

# 1992

## Census of Construction Industries

---

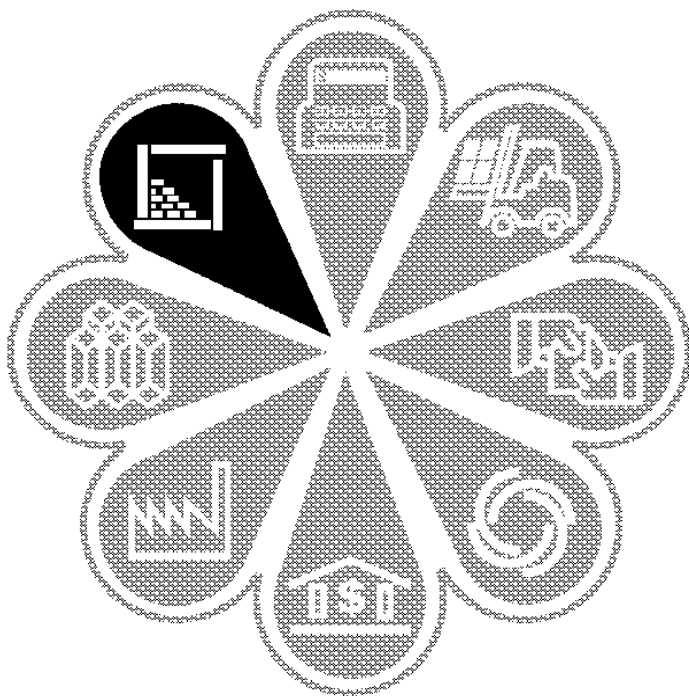
CC92-I-17

INDUSTRY SERIES

### Floor Laying and Other Floor Work Special Trade Contractors, Not Elsewhere Classified

Industry 1752

---



# 1992 Census of Construction Industries

---

CC92-I-17

INDUSTRY SERIES

## Floor Laying and Other Floor Work Special Trade Contractors, Not Elsewhere Classified

Industry 1752

---

Issued August 1995



**U.S. Department of Commerce**  
**Ronald H. Brown**, Secretary  
**David J. Barram**, Deputy Secretary

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

**BUREAU OF THE CENSUS**  
**Martha Farnsworth Riche**, Director

---

## Acknowledgments

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

This report was prepared in the Manufacturing and Construction Division. **Barry A. Rappaport**, Assistant Chief for Construction and Mineral Census and Related Programs, was responsible for the overall planning, management, and coordination of the census of construction industries. Planning and implementation were under the direction of **Patricia L. Horning**, Chief, Construction and Mineral Census Branch, with staff assistance by **Juliana Van Berkum**, **Susan L. Hostetter**, **Doris M. Kling**, **Carolyn J. Stone**, and **Linda M. Taylor**. The sampling plans and variance and estimation specifications were developed by **Dennis K. Duke**. Under the direction of **C. Lloyd Anderson**, the Systems Support Staff maintained the small computers and assisted in the management of computer output.

Systems and procedures for mailout, receipt, correspondence, data input, industry classification, other clerical processing, administrative-record processing, quality control, and the associated electronic computer programs, were developed in the Economic Planning and Coordination Division.

Mailout preparation and receipt operations, clerical and analytical review activities, data keying, and geocoding review were performed by the staff of the Data Preparation Division, **Judith N. Petty**, Chief.

Geographic coding procedures and associated computer programs were developed by the staff of the Geography Division, **Joel Morrison**, Chief.

The computer processing systems were developed and coordinated in the Economic Statistical Methods and Programming Division, **Charles P. Paulter, Jr.**, Chief, and **Sarah W. Baumgardner**, Assistant Chief. **Samuel Rozenel**, Chief, Current Construction Branch, was responsible for the design and implementation of the computer systems. The computer programs were prepared under the supervision of **Leonard S. Sammarco** and **Kevin J. Montgomery**.

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

The staff of the Administrative and Publications Services Division, **Walter C. Odom**, Chief, performed planning, design, composition, editorial review, and printing planning and procurement for the publications and report forms. **Bernadette J. Gayle** provided publication coordination and editing.

Special acknowledgment is also due the many businesses whose cooperation has contributed to the publication of these data.

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



**Economics and Statistics  
Administration**

**Everett M. Ehrlich**, Under Secretary  
for Economic Affairs



**BUREAU OF THE CENSUS**

**Martha Farnsworth Riche**, Director  
**Harry A. Scarr**, Deputy Director

**Paula J. Schneider**, Principal Associate  
Director for Programs

**Frederick T. Knickerbocker**, Associate  
Director for Economic Programs

**Thomas L. Mesenbourg**, Assistant Director  
for Economic Programs

**ECONOMIC PLANNING AND COORDINATION  
DIVISION**

**John P. Govoni**, Chief

**MANUFACTURING AND CONSTRUCTION DIVISION**  
**David W. Cartwright**, Chief

# Introduction to the Economic Census

---

## PURPOSES AND USES OF THE ECONOMIC CENSUS

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

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

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

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

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

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

## AUTHORITY AND SCOPE

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

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

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

## AVAILABILITY OF THE DATA

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

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

## WHAT'S NEW IN 1992

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

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

## HISTORICAL INFORMATION

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

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

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

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

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

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

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

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

## **AVAILABILITY OF MORE FREQUENT ECONOMIC DATA**

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

## **SOURCES FOR MORE INFORMATION**

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

# Census of Construction

## GENERAL

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

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

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

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

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

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

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

## ESTABLISHMENT BASIS OF REPORTING

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

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

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

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

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

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

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

## **SAMPLE DESIGN, ESTIMATION PROCEDURES, AND RELIABILITY OF ESTIMATES**

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

### **Employer Companies**

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

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

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

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

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

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



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

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

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

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

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

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

$p_i$  is the selection probability of that firm.

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

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

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

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

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

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

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

## Nonemployer Companies

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

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

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

## CENSUS REPORT FORMS

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

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

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

## DATA PROCESSING

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

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

Data records, then, underwent a detailed computer review and analysis. The records containing significant problems were referred for further analytical review and, if necessary, contacts were made with the respondents. The computer performed most classification coding (such as industry coding, geographic coding, and size coding), and

imputation for missing items or for reports not received in time for tabulation. The imputation was performed on an industry (or industry group) and State (or geographic group) basis using all available response and administrative data.

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

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

## GEOGRAPHIC CLASSIFICATION

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

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

## CHANGE IN COLLECTION METHODOLOGY FOR VALUE OF CONSTRUCTION WORK DONE

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

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

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

## DUPLICATION IN VALUE OF CONSTRUCTION WORK

The aggregate of value of construction work reported by all construction establishments in each of the several industry, geographic area, or other groupings in this census contains varying amounts of duplication, since the construction work of one firm may be subcontracted to

other construction firms and may also be included in the subcontractors' value of construction work. To avoid this duplication, a "net" value of construction work figure has been derived for each establishment by subtracting the costs for construction work subcontracted to others from the value of construction work.

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

**SPECIAL TABULATIONS**

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

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

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

**COMPARABILITY OF CENSUS OF CONSTRUCTION INDUSTRIES DATA WITH OTHER DATA**

Data contained in the reports of the 1992 Census of Construction Industries are not the same as the data published in the Census Bureau's monthly Construction Reports, Series C30, Value of New Construction Put in Place. The main difference is that the C30 series covers all new construction put in place without regard to who is performing the construction activity; whereas, the construction census figures cover both new construction and maintenance and repair work done by establishments classified in the construction industry. Significant amounts

of construction are done by establishments classified outside of construction (in real estate, manufacturing, utilities, and communications, for example), both as "force account" construction and construction done for others. In addition, the value in place series includes construction-related expenses such as architectural and engineering costs and the costs of materials supplied by owners which are normally not reflected in the census of construction industries.

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

**ABBREVIATIONS AND SYMBOLS**

The following abbreviations and symbols are used in this publication:

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

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

Statistics	For the United States	By State	By employment size	By size class of dollar value of business done	By type, class, and location of construction <sup>1</sup>	By specialization in types of construction
Assets and depreciation (gross book value):						
Beginning of year—buildings, machinery, and equipment . . . . .	3					
End of year—total . . . . .	1, 3	1	5	6		
End of year—buildings, machinery, and equipment . . . . .	3					
Depreciation charges during year—buildings, machinery, and equipment . . . . .	3					
Capital expenditures:						
Total capital expenditures . . . . .	1, 3	1	5	6		
New buildings—machinery and equipment . . . . .	3					
Used buildings—machinery and equipment . . . . .	3					
Communication services, costs for . . . . .	2					
Employees:						
All employees—average number . . . . .	1, 2, 8	1	5	6		8
Construction workers—average number . . . . .	1, 2, 9	1, 9				
Construction workers—quarterly . . . . .	2, 9	9				
Other employees—average number . . . . .	2					
Other employees—quarterly . . . . .	2					
Establishments—number in business during year . . . . .	1, 2, 4, 8, 9	1, 9	5	6		8
Fringe benefits—legally required and voluntary expenditures . . . . .	2					
Inventories . . . . .	4					
Materials, components, supplies, and fuels—costs for . . . . .	1, 2	1	5	6		
Ownership—private or government owned . . . . .	2					
Payroll:						
First-quarter, all employees . . . . .	2					
Annual:						
All employees . . . . .	1, 2, 8	1	5	6		8
Construction workers . . . . .	1, 2	1				
Other employees . . . . .	2					
Power, fuels, and lubricants—costs for . . . . .	2					
Proprietors and working partners . . . . .	2					
Ratios, selected industry . . . . .	12	13				
Receipts and value:						
Dollar value of business done, total . . . . .	2, 11		5	6	11	
Value of construction work, total . . . . .	1, 2, 4, 7, 8, 10	1, 10	5	6	7, 10	8
For work subcontracted in from others . . . . .	1, 2					
Other business receipts . . . . .	2					
Net value of construction work . . . . .	1, 2, 8	1	5	6		8
Value added . . . . .	1, 2, 8	1	5	6		8
Rental costs:						
Total . . . . .	1, 2	1	5	6		
For machinery and equipment . . . . .	2					
For buildings . . . . .	2					
Repairs to buildings and other structures . . . . .	2					
Repairs to machinery and equipment . . . . .	2					
Subcontract work to others, costs for . . . . .	1, 2, 8	1	5	6		8

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

<sup>1</sup>Type—buildings, roads, etc. Class—new construction; additions, alterations, or reconstruction; or maintenance and repair work.

# Contents

## Floor Laying and Other Floor Work Special Trade Contractors Not Elsewhere Classified

[Page numbers listed here omit the prefix that appears as part of the number of each page]

	Page
Introduction to the Economic Census.....	III
Census of Construction .....	V
Users' Guide for Locating Statistics in This Report by Table Number .....	X
Summary of Findings .....	2

### FIGURES

1. Value of Construction Work by Type of Construction .....	3
2. Selected Costs per Dollar Value of Business Done .....	3

### TABLES

#### Statistics for Establishments With Payroll

1. General Statistics by State: 1992 and 1987 .....	4
2. Detailed Statistics: 1992 and Earlier Census Years.....	6
3. Assets, Capital Expenditures, and Depreciation: 1992 and 1987 .....	7
4. Value of Inventories: 1992 and 1991 .....	7
5. Selected Statistics by Employment Size Class: 1992 and 1987 .....	8
6. Selected Statistics by Size Class of the Dollar Value of Business Done: 1992 and 1987 .....	8
7. Value of Construction Work by Type of Construction: 1992 and 1987 .....	9
8. Selected Statistics by Specialization in Types of Construction: 1992 .....	10
9. Quarterly Construction Worker Employment by State: 1992 .....	11
10. Value of Construction Work by Location of Construction Work: 1992 and 1987 ...	12
11. Dollar Value of Business Done by Kind-of-Business Activity: 1992 and 1987 .....	13
12. Selected Industry Ratios: 1992 and 1987 .....	14
13. Selected Industry Ratios by State: 1992 .....	15

**Statistics for Establishments Without Payroll appear in the U.S. Industry Summary Report.**

### APPENDIXES

A. Explanation of Terms .....	A-1
B. Standard Industrial Classification Titles for Industry Groups and Industries .....	B-1
C. Geographic Divisions and States.....	C-1

Publication Program..... Inside back cover

---

## Summary of Findings

---

Establishments classified in this industry are primarily engaged in the installation and or removal of floor coverings such as carpeting, asphalt tile, linoleum and resilient flooring. This industry also includes contractors engaged in laying, scraping, finishing or refinishing of parquet and other hardwood flooring. For additional examples, refer to the *Standard Industrial Classification Manual: 1987*<sup>1</sup> (SIC) published by the Office of Management and Budget, Executive Office of the President.

During 1992, the establishments with paid employees classified in this industry accounted for \$4.5 billion in total dollar value of business. Of this amount, \$4.4 billion were for the value of construction work. These establishments paid out \$1.9 billion for materials, components, and supplies and \$395 million for construction work subcontracted to others. Costs for selected power, fuels, and lubricants for the industry were \$71 million. Value added for 1992 was \$2.2 billion.

There were 10,196 establishments with total employment averaging 48,948 during the year. Total payroll for 1992 was \$1.1 billion.

---

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

Larger establishments with 20 employees or more, while representing only 4 percent of the total number of employer establishments in this industry, accounted for 34 percent of all business done.

A "construction establishment" is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sampled establishment covering domestic operations. Separate reports were not, however, required for each project or construction site.

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

The data in this report are estimated from a sample survey and are subject to sampling variability as well as errors of response and nonreporting. The relative standard error shown in the tables is a measure of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the introduction.

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

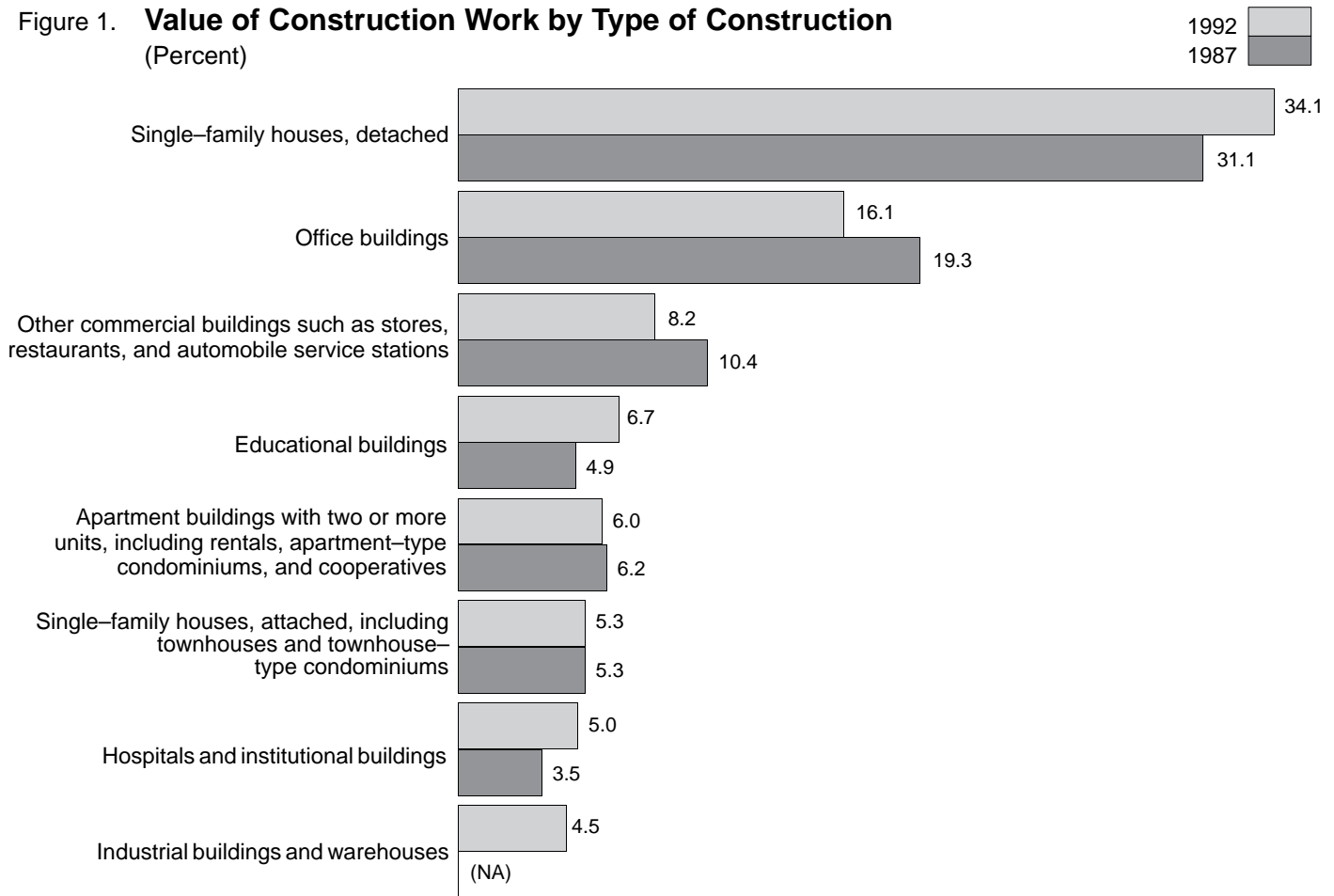
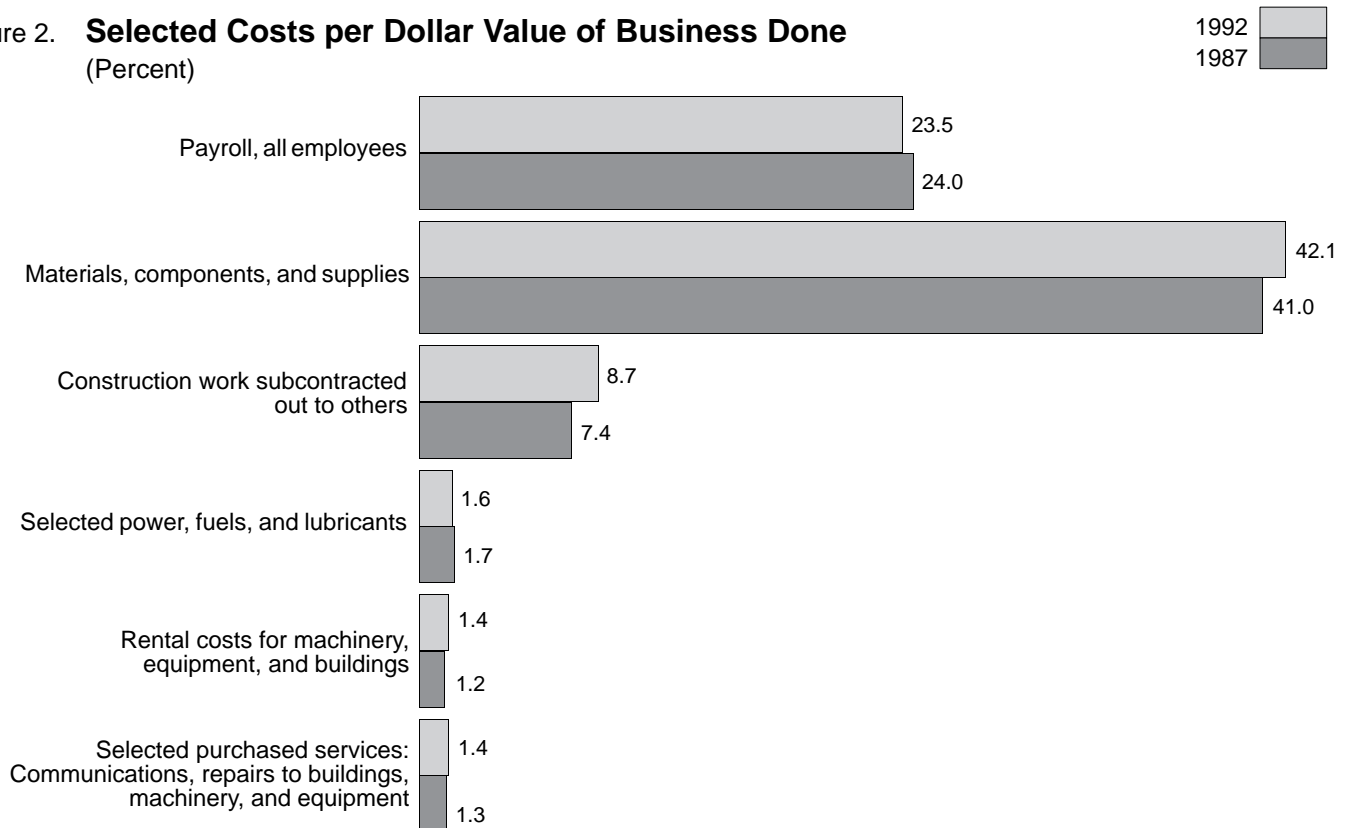


Figure 2. **Selected Costs per Dollar Value of Business Done**  
(Percent)



**Table 1. General Statistics for Establishments With Payroll by State: 1992 and 1987**

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

Location of establishment	1992								
	Number of establishments	Employees**		Payroll		Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels
		All	Construction workers	All employees	Construction workers				
	A	B	C	D	E	F	G	H	I
<b>United States .....</b>	<b>10 196</b>	<b>48 948</b>	<b>36 434</b>	<b>1 065 150</b>	<b>723 556</b>	<b>4 427 519</b>	<b>4 032 451</b>	<b>2 165 761</b>	<b>1 980 223</b>
Alabama .....	131	557	422	8 944	6 168	39 293	36 648	20 997	17 567
Alaska .....	30	76	57	2 283	1 693	10 644	9 952	5 005	5 175
Arizona .....	151	872	678	18 693	12 847	76 920	72 460	36 583	37 219
Arkansas .....	45	(S)	(S)	(S)	(S)	(S)	(S)	(D)	(D)
California .....	1 434	8 726	6 558	205 292	139 384	801 215	735 407	400 930	352 984
Colorado .....	182	1 079	844	24 080	16 736	100 406	83 993	46 990	38 733
Connecticut .....	141	745	544	19 507	11 740	80 887	70 031	45 258	30 614
Delaware .....	39	160	123	3 611	2 537	14 327	13 329	6 555	6 775
District of Columbia .....	7	66	47	1 461	865	4 924	3 925	(D)	2 729
Florida .....	448	2 000	1 418	37 649	24 965	184 464	163 264	77 002	87 719
Georgia .....	204	1 016	753	19 042	12 958	97 764	87 071	47 377	42 507
Hawaii .....	61	393	289	11 180	7 729	39 675	38 615	22 428	16 563
Idaho .....	42	82	73	904	831	4 151	3 964	2 166	(D)
Illinois .....	489	2 907	2 144	80 313	55 636	274 873	257 151	147 985	113 455
Indiana .....	234	1 214	785	24 836	13 869	124 294	109 245	56 764	61 003
Iowa .....	124	352	281	6 855	4 803	26 321	25 345	14 084	12 118
Kansas .....	124	505	409	11 066	7 909	41 678	39 543	21 871	18 653
Kentucky .....	123	621	474	10 221	7 557	45 697	44 186	23 037	21 346
Louisiana .....	102	503	374	8 200	5 985	39 962	36 463	18 384	19 190
Maine .....	68	193	144	3 409	2 595	14 674	13 510	9 033	(D)
Maryland .....	265	1 482	1 039	33 564	22 267	142 947	130 338	60 533	70 348
Massachusetts .....	237	833	614	17 847	11 332	105 590	88 427	43 047	50 623
Michigan .....	266	1 214	907	29 678	20 124	126 796	111 445	54 133	59 206
Minnesota .....	159	847	644	(S)	12 573	74 521	68 575	39 096	29 963
Mississippi .....	52	164	131	2 155	1 588	8 107	7 818	4 667	(D)
Missouri .....	262	1 513	1 100	34 179	24 063	120 061	114 746	57 815	59 149
Montana .....	19	44	37	621	560	2 191	2 114	1 293	(S)
Nebraska .....	66	262	211	4 289	3 033	31 555	26 904	13 936	13 663
Nevada .....	54	401	319	8 705	6 245	32 135	30 504	18 510	(S)
New Hampshire .....	48	188	149	4 195	3 245	22 722	21 013	9 682	11 528
New Jersey .....	318	1 613	1 231	42 199	29 134	152 643	139 688	79 688	61 475
New Mexico .....	56	155	125	2 478	1 961	13 717	12 912	6 448	6 546
New York .....	686	2 568	1 944	63 156	44 665	250 779	225 052	131 538	97 875
North Carolina .....	420	1 422	1 140	22 853	17 794	94 948	88 285	47 389	42 198
North Dakota .....	35	127	96	1 925	1 350	*8 630	*8 183	3 318	*4 872
Ohio .....	365	2 156	1 504	50 655	30 852	198 350	181 877	98 976	88 030
Oklahoma .....	78	367	288	6 090	4 544	25 570	23 475	10 928	13 133
Oregon .....	181	670	502	12 999	8 797	56 026	52 029	26 628	26 329
Pennsylvania .....	446	1 899	1 359	41 313	26 774	168 936	158 565	85 283	82 094
Rhode Island .....	43	118	96	2 940	2 508	13 859	13 002	7 922	5 199
South Carolina .....	153	472	354	6 210	4 410	28 329	26 632	14 578	(D)
South Dakota .....	42	127	110	1 617	(S)	4 990	4 853	3 266	1 618
Tennessee .....	146	681	520	12 006	7 964	68 053	60 364	30 877	30 624
Texas .....	417	2 371	1 705	44 178	28 056	225 698	201 305	105 415	106 460
Utah .....	63	242	184	3 820	2 965	24 254	21 085	9 877	11 290
Vermont .....	34	81	65	1 159	865	5 125	4 750	2 415	(S)
Virginia .....	362	1 619	1 180	33 275	21 949	123 301	112 397	58 069	60 399
Washington .....	376	1 681	1 280	34 198	23 042	150 081	136 301	71 846	68 244
West Virginia .....	34	112	87	1 518	1 239	4 583	4 075	2 516	(D)
Wisconsin .....	321	1 223	920	26 297	19 207	98 575	93 334	52 541	44 334
Wyoming .....	17	37	32	409	328	1 507	1 442	(D)	839



1992—Con.					1987			Relative standard error of estimate (percent) for column—			Location of establishment
Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††				
J	K	L	M	N	O	P	Q				
<b>395 068</b>	<b>2 683 933</b>	<b>62 406</b>	<b>46 221</b>	<b>400 507</b>	<b>44 579</b>	<b>3 651 435</b>	<b>1 880 303</b>	<b>1</b>	<b>1</b>	<b>6</b>	<b>U.S.</b>
2 645	24 608	350	765	5 121	(D)	33 172	(D)	12	13	39	AL
693	5 069	128	(S)	(S)	(S)	(S)	(S)	6	9	(S)	AK
4 460	36 025	(S)	(S)	5 381	685	63 918	25 256	9	10	(S)	AZ
(S)	(S)	*182	*171	(S)	152	6 248	3 713	(S)	(S)	44	AR
65 808	498 322	12 443	6 933	50 771	6 615	623 028	314 083	3	3	12	CA
*16 413	87 009	1 437	1 569	8 841	614	53 022	24 450	6	8	16	CO
10 855	41 370	922	(S)	10 152	1 125	84 472	48 668	13	12	(S)	CT
(S)	7 901	(S)	*68	1 111	137	7 517	4 220	20	10	52	DE
999	3 841	33	—	(D)	93	(D)	2 781	(Z)	(Z)	—	DC
21 200	99 453	2 219	1 459	20 012	1 336	109 423	54 113	6	8	33	FL
10 693	40 956	(S)	(S)	6 749	825	69 643	33 805	15	12	(S)	GA
1 060	26 016	469	*573	3 602	223	20 414	10 516	11	9	45	HI
187	3 297	58	142	835	*74	5 549	*1 840	(Z)	(Z)	(Z)	ID
17 722	177 454	6 790	5 380	33 303	2 597	234 677	128 879	6	4	26	IL
15 049	74 769	1 683	*1 898	11 247	916	72 125	35 044	8	10	57	IN
977	13 574	236	*622	3 242	191	11 905	8 244	10	9	60	IA
2 135	26 761	383	418	2 143	301	27 174	11 141	8	5	7	KS
1 510	22 665	493	*1 005	3 828	282	11 568	7 438	13	16	63	KY
3 499	22 629	573	237	2 525	426	25 769	15 810	14	13	33	LA
1 164	8 476	177	127	2 986	158	12 458	7 682	9	9	20	ME
12 609	103 995	2 818	802	14 572	1 893	169 199	85 219	7	9	27	MD
17 163	69 877	1 405	661	7 489	1 667	157 656	83 572	7	6	18	MA
15 351	80 319	2 016	1 464	10 219	1 018	88 361	45 616	8	5	10	MI
(S)	(S)	621	1 135	(S)	908	69 881	43 781	11	9	39	MN
289	2 995	47	20	849	(S)	(S)	(S)	5	4	17	MS
(S)	105 583	1 421	1 107	16 312	1 140	86 718	48 736	10	12	33	MO
77	(S)	38	70	(S)	(S)	(S)	(S)	(Z)	(Z)	(Z)	MT
*4 651	24 257	196	162	1 970	217	17 496	7 765	13	25	23	NE
(S)	(S)	(S)	*86	(D)	224	14 668	8 136	18	16	60	NV
1 709	13 130	134	196	(S)	166	10 852	5 576	11	10	(Z)	NH
12 955	92 307	2 815	1 137	10 924	2 286	206 531	107 962	4	5	23	NJ
806	9 806	256	611	2 201	156	12 251	4 291	13	15	5	NM
25 727	118 003	3 494	1 422	18 214	3 602	304 169	171 670	4	6	13	NY
6 663	45 569	716	654	8 019	774	46 571	22 317	9	8	12	NC
*447	*9 637	38	151	*1 419	*133	7 706	*3 125	34	43	39	ND
16 472	117 051	2 773	2 275	16 738	1 860	142 268	77 124	4	3	13	OH
2 095	12 628	270	607	2 901	223	13 327	6 641	18	11	7	OK
3 997	40 178	528	*916	6 691	594	53 709	26 435	10	9	57	OR
10 371	95 617	2 318	1 569	18 064	2 368	179 082	94 272	7	5	15	PA
857	7 038	134	*63	513	140	16 202	9 064	4	2	58	RI
1 697	9 224	194	289	4 782	404	21 529	11 325	14	17	16	SC
136	(S)	38	66	616	(S)	(S)	(S)	12	14	(Z)	SD
7 689	45 787	*1 538	607	6 586	656	40 195	16 612	13	15	39	TN
24 394	109 635	3 257	1 412	(S)	2 365	191 229	86 407	6	7	20	TX
*3 169	16 201	432	381	1 605	161	11 672	5 136	11	22	39	UT
(S)	1 947	(S)	(S)	*1 012	(D)	2 805	1 440	18	12	(S)	VT
10 904	87 916	1 626	1 742	17 128	2 074	153 528	75 861	7	6	23	VA
13 781	120 794	1 475	801	9 547	1 045	74 921	37 435	6	5	16	WA
508	2 425	43	*82	620	*100	6 172	*2 748	10	8	41	WV
5 241	53 419	1 308	2 607	11 214	742	50 740	28 165	8	8	26	WI
64	886	36	61	304	(D)	(D)	(D)	5	6	5	WY

**Table 2. Detailed Statistics for Establishments With Payroll: 1992 and Earlier Census Years**

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

Item	1992	1987	1982	1977	Relative standard error of estimate (percent)			
					1992	1987	1982	1977
Number of establishments in business during year .....	10 196	8 174	6 673	8 969	1	2	2	3
Proprietors and working partners .....	5 039	2 862	3 213	6 107	2	4	3	4
All employees** .....	48 948	44 579	32 349	40 990	1	2	2	1
Construction workers:								
March .....	35 739	34 283	24 548	31 480	1	2	2	1
May .....	36 414	34 573	25 008	35 148	1	2	2	2
August .....	38 680	36 496	25 491	34 284	1	2	2	2
November .....	34 905	33 311	24 224	33 843	1	2	2	2
Average .....	36 434	34 666	25 410	33 724	1	2	2	1
Other employees:								
March .....	12 483	10 085	6 922	7 133	2	2	2	2
May .....	12 076	9 484	(NA)	(NA)	2	2	(NA)	(NA)
August .....	11 831	9 656	(NA)	(NA)	2	2	(NA)	(NA)
November .....	13 667	10 430	(NA)	(NA)	2	2	(NA)	(NA)
Average .....	12 514	9 914	(NA)	(NA)	2	2	(NA)	(NA)
Payroll, all employees .....	1 065 150	906 162	496 824	453 107	1	1	1	1
Payroll, construction workers .....	723 556	645 485	364 231	352 246	1	1	2	1
Payroll, other employees .....	341 594	260 676	132 593	100 861	1	2	2	1
First-quarter payroll, all employees .....	240 158	206 158	112 677	98 200	2	2	2	1
Fringe benefits, all employees .....	220 590	186 806	87 259	79 774	2	2	2	1
Legally required expenditures .....	159 350	141 712	68 918	47 366	2	2	2	1
Voluntary expenditures .....	61 240	45 094	18 341	32 409	4	2	2	1
Dollar value of business done .....	4 541 052	3 771 964	1 854 075	1 673 903	1	2	2	1
Value of construction work .....	4 427 519	3 651 435	1 793 756	1 616 932	1	2	2	1
Value of construction work subcontracted in from others .....	2 683 933	1 626 503	852 754	785 073	3	3	2	2
Other business receipts .....	113 533	120 529	60 319	56 971	8	5	5	5
Net value of construction work† .....	4 032 451	3 371 200	1 697 628	1 547 860	1	1	2	1
Value added†† .....	2 165 761	1 880 303	913 316	823 659	1	1	2	1
Selected costs .....	2 375 291	1 891 661	940 758	850 244	2	2	2	2
Materials, components, and supplies .....	1 909 587	1 548 341	806 949	749 792	2	2	2	2
Construction work subcontracted out to others .....	395 068	280 234	96 128	69 072	4	5	3	3
Selected power, fuels, and lubricants .....	70 636	63 085	37 680	31 380	2	2	3	3
Electricity .....	12 968	11 249	6 210	4 122	2	3	4	3
Natural and manufactured gas .....	3 474	2 204	1 886	2 070	4	4	5	28
Gasoline and diesel fuel .....	51 915	46 453	27 464	22 495	2	2	3	2
On highway use .....	49 745	43 785	(NA)	(NA)	2	2	(NA)	(NA)
Off highway use .....	2 170	2 667	(NA)	(NA)	7	4	(NA)	(NA)
Other, including lubricating oils and greases .....	2 279	3 178	2 119	2 694	6	5	7	6
Rental cost for machinery, equipment, and buildings .....	62 406	45 168	18 142	11 933	4	3	3	3
For machinery and equipment .....	10 558	7 544	3 628	3 049	8	5	5	6
For buildings .....	51 848	37 624	14 514	8 884	4	4	4	3
Selected purchased services .....	62 447	47 845	23 186	24 120	3	2	3	3
Communication services .....	33 147	27 021	13 143	12 042	3	2	3	3
Repairs to buildings and other structures .....	3 712	4 859	2 184	1 747	8	6	6	4
Repairs to machinery and equipment .....	25 587	15 963	7 858	10 332	4	3	3	4
Ownership of construction projects:								
Value of construction work .....	4 427 519	3 651 435	1 793 756	1 616 932	1	2	2	1
Government owned .....	606 667	360 305	204 766	130 594	6	5	11	4
Federal .....	167 939	103 708	(NA)	(NA)	8	7	(NA)	(NA)
State and local .....	438 728	256 597	(NA)	(NA)	6	6	(NA)	(NA)
Privately owned .....	3 820 852	3 291 129	1 588 989	1 486 338	2	2	2	1

**Table 3. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1992 and 1987**

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

Item	1992	1987	Relative standard error of estimate (percent)	
			1992	1987
<b>BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT</b>				
Beginning-of-year gross book value of depreciable assets .....	367 651	253 237	4	6
Capital expenditures, other than land .....	46 221	41 437	6	5
New .....	33 741	34 385	6	5
Used .....	12 480	7 052	10	10
Retirements and disposition of depreciable assets.....	13 365	8 519	9	12
End-of-year gross book value of depreciable assets .....	400 507	286 154	3	6
Depreciation charges during year .....	43 548	34 555	4	5
<b>Buildings and Other Structures, Additions, and Related Facilities</b>				
Beginning-of-year gross book value of depreciable assets .....	75 657	112 467	6	12
Capital expenditures, other than land .....	6 412	5 954	13	10
New buildings and other structures .....	2 588	4 175	11	11
Used buildings and other structures.....	3 824	1 779	20	13
Retirements and disposition of depreciable assets.....	1 893	2 293	24	31
End-of-year gross book value of depreciable assets .....	80 176	116 128	6	11
Depreciation charges during year .....	5 544	8 443	9	9
<b>Machinery and Equipment</b>				
Beginning-of-year gross book value of depreciable assets .....	291 995	140 769	4	4
Capital expenditures, other than land .....	39 809	35 482	6	5
New machinery and equipment, including automobiles and trucks .....	31 153	30 210	7	5
New automobiles and trucks, intended primarily for highway use .....	16 037	21 367	7	6
Used machinery and equipment, including automobiles and trucks .....	8 656	5 272	11	13
Retirements and disposition of depreciable assets.....	11 472	6 226	9	10
End-of-year gross book value of depreciable assets .....	320 331	170 026	4	4
Depreciation charges during year .....	38 004	26 112	4	5

**Table 4. Value of Inventories for Establishments With Payroll: 1992 and 1991**

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

Item	Establishments with payroll	Relative standard error of estimate (percent)
<b>All establishments:</b>		
Number .....	10 196	1
Value of construction work .....	4 427 519	1
<b>Establishments with inventories:</b>		
Number .....	3 238	2
Value of construction work .....	2 730 183	1
<b>Inventories<sup>1</sup>:</b>		
End of 1992, materials and supplies .....	127 315	5
End of 1991, materials and supplies .....	120 042	4
<b>Establishments with no inventories:</b>		
Number .....	2 765	3
Value of construction work .....	736 271	4
<b>Establishments not reporting:</b>		
Number .....	4 193	2
Value of construction work .....	961 065	3

<sup>1</sup>Inventories at cost or market prior to any adjustment to correct to LIFO values.

**Table 5. Selected Statistics for Establishments With Payroll by Employment Size Class: 1992 and 1987**

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

Selected statistics	Total	Establishments with an average of—								
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees or more
<b>1992</b>										
Number of establishments .....	10 196	7 267	1 733	809	314	63	10	—	—	—
All employees** .....	48 948	12 419	11 291	10 764	8 974	4 102	1 399	—	—	—
Payroll, all employees .....	1 065 150	186 553	229 953	252 594	232 697	118 182	45 171	—	—	—
Dollar value of business done .....	4 541 052	988 536	965 019	1 051 982	951 282	437 591	146 641	—	—	—
Value of construction work .....	4 427 519	965 289	930 988	1 030 297	936 979	418 746	145 221	—	—	—
Net value of construction work† .....	4 032 451	865 941	837 509	938 007	857 503	393 197	140 295	—	—	—
Value added†† .....	2 165 761	493 942	464 858	511 804	407 569	210 635	76 953	—	—	—
Cost of materials, components, supplies, and fuels .....	1 980 223	395 247	406 682	447 889	464 236	201 407	64 762	—	—	—
Cost of construction work subcontracted out to others .....	395 068	99 348	93 479	92 290	79 476	25 549	4 926	—	—	—
Rental cost for machinery, equipment, and buildings .....	62 406	12 194	14 934	14 941	13 384	4 722	2 231	—	—	—
Capital expenditures, other than land .....	46 221	16 078	10 150	8 289	7 323	3 179	1 201	—	—	—
End-of-year gross book value of depreciable assets .....	400 507	105 522	86 298	77 819	81 358	37 225	12 284	—	—	—
<b>1987</b>										
All employees** .....	44 579	10 143	8 652	9 464	9 370	4 528	2 420	(D)	—	—
Value of construction work .....	3 651 435	748 924	626 273	750 085	838 073	688 078	(D)	(D)	—	—
Value added†† .....	1 880 303	381 159	319 082	377 839	432 484	231 333	138 404	(D)	—	—
<b>1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)</b>										
All employees** .....	1	3	4	4	2	(Z)	(Z)	—	—	—
Net value of construction work† .....	1	3	4	4	2	(Z)	(Z)	—	—	—
Capital expenditures, other than land .....	6	11	16	10	2	(Z)	(Z)	—	—	—

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

**Table 6. Selected Statistics by Size Class of the Dollar Value of Business Done for Establishments With Payroll: 1992 and 1987**

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

Selected statistics	Total	Establishments with dollar value of business done									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
<b>1992</b>											
Number of establishments .....	10 196	(S)	(S)	2 224	2 612	1 454	1 071	654	166	114	22
All employees** .....	48 948	(S)	(S)	3 308	7 077	7 542	8 485	9 809	4 815	4 473	1 721
Payroll, all employees .....	1 065 150	(S)	(S)	39 538	105 342	134 649	183 566	244 703	127 572	149 849	66 706
Dollar value of business done .....	4 541 052	(S)	(S)	158 394	418 503	514 082	735 759	1 001 204	564 885	762 751	328 773
Value of construction work .....	4 427 519	(S)	(S)	156 985	413 844	497 873	714 322	971 620	556 014	744 924	315 588
Net value of construction work† .....	4 032 451	(S)	(S)	151 335	393 787	464 723	644 393	882 023	500 800	663 188	277 744
Value added†† .....	2 165 761	(S)	(S)	100 055	237 388	271 376	367 878	467 675	263 758	302 824	118 022
Cost of materials, components, supplies, and fuels .....	1 980 223	(S)	(S)	52 689	161 058	209 556	297 951	443 932	245 913	378 191	172 907
Cost of construction work subcontracted out to others .....	395 068	(S)	(S)	5 650	20 057	33 150	69 930	89 596	55 214	81 736	37 844
Rental cost for machinery, equipment, and buildings .....	62 406	(S)	(S)	1 519	4 927	7 368	14 049	12 898	6 723	10 293	4 202
Capital expenditures, other than land .....	46 221	(S)	(S)	2 277	7 170	8 122	8 656	7 980	3 665	5 549	2 168
End-of-year gross book value of depreciable assets .....	400 507	(S)	(S)	19 970	46 261	57 859	66 786	79 372	41 408	55 021	26 989
<b>1987</b>											
All employees** .....	44 579	(S)	(S)	(S)	5 954	6 177	7 499	8 950	4 671	3 583	3 124
Value of construction work .....	3 651 435	(S)	(S)	(S)	300 873	413 322	574 090	777 075	510 608	496 802	414 930
Value added†† .....	1 880 303	(S)	(S)	(S)	178 515	215 740	296 298	385 655	253 318	221 443	214 393
<b>1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)</b>											
All employees** .....	1	(S)	(S)	5	5	5	5	3	2	1	(Z)
Net value of construction work† .....	1	(S)	(S)	4	4	5	5	4	3	3	(Z)
Capital expenditures, other than land .....	6	(S)	(S)	18	12	20	17	10	4	2	(Z)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

**Table 7. Value of Construction Work for Establishments With Payroll by Type of Construction: 1992 and 1987**

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

Type of construction	Value of construction work				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair	A	B	C	D
	A	B	C	D	A	B	C	D
<b>1992</b>								
<b>Value of construction work</b> .....	<b>4 427 519</b>	<b>1 861 638</b>	<b>1 521 101</b>	<b>621 841</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>3</b>
Building construction .....	3 994 190	1 856 032	1 518 463	619 695	1	2	2	3
Single-family houses .....	1 742 927	959 515	521 982	261 430	2	2	3	5
Single-family houses, detached .....	1 507 732	835 652	454 869	217 211	2	3	3	5
Single-family houses, attached, including townhouses and townhouse-type condominiums .....	235 195	123 863	67 114	44 219	5	4	13	11
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives .....	265 513	90 948	114 589	59 976	5	5	7	11
Other residential buildings, including hotels, motels, and tourist cabins .....	70 289	18 966	33 022	18 300	7	8	10	15
Hotels, motels, and tourist cabins .....	50 018	14 762	23 805	11 451	6	7	7	12
Other residential buildings .....	20 271	4 205	9 217	6 849	19	25	28	36
Office buildings .....	711 640	283 842	341 707	86 091	3	4	4	5
Other commercial buildings such as stores, restaurants, and automobile service stations .....	361 172	169 077	152 042	40 053	4	8	5	5
Industrial buildings and warehouses .....	200 315	62 257	78 188	59 870	7	7	13	10
Industrial buildings .....	168 659	56 505	58 470	53 684	6	7	7	10
Warehouses .....	31 657	5 752	*19 718	6 186	28	16	44	19
Religious buildings .....	59 424	21 451	27 442	10 530	6	7	5	10
Educational buildings .....	296 690	138 989	113 773	43 928	4	6	5	7
Hospitals and institutional buildings .....	221 048	82 414	111 452	27 182	5	9	4	5
Amusement, social, and recreational buildings, indoors .....	50 002	21 647	18 816	9 539	5	5	2	22
Other nonresidential buildings .....	15 171	6 926	5 450	2 795	14	13	17	15
Nonbuilding construction .....	10 390	5 606	2 637	2 146	10	16	9	13
Construction work, n.s.k. ....	422 939	(NA)	(NA)	(NA)	5	(NA)	(NA)	(NA)
<b>1987</b>								
<b>Value of construction work</b> .....	<b>3 651 435</b>	<b>1 926 895</b>	<b>958 811</b>	<b>493 661</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>3</b>
Building construction .....	3 349 903	1 917 838	950 515	481 549	2	2	3	3
Single-family houses .....	1 327 792	806 437	350 490	170 865	2	3	4	5
Single-family houses, detached .....	1 134 442	685 432	298 046	150 964	2	3	4	5
Single-family houses, attached, including townhouses and townhouse-type condominiums .....	193 349	121 004	52 444	19 900	6	6	10	8
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives .....	226 756	130 755	51 905	44 095	6	8	15	9
Other residential buildings, including hotels, motels, and tourist cabins .....	132 678	60 036	37 750	34 892	6	6	7	17
Hotels, motels, and tourist cabins .....	90 948	45 199	23 070	22 679	7	7	6	19
Other residential buildings .....	41 730	14 837	14 679	12 213	13	7	14	32
Office buildings .....	702 996	418 698	214 827	69 470	4	4	7	4
Other commercial buildings such as stores, restaurants, and automobile service stations .....	378 892	217 015	106 800	55 076	4	4	7	11
Industrial buildings .....	149 642	86 031	29 002	34 608	6	7	5	13
Religious buildings .....	50 545	21 642	19 871	9 031	6	6	10	13
Educational buildings .....	179 170	88 750	67 382	23 037	6	8	6	13
Hospitals and institutional buildings .....	126 673	50 089	55 429	21 154	3	5	3	7
Amusement, social, and recreational buildings, indoors .....	36 956	17 938	9 227	9 791	12	18	9	23
Other nonresidential buildings .....	37 803	20 447	7 832	*9 530	24	12	19	57
Nonbuilding construction .....	29 465	9 057	8 296	12 111	14	7	19	28
Construction work, n.s.k. ....	272 067	(NA)	(NA)	(NA)	6	(NA)	(NA)	(NA)

**Table 8. Selected Statistics for Establishments With Payroll by Specialization in Types of Construction: 1992**

[Thousand dollars. Detail may not add to total because of rounding. This table presents selected statistics for establishments according to degree of specialization in major types of construction work. If number of establishments or value of construction work for a given type of specialization are relatively insignificant, data may not be shown. In addition, data are not shown in this table where distribution of the value of construction work by type of construction was not provided in table 7. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A]

Item	Number of establishments	All employees**	Payroll, all employees	Value of construction work		Net value of construction work†	Value added††	Cost of construction work sub-contracted out to others	Relative standard error of estimate (percent) for column—		
				For all types	For specialized type				B	D	H
				A	B				C	D	E
<b>All establishments</b> .....	<b>10 196</b>	<b>48 948</b>	<b>1 065 150</b>	<b>4 427 519</b>	<b>2 740 638</b>	<b>4 032 451</b>	<b>2 165 761</b>	<b>395 068</b>	<b>1</b>	<b>1</b>	<b>4</b>
Establishments not specializing by type .....	1 644	11 229	281 297	1 203 522	(NA)	1 094 853	553 525	108 669	3	3	5
Establishments specializing 51 percent or more .....	8 552	37 719	783 853	3 223 997	2 740 638	2 937 598	1 612 235	286 399	2	2	5
<b>SINGLE-FAMILY HOUSES, DETACHED</b>											
<b>All establishments specializing in type</b> .....	<b>4 779</b>	<b>18 293</b>	<b>368 003</b>	<b>1 509 954</b>	<b>1 272 760</b>	<b>1 371 555</b>	<b>734 495</b>	<b>138 398</b>	<b>2</b>	<b>3</b>	<b>6</b>
Establishments with —											
100 percent specialization .....	1 594	4 778	88 202	363 020	363 020	334 694	186 110	28 326	6	6	12
90 to 99 percent specialization .....	1 199	4 566	93 580	374 130	348 886	347 264	189 282	26 866	5	4	11
80 to 89 percent specialization .....	731	2 865	55 574	254 086	211 094	228 738	111 413	25 347	7	9	16
70 to 79 percent specialization .....	(S)	3 584	75 979	287 090	208 960	253 030	133 837	34 060	6	5	14
60 to 69 percent specialization .....	385	1 977	44 496	193 690	120 037	173 440	95 823	20 250	8	10	18
51 to 59 percent specialization .....	89	523	10 172	37 938	20 762	34 389	18 030	*3 549	16	17	42
<b>SINGLE-FAMILY HOUSES, ATTACHED, INCLUDING TOWNHOUSES AND TOWNHOUSE-TYPE CONDOMINIUMS</b>											
<b>All establishments specializing in type</b> .....	<b>258</b>	<b>996</b>	<b>20 411</b>	<b>85 312</b>	<b>71 017</b>	<b>76 285</b>	<b>43 765</b>	<b>9 027</b>	<b>13</b>	<b>14</b>	<b>21</b>
Establishments with —											
100 percent specialization .....	113	424	7 337	30 131	30 131	28 734	16 545	*1 397	25	30	46
90 to 99 percent specialization .....	33	126	3 019	14 720	13 414	12 136	7 300	2 585	26	24	37
80 to 89 percent specialization .....	26	103	2 158	5 882	4 813	(D)	4 036	(D)	37	32	(D)
70 to 79 percent specialization .....	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
60 to 69 percent specialization .....	*20	127	3 267	10 193	6 340	(D)	5 506	(D)	34	31	(D)
51 to 59 percent specialization .....	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
<b>APARTMENT BUILDINGS WITH TWO OR MORE UNITS, INCLUDING RENTALS, APARTMENT-TYPE CONDOMINIUMS, AND COOPERATIVES</b>											
<b>All establishments specializing in type</b> .....	<b>232</b>	<b>1 512</b>	<b>34 640</b>	<b>146 377</b>	<b>116 650</b>	<b>130 812</b>	<b>71 060</b>	<b>15 565</b>	<b>8</b>	<b>9</b>	<b>20</b>
Establishments with —											
100 percent specialization .....	121	428	8 512	39 088	39 088	33 879	19 758	5 209	18	19	32
90 to 99 percent specialization .....	*21	*103	*1 556	*5 459	*5 045	*5 447	*3 347	(S)	42	41	(S)
80 to 89 percent specialization .....	19	310	9 952	45 489	37 969	41 170	18 143	4 319	9	13	32
70 to 79 percent specialization .....	28	144	3 148	*14 313	*10 441	*11 695	5 963	(S)	29	46	(S)
60 to 69 percent specialization .....	(S)	280	6 484	24 113	14 654	21 433	12 791	2 680	20	23	35
51 to 59 percent specialization .....	*6	247	4 989	17 915	9 453	17 189	11 059	727	7	14	28
<b>OFFICE BUILDINGS</b>											
<b>All establishments specializing in type</b> .....	<b>407</b>	<b>4 306</b>	<b>119 261</b>	<b>506 446</b>	<b>407 340</b>	<b>454 396</b>	<b>233 968</b>	<b>52 049</b>	<b>5</b>	<b>4</b>	<b>9</b>
Establishments with —											
100 percent specialization .....	112	1 175	29 207	111 010	111 010	104 484	55 684	6 526	12	10	25
90 to 99 percent specialization .....	(S)	(S)	20 437	102 313	95 300	92 674	39 414	9 638	(S)	12	21
80 to 89 percent specialization .....	45	638	14 691	65 572	53 623	(D)	30 448	(D)	10	15	(D)
70 to 79 percent specialization .....	89	773	22 631	91 902	66 407	77 784	40 069	14 119	10	9	22
60 to 69 percent specialization .....	48	632	19 787	88 274	55 538	76 055	40 323	12 219	5	7	11
51 to 59 percent specialization .....	13	341	12 509	47 375	25 461	(D)	28 031	(D)	7	3	(D)
<b>OTHER COMMERCIAL BUILDINGS SUCH AS STORES, RESTAURANTS, AND AUTOMOBILE SERVICE STATIONS</b>											
<b>All establishments specializing in type</b> .....	<b>305</b>	<b>2 152</b>	<b>47 512</b>	<b>179 926</b>	<b>151 559</b>	<b>161 324</b>	<b>101 134</b>	<b>*18 602</b>	<b>8</b>	<b>9</b>	<b>48</b>
Establishments with —											
100 percent specialization .....	(S)	708	14 741	62 013	62 013	50 445	31 622	(S)	12	20	(S)
90 to 99 percent specialization .....	33	301	8 635	30 398	28 587	28 573	19 105	1 825	22	15	33
80 to 89 percent specialization .....	34	268	5 799	20 338	16 565	19 557	12 696	781	16	15	25
70 to 79 percent specialization .....	46	397	7 859	31 445	23 189	29 882	17 613	1 562	24	22	16
60 to 69 percent specialization .....	45	300	6 155	23 778	14 686	21 697	11 468	(S)	19	17	(S)
51 to 59 percent specialization .....	*15	178	4 322	11 953	6 520	11 169	8 630	785	28	17	(Z)
<b>INDUSTRIAL BUILDINGS</b>											
<b>All establishments specializing in type</b> .....	<b>163</b>	<b>1 351</b>	<b>33 333</b>	<b>106 663</b>	<b>91 520</b>	<b>100 888</b>	<b>65 422</b>	<b>5 776</b>	<b>11</b>	<b>9</b>	<b>15</b>
Establishments with —											
100 percent specialization .....	68	420	8 750	26 182	26 182	25 152	18 364	1 030	24	19	27
90 to 99 percent specialization .....	18	298	8 599	26 674	24 941	25 451	16 720	1 223	20	17	32
80 to 89 percent specialization .....	27	202	6 936	25 665	21 660	(D)	14 897	(D)	22	15	(D)
70 to 79 percent specialization .....	(S)	201	3 880	(S)	(S)	(S)	(S)	(S)	36	(S)	(S)
60 to 69 percent specialization .....	22	230	5 168	12 977	7 939	(D)	8 795	(D)	23	13	(D)
51 to 59 percent specialization .....	-	-	-	-	-	-	-	-	-	-	-
<b>EDUCATIONAL BUILDINGS</b>											
<b>All establishments specializing in type</b> .....	<b>173</b>	<b>1 491</b>	<b>34 098</b>	<b>144 808</b>	<b>109 725</b>	<b>137 284</b>	<b>65 386</b>	<b>7 523</b>	<b>11</b>	<b>10</b>	<b>14</b>
Establishments with —											
100 percent specialization .....	29	130	2 884	12 036	12 036	11 221	5 150	815	25	26	27
90 to 99 percent specialization .....	30	197	5 661	24 456	22 621	23 519	12 197	937	26	27	29
80 to 89 percent specialization .....	33	370	8 138	30 901	25 253	29 348	12 784	*1 553	23	20	51
70 to 79 percent specialization .....	19	221	5 197	23 796	17 130	21 804	10 639	1 992	16	14	4
60 to 69 percent specialization .....	55	485	10 406	47 770	29 305	45 829	22 174	1 941	23	22	32
51 to 59 percent specialization .....	6	86	1 813	5 848	3 380	5 563	2 443	285	34	23	31

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

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

Location of establishment	Number of establishments	Average number of construction workers	Construction workers <sup>1</sup>				Relative standard error of estimate (percent) for column—					
			January to March	April to June	July to September	October to December	A	B	C	D	E	F
			A	B	C	D	E	F	A	B	C	D
<b>United States .....</b>	<b>10 196</b>	<b>36 434</b>	<b>35 739</b>	<b>36 414</b>	<b>38 680</b>	<b>34 905</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>
Alabama .....	131	422	400	414	453	421	13	12	11	14	13	13
Alaska .....	30	57	36	59	(S)	68	12	8	9	15	(S)	4
Arizona .....	151	678	644	657	694	718	8	8	9	9	9	8
Arkansas .....	45	(S)	(S)	(S)	(S)	(S)	15	(S)	(S)	(S)	(S)	(S)
California .....	1 434	6 558	6 511	6 608	6 910	6 204	3	3	3	3	3	4
Colorado .....	182	844	817	788	900	870	6	6	6	6	8	7
Connecticut .....	141	544	527	585	566	499	7	14	14	15	13	12
Delaware .....	39	123	119	114	132	125	15	23	21	22	22	24
District of Columbia .....	7	47	45	45	48	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
Florida .....	448	1 418	1 389	1 421	1 483	1 378	6	6	6	6	6	6
Georgia .....	204	753	684	794	795	741	9	16	13	16	18	18
Hawaii .....	61	289	302	280	281	292	8	12	12	12	11	12
Idaho .....	42	73	69	70	82	70	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
Illinois .....	489	2 144	1 967	2 165	2 266	2 178	6	6	6	7	7	7
Indiana .....	234	785	750	773	872	744	6	9	9	10	9	9
Iowa .....	124	281	297	294	297	237	12	11	11	11	12	11
Kansas .....	124	409	411	420	434	371	9	9	9	11	10	9
Kentucky .....	123	474	429	490	533	445	13	12	12	12	12	12
Louisiana .....	102	374	385	358	382	371	12	16	16	16	15	16
Maine .....	68	144	149	149	150	129	15	12	14	11	12	13
Maryland .....	265	1 039	1 068	1 063	1 100	926	8	8	7	7	7	9
Massachusetts .....	237	614	653	635	626	544	8	8	8	8	9	9
Michigan .....	266	907	861	869	1 018	879	6	9	9	9	9	9
Minnesota .....	159	644	596	628	738	615	11	11	13	11	10	12
Mississippi .....	52	131	146	139	124	116	9	6	5	3	6	3
Missouri .....	262	1 100	1 086	1 067	1 168	1 079	9	10	11	11	10	10
Montana .....	19	37	33	35	36	43	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
Nebraska .....	66	211	205	221	227	189	15	12	14	12	12	13
Nevada .....	54	319	315	335	338	288	12	21	20	22	23	19
New Hampshire .....	48	149	128	156	157	156	18	12	13	10	11	11
New Jersey .....	318	1 231	1 194	1 258	1 318	1 153	6	5	5	5	5	4
New Mexico .....	56	125	117	114	134	134	9	16	17	17	14	15
New York .....	686	1 944	1 929	1 995	2 027	1 825	5	4	4	4	4	6
North Carolina .....	420	1 140	1 135	1 156	1 231	1 037	6	9	8	8	8	9
North Dakota .....	35	96	92	93	97	101	20	35	35	39	33	33
Ohio .....	365	1 504	1 495	1 509	1 591	1 420	4	4	4	4	5	4
Oklahoma .....	78	288	238	264	348	301	16	20	19	17	24	21
Oregon .....	181	502	473	506	525	504	7	10	11	13	10	11
Pennsylvania .....	446	1 359	1 272	1 336	1 473	1 356	4	7	8	7	7	9
Rhode Island .....	43	96	81	103	111	87	7	5	5	4	4	5
South Carolina .....	153	354	352	345	375	344	7	16	16	15	15	19
South Dakota .....	42	110	(S)	(S)	90	137	18	14	(S)	(S)	17	5
Tennessee .....	146	520	514	538	541	486	11	16	15	15	17	17
Texas .....	417	1 705	(S)	1 497	1 708	1 580	6	6	(S)	7	7	7
Utah .....	63	184	179	170	195	193	5	11	14	12	12	11
Vermont .....	34	65	69	68	64	59	22	23	33	22	24	25
Virginia .....	362	1 180	1 092	1 198	1 285	1 144	6	6	6	7	7	7
Washington .....	376	1 280	1 251	1 328	1 354	1 186	5	6	6	6	6	7
West Virginia .....	34	87	68	77	108	94	6	9	12	11	7	8
Wisconsin .....	321	920	873	930	1 022	853	7	8	8	8	8	8
Wyoming .....	17	32	24	31	40	34	11	6	6	4	5	4

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

**Table 10. Value of Construction Work for Establishments With Payroll by Location of Construction Work: 1992 and 1987**

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

Location of construction work	1992					1987 value of construction work done in this State	Percent change 1987 (col F) to 1992 (col A)	Relative standard error of estimate (percent) for column—		
	Value of construction work done in this State	Construction work done by establishments located in this State		Construction work done by establishments not located in this State				A	C	E
		Number	Value of construction work	Number	Value of construction work					
	A	B	C	D	E			F	G	A
<b>United States</b> .....	<b>4 427 519</b>	<b>10 166</b>	<b>4 219 427</b>	<b>2 199</b>	<b>208 092</b>	<b>3 651 435</b>	<b>21.3</b>	<b>1</b>	<b>1</b>	<b>4</b>
Alabama .....	38 550	131	36 947	44	1 603	32 142	19.9	12	12	25
Alaska .....	(D)	(S)	(D)	1	(D)	8 728	(D)	(D)	(D)	(D)
Arizona .....	75 298	151	74 383	*23	*914	64 330	17.0	11	11	40
Arkansas .....	(S)	(S)	(S)	*16	755	8 284	(S)	(S)	(S)	4
California .....	803 060	1 434	799 956	34	3 105	622 160	29.1	3	3	17
Colorado .....	103 414	182	100 038	25	3 376	54 337	90.3	11	12	36
Connecticut .....	79 773	139	76 249	61	3 524	82 371	-3.2	12	12	27
Delaware .....	15 002	39	13 535	37	1 467	9 020	66.3	11	12	11
District of Columbia .....	16 973	7	2 920	67	14 053	25 939	-34.6	8	(Z)	10
Florida .....	186 582	(S)	181 479	48	5 104	117 688	58.5	8	8	21
Georgia .....	97 529	204	92 898	80	4 631	75 222	29.7	13	13	21
Hawaii .....	(D)	61	(D)	*3	(D)	(D)	(D)	(D)	(D)	(D)
Idaho .....	6 096	(S)	4 055	6	*2 040	*5 728	6.4	22	(Z)	65
Illinois .....	283 274	489	271 705	140	11 569	225 217	25.8	4	4	16
Indiana .....	121 099	234	114 756	88	6 343	70 039	72.9	11	11	11
Iowa .....	26 917	124	25 119	29	1 798	13 833	94.6	9	10	2
Kansas .....	39 463	121	34 937	42	4 526	(D)	(D)	7	6	28
Kentucky .....	48 466	123	40 420	79	8 046	13 365	262.6	13	15	14
Louisiana .....	(D)	102	(D)	12	(D)	25 994	(D)	(D)	(D)	(D)
Maine .....	17 151	68	13 656	14	3 495	19 936	-14.0	7	8	4
Maryland .....	131 876	263	123 050	77	8 826	110 114	19.8	9	9	4
Massachusetts .....	105 061	229	96 278	58	8 783	146 666	-28.4	5	6	20
Michigan .....	129 899	(S)	124 827	77	5 072	90 148	44.1	6	6	13
Minnesota .....	77 130	(S)	73 870	36	*3 260	68 091	13.3	9	9	68
Mississippi .....	10 622	52	7 343	38	3 278	6 655	59.6	11	2	34
Missouri .....	114 427	260	110 154	35	4 274	86 546	32.2	11	11	5
Montana .....	2 526	(S)	2 150	*14	*376	*6 352	-60.2	8	(Z)	55
Nebraska .....	30 420	66	29 733	9	*687	(D)	(D)	27	29	66
Nevada .....	35 817	(S)	31 974	*19	3 842	14 992	138.9	14	16	26
New Hampshire .....	19 241	45	17 382	58	1 858	15 658	22.9	9	10	23
New Jersey .....	139 135	(S)	128 469	108	10 666	165 016	-15.7	6	6	9
New Mexico .....	12 903	56	12 449	*9	(S)	13 872	-7.0	13	13	(S)
New York .....	263 823	686	241 682	83	22 141	350 797	-24.8	6	6	4
North Carolina .....	95 410	420	92 226	52	3 183	50 532	88.8	8	8	22
North Dakota .....	6 085	35	5 859	*14	*226	3 568	70.5	26	27	47
Ohio .....	184 037	364	178 490	54	5 547	133 630	37.7	3	3	33
Oklahoma .....	25 181	78	24 945	*5	236	12 979	94.0	12	12	36
Oregon .....	63 795	181	54 559	33	9 236	53 139	20.1	8	9	12
Pennsylvania .....	170 974	446	162 708	107	8 265	177 501	-3.7	5	5	14
Rhode Island .....	14 772	43	13 680	30	1 091	19 184	-23.0	2	2	9
South Carolina .....	28 749	153	26 360	50	2 389	20 394	41.0	16	17	11
South Dakota .....	5 194	(S)	4 833	7	360	*6 663	-22.1	13	14	13
Tennessee .....	66 467	146	64 572	56	1 894	41 840	58.9	15	16	6
Texas .....	226 261	417	224 800	22	1 462	189 842	19.2	7	7	12
Utah .....	19 901	63	19 895	(S)	(S)	11 071	79.8	21	21	(S)
Vermont .....	5 684	34	5 014	18	670	(D)	(D)	10	11	28
Virginia .....	120 418	362	107 263	120	13 155	179 894	-33.1	6	6	11
Washington .....	142 140	376	140 692	28	1 449	75 624	88.0	5	5	29
West Virginia .....	6 897	34	4 204	54	2 692	*6 938	-6	11	7	26
Wisconsin .....	96 791	321	94 706	62	2 086	52 180	85.5	8	9	16
Wyoming .....	2 020	17	1 507	11	*513	(D)	(D)	13	6	49



**Table 11. Dollar Value of Business Done for Establishments With Payroll by Kind-of-Business Activity: 1992 and 1987**

[Thousand dollars. Detail may not add to total because of rounding. Based on their primary business activity or combination of activities, establishments were classified into this specific industry. These establishments, however, may also be engaged in other kinds of business activities. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Primary and other kind of business activities	Dollar value of business done		Relative standard error of estimate (percent)	
	1992	1987	1992	1987
<b>All kinds of business</b> .....	<b>4 541 052</b>	<b>3 771 964</b>	<b>1</b>	<b>2</b>
<b>SPECIAL TRADE CONTRACTORS</b>				
Acoustical contractor .....	33 008	26 247	13	8
Carpentry contractor .....	31 289	18 844	9	15
Carpet laying or removal contractor .....	2 068 260	1 737 414	2	2
Computer floor installation contractor .....	150 060	235 668	10	10
Flooring contractor, wood .....	978 749	639 441	3	3
Linoleum, asphalt resilient or vinyl tile installation contractor .....	863 267	641 933	2	3
Tile setting contractor .....	91 079	68 254	6	3
Other construction activities .....	128 940	147 853	8	8
<b>OTHER BUSINESS ACTIVITIES</b>				
Retail trade .....	71 312	76 090	10	8
Other business activities .....	37 175	43 632	13	(NA)
Kind of business activity, n.s.k. ....	87 912	136 588	10	10

**Table 12. Selected Industry Ratios for Establishments With Payroll: 1992 and 1987**

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

Selected statistics	1992	1987	Relative standard error of estimate (percent) for 1992
<b>AVERAGE PER ESTABLISHMENT</b>			
Number of employees** .....	4.8	5.5	1
Number of construction workers.....	3.6	4.2	1
Number of all other employees .....	1.2	1.2	1
Payroll, all employees .....	104.5	110.9	1
Payroll, construction workers..... do--	71.0	79.0	1
Payroll, other employees .....	33.5	31.9	1
Dollar value of business done..... do--	445.4	461.5	1
Value of construction work..... do--	434.2	446.7	1
Cost of materials, components, supplies, and fuels..... do--	194.2	197.1	1
Construction work subcontracted to others..... do--	38.7	34.3	4
Rental cost for machinery, equipment, and buildings..... do--	6.1	5.5	4
Capital expenditures, other than land..... do--	4.5	5.1	6
Gross book value of depreciable assets..... do--	39.3	35.0	4
<b>AVERAGE PER EMPLOYEE</b>			
Payroll, all employees..... \$1,000--	21.8	20.3	1
Dollar value of business done..... do--	92.8	84.6	1
Value added††..... do--	44.2	42.2	1
<b>AVERAGE PER CONSTRUCTION WORKER</b>			
Payroll, construction workers..... \$1,000--	19.9	18.6	1
Value of construction work..... do--	121.5	105.3	1
<b>AVERAGE PER OTHER EMPLOYEE</b>			
Payroll, other employees..... \$1,000--	27.3	26.3	1
<b>AVERAGE PER DOLLAR VALUE OF CONSTRUCTION WORK</b>			
Payroll, all employees.....	.241	.248	1
Cost of materials, components, supplies, and fuels.....	.447	.441	1
Cost of construction work subcontracted out to others.....	.089	.077	3
Value of construction work subcontracted in from others.....	.606	.445	2
Rental cost for machinery, equipment, and buildings.....	.014	.012	4

**Table 13. Selected Industry Ratios for Establishments With Payroll by State: 1992**

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

Location of establishment	Average number of employees** per establishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	Average per dollar value of construction work				
				Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Value of construction work sub-contracted in from others	Rental cost for machinery, equipment, and buildings
<b>United States</b> .....	<b>4.8</b>	<b>21.8</b>	<b>121.5</b>	<b>.241</b>	<b>.447</b>	<b>.089</b>	<b>.606</b>	<b>.014</b>
Alabama .....	4.3	16.1	93.1	.228	.447	.067	.626	.009
Alaska .....	2.6	30.0	186.7	.214	.486	.065	.476	.012
Arizona .....	5.8	21.4	113.5	.243	.484	.058	.468	(S)
Arkansas .....	(S)	(S)	(S)	(S)	(D)	(S)	(S)	(S)
California .....	6.1	23.5	122.2	.256	.441	.082	.622	.016
Colorado .....	5.9	22.3	119.0	.240	.386	*.163	.867	.014
Connecticut .....	5.3	26.2	148.7	.241	.378	.134	.511	.011
Delaware .....	4.1	22.6	116.5	.252	.473	(S)	.551	(S)
District of Columbia .....	9.4	22.1	104.8	.297	.554	.203	.780	.007
Florida .....	4.5	18.8	130.1	.204	.476	.115	.539	.012
Georgia .....	5.0	18.7	129.8	.195	.435	.109	.419	(S)
Hawaii .....	6.5	28.4	137.3	.282	.417	.027	.656	.012
Idaho .....	2.0	11.0	56.9	.218	(D)	.045	.794	.014
Illinois .....	6.0	27.6	128.2	.292	.413	.064	.646	.025
Indiana .....	5.2	20.5	158.3	.200	.491	.121	.602	.014
Iowa .....	2.8	19.5	93.7	.260	.460	.037	.516	.009
Kansas .....	4.1	21.9	101.9	.266	.448	.051	.642	.009
Kentucky .....	5.0	16.5	96.4	.224	.467	.033	.496	.011
Louisiana .....	5.0	16.3	106.9	.205	.480	.088	.566	.014
Maine .....	2.8	17.7	101.9	.232	(D)	.079	.578	.012
Maryland .....	5.6	22.6	137.6	.235	.492	.088	.728	.020
Massachusetts .....	3.5	21.4	172.0	.169	.479	.163	.662	.013
Michigan .....	4.6	24.4	139.8	.234	.467	.121	.633	.016
Minnesota .....	5.3	(S)	115.7	(S)	.402	(S)	(S)	.008
Mississippi .....	3.2	13.1	61.9	.266	(D)	.036	.369	.006
Missouri .....	5.8	22.6	109.1	.285	.493	(S)	.879	.012
Montana .....	2.3	14.1	59.2	.283	(S)	.035	(S)	.017
Nebraska .....	4.0	16.4	149.6	.136	.433	.147	.769	.006
Nevada .....	7.5	21.7	100.7	.271	(S)	(S)	(S)	.008
New Hampshire .....	3.9	22.3	152.5	.185	.507	.075	.578	.006
New Jersey .....	5.1	26.2	124.0	.276	.403	.085	.605	.018
New Mexico .....	2.8	16.0	109.7	.181	.477	.059	.715	.019
New York .....	3.7	24.6	129.0	.252	.390	.103	.471	.014
North Carolina .....	3.4	16.1	83.3	.241	.444	.070	.480	.008
North Dakota .....	3.6	15.2	89.9	.223	.565	.052	(S)	.004
Ohio .....	5.9	23.5	131.9	.255	.444	.083	.590	.014
Oklahoma .....	4.7	16.6	88.8	.238	.514	.082	.494	.011
Oregon .....	3.7	19.4	111.6	.232	.470	.071	.717	.009
Pennsylvania .....	4.3	21.8	124.3	.245	.486	.061	.566	.014
Rhode Island .....	2.7	24.9	144.4	.212	.375	.062	.508	.010
South Carolina .....	3.1	13.2	80.0	.219	(D)	.060	.326	.007
South Dakota .....	3.0	12.7	45.4	.324	.324	.027	(S)	.008
Tennessee .....	4.7	17.6	130.9	.176	.450	.113	.673	*.023
Texas .....	5.7	18.6	132.4	.196	.472	.108	.486	.014
Utah .....	3.9	15.8	131.8	.157	.465	.131	.668	.018
Vermont .....	2.4	14.3	78.8	.226	(S)	(S)	.380	(S)
Virginia .....	4.5	20.6	104.5	.270	.490	.088	.713	.013
Washington .....	4.5	20.3	117.3	.228	.455	.092	.805	.010
West Virginia .....	3.3	13.6	52.7	.331	(D)	.111	.529	.009
Wisconsin .....	3.8	21.5	107.1	.267	.450	.053	.542	.013
Wyoming .....	2.2	11.1	47.1	.271	.557	.043	.588	.024

## Appendix A.

# Explanation of Terms

**Construction.** Is composed of three broad categories:

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

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

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

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

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

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

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

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

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

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

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

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

Dollar value of business done comprises the following detail:

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

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

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

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

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

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

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

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

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

Costs for materials, components, and supplies include:

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

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

Excluded from this item are:

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

Costs for construction work subcontracted out to others include:

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

Excluded from this item are:

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

Costs for selected power, fuels, and lubricants include:

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

**Rental costs for machinery, equipment, and buildings.**

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

#### **Building construction:**

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

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

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



# Appendix B. Standard Industrial Classification Titles for Industry Groups and Industries

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

## Appendix C. Geographic Divisions and States

---

### NEW ENGLAND STATES

Connecticut  
Maine  
Massachusetts  
New Hampshire  
Rhode Island  
Vermont

### MIDDLE ATLANTIC STATES

New Jersey  
New York  
Pennsylvania

### EAST NORTH CENTRAL STATES

Illinois  
Indiana  
Michigan  
Ohio  
Wisconsin

### WEST NORTH CENTRAL STATES

Iowa  
Kansas  
Minnesota  
Missouri  
Nebraska  
North Dakota  
South Dakota

### SOUTH ATLANTIC STATES

Delaware  
District of Columbia  
Florida  
Georgia  
Maryland

### SOUTH ATLANTIC STATES—Con.

North Carolina  
South Carolina  
Virginia  
West Virginia

### EAST SOUTH CENTRAL STATES

Alabama  
Kentucky  
Mississippi  
Tennessee

### WEST SOUTH CENTRAL STATES

Arkansas  
Louisiana  
Oklahoma  
Texas

### MOUNTAIN STATES

Arizona  
Colorado  
Idaho  
Montana  
Nevada  
New Mexico  
Utah  
Wyoming

### PACIFIC STATES

Alaska  
California  
Hawaii  
Oregon  
Washington

# Publication Program

## 1992 CENSUS OF CONSTRUCTION INDUSTRIES

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

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

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

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

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

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

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

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

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

(Available April 1995 through August 1995) [P] [C] [+ ]

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

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

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

(Available August 1995 through December 1995) [P] [C] [+ ]

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

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

(Available August 1995) [P] [C]

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

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

## OTHER ECONOMIC CENSUS REPORTS

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

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

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

## HOW TO ORDER DATA PRODUCTS

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