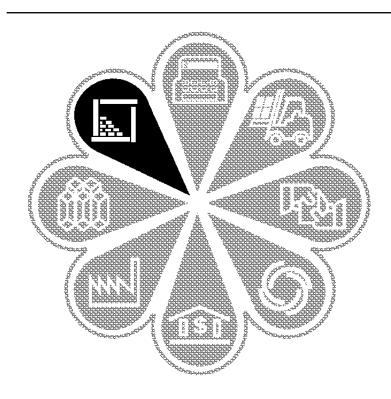
# **1992**Census of Construction Industries

CC92-I-19

**INDUSTRY SERIES** 

# **Concrete Work Special Trade Contractors**

Industry 1771



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Industry 1771

Issued April 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

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



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# 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: 19871 (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>&</sup>lt;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 singleestablishment 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:

$$x'_{c} = \sum_{i=1}^{n} x_{i} / p_{i}$$

$$i = 1$$

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

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

p<sub>i</sub> is the selection probability of that firm.

n 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 questionnaries 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 constructionrelated 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.)
- Withheld to avoid disclosing data for individual (D) 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.
- Not specified by kind. n.s.k.

# **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 dol- lar value of busi- ness done	By type, class, kind of business, 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  End of year—buildings, machinery, and equipment  Depreciation charges during year— buildings, machinery, and equipment	1, 3 3 3	1	5	6		
Capital expenditures: Total capital expenditures New buildings—machinery and equipment Used buildings—machinery and equipment	1, 3 3 3	1	5	6		
Communication services, costs for	2					
Employees: All employees—average number Construction workers—average number Construction workers—quarterly Other employees—average number Other employees—quarterly	1, 2, 8 1, 2, 9 2, 9 2	1 1, 9 9	5	6		8
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 1, 2, 8 1, 2	1 1	5	6		8
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 1, 2, 4, 7, 8, 10 1, 2 2	1, 10	5 5	6 6	11 7, 10	8
Net value of construction work  Value added.	1, 2, 8 1, 2, 8	1 1	5 5	6 6		8 8
Rental costs:						
Total  For machinery and equipment  For buildings	1, 2 2 2	1	5	6		
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>&</sup>lt;sup>1</sup>Type—buildings, roads, etc. Class—new construction; additions, alterations, or reconstruction; or maintenance and repair work.

# **Summary of Findings**

Establishments classified in this industry are primarily engaged in concrete work including portland cement and asphalt, surfacing of concrete floors, constructing culverts and curbs, pouring concrete foundations, construction with gunite and stucco, and constructing private driveways and walks of all materials. For additional examples, refer to the *Standard Industrial Classification Manual: 1987* (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 \$14.6 billion in total dollar value of business. Of this amount, \$14.4 billion were for the value of construction work. These establishments paid out \$5.3 billion for materials, components, and supplies and \$1.2 billion for construction work subcontracted to others. Costs for selected power, fuels, and lubricants for the industry were \$367 million. Value added for 1992 was \$7.7 billion.

There were 26,123 establishments with total employment averaging 192,539 during the year. Total payroll for 1992 was \$4.0 billion.

Larger establishments with 20 employees or more, while representing only 7.1 percent of the total number of employer establishments in this industry, accounted for 46.8 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.

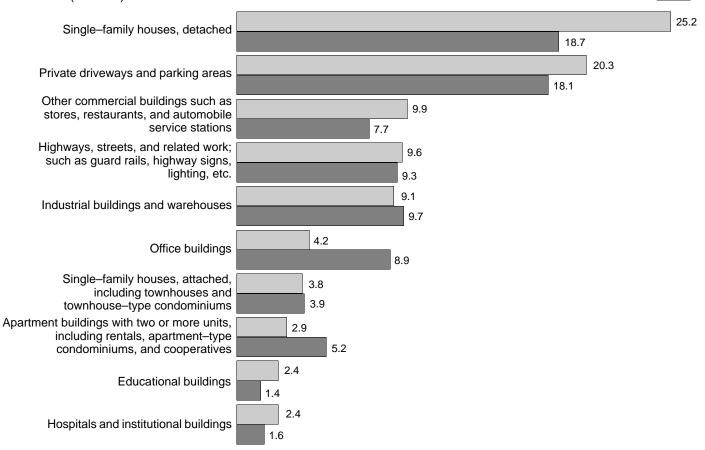
For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done but excluded from the value of construction work done. For 1992, receipts from the sale of land 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.

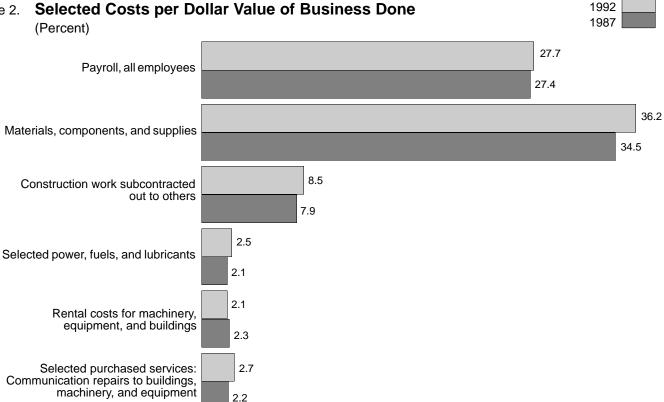
<sup>&</sup>lt;sup>1</sup>Standard Industrial Classification Manual: 1987. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

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









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

	1992												
		Employ	yees**	Pay	roll								
Location of establishment	Number of establishments	All	Construction workers	All employees	Construction workers	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels				
	A	В	С	D	Е	F	G	Н	1				
United States	26 123	192 539	160 750	4 038 030	3 092 990	14 422 908	13 179 429	7 703 117	5 649 439				
Alabama Alaska Arizona Arkansas California	279	2 345	2 033	35 886	27 887	125 081	116 216	72 084	46 393				
	43	258	222	8 385	*7 479	*31 038	25 938	14 620	*12 039				
	421	5 472	4 547	105 657	81 055	364 087	345 660	193 148	164 747				
	197	1 614	1 345	24 628	18 319	96 379	89 716	53 137	38 555				
	3 017	25 854	21 565	641 284	485 989	2 222 462	1 963 081	1 191 770	780 285				
Colorado Connecticut. Delaware District of Columbia Florida	618	5 223	4 481	104 744	81 914	374 771	351 242	200 671	154 154				
	356	1 512	1 246	34 411	25 933	106 711	99 597	66 308	34 187				
	106	898	766	16 481	12 766	50 932	45 442	28 398	17 210				
	*12	(D)	166	(D)	(D)	(D)	(D)	(D)	(D)				
	1 470	10 159	8 324	185 129	137 540	624 162	570 944	357 150	221 282				
Georgia	528	5 112	4 301	96 128	73 349	349 755	314 499	193 891	125 055				
	64	595	484	17 148	12 423	59 722	54 503	35 890	(D)				
	195	859	769	14 688	12 271	62 073	59 096	38 683	(D)				
	1 437	11 330	9 312	298 103	227 333	1 053 357	963 041	545 554	423 284				
	616	4 247	3 564	80 553	63 083	287 332	268 788	154 475	116 980				
lowa	381	2 630	2 261	59 389	44 516	218 606	205 346	116 949	97 787				
Kansas	343	2 738	2 269	51 134	37 616	173 495	164 681	89 127	77 460				
Kentucky	336	2 232	1 853	36 673	29 537	128 096	113 479	67 505	47 087				
Louisiana	133	972	785	13 175	10 283	59 287	54 232	30 774	23 552				
Maine	245	1 162	982	21 968	17 434	83 865	79 142	47 355	31 787				
Maryland	610	6 944	5 695	132 581	97 551	484 056	438 921	239 836	199 415				
Massachusetts	555	3 173	2 711	73 405	59 325	263 499	243 691	150 240	94 124				
Michigan	1 159	7 126	5 699	164 427	124 410	638 084	579 033	333 438	262 397				
Minnesota	635	3 775	3 031	88 708	66 116	327 895	303 029	174 224	135 605				
Mississippi	136	1 113	933	18 093	14 174	66 492	61 472	39 429	27 500				
Missouri	744	5 030	4 283	99 414	77 906	329 350	309 788	177 880	134 326				
	164	578	512	8 710	7 568	40 825	38 454	22 067	18 754				
	178	1 235	1 091	22 418	17 859	89 442	83 574	46 363	37 758				
	192	2 641	2 352	75 463	60 073	262 344	230 476	131 108	99 369				
	145	603	521	12 532	10 120	43 811	42 321	26 256	16 243				
New Jersey	585	3 788	3 194	101 896	79 144	337 570	313 709	182 542	135 358				
	139	998	835	16 505	12 850	62 044	57 881	32 309	25 572				
	1 332	8 127	6 579	180 763	135 632	660 760	613 897	370 589	252 567				
	680	4 625	3 824	73 077	57 117	269 990	251 611	131 924	124 048				
	93	(D)	364	(D)	(D)	29 353	26 276	12 586	14 154				
Ohio	1 159	9 720	8 263	226 928	183 530	807 378	732 737	389 283	350 857				
	215	1 335	1 145	18 322	14 837	71 829	65 404	42 627	(D)				
	361	2 103	1 699	50 462	38 491	168 068	156 900	97 215	(D)				
	1 158	7 347	6 195	163 767	127 115	606 263	558 776	334 940	230 320				
	106	434	346	9 590	7 529	31 613	27 421	15 911	(D)				
South Carolina South Dakota Tennessee Texas Utah	294	2 203	1 889	32 902	25 015	119 740	110 839	61 304	53 043				
	102	506	445	7 666	6 617	29 841	29 011	16 915	12 143				
	386	2 758	2 240	47 607	33 155	189 476	168 313	99 502	68 982				
	1 420	13 725	11 644	208 667	154 515	815 285	724 629	393 851	332 104				
	246	1 423	1 170	24 991	19 985	89 697	85 658	49 912	36 891				
Vermont	131	413	349	7 985	6 485	27 793	26 920	15 877	12 442				
	661	5 490	4 609	105 792	79 460	345 643	321 344	197 935	128 341				
	826	3 793	3 138	82 764	63 986	265 293	247 618	154 718	96 834				
	123	703	544	11 160	8 565	48 485	42 862	30 152	14 165				
	719	4 614	3 807	106 456	80 775	383 970	363 352	211 449	158 742				
	73	412	367	7 290	6 404	(D)	(D)	(D)	12 198				

		1992—Con.			1987									
Cost of construction work sub-contracted out to others	Value of construction work subcontracted 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††	error (pe	Relative standard error of estimate (percent) for column—		rror of estimate (percent) for		esta	eation of ablish- ent
J	К	L	М	N	0	Р	Q	В	G	М				
1 243 479	8 806 421	312 771	330 208	3 234 505	218 194	15 055 670	8 443 003	1	1	3		U.S.		
8 866	70 923	2 042	2 432	32 845	2 275	117 493	69 076	9	8	17	AL			
*5 100	*23 649	871	835	7 461	264	21 222	12 340	23	38	14	AK			
18 427	288 545	8 728	5 886	61 336	6 984	449 490	236 607	5	4	13	AZ			
6 663	30 618	3 330	4 589	37 193	1 255	61 421	29 399	10	10	24	AR			
259 381	1 568 896	50 313	26 569	345 119	33 363	2 781 887	1 518 217	2	2	8	CA			
23 529	214 405	4 747	8 870	70 345	4 116	216 616	133 900	5	5	14	CO			
7 115	53 691	2 425	2 582	35 576	2 970	234 193	148 811	8	7	39	CT			
5 491	34 201	2 114	969	9 302	931	80 113	41 206	8	7	24	DE			
(D)	1 962	(D)	(D)	(D)	80	*6 827	2 828	(D)	(D)	-	DC			
53 218	427 944	13 837	13 853	132 667	15 711	784 294	455 722	4	4	15	FL			
35 256	231 098	7 067	15 068	104 959	5 805	349 706	195 278	4	5	25	GA			
*5 219	43 440	1 075	2 013	13 223	192	15 599	8 476	9	9	35	HI			
(S)	25 895	(S)	1 478	11 059	385	22 063	12 178	13	14	37	ID			
90 316	625 068	20 563	30 013	241 224	12 599	1 118 152	610 875	3	3	10	IL			
18 544	168 577	3 456	7 264	76 682	3 715	233 190	131 763	5	3	18	IN			
13 260 8 814 14 617 5 055 4 724	124 173 99 950 56 711 24 281 26 472	4 916 5 712 4 083 1 236 741	9 015 5 602 2 539 1 652 2 374	62 674 49 148 27 533 *10 954 33 740	2 319 2 386 2 467 930 1 086	159 876 174 651 122 351 50 788 65 415	84 333 101 367 68 648 27 000 35 026	6 7 6 9	4 7 6 13 9	12 19 17 35 19	IA KS KY LA ME			
45 135	382 232	15 723	7 939	129 379	8 417	533 499	293 854	3	3	12	MD			
19 809	177 484	6 288	4 772	72 157	4 442	320 081	197 318	5	5	13	MA			
59 051	338 297	11 748	14 949	164 034	6 748	582 253	332 759	3	3	10	MI			
24 866	208 936	6 883	12 373	91 723	4 135	339 958	200 254	5	5	12	MN			
5 020	21 360	1 184	1 588	15 091	832	28 282	16 829	14	14	30	MS			
19 561	196 189	5 646	10 053	86 948	6 306	400 481	233 113	5	4	16	MO			
2 371	19 451	665	1 581	8 514	188	8 167	4 955	15	12	39	MT			
5 867	44 383	1 341	2 569	21 366	1 427	66 191	35 031	11	9	21	NE			
31 868	197 010	9 462	5 450	41 223	1 186	94 123	55 118	4	4	7	NV			
1 490	27 607	790	969	12 115	1 485	90 859	52 940	11	13	24	NH			
23 861	185 110	7 236	6 867	84 518	6 635	528 415	299 478	4	4	21	NJ			
4 163	48 227	1 171	2 135	15 151	1 339	74 546	41 571	11	8	26	NM			
46 863	291 023	11 738	8 251	151 390	10 998	952 856	556 442	7	3	14	NY			
18 380	173 247	4 634	8 413	91 107	4 631	247 456	137 446	6	5	20	NC			
3 078	14 909	(S)	1 039	(D)	272	11 407	6 402	(D)	12	31	ND			
74 641	479 412	12 164	19 113	146 325	10 094	732 113	402 440	2	2	10	OH			
6 425	41 233	1 371	*1 487	15 012	1 169	52 610	31 456	10	9	45	OK			
11 168	121 361	4 166	4 313	51 604	1 508	86 577	54 399	7	6	15	OR			
47 487	342 290	14 352	12 889	156 397	7 878	538 348	302 757	3	3	10	PA			
4 191	15 231	1 131	1 083	13 156	716	49 511	34 543	7	6	5	RI			
8 901	66 898	2 143	4 057	55 860	2 201	95 921	54 817	9	8	14	SC			
830	19 614	*377	*4 154	*13 241	642	40 870	18 813	17	19	57	SD			
21 164	87 563	2 938	4 628	46 653	2 285	138 877	70 049	8	6	27	TN			
90 656	486 319	22 581	13 052	106 058	15 107	836 458	428 244	3	4	9	TX			
4 039	39 465	*2 833	2 381	15 026	1 479	78 415	48 728	11	11	18	UT			
873	15 444	830	887	8 486	479	33 392	16 126	12	13	31	VT			
24 298	248 294	11 986	6 111	74 363	7 870	492 301	269 927	4	3	17	VA			
17 676	179 057	6 545	7 527	50 219	3 348	224 176	142 499	5	4	17	WA			
5 622	(S)	(D)	815	10 304	634	42 104	22 503	14	10	32	WV			
20 618	175 412	4 718	14 361	106 831	3 662	257 993	151 330	4	4	17	WI			
(D)	11 969	313	(D)	3 705	224	12 062	7 794	7	(D)	22	WI			

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

Item							dard er (percen	
	1992	1987	1982	1977	1992	1987	1982	1977
Number of establishments in business during year	26 123	23 422	19 986	16 974	1	1	1	2
Proprietors and working partners	11 399	7 166	8 708	11 616	2	3	2	3
All employees**	192 539	218 194	157 241	118 116	1	1	1	1
Construction workers:  March	128 140 170 607 181 828 162 426 160 750	154 271 196 024 209 991 187 138 186 840	106 893 143 276 155 141 136 673 137 832	83 052 114 935 121 509 108 448 107 085	1 1 1 1	1 1 1 1	1 1 1 1 1	1 1 1 1
Other employees:  March	30 890 32 214 32 278 31 774 31 789	31 120 31 639 31 665 30 979 31 353	19 135 (NA) (NA) (NA) (NA)	10 011 (NA) (NA) (NA) (NA)	1 1 1 1	1 1 1 1	1 (NA) (NA) (NA) (NA)	1 (NA) (NA) (NA) (NA)
Payroll, all employees	4 038 030 3 092 990 945 040	4 174 568 3 278 057 896 511	2 309 814 1 901 567 408 247	1 209 879 1 042 622 167 257	1 1 1	1 1 1	1 1 1	1 1 1
First-quarter payroll, all employees	744 645	802 111	418 475	208 082	1	1	1	1
Fringe benefits, all employees	956 198 659 814 296 384	928 542 655 522 273 019	424 267 328 610 95 657	242 954 141 330 101 624	1 1 1	1 1 1	1 1 1	1 1 1
Dollar value of business done	14 596 035 14 422 908 8 806 421 173 128	15 212 049 15 055 670 9 045 744 156 378	8 376 774 8 207 000 4 525 480 169 774	4 151 856 4 097 293 2 712 237 54 564	1 1 1 4	1 1 1 3	1 1 (NA) 1	1 1 (NA) 4
Net value of construction work†	13 179 429	13 853 510	7 447 221	3 862 143	1	1	1	1
Value added††	7 703 117	8 443 003	4 491 568	2 227 880	1	1	1	1
Selected costs	6 892 918 5 282 130 1 243 479 367 309 36 817 14 607 291 651 231 752 59 899 24 234	6 769 045 5 242 978 1 202 160 323 906 28 072 10 223 263 008 215 662 47 345 22 602	3 885 206 2 878 175 759 779 247 251 22 030 11 120 198 489 (NA) (NA) 15 610	1 923 977 1 595 677 235 150 93 150 6 614 3 613 74 480 (NA) (NA) 8 445	1 1 2 1 2 3 1 1 2 3	1 1 1 1 2 3 1 1 2 2	1 1 1 1 1 2 1 (NA) (NA) 3	1 1 1 1 2 2 1 (NA) (NA)
Rental cost for machinery, equipment, and buildings	312 771 225 865 86 906	346 382 277 328 69 054	170 175 143 619 26 556	65 864 56 651 9 213	2 3 3	2 2 3	1 1 2	2 2 2
Selected purchased services  Communication services  Repairs to buildings and other structures  Repairs to machinery and equipment	397 194 100 450 15 243 281 500	332 871 65 724 14 478 252 667	200 254 36 076 7 285 156 892	104 935 32 193 3 380 69 362	2 2 5 2	1 2 4 2	1 2 4 1	9 29 3 2
Ownership of construction projects: Value of construction work Government owned Federal State and local Privately owned	14 422 908 2 738 443 511 794 2 226 649 11 684 465	15 055 670 2 265 359 467 051 1 798 308 12 790 310	8 207 000 1 965 071 (NA) (NA) 6 241 929	4 097 293 373 780 (NA) (NA) 3 723 513	1 2 4 2 1	1 2 3 2 1	1 2 (NA) (NA) 1	1 2 (NA) (NA) 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]

ltem			Relative standard error of estimat (percent)			
	1992	1987	1992	1987		
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT						
Beginning-of-year gross book value of depreciable assets Capital expenditures, other than land New Used Retirements and disposition of depreciable assets	3 058 345 330 208 233 671 96 537 154 048	2 258 782 366 126 285 927 80 199 108 316	2 3 3 5 6	2 2 2 2 4 6		
End-of-year gross book value of depreciable assets	3 234 505	2 516 592	2	2		
Depreciation charges during year	363 320	335 624	2	2		
Buildings and Other Structures, Additions, and Related Facilities						
Beginning-of-year gross book value of depreciable assets	276 592 17 920 11 330 6 590 6 743	319 574 32 314 22 751 9 563 11 234	5 9 10 16 25	4 6 8 10 13		
End-of-year gross book value of depreciable assets	287 770	340 653	5	4		
Depreciation charges during year	23 275	29 804	6	6		
Machinery and Equipment						
Beginning-of-year gross book value of depreciable assets	2 781 753 312 288 222 341 82 765 89 947 147 305	1 939 208 333 812 263 176 126 544 70 635 97 081	2 3 3 4 5 6	2 2 2 2 3 4 6		
End-of-year gross book value of depreciable assets	2 946 736	2 175 938	2	2		
Depreciation charges during year	340 044	305 820	2	2		

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

	, , ,	
ltem	Establishments with payroll	Relative standard error of estimate (percent)
All establishments: Number Value of construction work	26 123 14 422 908	1
Establishments with inventories: Number	4 830 4 260 897	2 1
End of 1992, materials and supplies End of 1991, materials and supplies	77 863 80 605	4
Establishments with no inventories:  Number	11 287 6 848 882	1
Establishments not reporting: NumberValue of construction work	10 006 3 313 129	1 1

<sup>&</sup>lt;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]

					Establishr	nents with an a	average of-			
Selected statistics	Total	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
1992										
Number of establishments  All employees** Payroll, all employees Dollar value of business done Value of construction work Net value of construction work†	26 123 192 539 4 038 030 14 596 035 14 422 908 13 179 429	14 812 31 086 469 164 2 293 932 2 275 555 2 105 418	2 587 058	3 146 40 861 843 906 2 869 857 2 836 436 2 626 711	1 442 42 108 1 031 189 3 393 738 3 344 431 3 040 170	305 20 702 542 893 1 843 374 1 812 368 1 622 531	85 11 633 303 601 1 118 628 1 104 161 961 246	8 2 681 73 143 225 391 218 211 398 755	3 633 62 295 244 688 244 688 (D)	2 (D) (D) (D) (D) (D)
Value added††—————————————————————————————————	7 703 117 5 649 439 1 243 479 312 771 330 208 3 234 505	1 179 615 944 180 170 137 53 031 58 114 533 570	1 389 562 1 054 405 162 460 52 914 63 156 614 428	1 549 340 1 110 792 209 725 56 273 67 410 651 659	1 781 992 1 307 485 304 261 78 749 82 499 798 531	964 740 688 797 189 837 41 222 33 044 340 893	606 141 369 572 142 915 23 865 17 973 219 991	141 972 174 208 64 144 2 605 8 012 50 610	89 755 (D) (D) 4 112 (D) 24 823	(D) (D) (D) (D) (D)
All employees**	218 194 15 055 670 8 443 003	(S) (S) (S)	38 833 2 278 812 1 266 297	44 969 2 849 297 1 647 163	47 630 3 549 510 1 970 800	25 437 2 099 879 1 163 867	21 396 1 735 326 944 376	6 032 879 760 265 008	6 742 (D) 246 405	(D) (D) (D)
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)										
All employees** Net value of construction work† Capital expenditures, other than land	1 1 3	2 3 7	3 3 9	3 2 6	2 1 4	3 1 1	(Z) (Z) (Z)	(Z) (Z) (Z)	(Z) (D) (D)	(D) (D) (D)

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]

		Establishments with dollar value of business done										
Selected statistics	Total	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	
1992												
Number of establishments  All employees** Payroll, all employees Dollar value of business done Value of construction work Net value of construction work†	26 123 192 539 4 038 030 14 596 035 14 422 908 13 179 429	(S) (S) (S) (S) (S) (S) (S)	(S) (S) (S) (S) (S) (S)	(S) (S) (S) (S) (S) (S) (S)	7 756 25 922 333 662 1 251 206 1 242 535 1 177 248	5 505 31 955 552 156 1 932 902 1 924 347 1 834 783	3 292 32 563 628 598 2 272 929 2 247 544 2 117 929	2 033 37 615 892 114 3 048 669 3 010 657 2 758 421	612 22 765 599 286 2 080 003 2 056 758 1 854 544	240 14 907 448 379 1 610 642 1 582 523 1 409 081	113 16 848 499 968 2 056 686 2 017 919 1 701 753	
Value added††Cost of materials, components, supplies, and	7 703 117	(S)	(S)	(S)	690 819	1 061 197	1 214 436	1 629 570	1 068 219	813 809	1 032 989	
fuelsCost of construction work subcontracted out	5 649 439	(S)	(S)	(S)	495 100	782 141	928 878	1 166 863	809 570	623 391	707 531	
to othersRental cost for machinery, equipment, and	1 243 479	(S)	(S)	(S)	65 288	89 564	129 615	252 237	202 214	173 441	316 166	
buildingsCapital expenditures, other than land	312 771 330 208	(S) (S)	(S) (S)	(S) (S)	28 326 28 692	42 119 47 737	48 447 62 115	63 961 73 214	39 799 43 882	35 031 37 658	48 342 29 895	
End-of-year gross book value of depreciable assets	3 234 505	(S)	(S)	(S)	272 864	449 055	544 254	696 513	476 770	351 255	364 543	
1987												
All employees** Value of construction work Value added††	218 194 15 055 670 8 443 003	(S) (S) (S)	(S) (S) (S)	(S) (S) (S)	27 190 1 143 151 676 714	32 021 1 586 537 926 305	32 607 2 071 544 1 157 218	39 960 2 980 374 1 685 131	26 647 2 320 521 1 296 324	19 366 1 687 235 932 277	28 137 2 938 966 1 568 897	
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)												
All employees**Net value of construction work†Capital expenditures, other than land	1 1 3	(S) (S) (S)	(S) (S) (S)	(S) (S) (S)	3 3 8	3 3 8	3 3 8	2 2 7	1 1 3	(Z) 1 1	(Z) (Z) (Z)	

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

# 19–8 CONCRETE WORK

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

		Value of cons	struction work		Relative standard error			
Type of construction	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair	5 5 14 1 1 2 2 2 3 7 7 11 2 2 3			
	А	В	С	D	А	В	С	D
1992								
Value of construction work	14 422 908	9 974 526	2 246 007	2 080 518	1	1	1	2
Building construction Single-family houses Single-family houses, detached Single-family houses, attached, including townhouses and townhouse-type condominiums	9 002 047 4 173 892 3 629 974 543 918	6 947 107 3 447 963 2 991 622	1 162 945 381 710 338 597	891 995 344 219 299 754 44 465	1 2	2 2	3 4	3 4 4 12
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	412 200	456 341 297 136	43 113 37 408	77 655				9
Other residential buildings, including hotels, motels, and tourist cabins Office buildings Other commercial buildings such as stores, restaurants, and automobile service	87 477 606 308	65 929 463 606	10 887 92 594	10 660 50 108	7 2	8 2	9 5	16 6
stations. Industrial buildings and warehouses Industrial buildings. Warehouses Religious buildings Educational buildings Hospitals and institutional buildings Farm buildings, nonresidential Other nonresidential buildings	1 420 884 1 316 171 941 792 374 380 106 632 343 404 349 586 82 868 102 626	1 087 747 894 142 592 348 301 794 71 711 255 513 229 295 59 298 74 767	193 490 233 985 196 736 37 249 21 467 61 683 100 567 13 138 16 015	139 647 188 044 152 707 35 337 13 454 26 208 19 724 10 432 11 845	3 4 3 2 8	2 2 3 5 2 2 8 7	4 4 7 6 5 4 19	6 4 5 9 6 8 6 23 28
Nonbuilding construction	5 299 003	3 027 419	1 083 061	1 188 522	1	1	2	3
signs, lighting, etc. Outdoor swimming pools Private driveways and parking areas Recreational facilities Bridges, tunnels, and elevated highways Sewers, water mains, and related facilities Blast furnaces, petroleum refineries, chemical complexes, etc. Sewage treatment and water treatment plants Other nonbuilding construction	1 378 784 114 152 2 930 267 120 799 164 771 84 785 92 834 116 300 296 310	795 568 94 437 1 574 690 69 755 110 333 60 832 48 639 80 221 192 945	311 080 12 732 596 987 30 281 33 876 15 461 13 170 24 221 45 254	272 137 6 983 758 590 20 763 20 562 8 492 31 025 11 859 58 111	2 8 5 6 5 3	11 2 10 6 7 7 3	20 3 7 3 5 13 3	4 19 4 15 12 11 3 12 10
Construction work, n.s.k.	121 858	(NA)	(NA)	(NA)	8	(NA)	(NA)	(NA)
1987								
Value of construction work	15 055 670	11 376 824	1 586 290	1 442 529	1	1	2	2
Building construction	9 318 387 3 402 452 2 820 963 581 489	7 906 164 2 963 395 2 437 056 526 338	814 656 259 197 231 851 27 345	597 567 179 860 152 055 27 804	1 2	2 2	5 5	3 5 5
condominiums  Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives  Other residential buildings, including hotels, motels, and tourist cabins  Hotels, motels, and tourist cabins  Other residential buildings  Office buildings	779 680 446 670 241 110 205 560 1 340 326	696 792 397 637 220 360 177 276 1 206 300	32 837 28 296 13 086 15 210 81 088	50 050 20 735 7 662 13 073 52 938	3 2 3 3		4 7 7 12	7 10 10 14 4
Other commercial buildings such as stores, restaurants, and automobile service stations	1 159 451 1 458 714 982 416 476 297 210 194 241 398 279 502	954 890 1 174 108 768 880 405 227 149 094 167 485 196 463	127 518 147 931 103 408 44 523 43 592 59 646 34 551	77 042 136 674 110 127 26 546 17 507 14 266 48 495	4 2	2	4 5 7 6 3	6 4 5 11 7 9 11
Nonbuilding construction	5 087 257	3 470 661	771 634	844 961	1	1	2	2
signs, lighting, etc.  Outdoor swimming pools  Private driveways and parking areas  Sewers, water mains, and related facilities  Sewage treatment and water treatment plants  Other nonbuilding construction	1 399 526 150 170 2 729 423 102 224 98 400 607 514	965 779 126 598 1 785 741 80 944 70 823 440 776	233 300 10 494 435 681 9 704 10 416 72 039	200 447 13 077 508 001 11 575 17 159 94 702		2 7 2 8 19 (NA)	11	3 9 3 14 24 (NA)
Construction work, n.s.k.	650 026	(NA)	(NA)	(NA)	4	(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]

see appendix A]											
ltem	Number of			wc	onstruction ork For	Net value of		Cost of construction work sub-	stan of	Relative dard e estima rcent)	error ate
Kom	establish- ments	All employees**	Payroll, all employees	For all types	specialized type	construction work†	Value added††	contracted out to others		olumn'	
	А	В	С	D	Е	F	G	Н	В	D	Н
All establishments	26 123	192 539	4 038 030	14 422 908	9 268 860	13 179 429	7 703 117	1 243 479	1	1	2
Establishments not specializing by type Establishments specializing 51 percent or more	4 359 21 764	48 182 144 358	1 100 808 2 937 223	3 641 387 10 781 521	(NA) 9 268 860	3 301 973 9 877 456	2 014 800 5 688 317	339 414 904 065	2	1	2 2
SINGLE-FAMILY HOUSES, DETACHED											
All establishments specializing in type	9 471	53 216	960 341	3 488 214	3 046 380	3 310 094	1 832 104	178 120	2	2	4
Establishments with —  100 percent specialization — 90 to 99 percent specialization — 80 to 89 percent specialization — 70 to 79 percent specialization — 60 to 69 percent specialization — 51 to 59 percent specialization	4 593 1 660 1 203 1 053 709 253	21 326 11 021 8 042 5 894 5 229 1 703	363 792 213 587 135 980 104 956 106 314 35 711	1 328 218 784 020 515 540 381 203 349 259 129 975	1 328 218 727 045 425 242 278 882 216 912 70 082	1 262 906 739 157 488 493 366 759 331 240 121 540	695 052 390 864 268 858 208 610 200 730 67 990	65 311 44 863 27 048 14 444 18 019 8 435	3 5 7 6 6 12	3 5 5 5 5 10	8 13 6 10 6 13
SINGLE-FAMILY HOUSES, ATTACHED, INCLUDING TOWNHOUSES AND TOWNHOUSE-TYPE CONDOMINIUMS											
All establishments specializing in type	694	4 571	84 265	299 300	256 719	278 573	154 420	20 727	8	7	18
Establishments with — 100 percent specialization	336 (S) 56 67 (S) (S)	2 117 662 439 311 637 405	38 139 11 895 8 291 6 052 11 886 8 001	134 459 41 012 32 364 26 313 40 815 24 337	134 459 38 344 26 667 19 285 25 141 12 823	122 257 38 937 31 223 25 019 38 144 22 994	73 991 18 694 13 908 13 874 21 218 12 734	12 201 (S) 1 141 1 294 2 671 1 344	12 17 20 27 20 24	11 15 20 32 15 18	30 (S) 32 27 13 19
APARTMENT BUILDINGS WITH TWO OR MORE UNITS, INCLUDING RENTALS, APARTMENT-TYPE CONDOMINIUMS, AND COOPERATIVES											
All establishments specializing in type	273	2 616	59 619	197 266	161 395	174 540	108 467	22 727	9	8	14
Establishments with —  100 percent specialization	86 22 45 73 36 11	702 432 288 554 308 333	20 541 9 702 5 891 10 449 5 727 7 309	64 837 24 823 20 702 37 866 28 297 20 741	64 837 22 521 17 430 27 808 17 715 11 082	57 684 22 603 18 668 34 997 22 802 17 786	35 228 18 437 8 629 22 018 12 974 11 180	7 152 2 220 *2 034 2 869 *5 495 2 955	13 18 28 25 29 13	9 19 31 22 31 13	4 24 47 39 51 9
OFFICE BUILDINGS											
All establishments specializing in type	240	2 469	66 105	219 482	168 549	193 339	115 961	26 143	7	4	3
Establishments with — 100 percent specialization	(S) *17 (S) 22 35 2	671 (D) 483 513 575 (D)	14 848 (D) 11 163 18 492 17 009 (D)	49 692 (D) 29 145 60 196 68 165 (D)	49 692 (D) 23 743 43 426 41 806 (D)	44 156 (D) (D) 53 454 (D) (D)	28 326 (D) 18 943 35 056 26 189 (D)	5 536 *267 (D) 6 742 (D) (D)	17 (D) 19 7 10 (D)	9 (D) 13 7 6 (D)	7 65 (D) 9 (D) (D)
OTHER COMMERCIAL BUILDINGS SUCH AS STORES, RESTAURANTS, AND AUTOMOBILE SERVICE STATIONS											
All establishments specializing in type	1 294	11 818	247 482	895 564	742 152	803 054	476 022	92 510	4	4	5
Establishments with	498 181 144 182 209 81	4 240 1 668 1 549 1 499 1 639 1 223	87 778 35 420 30 602 27 968 33 640 32 075	336 334 128 081 107 467 96 426 108 197 119 059	336 334 118 305 87 375 69 793 66 795 63 550	297 584 119 362 95 436 88 303 95 421 106 948	180 941 68 413 48 970 50 666 52 696 74 336	38 750 8 719 12 032 8 123 12 776 12 111	7 10 11 15 12 11	6 11 10 14 9 7	9 21 15 22 12 5
INDUSTRIAL BUILDINGS											
All establishments specializing in type	705	7 482	172 240	566 302	456 419	475 054	308 531	91 248	5	5	7
Establishments with —  100 percent specialization	261 (S) 45 130 126 67	2 509 (S) 605 1 346 1 380 702	58 333 16 764 15 713 32 896 32 078 16 456	183 385 49 865 53 596 121 248 98 591 59 618	183 385 46 064 44 084 89 060 61 753 32 073	155 732 40 558 39 791 102 708 88 529 47 736	101 356 31 504 23 989 64 361 56 918 30 402	27 652 (S) 13 806 18 541 10 062 11 881	8 (S) 15 13 12 12	8 10 10 13 14 7	16 (S) 6 22 18 3
WAREHOUSES											
All establishments specializing in type	168	1 822	40 935	131 290	104 482	121 290	66 827	10 000	9	6	14
Establishments with —  100 percent specialization — 90 to 99 percent specialization — 80 to 89 percent specialization — 70 to 79 percent specialization — 60 to 69 percent specialization — 51 to 59 percent specialization	74 23 32 *18 15 7	632 207 263 224 249 248	12 165 6 205 4 843 2 925 6 278 8 520	36 290 20 422 17 668 9 353 22 553 25 004	36 290 18 451 14 851 6 679 14 513 13 698	35 540 18 477 15 471 8 017 20 257 23 529	24 629 5 157 9 539 4 215 11 185 12 103	750 1 945 2 197 *1 336 *2 296 1 475	18 25 24 36 20 (Z)	10 14 16 35 23 (Z)	26 15 22 64 42 (Z)

# 19-10 CONCRETE WORK

CONSTRUCTION-INDUSTRY SERIES

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

[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]

see appendix A]											
	Novel or of			Value of co		Net		Cost of construction	star of	Relative	error ate
Item	Number of establish- ments	All employees**	Payroll, all employees	For all types	For specialized type	value of construction work†	Value added††	work sub- contracted out to others		rcent) olumn	
	А	В	С	D	Е	F	G	Н	В	D	Н
EDUCATIONAL BUILDINGS											
All establishments specializing in type	134	1 681	44 814	112 995	85 599	101 102	70 910	11 893	8	7	13
Establishments with — 100 percent specialization	31	435 82 302 295 391 177	13 566 1 509 6 310 6 837 10 865 5 726	26 436 2 516 23 179 18 508 27 354 15 002	26 436 2 282 18 662 13 295 16 632 8 292	24 961 (D) 17 991 17 100 24 814 (D)	19 973 (S) 15 893 10 780 14 684 8 079	1 475 (D) 5 188 1 409 2 540 (D)	9 9 24 30 8 31	1 7 27 15 10 13	(Z) (D) 30 26 4 (D)
HOSPITALS AND INSTITUTIONAL BUILDINGS											
All establishments specializing in type	90	1 331	38 243	108 101	92 718	91 682	55 160	16 419	7	4	4
Establishments with —  100 percent specialization	*7 *15	304 125 401 236 266	10 376 3 316 11 581 7 132 5 838	38 980 (D) 30 519 16 987 (D)	38 980 (D) 24 985 12 464 (D)	(D) (D) 27 098 14 690 12 249	16 777 4 580 14 831 9 631 9 341	(D) (D) 3 421 2 297 (D)	7 20 15 17 20	5 (D) 5 15 (D)	(D) (D) 4 25 (D)
HIGHWAYS, STREETS, AND RELATED WORK SUCH AS INSTALLATION OF GUARD RAILS, HIGHWAY SIGNS, LIGHTING, ETC.											
All establishments specializing in type	1 179	10 380	239 859	844 328	762 454	783 157	442 236	61 171	4	3	6
Establishments with — 100 percent specialization	231 94	5 621 1 571 1 467 900 593 228	121 066 36 691 36 800 23 119 16 892 5 292	420 118 139 511 125 445 89 058 52 617 17 579	420 118 130 078 103 527 65 249 33 745 9 737	392 689 127 512 118 512 81 003 47 748 15 693	223 469 71 201 62 055 47 318 28 524 9 668	27 429 11 999 6 933 8 055 4 869 1 886	7 11 7 10 12 25	6 10 5 8 8 18	11 14 5 6 2 13
OUTDOOR SWIMMING POOLS											
All establishments specializing in type	158	1 374	29 799	95 510	91 587	94 539	54 130	971	13	12	20
Establishments with —  100 percent specialization —  90 to 99 percent specialization —  80 to 89 percent specialization —  70 to 79 percent specialization —  60 to 69 percent specialization —  51 to 59 percent specialization —	*29 *4 -	1 072 217 (S) - *54	22 924 5 128 (S) 1 097	70 095 16 840 (S) - *5 485	70 095 15 535 (S) - *3 485	69 420 (D) (S) (D)	40 754 9 671 *685 - *3 020	675 (D) - - (D)	15 29 (S) - 56	15 26 (S) - 46 -	29 (D) - (D)
PRIVATE DRIVEWAYS AND PARKING AREAS											
All establishments specializing in type	5 785	36 099	750 751	3 039 189	2 613 127	2 762 478	1 587 717	276 711	2	2	5
Establishments with —  100 percent specialization — 90 to 99 percent specialization — 80 to 89 percent specialization — 70 to 79 percent specialization — 60 to 69 percent specialization — 51 to 59 percent specialization	4 045 520 343 322 389 165	20 258 3 572 2 543 3 098 4 120 2 509	376 459 76 331 56 023 74 871 98 444 68 623	1 522 649 295 782 252 740 273 536 395 651 298 831	1 522 649 275 433 209 056 200 407 245 371 160 212	1 392 313 274 160 229 666 241 739 363 788 260 813	795 883 156 143 132 589 131 045 206 889 165 169	130 336 21 622 23 074 31 797 31 863 38 018	3 7 7 8 5 6	3 7 7 6 4 4	11 12 16 4 4 3
RECREATIONAL FACILITIES											
All establishments specializing in type	199	1 173	24 721	103 422	93 601	89 636	50 865	13 786	11	9	8
Establishments with —  100 percent specialization	135 (S) 1 *18 - 2	664 235 (D) *175 - (D)	13 215 5 555 (D) 3 569 (D)	52 705 25 308 (D) 15 799 (D)	52 705 23 126 (D) 11 399 (D)	46 527 22 365 (D) 12 995 (D)	25 814 12 614 (D) 6 123 (D)	6 179 2 943 (D) 2 804 - (D)	14 25 (D) 40 – (D)	13 16 (D) 35 - (D)	8 9 (D) 33 - (D)
CHEMICAL COMPLEXES, ETC.  All establishments specializing in type	35	961	24 965	91 824	76 218	78 696	50 652	13 128	9	6	9
Establishments with —  100 percent specialization	10 1 9 *9 2 *4	334 (D) 165 302 (D) (D)	8 523 (D) 5 544 5 330 (D) (D)	35 033 (D) 23 151 15 484 (D) (D)	35 033 (D) 18 959 11 457 (D) (D)	31 304 (D) (D) 14 316 (D) *6 457	16 123 (D) 14 928 11 037 (D)	3 729 (D) (D) 1 168 (D) (D)	6 (D) 21 23 (D) (D)	6 (D) 8 16 (D) (D)	18 (D) (D) 35 (D) (D)

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

	Construction workers <sup>1</sup>									l error o	of estim	ate
Location of establishment	Number of establishments	number of construction workers	January to March	April to June	July to September	October to December			cent) fo			
	А	В	С	D	Е	F	А	В	С	D	Е	F
United States	26 123	160 750	128 140	170 607	181 828	162 426	1	1	1	1	1	1
Alabama	279	2 033	1 798	2 207	2 209	1 916	9	9	8	9	9	11
	43	222	(D)	243	324	(D)	20	26	(D)	25	24	(D)
	421	4 547	4 251	4 618	4 867	4 454	6	5	5	5	5	5
	197	1 345	1 198	1 365	1 433	1 383	8	10	11	10	10	11
	3 017	21 565	20 371	22 467	22 642	20 780	2	2	2	2	2	2
Colorado	618	4 481	3 474	4 659	5 211	4 580	5	5	5	5	5	6
	356	1 246	660	1 246	1 607	1 470	6	7	10	7	8	10
	106	766	642	792	883	747	11	9	11	9	9	10
	*12	166	(D)	157	174	(D)	45	7	(D)	7	6	(D)
	1 470	8 324	8 091	8 860	8 445	7 901	4	4	4	4	4	4
Georgia Hawaii Ilinois Indiana	528 64 195 1 437 616	4 301 484 769 9 312 3 564	3 831 467 598 5 994 2 561	4 406 482 783 10 191 3 706	4 540 475 875 11 203 4 223	4 425 511 820 9 858 3 768	6 17 8 3 4	5 9 13 3 5	5 9 15 4 6	5 9 13 3 5	6 10 13 3 5	5 10 15 3 6
lowa Kansas Kentucky Louisiana Maine	381 343 336 133 245	2 261 2 269 1 853 785 982	1 432 1 835 1 402 695 473	2 590 2 483 1 954 868 1 098	2 782 2 595 2 084 903 1 351	2 239 2 163 1 972 672 1 008	6 6 6 7 9	6 7 6 9	7 7 8 10 10	7 7 6 9 10	6 7 7 12 9	6 7 6 13 10
Maryland	610	5 695	4 706	6 016	6 415	5 645	6	3	3	3	3	4
	555	2 711	1 691	2 850	3 230	3 074	6	5	7	5	6	5
	1 159	5 699	3 045	6 380	7 227	6 142	4	3	5	4	3	3
	635	3 031	1 536	3 576	4 014	2 998	5	5	8	5	5	6
	136	933	856	897	1 057	924	13	15	14	12	19	19
Missouri Montana	744 164 178 192 145	4 283 512 1 091 2 352 521	3 604 393 823 2 224 341	4 583 522 1 294 2 360 556	4 978 618 1 294 2 512 654	3 969 515 952 2 310 534	5 10 11 7 11	5 15 11 5 12	5 15 14 5 16	5 16 12 5 11	5 15 12 5 10	5 16 11 5 12
New Jersey New Mexico New York North Carolina North Dakota	585	3 194	2 394	3 425	3 720	3 238	6	5	5	4	5	5
	139	835	756	855	860	869	12	11	12	10	12	12
	1 332	6 579	3 898	7 157	8 019	7 242	4	7	11	6	6	10
	680	3 824	3 384	3 965	4 048	3 900	5	5	5	5	5	6
	93	364	216	398	475	369	11	11	12	11	11	14
OhioOklahoma	1 159	8 263	5 567	8 873	9 670	8 943	3	2	3	3	3	3
Oklahoma	215	1 145	933	1 359	1 273	1 015	9	10	11	16	10	10
Oregon	361	1 699	1 561	1 714	1 833	1 687	6	7	7	7	8	9
Pennsylvania	1 158	6 195	4 378	6 724	7 160	6 518	4	3	4	3	3	3
Rhode Island	106	346	170	423	433	357	10	6	11	6	7	6
South Carolina South Dakota Tennessee Texas Utah	294	1 889	1 711	1 981	1 980	1 886	8	9	10	9	9	10
	102	445	271	525	534	452	12	17	18	18	18	17
	386	2 240	1 887	2 280	2 370	2 423	7	9	9	8	9	9
	1 420	11 644	10 982	12 088	12 213	11 291	3	3	4	4	4	3
	246	1 170	900	1 264	1 386	1 129	6	10	11	10	9	10
Vermont Virginia Washington West Virginia Wisconsin Wyoming	131	349	201	396	465	334	12	13	14	14	12	17
	661	4 609	4 066	4 637	5 033	4 699	5	4	4	4	4	4
	826	3 138	2 977	3 205	3 388	2 984	4	5	5	5	5	6
	123	544	342	494	739	601	10	14	16	13	14	18
	719	3 807	1 980	4 228	4 982	4 038	5	4	6	4	5	5
	73	367	271	409	420	365	9	7	8	7	7	6

<sup>&</sup>lt;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

					Ì					
Location of construction work		Construction establishmen this	work done by its located in State	Construction work done by establishments not located in this State		1987	Percent change 1987	Relative standard error of estimate (percent) for		
Eccation of Constitution work	Value of construction work done in this State	Number	Value of construction work	Number	Value of construction work	value of construction work done in this State	(col F) to 1992 (col A)		olumn —	
	А	В	С	D	Е	F	G	Α	С	Е
United States	14 422 908	26 042	13 598 629	2 898	824 279	15 055 671	-4.2	1	1	2
Alabama	122 567	279	105 796	63	16 770	102 097	20.0	7	7	13
	*31 838	43	*31 038	(S)	(S)	18 156	75.4	43	44	(S)
	353 631	405	340 627	14	13 003	459 107	–23.0	4	4	3
	115 216	197	93 159	47	22 057	58 797	96.0	8	10	11
	2 234 054	3 016	2 208 016	48	26 038	2 769 038	–19.3	2	2	10
Colorado Connecticut Delaware District of Columbia Florida	365 793	617	359 747	22	6 046	212 859	71.8	6	6	3
	113 687	355	104 129	46	9 558	230 866	-50.8	7	7	7
	47 285	106	41 651	50	5 634	75 824	-37.6	6	7	11
	40 582	(S)	(D)	78	(D)	108 966	-62.8	1	(D)	(D)
	624 985	1 469	605 108	54	19 877	807 487	-22.6	4	4	5
Georgia Hawaii	344 037	528	320 798	114	23 238	351 354	-2.1	5	5	10
	61 138	64	59 722	*18	*1 416	15 308	299.4	12	12	53
	65 593	(S)	60 719	28	4 874	26 954	143.4	14	15	37
	1 077 040	1 431	1 036 545	81	40 495	1 129 414	-4.6	2	3	3
	298 527	613	278 977	111	19 551	270 655	10.3	3	3	8
lowa	211 833	381	194 070	78	17 763	141 964	49.2	5	5	27
Kansas	136 973	340	125 071	37	11 902	160 514	-14.7	7	8	13
Kentucky	166 220	336	121 062	116	45 159	140 794	18.1	5	7	3
Louisiana	63 027	131	52 250	34	10 777	66 626	-5.4	10	12	10
Maine	83 708	245	80 623	32	3 085	60 799	37.7	8	9	27
Maryland	428 591	604	391 285	123	37 305	410 596	4.4	3	4	9
	258 821	553	250 508	66	8 313	334 941	-22.7	5	5	11
	635 260	1 159	626 196	52	9 064	560 115	13.4	3	3	20
	322 957	633	315 979	65	6 978	345 086	-6.4	5	5	15
	77 564	136	63 589	44	13 975	34 280	126.3	12	14	17
Missouri	322 357	742	303 685	74	18 672	365 083	-11.7	4	4	22
	41 507	164	40 646	15	860	9 886	319.9	12	12	14
	83 546	178	78 407	31	5 139	60 357	38.4	9	10	39
	258 655	192	247 979	42	10 676	102 765	151.7	4	4	7
	45 250	144	37 756	73	7 494	100 002	-54.8	12	14	23
New Jersey	349 598	575	321 975	103	27 623	565 111	-38.1	4	4	9
	64 506	131	60 719	29	*3 787	79 926	-19.3	8	8	49
	662 854	1 331	642 832	107	20 022	944 022	-29.8	3	3	15
	291 836	680	264 668	70	27 168	267 268	9.2	5	5	5
	29 275	93	24 991	9	4 284	14 863	97.0	12	14	4
Ohio Oklahoma Oregon Pennsylvania Rhode Island	676 009	1 158	653 102	114	22 907	646 260	4.6	2	2	5
	73 522	215	66 994	35	6 529	57 256	28.4	9	10	11
	168 127	353	158 963	41	9 164	88 027	91.0	6	6	16
	629 047	1 157	582 787	112	46 260	526 444	19.5	3	3	2
	33 552	106	27 886	39	5 666	45 382	–26.1	6	7	5
South Carolina	127 687	290	112 400	66	15 287	106 552	19.8	7	8	7
	31 324	102	28 225	23	3 099	45 337	-30.9	17	18	34
	182 099	386	164 341	57	17 758	187 971	-3.1	6	7	8
	824 117	1 420	784 956	69	39 161	763 458	7.9	4	4	5
	90 183	246	87 793	*15	2 389	70 723	27.5	11	11	34
Vermont	26 602	131	25 875	5	727	30 451	-12.6	13	13	34
	377 033	661	301 502	147	75 531	545 940	-30.9	3	4	3
	286 915	826	254 791	37	32 124	233 812	22.7	4	4	2
	59 800	123	46 307	81	13 493	46 474	28.7	8	9	16
	379 483	718	369 685	54	9 798	246 127	54.2	4	4	6
	27 096	73	(D)	27	(D)	13 555	99.9	7	(D)	(D)

# 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 o			of estimate (percent)	
Filliary and other kind of business activities	1992	1987	1992	1987	
All kinds of business	14 596 035	15 212 049	1	1	
HEAVY CONSTRUCTION OTHER THAN BUILDING CONSTRUCTION—CONTRACTORS					
Heavy construction contractor	74 998 86 691 1 451 284	85 533 117 264 864 799	5 5 3	6 5 4	
SPECIAL TRADE CONTRACTORS					
Asphalt contractor, private driveways and parking areasConcrete contractor, except paving of roads, highways, and streetsCulvert and curb construction contractor.	2 196 906 6 373 732 1 007 883	2 379 783 7 573 021 234 340	2 1 3	2 1 7	
Excavating, earth and land clearing contractor, connected with buildings ————————————————————————————————————	81 051 2 439 985 241 657	(NA) 2 826 522 180 715	7 2 7	(NA) 2 5	
Other construction activities	464 021	592 703	3	(NA)	
Other business activities	168 440	165 694	4	(NA)	
Kind of business activity, n.s.k.	9 387	191 672	16	8	

# 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
AVERAGE PER ESTABLISHMENT			
Number of employees** Number of construction workers. Number of all other employees Payroll, all employees Payroll, construction workers do-Payroll, other employees do-Payroll, other employees	7.4 6.2 1.2 154.6 118.4 36.2	9.3 8.0 1.3 178.2 140.0 38.3	1 1 1 1 1 1
Dollar value of business done	558.7 552.1 216.3 47.6 12.0 12.6 123.8	649.5 642.8 237.7 51.3 14.8 15.6 107.5	1 1 1 2 2 2 3 2
AVERAGE PER EMPLOYEE			
Payroll, all employees       \$1,000_         Dollar value of business done       do_         Value added††       do_	21.0 75.8 40.0	19.1 69.7 38.7	(Z) 1 1
AVERAGE PER CONSTRUCTION WORKER			
Payroll, construction workers \$1,000_ Value of construction work dodo	19.2 89.7	17.5 80.6	(Z) 1
AVERAGE PER OTHER EMPLOYEE			
Payroll, other employees\$1,000	29.7	28.6	1
AVERAGE PER DOLLAR VALUE OF CONSTRUCTION WORK			
Payroll, all employees	.280 .392 .086 .611 .022	.277 .370 .080 .601	(Z) (Z) 1 1 2

# 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]

				Average per dollar value of construction work				
Location of establishment	Average number of employees** per estab- lishment	Payroll per employee (\$1,000)	Value of construction work per construction worker (\$1,000)	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
United States	7.4	21.0	89.7	.280	.392	.086	.611	.022
Alabama	8.4	15.3	61.5	.287	.371	.071	.567	.016
	6.0	32.5	139.8	.270	.388	.164	.762	.028
	13.0	19.3	80.1	.290	.452	.051	.793	.024
	8.2	15.3	71.7	.256	.400	.069	.318	.035
	8.6	24.8	103.1	.289	.351	.117	.706	.023
Colorado Connecticut Delaware District of Columbia Florida	8.5	20.1	83.6	.279	.411	.063	.572	.013
	4.2	22.8	85.6	.322	.320	.067	.503	.023
	8.5	18.4	66.5	.324	.338	.108	.671	.042
	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	6.9	18.2	75.0	.297	.355	.085	.686	.022
Georgia Hawaii Idaho Illinois Indiana	9.7	18.8	81.3	.275	.358	.101	.661	.020
	9.3	28.8	123.4	.287	(D)	.087	.727	.018
	4.4	17.1	80.7	.237	(D)	(S)	.417	(S)
	7.9	26.3	113.1	.283	.402	.086	.593	.020
	6.9	19.0	80.6	.280	.407	.065	.587	.012
lowa Kansas	6.9 8.0 6.7 7.3 4.7	22.6 18.7 16.4 13.6 18.9	96.7 76.5 69.1 75.5 85.4	.272 .295 .286 .222 .262	.447 .446 .368 .397 .379	.061 .051 .114 .085 .056	.568 .576 .443 .410 .316	.022 .033 .032 .021 .009
Maryland Massachusetts Michigan Minnesota Mississippi	11.4	19.1	85.0	.274	.412	.093	.790	.032
	5.7	23.1	97.2	.279	.357	.075	.674	.024
	6.2	23.1	112.0	.258	.411	.093	.530	.018
	5.9	23.5	108.2	.271	.414	.076	.637	.021
	8.2	16.3	71.3	.272	.414	.075	.321	.018
Missouri	6.8	19.8	76.9	.302	.408	.059	.596	.017
	3.5	15.1	79.7	.213	.459	.058	.476	.016
	6.9	18.2	82.0	.251	.422	.066	.496	.015
	13.7	28.6	111.5	.288	.379	.121	.751	.036
	4.2	20.8	84.1	.286	.371	.034	.630	.018
New Jersey New Mexico New York North Carolina North Dakota	6.5	26.9	105.7	.302	.401	.071	.548	.021
	7.2	16.5	74.3	.266	.412	.067	.777	.019
	6.1	22.2	100.4	.274	.382	.071	.440	.018
	6.8	15.8	70.6	.271	.459	.068	.642	.017
	(D)	(D)	80.6	(D)	.482	.105	.508	(S)
Ohio Oklahoma Oregon Pennsylvania Rhode Island	8.4	23.3	97.7	.281	.435	.092	.594	.015
	6.2	13.7	62.7	.255	(D)	.089	.574	.019
	5.8	24.0	98.9	.300	(D)	.066	.722	.025
	6.3	22.3	97.9	.270	.380	.078	.565	.024
	4.1	22.1	91.4	.303	(D)	.133	.482	.036
South Carolina South Dakota Tennessee Texas Utah	7.5	14.9	63.4	.275	.443	.074	.559	.018
	5.0	15.2	67.1	.257	.407	.028	.657	.013
	7.2	17.3	84.6	.251	.364	.112	.462	.016
	9.7	15.2	70.0	.256	.407	.111	.597	.028
	5.8	17.6	76.7	.279	.411	.045	.440	*.032
Vermont	3.1	19.3	79.6	.287	.448	.031	.556	.030
	8.3	19.3	75.0	.306	.371	.070	.718	.035
	4.6	21.8	84.5	.312	.365	.067	.675	.025
	5.7	15.9	89.1	.230	.292	.116	(S)	(D)
	6.4	23.1	100.9	.277	.413	.054	.457	.012
	5.6	17.7	(D)	(D)	(D)	(D)	(D)	(D)

# Appendix A. **Explanation of Terms**

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

- 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.
- 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.

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- 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
15	BUILDING CONSTRUCTION—GENERAL CONTRACTORS AND OPERATIVE BUILDERS	17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS—Con.
152	General Building Contractors—Residential Buildings	<b>173</b> 1731	Electrical Work Special Trade Contractors Electrical Work Special Trade Contractors
1521 1522	General Contractors—Single-Family Houses General Contractors—Residential Buildings, Other Than Single-Family	174	Masonry, Stone Work, Tile Setting, and Plastering Special Trade Contractors
<b>153</b> 1531	Operative Builders Operative Builders	1741 1742	Masonry, Stone Setting, and Other Stone Work Special Trade Contractors Plastering, Drywall, Acoustical, and Insulation
154	General Building Contractors—Nonresidential Buildings	1743	Work Special Trade Contractors Terrazzo, Tile, Marble, and Mosaic Work
1541	General Contractors—Industrial Buildings and Warehouses	4	Special Trade Contractors
1542	General Contractors—Nonresidential Buildings, Other Than Industrial Buildings and Warehouses	<b>175</b> 1751	Carpentry and Floor Work Special Trade Contractors Carpentry Work Special Trade Centractors
16	HEAVY CONSTRUCTION OTHER THAN BUILDING CONSTRUCTION—CONTRACTORS	1752	Carpentry Work Special Trade Contractors Floor Laying and Other Floor Work Special Trade Contractors, Not Elsewhere Classified
161	Highway and Street Construction, Except Elevated Highways	176	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
1611	Highway and Street Construction Contractors, Except Elevated Highways	1761	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
162	Heavy Construction, Except Highway and Street Construction	177	Concrete Work Special Trade Contractors
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> 1781	Water Well Drilling Special Trade Contractors Water Well Drilling Special Trade Contractors
1629	Heavy Construction Contractors, Not Elsewhere Classified	179	Miscellaneous Special Trade Contractors
17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS	1791 1793	Structural Steel Erection Special Trade Contractors Glass and Glazing Work Special Trade
171	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1794	Contractors Excavation Work Special Trade Contractors
1711	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1795	Wrecking and Demolition Work Special Trade Contractors Installation or Erection of Building Equipment,
172	Painting and Paper Hanging Special Trade Contractors	1796	Special Trade Contractors, Not Elsewhere Classified
1721	Painting and Paper Hanging Special Trade Contractors	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 JOBNAME: No Job Name PAGE: 1 SESS: 29 OUTPUT: Tue Apr 4 08:18:14 1995 / pssw01/ disk2/ economic/ cc92i/ 00/ 07txtpub

# **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) [F

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.