# Graphic Summary of the

## 1977 ECONOMIC GENSUSES



U.S. Department of Commerce BUREAU OF THE CENSUS

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### 1977 ECONOMIC GENEUSES



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### U.S. Department of Commerce

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### INTRODUCTION

#### **PURPOSE**

This publication contains a series of charts and maps developed from data collected in the economic censuses. Its major purpose is to provide a visual complement to the tabular information available as well as to encourage the reader to consult the basic census publications from which the charts were developed. The economic censuses, which include industries that account for 60 percent of the Nation's gross national product (GNP), are a rich source of information for the study of industry differences in productivity, output, labor, capital expenditures, etc.

#### CONTENT

This graphic summary is primarily a book of selected charts and maps containing only a minimum of explanation. It is not intended to be a complete illustrated profile of each economic sector. Instead the charts and maps depict a few highlights of major sectors of the economy and how these have changed over a period of years, specifically 1967 to 1977. When comparable 1967 data are not available, 1972 to 1977 comparisons are shown or data for 1977 only are illustrated.

While the data in this publication are primarily from the economic censuses, data from the Bureau of Economic Analysis, the Federal Highway Administration, and other sources were used to illustrate specific characteristics.

A separate section is presented for each of the major censuses and selected surveys. These include the mineral, construction, manufacturing, transportation, and service industries and wholesale and retail trades. Also included is a section on minority-and women-owned businesses and a summary of findings from the enterprise statistics program.

The introduction to each section defines the industry activity included and describes any unique factors that should be considered in reviewing the information. An explanation of terms and identification of sources of information presented in this publication appear in appendixes C and D.

The primary geographic areas for which 1977 economic census data are available are described in appendix B. The geographic areas for which data are presented in this publication are limited to the 9 geographic subdivisions of the United States, to the 50 States, and to standard metropolitan statistical

areas (SMSA's). The National Travel Survey regions used in the chapter on transportation relate only to the National Travel Survey conducted as part of the census of transportation and the central business districts used in the chapter on retail trade relate only to the census of retail trade.

SMSA's used in the 1977 economic censuses were those established as of December 1977 by the U.S. Department of Commerce, Office of Federal Statistical Policy and Standards. SMSA's included in this publication, their full titles, and area coverage are listed in appendix C. Full SMSA titles were not always listed in the diagrams.

The selection of class intervals for the State choropleth (shaded) maps was based upon the variable series method of determining class intervals. This method was employed to call attention to specific internal characteristics of each distribution, while providing the map reader with the maximum possible amount of information. In addition, to indicate the full range of values related to the map, the actual minimum and maximum values of each distribution have been used in the map legend instead of the more ambiguous terms "less than" and "greater than."

#### THE REPORTING UNIT

Data for the economic censuses were collected, summarized, and published primarily by establishment. An establishment, as defined for census purposes, is a business or industrial unit at a single geographic location which produces or distributes goods or performs services. If distinctly different kinds of activity are conducted by the same company at a single location, each activity is treated as a separate establishment if separate records are available and if the size of the individual activity is significant. A "company" as the term is used in the economic censuses is an organization consisting of one or more establishments under common ownership or control. The term "firm" is used interchangeably with "company."

Except for portions of the census of transportation, data for the economic censuses are tabulated on the basis of the Standard Industrial Classification (SIC) system. The SIC system is used in the classification of establishments by the type of activity in which they are primarily engaged. Comparability between the statistics tabulated for the 1977 economic censuses and those tabulated for the 1967 censuses were affected by sub-

Data in the Commodity Transportation Survey part of the census of transportation are presented for Transportation Commodity Classification (TCC) codes, which are adaptations of SIC classifications for commodities shipped by manufacturers.

#### **CURRENT DOLLAR VALUE**

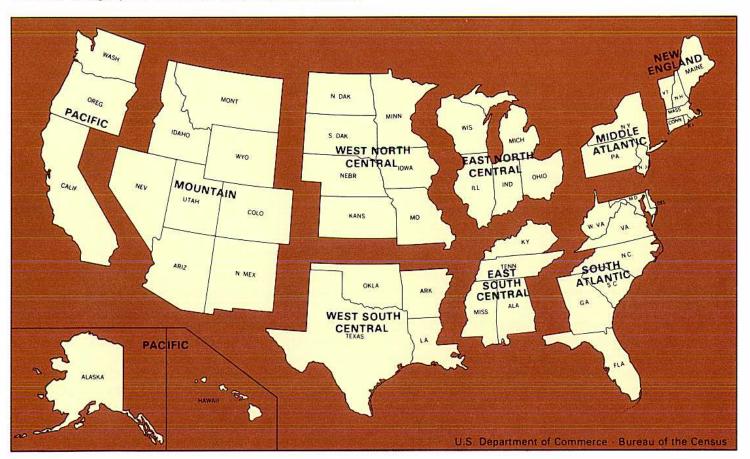
Many of the data items collected and published in the economic censuses are in terms of "dollar volume," e.g., sales, receipts, payrolls, cost of materials, capital expenditures, and assets. It must be emphasized, therefore, that the value information collected and published are in terms of the prices current at the time each census is conducted. No adjustments were made for price changes in the presentation of the charts and maps in this publication.

In comparing trends in census data between 1967 and 1977, both price movements and trends in the economy must be kept in mind. Between 1967 and 1977, the national economy grew

strongly. The GNP, which is the best measure of movements of the overall economy, rose from \$796 billion in 1967 to \$1,887 billion in 1977, an increase of 137 percent. Thus, current dollar GNP was 2.3 times what it had been 10 years earlier. However, a considerable amount of this increase was in the form of inflation. After adjustments for price changes, the increase in GNP over the decade was only 32 percent. To provide a better measure of real change, we have frequently shown the change in employment, although employment tends to understate the real growth in the economy because it ignores productivity increases. For example, while real GNP rose by 32 percent between 1967 and 1977, the overall civilian labor force rose only 22 percent.

There has been an upward trend in the productivity of labor in most major economic sectors. Productivity measurement, or output per employee, varies by economic sector and industry, and statistics on productivity are not available for each and every industry. However, the Bureau of Labor Statistics estimates that for the nonfarm business sector as a whole, productivity between 1967 and 1977 increased approximately 16 percent, i.e., employees produced 16 percent more in 1977 than in 1967.

#### Census Geographic Divisions of the United States



### ENTERPRISE STATISTICS



Enterprise statistics has been a byproduct of the Census Bureau's regular economic censuses program since 1954. The enterprise statistics program involves regrouping census data records of establishments under common ownership or control to show the economic composition and change of owning or controlling firms.

Since 1954, the program has covered companies primarily engaged in retail trade, wholesale trade, selected services, manufacturing, and mineral industries. Construction activities were added in 1967. Geographic data are not tabulated in the enterprise statistics program.

Each company covered in the 1977 economic censuses was classified in one of approximately 200 enterprise or company industry categories. Each of these categories, specifically designed for use in the enterprise statistics publication series, is a grouping of fourdigit SIC industries. These groupings adapt the four-digit SIC classification system to an industrial classification system that is conceptually meaningful for consolidated company aggregates of establishment data collected in the economic censuses.

Enterprise statistics are the last data to be published in the economic censuses program, because the corrected final data become available only after completion of all the economic censuses. Statistics for company-establishment relationships are tabulated by type of company organization, company size, and industry classification. Other crosstabulations indicate patterns of industrial diversification by companies.

#### Number of Companies Increased 27 Percent

The number of companies in all industries within the scope of the economic censuses rose 27 percent during the 10-year period, 1967 to 1977. In 1977, as in 1967, the majority of all companies were in the business sector, which included wholesale trade, retail trade, and selected service industries.

Retail trade and selected service industries, by themselves, accounted for 68 percent of all companies in 1977 compared to 70 percent in 1967.

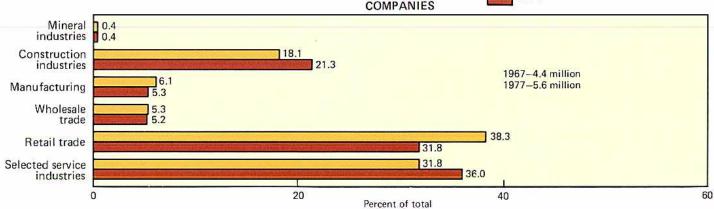
Employment rose by 19 percent during this 10-year period. While the manufacturing sector still accounted for the largest share of employees, its proportionate share decreased from 51 percent in 1967 to 44 percent in 1977. On the other hand, the

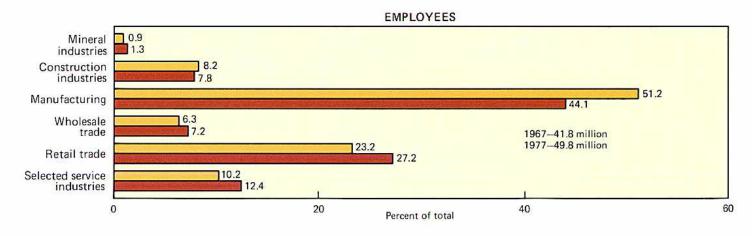
share of employees accounted for by the business sector increased.

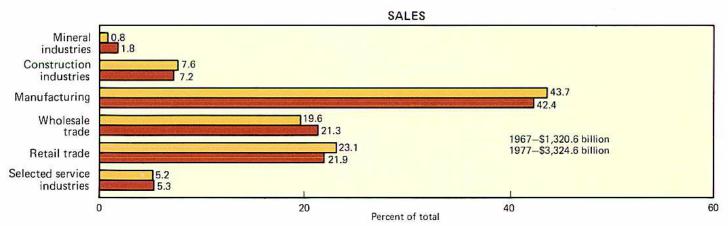
Overall sales increased by 152 percent. The share generated by each major sector changed only slightly. Manufacturing still accounted for over 40 percent in 1977, and the wholesale and retail trades each accounted for about one-fifth of total sales.

### Companies, Employment, and Sales, by Major Industry Division: 1967 and 1977









39.2

40

Percent of total

43.1

60

### Less Than 1 Percent of Companies Generated 43 Percent of Sales

Fifty-four percent of all companies within the scope of the 1977 economic censuses had no paid employees. This group accounted for only 2.5 percent of total sales. Companies with 1,000 or more employees com-

prised less than 1 percent of all companies, but they accounted for 43 percent of total sales.

Except for the smallest employment size categories (no paid employees and 1 to 9 employees) and those in the largest size categories (1,000 employees or more), the distribution of companies and sales by employment size class remained relatively the same.

One particular industry, minerals, changed rather signifi-

cantly in the distribution of company sales during this period. Companies with 1,000 or more employees increased their proportion of total mineral industry sales from 37 percent to 57 percent.

3.9

4.3

20



500 to 999 employees

1,000 employees or more

0.06

0.05

0.06

0.06

Source: U.S. Department of Commerce, Bureau of the Census

Percent of total

20

40

60

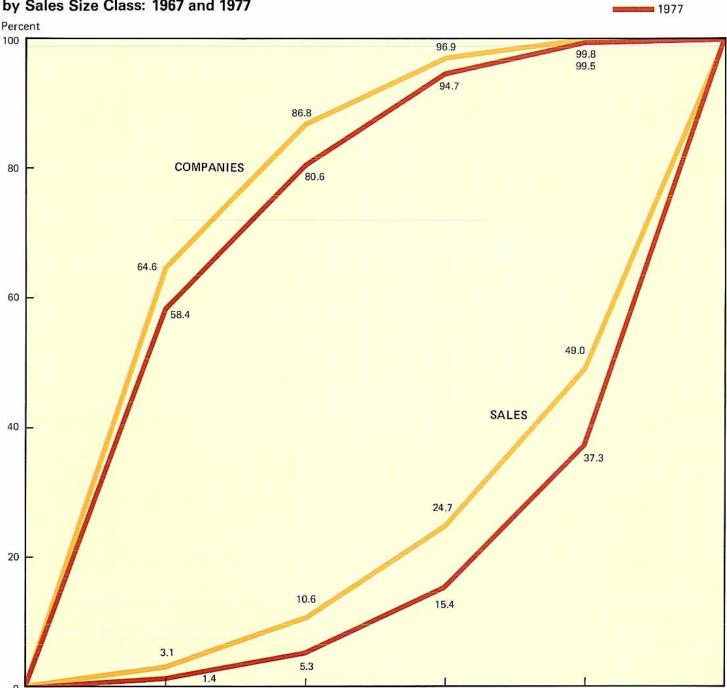
### More Than One-Half of All Companies Had Sales Less Than \$50,000

In 1977, 58 percent of all companies recorded sales of less than \$50,000, while 81 percent recorded sales of less than \$200,000. These figures compare to 65 and 87 percent, respectively, in 1967. About 95 percent of the companies had sales of less than \$1 million in 1977, accounting for only 15 percent of total sales. In 1967, 97 percent of the companies were in the same size class and accounted for one-fourth of all sales.

Approximately 63 percent of total sales in 1977 were accrued by companies generating \$10 million or more in sales; yet this group comprised less than 1 percent of all companies. In 1967, these large companies generated 51 percent of total sales. Thus, the largest companies were generating a greater proportion of sales in 1977 than in 1967.

1967

### Cumulative Percent of Companies and Sales, by Sales Size Class: 1967 and 1977



Less than \$200,000

Less than \$1,000,000

Less than \$10,000,000

Total

Source: U.S. Department of Commerce, Bureau of the Census

Less than \$50,000

1967

1977

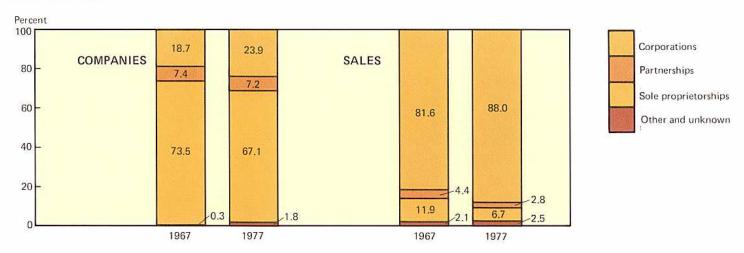
### Major Share of Total Sales Generated by Corporations

Sole proprietorships were the most frequent legal form of company organization in both 1967 and 1977 with 74 and 67 percent, respectively. However, corporations accounted for an overwhelming proportion of total sales. In 1977, corporations accounted for 88 percent and in 1967, 82 percent.

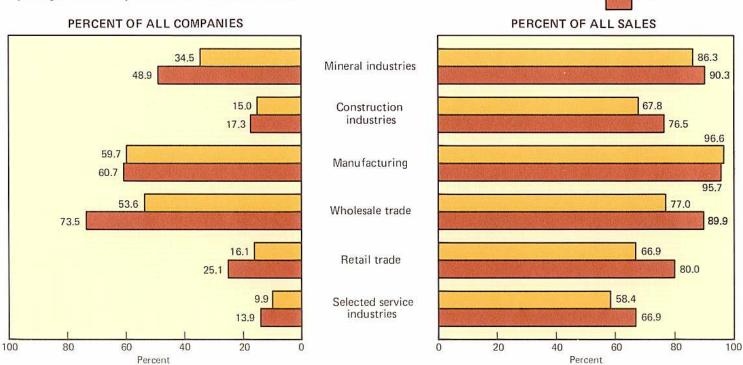
Corporations as a percent of all companies increased in each of the major industrial divisions. In 1977, corporations comprised 49 percent or more of the number of companies in minerals, manufacturing, and wholesale trade. Corporations also accounted for at least two-

thirds of the sales by each of the major industrial divisions in 1977. In the case of manufacturing, it was approximately 96 percent in both 1967 and 1977.

### Companies and Sales, by Legal Form of Organization: 1967 and 1977



### Corporations as a Percent of Companies and as a Percent of Sales, by Major Industry Division: 1967 and 1977



Source: U.S. Department of Commerce, Bureau of the Census

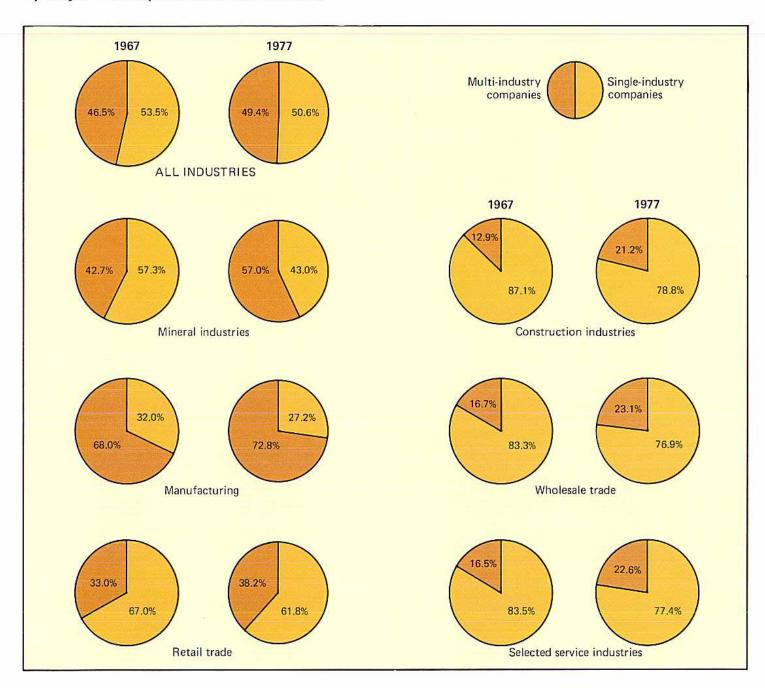
#### Companies Showed Greater Diversification

The extent of industrial diversification can be illustrated by distinguishing between companies that operate in only one industry category (single-industry companies) and those that operate in two or more industry categories (multi-industry companies).

Nationwide, the share of employment in multi-industry companies increased between 1967 and 1977. In 1977, total employment was almost equally divided between single-and multi-industry companies compared with 1967 when multi-industry companies accounted for 46 percent of total employment. The share of employment within each sector, however, varied significantly from that for all indus-

tries. For example, in 1977, multi-industry companies in construction industries accounted for only 21 percent of total employment, whereas in manufacturing they accounted for 73 percent. In comparison, the percentages in 1967 were 13 percent for construction industries and 68 percent for manufacturing.

### Employment in Single- and Multi-Industry Companies, by Major Industry Division: 1967 and 1977



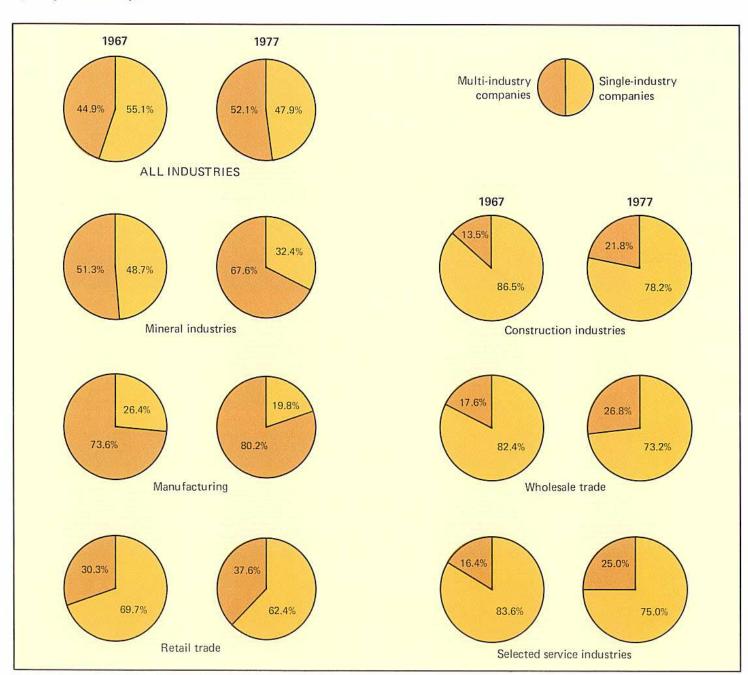
## Multi-Industry Companies Dominated Sales in Manufacturing and Mineral Industries

The share of sales accounted for by multi-industry companies nationwide increased from 45 percent in 1967 to 52 percent in 1977. In the manufacturing and mineral industries, however, multi-industry companies gained a far greater share of sales than that for all industries. In 1977, multi-industry companies in the mineral industries accounted for more than two-thirds of total sales, and in manufacturing, 80 percent of total sales.

At the lower end of the scale were the construction industries, in which multi-industry companies accounted

for only about one-fifth of total sales in 1977, and wholesale trade and selected service industries, in which multiindustry companies took in only about 25 percent of total sales.

### Sales of Single- and Multi-Industry Companies, by Major Industry Division: 1967 and 1977



### Companies in Manufacturing and Mineral Industries Had Greatest Diversification

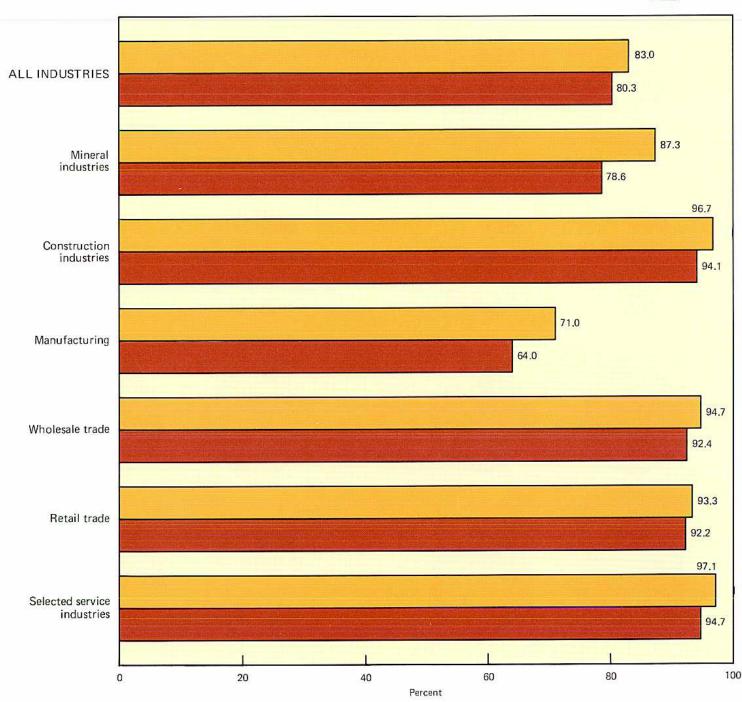
The proportion of employees in establishments classified in the same primary activity as parent companies provides a measure of the extent to which companies tend to confine their activities to a single industry or to extend or diversify their activities into other industries. This proportion is known as the industry specialization ratio. The higher the ratio, the less diversified is the industry. For all industries combined, this ratio was 80 percent in 1977, down from 83 percent in 1967.

The mineral industries and manufacturing showed the greatest increase in diversification among all industry divisions. For the mineral industries, the ratio fell from 87 to 79 between 1967 and 1977. In manufacturing, the ratio fell from 71 to 64 during the same period.

Each of the remaining industry divisions showed slight increases in diversification. Nevertheless, in the remaining industries the ratio remained above 90 percent over the decade.

### Employment in Establishments Classified in Same Primary Activity as Parent Company, by Major Industry Division: 1967 and 1977





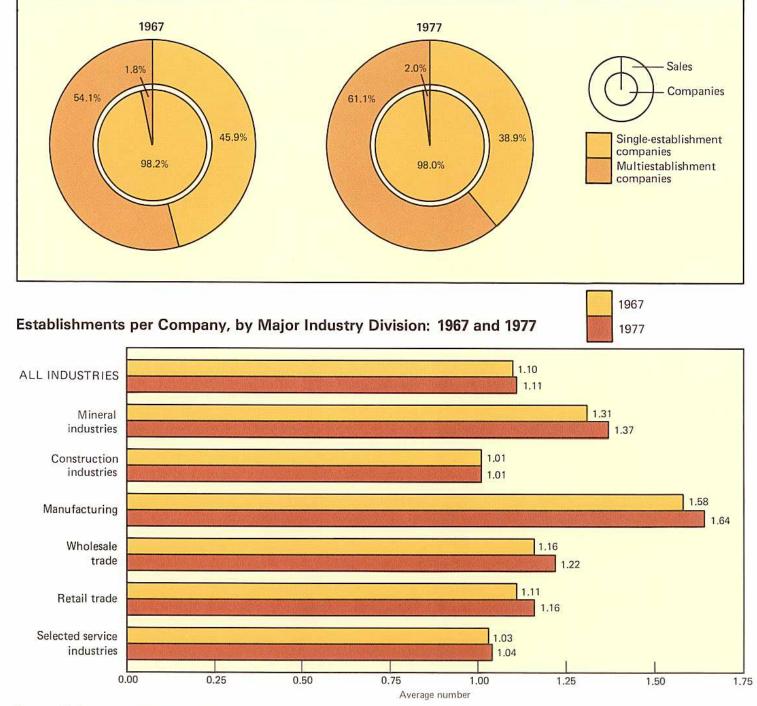
### Single-Establishment Companies Comprised 98 Percent of All Companies

Single-establishment companies have only one establishment included in the scope of the economic censuses. They can be considered only as single-industry companies. Multiestablishment companies can be either single- or multiindustry companies. In both 1967 and 1977, 98 percent of all companies were comprised of single-establishment companies.

Although only 2 percent of the total number of companies, multiestablishment companies accounted for 61 percent of total company sales in 1977, up from 54 percent in 1967. With the exception of the construction industries, the average number of establishments per company increased in all major industry divisions between 1967 and 1977. Manufacturing recorded the largest number of establishments per company, averaging 1.58 in 1967 and 1.64 in 1977. The construction industries recorded the lowest average number of establish-

ments per company with 1.01 over the decade.

### Single- and Multiestablishment Companies and Sales: 1967 and 1977



Source: U.S. Department of Commerce, Bureau of the Census

### Mineral Industries Recorded Fourfold Increase in Sales per Company

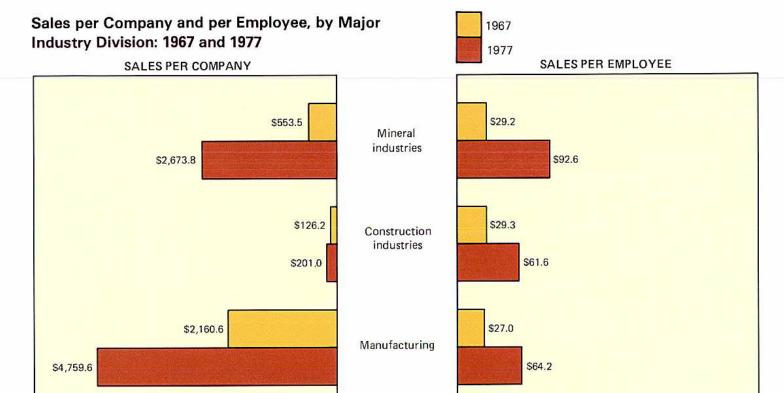
Sales per company and sales per employee provide two measures of the value of the products, materials, or services rendered and of the relative importance of labor input to the industry.

The mineral industries recorded the largest advance in sales per company, increasing almost 400 percent during the decade, replacing wholesale trade, which ranked second in 1967.

Manufacturing showed a substantially larger volume of sales per company than any other industry division.

Selected service industries continued to record the smallest volume of sales per company together with the smallest increase (78 percent) in sales per company between 1967 and 1977.

Although manufacturing accounted for the largest volume of sales per company in both 1967 and 1977, wholesale trade recorded the largest volume of sales per employee in both years. Selected service industries registered the lowest volume of sales per employee.





Thousands of dollars

Source: U.S. Department of Commerce, Bureau of the Census

Thousands of dollars

### Differences in Annual Payroll per Employee Increased Among Industry Divisions

In 1977, a greater difference existed between the industry division with the highest annual payroll per employee and the one with the lowest payroll than in 1967. Among the industry divisions, retail

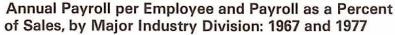
trade had the lowest payroll per employee for both 1967 and 1977. In 1967, the payroll per employee was greatest in the construction industries, 75 percent higher than in retail trade; by 1977, it was greatest in the mineral industries, 121 percent higher than payroll per employee in retail trade.

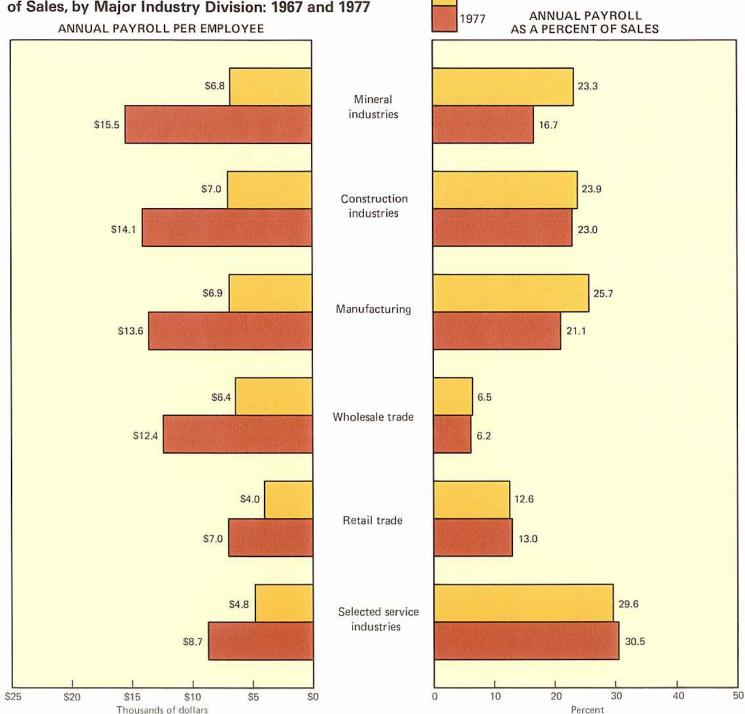
In 1967, there were only small differences in the annual payroll per employee among the mineral industries, construction industries, and manufacturing; the difference between the smallest and largest was about 3 percent. By 1977, this spread had increased so that the difference between the lowest and highest was 14 percent. Mineral industries, which had ranked third in 1967, now ranked first.

Annual payroll as a percent of sales changed only slightly for those industrial divisions in

1967

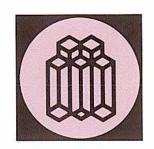
the business sector (wholesale trade, retail trade, and selected service industries). Selected service industries continued to have the highest percent with approximately 30 percent in both years.





Source: U.S. Department of Commerce, Bureau of the Census

### CENSUS OF MINERAL INDUSTRIES



The 1977 Census of Mineral Industries was an enumeration of establishments primarily engaged in the extraction of minerals, including solids, such as coal and ores; liquids, such as crude petroleum; and gases. such as natural gas. The first minerals census covered the year 1840. Censuses were conducted at approximately 10-year intervals through 1939. After a wartime interruption, the census resumed in 1954. Since that time, censuses have been taken approximately every 5 years. The 1977 census is the 18th census of mineral industries of the United States.

For the 1977 census, questionnaires were sent to each establishment of multiestablishment companies and to large single-establishment companies. For small single-establishment companies with 20 or less employees (the cutoff varied by industry), information was obtained from administrative records. The results of the census provide information for 42 mineral industries within 5 industry groups.

- SIC 10 Metal mining
- SIC 11 Anthracite mining
- SIC 12 Bituminous coal and lignite mining
- SIC 13 Oil and gas extraction
- SIC 14 Mining and quarrying of nonmetallic minerals, except fuels

The following general information was collected in the census.

Employment Payroll

Hours worked

Cost of supplies, resales, fuel, electric energy, and contract work

Capital expenditures

Quantity of electric energy consumed Supplemental labor costs

Gross book value of fixed assets

Mineral development and exploration expenditures

Inventories Rental payments

Depreciation, amortization, and depletion

In addition, based on inquiries especially adapted for each mineral industry or combinations of mineral industries, information was collected on supplies, minerals received for preparation, and fuels used; value of products produced or shipped and other receipts; and type of operation.

There is significant productive activity at mining sites in the form of exploration and development that is not reflected in current shipments. vet such activity absorbs labor and capital inputs. Because of this activity, value added created by mineral industries is calculated by adding to shipments capital expenditures for exploration and development of mineral properties, as well as expenditures for new and used structures, machinery, and equipment.

The census of mineral industries covers each mining establishment with one paid employee or more. Data for single-unit firms without paid employees were included in censuses prior to 1967, However, beginning with the 1967 census, this group of establishments was excluded.

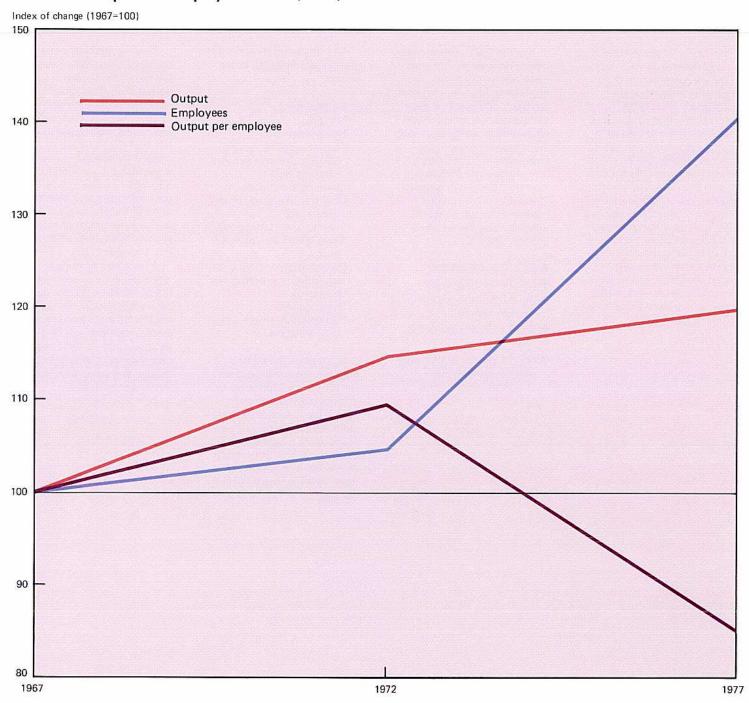
### Employment in Mineral Industries Rose More Rapidly Than Output

Between 1967 and 1977, output in the mineral industries increased 20 percent. Employment, however, rose 41 percent, indicating a lower output per employee in 1977 than in 1967. Between 1967 and 1972, output increased 15

percent whereas employment increased about 5 percent. Thus, output per employee rose nearly 10 percent. Between 1972 and 1977, however, it fell about 22 percent. By 1977, it was 15 percentage points lower than it had been in 1967.

Part of this slower growth in output between 1972 and 1977 appears attributable to the resurgence of domestic coal production and the intensive development of additional domestic supplies of coal and oil that were not yet in full production.

### Indexes of Output and Employment: 1967, 1972, and 1977



### Oil and Gas Extraction Largest of the Mineral Industries

In 1977, the mineral industries employed 798,800 workers. This figure represents an increase of 41 percent over the 567,300 employees recorded in 1967. Value added increased 252 percent, from \$19.3 billion to \$68.0

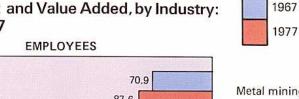
billion during the same period.

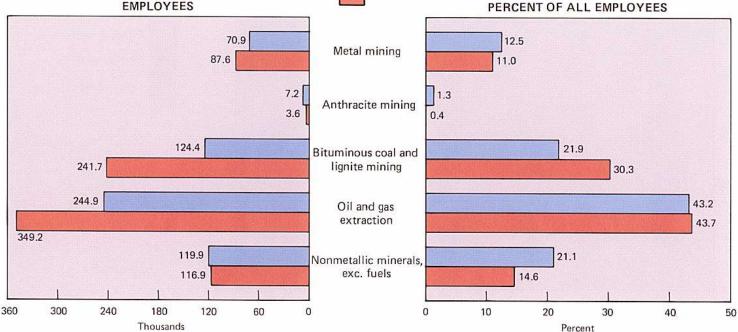
Oil and gas extraction was the largest segment of this industry, accounting for 43 percent of the employees in both 1967 and 1977 and producing about 71 percent of the value added in 1977, about 2 percentage points above 1967.

Anthracite mining, with slightly more than 1 percent (7,200) of mineral industry employees in 1967 experienced a 50-percent decline in employment during the decade, Bituminous coal and lignite mining with 241,700 employees, or 30 percent of the employees in 1977, registered a 94-percent increase since 1967. By 1977, this sector also produced about 16 percent of the total value added by the mineral industries. This was up from 10 percent in 1967. Changes in the metal-mining industries

were less dramatic than the fuel industries. In the 10-year period, employment rose 24 percent while the value added rose 119 percent, from \$1.6 billion to \$3.5 billion.

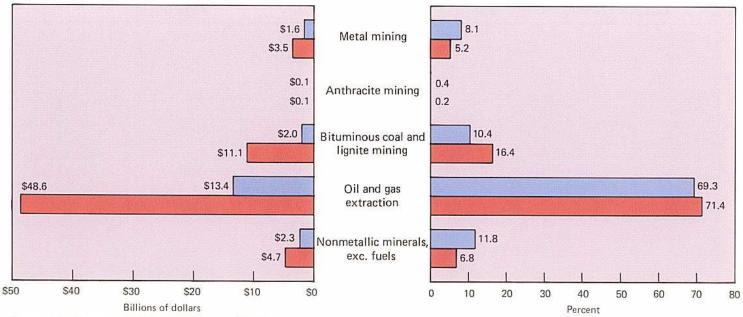
#### Employment and Value Added, by Industry: 1967 and 1977





#### VALUE ADDED

### PERCENT OF TOTAL VALUE ADDED



Source: U.S. Department of Commerce, Bureau of the Census

### Most Establishments Had Few Employees

Of the 31,400 mineral industries establishments in 1977, 65 percent employed less than 10 persons. These establishments employed only 6 percent of all mineral workers and produced only 9 percent of the industry's value added. In contrast, establishments with 100 employees or more

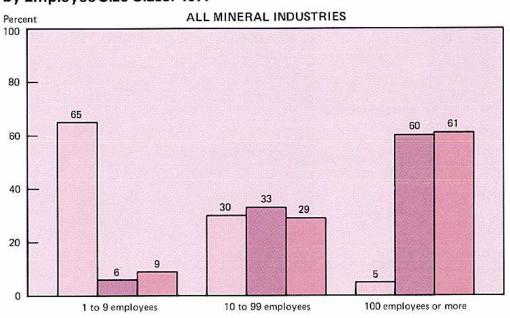
were only 5 percent of establishments but employed 60 percent of the workers and produced 61 percent of the industry's value added.

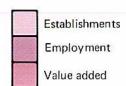
There were, however, significant differences among individual industries. Some industries tended toward a smaller scale of operations than others. For example, in the construction sand and gravel industry, less than 0.5 percent of the establish-

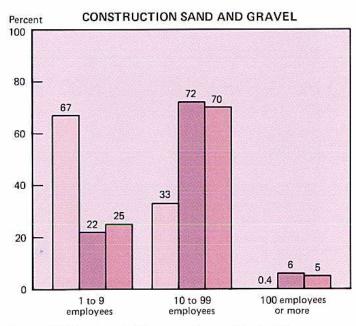
ments employed 100 workers or more, and they produced 5 percent of the value added. Seventy-two percent of the workers and 70 percent of the value added were accounted for by establishments with 10 to 99 employees.

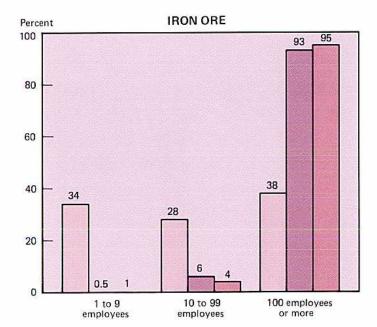
Iron ore extraction displayed a decidedly different pattern. Establishments with 100 employees or more employed 93 percent of the workers. These establishments, which represented 38 percent of all establishments in the industry, produced 95 percent of the value added.

### Establishments, Employment, and Value Added for Selected Industries, by Employee Size Class: 1977









Source: U.S. Department of Commerce, Bureau of the Census

### Corporations Were Predominant Legal Form of Organization

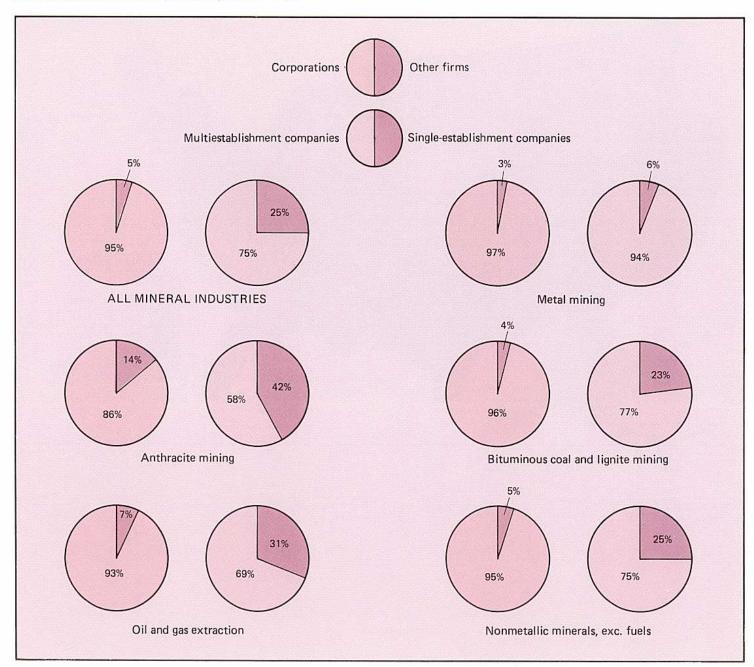
The mineral industries were highly oriented toward the corporate form of organization. In 1977, 95 percent of all employees in mineral industries worked for corporations. With the exception of anthracite mining (where employees comprised only 0.5

percent of all mineral industries employment), over 90 percent of the employees in each industry group worked for corporations.

In addition to a corporate orientation, companies were also predominately multi-establishment. In 1977, 75 percent of the employees worked for multiestablishment companies. Excluding anthracite mining, this share ranged from 69 percent in

oil and gas extraction industries to 94 percent in metalmining industries.

### Employment, by Legal Form of Organization and Singleand Multiestablishment Companies: 1977



### Over 60 Percent of Mineral Industries Employees Located in Nine States

Employment in the mineral industries reflected the geographic distribution of mineral resources. Nine States accounted for 63 percent of all mineral industries employees. Texas recorded the largest number of mineral industries employees, almost 18 percent. Four of the nine States were

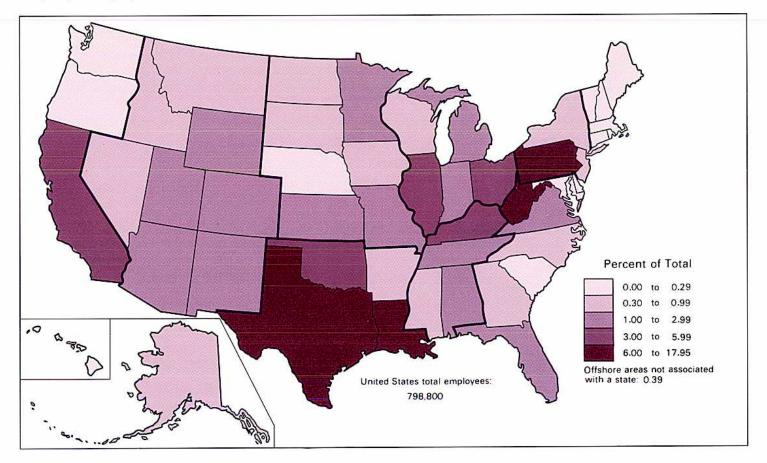
predominantly engaged in extracting oil and gas (Texas, Louisiana, Oklahoma, and California). The five other States produced mostly coal (West Virginia, Pennsylvania, Kentucky, Ohio, and Illinois).

Eight States increased their number of mineral industries employees by over 60 percent between 1967 and 1977. Wyoming led with an increase of 161 percent (approximately 14,000 mineral industries employees). Eleven States experienced losses. While Rhode Island registered the largest relative loss (67 percent), the actual numbers were negligible. New York, lost the largest number, with a 22-percent decrease (approximately 2,000 mineral industries employees).

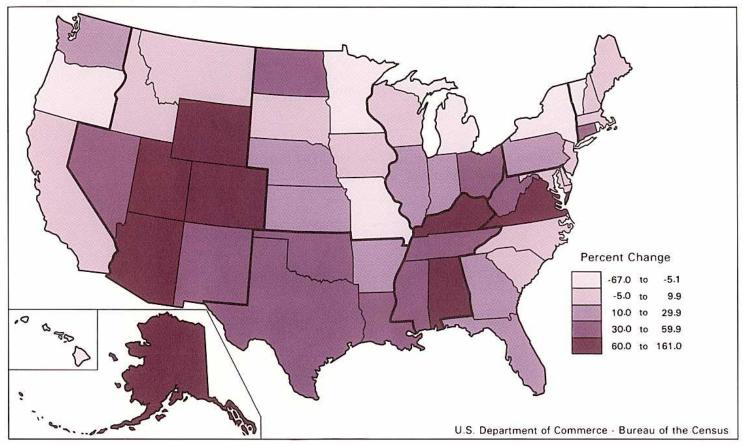
Nationwide, the mineral industries employed less than 1 percent of the U.S. civilian labor force. However, this percentage varied by State. In several States, mineral extraction played a far more significant role. For example, only

2.8 percent of all mineral industries employees worked in Wyoming, but they comprised 11 percent of the State's civilian labor force, the highest percentage in the Nation. West Virginia was second with approximately 10 percent of its labor force in mineral industries. In contrast, Texas had approximately 18 percent of all mineral industries employees, but they accounted for only 2.4 percent of the State's labor force.

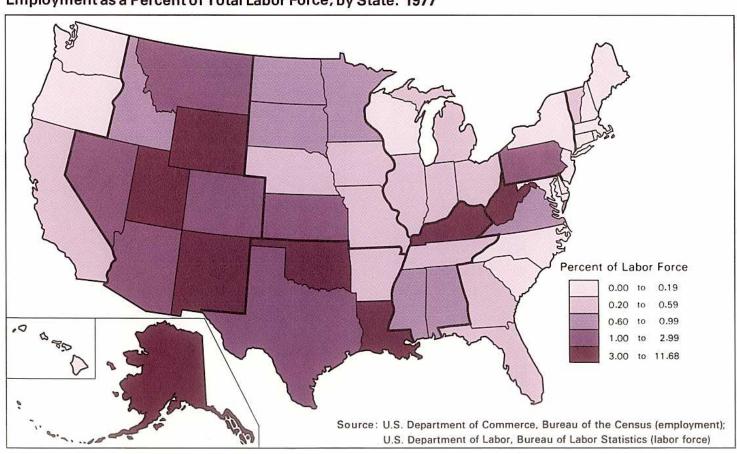
### Employment, by State: 1977



### Change in Employment, by State: 1967-1977



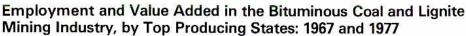
### Employment as a Percent of Total Labor Force, by State: 1977

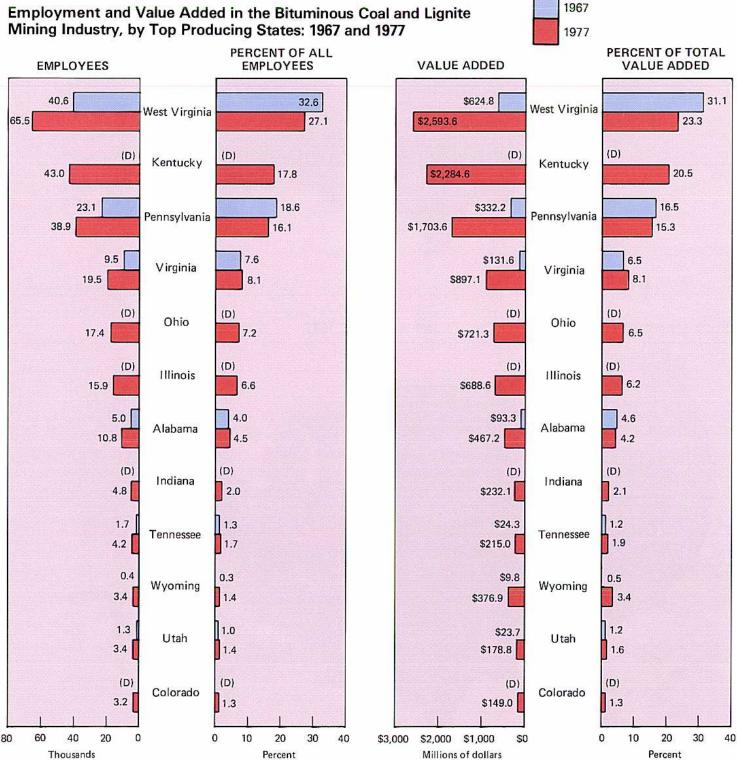


### West Virginia Leading Coal-Producing State

The total number of employees in bituminous coal and lignite mining increased from 124,400 in 1967 to 241,700 in 1977, about 94 percent. Value added increased over 450 percent, rising from \$2.0 billion to \$11.1 billion during the same time period. In 1977, 12 States accounted for 95 percent of the employees and 94 percent of the value added.

West Virginia ranked first in 1977 with 65,500 employees and produced \$2.6 billion of the value added. While the number of employees and value added increased in West Virginia between 1967 and 1977, the State's relative share of the national total declined, from 33 percent of the total number of employees to 27 percent and from 31 percent of the total value added to 23 percent. This relative decline reflected the increasing rate of growth of coal-mining activity in other States during this 10-year period.





D Data withheld to avoid disclosure. Source: U.S. Department of Commerce, Bureau of the Census

#### Texas Ranked First in Oil and Gas Production

The total number of employees in the oil and gas extraction industry increased from 244,900 to 349,200, or 43 percent, between 1967 and 1977. At the same time, value added increased 263 percent,

from \$13.4 billion to \$48.6 billion. Ten States accounted for about 89 percent of the employees and 92 percent of the value added in this industry. These statistics show little change since 1967 when the same States accounted for 87 percent of the employees and 93 percent of value added.

Texas ranked first in 1977 with 133,900, or 38 percent,

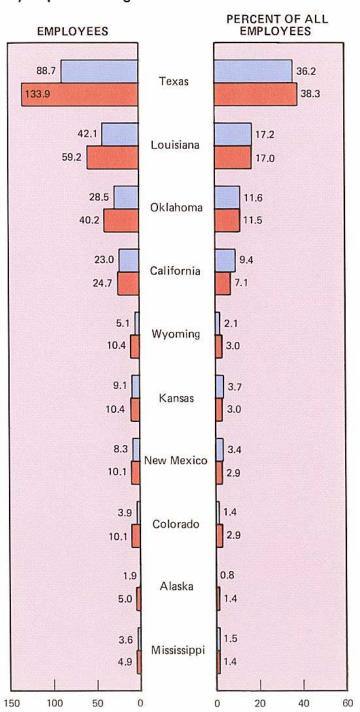
of the employees and produced \$19.3 billion, or 40 percent, of the value added. The share of total employees and value added in Texas increased slightly since 1967 when these percentages were both approximately 36 percent. These gains occurred despite the increased growth of activity in the neighboring States of Louisiana and Oklahoma (ranked second

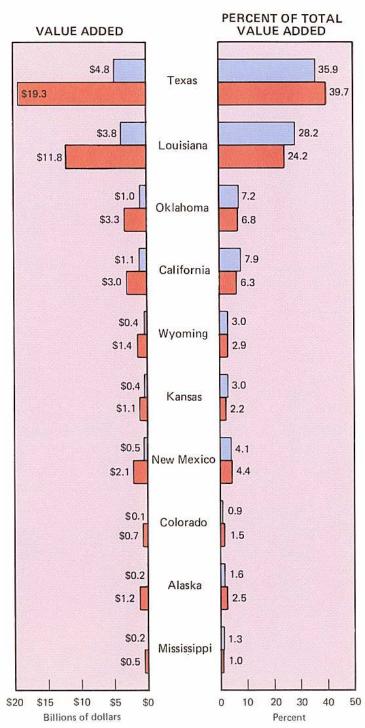
and third) and in such States as Wyoming, Colorado, and Alaska.

1967

1977

### Employment and Value Added in the Oil and Gas Extraction Industry, by Top Producing States: 1967 and 1977





Source: U.S. Department of Commerce, Bureau of the Census

Percent

Thousands

# CENSUS OF CONSTRUCTION INDUSTRIES



The 1977 Census of Construction Industries was an enumeration of establishments primarily engaged in construction and operating as general contractors and operative builders, special trade contractors, or land subdividers and developers. Construction included new work as well as additions, alterations, and maintenance and repair work. Census data for the construction industry were collected for 1929, 1935, and 1939 and published as part of the business census reports. Data were not collected again until 1967 when the census of construction industries became an individual seqment of the economic censuses. The 1977 census was the sixth census of construction industries of the United States.

There are more than 1 million construction firms in the United States, and almost half of these have paid employees. For most industries, the census includes all construction establishments with 15 or more employees and a sample of small construction establishments. In addition, limited data for more than 500 thousand construction firms without paid employees were obtained from Federal administrative records.

Census data for construction industries cover 27 four-digit SIC industry codes and related industry groups:

- SIC 15 Building construction—general contractors and operative builders
- SIC 16 Construction other than building construction—general contractors
- SIC 17 Construction special trade contractors
- SIC 6552 Land subdividers and developers

The 1977 Census of Construction Industries collected information on the following subjects:

Number of employees
Payrolls (annual and firstquarter)
Payments for—
Materials, components,
and supplies
Work subcontracted to
others
Renting or leasing of
structures, machinery,
and equipment
Power, fuels and lubricants

Supplemental labor costs Selected purchased services

Capital expenditures (excluding land)

Receipts during year 1977: Total receipts Construction receipts Receipts from the sale of

Other business receipts Fixed assets and deprecia-

land

Construction receipts by— Type (buildings, streets, etc.)

Class (new or maintenance and repair) Location (home State or in other States) Ownership (public or private)

Unless otherwise noted, the charts and maps that follow only include data for establishments with paid employees.

### Nonemployers Accounted for Majority of Construction Establishments

There were 1.2 million establishments in the construction industry in 1977, an increase of about 55 percent since 1967. Total receipts for all establishments rose 152 percent during the same

period, from \$94.9 billion to \$239.4 billion.

Establishments with no paid employees (nonemployer establishments) accounted for a large share of the industry. Overall, these establishments comprised about 60 percent of the total number of construction establishments in 1977, rising from 54 percent in 1967. In 1977, two-thirds of the special trade contractors were nonemployer establish-

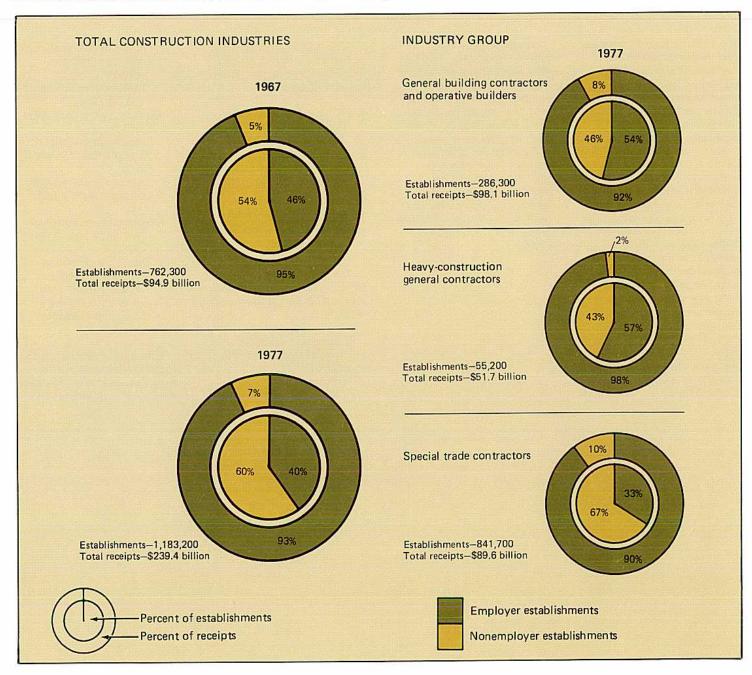
ments. In contrast, this figure was 43 percent for heavy-construction general contractors

Although nonemployer establishments outnumbered employer establishments, they accounted for only 7 percent of total receipts in 1977. The share of total receipts by nonemployer establishments also varied among construction industries and ranged, for example, from 10 percent for

special trade contractors to 2 percent for heavy-construction general contractors.

In the chart below, the 1967 figures for all construction industries exclude operative builders. This exclusion has only a minor effect on the percentage comparison between 1967 and 1977.

### Employer and Nonemployer Establishments and Total Receipts for All Industries, 1967 and 1977, and for Industry Groups, 1977



### **Construction Industry Oriented Toward Small Establishments**

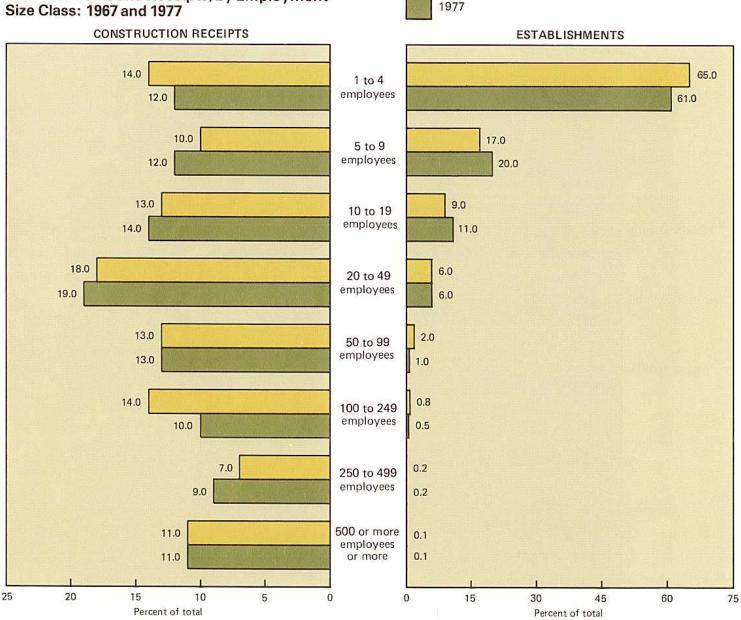
An overwhelming proportion of those establishments with paid employees (employer establishments) engaged less than 10 employees. While this group comprised more than 80 percent of the employer establishments, they accounted for only 24

percent of the receipts in both 1967 and 1977. In contrast, establishments with 100 or more employees accounted for 1 percent of the employer establishments in both 1967 and 1977, but they earned 32 percent of the construction receipts in 1967 and 30 percent in 1977.

Although there has been relatively little change between the various employment size classes of establishments, there were some noticeable shifts in this 10-year period. For example, the number of establishments in the 1-to-4 employee size class decreased from 65 percent to 61 percent of the total while the number in both the 5-to-9 and 10-to-19 size groups increased. This pattern was also reflected in the share of receipts for these employment classes.

1967

### Establishments and Receipts, by Employment Size Class: 1967 and 1977



Total receipts 1967-\$92.6 billion 1977-\$214.8 billion

Total establishments 1967-368,800 1977-480,000

### South and West Increased Share of Construction Receipts

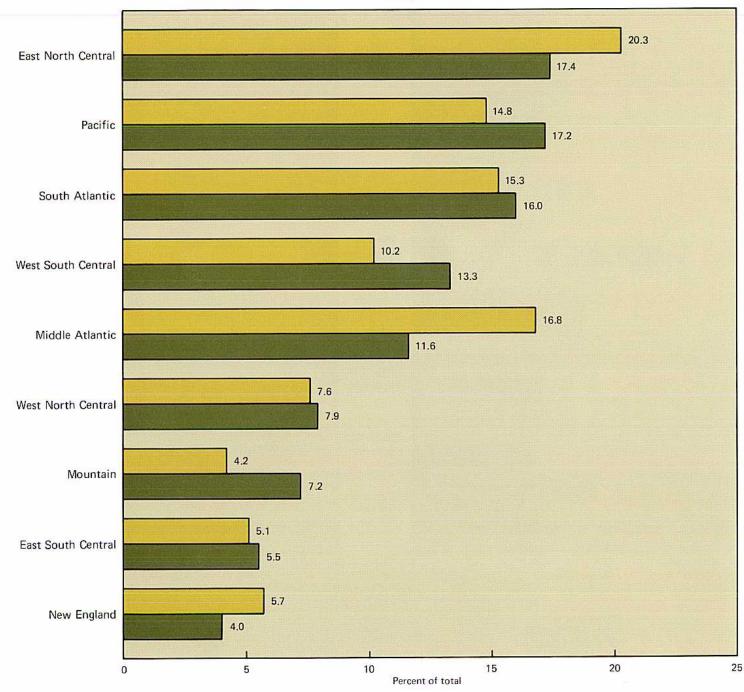
Construction receipts for establishments with employees increased nationwide from \$92.6 billion in 1967 to \$214.8 billion in 1977, about 132 percent. This increase, however, was not shared equally among the geographic divisions in the United States.

Generally, the Northern and Eastern States accounted for a smaller proportion of total construction receipts in 1977, whereas the Southern and Western divisions accounted for a larger proportion of total construction receipts. Texas, for example, increased its share from 6 percent in 1967 to over 8 percent in 1977.

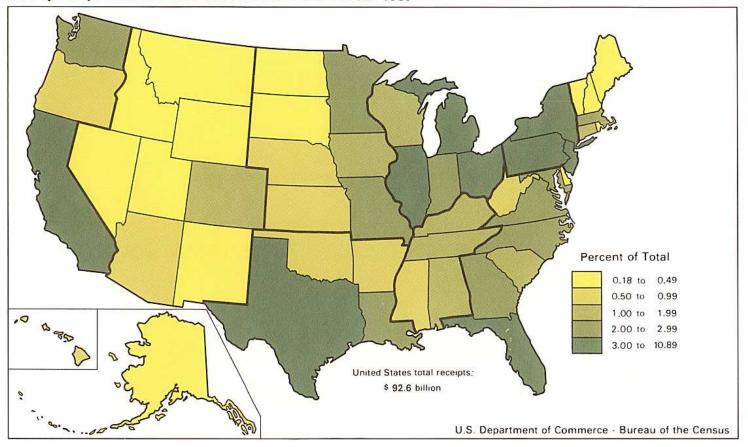
New York, on the other hand, lost ground relative to other areas, decreasing from 8 percent in 1967 to about 5 percent in 1977. Although the volume of receipts was small compared to other divisions, the States in the Mountain Division showed large relative increases in construction activity during this period.

### Construction Receipts, by Geographic Division in Which Construction Is Located: 1967 and 1977

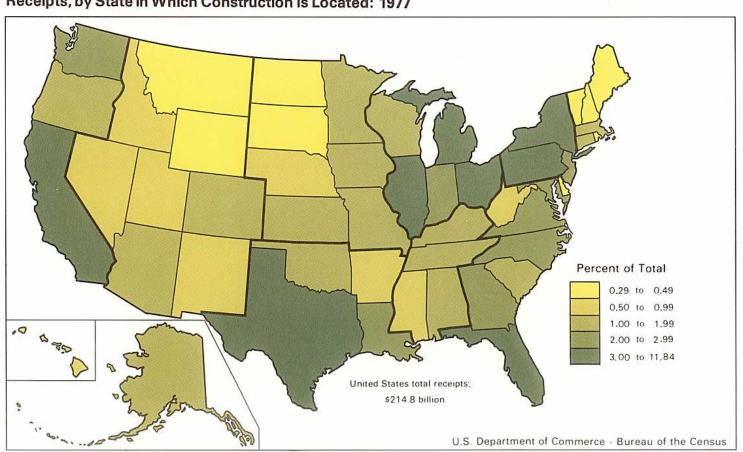




### Receipts, by State in Which Construction Is Located: 1967



### Receipts, by State in Which Construction Is Located: 1977



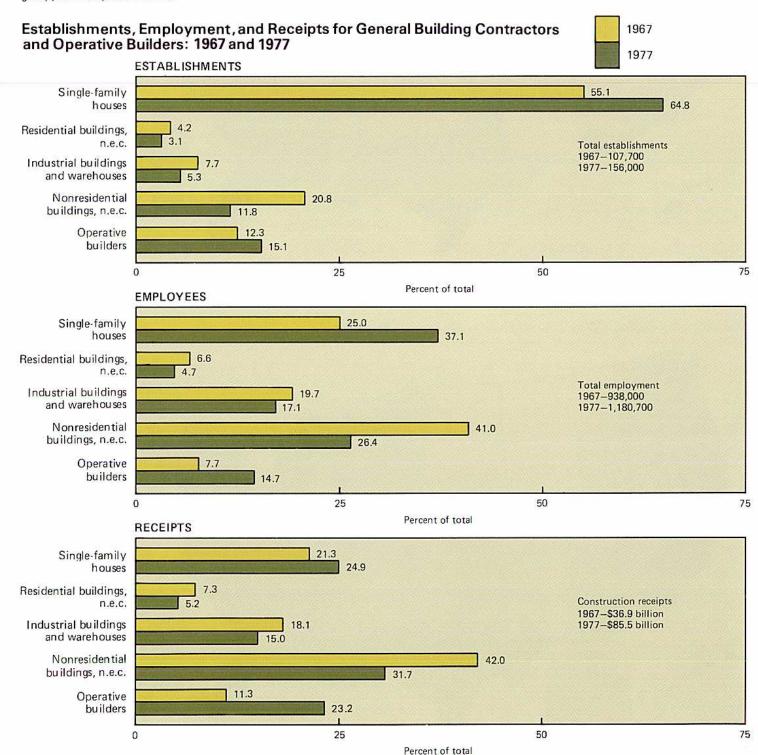
#### Residential Builders Largest Group Within General Contractors

General building contractors and operative builders primarily engaged in the construction of residential, farm, and commercial types of buildings. Contractors building singlefamily houses constituted the largest category within this group, with 55 percent of the employer establishments in 1967 and 65 percent in 1977. They also employed the largest percentage of workers, 25 percent in 1967 and 37 percent in 1977.

While this group of contractors accounted for approximately two-thirds of the establishments and over one-third of the employees in 1977, they accounted for only one-fourth of the construction

receipts, 4 percentage points greater than in 1967.

Operative builders (i.e., builders primarily engaged in construction on their own account rather than as contractors) also had a significant increase in their share of establishments, employees, and receipts during this period, the percentage share for employment and receipts doubled since 1967.

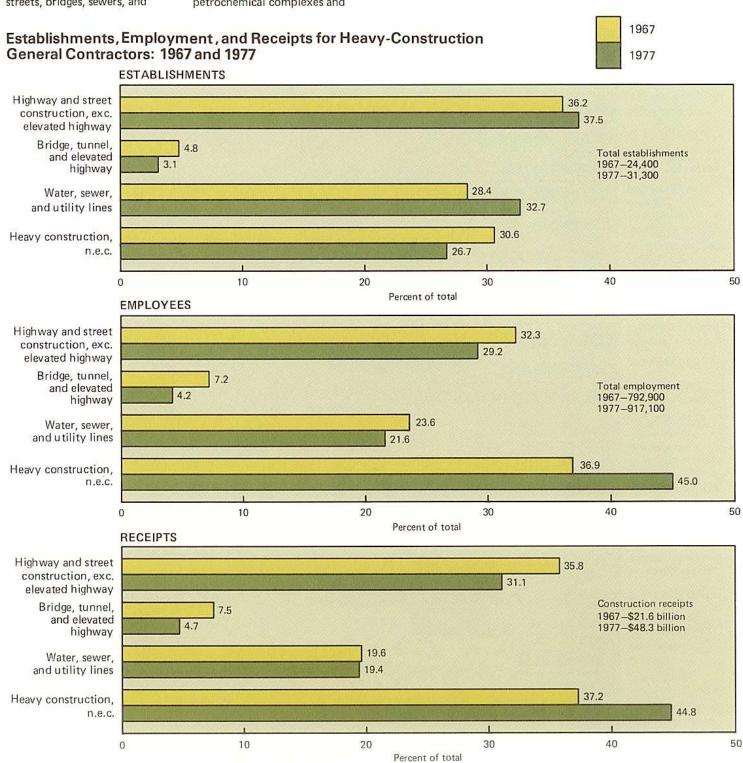


#### Highway Construction Leading Employer Among Heavy-Construction Contractors

Heavy-construction general contractors, with slightly more than one-fifth of all construction employees in 1977, were primarily engaged in the construction of highways and streets, bridges, sewers, and

bulkheads, in dredging waterways, etc. Those involved in the construction of highways and streets, with slightly more than one-third of the establishments and 29 percent of the employees, comprised the largest category in this group in both 1967 and 1977.

Even so, miscellaneous heavy-construction contractors, which includes such construction activities as petrochemical complexes and power plants, employed 45 percent of the workers and received 45 percent of the receipts in 1977. These were significant increases over 1967 when employment and receipts were both 37 percent of the total.



n.e.c. Not elsewhere classified. Source: U.S. Department of Commerce, Bureau of the Census

#### Plumbing, Heating, and Air-Conditioning Contractors Largest Special Trade Employer

Special trade contractors were primarily engaged in such activities as plumbing, painting, plastering, carpentering, and electrical work. They accounted for onehalf of all construction employees and generated

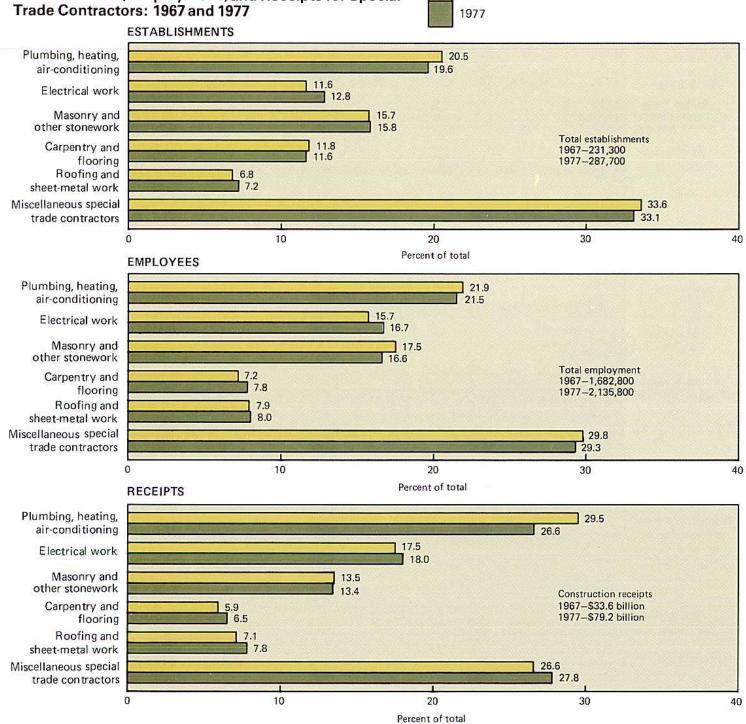
over one-third of all construction receipts.

Plumbing, heating, and airconditioning contractors made up the largest group of special trade contractors with about one-fifth of the establishments and employees in both 1967 and 1977. This group also generated the largest share of receipts in both years, 30 and 27 percent, respectively.

The next two largest groups were contractors of electrical work and masonry and other stonework, Although these two groups had the same percentage of special trade employees, approximately 17 percent, electrical work had the larger share of receipts with 18 percent.

### Establishments, Employment, and Receipts for Special





#### **General Building** Contractors and Operative **Builders Dominated** Construction Industries

General building contractors and operative builders continued to dominate the construction industry, generating 40 percent of total

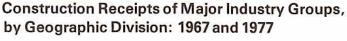
construction receipts in 1977 as in 1967. This dominance was also reflected in seven of the nine geographic divisions. The exceptions were the Middle Atlantic and East North Central Divisions, where special trade contractors generated a larger share of the receipts in 1977.

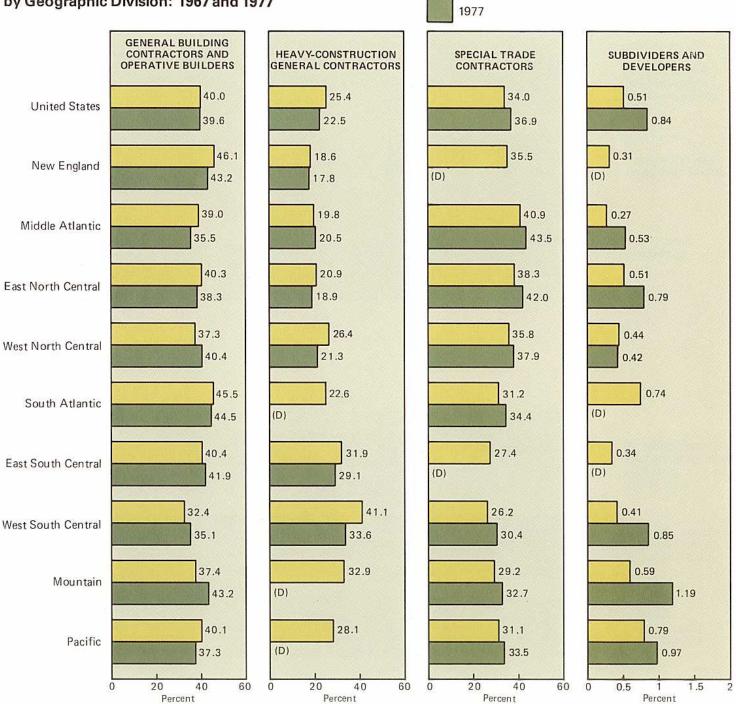
Between 1967 and 1977. general building contractors increased their proportion of receipts in only four divisions:

West North Central, East South Central, West South Central, and Mountain. Special trade contractors, on the other hand, showed relative increases in all divisions.

Except for the Middle Atlantic Division, heavyconstruction general contractors decreased their relative share of receipts in all divisions.

1967





Percent

#### Payroll Costs Higher for Special Trade Contractors

While receipts for employer establishments rose 132 percent between 1967 and 1977, labor costs and the cost of purchased materials rose 127 and 144 percent, respectively. With a few exceptions, the overall share of the total cost attributed

to payroll and to purchased materials in 1967 remained about the same as in 1977.

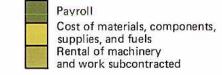
These percentages, however, varied significantly between the individual construction industries. For example, under general building contractors and operative builders, payroll represented 18 percent of principal construction cost in both 1967 and 1977. In contrast, under special trade contractors, payroll

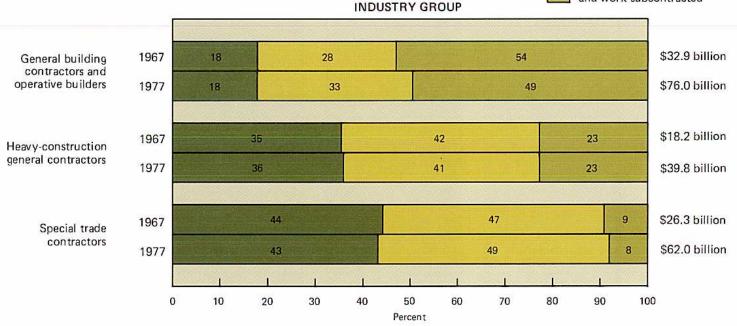
costs were about 43 percent, more than double those for general building contractors and operators.

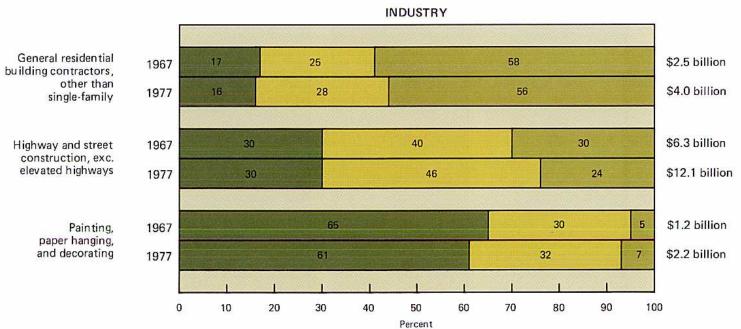
This difference was even more accentuated between individual construction industries. Payroll costs for general residential contractors (other than single-family houses) represented about 16 percent of construction cost, while the payroll costs for

painting, paper hanging, and decorator contractors were 61 percent.

### Selected Costs, by Major Industry Groups and Selected Industries: 1967 and 1977







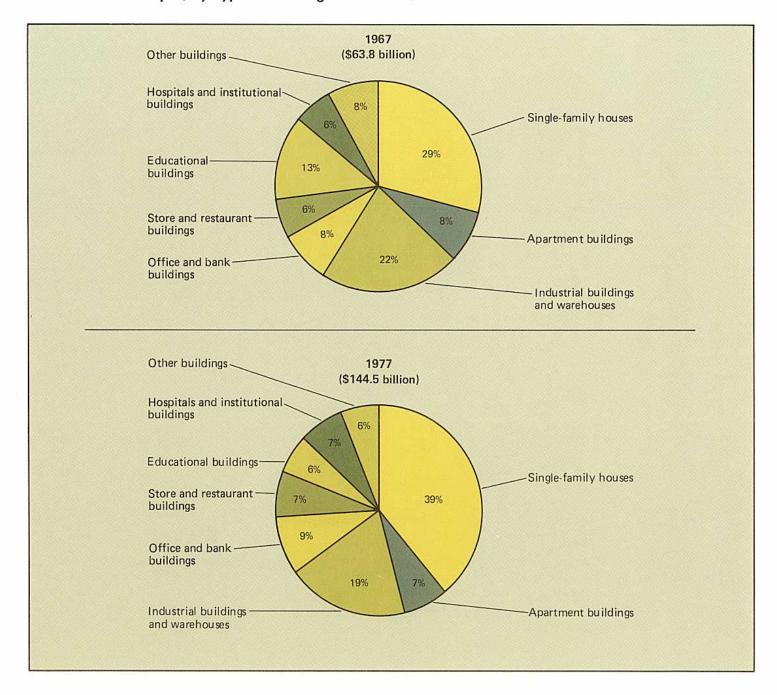
#### Single-Family Homes Comprised Largest Share of Building Construction

Receipts for building construction (\$63.8 billion in 1967 and \$144.5 billion in 1977) continued to be more than double nonbuilding construction receipts (\$24.0 billion in 1967 and \$59.8 billion in 1977).

During this 10-year period, a shift in the type of buildings being constructed occurred. For example, single-family housing represented 29 percent of construction receipts in 1967; in 1977 it represented 39 percent. In addition, hospital, office, bank, store, and restaurant construction each generated a slightly larger share of total building receipts in 1977 than in 1967.

At the same time, educational buildings, which accounted for 13 percent of building construction receipts in 1967, accounted for only 6 percent in 1977. Industrial, warehouse, and apartment building construction also accounted for a smaller share of the receipts.

#### Construction Receipts, by Type of Building: 1967 and 1977



#### Electrical Contractors' Share of Receipts Remained Steady

While receipts of electrical contractors increased between 1967 and 1977, this group continued to account for 18 percent of all construction receipts earned by special trade contractors. There were several slight shifts, however, in the sources of receipts.

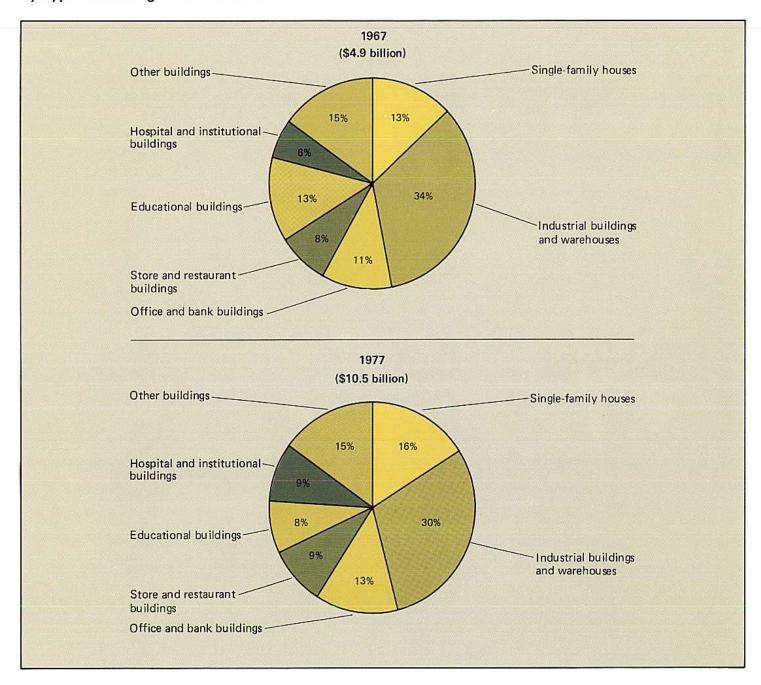
Single-family houses, industrial buildings, and warehouses made up the largest share of electrical contractor receipts, 47 percent in 1967 and 46 percent in 1977. However, the share of receipts for single-family houses rose from 13 to 16 percent while the share for industrial buildings and warehouses declined from 34 to 30 percent.

Other changes or shifts that occurred during this period

included an increase in electrical contract work in hospitals, institutional buildings, stores, and restaurants and a decline in the share of work on educational buildings.

In the chart below, 1967 receipts for electrical work were not adjusted for SIC revisions in 1972. These revisions had only a minor effect on the percentage comparisons between 1967 and 1977.

## Construction Receipts for Electrical Work, by Type of Building: 1967 and 1977



## CENSUS OF MANUFACTURES



The 1977 Census of Manufactures was an enumeration of establishments engaged in the mechanical or chemical transformation of materials or substances into new products. These establishments, usually described as plants, factories, or mills, characteristically use power-driven machines and material-handling equipment. The census of manufactures is the second oldest of the national censuses and the oldest of the economic censuses. The first census of manufactures was taken in 1810, when questions on manufacturing were included with the census of population. With the exception of 1830, a census of manufactures was taken at 10-year intervals through 1900. It was conducted at 5-year intervals through 1920 and then every other year through 1939. After a wartime interruption, this census resumed in 1947. Since that time, it has been conducted approximately every 5 years. The 1977 census is the 30th census of manufactures of the United States.

For the 1977 Census of Manufactures, questionnaires were mailed to all multiestablishment companies and the larger single-establishment companies. For approximately 150,000 singleestablishment companies with up to 20 employees (the number of employees varied by industry), information was obtained from Federal administrative records. The diversity of these activities required more than 200 different report forms to collect information

on about 13,000 separate products. There were 452 four-digit industries classified into 20 major industry groups. The major industry groups follow.

- SIC 20 Food and kindred products
- SIC 21 Tobacco manufactures
- SIC 22 Textile mill products
- SIC 23 Apparel and other finished products made from fabrics and similar materials
- SIC 24 Lumber and wood products, except furniture
- SIC 25 Furniture and fixtures
- SIC 26 Paper and allied products
- SIC 27 Printing, publishing, and allied industries
- SIC 28 Chemicals and allied products
- SIC 29 Petroleum refining and related industries
- SIC 30 Rubber and miscellaneous plastics products
- SIC 31 Leather and leather products
- SIC 32 Stone, clay, glass, and concrete products
- SIC 33 Primary metal industries
- SIC 34 Fabricated metal products, except machinery and transportation equipment
- SIC 35 Machinery, except electrical
- SIC 36 Electrical and electronic machinery, equipment, and supplies

- SIC 37 Transportation equipment
- SIC 38 Measuring, analyzing, and controlling instruments; photographic, medical, and optical goods; watches and clocks
- SIC 39 Miscellaneous manufacturing industries

Information on the following items was obtained from all large establishments included in the mail canvass.

Employment
Payroll
Hours worked
Inventories
Capital expenditures
Costs of—
Materials
Resales
Fuels

Electricity

Contract work

In the intercensal years, an annual survey of manufactures (ASM) is conducted on a sample basis. Approximately 70,000 establishments in the ASM sample provide all of the above information along with the additional items listed below.

Type of fuel consumed
Exports of manufactured
products
Supplemental labor costs
Quantity of electricity
Gross value of fixed assets
Rental payments
Retirements
Depreciation
Purchased services
New capital expenditures
(for transportation equipment, computers, and all other)

In census years, the ASM is integrated with the full enumeration.

In addition, through the use of various specialized report forms, detailed information was collected on materials consumed, supplies used, and products made and shipped. In selected industries, supplemental information was also obtained on characteristics of the plant, for example, type of operation, processing of metals, and types of equipment.

The data used to calculate the chart on indexes of production and employment have been adjusted for changes in the Standard Industrial Classification (SIC) system over the years. There were major revisions in the SIC in 1957 and 1972. Most of the changes reallocated industry activity within manufacturing and thus had little effect on overall manufacturing totals. Between 1947 and 1954, however, the scope of manufacturing expanded to include fluid milk production and logging camp and contractor operations, previously not considered manufacturing. The 1947 shipments data were reestimated to include these two industries and to make them comparable with 1954 data.

The 1947 employment data shown on the time series map are not completely comparable with employment data for 1958, 1967, and 1977, because they exclude logging camps and contractors and fluid milk processors. In 1958, these two industries accounted for about 0.5 percent of all

manufacturing employment.
Logging camps and contractors
tend to be more heavily concentrated in the South and
Northwest. Fluid milk
processors tend to be located
more in conformity with the

geographic distribution of the population. In addition to the differences described above, the figures for 1947 do not include central administrative offices, which were included in census years since 1947.

In the charts showing standard metropolitan statistical areas (SMSA's), comparison data for 1967 have been retabulated in terms of the 1977 SMSA boundaries to provide comparability between the 2 census years. These figures do not include statistics for counties, towns, or cities that had less than 450 manufacturing employees in 1967.

#### Output per Employee Increased Over 30-Year Span

Manufacturing currently accounts for about 25 percent of the gross national product. During the 30 years since the first postwar census in 1947, manufacturing output increased substantially. Using 1947 as an index base of 100, output in 1977 stood at

323.4, an increase of 223 percent. During the same period, employment increased only 29 percent.

With the slower growth in employment, productivity in the form of output per employee rose, although its increase was uneven across the 30-year span. For example, in the 11-year span of 1947 to 1958, output climbed 42 percent, or about 3.7 percent per year; employment grew more

slowly, 5 percent, or about 0.5 percent per year. Between 1958 and 1967, a 9-year span, output rose 72 percent, or 8 percent per year, whereas employment rose about 20 percent, or 2.2 percent per year. From 1967 to 1977, output rose 33 percent, or 3.3 percent per year; employment rose only 2 percent over the period, or 0.2 percent per year.

#### Indexes of Output and Employment: 1947, 1958, 1967, and 1977

Index of change (1947=100) 350 Output Employees Output per employee 300 250 200 150 100 1958 1967 1977 1947

## Durable Goods Manufacturers Accounted for Over 50 Percent of Employees

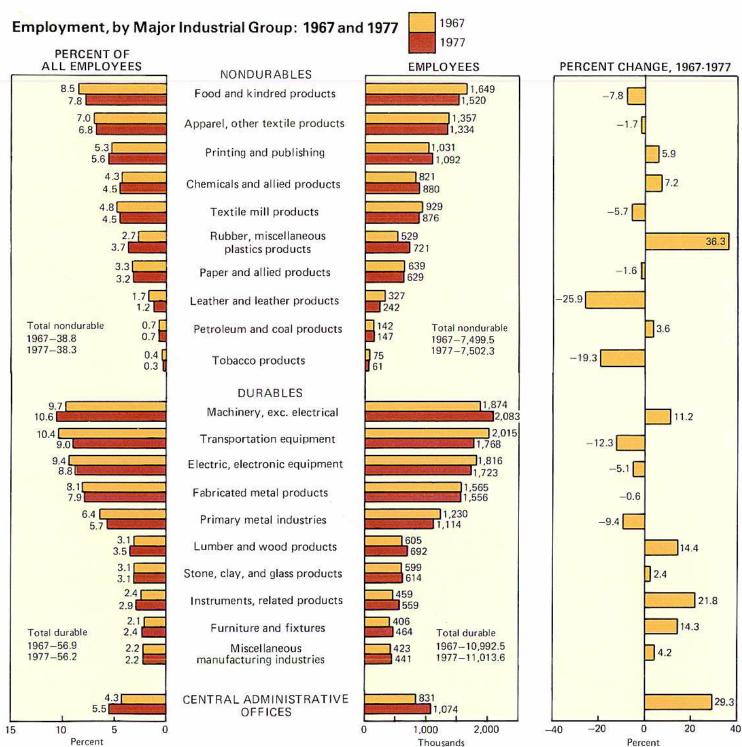
Employment in manufacturing was not evenly distributed among the major industrial groups. Durable goods in 1977 accounted for 56 percent of employment whereas nondurable goods accounted for only 38 percent. Another 6 percent of the employees in manufacturing were located at central administrative offices, providing services such as management, accounting, warehousing, and research and development.

Within the durable goods sector, the machinery industry dominated with 11 percent of all manufacturing employees. Food and kindred products

dominated the nondurable goods industrial group with 8 percent of all manufacturing employees. Tobacco manufacturers had the lowest number of employees of any major industry, with less than one-half of 1 percent.

While the total number of employees in manufacturing industries increased by only 1 percent between 1967 and 1977, there were a number of significant changes within

separate industries. Employment in the rubber and plastics industry increased by 36 percent, or nearly 200,000 employees; in contrast leather and leather products recorded a 26-percent decrease, losing 85,000 employees.



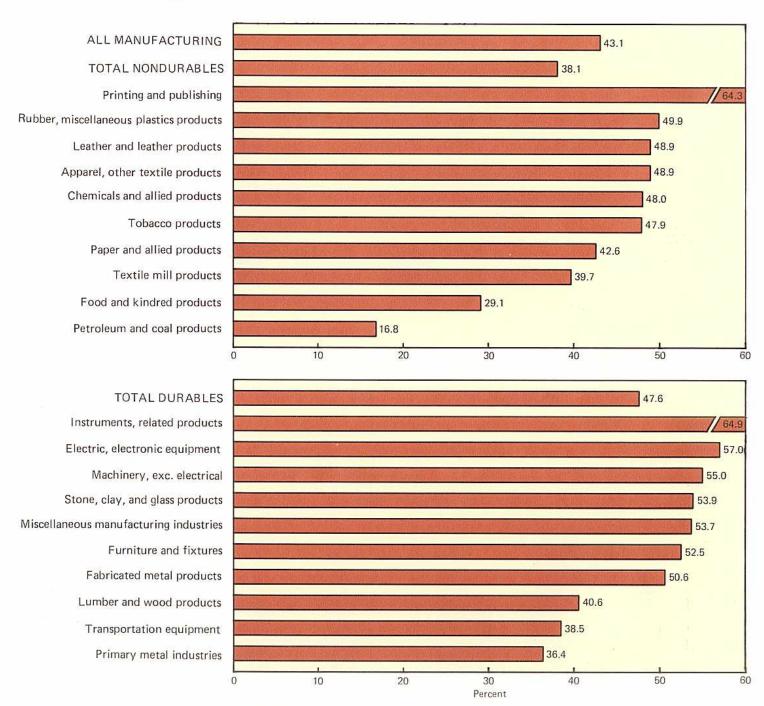
#### Overall Value Added Was 43 Percent of Shipments

Value added is the value of shipments less costs of materials purchased, adjusted for changes in inventories, and is the measure of the contribution of an industry to the overall output of the Nation.

The manufacturing sector recorded shipments valued at \$1.4 trillion in 1977. Approximately \$800 billion of materials and supplies were consumed and approximately \$600 billion in value was added in the manufacturing process.

Value added varied among the major industrial groups. For example, the overall value added in the manufacturing process in 1977 was 43 percent of total shipments. However, this ranged from 17 percent for petroleum and coal products to 65 percent for instruments and related products. The value added for durable goods was usually greater than that for nondurable goods, 48 percent and 38 percent, respectively.

## Value Added by Manufacture as a Percent of Value of Products Shipped: 1977



#### Manufacturing Activity Concentrated in Large Plants

There were approximately 360,000 manufacturing establishments in 1977, and 54 percent of these employed less than 10 workers. Although comprising over one-half of the establishments, this group accounted for only 3 percent

of all manufacturing employees and only 2 percent of the value added. In comparison, 10 percent of the establishments that had 100 or more employees accounted for 76 percent of all employees and generated 80 percent of the value added.

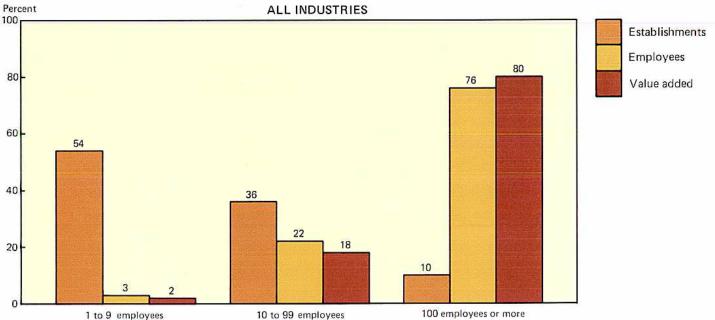
Some industries were typically small; others were large. In logging, for example, 88 percent of the establishments employed fewer than 10

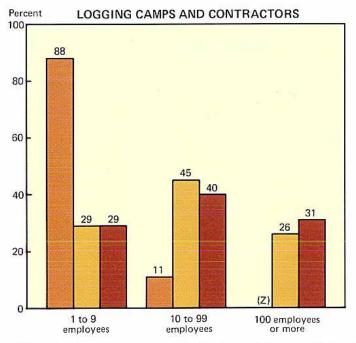
persons and accounted for 29 percent of the employees and value added. In contrast, establishments in the steel industry with less than 10 employees represented only 41 percent of the total, and they generated only a fraction of 1 percent of the employment and value added. However, 41 percent of the steel mills had 100 or more employees and generated 99 percent of employment

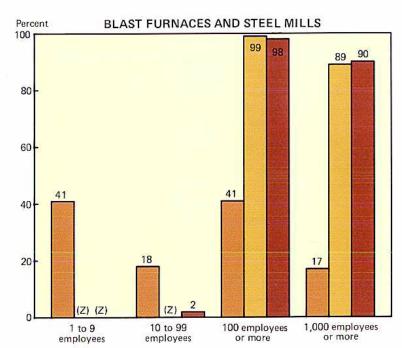
and 98 percent of the value added.

About 17 percent of the steel mills were very large, employing 1,000 or more workers. They represented 90 percent of the value added and 89 percent of the employees in the industry.

## Establishments, Employment, and Value Added for Selected Industries, by Employment Size Class: 1977







Z Less than 1 percent. Source: U.S. Department of Commerce, Bureau of the Census

## Consumption of Energy in Manufacturing Continued Upward Trend

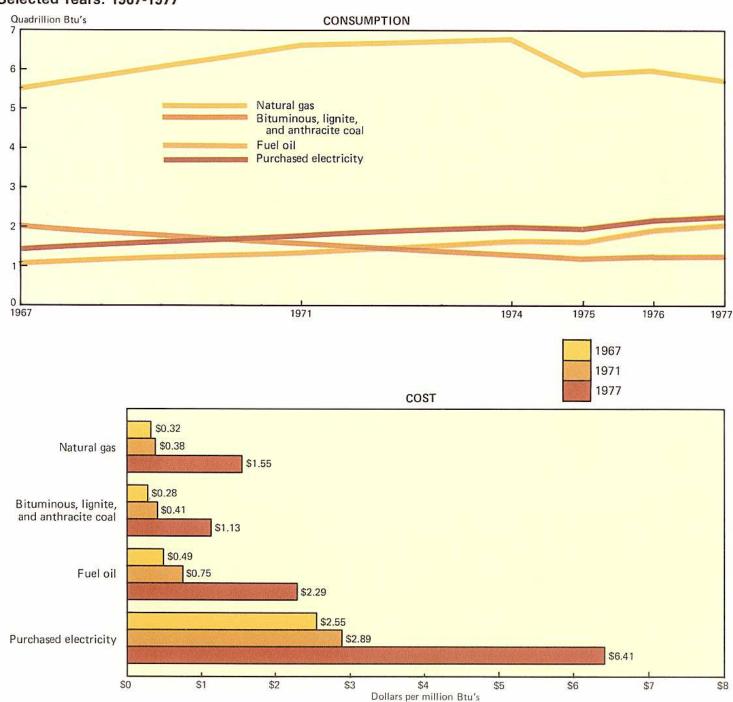
While there has been a long term upward trend in the overall consumption of energy for heat and power, not all fuel sources have shared equally. As a result there have been some very significant shifts in the consumption of energy resources. Between 1967 and 1977, the amount of oil used by manufacturers had almost doubled; the amount of electricity used was 50 percent greater than in 1967. During this period, natural gas consumption increased but in 1974 began to decline. With 5.7 quadrillion Btu's, the use of natural gas was only 4 percent greater in 1977 than

in 1967. Nevertheless, natural gas continued to be the fuel most used in manufacturing.

While coal consumption showed a downward trend after 1967, the escalation of prices and the interruption of supplies of oil and gas have created changes in demand, and the consumption of coal for manufacturing purposes rose again.

The change in the cost of energy sources was dramatic during this period. In 1977, the unit values per Btu of oil, gas, and coal were four to five times greater than in 1967. The unit values of purchased electricity increased less spectacularly, but still 1½ times greater than in 1967. (Figures exclude coke and breeze, other fuels, and fuels not specified by kind.)

#### Fuel Consumption and Cost, by Type of Fuel, Selected Years: 1967-1977



#### Manufacturing Still Concentrated in East North Central and Middle Atlantic Divisions

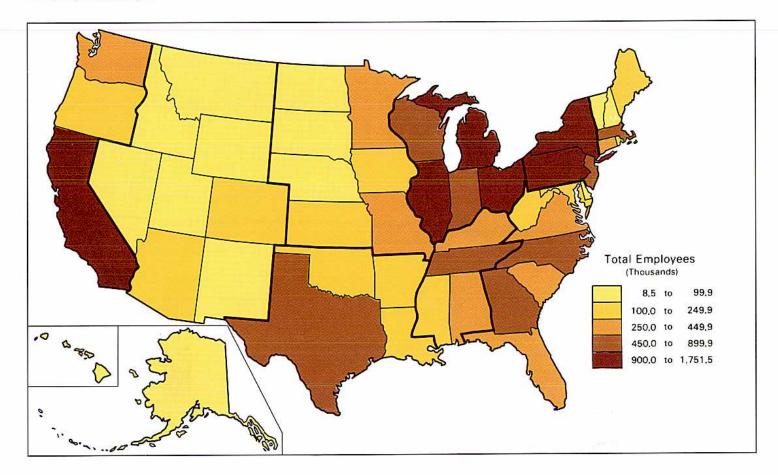
In 1977, there continued to be a significant geographic concentration of manufacturing activity in the eight States of the Middle Atlantic and East North Central Divisions, which reflected in part the historical growth of the United States.

In 1947, these two divisions accounted for 8.3 million (58 percent) of all manufacturing employees. Between 1947 and 1977, the number of manufacturing employees nationwide increased by 37 percent. This growth, however, was not uniformly distributed throughout the country. While there continued to be a

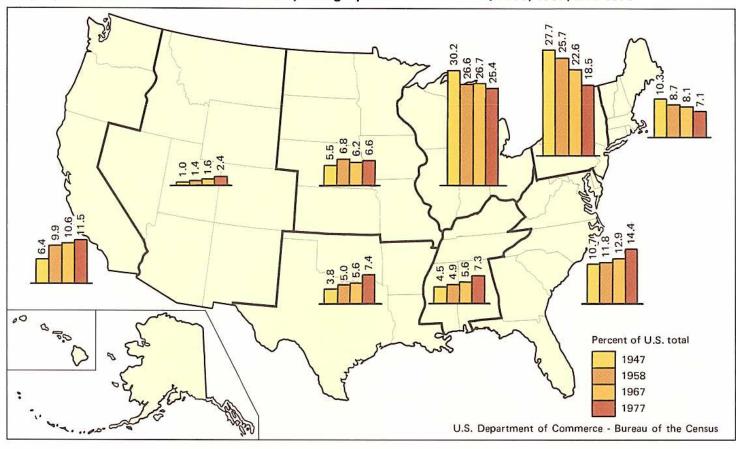
large concentration in the two divisions in 1977, 8.6 million employees, the relative share of employees declined to 44 percent; the East North Central Division dropped from 30 to 25 percent and the Middle Atlantic Division dropped from 28 to 19 percent. At the same time, the South Atlantic Divisions' share of manufacturing employees rose from 11 to 14 percent and the

Pacific's share went up from 6 to 12 percent.

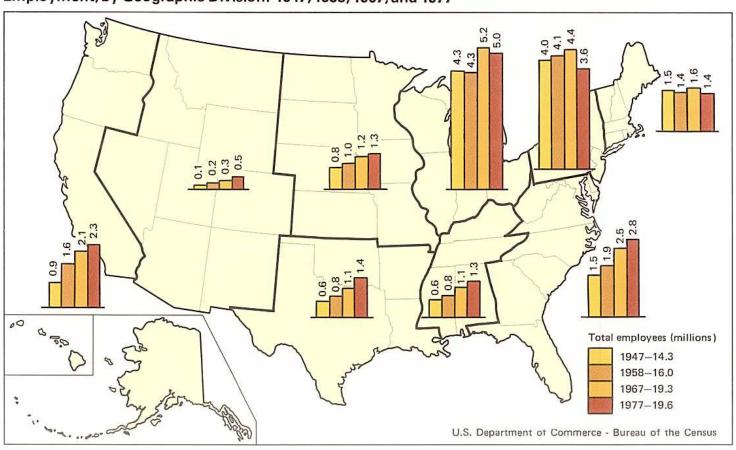
#### Employment, by State: 1977



### Employment as a Percent of U.S. Total, by Geographic Division: 1947, 1958, 1967, and 1977



#### Employment, by Geographic Division: 1947, 1958, 1967, and 1977



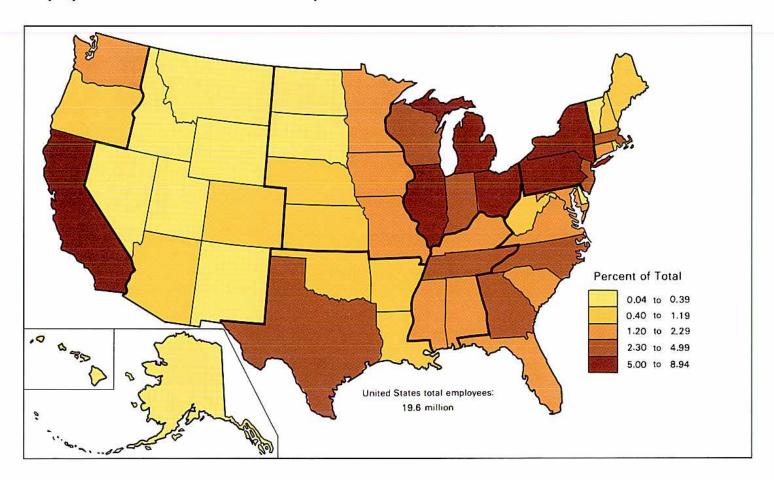
#### California Had Most Manufacturing Employees

Only 6 States in 1977 individually accounted for 5 percent or more of the total number of manufacturing employees. These 6 States together, however, accounted for 42 percent of all manufacturing employees. In con-

trast, there were 12 States (10 west of the Mississippi River) that each had less than 0.4 percent of the total number of manufacturing employees. These 12 together accounted for only 2 percent of the manufacturing employees.

California with 9 percent led all other States, followed by New York with 8 percent and Pennsylvania, Ohio, and Illinois, each with 7 percent. The States with the smallest share of manufacturing employees were Wyoming with 0.04 percent, North Dakota with 0.07 percent, and Nevada with 0.08 percent.

#### Employment as a Percent of U.S. Total, by State: 1977



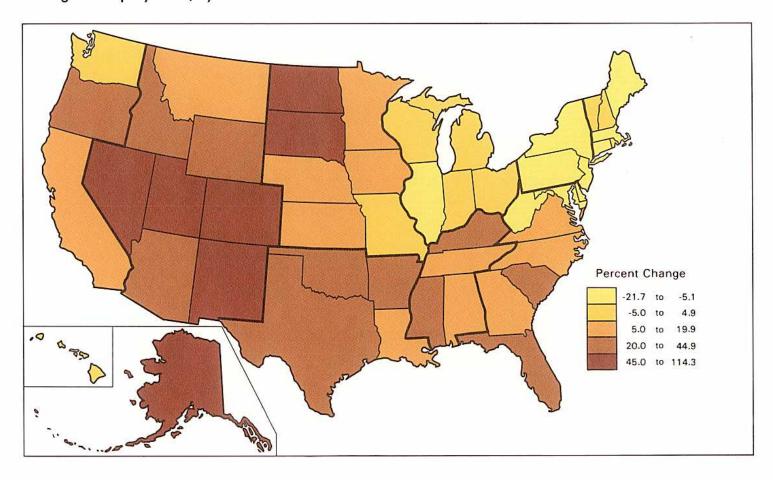
#### Major Changes Took Place in Geographic Distribution of Employment

The number of manufacturing employees in the United States rose slightly more than 1 percent between 1967 and 1977. This small increase, however, masked the significant changes within the individual States.

Of 17 States reporting decreases, New York recorded the largest relative decrease, 22 percent, followed by Maryland with a 15-percent decline and Pennsylvania and Massachusetts with 14-percent declines.

In contrast, in some southern and western States the relative growth in employment was dramatic, even though the actual number of manufacturing employees was small in some States. For example, Nevada increased its number of manufacturing employees by 114 percent, from 7,000 to 15,000 employees. Texas showed the largest increase in actual numbers (229,800), followed by California (168,000).

#### Change in Employment, by State: 1967-1977



#### North and South Carolina Had Highest Percentages of Labor Force in Manufacturing

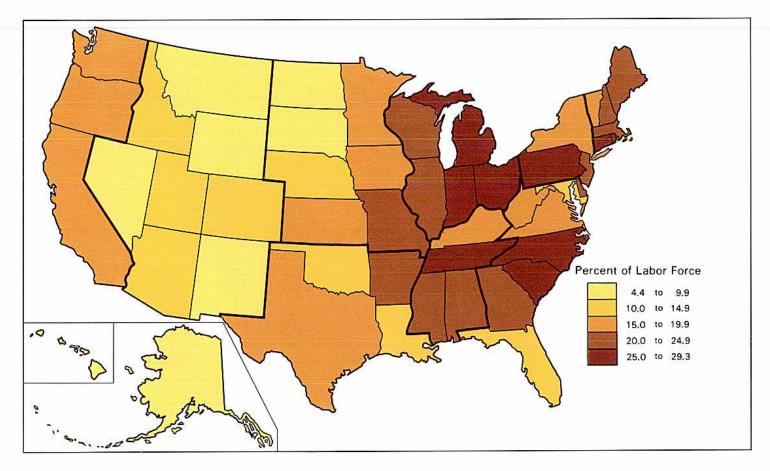
The proportion of a State's labor force employed in manufacturing gives an indication of the importance of manufacturing in its economy. Nationwide, 20 percent of the labor force was employed in

manufacturing in 1977. In California, the State with the most manufacturing employees (9 percent of the U.S. total), those employees comprised 17 percent of the labor force. In Iowa, on the other hand, where only 1 percent of the Nation's manufacturing workers were employed, they also accounted for 17 percent of the State's labor force.

The increased importance of manufacturing in such

southern States as North and South Carolina is reflected by the highest manufacturing employee/labor force ratios in the Nation in 1977, 29.1 and 29.3 percent, respectively. Manufacturing activity was least important in such States as Wyoming, Nevada, and North Dakota where manufacturing employment in each of these States was less than 5 percent of the labor force.

#### Employment as a Percent of Total Labor Force, by State: 1977



#### Specialization Continued in Geographic Divisions

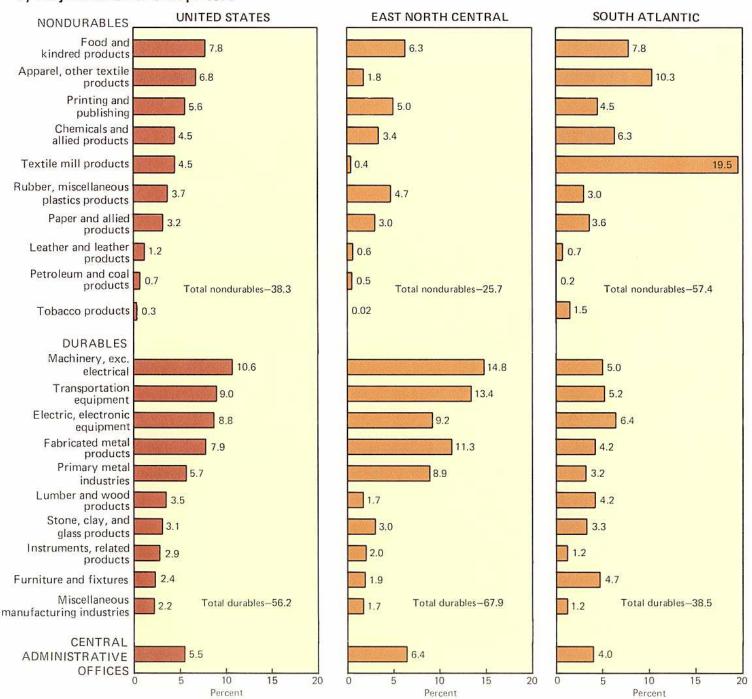
Each geographic division tends toward some type of industrial specialization. For example, in 1977, 56 percent of manufacturing employees in the United States worked in a durable goods industry. In the East North Central Division, however, this figure was 68 percent. In comparison, in the South Atlantic Division, it was only 39 percent

Similar differences can be identified when reviewing a more refined industry breakdown. At the national level, textile mill industries in 1977 accounted for only about 5 percent of all manufacturing employment. In the South Atlantic Division, however,

textile industries accounted for almost 20 percent of that region's manufacturing employment. In the East North Central Division, however, textile employment was a negligible share of manufacturing activity, less than one-half of 1 percent of that area's manufacturing employees.

A different pattern was reflected by the machinery industry. In 1977, this industry accounted for 11 percent of the overall employment in manufacturing. In the East North Central Division, it included 15 percent of the manufacturing employees but in the South Atlantic only 5 percent.

## Employment in Selected Geographic Divisions, by Major Industrial Group: 1977



Source: U.S. Department of Commerce, Bureau of the Census

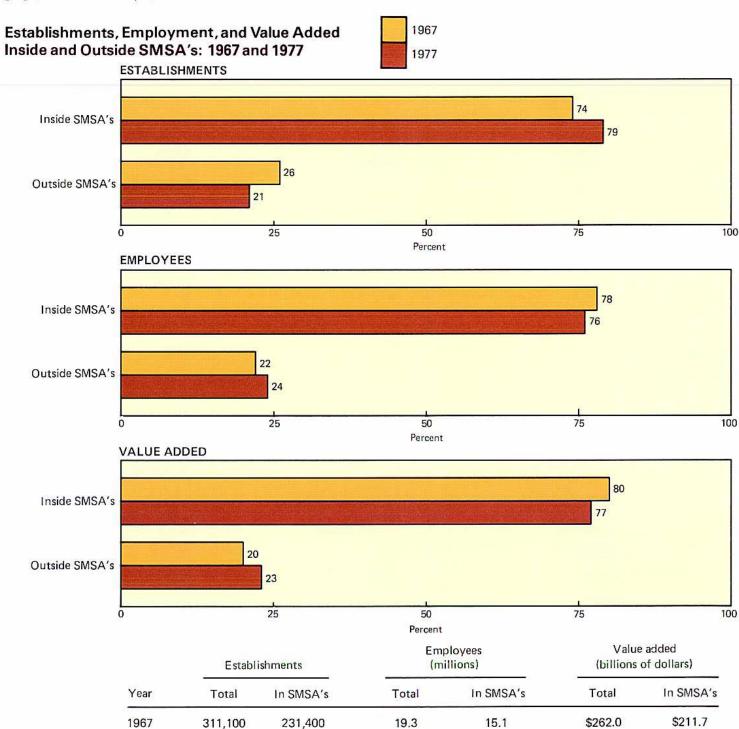
#### Nonmetropolitan Areas Gained Manufacturing Employees

While manufacturing establishments were still concentrated within metropolitan areas and had increased in number, the distribution of manufacturing employees indicated a possible geographic shift. In 1967, 78

percent of all manufacturing employees worked in metropolitan areas, but by 1977 their number had decreased to 76 percent. Manufacturing activity did not grow as rapidly in metropolitan areas as in the rest of the Nation.

Between 1967 and 1977, metropolitan areas actually lost almost 310,000 employees, while areas outside gained 577,000 employees.

This same pattern of change was reflected in the value added by manufacturing inside and outside metropolitan areas. The proportion of value added increased in counties outside metropolitan areas, from 20 percent in 1967 to 23 percent in 1977.



1977

359,900

285,000

19.6

14.8

\$585.2

\$448.1

#### Larger, Older Metropolitan Areas Lost Manufacturing Employees

Most large metropolitan areas with over 100,000 manufacturing employees in 1967 lost employment by 1977. The New York metropolitan area, which had the largest number of manufacturing

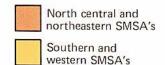
employees in 1967 (1.1 million), also had the greatest loss (277,300 employees). Philadelphia and Chicago lost 121,000 and 98,000 employees, respectively.

Of the eight metropolitan areas that gained manufacturing employment during the same time period, four had gains of 48,000 or more, Houston and Dallas-Fort Worth in Texas and San Jose and Anaheim-Santa Ana-

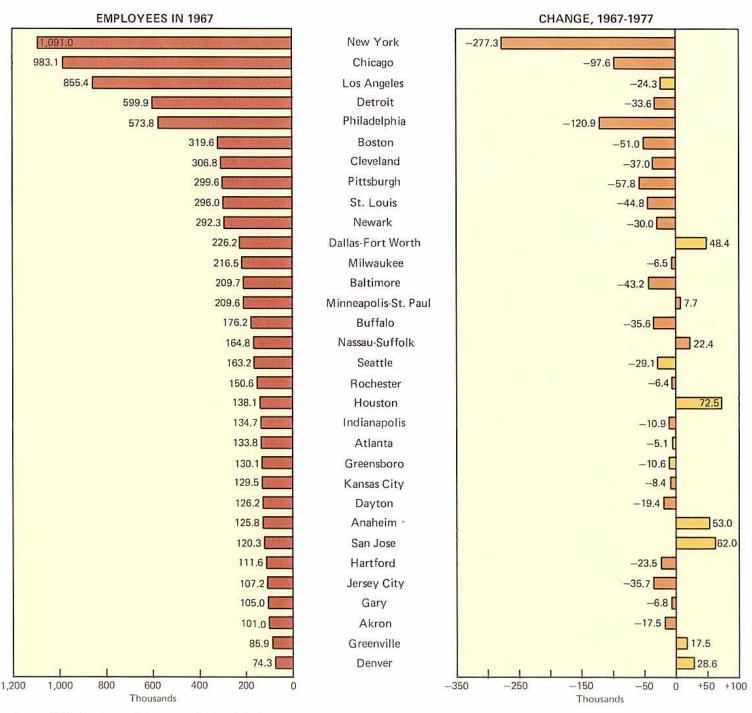
Garden Grove in California. Two areas, Greenville-Spartanburg in South Carolina and Denver, Colorado, gained a sufficient number of employees to put them over 100,000 manufacturing employees in 1977.

The larger metropolitan areas, which tended to be older and located in the northern part of the United States, declined in industrial

activity, whereas those in the South and West increased.



#### SMSA's With 100,000 or More Employees: 1967-1977



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# CENSUS OF TRANSPORTATION



The 1977 Census of Transportation consisted of four independent surveys, each taken within a different time frame, rather than a single census. These surveys are the National Travel Survey, Truck Inventory and Use Survey, Commodity Transportation Survey, and Nonregulated Motor Carriers and Public Warehousing Survey. Each survey collected information about a particular area of transportation that was not covered in the statistics collected or published by other Federal or private agencies. These surveys were previously conducted in 1963, 1967, and 1972.

The 1977 National Travel Survey provided profiles of the volume and characteristics of nonlocal travel (at least 100 miles) from a sample of 25,000 civilian households in the United States.

Information was collected on the following subjects.

Means of transport
Purpose of trip
Recreational activities
Weekend and vacation travel
Travel to and through States
Number of households and
persons taking trips, number of trips taken, persontrips, person-miles, personnights, and overnight
accommodations
Characteristics of travelers,
households, and trips

The regions used in the 1977 National Travel Survey were the same as those designated by the U.S. Travel Service and the Discover America Travel Organization. The one exception was Hawaii, included in the Far Western Region instead of the Islands group.

The 1977 Truck Inventory and Use Survey (TIUS) provided data on the physical characteristics and operational use of the Nation's private and commercial trucks from a sample of 117,000 registered trucks.

Information was collected on the following subjects.

Number of vehicles Number of truck-miles Major use of vehicle Model year Body type Vehicle size class Type of fuel Acquisition Maintenance Classification of operator Hazardous material Engine size Type of transmission and braking system Power steering and airconditioning Fuel conservation equipment

In 1977, sample data for TIUS were benchmarked to R. L. Polk and Company's July 1, 1977 data to provide estimates of the total truck population, while the 1967 data were benchmarked to Federal Highway Administration (FHWA) data. The TIUS estimate for 1977 was 8 percent lower than the FHWA estimate.

The 1977 Commodity Transportation Survey provided statistics on the volume and characteristics of commodity shipments originated by manufacturers and included manufacturing establishments (or manufacturers) in the 50 States and the District of Columbia. A sample of about 20,000 establishments provided information on the flow of commodities from supply areas to markets or redistribution points. SIC codes were used to identify the manufacturing establishments by type of activity in which they are engaged. Transportation commodity classification (TCC) codes were used to identify shipments of commodities by type of product.

Information on the following subjects was collected or calculated for each commodity shipped.

Tons, ton-miles
Method of transport
Length of haul
Commodity
Weight of shipment
Value of shipment
Origin and destination areas

The Nonregulated Motor Carriers and Public Warehousing Survey provided data on truck and bus carriers not subject to Interstate Commerce Commission regulations and on public warehouses. Approximately 50,000 motor freight carriers and public warehouses and 4,000 bus carriers received questionnaires.

Information was collected on the following subjects.

Kind of business Motor freight transportation Public warehousing Bus carriers Operating revenues Operating expenses Payroll Employment Capital expenditures Employer cost of fringe benefits Warehouse and storage space Revenue freight equipment Revenue passenger equipment

A graphic presentation of this survey is not included in this publication.

## Personal Travel Doubled Since 1967

Total personal travel rose steadily during the 10-year period of 1967 to 1977, from 253 million trips to 539 million trips, or 113 percent.

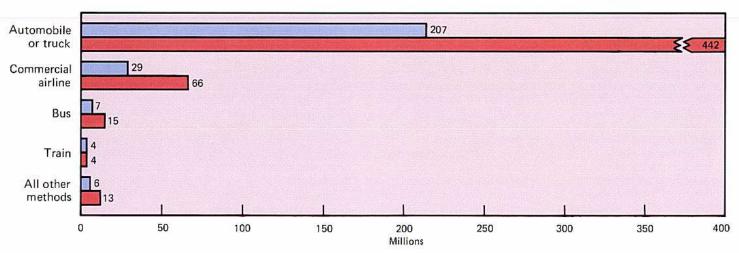
The automobile and truck remained the major means of personal travel, accounting for 82 percent in both 1967 and 1977. Commercial airlines ranked second, increasing by 128 percent from the 1967 total.

Visits to relatives and friends continued to be the main reason for travel, accounting for 37 percent of total person-trips. However, travel for this purpose declined in relative importance since 1967, when it was 41 percent of all person-trips. Trips for other purposes, such as

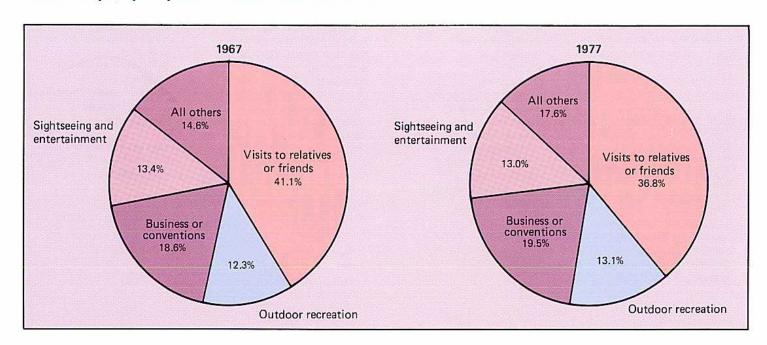
business, conventions, and outdoor recreation, increased in relative importance during this period.

#### Person-Trips, by Method of Transportation: 1967 and 1977





#### Person-Trips, by Purpose of Travel: 1967 and 1977



#### **Great Lakes Country Generated Greatest** Number of Person-Trips

During 1977, 136 million persons, or 64 percent of the total civilian noninstitutional population, took one or more round trips to places at least 100 miles or more away from home. This compares to 114

million persons, or 55 percent, in 1972.

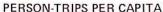
The National Travel Survey regions with the largest populations-the Great Lakes Country and the South, with a combined estimated population of 41 percent in 1977accounted for the greatest volume of travel in both 1972 and 1977. The Great Lakes Country alone generated almost one-fourth of all person-trips in these 2 years.

Persons living in the three western travel regions-Mountain West, Frontier West, and Far West and Hawaii-traveled more frequently than their counterparts in the northeastern parts of the United States. For example, persons living in the Mountain West averaged 3.8 person-trips, while those in the Eastern Gateway States of New York and New Jersey averaged 1.7 trips.

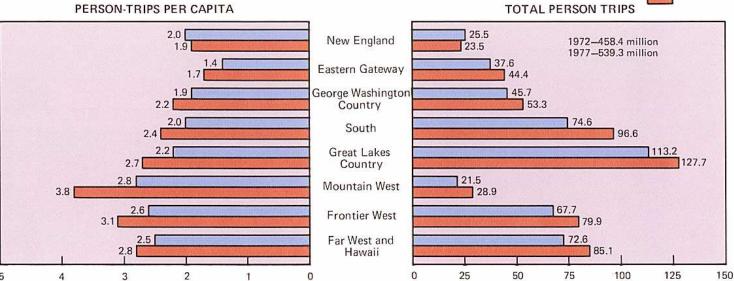
#### Per Capita and Total Person-Trips, by Travel Region of Origin: 1972 and 1977



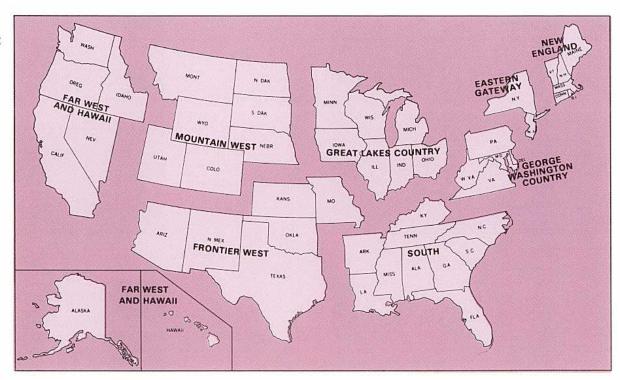
Millions



Number



**National Travel** Survey Regions: 1977



## Overnight Accommodations Varied With Trip Purpose

The total number of personnights in travel for all purposes increased from 1,782 million in 1972 to 2,164 million in 1977 (21 percent). The number of person-nights spent visiting friends and relatives,

which was the major purpose of all personal travel, increased 24 percent.

Even though the total number of person-nights in travel increased, the type of overnight accommodation used for any one purpose changed only slightly between 1972 and 1977; there were more significant variations in type of accommodations among trip purposes.

When visiting relatives and

friends, overnight accommodations with relatives or friends were most often used—86 percent in both 1972 and 1977. When travel was for sightseeing or entertainment purposes, rental accommodations were used most often—66 percent in 1972 and 63 percent in 1977.

#### Person-Nights and Type of Accommodation, by Purpose of Trip: 1977

#### TYPE OF ACCOMMODATION PERSON-NIGHTS IN TRAVEL 1,782 ALL TRIPS 2,164 Visits to relatives or friends Business or convention Outdoor recreation Sightseeing or entertainment All other purposes 1,500 1,000 2,000 2,500 Millions Percent With relatives or friends Rental accommodations Own cabin, campsight, vacation home, etc. or private commercial campground Other accommodations

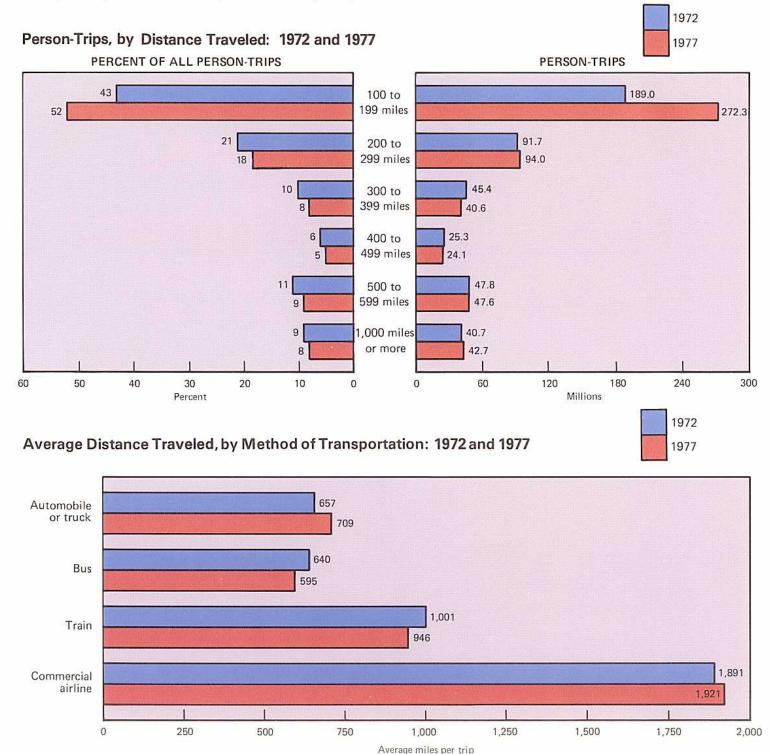
#### Most Person-Trip Destinations Less Than 200 Miles From Home

Over one-half of the persontrips made in 1977 were to destinations less than 200 miles from home. This was an increase over the 43 percent in 1972. Another 31 percent of the person-trips were to destinations between 200 and 499 miles from home; this was down from the 37 percent in 1967.

The average trip distance traveled by the major means of transportation continued to change during this period. The average distance for a persontrip by automobile or truck was 709 miles in 1977, an increase of 8 percent over 1967 while the distance by airplane increased 2 percent,

from 1,891 to 1,921 miles. In contrast, the average person-trip distance for bus and train declined, 7 percent for buses and 5 percent for trains.

There was also a strong relationship between distance traveled and means of transportation. For commercial modes, the bus was favored for the shorter trips while the airplane was preferred for long distances.



Source: U.S. Department of Commerce, Bureau of the Census

#### Truck Registrations Increased by 71 Percent

The number of trucks in the United States increased dramatically during this period, from 15.4 million to 26.2 million, or 71 percent.

Trucks were used in larger numbers for both commercial hauling and personal transportation. They accounted for 19 percent of all registered vehicles in 1977 compared to 16 percent in 1967.

Truck size is classified by weight: light (10,000 pounds or less), medium (10,001-19,500 pounds), light-heavy (19,501-26,000 pounds), heavy-heavy (26,001 pounds or more).

Light trucks continued to account for the major share of all trucks in use nationwide—85 percent in 1977, up from

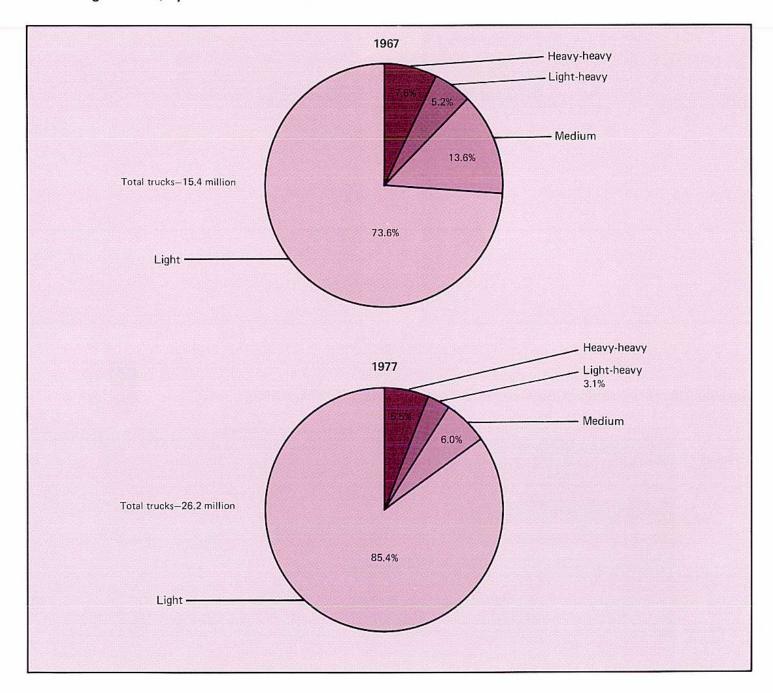
74 percent in 1967. The number of light trucks almost doubled during this period, which was the major reason for the 71-percent rise in the total number of trucks.

Twelve States had increased registrations of over 90 percent, with three western States (Utah, Nevada, and Arizona) and Michigan increasing over 100 percent. Only the District of Columbia

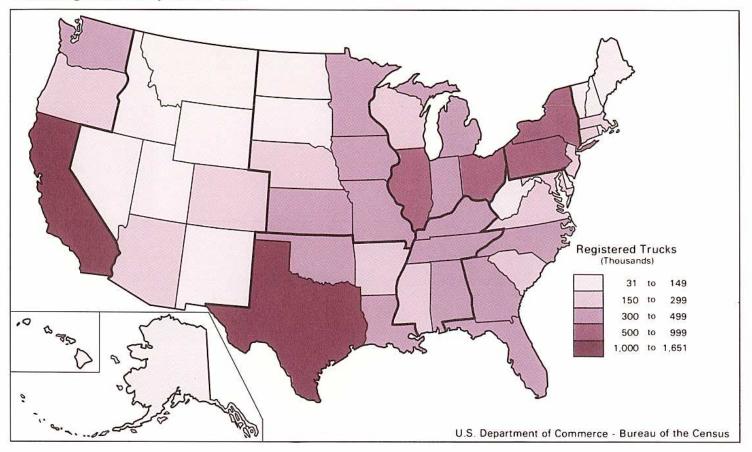
experienced a decrease in truck registrations.

California had the largest number of trucks, with 2.9 million registrations, followed by Texas, Illinois, and Michigan. These four States alone accounted for slightly more than one-fourth of all truck registrations.

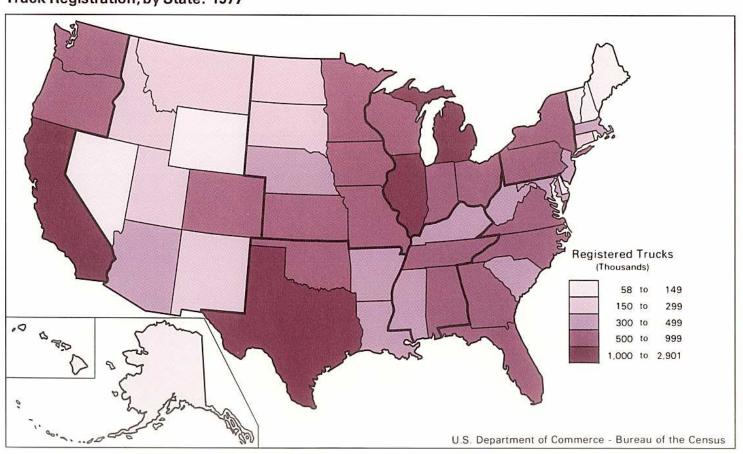
#### Truck Registration, by Truck Size: 1967 and 1977



#### Truck Registration, by State: 1967



#### Truck Registration, by State: 1977



#### **Heavy Trucks Used** for Most Long-Range Trips

The size of the trucks used for different purposes was reflected in the geographic range of operations. The longer the distance, the greater the tendency to use trucks of heavier weight. In 1977, 75 percent of the vehicle miles of long-range trips (over 200

miles one-way) were made by the heaviest weight trucks. Light trucks were used predominantly for local, shortrange (200 miles or less), and off-the-road (mostly construction and farming) operations.

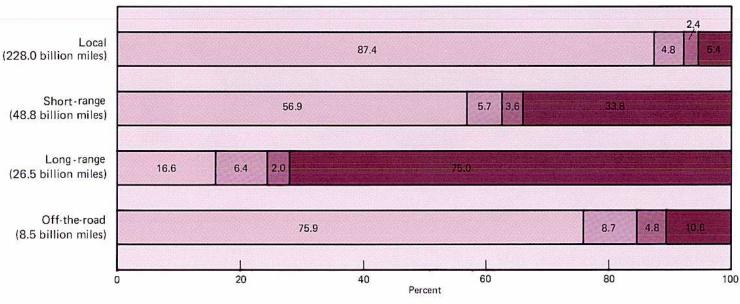
Diesel fuel was little used in light and medium-size trucks in 1977. It was, however, the most common fuel used by heavier trucks; 61 percent of all fuel used by trucks in the heavy-heavy

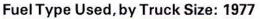
category was diesel fuel Although only 4 percent of the truck inventory used diesel fuel or liquefied petroleum gas (LPG), they accounted for approximately 15 percent of the truck-miles.

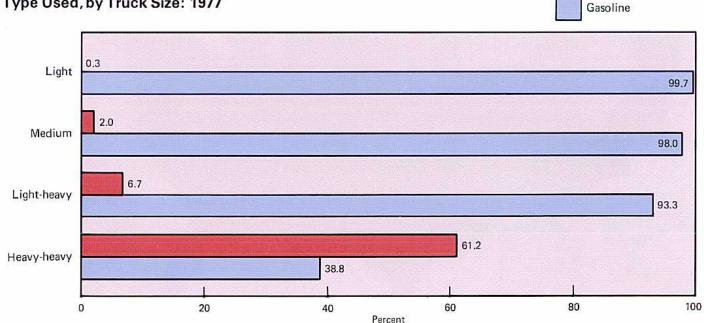


Diesel (including LPG)

#### Range of Operation, by Truck Size: 1977







#### Truck-Miles Varied With Size of Vehicle and Geographic Area

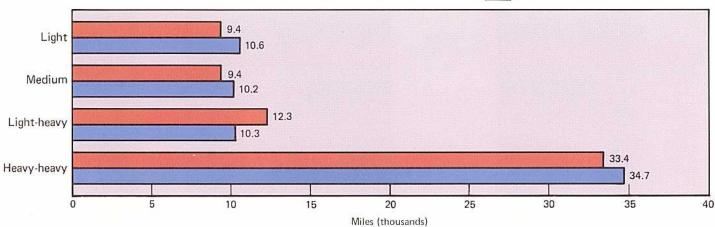
In 1977, annual truck-miles increased 80 percent over those in 1967 (312.5 billion in 1977 and 173.7 billion in 1967). Nationwide, annual miles driven per truck in 1977 changed very little from 1967—from 11,300 to 11,900 truck-miles, a change

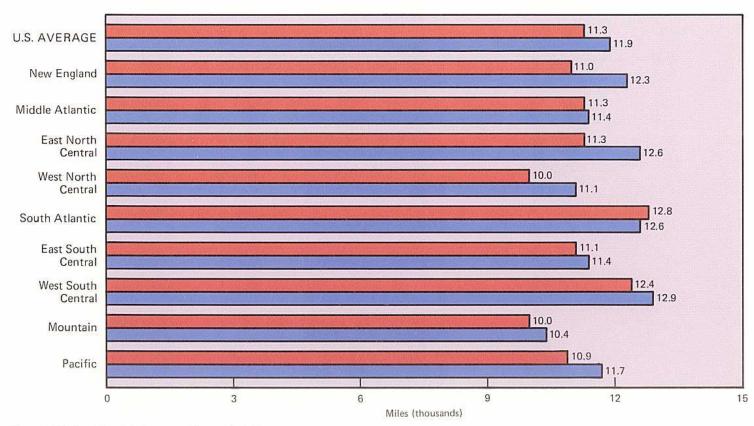
of 5 percent. Trucks classified as light, medium, and light-heavy averaged between 10,200 and 10,600 truck-miles per truck in 1977, while the heaviest trucks, those over 26,000 pounds, averaged more than 33,000 truck-miles in 1967 and 1977.

The annual number of truck-miles varied by geographic area as well as by vehicle size. Trucks in the West South Central Division were driven an average of 12,900 miles in 1977, 1,000 miles, or 8 percent, more than the national average, while trucks in the Mountain Division were driven 10,400 miles, 1,500 miles, or 12 percent, less than the national average.

## Average Annual Miles per Truck, by Truck Size and Geographic Division: 1967 and 1977







#### Over One-Half of All Trucks Used for Personal Transportation

In 1977, 54 percent of all trucks were used for personal transportation. This compares to 34 percent in 1967 and reflects increased use of light trucks. Personal truck transportation is considered to be the use of a truck in place of

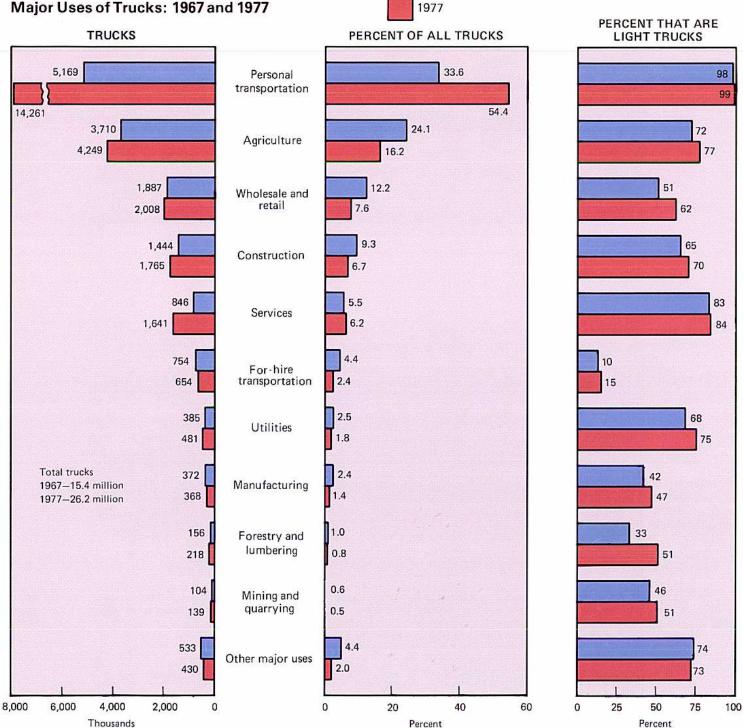
an automobile for travel to and from work, outdoor recreation, social activities, etc. Trucks used for agricultural purposes ranked second.

While the number and use of trucks increased throughout most sectors of the economy, some sectors showed a decline. These included for-hire transportation, manufacturing, and other major uses.

Light trucks were used more extensively in all sectors, even those that had been predominantly heavy truck oriented, such as forestry and lumbering. In addition to personal transportation, light trucks accounted for 75 percent or more of the trucks used in 1977 for such activities as services, agriculture, and utilities.

1967





#### Most Shipments by Manufacturers Traveled Less Than 100 Miles

Almost one-half of the 3.3 billion tons of products shipped by manufacturers in 1977 was from petroleum and coal products industries (30 percent) and stone, clay, and

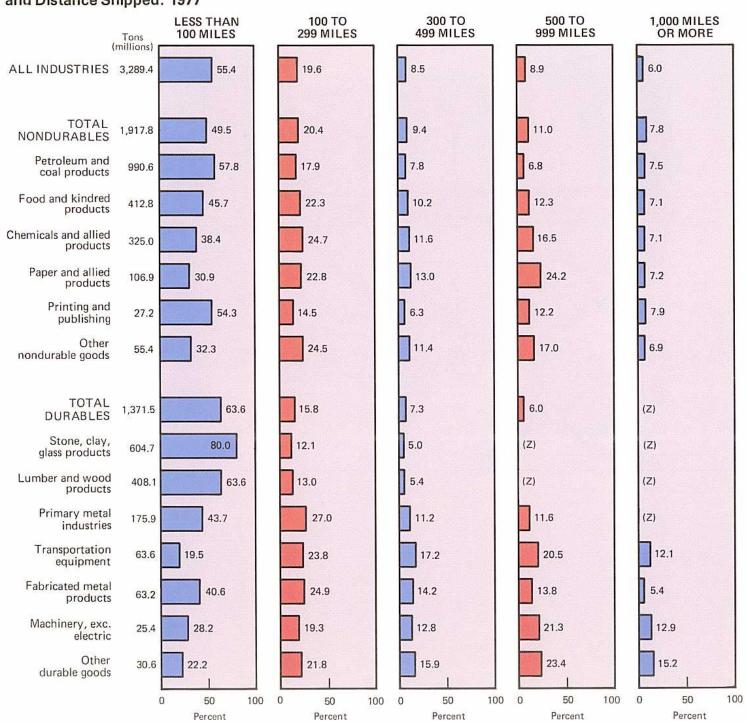
glass products industries (18 percent). Both of these industries shipped a major portion of their products less than 100 miles—58 percent and 80 percent, respectively.

Other industries with onehalf or more of their shipments traveling less than 100 miles included printing and publishing, with 54 percent, and lumber and wood products, with 64 percent. Three industries shipped over 30 percent of their products 500 miles or more. Machinery led with approximately 34 percent, followed by transportation equipment and paper and allied products.

Data shown below are preliminary and subject to change when final figures are published. Shipments will not sum to 100 percent. Not shown is the percent of ship-

ments whose distance was not reported.

## Manufacturers' Shipments, by Major Industry Group and Distance Shipped: 1977



#### California and Texas Led States in Volume of Shipments Made by Manufacturers

Three States had over 200 million tons of products shipped by manufacturers in 1977; Texas with 428.6 million tons, California with 315.9 million tons, and Louisiana with 206.6 million

tons. In each of these States, petroleum products comprised a major portion of the products shipped. In Louisiana, for example, 60 percent of the tonnage shipped were products resulting from petroleum refining.

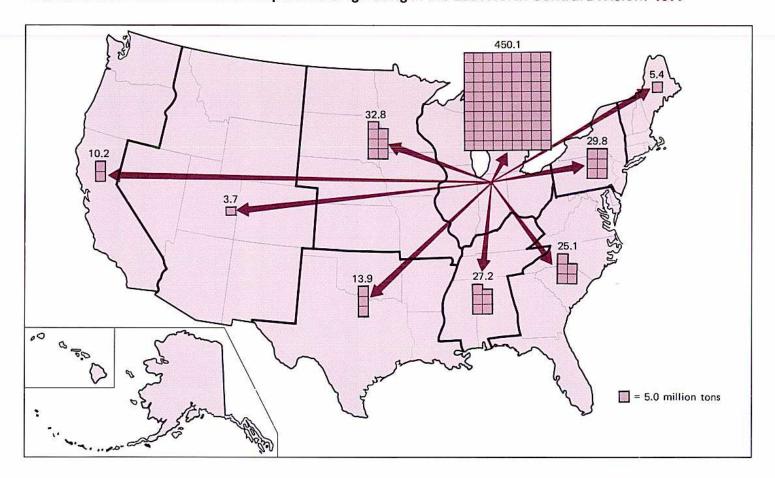
On the receiving side, only two States received more than 200 million tons of shipments made by manufacturers; California with 319.4 million tons and Texas with 305.7 million tons. Only seven other States received more than 100 million tons.

A large percentage of the products shipped by manufacturers originated and remained within the same geographic division. For example, in the East North Central Division, manufacturers shipped approximately 609 million tons in 1977, 74 percent of which remained in the division.

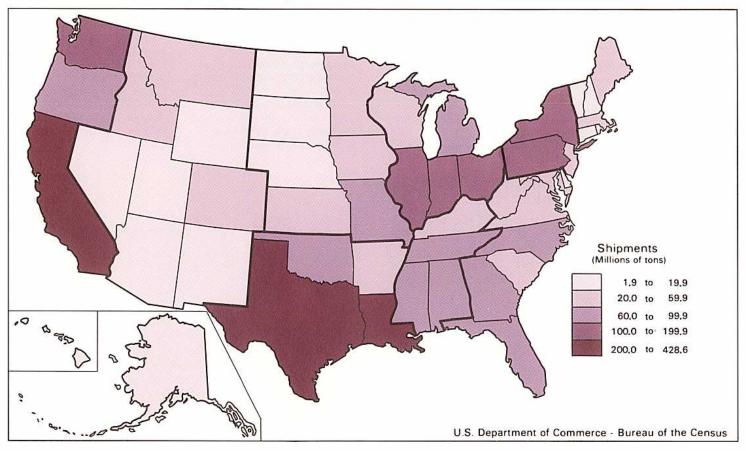
The West North Central Division, with 5 percent, received the next largest volume of goods from the East North Central States.

Data shown below are preliminary and subject to change when final figures are published.

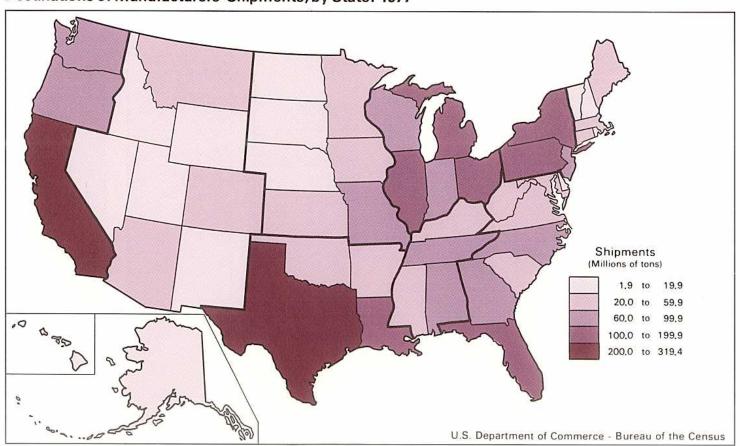
#### Destinations of Manufacturers' Shipments Originating in the East North Central Division: 1977



#### Origins of Manufacturers' Shipments, by State: 1977



#### Destinations of Manufacturers' Shipments, by State: 1977



#### More Manufactured Goods Shipped by Truck Than by Any Other Method

Over one-half (57 percent) of the 3.3 billion tons of goods shipped by manufacturers in 1977 was transported either by for-hire motor carrier or by private truck. Private truck shipments carried over 72 percent of all stone, clay, and glass products. Private trucks also accounted for approximately 45 percent of all shipments of printing and publishing products and lumber and wood products. Commercial motor carriers transported between 45 and 50 percent of the products shipped by the primary metals, fabricated metals, and machinery industries.

Railroads, which accounted

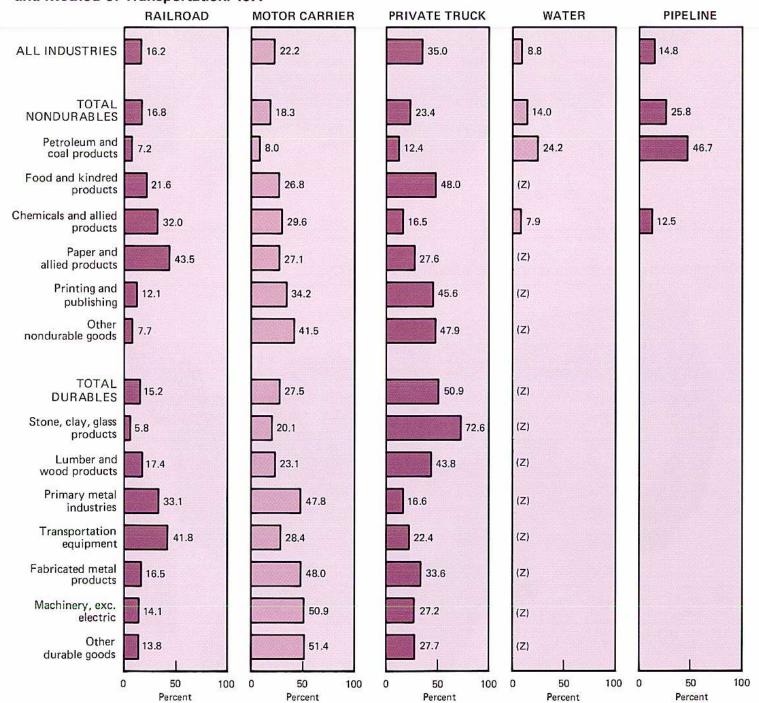
for 16 percent of the tonnage shipped, were more typically used for low-value or bulky products or where specific service requirements predominated. The chemicals, paper, and transportation equipment industries used railroads more than any other mode.

Movement of manufactured products by water was significant only to the petroleum and chemical products indus-

tries. Similarly, shipments by pipeline were generally restricted to these same two industry groups.

Data shown below are preliminary and subject to change when final figures are published. Shipments will not sum to 100 percent. Not shown is the percent of shipments whose carriers were not reported as well as shipments by other carriers than those noted.

## Manufacturers' Shipments, by Major Industry Group and Method of Transportation: 1977



# CENSUS OF WHODESAUE TRADE



The 1977 Census of Wholesale Trade was an enumeration of establishments primarily engaged in selling merchandise to retailers and repair shops; to industrial, commercial, institutional, professional, or agricultural users; or to other wholesalers. Also included are establishments acting as agents or brokers in either buying merchandise for or selling merchandise to such clients or customers. The census of wholesale trade was part of the original census of business taken for 1929. Prior to 1972, it was included with retail trade and selected services under the umbrella title "census of business." It has been one of the separate economic censuses since then. The 1977 census was the 11th enumeration of wholesale trade of the United States.

Wholesale trade data are published for as many as 125 kind-of-business classifications within the three major types of wholesale operation: Merchant wholesalers, manufacturers' sales branches and sales offices, and merchandise agents and brokers. Twenty different wholesale trade questionnaires, tailored to the industries covered, were used.

Wholesale trade census reports contain information for the following kind-of-business groups:

- SIC 50 Durable goods
- SIC 501 Motor vehicles and automotive parts and supplies
- SIC 502 Furniture and home furnishings
- SIC 503 Lumber and other construction materials
- SIC 504 Sporting, recreational, photographic, toys, hobby goods and supplies

- SIC 505 Metals and minerals, except petroleum
- SIC 506 Electrical goods
- SIC 507 Hardware, plumbing, heating equipment and supplies
- SIC 508 Machinery, equipment, and supplies
- SIC 509 Miscellaneous durable goods
- SIC 51 Nondurable goods
- SIC 511 Paper and paper products
- SIC 512 Drugs, drug proprietaries and druggists' sundries
- SIC 513 Apparel, piece goods and notions
- SIC 514 Groceries and related products
- SIC 515 Farm-product raw materials
- SIC 516 Chemicals and allied products
- SIC 517 Petroleum and petroleum products
- SIC 518 Beer, wine and distilled alcoholic beverages
- SIC 519 Miscellaneous nondurable goods

Only firms with paid employees were included in the census of wholesale trade. Data on the following subjects are presented:

Number of establishments Pavroll Employment Operating expenses End-of-year inventories Size of establishments Size of firm Legal form of organization Type of operation: Merchant wholesalers Manufacturers' sales branches and offices Agents, brokers and commission merchants Sales of merchant wholesalers, manufacturers' sales branches and offices, and agents, brokers, and commission merchants by 625 different commodity lines.

#### Wholesale Sales Passed \$1 Trillion in 1977

Wholesale trade, the major economic vehicle for distributing raw materials and finished goods, grew substantially between 1967 and 1977. Sales by wholesale firms rose from \$470.4 billion to \$1.26 trillion, about 167 percent. Firms in

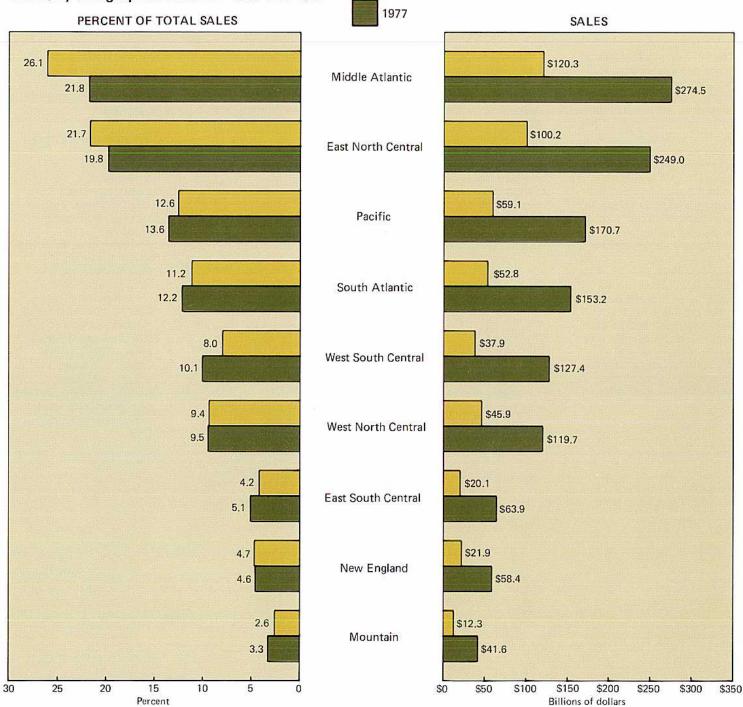
the Middle Atlantic and East North Central Divisions recorded lower percentage increases in sales than experienced nationally during this period. Nevertheless, these two divisions still accounted for about 42 percent of all wholesale establishment sales. This was down from 48 percent in 1967. Except for New England, all remaining divisions recorded slight increases

in their share of total sales.
Among the States, New
York still recorded the
largest share of total sales in
1977 with 13 percent. However, this was down from
about 17 percent of total
sales in 1967. Other States
with over 5 percent of total
sales in 1977 included
California (10 percent),
Illinois (8 percent), and

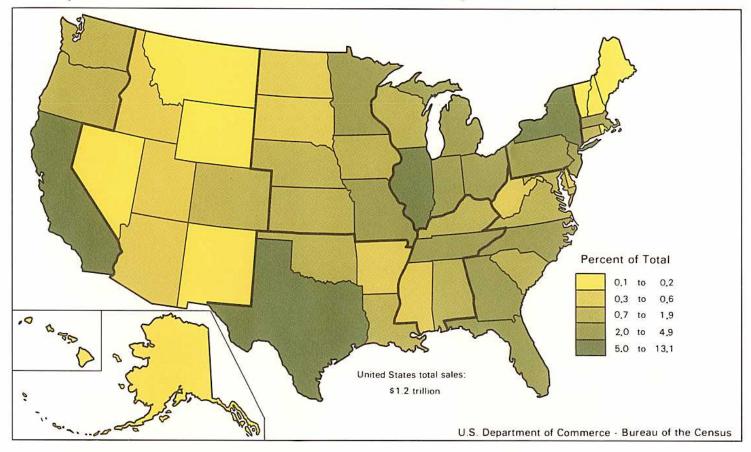
Texas (7 percent).

#### Sales, by Geographic Division: 1967 and 1977

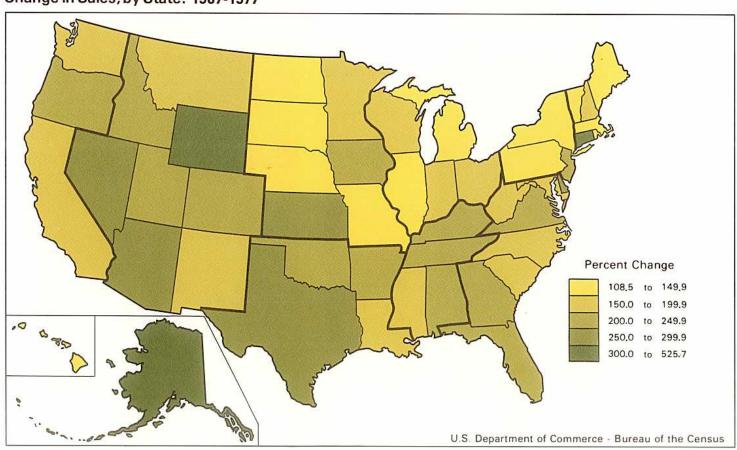




Sales, by State: 1977



#### Change in Sales, by State: 1967-1977



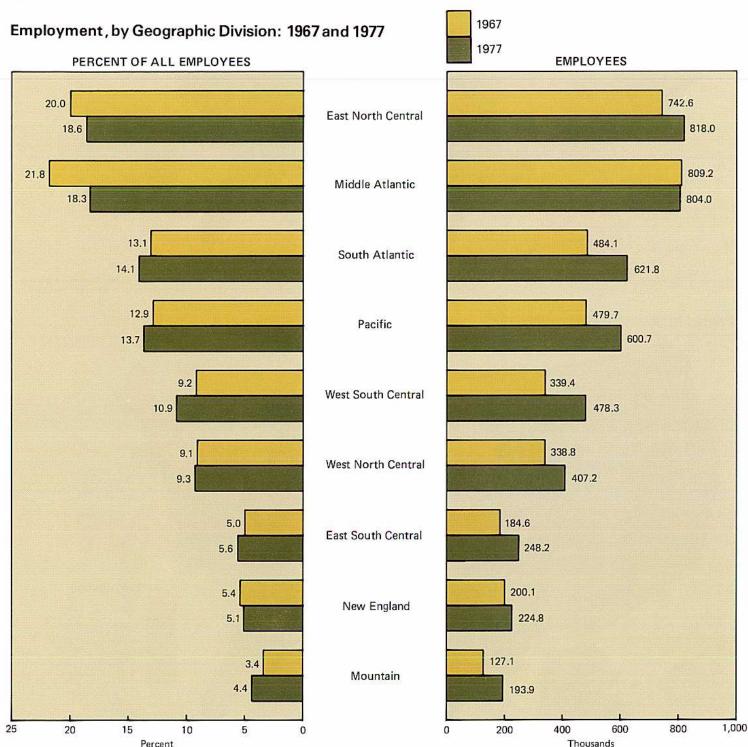
#### Three Geographic **Divisions Each Gained** Over 100,000 **Employees**

While employment in the wholesale sector grew steadily during the period 1967 to 1977, not all parts of the country shared in the rise in employment. The number of persons employed by whole-

sale firms increased from 3.7 million in 1967 to 4.4 million in 1977, about 19 percent. Firms in the East North Central and Middle Atlantic Divisions accounted for 42 percent of employment in 1967 but declined to 37 percent by 1977. Despite this relative decline, more than onethird of all wholesale employees continued to work in the East North Central and Middle Atlantic Divisions in 1977.

The South Atlantic, West South Central, and Pacific Divisions had major gains in wholesale activity during this period, each division gaining over 100,000 employees.

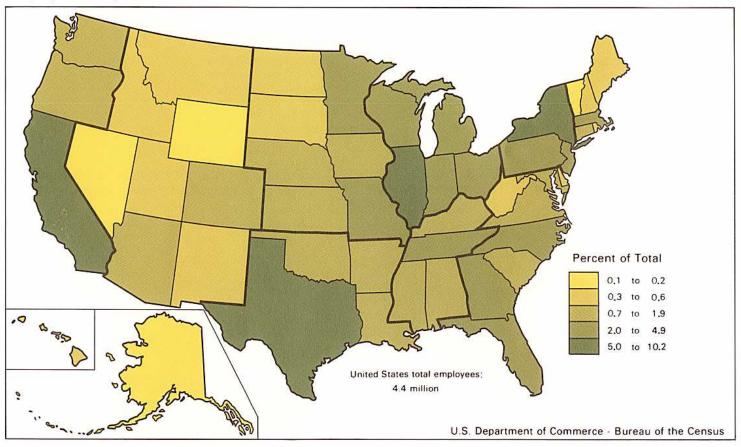
California, with about 10 percent of wholesale employment, ranked first in 1977. New York, which had ranked first in 1967, had a decrease of 12 percent, or 56,000 employees, so that in 1977, it ranked second with 9 percent of total wholesale employees. Other States with 5 percent or more of total employees in 1977 included Texas (7 percent) and Illinois (6 percent).



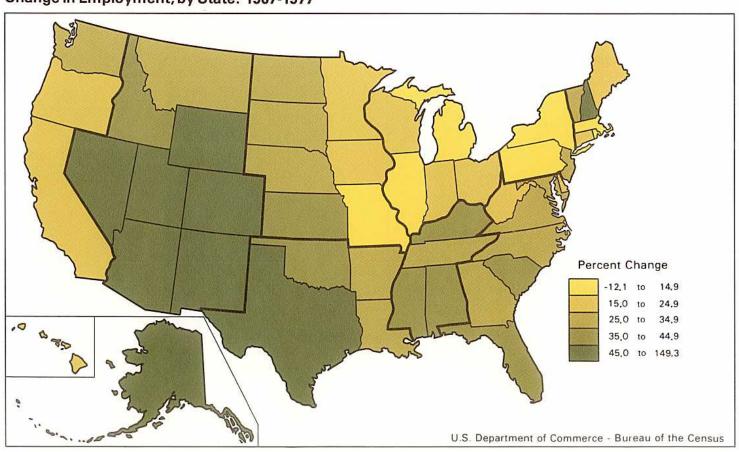
Source: U.S. Department of Commerce, Bureau of the Census

Percent

#### Employment, by State: 1977



#### Change in Employment, by State: 1967-1977



#### Wholesale Establishments Gained Despite Sharp Drop in Petroleum Bulk Plants

The number of wholesale establishments rose from 346,600 in 1967 to 382,800 in 1977, about 10 percent. Of the three major types of wholesale establishments, agents, brokers, and commission mer-

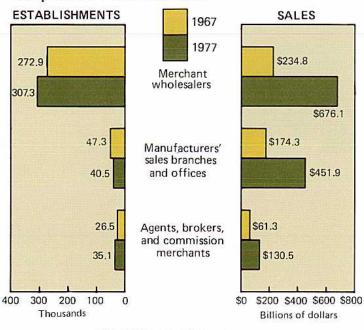
chants had the largest relative increase with a gain over the decade of 33 percent.

A decline of 14 percent was recorded in the number of manufacturers' sales branches and sales offices, which moderated the overall rise in the number of wholesale establishments. This decrease reflected the sharp decline of petroleum bulk stations and terminals from 30,200 establishments in 1967 to 17,300

in 1977, as marginally profitable establishments of the refiner-marketers were closed.

Even with a reduced number of establishments, the number of gallons of refined petroleum sold in 1977 was 22 percent above 1967. The 1977 dollar volume of petroleum sales was 190 percent above 1967, reflecting the substantial price increases during this period.

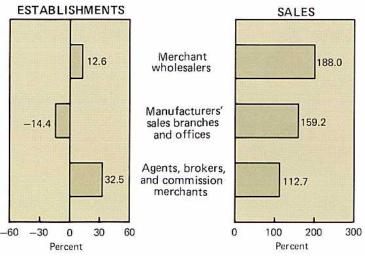
## Establishments and Sales, by Type of Operation: 1967 and 1977

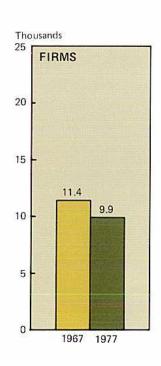


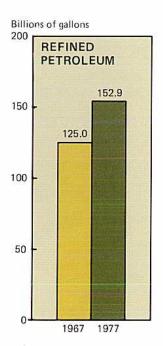
#### Petroleum Bulk Stations and Terminals, Selected Data and Years: 1967 and 1977



#### PERCENT CHANGE, 1967-1977







#### Consumer and Industrial Products Favored Different Types of Wholesale Distribution

In the movement of raw products and manufactured goods in 1977 from producer to consumer, merchant wholesale firms accounted for 54 percent of the total wholesale sales. This was followed by manufacturers' sales branches and offices with 36 percent and by agents, brokers, and commission merchants with 10 percent.

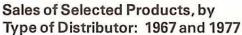
Producers and manufacturers tended to favor one type of wholesaling activity over another. For example, in 1977, 83 percent of wholesale sales of beer, wines, and distilled alcoholic beverages were by merchant wholesalers.

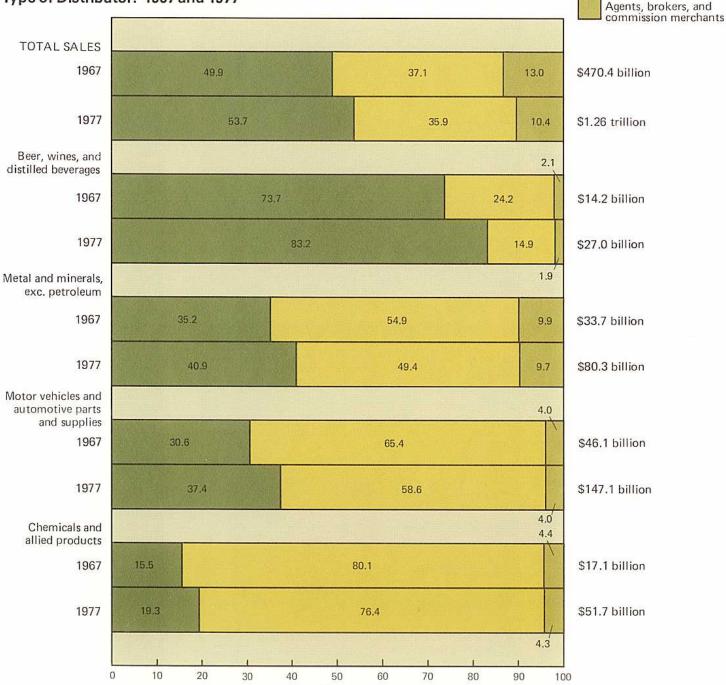
In contrast, only 19 percent of the sales of chemicals and allied products were by merchant wholesalers. Consumer products such as beer and wine were distributed mainly by merchant wholesalers because of the large number and wide variety of products to be sold. Distribution of industrial products such as chemicals and allied products was done chiefly by manufacturers' sales branches

and offices because these products require special handling and were usually sold in large quantities to industrial consumers.

Merchant wholesalers

Manufacturers' sales branches and offices





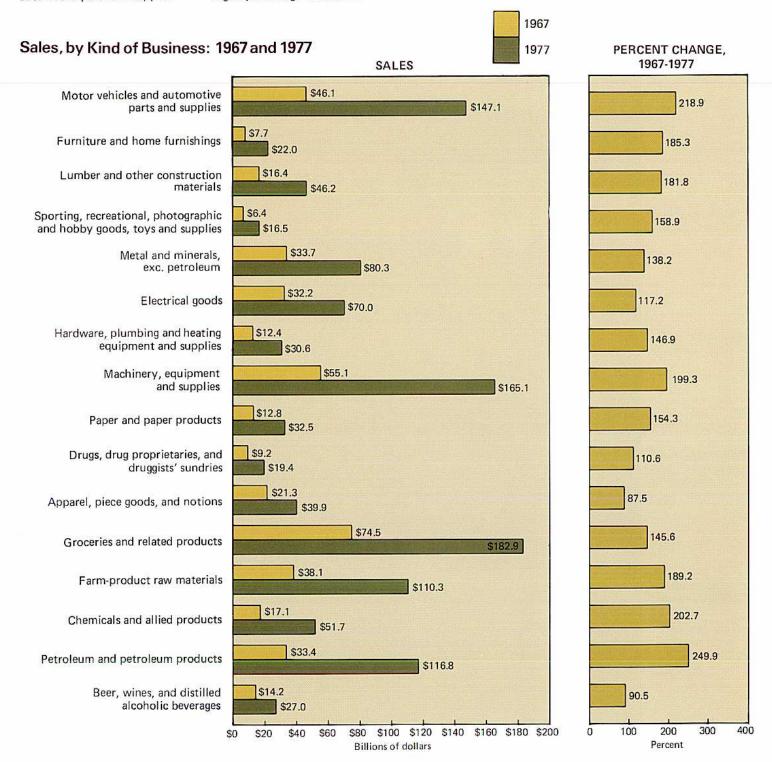
Percent

#### Petroleum and Petroleum Products Recorded 250-Percent Increase in Sales

Groceries and related products continued to lead all other wholesale industries in 1977 with sales of \$182.9 billion. The machinery, equipment, and supplies industry was second and motor vehicles and automotive parts and supplies

industries were third in volume of sales. Together, these three industries accounted for about 39 percent of all sales in 1977, up slightly from the 38 percent recorded in 1967.

Petroleum and petroleum products wholesalers, which ranked sixth in dollar volume of sales in 1967, recorded a 250-percent increase in 1977 over 1967. This was the largest percentage increase of any wholesale industry during this period and moved the industry into fourth place in 1977, surpassing the sales volume of wholesalers of farm-product raw materials and metals and minerals. The lowest percentage growth in sales was experienced by the apparel industry which in 1977 recorded an 88-percent increase over 1967 sales.



#### New York Held Lead in Sales of Apparel, Piece Goods, and Notions

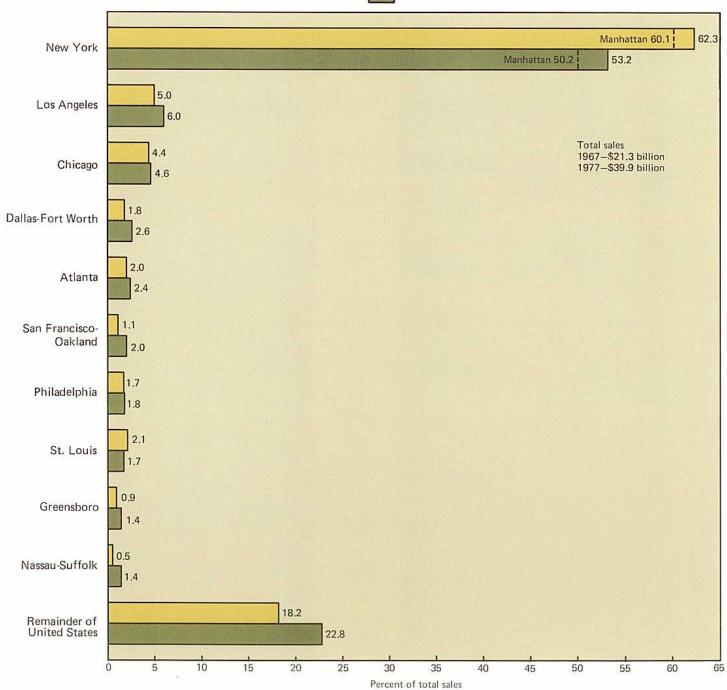
Wholesalers in certain industries tended to concentrate in specific areas of the country. The degree of concentration and the geographic area varied by kind of business. For example, wholesale firms that deal with apparel, piece goods,

and notions were concentrated in the New York metropolitan area, and particularly Manhattan Borough in New York City. Even though this area's relative share of market sales decreased, it still accounted for 53 percent of the market in 1977, down from 62 percent in 1967.

The metropolitan areas with the next largest market shares were Los Angeles and Chicago with 6 and 5 percent, respectively. While no other area dominated the wholesale sales as did New York, there was a greater geographical dispersion of sales in 1977 than in previous years.

## Sales of Apparel, Piece Goods, and Notions, by Selected SMSA's: 1967 and 1977





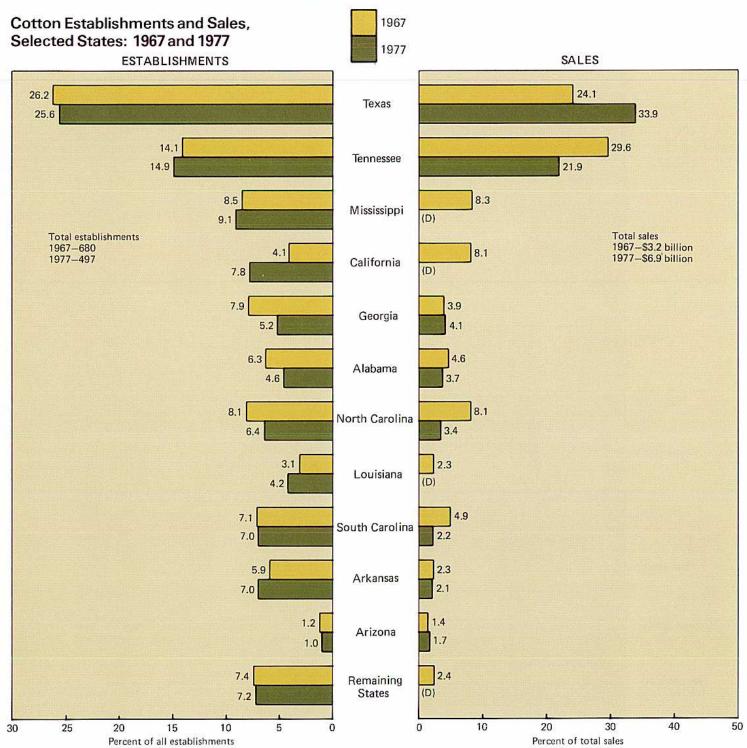
#### Texas Took Lead in Wholesale Sales of Cotton

Cotton wholesalers are another example of regional concentration. The six States of Texas, Tennessee, Georgia, Alabama, North Carolina, and South Carolina accounted for about 70 percent of all cotton wholesale sales in 1977, a decline from 75 percent in

1967. The two States of Tennessee and Texas, alone, accounted for about 40 percent of cotton wholesale establishments and over one-half of the sales of such establishments in both 1967 and 1977. In 1977, Texas overtook Tennessee and led in the total dollar volume of sales. In 1967, Tennessee accounted for about 30 percent of all wholesale sales of cotton, while Texas

accounted for 24 percent. In 1977, Tennessee's share of sales decreased to 22 percent while Texas' share increased to 34 percent.

Overall, the number of cotton wholesale establishments declined during this period by 27 percent; even so, the dollar volume of sales was up by 116 percent.



#### One-Third of Sales Generated by Less Than 4 Percent of Wholesale Establishments

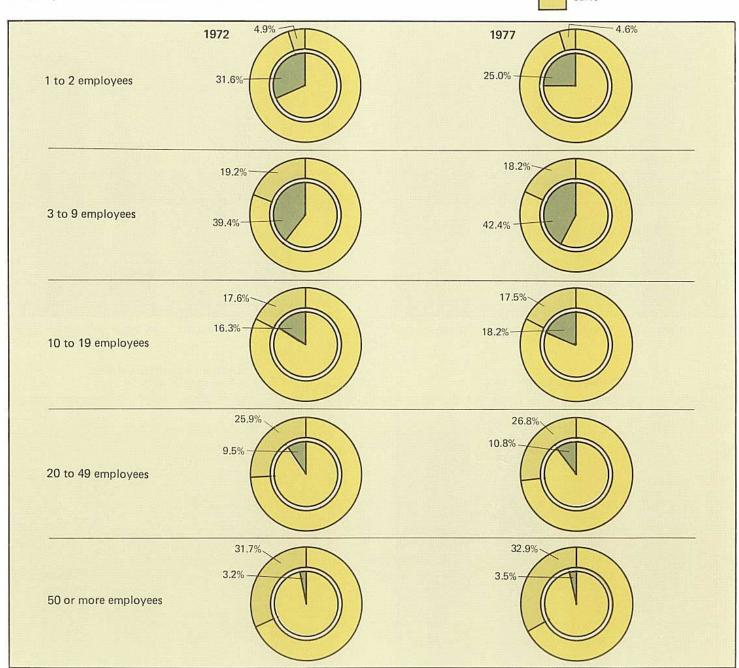
Most wholesale establishments tended to have a small number of employees. In both 1972 and 1977, more than two-thirds of all establishments engaged between one and nine employees. Even though this group comprised a large proportion of wholesalers, they only accounted for slightly more than onefifth of the total sales. In contrast, less than 4 percent of all wholesale establishments in 1977 engaged 50 employees or more. This small group, however, accounted for one-third of all sales during the same period.

Establishments in the oneto-two employee size category had the greatest change, as the number of establishments decreased from 32 percent of the total in 1972 to 25 percent in 1977. Sales remained proportionately about the same, at 5 percent. With the exception of sales by wholesalers in the three-to-nine employee size class, the percentage of establishments and the proportion of sales in all other employment size classes stayed about the same or increased slightly.

The data shown in the chart below include only establishments that operated the entire year

#### Establishments and Sales, by Employment Size Class: 1972 and 1977





#### Concentration of Sales by Largest Firms Varied by Kind of Business

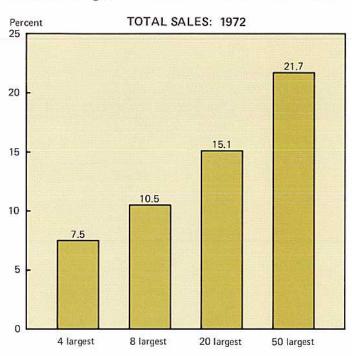
The relative concentration of sales made by the 4, 8, 20, and 50 largest wholesale firms changed very little between 1972 and 1977. (Comparable data for 1967 are not available.) The 50 largest wholesale firms made approximately 22 percent of all sales in both

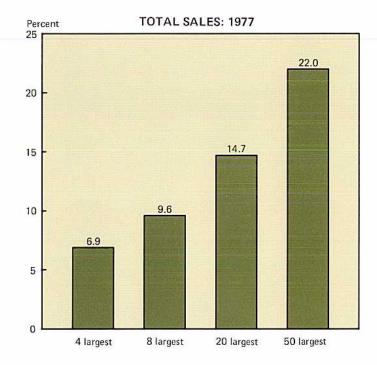
1972 and 1977. The share of the four largest firms during the same 2 years was approximately 7 percent.

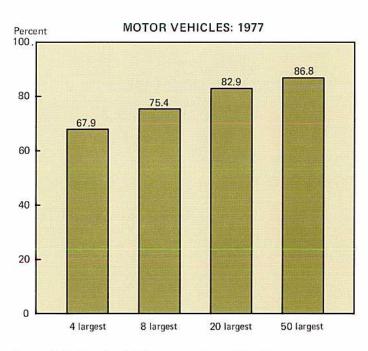
Each type of wholesale activity differed in the relative amount of sales concentration by a few establishments. For example, the 4 largest motor vehicle firms dominated the market with 68 percent of all wholesale sales, while the largest 50 firms accounted for a total of 87 percent. In

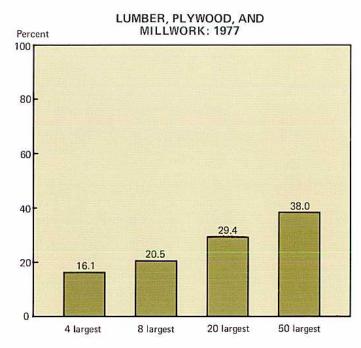
contrast, the 4 largest wholesale firms in lumber, plywood and millwork accounted for 16 percent of the sales, while the 50 largest wholesale firms in this industry shared only 38 percent of the sales.

#### Sales of Largest Wholesale Firms: 1972 and 1977



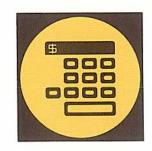






Source: U.S. Department of Commerce, Bureau of the Census

# CENSUS OF RETAIL TRADE



The 1977 Census of Retail Trade was an enumeration of establishments primarily engaged in selling merchandise to the general public for personal or household consumption and in rendering services incidental to the sale of those goods. The first retail census, covering the year 1929, was part of the census of business, which included wholesale trade in its scope. Beginning with the second business census, 1933, various service trades were added. With the 1972 economic censuses, however, each segment-retail trade, wholesale trade, and selected service industries-was considered a separate census. The 1977 census was the 11th census of retail trade of the United States.

Two basic sources were used to obtain the data for the census of retail trade. As a general rule, questionnaires were mailed to firms with four or more paid employees and to a sample of smaller employer firms. The mail portion of the census used 21 different retail trade questionnaires to allow for the many types of businesses covered. The Census Bureau used Federal administrative records to obtain information from more than 1 million smaller business firms. including all retail businesses without employees.

The 1977 retail trade census provided data for about 100 kind-of-business classifications within the 10 major groups listed below:

- SIC 52 Building materials, hardware, garden supply, and mobile home dealers
- SIC 53 General merchandise group stores
- SIC 54 Food stores
- SIC 55, except 554, Automotive dealers
- SIC 554 Gasoline service stations
- SIC 56 Apparel and accessory stores
- SIC 57 Furniture, home furnishings, and equipment stores
- SIC 58 Eating and drinking places
- SIC 591 Drug stores and proprietary stores
- SIC 59, except 591, Miscellaneous retail stores

Data on the following subjects are presented in retail trade reports.

Number of establishments
Sales
Payroll
Employment
Number of sole proprietorships and partnerships
Legal form of organization
Size of establishment
Size of firm
Sales by merchandise lines

With the exception of the charts on pages 83 (per capita portion only), 84, 88, and 92, which refer to sales by all retail establishments in metropolitan areas, all other diagrams refer only to sales of retail establishments with payroll.

Central business districts referred to in the chart on page 84 are those defined in 1967 and were used to determine both 1967 and 1977 figures. Springfield-Chicopee-Holyoke, Mass.-Conn. SMSA was used in the New England Division because of the availability of comparable data.

#### Retail Spending as a Percent of Disposable Income Changed Slightly in 10-Year Period

As disposable income (DPI) increased from \$544 billion in 1967 to \$1.3 trillion in 1977, the share of DPI spent in the Nation's retail stores rose from 52 percent in 1967 to 55 percent in 1972 and declined back to about 54

percent in 1977. Thus, at the start of this 10-year period, about 52 cents of the DPI dollar was spent in retail stores. At the end of this period it was 54 cents of the DPI dollar, even though DPI increased by about 140 percent.

While this was the national average, there were regional variations. For example, the share of the DPI dollar spent in retail stores in the West

South Central Division was 56 cents in 1967 and 58 cents in 1977. These were, respectively, 7 and 8 percent above the national average. In contrast, in the Middle Atlantic Division the share of the DPI dollar was 49 cents in 1967 and 47 cents in 1977. These were, respectively, 7 and 13 percent below the national average. In 1977, the West South Central Division accounted for the third highest share of DPI

spent in retail stores, trailing the East South Central and Mountain Divisions. The Middle Atlantic accounted for the smallest share.

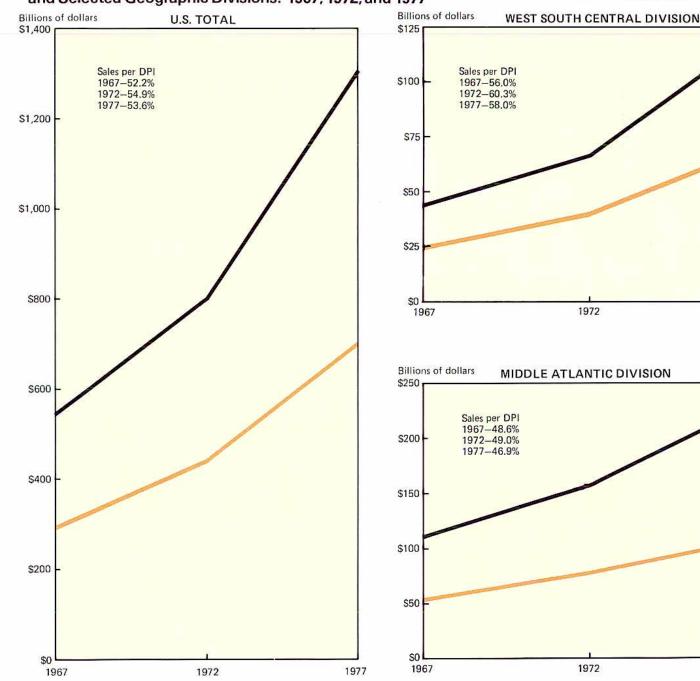
Disposable personal income (DPI)

Retail Sales

1977

1977

## Retail Sales and Disposable Personal Income for United States and Selected Geographic Divisions: 1967, 1972, and 1977



Source: U.S. Department of Commerce, Bureau of the Census (retail sales) and Bureau of Economic Analysis (DPI).

#### East North Central Division Continued To Rank First in Retail Sales

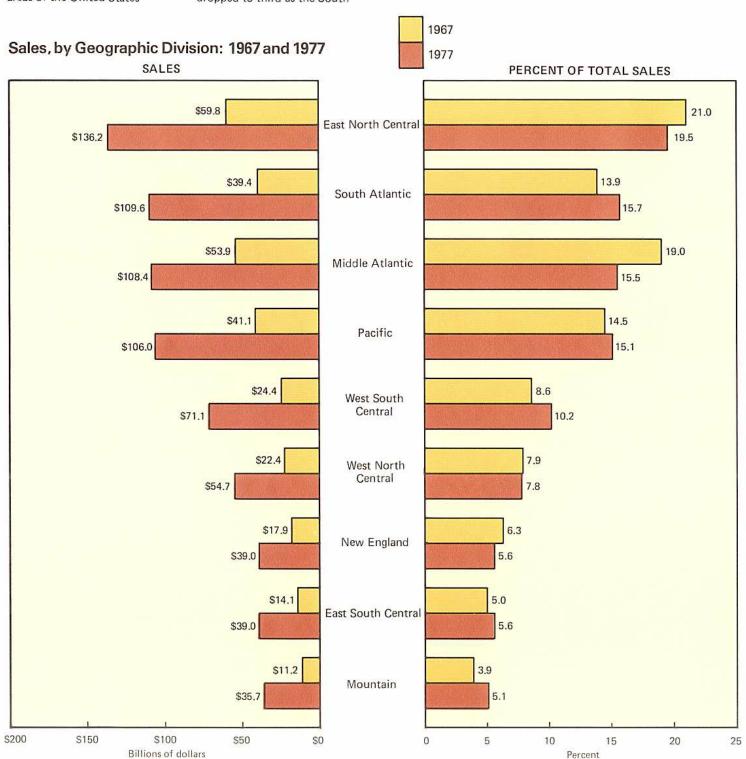
The dollar volume of sales in retail stores nationwide rose from \$284.1 billion in 1967 to \$699.6 billion in 1977, a 146-percent increase. As expected, the more populated areas of the United States

accounted for the largest volume of retail sales.

In 1967, the combined sales of the East North Central and Middle Atlantic Divisions, which ranked first and second, accounted for 40 percent of the Nation's retail sales. By 1977, however, the share of retail sales for these two divisions had declined to 35 percent and the Middle Atlantic Division's rank had dropped to third as the South

Atlantic Division's share of retail sales increased from 14 percent to 16 percent.

Generally, the market share of sales in the north central and eastern parts of the country declined in this period as those in the south and west increased.



#### Per Capita Retail Sales Increased as Geographic Differences Decreased

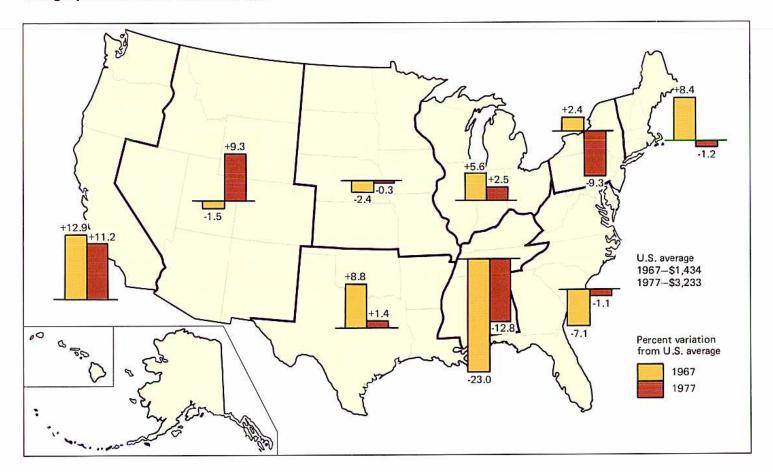
Retail sales per capita provides a measure of the retail dollars spent relative to the total population of an area. Nationwide per capita retail sales rose 125 percent between 1967 and 1977, from \$1,434 to \$3,233. Among the geographic divisions, the Pacific Division had the highest per capita sales for both years, 13 percent above the United States average in 1967 and 11 percent above in 1977.

At the other end of the ranking was the East South Central Division which was below the national average in both years by 23 and 13 percent, respectively.

While the Mountain Division ranked slightly below the national average in 1967

(\$1,417), this division showed the largest increase in absolute dollars of retail sales per capita, an increase of 150 percent between 1967 and 1977.

## Per Capita Sales Compared to U.S. Average, by Geographic Division: 1967 and 1977



Division	1967	1977
Pacific	\$1,624	\$3,595
Mountain	\$1,417	\$3,535
East North Central	\$1,520	\$3,313
West South Central	\$1,312	\$3,278
West North Central	\$1,405	\$3,225
South Atlantic	\$1,337	\$3,198
New England	\$1,566	\$3,193
Middle Atlantic	\$1,474	\$2,932
East South Central	\$1,108	\$2,820

Note: Listed in rank order for 1977.

#### Five States Accounted for 35 Percent of Retail Sales

The five States with the largest volume of retail sales in 1977 were California, New York, Texas, Illinois, and Pennsylvania. They accounted for 35 percent of the total volume of retail sales, as well as for 35 percent of the estimated population in 1977.

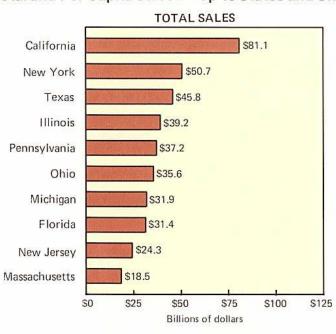
Although the total volume of sales for Pennsylvania and New York were among the largest, per capita retail sales for these two States were well below the national average. New York, with the exception of Mississippi, had the lowest per capita sales of any State.

While Nevada and Alaska led all States in retail sales per capita, the combined retail sales of these two States accounted for less than 1 percent of total retail sales in 1977.

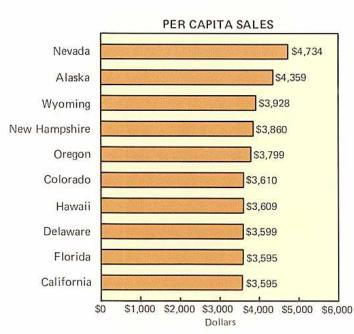
Among 10 of the Nation's largest metropolitan areas, Los Angeles ranked first in total sales but fifth in per capita sales. Houston and Dallas-Fort Worth were eighth and ninth in sales but ranked first and second, respectively, in per capita sales.

Eight of the 10 metropolitan areas had per capita retail sales higher than the national average. Only the Philadelphia and New York metropolitan areas were below the national average. Even so, New York, with its large concentration of population, ranked third in retail sales. These 10 metropolitan areas accounted for 22 percent of the Nation's retail sales.

#### Total and Per Capita Sales in Top 10 States and SMSA's: 1977









#### Retail Sales in Central Business Districts Continued Relative Decline

Within metropolitan areas, the negative impact on the central business district (CBD) of increased retail activity outside of the CBD continued. A 1967-1977 comparison of combined retail sales of the three most populous metropolitan areas

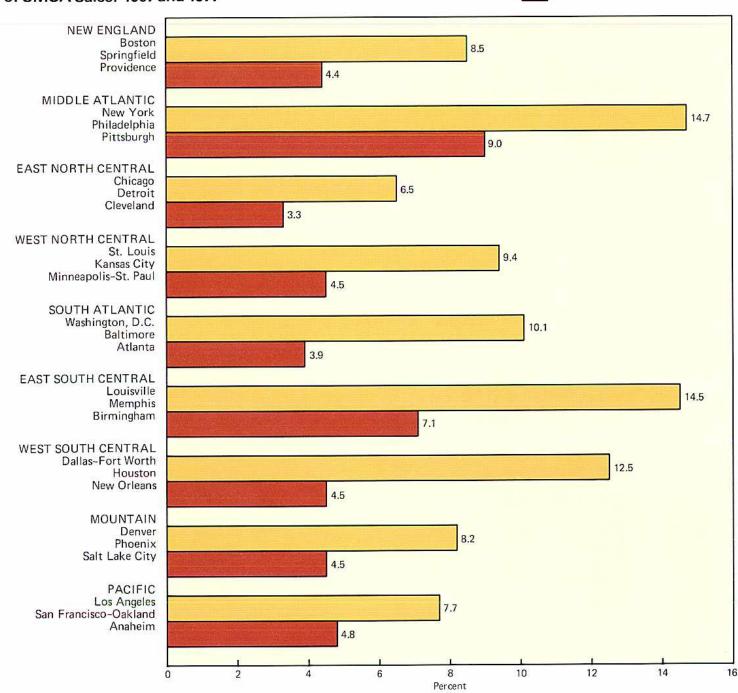
in each of the nine geographic divisions against the combined sales of their CBD's indicates how dramatic the decrease was.

In two divisions, the West South Central and the South Atlantic Divisions, the decrease was more than 60 percent (from 10 to 4 percent of all metropolitan retail sales in the South Atlantic Division and from 13 to 5 percent in the West South Central Division).

The CBD's that appeared to have been impacted least during this period were those located in the metropolitan areas of the Middle Atlantic and the Pacific Divisions; but even here, the proportion of total metropolitan retail sales in 1977 was one-third less than what it had been in 1967.

## Central Business District Sales as a Percent of SMSA Sales: 1967 and 1977





#### Food Establishments Led Retail Business in Sales and Employment

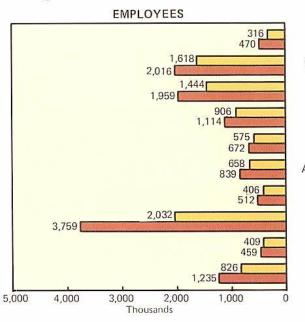
Eating and drinking establishments, which average one establishment for every 700 persons in the United States, led all retail trade categories in the number of employees (2.0 million in 1967 and 3.8 million in 1977). Food stores, on the

other hand, led all other retail stores in sales volume in both years with \$66 billion in 1967 and \$153 billion in 1977. Although automotive dealers trailed food stores in the volume of sales in both periods, they accounted for a major sales increase of 170 percent over 1967 sales as compared with the 131-percent increase recorded by food stores.

Sales per employee ratios provide an indication of the

varying values of merchandise sold by retail employees and the degree of labor-intensiveness of different retail business groups. Two contrasting retail activities were automobile dealers and eating and drinking establishments. Automobile dealers averaged \$132,000 in sales per employee, while eating and drinking places, a very labor-intensive industry, averaged only \$16,300 in sales per employee.

#### Employment and Sales for Major Retail Categories: 1967 and 1977



Building materials and hardware stores

General merchandise stores

Food stores

Automotive dealers

Gasoline service stations

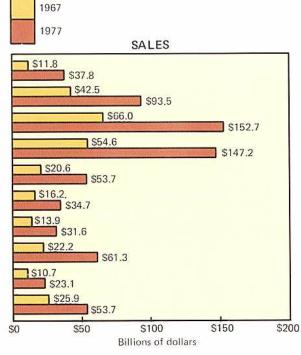
Apparel and accessory stores

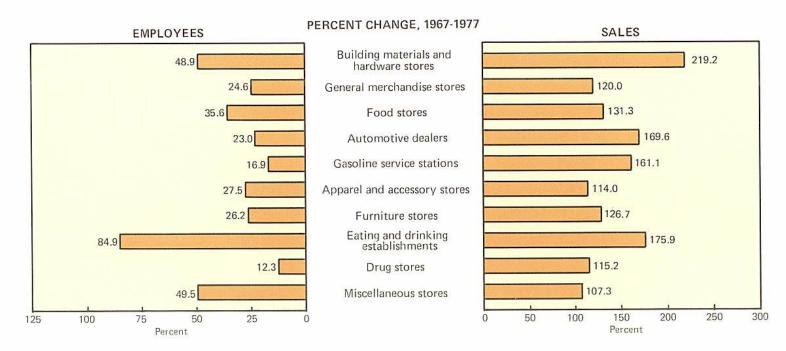
Furniture stores

Eating and drinking establishments

Drug stores

Miscellaneous stores





#### Food Stores Captured Largest Share of Per Capita Sales

Retail sales in food stores, eating and drinking establishments, gasoline stations, and apparel stores accounted for \$676 (or 47 percent) of per capita total sales in 1967 and \$1,453 (or 45 percent) in 1977. Food store sales alone, with \$356, were about 25

percent of per capita total sales in 1967 and \$741, or 23 percent, in 1977. Even though per capita sales increased for each of these four selected categories, there were only slight changes nationally in their relative ranking during this 10-year period.

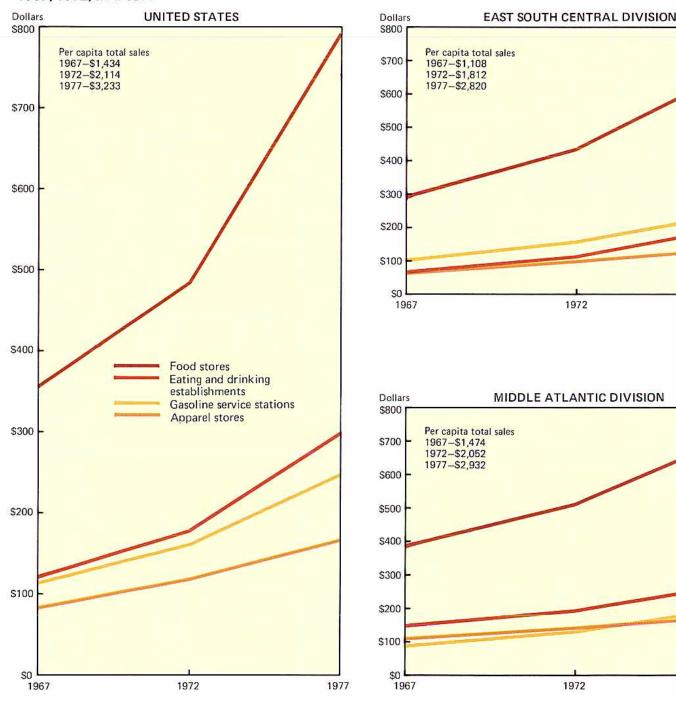
Regionally, there were variations from this spending pattern. For example, in the Middle Atlantic Division, per capita sales for apparel stores in 1967 was \$110, about 7 percent of per capita total sales for that geographic division. In 1977, per capita sales increased to \$179, but proportionately decreased to 6 percent. Nationally, these figures were 6 percent in 1967 and 5 percent in 1977.

Per capita sales for eating and drinking establishments in the East South Central Division in 1967 was \$65, 6 percent of per capita total sales for that geographic division. In 1977, per capita sales rose to \$204, 7 percent of the total. For the Nation, these figures were 8 percent in 1967 and 9 percent in 1977.

1977

1977

## Per Capita Sales for Selected Categories: 1967, 1972, and 1977



#### Expenditures for Food Consumption Away From Home Increased

Americans increased the amount of money spent for food and beverages consumed away from home between 1967 and 1977. Sales made in food stores and eating and drinking places indicated that for every dollar spent for food in 1977, 28 cents went for meals and

beverages prepared outside of the home; in 1967, this figure was 25 cents.

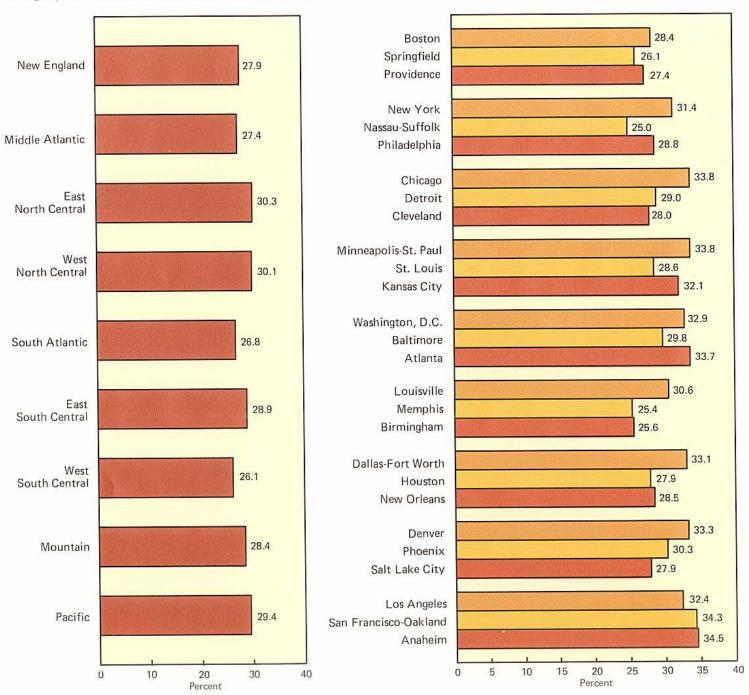
The North Central and the Pacific Divisions in 1977 each accounted for a larger share of their food dollar for "eating out" than did the other divisions, as each registered approximately 30 percent of total food-related sales being made in eating and drinking places. Of the 50 states, Hawaii ranked the highest with 43

percent. If only continental United States is considered, Wisconsin had the highest percentage with 33 percent and Mississippi had the lowest with 19 percent.

Comparing these same figures for the three most populous metropolitan areas in each of the nine geographic divisions, the Anaheim and San Francisco-Oakland metropolitan areas ranked highest with approximately 34 per-

cent. Other major metropolitan areas such as Minneapolis-St. Paul, Chicago, Atlanta, and Dallas-Fort Worth also had a high percentage with approximately one-third of the food dollar being spent away from home.

## Cost of Eating Out as a Percent of Total Food Expenditures, by Geographic Divisions and Selected SMSA's: 1977



#### Department Store Sales One-Tenth of All Retail Sales

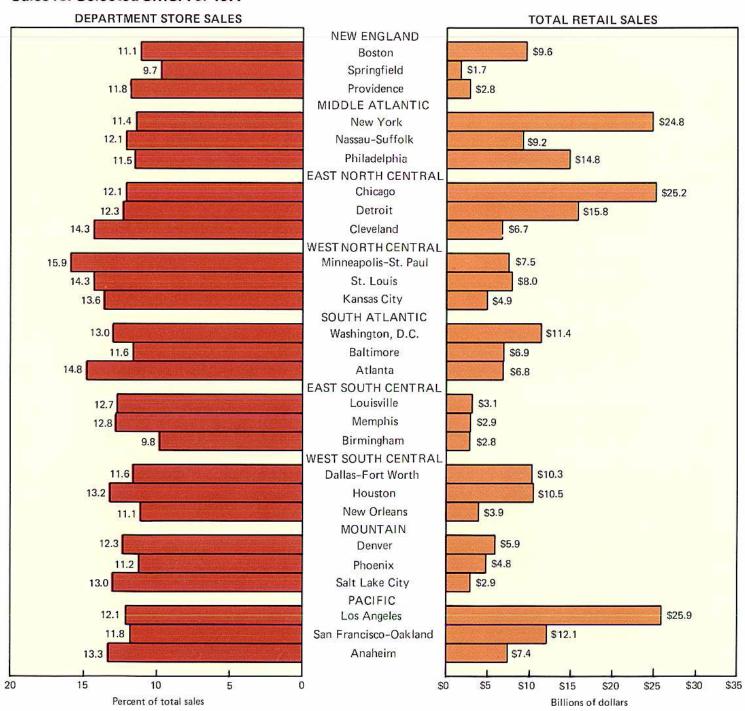
Nationally, department store sales in 1977 were 10.6 percent of total retail sales (\$723.1 billion). The combined department store share of sales for the three largest SMSA's within a division was highest

in the West North Central Division with 15 percent. The Minneapolis-St. Paul metropolitan area, with 16 percent, had the largest department store share of total sales compared to any major metropolitan area. The Atlanta metropolitan area was second with approximately 15 percent followed by Cleveland and St. Louis with about 14 percent.

There were approximately 8,800 department stores in 1977, an average of 1 department store for every 24,000 inhabitants. With average sales of \$8.7 million, department stores continued to have the largest volume of sales per store than any other type of retail activity. The large volume of sales can be attributed in part to the wide

variety and depth of merchandise that they carried.

## Department Store Sales as a Percent of Sales for Selected SMSA's: 1977



#### Department Stores Continued To Dominate Retail Clothing Market

Department stores accounted for almost half of the men's and women's retail clothing sales in 1977. Department stores made major strides in increasing their share of the men's and boys' clothing market between 1967 and 1977, from 39 percent of total sales in 1967 to 47 percent in 1977. These gains came largely at the expense of the men's specialty stores, which accounted for 32 percent of sales in 1967 but dropped to 28 percent in 1977, and from miscellaneous other types of stores whose share of sales decreased from 17 to 13 percent.

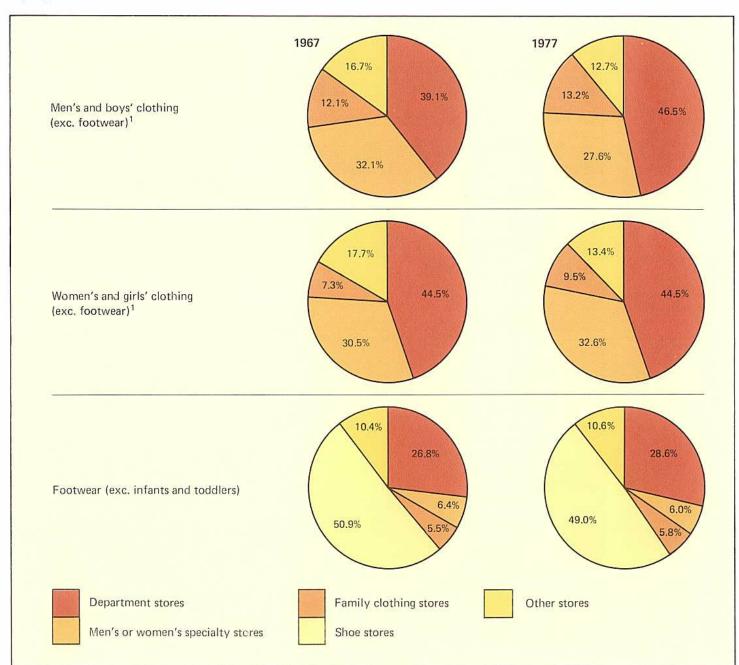
The share of women's and girls' clothing sales made by

department stores remained the same in both 1967 and 1977, about 45 percent. However, gains in the market share during this period were recorded by both family clothing stores and women's specialty shops. These gains were made at the expense of miscellaneous other types of stores whose share of the market decreased from 18 to 13 percent.

Although department stores

had a slightly larger share of the footwear market in 1977 than in 1967, almost 50 percent of all footwear sales continued to be accounted for by shoe stores.

#### Sales of Clothing and Footwear, by Type of Store: 1967 and 1977



<sup>&</sup>lt;sup>1</sup>Excludes shoe stores, less than 1 percent.
Source: U.S. Department of Commerce, Bureau of the Census

#### Major Merchandise Lines in Department Stores Remained the Same

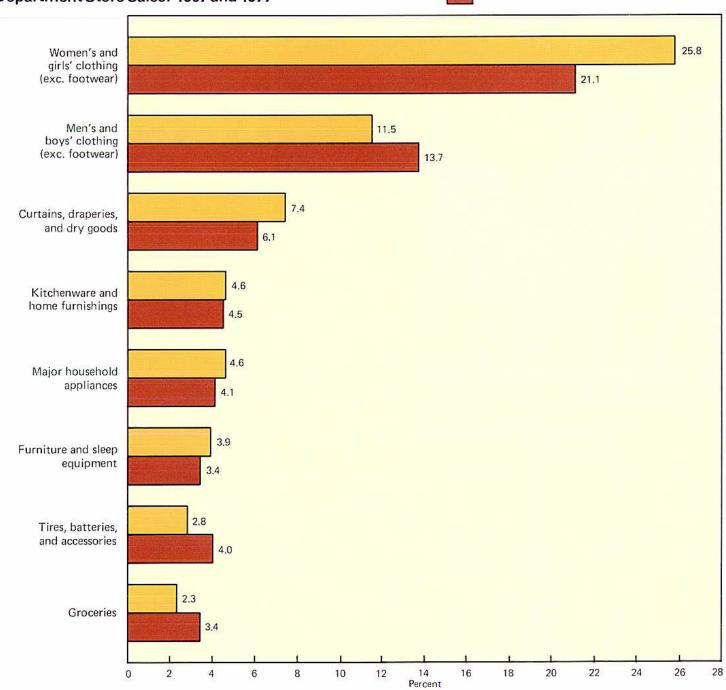
The three top merchandise lines in department store sales were women's and girls' clothing, men's and boys' clothing, and curtains, draperies, and dry goods. These three lines accounted for 45

percent of sales in 1967 and 41 percent in 1977. During this period, however, there was a shift in their relative importance. The share of women's and girls' clothing sales decreased from one-quarter of all department store sales to one-fifth, while men's clothing increased from 12 to 14 percent. The share of sales for curtains, draperies, and dry goods also declined slightly, from 7 to 6 percent.

The remaining merchandise lines sold accounted for a larger share of total department store sales in 1977 than in 1967, but not all of these lines increased. For example, sales of tires, batteries, and accessories, and groceries recorded increases in their shares, whereas kitchenware and home furnishings, major household appliances, and furniture and sleep equipment recorded decreases.

## Sales of Selected Merchandise Lines as a Percent of Total Department Store Sales: 1967 and 1977





#### North Central and Mountain Divisions Continued Higher Gasoline Service Station Sales per Licensed Driver

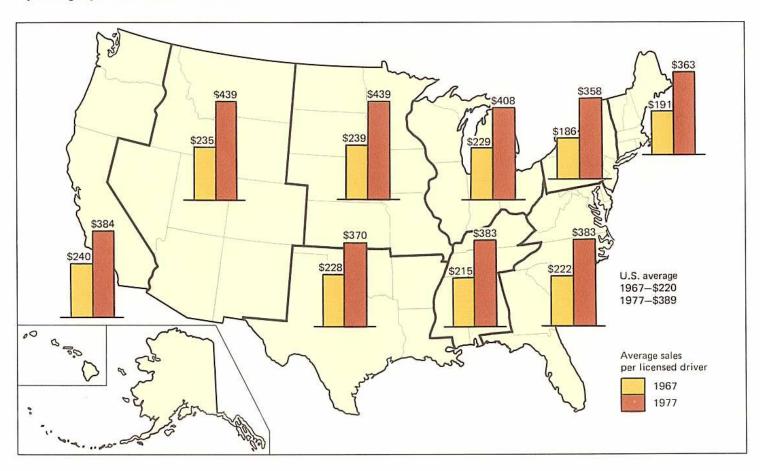
Gasoline service stations, which have become an important social and economic link in our automobile-oriented society, had total sales of \$56.5 billion in 1977; this was up 174 percent from 1967. Sales of gasoline stations (i.e., gasoline, oil, tires and related service station products and services) comprised about 8 percent of retail sales in both 1967 and in 1977.

The average sales per licensed driver in the United States was \$389 in 1977. This was 77 percent higher than 1967 when it was \$220. This figure varied in different parts of the country. Sales

per driver in 1977 averaged from \$439 (13 percent above the Nation's average) in the West North Central and Mountain Divisions to \$358 (8 percent below the Nation's average) in the Middle Atlantic Division. The Middle Atlantic and New England Divisions both continued to have the lowest gasoline service station sales per licensed driver in 1977 despite their 90-percent increases.

The Pacific and West North Central Divisions had ranked first and second in sales per licensed driver in 1967. This changed in 1977 when both the West North Central and Mountain Divisions had greater sales per licensed driver (\$439) than the Pacific Division (\$384).

## Average Gasoline Service Station Sales Per Licensed Driver, by Geographic Division: 1967 and 1977



#### Multiestablishment Firms Gained Larger Share of Retail Market

The number of firms with more than one establishment in the same retail activity (multiestablishment firms) and their market share of retail sales increased between 1967 and 1977. In 1967, 13 percent

of all retail establishments were operated by multiestablishment firms and represented 40 percent of the retail sales. In 1977, these figures rose to 18 and 48 percent, respectively.

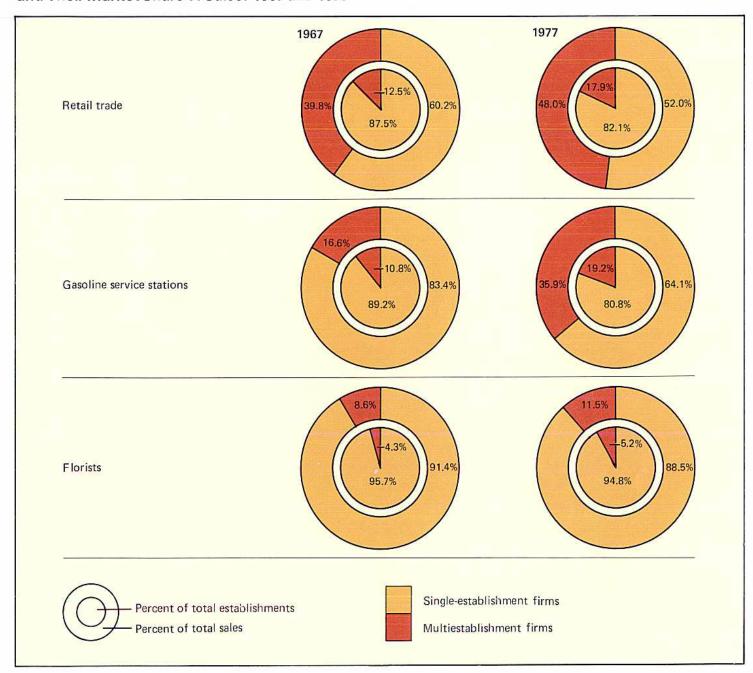
This trend, however, was not consistent throughout all retail establishments. In the gasoline service station industry, the number of multiestablishment firms went from 11 percent of the industry to

19 percent in 1977. Concurrently, this group more than doubled its share of total market sales from 17 to 36 percent.

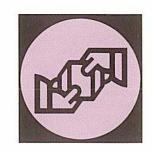
The florist industry, on the other hand, was hardly affected by this pattern of activity. In 1967, multiestablishment firms accounted for approximately 4 percent of the florist establishments and a 9-percent share of this industry's sales. By 1977, this group represented

5 percent of the establishments and about 12 percent of its sales.

## Single- and Multiestablishment Firms in Selected Retail Categories and Their Market Share of Sales: 1967 and 1977



## GENSUS OF SERVICE INDUSTRIES



The 1977 Census of Service Industries was an enumeration of establishments primarily engaged in providing a wide variety of services for individuals, business and government establishments, and other organizations. The first census covered the year 1933. Censuses of selected service industries were also taken for 1935 and 1939 and, after a wartime interruption, were resumed with the 1948 census. Before 1972, the census was conducted approximately every 5 years as part of the census of business. In 1972, the census of selected service industries-like the censuses of retail trade and wholesale trade-became one of the separate economic censuses. The 1977 census was the 10th census of service industries of the United States, but because of a major expansion in scope, it was the first census not limited to selected industries.

Two basic sources were used to obtain data for the census of service industries. Generally, questionnaires were mailed to firms and organizations with four or more paid employees and to a sample of smaller employer firms. The mail portion of the census used 25 different questionnaires to

allow for the variety of businesses and activities. The Census Bureau used Federal administrative records to obtain information from about 2 million smaller service firms, including all establishments without employees.

The scope of the 1977 census was expanded to include many industries not previously covered. Most data in this section are presented for the selected service industries covered in the 1967 and 1972 censuses. This includes establishments in the following classifications.

- SIC 701, 703, Hotels, motels, camps, and trailering parks
- SIC 72 Personal services
- SIC 73 Business services
- SIC 75 Automotive repair, services, and garages
- SIC 76 Miscellaneous repair services
- SIC 78, 79 Motion pictures and amusement and recreation services
- SIC 8072 Dental laboratories
- SIC 81 Legal services
- SIC 891 Engineering, architectural, and surveying services

The following industries were covered for the first time in 1977.

- SIC 4722 Arrangement of passenger transportation
- SIC 702, 704 Rooming and boarding houses and membership lodging
- SIC 80, exc. 8072 Health services, except dental laboratories
- SIC 82 Educational services
- SIC 83 Social services
- SIC 84 Museums, art galleries, and botanical and zoological gardens (noncommercial)
- SIC 86, exc. 866, Membership organizations, except religious organizations
- SIC 89, exc. 891, Miscellaneous services, except engineering, architectural, and surveying services

Data from the census of service industries are provided for about 250 kind-of-business classifications. Statistics for taxable and tax-exempt activities are usually presented separately, as are data for previous in-scope services and those included for the first time. Data on the following subjects are presented in the census of service industries reports, although only limited detail is provided for tax-exempt and new in-scope industries.

Number of establishments
Operating receipts and total
revenue
Expenses
Payroll
Employment
Legal form of organization
Size of establishment
Size of firm
Analysis of receipts and revenue for selected kinds of business
Personnel and payroll by occupation for selected kinds of business

Data on number of establishments and receipts presented in this section are for all establishments, including those with and without paid employees. Data on employment are for establishments with paid employees. The number of paid employees represents the number for the pay period including March 12.

Because of the change in the type of receipts data for the advertising industry, gross billings in 1967 and 1972, and commissions, fees, and other income in 1977, the receipts data for 1977 are not comparable to previous censuses. Unless noted, information on receipts for advertising services is not included in business or selected service summaries.

#### In 1977, 61 Percent of Establishments Did Not Have Paid Employees

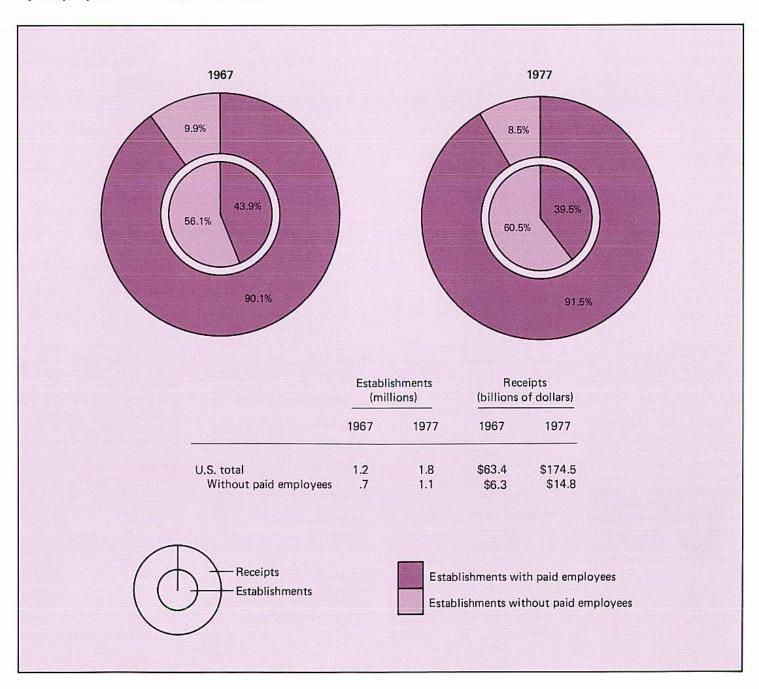
The typical establishment in many of the selected service industries was a small unincorporated business (i.e., sole proprietorship or partnership) where the services were provided by the proprietor or partners rather than by paid

employees. The number of establishments without any paid employees increased 67 percent from 0.7 million in 1967 to 1.1 million in 1977. As a result of this increase, establishments without paid employees comprised an even larger percentage of all service establishments in 1977 than in 1967, from 56 to 61 percent. The receipts for this

group of establishments also increased from \$6.3 billion to \$14.8 billion, up 135 percent.

Despite these substantial increases, the share of total receipts for selected service establishments without any paid employees was only about 8.5 percent in 1977. This was down slightly from 1967 when the share was about 10 percent.

#### Establishments and Receipts, by Employer Status: 1967 and 1977



#### Single-Establishment Firms Accounted for Two-Thirds of Receipts

Firms with only one establishment accounted for 95 percent of the total number of establishments in the selected service industries in 1967 and 1977. Their share of total receipts, however, was not comparable in size. In 1967,

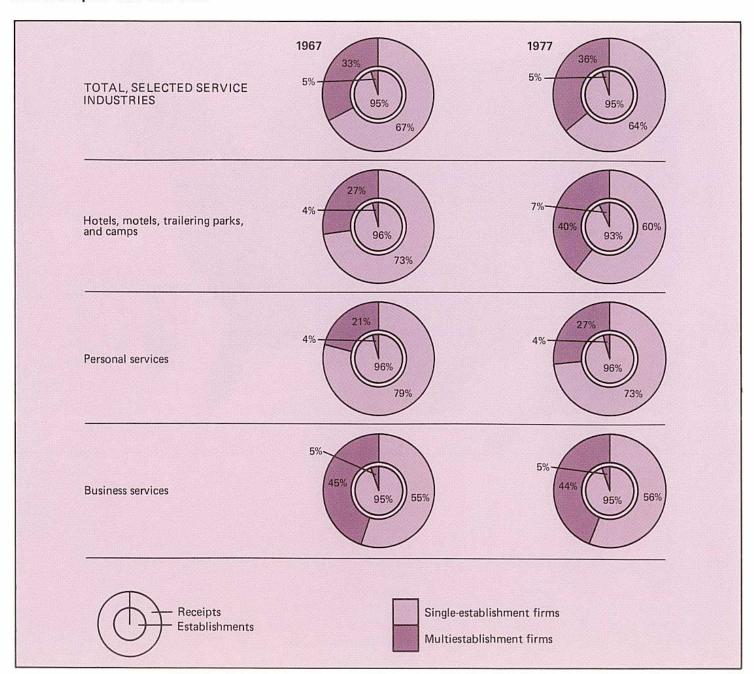
receipts were 67 percent of the total and in 1977, 64 percent. This percentage, however, varied from industry to industry. For example, the share for business services was 56 percent and the share for personal services was 73 percent in 1977.

In contrast, firms with more than one establishment in the same industry (i.e., multiestablishment firms) did not account for more than 7 percent of the total number of establishments in any given service industry. However, their share of industry receipts was in greater proportion than their numbers indicated. For example, in 1977, multiestablishment firms accounted for 4 percent of the total number of establishments in the personal services industry; however, they accounted for about 27 percent of the receipts.

In the business services industry, multiestablishment firms in 1977 comprised only 5 percent of the total number of establishments, yet captured about 44 percent of the receipts.

For 1967, data for total selected service industries exclude dental laboratories; legal services; and engineering, architectural, and surveying services. Comparable 1967 data are not available.

## Single- and Multiestablishment Firms and Receipts: 1967 and 1977



#### California Surpassed New York in Selected Service Employees and Receipts

Selected service employment nationwide increased 47 percent from 1967 to 1977 while receipts increased 175 percent. With few exceptions the geographic distribution of employees was similar to that of receipts, with the more

populous States continuing to account for a major share of both.

Seven States (California, New York, Texas, Florida, Illinois, Pennsylvania, and Ohio), containing an estimated 44 percent of the total U.S. population in 1977, accounted for 50 percent of the selected service employees and 52 percent of the receipts. These figures were down slightly from 1967 when employment in the combined

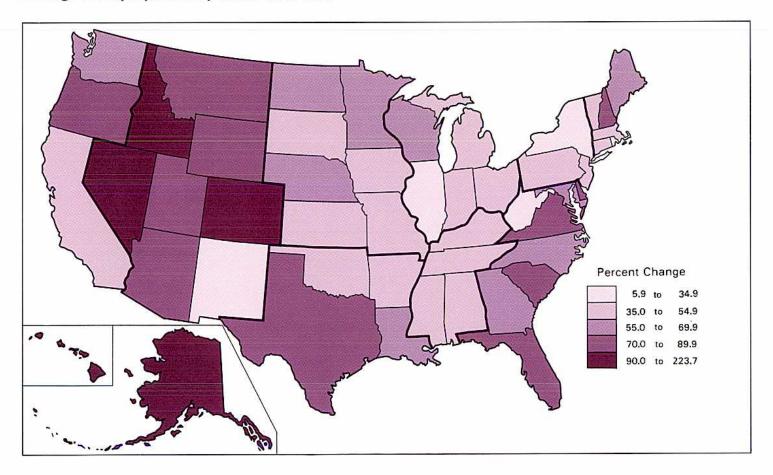
States was 52 percent and receipts were 54 percent of the total.

In 1967, New York accounted for the largest share of selected service employees and receipts. However, between 1967 and 1977 while New York increased employment by about 6 percent and receipts by about 100 percent, California had a 54-percent increase in employment and a 196-percent increase

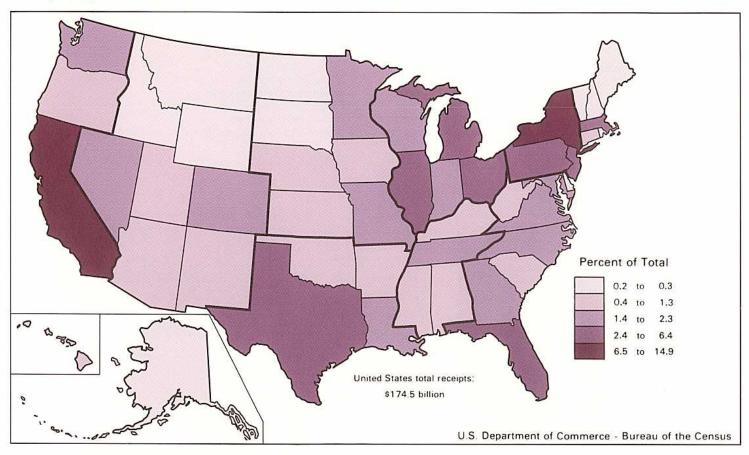
in receipts. By 1977, California had increased its relative share of employees to 13 percent and its receipts to 15 percent of the U.S. total. This surpassed New York which had 10 percent and 11 percent, respectively.

Texas and Florida also registered significant gains. Each of these States had an increase in employment of about 77 percent, or over 150,000 selected service employees.

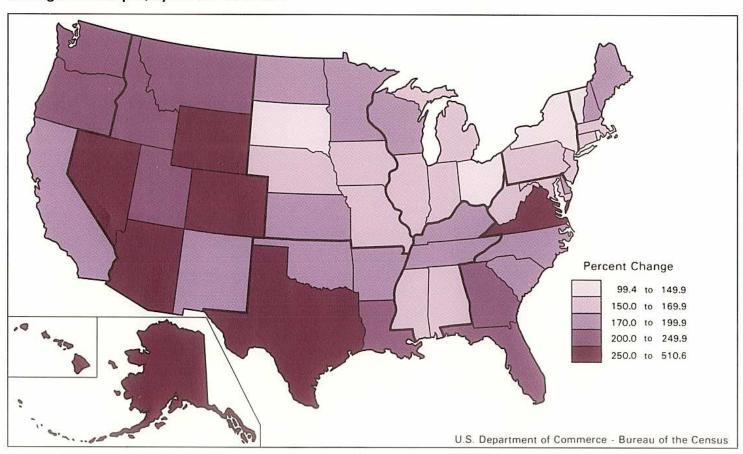
#### Change in Employment, by State: 1967-1977



#### Receipts, by State: 1977



Change in Receipts, by State: 1967-1977



#### **Business Services** Topped Growth of All Other Selected Service Industries

Business services, which showed the greatest gains of all the service industries between 1967 and 1977, accounted for 28 percent of all selected service receipts and 36 percent of the employment in 1977. Establishments in this

group increased from 211,000 in 1967 to 458,000 in 1977, about 117 percent. Receipts increased 247 percent compared to 175 percent for all selected service industries combined. Employment rose 90 percent during this period compared with a 47-percent rise for all selected service industries.

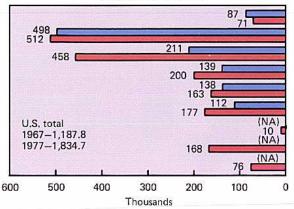
Personal services, dominated by laundry services and beauty

and barber shops, had the least overall growth. The number of establishments in this group increased only 3 percent and receipts increased 57 percent, while employment registered a decline of 12 percent during the 10-year period.

Although the number of hotels, motels, trailering parks, and camps decreased in contrast to all other selected service industry groups, significant gains were recorded in receipts and in employment from 1967 to 1977.

#### Establishments, Employment, and Receipts: 1967 and 1977

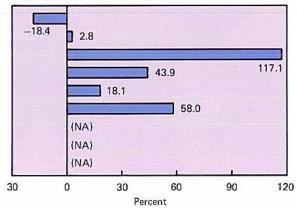
#### **ESTABLISHMENTS**



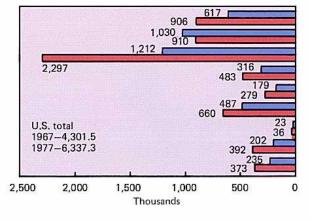
1967 1977

Hotels, motels, trailering parks, and camps Personal services Business services Automotive services Miscellaneous repair Amusement **Dental laboratories** Legal services Engineering, architecture, and surveying

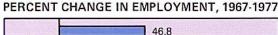
#### PERCENT CHANGE IN ESTABLISHMENTS, 1967-1977

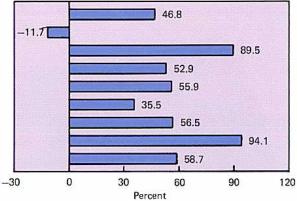


#### **EMPLOYMENT**

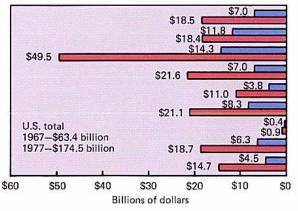


Hotels, motels, trailering parks, and camps Personal services **Business services** Automotive services Miscellaneous repair Amusement Dental laboratories Legal services Engineering, architecture, and surveying



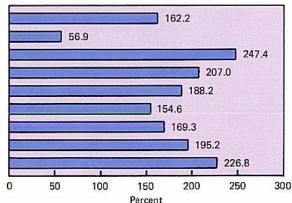


#### RECEIPTS



Hotels, motels, trailering parks, and camps Personal services **Business services** Automotive services Miscellaneous repair Amusement Dental laboratories Legal services Engineering, architecture, and surveying

#### PERCENT CHANGE IN RECEIPTS, 1967-1977



#### Concentration of Receipts in **Largest Firms** Remained Small

The share of total receipts accounted for by the 4, 8, 20, and 50 largest firms in the selected service industries was comparatively small in 1972 and 1977. The 50 largest firms accounted for only 9 percent of total receipts, while the 4

largest firms accounted for less than 2 percent of receipts.

Even so, there was considerable variation among individual industries. For example, the automotive repair industry had a very small level of concentration, with the 50 largest firms accounting for less than 5 percent of all receipts in 1972 and 1977.

The computer and data processing industry, on the other hand, showed a much higher

level of concentration, with the 50 largest firms accounting for 41 percent of all receipts in 1977. This, however, was significantly less than in 1972 when the 50 largest firms accounted for 51 percent of the receipts.

Receipts for advertising services were included in the calculations of percentages

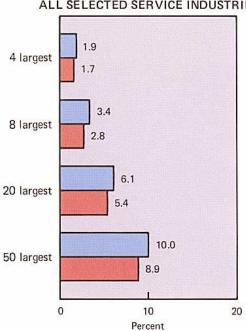
1972

1977

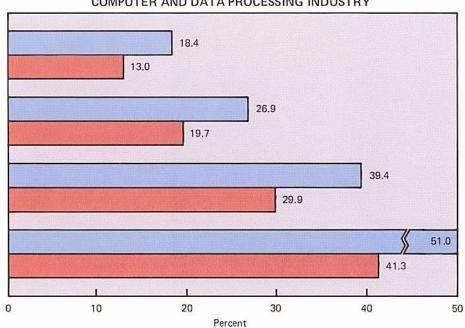
shown below for total selected service industries. Because of the change in type of receipts data collected in this industry between 1972 and 1977, any comparisons between the 2 years should consider this difference.

#### Receipts of Largest Firms in Selected Service Industries: 1972 and 1977

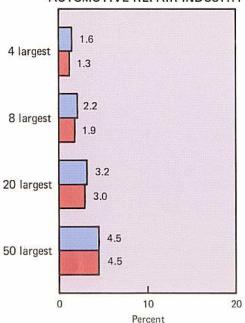




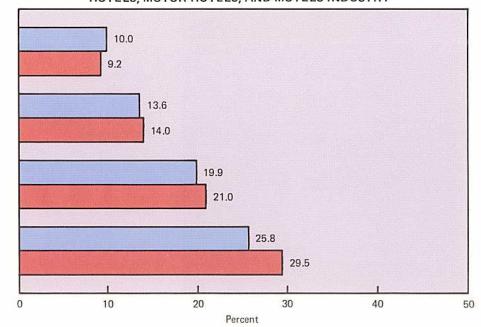
#### COMPUTER AND DATA PROCESSING INDUSTRY



#### AUTOMOTIVE REPAIR INDUSTRY



#### HOTELS, MOTOR HOTELS, AND MOTELS INDUSTRY



#### Services to Dwellings and Other Buildings Largest Employer in **Business Services**

Services to dwellings and other buildings continued to register the largest share of employees with about 19 percent in 1977. Management, consulting, and public relations services, at the same time, accounted for the largest share of total

business service receipts in 1972 and in 1977 with 14 and 15 percent, Computer and data processing services were second in volume of receipts in 1972 and in 1977.

While all business services recorded increases in both receipts and employment during this period, the gains scored by the computer and data processing industries surpassed all others, with

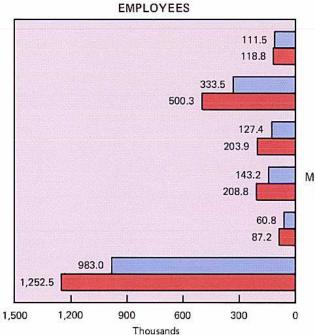
receipts increasing by 120 percent and employment by 60 percent.

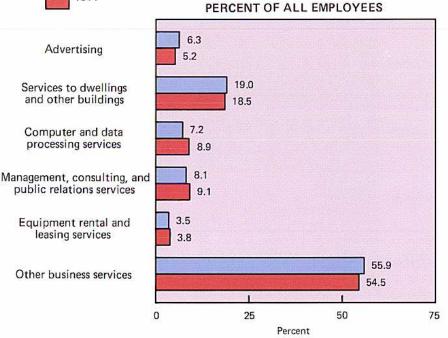
The 1972 receipts data for advertising in the chart below have been adjusted for comparability with the 1977 receipts data.

1972

1977







#### \$3.0 \$5.0 \$2.5 \$4.6 \$3.4 \$7.6 \$4.3 \$8.3 \$2.4 \$5.1 \$14.6 \$23.9

RECEIPTS

#### PERCENT OF TOTAL RECEIPTS 10.1 Advertising 9.1 8.4 Services to dwellings and other buildings 8.4 11.4 Computer and data processing services 13.9 14.0 Management, consulting, and public relations services 15.3 7.8 Equipment rental and leasing services 9.4 48.3 Other business services 43.9 0 50 25 75

Percent

Billions of dollars Source: U.S. Department of Commerce, Bureau of the Census

\$15

\$10

\$5

SO

\$30

\$25

\$20

## New York Metropolitan Area Largest Employer in Management, Consulting, and Public Relations Services

Management, consulting, and public relations services tended to concentrate in major metropolitan areas. The 10 metropolitan areas with the largest concentration of establish-

ments (54,600) in 1977 accounted for 38 percent of all establishments in the industry, down from 42 percent in 1972 when these metropolitan areas registered 34,400 establishments.

These metropolitan areas experienced a relatively greater decline in employment than in receipts during the period, accounting for 47 percent of all employees in the industry in 1977, down from 54 per-

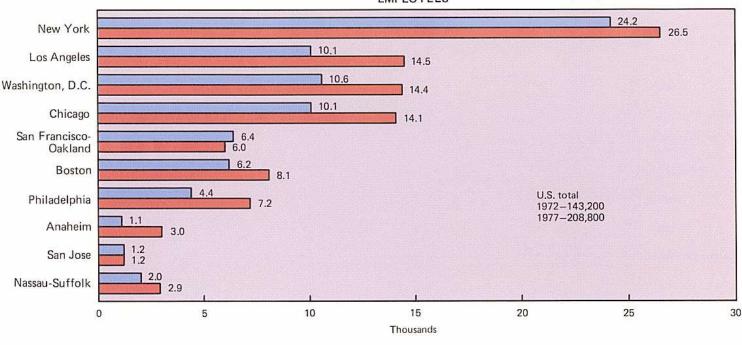
cent in 1972. Receipts showed a relative decline of only 2 percentage points, decreasing from 56 percent of total industry receipts to 54 percent.

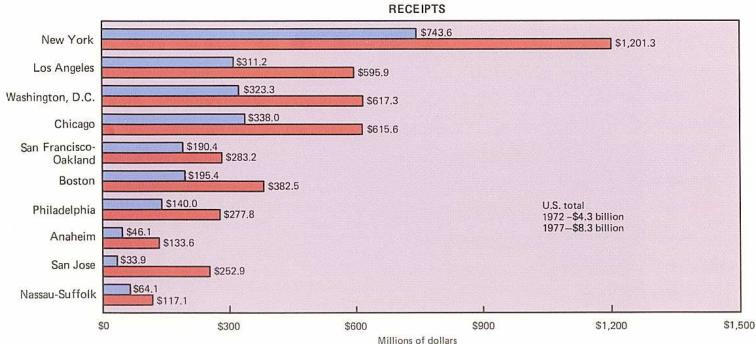
The New York City metropolitan area with 13 percent of the employees and 14 percent of the receipts in 1977 led all of the other metropolitan areas in these services. However, the relative proportion of employees and receipts were down from 1972 when they were both about 17 percent. Other metropolitan areas of significant importance were Los Angeles, Washington, D.C., and Chicago.

## Employees and Receipts of Management, Consulting, and Public Relations Service Industries, Selected SMSA's: 1972 and 1977

**EMPLOYEES** 







Source: U.S. Department of Commerce, Bureau of the Census

#### Washington, D.C., Metropolitan Area Largest Employer in Computer and Data Processing Services

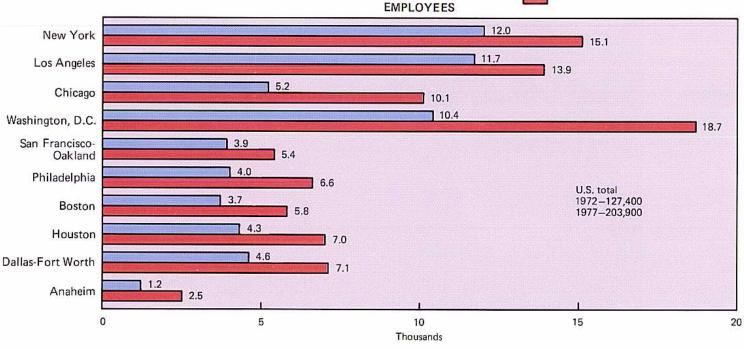
Computer and data processing services concentrated in major metropolitan areas in the same manner as management, consulting, and public relations services. The 10 metropolitan areas with the greatest number of establishments (6,200) in 1977 accounted for 39 percent of all establishments; 92,400, or 45 percent of all employees; and \$3.6 billion, or 47 percent of total receipts in the industry for that year. Although the total number of establishments, employees, and receipts increased nationwide between 1972 and 1977, the 10 metropolitan areas'

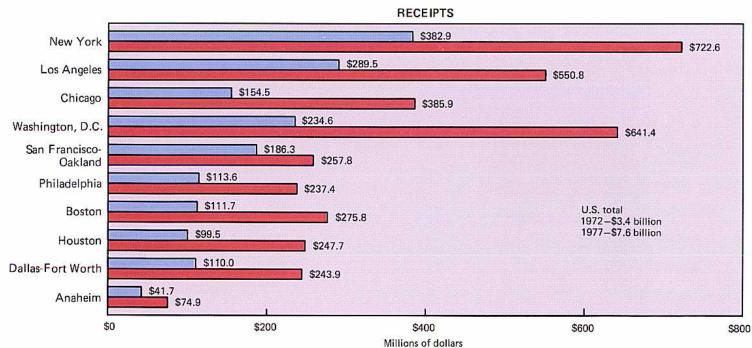
share was slightly lower in 1977 than in 1972.

The New York City metropolitan area led the industry in the number of employees and receipts in 1972. However, by 1977, the Washington, D.C., metropolitan area had made definite advances in the industry and became first in its share of total employees and second in its share of total receipts, The Los Angeles and Chicago metropolitan areas also accounted for major shares of employment and receipts in 1972 and 1977.









## **Employment in Personal Services** Declined

Personal service industries primarily provide services to individuals. This group experienced an overall decline in employment of about 12 percent over the 10-year period from 1967 to 1977. Laundry, cleaning, and garment services and beauty and barber shops

dominated the industry group, accounting for almost twothirds of personal service receipts in 1977. The two industries experienced a decline in employment between 1967 and 1977 of 37 percent and 2 percent, respectively, while their dollar volume of receipts only increased by 26 percent and 56 percent, respectively. In comparison, the service industries in total had an

employment increase of 47 percent and an increase in receipts of 175 percent.

Miscellaneous personal services recorded substantial gains in employment and receipts during this period. Employment rose 404 percent and receipts rose 340 percent. The two major activities in this miscellaneous group were reducing salons and health clubs and tax preparation

services. Together, they accounted for 61 percent of the miscellaneous employment and 52 percent of the receipts in 1977.

## **Employees and Receipts of Personal** Service Industries: 1967 and 1977



1967 1977

Laundry, cleaning, and garment services

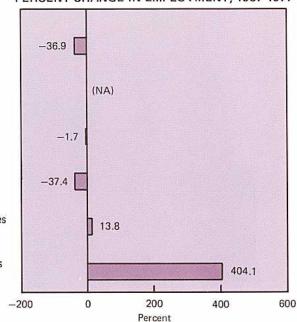
Photographic studios,

portraits

Beauty and barber shops

Shoe repair, shoeshine, and hat-cleaning shops

# PERCENT CHANGE IN EMPLOYMENT, 1967-1977



RECEIPTS \$5.4 Laundry, cleaning, and garment services \$6.8 (NA) Photographic studios, portraits \$1.2 \$3.4 Beauty and barber shops \$5.3 \$0.2 Shoe repair, shoeshine, and hat-cleaning shops \$0.2 Funeral services and crematories \$2.8 \$0.5 Miscellaneous personal services \$2.1 \$6 \$4 \$0 \$8 \$2

PERCENT CHANGE IN RECEIPTS, 1967-1977 25.7 (NA) 56.1 15.2 86.4 340.2 200 300 400 0 100 Percent

NA Not available. Source: U.S. Department of Commerce, Bureau of the Census

Billions of dollars

# Employment and Receipts Increased as Hotels, Motor Hotels, and Motels Decreased

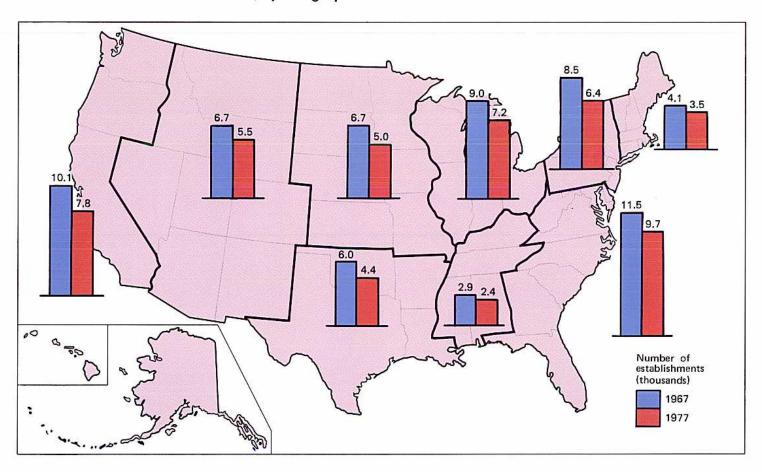
The hotel, motor hotel, and motel industry showed a growth in receipts and employment between 1967 and 1977 that was similar to service industries as a whole. How-

ever, at the same time, there was a substantial decrease in the number of establishments. Overall, receipts were 171 percent and employment 49 percent greater in 1977 than in 1967. In contrast, there were 21 percent fewer hotels, motor hotels, and motels in 1977 than there were in 1967, a decrease from 65,600 to 51,900. This loss was reflected in each of the nine geographic divisions.

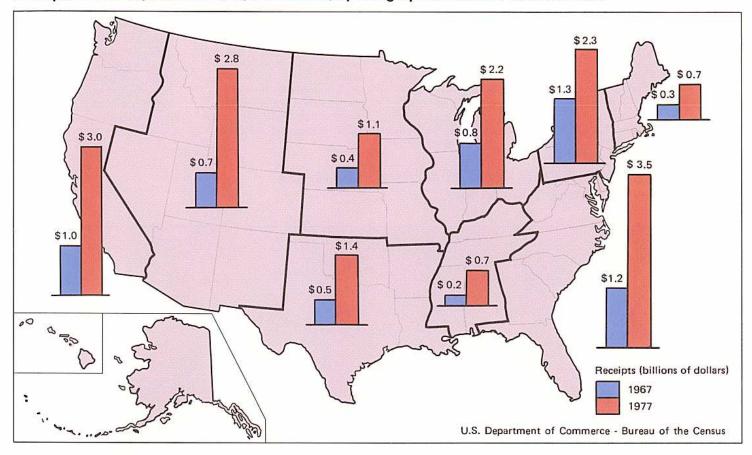
Five geographic divisions, led by the Mountain Division with 293 percent, recorded relative gains in receipts in excess of the industry average. The Mountain Division also had a major increase in number of employees, almost doubling during this period, from 59,100 to 117,300. The Middle Atlantic Division recorded the smallest percentage increase in receipts, 84 percent. This area also

gained only about 5,000 employees, 5 percent, since 1967.

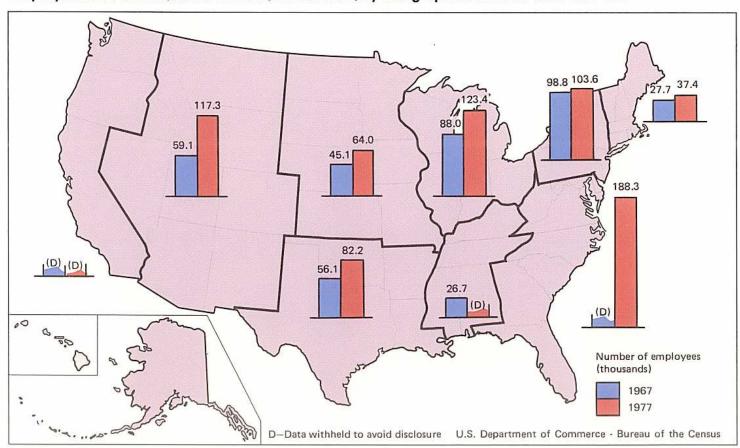
## Hotels, Motor Hotels, and Motels, by Geographic Division: 1967 and 1977



# Receipts of Hotels, Motor Hotels, and Motels, by Geographic Division: 1967 and 1977



# Employment of Hotels, Motor Hotels, and Motels, by Geographic Division: 1967 and 1977



# Small Hotels, Motor Hotels, and Motels Declined

The number of hotels, motor hotels, and motels operating the entire year declined 33 percent between 1967 and 1977. The decrease occurred primarily among establishments with no employees and those with less than 10 employees. In 1967, 85 per-

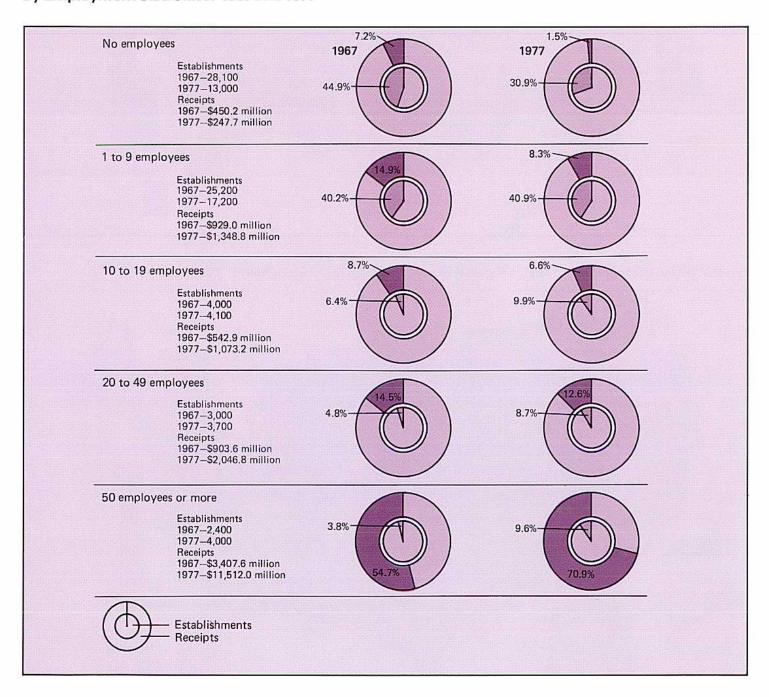
cent, or approximately 53,300 hotels, motor hotels, and motels, had no employees or employed less than 10 employees. These establishments accounted for about 22 percent of the industry's receipts in 1967. By 1977, the number of establishments in these two categories had declined to 30,200 and comprised only 72 percent of the establishments in the industry. The share of these small estab-

lishments in the industry's receipts also dropped sharply in 1977 to only 10 percent.

In contrast, the number of establishments with 10 or more employees increased, with the largest percentage gains being registered by establishments with 50 or more employees. Their number increased from about 2,400 in 1967 to 4,000 in 1977, or about 70 percent.

The volume of receipts for these larger establishments increased 238 percent and represented 71 percent of the industry's receipts in 1977 compared to 55 percent in 1967. Although receipts for establishments with 10 to 49 employees increased 116 percent, their share of the industry's receipts declined from 23 percent to 19 percent.

# Establishments and Receipts of Hotels, Motor Hotels, and Motels, by Employment Size Class: 1967 and 1977



# California Had Largest Number of Health Care Employees

Health care statistics include all paid employees (professional and nonprofessional) of establishments engaged in health services such as offices of physicians, dentists, and other health practitioners; nursing and personal care facilities; hospitals; medical and dental laboratories; and outpatient care facilities. In total, there were about 4.4 million employees.

The six States with the largest number of paid employees in the health services industry were also States with the largest population. These States represented about 40 percent of the total estimated population of the United States in

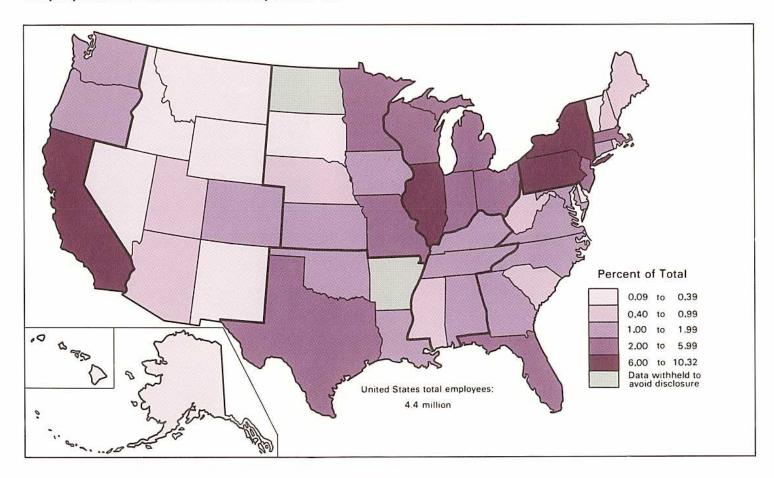
1977 and accounted for about 42 percent of the Nation's total employment in the health services industry.

California led all States, accounting for about 10 percent of total employment.

New York ranked second with 9 percent, followed by Pennsylvania and Illinois with 6 percent each and Ohio and Texas with 5 percent each.

Wyoming accounted for less than one-tenth of 1 percent of total health service industry employees.

# Employment in Health Services, by State: 1977



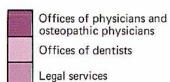
## Medical Professions Had Largest Share of Professional Services

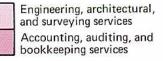
Professional services were located in all sections of the United States. However, the extent of professional services varied from community to community. Comparing 5 selected professional services in 10 major metropolitan areas, the medical professions

(offices of physicians and osteopathic physicians and dentists) accounted for the largest proportion of receipts and employment in 7 of the areas. Of the three remaining metropolitan areas, engineering, architectural, and surveying services accounted for the largest proportion of receipts and employment in Houston and Pittsburgh and legal services accounted for the

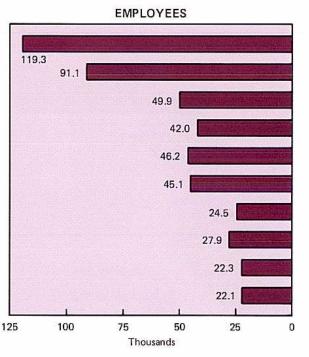
largest proportion in New York City.

Only two metropolitan areas, New York City and Dallas-Fort Worth, showed a significantly higher percentage of accounting, auditing, and bookkeeping services than in the other eight areas.





# Employees and Receipts of Selected Professional Service Industries, Selected SMSA's: 1977



New York

Los Angeles

San Francisco-Oakland

Houston

Philadelphia

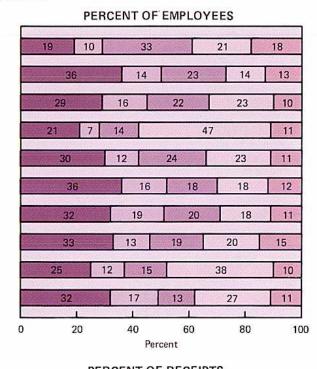
Detroit

Nassau-Suffolk

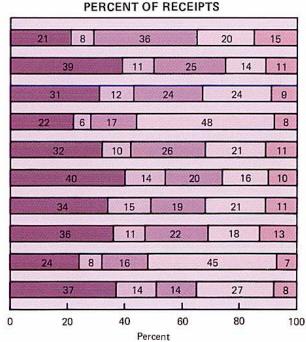
Dallas-Fort Worth

Pittsburgh

Anaheim



#### RECEIPTS \$6.2 New York \$4.3 Los Angeles \$2.3 San Francisco-Oakland \$2.1 Houston \$2.0 Philadelphia \$2.0 Detroit \$1.2 Nassau-Suffolk Dallas-Fort Worth \$1.2 Pittsburgh \$1.2 Anaheim \$1.1 \$8.0 \$6.0 \$4.0 \$2.0 Billions of dollars



Source: U.S. Department of Commerce, Bureau of the Census

# MINORITY-AND WOMEN-OWNED BUSINESSES



Surveys of minority- and women-owned businesses are conducted every 5 years as part of the economic censuses program. The surveys are designed to measure the extent of business ownership by specific minority groups and women. These surveys are based on the entire firm rather than on establishments of a firm.

The Survey of Minority-Owned Businesses was initiated in 1969 and incorporated into the economic censuses in 1972. It provides data on firms owned by Blacks, persons of Spanish origin, Asian Americans, American Indians, and other minorities. Information from the Survey of Minority-Owned Businesses was obtained from Federal administrative records, direct mail canvass, various published and unpublished source listings, and personal contacts with community and government representatives knowledgeable in this area.

The Survey of Women-Owned Businesses was first conducted as a special project in 1972. Data for the Survey of Women-Owned Businesses were compiled from Federal administrative records.

A firm was considered minority owned if the sole owner or one-half or more of the partners were minorities, and a corporation was classified as minority owned if at least 50 percent of the stock was owned by minorities. The same criteria were applied to identify women-owned firms.

Data for both surveys are presented by—

Industry (two-, three-, and four-digit SIC codes)
Geographic area (division, State, SMSA, county, and city)
Size of firm (employment, payroll, and receipts)
Legal form of organization (sole proprietorship, partnership, and corporation)

Tables in the published reports show—

Number of firms Gross receipts Number of paid employees Annual payroll All industries listed in the 1972 Standard Industrial Classification Manual and supplements are included in these surveys, with the following exceptions: Agricultural production, railroad transportation, U.S. Postal Service, trusts, miscellaneous investing, membership organizations, private households, and public administration.

Data for "all" firms used in the following charts for making comparisons to minority- and women-owned firms are based on statistics published by the Internal Revenue Service (IRS). These data are combined for retail and wholesale trade; therefore when comparisons are made with womenand minority-owned firms, census data for these categories are combined as well. IRS data for finance, insurance, and real estate have also been adjusted to improve comparisons between IRS and census data sets.

In charts showing period-toperiod comparisons, service industries added to the scope of the census in 1977 have been excluded. European Spanish ancestry, added in 1977, has also been excluded from the period-to-period comparisons for minorityowned firms.

All presentations for women-owned firms include data for sole proprietorships and partnerships, but exclude corporations other than subchapter S corporations. The same holds true for minority-owned firms when data are compared to "all" firms. However, all other data for minority firms include all types of corporations.

# Women-Owned Firms Increased But Percent of Total Still Small

The number of women-owned firms increased 30 percent, from 486,000 in 1972 to 631,800 in 1977. Gross receipts of such firms increased 72 percent, from \$23.5 billion to \$40.5 billion. Even so, women-owned firms com-

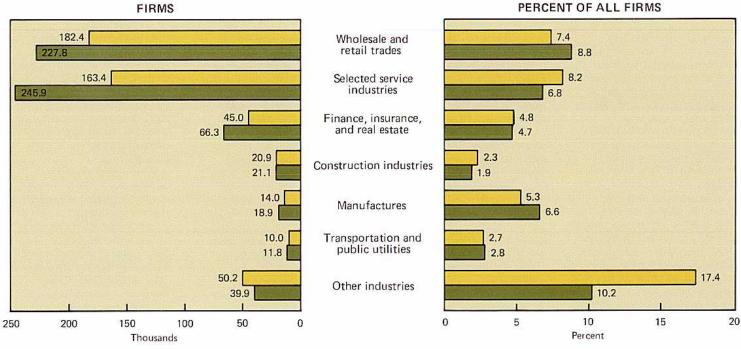
prised only 6.7 percent of the total number of firms in 1972 and 7.1 percent in 1977. Women-owned firms accounted for only 6.1 percent of the receipts of all firms in 1972, rising to 6.6 percent in 1977.

The greatest growth of women-owned firms in both number of firms and dollar volume of receipts occurred in selected service industries and in retail trade. However, the

greatest increase in the share of all receipts occurred in the manufacturing industries, where women-owned firms increased their share of total manufacturing receipts from 7.7 percent in 1972 to 9.4 percent in 1977.

# Women-Owned Firms and Receipts as a Percent of All Firms, by Major Industry Division: 1972 and 1977





#### PERCENT OF TOTAL RECEIPTS RECEIPTS \$14.5 Wholesale and retail trades 8.0 \$23.4 5.4 \$2.5 Selected service industries 5.9 \$6.0 \$1.0 2.9 Finance, insurance, and real estate 3.2 \$2.1 \$2.3 4.6 Construction industries \$2.9 4.0 \$2.0 Manufactures \$3.6 \$0.6 Transportation and public utilities 5.7 \$1.3 \$0.6 7.1 Other industries \$1.2 5 10 15 20 \$20 \$15 \$10 \$5 \$25 Percent Billions of dollars

Source: U.S. Department of Commerce, Bureau of the Census (women-owned businesses)
U.S. Department of Treasury, Internal Revenue Service (all firms)

# Women-Owned Firms Concentrated in Retail Trade and Service Industries

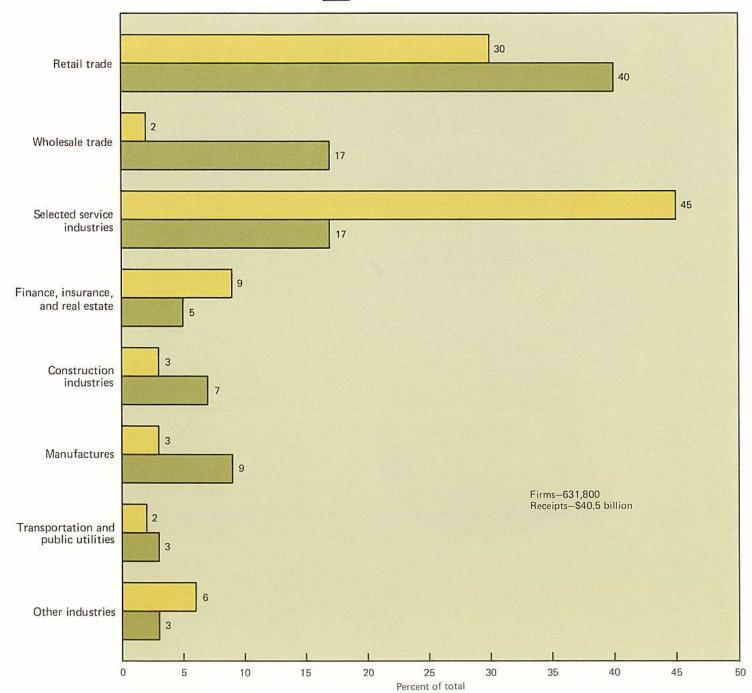
In 1977, the majority of all firms in the United States were concentrated in retail trade and service industries. The distribution was similar for women-owned firms, with 75 percent in these two categories. These two

industries also represented 57 percent of the receipts of all women-owned businesses, with 40 percent accounted for by retail trade alone. Of the remaining industries, no other accounted for more than 9 percent of the total number of women-owned firms.

Even though 45 percent of the companies owned by women were in the selected services industries, they accounted for only 17 percent of the receipts. In contrast, while only 2 percent of women-owned firms were in the wholesale trade industries, they accounted for 17 percent of the receipts of all women-owned businesses.

# Women-Owned Firms and Receipts, by Major Industry Division: 1977





Source: U.S. Department of Commerce, Bureau of the Census

# Distribution of Legal Form of Organization for Women-Owned Firms Similar to All Firms

In 1977, 86 percent of all U.S. firms operated as sole proprietorships, accounting for only 51 percent of the total gross receipts. Four percent of all firms were corporations, but they generated 23 percent

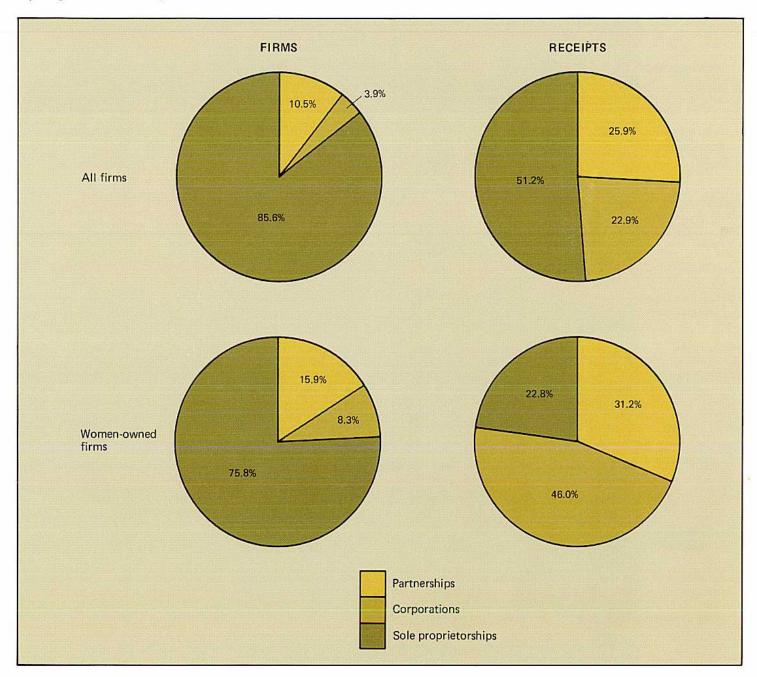
of the receipts. A similar distribution existed for womenowned firms, that is, greater than proportionate receipts for corporations and less than proportionate receipts for sole proprietorships, except that the proportionate differences were more pronounced than for all firms.

Sole proprietorships comprised 76 percent of all women-owned firms, but generated only 23 percent of the total receipts. Only 8 percent of the women-owned firms were corporations, but they accounted for 46 percent of the receipts.

Figures for all firms in the charts below are not comparable to those shown in the chapter, Enterprise Statistics, because (1) enterprise data include all corporations, but corporations other than subchapter S corporations are excluded from data for

women-owned firms, and (2) nonemployer firms are included in women-owned firms data, but are excluded from enterprise data.

# All Firms and Women-Owned Firms and Receipts, by Legal Form of Organization: 1977



Source: U.S. Department of Commerce, Bureau of the Census (women-owned businesses)
U.S. Department of Treasury, Internal Revenue Service (all firms)

# Most Women-Owned Firms Concentrated in Large Metropolitan Areas

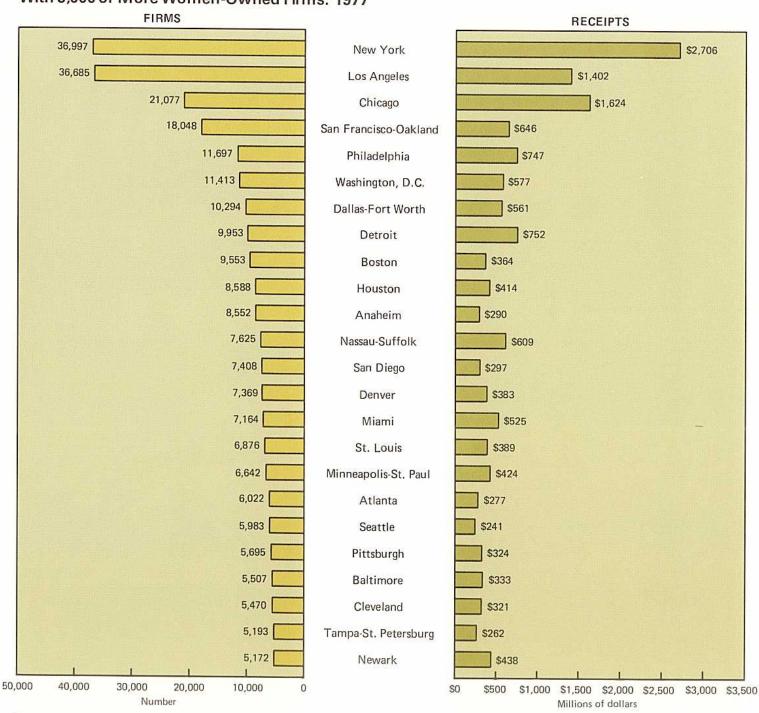
Similar to the distribution of all firms, women-owned firms concentrated in the larger, more populated metropolitan areas. In 1977, there were 24 SMSA's with 5,000 or more women-owned firms. These areas together accounted

for over one-third of all women-owned firms and receipts.

More than 10 percent of all women-owned firms were located in the New York and Los Angeles metropolitan areas. These two areas also generated about 10 percent of the receipts. New York ranked first in both the number of firms and receipts. Los Angeles

had almost as many firms as New York but ranked third in receipts, behind Chicago.

# Women-Owned Firms and Receipts, by SMSA's With 5,000 or More Women-Owned Firms: 1977



Source: U.S. Department of Commerce, Bureau of the Census

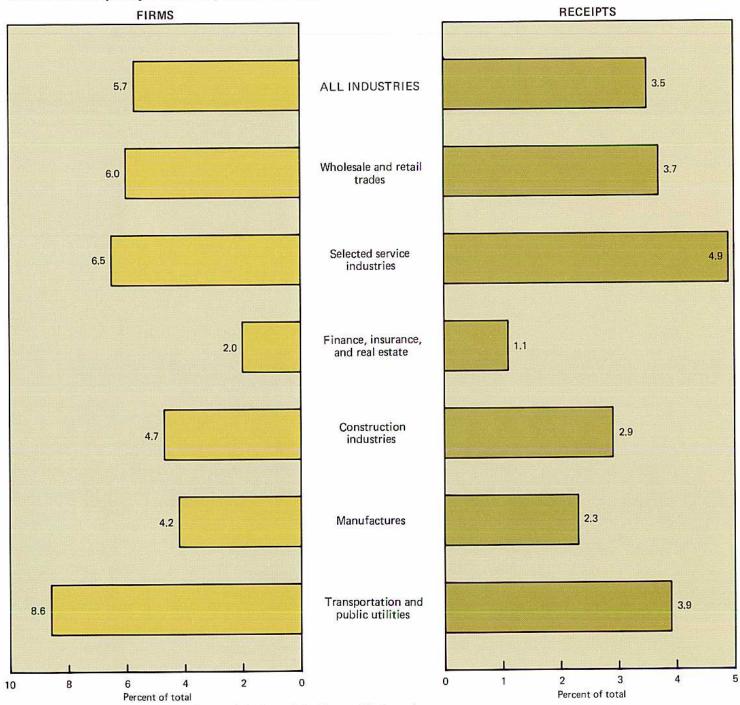
# Minorities Owned 6 Percent of All Firms and Earned 4 Percent of All Receipts

Of the 9.8 million firms in the United States in 1977, minorities owned 561,400 and earned \$22.2 billion in receipts compared to \$633.1 billion in receipts for all firms. Although there have been substantial increases in the number and

receipts of minority-owned firms, in 1977 they still accounted for only 5.7 percent of all firms in the United States and only 3.5 percent of all receipts. At the same time, minorities represented almost 19 percent of the general population.

In 1977, the minorities' share of all firms was greatest in the transportation and public utilities industries. The largest share of all receipts was earned in the service industries. The smallest share of firms and receipts was registered in finance, insurance, and real estate.

# Minority-Owned Firms and Receipts as a Percent of All Firms, by Major Industry Division: 1977



Source: U.S. Department of Commerce, Bureau of the Census (minority-owned businesses)
U.S. Department of Treasury, Internal Revenue Service (all firms)

# Spanish and Other Minority Ownership Increased at a Faster Rate Than Black Ownership of Firms

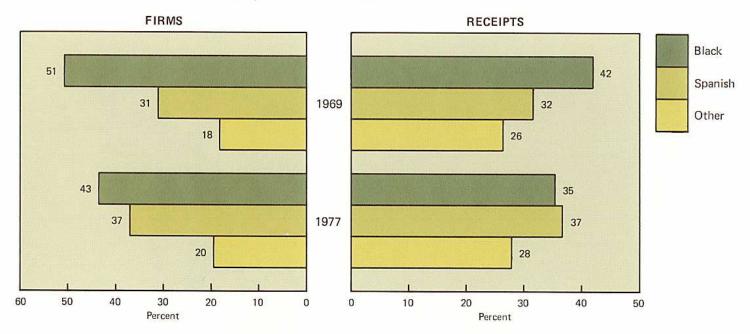
While the total number of firms and the volume of gross receipts increased for each minority group between 1969 and 1977, the proportionate number of firms and receipts held by each minority group changed.

The largest percentage of minority-owned firms were owned by Blacks during the period 1969 to 1977. However, the number of Spanishowned and other minority-owned firms increased at a faster rate than Black-owned firms. In 1969, Black-owned firms represented 51 percent of the total minority-owned firms, but their share had

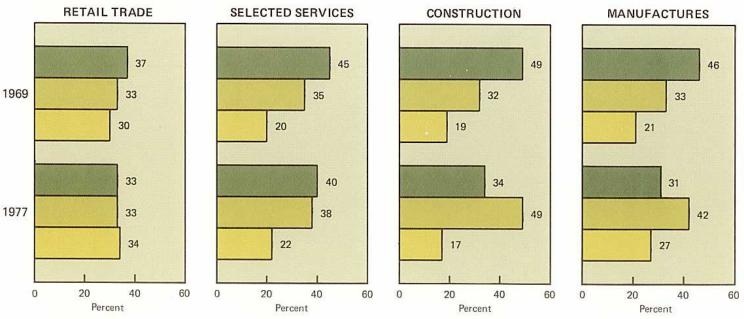
decreased to 43 percent by 1977. At the same time, the share of all minority-owned firms owned by persons of Spanish origin increased from 31 percent to 37 percent and the percentage owned by other minorities increased from 18 to 20.

Receipts of Spanish-owned and other minority-owned firms also increased at a greater rate than receipts of Blackowned firms. From 1969 to 1977, the share of total receipts accounted for by Black-owned firms decreased from 42 to 35 percent. The share of receipts of Spanish-owned firms increased during this period from 32 to 37 percent, surpassing receipts of Black-owned firms, and the share of receipts of other minority-owned firms increased from 26 percent to 28 percent.

# Minority-Owned Firms and Receipts: 1969 and 1977



# Receipts of Minority-Owned Firms, by Selected Industry Division: 1969 and 1977



Source: U.S. Department of Commerce, Bureau of the Census

# Minority-Owned Firms Concentrated by Geographic Areas

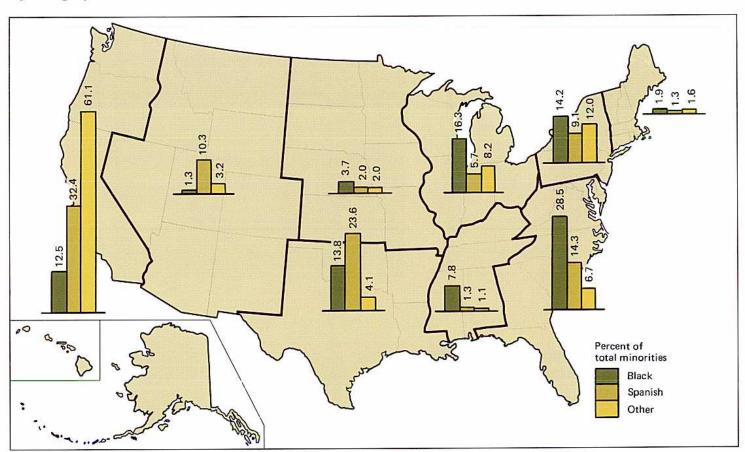
The geographic distribution of minority-owned firms was similar to the distribution of the Nation's minority population. In 1977, Black-owned firms were more geographically dispersed than Spanish- and other minority-owned firms. The largest concentration of

Black-owned firms (29 percent) occurred in the South Atlantic Division; 56 percent of the Spanish-owned firms were located in the Pacific and West South Central Divisions; and 61 percent of the other minority-owned firms were located in the Pacific Division.

The New England Division had the smallest overall share of minority-owned firms with less than 2 percent of each minority.

Across the Nation in 1977, Blacks owned 231,200 firms, Spanish-owned firms totaled 219,400, and other minorities owned 110,800 firms.

Black-, Spanish-, and Other Minority-Owned Firms, by Geographic Division: 1977



## Average Receipts of Minority-Owned Firms Were Lower Than Those of All Firms

A comparison of the average receipts of minority-owned firms in 1977 with those of all firms showed them to be lower in all major industries surveyed. Overall, the average receipts of minority-owned firms were 61 percent of the average

receipts for all firms (\$39,600 versus \$64,400).

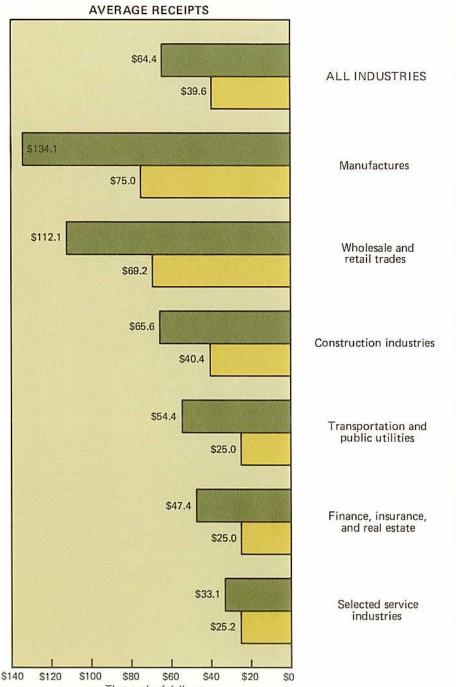
These percentages varied substantially among several major industries. For example, average receipts of minority-owned firms ranged from 53 percent of average receipts for all firms in finance, insurance, and real estate (\$25,000 compared to \$47,400) to 76 percent of the average for all firms in the services industries (\$25,200 compared to

\$33,100). Average receipts of minority-owned firms in wholesale and retail trades and construction, at 62 percent, were close to the overall average of 61 percent for all industries.

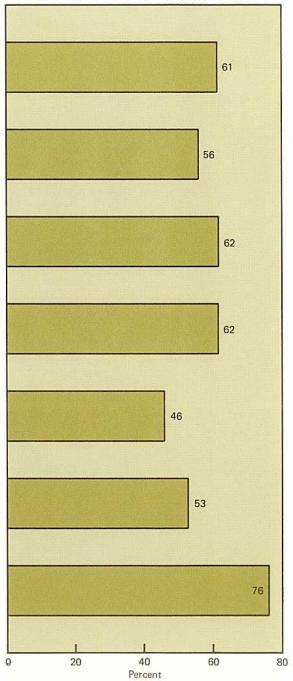
# Average Receipts of Minority-Owned Firms as a Percent of All Firms, by Major Industry Division: 1977

All firms

Minority-owned firms



# PERCENT OF U.S. AVERAGE RECEIPTS



Source: U.S. Department of Commerce, Bureau of the Census (minority-owned businesses)
U.S. Department of Treasury, Internal Revenue Service (all firms)

# Appendix A. General Information About the 1977 Economic Censuses

#### HISTORY AND BACKGROUND

The economic censuses constitute comprehensive and periodic canvasses of the Nation's industrial and business activities. The first economic census of the United States was conducted as part of the 1810 decennial census, when inquiries on manufacturing were included with the census of population. Minerals data were first collected in 1840. The first censuses of construction and business were taken for 1929. An integrated economic census program was begun for 1954. In that year, the censuses covered the retail and wholesale trades, selected service industries, manufactures, and mineral industries.

The economic censuses are required by law under title 13 of the United States Code, sections 131, 191, and 224, which requires that they be taken at 5-year intervals covering years ending in "2" and "7."

### SCOPE, CONTENT, AND COVERAGE

Data collection for the economic censuses covering activities for calendar year 1977 began early in 1978. Coverage and content were expanded from the 1972 censuses; the most significant changes were expansion in the coverage of service industries and the addition of more data items for GNP.

In planning the 1977 economic censuses, Census Bureau staff consulted with trade, business, and professional associations, individual business firms, unions, census advisory committees, Government agencies, and others regarding questions to be asked and desired formats for publishing results. The Advisory Council on Federal Reports, comprising representatives of each major field of business activity, reviewed the proposed questions, and Census Bureau staff screened the questions to eliminate any not clearly in the public interest.

The 1977 economic censuses cover approximately 6.8 million establishments, representing about 6.0 million companies, firms, and organizations. More than 400 different report forms were required to collect the vast array of information. However, questionnaires were mailed to only 2.1 million of those businesses, firms, and organizations. Approximately 3.9 million small businesses were not required to complete a census form since the Census Bureau has developed techniques to obtain limited information about them from Federal administrative records of the Internal Revenue Service and the Social Security Administration. Small firms, although large in number, account for a very small proportion of the employment, payroll, and sales or receipts recorded in the economic censuses. Each firm that received a census questionnaire was requested to answer some general

questions regarding industrial classification, location, type of ownership, dollar volume of business in 1977, number of employees, and amount of payroll. More specific questions were included depending upon the type of activity and industry.

As establishments returned the completed report forms, Census Bureau staff screened the data from the questionnaires and transferred the information to computer tape for extensive edits prior to tabulation. Data from administrative records were processed and merged with the questionnaire data. Tabulations used in the economic censuses publication program were prepared from these combined data files.

#### **PUBLICATIONS**

The results of the 1977 economic censuses are available in printed reports and on microfiche and computer tapes. Printed reports for the individual economic censuses usually consist of separate series for industries, geographic areas, subjects, and special reports. For some of these series, preliminary or advance reports were issued several months prior to the final reports. After all final separate paperbound reports have been published, they will be combined, assembled, and reissued in clothbound volumes. In many instances, these volumes contain explanatory material and graphics previously unpublished in the paperbound reports.

All of the published material will become available on microfiche. Most of these same summary statistics will also be issued on public-use computer tapes. In addition, a number of unpublished data series providing more detail than the printed reports will be made available on both microfiche and public-use computer tapes.

### CONFIDENTIALITY

Title 13 of the United States Code, which authorizes the taking of the 1977 economic censuses, imposes a joint obligation on firms to respond and on the Census Bureau to maintain the confidentiality of information reported to it. The law also specifies penalties for noncompliance by a respondent and for disclosure of information by the Census Bureau. No data are published by the Census Bureau that could reveal the identity or activities of any specific individual or firm. Individual census questionnaires cannot be used for the purposes of taxation, investigation, or regulation. The law also affords the full protection of confidentiality to the file copy of a census questionnaire that is retained by the respondent.

# Appendix B. Availability of Data for Geographic Areas

In general, the most detailed data are published at the national level. Fewer statistics appear for States and smaller areas in order to avoid disclosing information for individual firms and to reduce overall publishing costs. While not in printed reports, data for selected small areas are available on microfiche or on public-use computer tape. The table below presents the major types of geographic areas for which economic census data are available.

Some areas, like counties and places, appear throughout most of the economic censuses while other areas such as travel regions, major retail centers, and production areas are peculiar to a particular census program.

More information on geographic areas usually can be found in the introduction to the published reports.

Report number		States	SMSA's and SCSA's	Summary for areas outside SMSA's	Selected counties	All counties	Major cities	Towns, townships, and unincorporated places <sup>1</sup>	All incorporated places with 2,500 or more population
RC77-A	Retail Trade—Geographic Area Series:  Detailed kind-of-business data  Limited kind-of-business data	x	х	X²	X³	x	X³	X <sup>3</sup>	X³ X
RC77-C	Retail Trade—Major Retail Centers Series	ř	X4				X <sup>5</sup>		
RC77-L	Retail Trade—Merchandise Line Sales Series	X²	X <sup>2 4</sup>	X²					
WC77-A	Wholesale Trade—Geographic Area Series:  Detailed kind-of-business data	x	х	X²	X6	x	X³	X³ X	x
SC77-A	Service Industries—Geographic Area Series:  Detailed kind-of-business data	x	х	X²	X³	x	X³	X³ X	x
CC77-A	Construction—Geographic Area Series	×	X 7						
MC77-A	Manufactures—Geographic Area Series:  Detailed industry data	x	x		Χ <sup>8</sup>	x	Хª	X8	X*
MIC77-A	Mineral Industries—Geographic Area Series:  Detailed industry data	x			X°	X°			
TC77-T	Truck Inventory and Use Survey	×			X10				
TC77-C	Commodity Transportation Survey	x	X11						
TC77-N	National Travel Survey	×							
MB77	Survey of Minority-Owned Business Enterprises	x	X12		X <sup>13</sup>	X13	X <sup>13</sup>	X <sup>13</sup>	
WB77	Survey of Women-Owned Businesses	×	X14		X14	X14	X14	X <sup>14</sup>	

<sup>&</sup>lt;sup>1</sup> Towns in the New England States which include an urban population (cluster of population of 2,500 or more) or have a total population of 10,000 or more; townships in New Jersey and Pennsylvania with a population of 10,000 or more; and unincorporated places with a population of 25,000 or more.

<sup>&</sup>lt;sup>2</sup> Available only on microfiche.

<sup>&</sup>lt;sup>3</sup> Counties, cities, towns, and unincorporated places with 500 establishments or more.

<sup>4</sup> SMSA's only.

<sup>&</sup>lt;sup>5</sup> Cities containing a central business district.

<sup>&</sup>lt;sup>6</sup>Only counties with 200 wholesale establishments or more.

 $<sup>^{7}\,\</sup>mbox{Selected SMSA's}$  only, based on a 1970 population of 500,000 or more.

 $<sup>^{\</sup>rm 6}\,\text{Only}\,$  industry groups with 450 or more manufacturing employees are shown.

<sup>&</sup>lt;sup>9</sup> Only counties or industry groups within a county with \$5 million in total value of shipments are shown.

<sup>&</sup>lt;sup>10</sup> Available only on public-use tape.

<sup>&</sup>lt;sup>11</sup> Available only for Production Areas (comprised of one or more SMSA's).

<sup>&</sup>lt;sup>12</sup> Summary report has all SMSA's shown.

<sup>&</sup>lt;sup>13</sup>Only those areas with 100 or more minority-owned firms.

<sup>&</sup>lt;sup>14</sup>Only those areas with 100 or more women-owned firms.

# Appendix C. Notes, Explanations of Selected Terms, and SMSA Definitions

#### NOTES

#### Rounding

Detailed data in the charts may not agree with totals because of independent rounding. Furthermore, figures shown in the text, such as percent and absolute changes, and those shown in the charts may also vary slightly due to rounding.

### Survey and Sampling Error

The data in this publication come from a variety of surveys and other sources. Data from sample surveys are subject to sampling error, and all data are subject to possible nonsampling errors due to nonresponse, reporting, and processing errors. For more detailed explanations of the sampling and nonsampling errors associated with each series, refer to the original publication from which the data in this report were obtained.

#### Index of Production

The 1977 index of production used in the censuses of minerals and manufactures is extrapolated, based on the 1972 to 1977 movement of the Federal Reserve Board's Index of Industrial Production. The Federal Reserve Board's index was parallel to, but slightly lower than that used for the censuses until 1963. Since 1963, the rate of growth in the Federal Reserve's index has been slightly greater.

#### EXPLANATIONS OF SELECTED TERMS

Following is an explanation of selected terms used in this publication. In some cases, variations of terms occur in each economic area, and more complete explanations can be obtained by referring to the original publications from which the data in this report were obtained.

#### Annual Payroll

Includes all forms of compensation, such as salaries, wages, commissions, bonuses, vacation allowances, sick leave pay, and the value of payments in kind (e.g., free meals and lodgings) paid during the year to all employees. Tips and gratuities received by employees from patrons and reported to employers are included. For corporations, it includes amounts paid to officers and executives; for unincorporated businesses, it does not include profit or other compensation of proprietors or partners. Payroll is reported prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds.

# Central Business District (CBD)

The downtown retail area of a standard metropolitan statistical area (SMSA) central city or other SMSA city of 50,000 or more persons, which is characterized by high land valuation; high

concentration of retail businesses, offices, theaters, hotels, and service businesses; and high traffic flow.

### Company

An organization consisting of one or more establishments that the reporting firm specified to be under its ownership or control at year end. If a company owns or controls other companies, all establishments of the subsidiaries are included as part of the owning or controlling company. In this report, the terms "company," "firm," and "enterprise" are used interchangeably.

### **Employer and Nonemployer Firms**

Employer firms include those with annual payroll and nonemployer firms include those without annual payroll.

#### Employment

Includes full-time and part-time employees and salaried officers and executives of corporations who were on the payroll in a specified pay period. Employees on paid sick leave, paid holidays, and paid vacations are included. Proprietors and partners of unincorporated businesses are not included.

#### Enterprise

See Company.

#### Establishment

An economic unit, usually at a single physical location, at which business is conducted. An establishment is not necessarily identical with a company, firm, or enterprise, which may consist of one or more establishments. When two or more similar activities are carried on at a single location under a single ownership, all activities are grouped together as a single establishment, the entire establishment is classified on the basis of its major activity, and all data are included in that classification. However, distinct and separate economic activities (for which different industry classification codes are appropriate) conducted under the same ownership at a single location are counted as separate establishments if employment in each activity is significant and if separate accounting records are available or can be accurately estimated.

In the mineral industries, reporting of oil and gas field operations and contract services differed from the "establishment" basis used for other types of mining. Each concern operating oil and gas wells, drilling wells, or exploring for oil and gas for its own account was required to submit a separate report for each State or offshore area adjacent to each State in which it conducted such activities. Concerns that supplied contract services for mining establishments were required to submit one report covering all such activities in the United States. Information on capital expenditures, employment, and receipts was obtained by State and county.

In the construction industries, establishment is defined as a relatively permanent office or other place of business where the usual business activities related to construction are conducted.

#### Firm

See Company.

### Legal Form of Organization

Data from the economic censuses are classified into the following legal forms of organization:

**Sole proprietorships.** Unincorporated companies owned by one person.

Partnerships. Unincorporated companies owned by two or more persons having financial interest in the business. (Joint ventures, except corporations, are included as partnerships.)

**Corporations.** Companies legally incorporated under State or Federal laws including non-tax-exempt cooperatives.

Subchapter S corporations. Most of the economic censuses data include all corporations. However, much of the data presented for minority-owned and womenowned firms includes only subchapter S corporations. These are legally incorporated businesses, each with 10 or less shareholders who elect to be taxed as shareholders rather than as a corporation. The corporation files an 1120S tax form rather than the regular 1120 corporation tax form.

Other legal forms. Included in this group are cooperatives, estates, receiverships, government-owned liquor stores, etc.

#### Multiestablishment Firm

A firm with two or more establishments which may or may not be identified by the same industrial classifications.

#### Other Minorities

Includes American Indians; Alaskan natives; other Asians, such as Asian Indians, Chinese, Japanese and Korean; and other Pacific Islanders, such as Hawaiians and Filipinos.

## Person-Trip

Each time a person travels to a place at least 100 miles away from home and returns. One person on three different trips is counted as three person-trips. Three persons from the same household on one trip are counted as three person-trips.

#### Sales and Receipts

Generally, when sales and receipts data are presented, they include the receipts for goods produced or distributed or services provided. Nonoperating receipts, such as returns on investments and interest, are excluded.

In the census of construction industries, total construction receipts include all receipts from construction work. This includes receipts for maintenance and repair construction work

as well as for new construction work. Also included is the value of any construction work done by the reporting establishments for themselves. In contrast, all business receipts include all receipts from construction work and receipts from the reporting establishment's other business operations (rental of equipment to others, wholesale or retail sales, etc.).

### Single-establishment Firm

A firm with only one establishment.

#### Subchapter S Corporation

See Legal Form of Organization.

#### Truck Size

The size classification is based on the gross vehicle weight (empty weight of the vehicle plus the maximum carried load) at which the vehicle operated during the previous 12 months. The four size classes are—

Light-gross vehicle weight of 10,000 pounds or less Medium-gross vehicle weight of 10,001 to 19,500 pounds Light-heavy-gross vehicle weight of 19,501 to 26,000 pounds

Heavy-heavy-gross vehicle weight of 26,001 pounds or more

#### Value Added

For most industries this measure is derived by adding the value of shipments to the net change (between the beginning and the end of the year) in inventories of finished goods and work in process, and subtracting the cost of materials. "Value added" avoids the duplication in the "value of shipments" figure which results from the use of the products of some establishments as materials by others. Consequently, it is useful for comparing the relative economic contributions of the manufacturing process among industries and geographic areas.

### Value of Shipments

In the censuses of manufactures and mineral industries, shipments measure the dollar value of products shipped from establishments. Products transferred from one plant to another are valued at their full economic value, that is, include in addition to the cost of production, a reasonable proportion of company overhead and profits.

#### Wholesalers

Agents, brokers, and commission merchants. Establishments primarily engaged in selling or buying goods for others on an agency, commission, or brokerage basis.

Manufacturers' sales branches and offices. Establishments maintained by manufacturing, refining, and mining companies apart from their plants, or mines, for marketing their products at wholesale.

Merchant wholesalers. Intermediary establishments that take title to the goods they buy and sell, such as wholesale merchants or jobbers, industrial distributors, drop shippers,

retailer cooperative warehouses, terminal elevators, and cooperative buying associations.

# STANDARD METROPOLITAN STATISTICAL AREAS

The following are the full titles and the area definitions for the standard metropolitan statistical areas (SMSA's) included in this publication. Titles and definitions of SMSA's are established by the Department of Commerce, Office of Federal Statistical Policy and Standards.

- Akron, Ohio . . . . Consists of Portage and Summit Counties, Ohio
- Anaheim-Santa Ana-Garden Grove, Calif. . . . . Coextensive with Orange County, Calif.
- Atlanta, Ga. . . . . Consists of Butts, Cherokee, Clayton, Cobb, De Kalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Henry, Newton, Paulding, Rockdale, and Walton Counties, Ga.
- Baltimore, Md. . . . . Consists of Baltimore city and Anne Arundel, Baltimore, Carroll, Harford, and Howard Counties, Md.
- Birmingham, Ala. . . . . Consists of Jefferson, St. Clair, Shelby, and Walker Counties, Ala.
- Boston, Mass. . . . . Consists of Beverly, Lynn, Peabody, and Salem cities, and Boxford, Danvers, Hamilton, Lynnfield, Manchester, Marblehead, Middleton, Nahant, Saugus. Swampscott, Topsfield, and Wenham towns in Essex County; Cambridge, Everett, Malden, Medford, Melrose, Newton, Somerville, Waltham, and Woburn cities, and Acton, Arlington, Ashland, Bedford, Belmont, Boxborough, Burlington, Carlisle, Concord, Framingham, Holliston, Lexington, Lincoln, Natick, North Reading, Reading, Sherborn, Stoneham, Sudbury, Wakefield, Watertown, Wayland, Weston, Wilmington, and Winchester towns in Middlesex County; Quincy city, and Bellingham, Braintree, Brookline, Canton, Cohasset, Dedham, Dover, Foxborough, Franklin, Holbrook, Medfield, Medway, Millis, Milton, Needham, Norfolk, Norwood, Randolph, Sharon, Stoughton, Walpole, Wellesley, Westwood, Weymouth, and Wrentham towns in Norfolk County; Abington, Duxbury, Hanover, Hanson, Hingham, Hull, Kingston, Marshfield, Norwell, Pembroke, Rockland, Scituate towns in Plymouth County; and Boston, Chelsea, Revere cities, and Winthrop town in Suffolk County, Mass.
- Buffalo, N.Y..... Consists of Erie and Niagara Counties, N.Y. Chicago, III..... Consists of Cook, Du Page, Kane, Lake, McHenry, and Will Counties, III.
- Cleveland, Ohio . . . . Consists of Cuyahoga, Geauga, Lake, and Medina Counties, Ohio
- Dallas-Fort Worth, Tex.... Consists of Collin, Dallas, Denton, Ellis, Hood, Johnson, Kaufman, Parker, Rockwall, Tarrant, and Wise Counties, Tex.
- Dayton, Ohio . . . . Consists of Greene, Miami, Montgomery, and Preble Counties, Ohio
- Denver-Boulder, Colo. . . . . Consists of Adams, Arapahoe, Boulder, Denver, Douglas, Gilpin, and Jefferson Counties, Colo.

- Detroit, Mich. . . . . Consists of Lapeer, Livingston, Macomb, Oakland, St. Clair, and Wayne Counties, Mich.
- Gary-Hammond-East Chicago, Ind. . . . . Consists of Lake and Porter Counties, Ind.
- Greensboro-Winston-Salem-High Point, N.C.... Consists of Davidson, Forsyth, Guilford, Randolph, Stokes, and Yadkin Counties, N.C.
- **Greenville-Spartanburg, S.C....** Consists of Greenville, Pickens, and Spartanburg Counties, S.C.
- Hartford, Conn. . . . . Consists of Hartford city and Avon, Bloomfield, Canton, East Granby, East Hartford, East Windsor, Enfield, Farmington, Glastonbury, Granby, Manchester, Marlborough, Newington, Rocky Hill, Simsbury, South Windsor, Suffield, West Hartford, Wethersfield, Windsor, and Windsor Locks towns in Hartford County; New Hartford town in Litchfield County; Cromwell, East Hampton, and Portland towns in Middlesex County; Colchester town in New London County; and Andover, Bolton, Columbia, Coventry, Ellington, Hebron, Stafford, Tolland, Vernon, and Willington towns in Tolland County, Conn.
- Houston, Tex.... Consists of Brazoria, Fort Bend, Harris, Liberty, Montgomery, and Waller Counties, Tex.
- Indianapolis, Ind. . . . . Consists of Boone, Hamilton, Hancock, Hendricks, Johnson, Marion, Morgan, and Shelby Counties, Ind.
- Jersey City, N.J. . . . . Coextensive with Hudson County, N.J. Kansas City, Mo.-Kans. . . . Consists of Cass, Clay, Jackson, Platte, and Ray Counties, Mo., and Johnson and Wyandotte Counties, Kans.
- Los Angeles-Long Beach, Calif. . . . . Coextensive with Los Angeles County, Calif.
- Louisville, Ky.-Ind. . . . . Consists of Bullitt, Jefferson, and Oldham Counties, Ky., and Clark and Floyd Counties, Ind.
- Memphis, Tenn.-Ark.-Miss..... Consists of Shelby and Tipton Counties, Tenn.; Crittenden County, Ark.; and De Soto County, Miss.
- Miami, Fla. . . . . Coextensive with Dade County, Fla. Milwaukee, Wis. . . . . Consists of Milwaukee, Ozaukee, Washington, and Waukesha Counties, Wis.
- Minneapolis-St. Paul, Minn.-Wis. . . . . Consists of Anoka, Carver, Chisago, Dakota, Hennepin, Ramsey, Scott, Washington, and Wright Counties, Minn., and St. Croix County, Wis.
- Nassau-Suffolk, N.Y.... Consists of Nassau and Suffolk Counties, N.Y.
- New Orleans, La. . . . . Consists of Jefferson, Orleans, St. Bernard, and St. Tammany Parishes, La.
- New York, N.Y.-N.J..... Consists of Bronx, Kings, New York, Putnam, Queens, Richmond, Rockland, and Westchester Counties, N.Y., and Bergen County, N.J.
- Newark, N.J. . . . . Consists of Essex, Morris, Somerset, and Union Counties, N.J.
- Philadelphia, Pa.-N.J. . . . . Consists of Bucks, Chester,
  Delaware, Montgomery, and Philadelphia Counties, Pa., and
  Burlington, Camden, and Gloucester Counties, N.J.
- Phoenix, Ariz.... Coextensive with Maricopa County, Ariz. Pittsburgh, Pa.... Consists of Allegheny, Beaver, Washington, and Westmoreland Counties, Pa.

- Providence-Warwick-Pawtucket, R.I.-Mass. . . . . Consists of Barrington, Bristol, and Warren towns in Bristol County; Warwick city and Coventry, East Greenwich, and West Warwick towns in Kent County; Jamestown town in Newport County; Central Falls, Cranston, East Providence, Pawtucket, Providence, and Woonsocket cities and Burrillville, Cumberland, Johnston, Lincoln, North Providence, North Smithfield, Scituate, and Smithfield towns in Providence County; and Narragansett, North Kingstown, and South Kingstown towns in Washington County, R.I.; Attleboro city and North Attleborough, Norton, Rehoboth, and Seekonk towns in Bristol County; Plainville town in Norfolk County; and Blackstone and Millville towns in Worcester County, Mass.
- Rochester, N.Y..... Consists of Livingston, Monroe, Ontario, Orleans, and Wayne Counties, N.Y.
- St. Louis, Mo.-III. . . . . Consists of St. Louis city and Franklin, Jefferson, St. Charles, and St. Louis Counties, Mo.; and Clinton, Madison, Monroe, and St. Clair Counties, III.
- Salt Lake City-Ogden, Utah . . . . Consists of Davis, Salt Lake, Tooele, and Weber Counties, Utah
- San Diego, Calif. . . . . Coextensive with San Diego County, Calif.

- San Francisco-Oakland, Calif. . . . . Consists of Alameda, Contra Costa, Marin, San Francisco, and San Mateo Counties, Calif.
- San Jose, Calif. . . . . Coextensive with Santa Clara County, Calif.
- Seattle-Everett, Wash. . . . . Consists of King and Snohomish Counties, Wash.
- Springfield-Chicopee-Holyoke, Mass.-Conn. . . . . Consists of Chicopee, Holyoke, Springfield, and Westfield cities and Agawam, East Longmeadow, Hampden, Longmeadow, Ludlow, Monson, Palmer, Southwick, West Springfield, and Wilbraham towns in Hampden County; Northampton city and Belchertown, Easthampton, Granby, Hadley, Hatfield, Southampton, and South Hadley towns in Hampshire County; Warren town in Worcester County, Mass.; and Somers town in Tolland County, Conn.
- Tampa-St. Petersburg, Fla. . . . . Consists of Hillsborough, Pasco, and Pinellas Counties, Fla.
- Washington, D.C.-Md.-Va. . . . . Consists of District of Columbia; Charles, Montgomery, and Prince Georges Counties, Md.; and Alexandria, Fairfax, Falls Church, Manassas, and Manassas Park cities and Arlington, Fairfax, Loudoun, and Prince William Counties, Va.

\_. Current Population Reports, Series P-25,

# Appendix D. Economic Censuses Data Sources

Data from the	ne following sources appear in charts or maps on ted.	40, 42	1977 Census of Manufactures, Volume II, Industry Statistics.			
ENTERPR	ISE STATISTICS	44-51	1967 and 1977 Censuses of Manufactures, Volume III, Geographic Area Statistics.			
4-13	U.S. Department of Commerce, Bureau of the Census. 1967 and 1977 Enterprise Statistics, Part 1, General Report on Industrial Organiza-	48	U.S. Department of Labor, Bureau of Labor Statistics. Employment and Earnings, 1977.			
	tion.	TRANSPO	RTATION			
MINERAL	INDUSTRIES	54-57	U.S. Department of Commerce, Bureau of the			
16	U.S. Board of Governors of the Federal Reserve System. 1977 Index of Industrial Production.		Census. 1967, 1972, and 1977 Censuses of Transportation, Volume I, National Travel Survey.			
	U.S. Department of Commerce, Bureau of the Census. 1972 Census of Manufactures, Volume IV, Indexes of Production.	58-62	1967 and 1977 Censuses of Transportation, Volume II, Truck Inventory and Use Survey, U.S. Summary.			
16-23	1977 Census of Mineral Industries, Subject, Industry, and Area Statistics.	63-66	1977 Census of Transportation, Volume III, Commodity Transportation Survey.			
17, 21, <sup>1</sup> 22, 23	1967 Census of Mineral Industries, Summary Statistics and Major Groups 10-14.	WHOLESA	ALE TRADE			
21 <sup>2</sup>	U.S. Department of Labor, Bureau of Labor Statistics. Employment and Earnings, 1977.	68-72, 74	U.S. Department of Commerce, Bureau of the Census. 1967 Census of Business, Volume II, Retail Trade, Area Statistics.			
CONSTRU	JCTION INDUSTRIES	72	1967 Census of Business, Volume III,			
26-29, 33, 34	U.S. Department of Commerce, Bureau of the Census. 1977 Census of Construction Industries, Establishments With and Without Payroll, U.S. Summary.	68-76	Wholesale Trade, Subject Reports.  1967 Census of Business, Wholesale Trade, and 1977 Census of Wholesale Trade, Geographic Area Statistics.			
30-32, 35		72, 77, 78	1977 Census of Wholesale Trade, Subject Series, Establishment and Firm Size.			
	tractors, heavy-construction contractors, and special trade contractors.	77, <mark>7</mark> 8	1972 Census of Wholesale Trade, Volume I, Summary and Subject Statistics.			
36	1967 and 1977 Censuses of Construction Industries, Electrical Work Special Trade Con-	RETAIL T	RETAIL TRADE			
	tractors.	80	U.S. Department of Commerce, Bureau of			
MANUFA	CTURES		Economic Analysis. National Income and Production Accounts of the United States, 1967,			
39	U.S. Board of Governors of the Federal Reserve System. 1977 Index of Industrial Production.	00.00	1972, and 1977.  U.S. Department of Commerce, Bureau of the Census. Current Population Reports, Series P-25 Nos. 460 and 876.			
	U.S. Department of Commerce, Bureau of the Census. 1972 Census of Manufactures, Volume IV, Indexes of Production.	82, 86				
41, 43		80-83, 85- 88, 91	——. 1967 Census of Business, Retail Trade, and 1972 and 1977 Censuses of Retail Trade, Volume II, Area Statistics.			

83

No. 873.

<sup>&</sup>lt;sup>1</sup> Data for change in employment.

<sup>&</sup>lt;sup>2</sup> Data for employment as a percent of total labor force.

100-105,

107, 108

96, 107

95, 99,

106

Services, and 1972 and 1977 Censuses of Service

\_\_\_\_\_. 1967 Census of Business, Selected Services, and 1972 and 1977 Censuses of Service

Industries, Subject Series, Establishment and

\_. Current Population Reports, Series P-25,

Industries, Area Statistics.

Nos. 460 and 876.

Firm Size.

84	1967 Census of Business, Retail Trade,	MINORITY- AND WOMEN-OWNED BUSINESSES			
89, 92	and 1977 Census of Retail Trade, Major Retail Centers Reports.	110	U.S. Department of Commerce, Bureau of the Census. Women-Owned Businesses, 1972 and 1977.		
	and 1977 Census of Retail Trade, Volume I, Subject Reports, Establishment and Firm Size (Including Legal Form of Organization).		U.S. Department of Treasury, Internal Revenue Service. Statistics of Income, Business Income Tax Returns, 1972 and 1977, and Corporate		
90	1967 Census of Business, Retail Trade,		Income Tax Returns, 1972 and 1976.		
	and 1972 and 1977 Censuses of Retail Trade, Retail Merchandise Line Sales Reports.	111-113	U.S. Department of Commerce, Bureau of the Census. Women-Owned Businesses, 1977.		
91	U.S. Department of Transportation, Federal Highway Administration, Highway Statistics Summary, 1949-1975, and Highway Statistics,	112,114, 117	U.S. Department of Treasury, Internal Revenue Service. Statistics of Income, Corporate Income Tax Returns, 1976, and Business Tax Returns, 1977.		
SERVICE	1977. INDUSTRIES	114	U.S. Department of Commerce, Bureau of the Census. Current Population Reports, P-20, No. 324.		
94, 96-98	U.S. Department of Commerce, Bureau of the Census. 1967 Census of Business, Selected	114, 115, 117	1977 Survey of Minority-Owned Business Enterprises, Summary.		
	Services, Subject Series, individual reports for law firms, architectural and engineering firms, and other subjects.	116	1977 Survey of Minority-Owned Business Enterprises, Summary, and Black, Spanish origin		
94, 96-98,	1967 Census of Business, Selected		and Asian American, American Indian, and other minorities reports.		

# Appendix E. Obtaining Economic Censuses Data

#### SOURCES COVERING AVAILABILITY OF DATA

A variety of sources exist to inform users of the availability of 1977 economic censuses data products. The following sources publicize data products from the 1977 economic censuses.

#### Data User News

This is a monthly newsletter on activities, products, and services from the Census Bureau. Economic census reports and tapes are announced in *Data User News* as they become available. Occasional descriptive articles highlight important features of particular census publications, describe relevant aspects of census methodology, or cite applications of the data. *Data User News* is available by subscription for \$14 a year from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

### Bureau of the Census Catalog

The Catalog includes a comprehensive listing of Census Bureau data products grouped according to major subject. It contains descriptions of all the reports issued and data files that became available during the period covered.

The Catalog is divided into two parts: I, Publications, and II, Data Files and Special Tabulations. Part II presents more information than can be given here on various types of data files and special tabulations. The 1979 edition of the *Catalog* may be purchased for \$3.25 from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

#### HOW TO OBTAIN SPECIFIC PRODUCTS

### **Printed Reports**

Printed reports from the 1977 economic censuses (see p. 128) are available for use as reference material at libraries or may be purchased from the Government Printing Office (GPO).

The most convenient way to order publications from GPO is with publication order forms which list printed reports within a series by the individual series number, title, information on contents, GPO stock number, price per copy, and price for the series. Publication order forms may be obtained from the Data User Services Division, Customer Services Branch, Bureau of the Census, Washington, D.C. 20233.

Reports available for reference are useful to persons who have only limited interest in the publications or are waiting to receive copies from GPO. Most Census Bureau regional offices, Department of Commerce district offices, and depository libraries have copies of Census Bureau publications for reference. Over 1,300 libraries, located in every State, the District of Columbia, Puerto Rico, the Virgin Islands, and Guam have been designated as Federal or Census Depository Libraries.

#### Microfiche

Every final report of the 1977 economic censuses will also be available on microfiche. Users may want to order microfiche even if their intention is only to create paper copy from microfiche. Also, a number of data series which are not included in printed reports are available on microfiche. Microfiche can be ordered from the Data User Services Division, Customer Services Branch (Microfiche), Bureau of the Census, Washington, D.C. 20233.

#### Public-Use Computer Tapes

Public-use computer tapes contain most of the same summary statistics that are found in the published reports. Public-use computer tapes are available for users who wish to summarize, rearrange, or process large amounts of data. The tapes, with corresponding technical documentation, may be purchased for \$80 per reel from the Data User Services Division, Customer Services Branch (Public-Use Tapes), Bureau of the Census, Washington, D.C. 20233.

### Special Tabulations

The preparation of special tabulations involves the retabulation of data collected during the economic censuses. These tabulations provide an extension of economic data to users with specific requirements not met by published data. Special tabulations can be furnished on computer tape or as computer printouts on a cost reimbursable basis. For information on special tabulations, write to the Data User Services Division, Customer Services Branch, Bureau of the Census, Washington, D.C. 20233.

#### FOR ADDITIONAL INFORMATION

Economic subject-matter specialists located in Washington, D.C., can be contacted to assist users with specific problems or requests. The subject matter areas and telephone numbers (area code 301) follow.

Retail trade	763-7038
Wholesale trade	
Service industries	763-7039
Manufactures	763-7666
Mineral industries	763-5938
Construction industries	763-5435
Transportation	763-5430
Enterprise statistics	763-7086
Outlying areas	763-5261
Minority-owned businesses	763-5182
Women-owned businesses	763-5182

# 1977 ECONOMIC CENSUSES PUBLICATIONS

Publication series	Series code	Number of reports
RETAIL TRADE		
Geographic Area <sup>1</sup> Subject Merchandise Line Sales <sup>1</sup> Major Retail Centers	RC77-A-1 to 52 RC77-S-1 and 2 RC77-L RC77-C-1 to 49	52 2 1 49
SERVICE INDUSTRIES		
Geographic Area <sup>1</sup> Subject	SC77-A-1 to 53 SC77-S-1 to 10	56 10
WHOLESALE TRADE		
Geographic Area (Revised) Subject Commodity Line Sales <sup>1</sup>	WC77-A-1 to 52 WC77-S-1 to 3 WC77-L	52 3 1
CONSTRUCTION INDUSTRIES		
Industry Geographic Area Special <sup>2</sup>	CC77-1-1 to 28 CC77-A-1 to 10	28 10
MANUFACTURES		
Industry Geographic Area Subject	MC77-1-20A to 39D MC77-A-1 to 51 MC77-SR-1 to 14	82 51 16
MINERAL INDUSTRIES		
Industry Geographic Area Subject	MIC77-1-10A to 14E MIC77-A-1 to 9 MIC77-SR-1 to 7	14 9 7
TRANSPORTATION		
National Travel Survey Truck Inventory and Use Survey Commodity Transportation Survey <sup>3</sup>	TC77-N-1 and 2 TC77-T-1 to 52	2 52
Summary Report Nonregulated Motor Carriers and Public Warehousing Survey	TC77-CS	1
OTHER	0200000 1981	3.*
Outlying Areas	0.077.1 0	-
Enterprise Statistics	OAC77-1 to 6 ES77-1 and 2	7 2
Minority-Owned Business Enterprises Women-Owned Businesses	MB77-1 to 4 WB77-1 and 2	4 2

<sup>&</sup>lt;sup>1</sup> Additional detail is available on microfiche.

<sup>&</sup>lt;sup>2</sup> Two special reports are available on microfiche only: CC77-S-1(M), Legal Form of Organization and Specialization in Types of Construction, and 2(M), Operating Ratios and Comparative Analysis of Selected Data.

<sup>&</sup>lt;sup>3</sup> Additional reports are available on microfiche only: for geographic areas, TC77-CA-1(M) to 7(M); for commodities, TC77-CC-1(M) to 14(M).

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