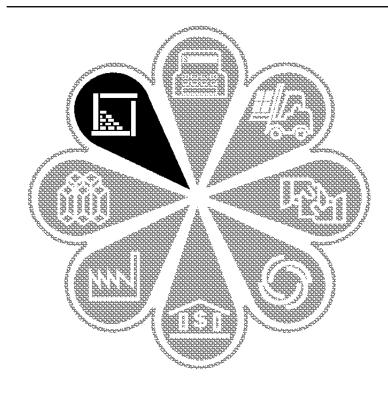
1992 Census of Construction Industries

CC92-I-21

INDUSTRY SERIES

Structural Steel Erection Special Trade Contractors

Industry 1791



1992 Census of Construction Industries

CC92-I-21

INDUSTRY SERIES

Structural Steel Erection Special Trade Contractors

Industry 1791

Issued June 1995



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

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

> BUREAU OF THE CENSUS Martha Farnsworth Riche, Director

Acknowledgments

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

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

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

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

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

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

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

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

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

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



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



BUREAU OF THE CENSUS Martha Farnsworth Riche, Director Harry A. Scarr, Deputy Director

 Paula J. Schneider, Principal Associate Director for Programs
 Frederick T. Knickerbocker, Associate Director for Economic Programs
 Thomas L. Mesenbourg, Assistant Director for Economic Programs

ECONOMIC PLANNING AND COORDINATION DIVISION John P. Govoni, Chief

MANUFACTURING AND CONSTRUCTION DIVISION David W. Cartwright, Chief

For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

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

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

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

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

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

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

AUTHORITY AND SCOPE

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

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

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

AVAILABILITY OF THE DATA

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

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

WHAT'S NEW IN 1992

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

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

HISTORICAL INFORMATION

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1963, 1958, and 1954. Prior to that time, the individual subcomponents of the economic census were taken separately at varying intervals. The economic census traces its beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for 1840 and subsequent censuses to include mining and some commercial activities. In 1902, Congress established a permanent Census Bureau and directed that a census of manufactures be taken every 5 years. The 1905 Manufactures Census was the first time a census was taken apart from the regular every-10-year population census.

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

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

The range of industries covered in the economic censuses has continued to expand. The census of construction industries began on a regular basis in 1967, and the scope of service industries was broadened in 1967, 1977, and 1987. The census of transportation began in 1963 as a set of surveys covering travel, transportation of commodities, and trucks, but expanded in 1987 to cover business establishments in several transportation industries. For 1992, these statistics are incorporated into a broadened census of transportation, communications, and utilities. Also new for 1992 is the census of financial, insurance, and real estate industries. This is part of a gradual expansion in coverage of industries previously subjected to government regulation. The Survey of Minority-Owned Business Enterprises was first conducted as a special project in 1969 and was incorporated into the economic census in 1972 along with the Survey of Women-Owned Businesses.

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

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

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

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

SOURCES FOR MORE INFORMATION

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

Census of Construction

GENERAL

The 1992 Census of Construction Industries covers all employer establishments (establishments with payroll) primarily engaged in contract construction or construction on their own account for sale as defined in the *Standard Industrial Classification Manual: 1987*^{–1} (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:

- 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

¹Standard 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 fourdigit 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 fourdigit 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:

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

- where: x'_{c} 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, is the selection probability of that firm.
 - n c is the number of firms in the sample for the cell.

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

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

relative standard error also partially reflects the effect of random errors of response and processing, but it does not take into account the effect of any consistent biases due to those types of errors. The chances are about 68 out of 100 that an estimate from the sample would differ from a complete census by less than the relative standard error. The chances are about 95 out of 100 that the difference is less than twice the relative standard error and about 99 out of 100 that it is less than 2-1/2 times the relative standard 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.)
- (D) Withheld to avoid disclosing data for individual companies; data are included in higher level totals.
- (NA) Not available.
- (S) Withheld because estimate did not meet publication standards on the basis of either the response rate, associated relative standard error, or a consistency review.
- (X) Not applicable.
- (Z) Less than half of the unit shown.
- n.s.k. Not specified by kind.

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

Statistics	For the United States	By State	By employment size	By size class of dol- lar value of busi- ness done	By type, class, kind of business, and location of construction ¹	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	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 2 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 2	1 1	5	6		8
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 Value of construction work, total For work subcontracted in from others Other business receipts Net value of construction work	2, 11 1, 2, 4, 7, 8, 10 1, 2 2 1, 2, 8	1, 10	5 5 5	6	11 7, 10	8
Value added	1, 2, 8	1	5	6		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.

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

Contents Structural Steel Erection Special Trade Contractors

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

		Page
Intro Cen Use Sun	oduction to the Economic Census Isus of Construction Irs' Guide for Locating Statistics in This Report by Table Number Inmary of Findings	III V X 2
FIG	URES	
1	Value of Construction Work by Type of Construction	3

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

TABLES

Statistics for Establishments With Payroll

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

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

APPENDIXES

А.	Explanation of Terms	A–1
В.	Standard Industrial Classification Titles for Industry Groups and Industries	B–1
С.	Geographic Divisions and States	C–1
Pub	lication Program Inside back of	cover

STRUCTURAL STEEL ERECTION 21-1

Summary of Findings

Establishments classified in this industry are primarily engaged in the erection of structural steel; the placement of concrete reinforcement and structural iron work; the installation of curtain wall and precast concrete; and the erection of metal storage tanks. For additional examples, refer to the *Standard Industrial Classification Manual: 1987*¹ (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 \$5.1 billion in total dollar value of business. Of this amount, \$5.0 billion were for the value of construction work. These establishments paid out \$1.5 billion for materials, components, and supplies and \$465 million for construction work subcontracted to others. Costs for selected power, fuels, and lubricants for the industry were \$75.5 million. Value added for 1992 was \$3.0 billion.

There were 3,792 establishments with total employment averaging 57,986 during the year. Total payroll for 1992 was \$1.6 billion.

Larger establishments with 20 employees or more, while representing only 20 percent of the total number of

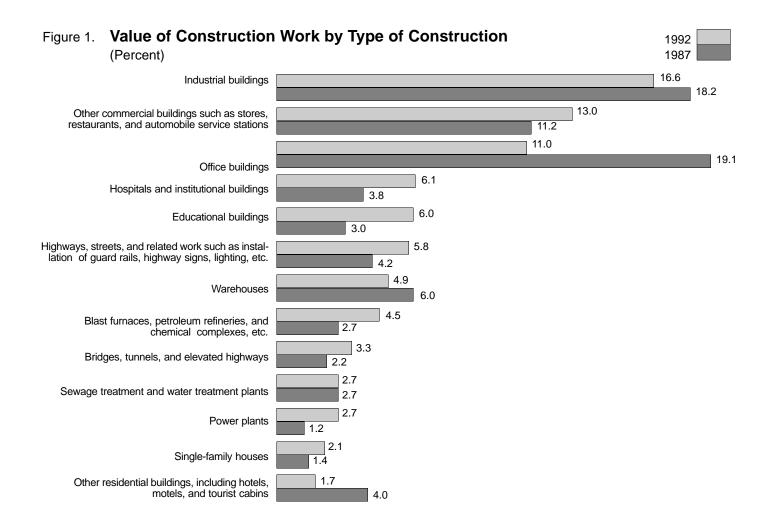
employer establishments in this industry, accounted for 71 percent of all business done.

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.

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



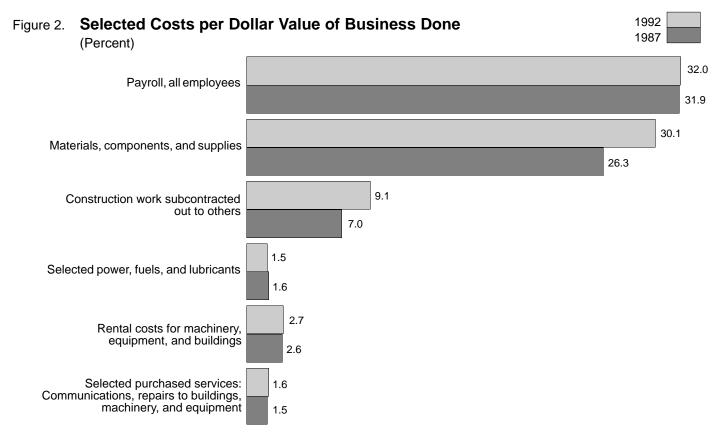


Table 1. General Statistics for Establishments With Payroll by State: 1992 and 1987 [Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix AJ

1992 Employees** Payroll Net Cost of Value value materials Location of establishment Number of establishof components, supplies, and of Construction All Construction Value ments All workers employees workers work work† addedtt fuels A в С D Е F G н ī United States _____ 3 792 57 986 47 138 1 628 902 1 226 900 4 952 038 4 486 702 3 020 993 1 608 375 Alabama _____ 873 745 20 437 16 239 43 277 40 921 37 974 44 83 1 081 323 8 310 51 171 10 121 119 1 357 5 101 19 813 26 158 108 683 (D) 96 420 (D) 48 331 19 230 Alaska ______ Arizona ______ 12 77 7 829 29 709 Arkansas ______California ______ 30 397 7 846 5 524 30 577 29 350 468 7 611 5 937 235 707 170 704 761 286 713 583 421 506 302 543 36 505 17 171 7 539 1 302 1 087 67 538 Colorado 69 28 147 112 709 97 203 31 888 Connecticut..... Delaware District of Columbia 549 227 408 167 11 642 5 164 61 061 24 392 51 962 18 049 28 686 7 366 53 14 (D) 10 796 225 2 729 2 209 57 955 41 592 192 766 168 939 93 483 78 029 Florida 1 580 1 276 23 507 109 573 91 220 63 398 37 483 Georgia _____ 116 32 952 Idaho ______ 77 119 15 091 226 170 106 029 70 644 13 662 207 463 99 602 51 579 9 596 143 382 75 218 19 496 416 23 386 18 920 (D) 4 781 3 335 60 669 37 041 27 198 158 4 970 2 620 1 605 2 121 1 345 80 685 44 870 69 586 31 780 149 91 Indiana_____ 9 630 10 671 10 439 (D) 32 447 37 786 63 373 *4 375 11 542 12 995 13 863 23 250 33 257 40 276 17 855 22 693 27 910 (D) 11 276 _____ 451 377 24 22 31 77 7 Kansas.... Kentucky Louisiana Maine 532 526 456 413 (D) 19 596 *1 685 695 58 19 509 *1 797 14 495 *1 458 66 947 *4 375 46 331 *2 690 875 (D) 57 376 99 631 137 441 75 014 11 471 59 79 160 54 1 091 1 693 2 301 1 038 33 722 56 479 68 703 36 611 96 505 143 975 241 336 91 273 131 386 210 932 Maryland 909 25 992 34 836 Maryland Massachusetts Michigan Minnesota Mississippi 46 428 52 120 30 068 34 836 31 996 77 635 24 637 1 473 1 816 96 968 19 595 870 103 387 28 333 282 5 545 4 306 22 192 8 124 70 50 775 38 762 192 371 170 763 122 110 48 869 Missouri 1 520 1 213 (D) 225 557 (D) 5 509 23 014 7 833 (D) 4 239 18 495 (D) (D) 320 (D) 10 087 53 022 14 154 (D) (D) (D) (D) (D) Montana _____ Nebraska_____ (D) 288 (D) 625 30 28 (D) 11 625 75 430 21 405 70 320 20 064 Nevada ______ New Hampshire ______ 664 39 336 262 5 597 131 23 282 99 *5 171 584 10 795 200 382 45 505 *4 443 62 406 5 607 74 599 17 355 236 210 20 457 273 211 58 811 2 326 347 84 803 7 070 69 093 10 094 2 834 267 848 New Jersev 396 2 976 1 191 20 933 306 554 63 665 104 578 22 886 1 614 599 355 906 2 294 996 81 267 15 554 6 121 67 42 (D) (D) 206 595 56 143 56 236 175 991 29 926 124 650 32 421 27 842 115 464 18 939 73 110 19 916 13 944 55 218 14 125 10 988 183 293 50 846 46 678 71 569 23 176 19 659 147 2 732 2 297 Oklahoma _____ Oregon _____ Pennsylvania _____ 64 62 854 693 651 565 148 15 2 024 212 1 660 164 55 270 9 811 42 081 7 548 162 255 (D) 49 129 (D) -----Rhode Island 60 30 45 293 15 670 3 001 22 573 12 286 2 569 18 157 82 785 38 458 12 550 57 785 311 941 33 947 10 127 53 683 27 601 6 285 36 191 191 947 8 182 (D) 19 506 South Carolina _____South Dakota _____ 714 170 587 142 Tennessee _____ Texas _____ Utah _____ 967 811 110 676 19 108 4 672 3 905 283 818 105 350 51 565 460 14 933 57 168 49 285 28 750 20 674 5 455 79 260 107 745 15 345 73 677 5 677 89 745 119 793 4 383 54 771 73 650 9 644 Vermont_____ 5 58 45 932 1 307 1 072 932 340 753 754 24 975 32 702 3 666 21 846 26 556 (D) 5 701 197 126 982 893 32 41 Virginia_____ Washington_____ 73 49 22 78 1 1 West Virginia _____ Wisconsin _____ Wyoming _____ 252 187 4 27 16 536 76 432 (D) 1 506 889 739 738 53 879 (D) (D) (D) (D) (D) (D)

21–4 STRUCTURAL STEEL ERECTION

		1992—Con.				1987								
Cost of construction work sub- contracted out to others	Value of construction work sub- contracted in from others	Rental cost for machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††	error (pe	Relative standard error of estimate (percent) for column—		error of estimate (percent) for		Location of establish- ment	
L	к	L	М	N	0	Р	Q	в	G	М				
465 336	3 423 692	139 831	77 261	814 369	65 348	4 862 655	3 253 345	1	1	5	U			
2 356	23 381	2 585	(S)	15 389	799	35 511	23 814	8	8	(S)	AL			
(D)	16 214	616	(D)	3 928	184	15 134	11 204	10	(D)	(D)	AK			
12 264	81 669	(S)	2 137	18 422	1 237	84 388	58 860	7	6	18	AZ			
1 226	(S)	*234	*252	4 453	569	31 889	18 806	21	15	50	AR			
47 703	641 368	21 036	7 802	95 206	8 769	833 529	508 363	2	2	14	CA			
15 506 9 099 6 344 23 828	81 290 30 072 17 963 145 732	2 804 3 081 445 5 107	1 378 *650 333 2 690	11 696 8 658 (D) 37 539	1 186 1 062 314 (D) 3 272	92 963 89 965 24 216 (D) 168 615	52 324 50 868 17 217 (D) 113 792	17 12 10 - 9	14 6 3 - 6	25 45 (Z) 32	CO CT DE DC FL			
18 353	65 070	3 547	1 652	17 992	2 443	188 780	123 074	8	6	16	GA			
6 475	63 436	1 162	537	10 008	458	46 755	35 178	8	6	15	HI			
1 428	*4 845	*843	265	4 427	153	7 877	6 195	31	28	26	ID			
18 707	188 771	7 858	3 059	33 401	2 839	240 950	160 461	5	4	19	IL			
6 428	77 817	4 031	3 110	22 891	1 339	67 459	52 213	8	6	4	IN			
(D)	20 578	570	*927	6 223	369	15 548	14 160	4	(D)	44	IA			
810	28 065	916	*755	5 089	500	31 665	24 090	6	4	46	KS			
2 490	28 974	1 339	531	8 845	736	54 999	35 287	12	6	2	KY			
3 574	36 305	1 551	1 733	13 241	1 134	60 587	38 833	10	15	11	LA			
-	(S)	(S)	(S)	(D)	37	2 308	1 455	(D)	51	(S)	ME			
5 231	76 945	1 763	(S)	27 768	1 788	112 878	85 322	7	6	(S)	MD			
12 589	129 773	2 046	2 010	16 872	2 022	149 182	110 820	7	4	19	MA			
30 404	122 313	4 193	3 076	30 691	2 262	219 687	143 815	4	7	21	MI			
6 419	94 692	3 032	2 033	25 291	1 401	126 835	83 232	6	6	22	MN			
2 597	14 480	*485	*413	4 839	481	21 031	12 946	16	16	44	MS			
21 608	96 235	4 370	1 626	26 037	1 031	64 911	46 720	6	4	21	MO			
(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	MT			
(D)	8 655	299	285	2 604	190	8 182	6 545	28	(D)	(Z)	NE			
*5 110	(S)	1 281	*2 012	*9 752	284	24 831	14 693	4	5	66	NV			
1 341	19 314	463	*186	3 645	357	20 045	15 766	14	13	51	NH			
31 638	117 837	5 728	2 715	38 509	2 808	228 986	176 422	5	1	7	NJ			
477	10 214	521	1 215	*8 296	174	6 637	4 736	21	13	11	NM			
33 343	218 589	8 729	3 478	50 131	4 899	414 577	276 622	4	3	8	NY			
4 854	38 907	2 931	1 847	16 137	1 385	59 395	37 878	11	11	29	NC			
(D)	2 648	*193	*83	*440	252	13 557	7 968	38	(D)	57	ND			
23 302	144 119	6 057	4 269	34 099	2 028	138 590	96 145	3	3	3	OH			
5 297	19 958	1 265	1 220	14 109	641	39 927	26 582	10	10	25	OK			
*9 559	33 846	1 614	(S)	6 570	524	55 572	28 528	19	15	(S)	OR			
13 736	100 629	5 903	*3 212	30 440	3 512	234 520	164 159	6	6	43	PA			
(D)	(D)	(D)	(D)	3 181	162	19 833	18 505	9	(D)	(D)	RI			
4 511 *2 424 4 102 28 123 7 883	28 451 (S) 39 356 178 843 52 129	1 769 (D) 1 352 12 939 *848	1 050 92 784 6 654 *1 870	10 093 1 742 12 427 51 641 *9 297	648 85 1 461 4 916 483	34 924 (D) 75 157 305 417 58 887	23 962 3 925 55 114 232 634 26 323	11 23 4 4 12	9 26 3 3 8	31 (Z) 17 65	SC SD TN TX UT			
222 10 486 12 048 1 191 2 756 (D)	(S) 74 506 80 105 7 629 44 163 (D)	186 2 710 4 117 *831 1 489 (D)	160 1 400 1 457 *129 724 (D)	1 170 31 851 9 068 2 779 10 269 496	126 1 896 975 191 799 92	9 174 150 433 81 263 10 555 66 489 6 706	6 579 89 538 50 030 8 459 45 206 4 341	(Z) 7 23 10 (Z)	(Z) 6 21 8 (D)	(Z) 17 5 47 20 (D)	VT VA WA WV WI WY			

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

[Thousand dollars. Detail may not add to total because of rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix A] Relative standard error of estimate (percent) Item 1992 1987 1982 1977 1992 1987 1982 1977 Number of establishments in business during year _____ 3 792 4 017 3 705 2 592 2 2 2 3 474 9 Proprietors and working partners _____ 759 725 10 8 732 7 All employees** _____ 57 986 65 348 61 588 47 166 1 1 1 1 Construction workers: 45 510 47 109 48 891 47 042 47 138 51 042 52 355 55 758 50 354 52 645 52 494 53 652 57 794 54 978 54 729 35 41 44 42 40 862 138 432 106 911 Average _____ Other employees: March 10 815 10 787 10 781 11 009 10 848 10 631 10 621 10 460 10 761 10 618 6 000 (NA) (NA) (NA) (NA) 8 904 (NA) (NA) (NA) (NA) (NA) (NA) (NA) (NA) May ______ August ______ November ______ (NA) (NA) (NA) (NA) 1 1 Average _____ Payroll, all employees _____ Payroll, construction workers_____ Payroll, other employees _____ 628 902 226 900 402 002 593 989 231 644 362 345 1 291 214 1 056 082 235 132 673 768 (Z) (Z) 1 1 1 556 462 117 307 1 360 261 296 023 (Z) First-quarter payroll, all employees _____ 373 315 140 704 1 1 1 Fringe benefits, all employees Legally required expenditures Voluntary expenditures 540 557 349 136 191 421 271 384 199 158 72 226 157 225 (Z) 444 17 271 1 111 315 910 128 261 82 023 75 202 (Z) Dollar value of business done______ Value of construction work ______ Value of construction work subcontracted in from others ______ 5 094 705 4 952 038 3 423 692 142 666 5 003 883 4 862 655 2 854 127 141 227 3 649 796 3 540 666 2 062 687 109 130 882 433 803 301 972 088 79 133 1 1 1 1 ż Other business receipts _. Net value of construction work+------4 486 702 4 510 231 3 233 092 1 709 473 1 1 1 1 Value added++ -----3 020 993 3 253 345 2 376 184 1 184 420 1 1 1 1 1 273 611 903 529 307 574 073 711 532 883 465 336 75 492 750 538 318 112 352 424 698 013 574 784 93 828 Selected costs 222122133 1 2 22232255 80 001 12 184 3 260 60 043 62 508 29 402 75 492 12 516 3 795 55 496 46 415 9 080 3 685 9 331 3 259 45 221 5 312 1 109 19 536 222 Gasoline and diesel fuel______ On highway use ______ 50 011 10 031 4 513 (NA) (NA) 4 695 (NA) (NA) 3 446 (NA) (NA) 3 (NA) (NA) 2 Off highway use ______ Off highway use ______ Other, including lubricating oils and greases ______ Rental cost for machinery, equipment, and buildings ______ For machinery and equipment ______ For buildings ______ 139 831 105 486 34 345 128 315 100 090 28 225 83 397 64 903 18 494 40 058 32 822 7 236 2 3 4 222 1 2 1 57 650 16 080 3 814 37 755 Selected purchased services ______ 83 306 24 963 72 859 22 321 5 378 45 160 27 858 8 253 1 828 22 2 2 4 2 1 2 2 1 22 4 660 53 683 828 778 4 3 17 Ownership of construction projects: Value of construction work 4 952 038 1 683 311 351 957 862 655 118 531 279 813 838 717 3 540 666 604 653 (NA) 803 301 331 237 (NA) 4 1 2 4 2 2 1 2 2 2 2 2 Government owned (NA) (NA) (NA) (NA) 1 Federal______State and local_______ Federal_ 331 354 ίNA λΝΑ 3 268 728 3 744 2 936 012 Privately owned _____ 1 472 064

21–6 STRUCTURAL STEEL ERECTION

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

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

Item				d error of estimate rcent)
	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	773 537 77 261 57 172 20 090 36 429	631 687 71 250 54 185 17 065 48 131	2 5 5 7 5	2 3 4 4 4
End-of-year gross book value of depreciable assets	814 369	654 807	2	2
Depreciation charges during year	80 949	76 477	3	2
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets	115 043 8 671 6 479 2 192 3 313	115 765 8 502 6 066 2 435 4 839	7 15 16 16 8	4 6 6 13 17
End-of-year gross book value of depreciable assets	120 401	119 429	7	4
Depreciation charges during year	9 664	8 697	9	3
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets	658 494 68 590 50 692 17 805 17 898 33 116	515 921 62 748 48 118 20 571 14 630 43 291	2 5 5 8 7 6	2 3 4 4 4 4
End-of-year gross book value of depreciable assets	693 968	535 377	2	2
Depreciation charges during year	71 285	67 779	3	2

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

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

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments: Number Value of construction work	3 792 4 952 038	2 1
Establishments with inventories: Number	1 055 2 209 122	4 1
End of 1992, materials and supplies End of 1991, materials and supplies	56 864 54 844	4 3
Establishments with no inventories: Number Value of construction work	1 602 1 841 722	3 2
Establishments not reporting: Number Value of construction work	1 134 901 195	3

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

CONSTRUCTION-INDUSTRY SERIES

STRUCTURAL STEEL ERECTION 21-7

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]

					Establishme	ents with an av	erage 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 +	3 792 57 986 1 628 902 5 094 705 4 952 038 4 486 702	1 349 2 919 52 532 237 232 231 075 207 508	867 5 441 126 753 416 362 404 941 367 475	807 10 828 272 461 837 824 822 190 731 988	556 16 641 496 248 1 463 424 1 415 192 1 275 048	145 9 866 315 238 962 561 944 349 875 980	55 7 598 245 433 794 999 763 913 697 565	9 2 780 78 004 <u>382 302</u> <u>370 378</u> <u>331 138</u>	3 1 913 42 232 (D) (D) (D)	- - - - -
Value added ⁺⁺	3 020 993 1 608 375 465 336 139 831 77 261 814 369	134 192 79 473 23 567 5 266 3 368 38 269	249 215 129 682 37 466 12 386 10 769 69 531	504 797 242 825 90 202 22 151 12 643 157 004	846 899 476 381 140 145 48 391 25 850 231 994	553 292 340 900 68 368 23 735 11 183 142 811	485 827 242 824 66 348 17 189 10 083 132 139	$\begin{array}{r} 246 & 772 \\ \hline 96 & 290 \\ \hline 39 & 240 \\ \hline 10 & 713 \\ \hline 3 & 366 \\ \hline 42 & 622 \end{array}$	(D) (D) (D) (D) (D) (D)	- - - - -
1987										
All employees** Value of construction work Value added††	65 348 4 862 655 3 253 345	(S) (S) (S)	6 918 413 035 268 511	11 713 811 373 514 912	17 755 1 299 448 888 567	11 124 918 956 641 857	8 957 762 855 496 497	2 943 <u>459 328</u> 178 696	3 163 (D) 142 621	
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)										
All employees** Net value of construction work† Capital expenditures, other than land	1 1 5	6 8 23	6 7 21	4 3 13	2 1 3	3 2 3	(Z) (Z) (Z)	(Z) (Z) (Z)	(Z) (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]

					Establishn	nents with do	llar value of b	ousiness 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 †	3 792 57 986 1 628 902 5 094 705 4 952 038 4 486 702	(0) (0) (0) (0) (0) (0) (0)	(S) (S) (S) (S) (S) (S)	352 1 003 9 495 25 188 24 419 23 395	830 3 206 51 432 134 779 133 696 124 763	569 4 096 78 902 201 812 199 055 190 147	672 7 504 175 734 476 569 463 437 434 936	614 12 347 337 462 935 560 908 823 838 989	278 9 816 302 579 952 573 933 781 839 762	120 7 711 249 788 835 452 801 928 707 935	81 11 884 420 636 1 525 651 1 479 780 1 319 890
Value addedtt Cost of materials, components, supplies, and	3 020 993	(S)	(S)	17 220	91 086	145 671	308 948	580 239	555 611	461 436	855 780
fuelsCost of construction work subcontracted out	1 608 375	(S)	(S)	6 945	34 761	47 233	139 120	285 486	302 942	280 023	509 981
to othersRental cost for machinery, equipment, and	465 336	(S)	(S)	(S)	8 933	8 908	28 501	69 835	94 019	93 993	159 890
Capital expenditures, other than land End-of-year gross book value of depreciable	139 831 77 261	(S) (S)	(S) (S)	661 *586	3 243 1 975	6 518 4 969	18 231 12 381	32 091 15 549	24 917 14 534	22 458 13 206	31 572 13 873
assets	814 369	(S)	(S)	(S)	26 063	28 901	110 469	165 265	141 630	129 836	205 387
1987											
All employees** Value of construction work Value added††	65 348 4 862 655 3 253 345	(S) (S) (S)	(S) (S) (S)	(S) (S) (S)	(S) (S) (S)	5 358 248 816 173 404	7 539 443 153 302 070	13 618 961 404 658 396	12 403 945 586 671 509	8 411 721 047 457 502	12 074 1 357 934 856 396
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)											
All employees** Net value of construction work† Capital expenditures, other than land	1 1 5	(S) (S) (S)	(S) (S) (S)	15 12 44	9 7 19	8 7 27	5 5 16	3 3 11	3 3 3	(Z) (Z) (Z)	(Z) (Z) (Z)

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

21-8 STRUCTURAL STEEL ERECTION

CONSTRUCTION-INDUSTRY SERIES

TIPS UPF [MCD_CMCB,C_STONE] 6/28/95 15:45:41 EPCV21 TLP:C_ST_INDTAB.TLP:58 6/28/95 15:44:55 DATA:C_ST_T1.DAT;29 6/28/95 15:44:23 UPF:CON_CENPROD;[CEN.DATA]C_ST_T PAGE: 5 TSF:TIPS92-15451114.DAT;1 6/28/95 15:45:14 UTF:TIPS93-15451114.DAT;1 6/28/95 15:45:33

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

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

		Value of cons	Relative standard error					
Type of construction	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair		of estimat		
	А	В	с	D	A	в	с	D
1992								
Value of construction work	4 952 038	3 400 849	1 049 136	452 296	1	1	1	2
Building construction Single-family houses	3 368 144 105 828	2 524 836 75 623	674 687 19 137	168 621 11 069	1 8	1 9	2 10	3 28
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives	82 471 85 507 543 864	65 570 74 600 448 895	11 655 8 874 82 218	5 246 2 033 12 751	6 2 2	7 1 2	2 6 4	15 5 3
Other commercial buildings such as stores, restaurants, and automobile service stations	645 706 1 069 324 824 492 244 832 68 960 298 443 301 080 27 928 63 813 75 219	497 292 729 270 532 357 196 913 48 316 230 117 207 767 19 348 58 260 69 778	119 133 245 931 206 732 39 199 19 185 63 712 88 661 *7 088 5 057 4 037	29 281 94 123 85 403 8 720 1 459 4 615 4 652 1 492 496 1 405	3 2 4 4 2 1 15 3 7	3 2 2 4 4 3 2 13 3 18	4 3 4 8 3 4 3 9 1	6 3 14 10 3 4 10 1 21
Nonbuilding construction	1 534 136	876 013	374 449	283 674	2	2	3	2
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc. Bridges, tunnels, and elevated highways Dam and reservoir construction Power and communication transmission lines, towers, and related facilities Sewers, water mains, and related facilities Sewers, sewer lines, septic systems, and related facilities Water mains and related facilities Mass transit construction Blast furnaces, petroleum refineries, chemical complexes, etc. Power plants Seweage treatment plants Seweage treatment plants Water storage facilities Oilfields Other nonbuilding construction	288 586 162 969 (D) 67 412 27 033 40 379 51 870 221 118 131 362 133 405 82 003 51 402 85 525 37 131 287 350	206 582 63 254 (D) 44 254 19 448 24 806 (D) 73 152 46 136 110 985 69 260 41 725 70 827 (D) 174 388	62 126 92 922 998 (D) 7 003 1 807 5 196 (D) 58 111 (D) 19 045 11 714 7 331 6 231 (D) 64 300	19 878 6 792 243 7 983 16 155 5 779 10 377 * 471 89 854 (D) 3 376 1 029 2 346 8 466 (D) 48 662	2 3 (D) 521 20(Z) 3 3 4 5 4 8 7 5	2 6 D D 9 4 9 D 3 8 3 5 2 6 D 5	4 (Z) 6 (D) 222 32 28 (D) 8 (D) 12 9 220 (D) 11	5 9 18 20 16 33 15 45 2 (D) 7 2 10 14 (D) 8
Construction work, n.s.k.	49 759	(NA)	(NA)	(NA)	15	(NA)	(NA)	(NA)
1987								
Value of construction work	4 862 655	3 778 867	620 592	235 132	1	1	1	3
Building construction Single-family houses	3 608 424 68 448	2 985 155 59 848	482 984 6 825	140 285 1 774	1 11	1 12	2 24	4 11
Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives. Other residential buildings, including hotels, motels, and tourist cabins	157 515 193 764 930 225	146 039 173 008 832 945	8 783 16 126 82 321	2 692 4 628 14 959	4 2 1	4 1 1	4 6 2	7 18 4
Other commercial buildings such as stores, restaurants, and automobile service stations	542 481 1 173 121 882 867 290 253 42 482 145 788 182 698 21 707 53 207 96 983	449 447 898 167 651 255 246 912 35 436 107 214 144 191 16 742 42 305 79 807	75 886 200 693 168 244 32 449 5 456 32 832 32 985 2 094 10 111 8 867	17 147 74 260 63 367 10 892 1 589 5 741 5 521 2 870 791 8 308	2 1 3 4 3 2 22 8 3	2 1 2 3 4 4 25 8 3	3 2 2 6 7 6 25 8 14	5 6 7 11 12 13 13 25 10 18
Nonbuilding construction Highways, streets, and related work such as installation of guard rails, highway	1 026 168	793 712	137 608	94 847	3	3	3	2
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc. Bridges, tunnels, and elevated highways Sewers, water mains, and related facilities Blast furnaces, petroleum refineries, chemical complexes, etc. Power plants Sewage treatment and water treatment plants Sewage treatment plants Water storage facilities Other nonbuilding construction	202 129 106 293 61 466 131 858 57 840 130 957 78 348 52 609 124 902 210 723	162 339 85 813 52 966 85 932 31 981 111 749 67 930 43 818 101 929 161 003	28 998 18 544 4 205 24 389 4 614 16 899 8 803 8 095 10 380 29 578	$\begin{array}{c} 10 & 792 \\ 1 & 935 \\ 4 & 295 \\ 21 & 536 \\ 21 & 243 \\ 2 & 308 \\ 1 & 614 \\ 694 \\ 12 & 591 \\ 20 & 146 \end{array}$	3 2 4 3 3 6 4 12 4 8	3 3 4 2 2 6 4 14 5 9	7 2 8 18 7 11 8 (Z) 7	4 21 3 5 15 22 9 8 14
Construction work, n.s.k.	228 064	(NA)	(NA)	(NA)	4	(NA)	(NA)	(NA)

CONSTRUCTION-INDUSTRY SERIES

STRUCTURAL STEEL ERECTION 21-9

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]

	Number of			Value of co wo		Net value of		Cost of construction work sub-	stan of	Relative Idard e estima Ircent)	error
Item	establish- ments	All employees**	Payroll, all employees	For all types	specialized type	construction work†	Value added††	contracted out to others		olumn-	
	A	В	С	D	E	F	G	н	В	D	н
All establishments	3 792	57 986	1 628 902	4 952 038	2 598 439	4 486 702	3 020 993	465 336	1	1	2
Establishments not specializing by type Establishments specializing 51 percent or more	1 162 2 630	21 899 36 087	653 852 975 050	1 888 736 3 063 302	(NA) 2 598 439	1 735 005 2 751 697	1 159 692 1 861 301	153 731 311 605	2 2	2	2 3
OFFICE BUILDINGS											
All establishments specializing in type	161	3 035	82 550	258 705	197 864	232 546	150 499	26 159	5	3	4
Establishments with — 100 percent specialization	71	760	19 454	51 680	51 680	47 538	35 484	4 141	17	13	5
90 to 99 percent specialization 80 to 89 percent specialization	7	176 453	6 411 10 932	18 353 44 926	16 916 36 161	(D) (D)	12 782 22 695	(D) (D)	(Z) 9 11	(Z) 6	(D) (D)
70 to 79 percent specialization60 to 69 percent specialization60 to 69 percent specialization	40	786 568	20 171 16 671	72 184 43 267	51 873 26 134	62 296 38 710	35 894 27 233	9 888 4 557	11 6 7	(Z) 6 6 5 2	(D) (D) 9 8 (Z)
51 to 59 percent specialization	9	291	8 911	28 295	15 100	24 749	16 411	3 546	7	2	(Z)
OTHER COMMERCIAL BUILDINGS SUCH AS STORES, RESTAURANTS, AND AUTOMOBILE SERVICE STATIONS											
All establishments specializing in type	430	5 485	137 713	418 518	356 841	368 915	249 510	49 604	4	5	12
Establishments with — 100 percent specialization 90 to 99 percent specialization	232 30	2 849 358	67 077 9 810	200 374 25 784	200 374 23 963	179 654 24 238	137 744 16 118	20 720	6 11	8	19 21
90 to 99 percent specialization 80 to 89 percent specialization 70 to 79 percent specialization	30 37 73	358 747 472	9 810 17 868 13 408	25 784 54 007 48 392	23 963 44 325 35 739	24 238 52 347 38 572	32 500 18 923	1 546 1 659 9 820	11 14 15	9 12 9 17	21 27 5
60 to 69 percent specialization 51 to 59 percent specialization	33	580 479	15 188 14 362	45 780 44 181	28 508 23 933	36 914 37 189	21 472 22 753	*8 867 6 992	15 12	17 9	49 3
INDUSTRIAL BUILDINGS											
All establishments specializing in type	481	7 004	192 724	553 977	465 264	509 939	368 918	44 038	3	3	11
Establishments with — 100 percent specialization	291	3 045	80 835	209 257	209 257	191 871	143 169	17 386	6	4	8
90 to 99 percent specialization 80 to 89 percent specialization	38 36	903 872	22 724 25 080	83 405 59 497	76 564 48 686	79 911 56 545	48 039 45 910	3 494 2 952	7 5	1 5 7	2 7
70 to 79 percent specialization 60 to 69 percent specialization	53 51	770 1 047	21 218 32 007	72 271 89 514	51 842 56 194 22 722	66 286 79 876	48 290 60 993	5 985 *9 637	9 6 5	13 7	11 48 10
51 to 59 percent specialization WAREHOUSES	11	366	10 860	40 034	22 122	35 450	22 518	4 584	5		10
All establishments specializing in type	155	1 340	28 371	77 984	60 392	69 553	49 597	8 430	11	12	15
Establishments with -	155	1 340	20 371	77 304	00 332	05 555	45 551	0 430		12	
100 percent specialization 90 to 99 percent specialization	73 4	407 96	7 671 3 183	20 575 10 176	20 575 9 172	18 898 (D)	14 029 5 688	1 677 (D) (D)	19 (Z) 43	18 (Z)	5 (D)
80 to 89 percent specialization 70 to 79 percent specialization	*15 *27	*129 195	*2 966 3 862	*6 548 9 216	*5 256 6 652	(D) 9 012	4 082 7 370	204	43 32 24	(Z) 42 26 32	(D) (D) 16
60 to 69 percent specialization51 to 59 percent specialization	23 *12	371 142	7 693 2 996	23 285 8 184	14 306 4 432	21 179 7 841	13 619 4 809	*2 106 343	24 26	32 17	49 24
EDUCATIONAL BUILDINGS											
All establishments specializing in type	90	1 023	29 546	87 867	59 717	75 229	50 804	12 638	12	7	1
Establishments with – 100 percent specialization	*26	*126	*1 707	3 656	3 656	3 626	2 146	(S)	65	31	(S) (D)
90 to 99 percent specialization 80 to 89 percent specialization 70 to 79 percent specialization	(S) 12 9	73 160 144	2 628 3 238 4 120	7 946 9 358 12 833	7 409 7 553 9 168	(D) 9 146 (D)	6 548 7 219 8 263	(D) 211 (D)	26 21 29	16 21 30	17
60 to 69 percent specialization 51 to 59 percent specialization	9 21 9	270 249	9 735 8 118	25 844 28 230	15 884 16 049	(D) 23 571 (D)	15 543 11 085	(D) 2 273 (D)	29 10 30	30 6 11	(D) 1 (D)
HIGHWAYS, STREETS, AND RELATED WORK SUCH AS INSTALLATION OF GUARD RAILS, HIGHWAY SIGNS, LIGHTING, ETC.		273	0 110	20 200	10 049						
All establishments specializing in type	160	2 456	73 199	217 655	182 800	208 342	133 593	9 314	5	3	1
Establishments with – 100 percent specialization	78	1 286	39 004	107 023	107 023	105 869	68 496	1 155	8	4	9
90 to 99 percent specialization 80 to 89 percent specialization	13 (S)	195 206	5 544 5 478	21 509 13 078	20 604 10 819	(D) (D)	10 682 7 746	(D) (D) (D)	17	7	(D) (D)
70 to 79 percent specialization60 to 69 percent specialization	13 (S) 5 32 10	121 276	3 656 5 872	10 108 17 908	7 160 11 003	(D) 17 844	5 219 14 340	*64	(Z) 23 4	4 7 (Z) 32 2	(D) (D) (D) 66 (Z)
51 to 59 percent specialization	10	373	13 644	48 029	26 190	41 942	27 109	6 087	4	2	(Z)
All establishments specializing in type	49	1 654	64 142	231 040	186 677	203 051	141 819	27 989	4	3	10
Establishments with – 100 percent specialization	26	924	33 983	110 488	110 488	93 226	51 521	17 262	6	4	10
90 to 99 percent specialization 80 to 89 percent specialization	5	193	6 569			16 546	9 736	1 371	(Z) 12		-
70 to 79 percent specialization60 to 69 percent specialization	*10	215 (D) (D)	(D) 3 352	(D) 9 822	(D) 6 006	(D) 9 032	(D) 6 421	(D) *790	12 (D) (D)	(Z) (D) 29 (D)	(Z) (D) 57 (D)
51 to 59 percent specialization	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

21–10 STRUCTURAL STEEL ERECTION

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

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

		Average	Construction workers ¹					_ Relative standard error of estimate					
Location of establishment	Number of establishments	number of construction workers	January to March	April to June	July to September	October to December	(percent) for column-						
	A	В	С	D	E	F	A	В	С	D	Е	F	
United States	3 792	47 138	45 510	47 109	48 891	47 042	2	1	1	1	1	1	
Alabama Alaska Arizona Arkansas California	44 12 77 30 468	745 83 1 081 323 5 937	739 62 1 071 284 5 815	762 71 1 075 344 6 049	723 95 1 180 359 6 108	757 105 998 304 5 775	12 17 15 21 7	8 10 7 22 2	7 6 7 20 2	7 11 7 20 2	10 10 7 24 3	10 9 8 23 2	
Colorado Connecticut Delaware District of Columbia Florida	69 53 14 225	1 087 408 167 2 209	980 380 146 1 913	1 218 386 166 2 420	1 147 446 188 2 289	1 002 421 167 2 215	17 16 30 - 9	18 13 10 10	16 12 9 - 8	22 12 8 - 11	18 13 16 	17 16 8 11	
Georgia Hawaii Idaho Illinois Indiana	116 19 27 149 91	1 276 416 158 2 121 1 345	1 442 468 160 1 953 1 206	1 259 384 162 2 137 1 247	1 170 405 155 2 378 1 573	1 233 406 156 2 015 1 356	12 10 32 10 14	8 9 31 5 8	7 8 27 5 8	8 9 29 4 7	9 9 34 4 10	9 9 35 5 7	
lowa Kansas Kentucky Louisiana Maine	24 22 31 77 7	377 456 413 695 58	369 459 368 740 (S)	349 495 389 645 58	383 379 426 695 74	408 490 469 699 60	20 12 14 18 35	5 6 13 10 36	(Z) 3 10 10 (S)	3 5 9 9 36	10 8 15 10 31	4 9 21 11 37	
Maryland Massachusetts Michigan Minnesota Mississippi	59 79 160 54 28	909 1 473 1 816 870 282	888 1 806 1 565 716 234	907 1 268 1 840 874 372	946 1 017 2 064 989 254	895 1 799 1 797 900 270	12 16 10 20 7	6 7 4 5 15	6 5 3 15	7 10 4 5 27	8 12 4 6 19	6 6 4 6 17	
Missouri Montana Nebraska Nevada Nevada New Hampshire	70 2 30 28 39	1 213 (D) 225 557 262	1 242 (D) 202 413 223	1 035 (D) 215 514 277	1 303 (D) 272 676 244	1 270 (D) 212 628 303	11 (Z) 36 18 22	7 (D) 28 3 14	7 (D) 26 5 12	8 (D) 29 3 17	8 (D) 26 2 14	7 (D) 23 3 15	
New Jersey New Mexico New York North Carolina North Dakota	131 23 282 99 *5	2 326 347 2 294 996 42	2 350 359 2 278 938 25	2 371 358 2 375 1 094 33	2 271 339 2 349 1 001 62	2 313 334 2 172 951 *46	10 25 11 14 45	6 24 4 11 39	8 21 5 11 31	8 24 4 13 31	3 26 4 11 39	5 27 4 11 41	
Ohio Oklahoma Oregon Pennsylvania Rhode Island	147 64 62 148 15	2 297 693 565 1 660 164	2 167 734 573 1 501 138	2 303 681 585 1 559 153	2 387 664 564 1 895 188	2 332 693 538 1 684 176	9 19 21 15 28	2 9 19 5 5	2 9 21 4 3	3 8 26 4 3	2 10 19 5 8	3 10 14 11 4	
South Carolina South Dakota Tennessee Texas Utah	60 30 45 293 51	587 142 811 3 905 460	640 130 790 3 756 448	550 113 798 4 043 458	557 149 819 4 034 526	600 176 838 3 786 406	20 35 9 9 18	10 20 3 4 12	10 15 4 4 11	10 17 4 4 11	10 21 3 5 16	9 28 4 5 11	
Vermont Virginia Washington West Virginia Wisconsin Wyoming	5 73 49 22 78 6	45 982 893 187 739 (D)	45 1 160 831 159 559 (D)	35 883 857 181 721 (D)	47 918 1 020 211 913 (D)	54 968 862 197 765 (D)	(Z) 16 18 17 18 (Z)	(Z) 6 7 24 11 (D)	(Z) 8 5 33 9 (D)	(Z) 6 10 28 16 (D)	(Z) 8 25 10 (D)	(Z) 6 9 20 11 (D)	

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

CONSTRUCTION-INDUSTRY SERIES

STRUCTURAL STEEL ERECTION 21-11

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

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

1992										
Location of construction work		establishmer	work done by nts located in State	establishmen	work done by ts not located State	1987	Percent change 1987	Relative standard error of estimate (percent) for		nate
		Number	Value of construction work	Number	Value of construction work	value of construction work done in this State	(col F) to 1992 (col A)	CC	olumn—	
	A	В	с	D	E	F	G	А	с	E
United States	4 952 038	3 731	3 861 382	1 920	1 090 656	4 862 655	1.8	1	1	1
Alabama	54 697	44	36 298	43	18 399	60 950	-10.3	7	9	8
Alaska	17 158	12	(D)	2	(D)	17 292	8	8	(D)	(D)
Arizona	100 506	77	88 428	22	12 078	88 457	13.6	6	7	9
Arkansas	30 097	26	24 281	37	5 816	29 516	2.0	9	11	6
California	804 198	468	725 932	53	78 266	882 016	-8.8	2	2	1
Colorado Connecticut Delaware District of Columbia Florida	80 521 64 487 20 836 20 132 201 556	65 53 14 225	72 339 55 804 13 982 178 519	24 36 37 36 70	8 182 8 683 6 854 20 132 23 037	55 501 101 139 20 631 18 461 187 223	45.1 -36.2 1.0 9.0 7.7	16 5 5 4 5	18 6 4 - 6	8 6 12 4 3
Georgia	120 140	116	92 768	77	27 373	149 641	-19.7	5	6	3
Hawaii	115 404	19	77 119	*16	38 285	53 371	116.2	4	6	1
Idaho	16 780	(S)	14 050	10	2 730	15 396	9.0	22	27	12
Illinois	250 611	148	204 186	64	46 425	252 249	6	3	4	2
Indiana	124 364	84	93 153	62	31 211	77 207	61.1	5	7	4
lowa	22 954	23	12 406	38	10 548	19 001	20.8	4	6	7
Kansas	38 356	21	20 353	35	18 004	28 243	35.8	3	4	4
Kentucky	42 324	25	18 706	71	23 618	46 846	-9.7	2	5	2
Louisiana	87 868	77	61 047	38	26 821	75 415	16.5	11	16	1
Maine	8 345	(S)	*4 035	13	4 310	16 634	-49.8	27	55	6
Maryland	68 126	54	51 468	65	16 659	84 825	-19.7	8	10	4
Massachusetts	105 175	78	81 620	55	23 554	184 697	-43.1	5	7	3
Michigan	206 790	160	199 756	31	7 033	213 555	-3.2	8	8	2
Minnesota	77 409	54	70 891	14	6 517	123 694	-37.4	7	8	3
Mississippi	29 256	27	15 781	40	13 475	24 640	18.7	13	22	11
Missouri	107 401	66	88 710	51	18 691	77 534	38.5	6	7	9
Montana	4 091	2	(D)	6	(D)	1 857	120.3	1	(D)	(D)
Nebraska	16 490	30	11 207	29	5 283	13 821	19.3	9	14	4
Nevada	89 998	28	71 895	31	18 104	45 579	97.5	7	8	7
New Hampshire	18 202	38	13 527	*18	4 675	13 593	33.9	12	16	2
New Jersey	150 075	122	102 173	62	47 902	192 414	-22.0	2	3	1
New Mexico	38 015	23	20 082	25	17 932	8 379	353.7	8	14	9
New York	430 923	282	291 786	85	139 137	446 441	-3.5	3	4	1
North Carolina	84 253	99	54 949	49	29 304	64 835	30.0	8	13	2
North Dakota	8 205	*5	6 121	*9	*2 083	12 718	-35.5	33	38	62
Ohio Oklahoma Oregon Pennsylvania Rhode Island	239 501 38 430 73 545 242 582 18 466	147 59 61 147 15	182 204 34 111 52 989 142 292 (D)	71 12 20 101 9	57 297 4 320 20 556 100 290 (D)	164 092 36 543 12 700 226 898 9 709	46.0 5.2 479.1 6.9 90.2	4 12 15 4 2	5 14 21 7 (D)	2 (Z) 2 (D)
South Carolina	44 886	57	28 967	41	15 919	36 294	23.7	9	14	7
South Dakota	9 310	29	*8 587	*7	723	5 696	63.5	39	43	23
Tennessee	49 098	45	34 814	33	14 284	77 763	–36.9	4	5	10
Texas	250 605	291	229 260	55	21 345	230 937	8.5	4	4	11
Utah	30 686	49	23 741	9	6 945	36 317	–15.5	11	14	1
Vermont	4 690	(S)	4 253	*17	437	8 292	-43.4	2	(Z)	18
	78 298	72	55 089	75	23 209	120 088	-34.8	6	8	11
	97 004	49	77 221	42	19 782	104 727	-7.4	7	9	3
	28 456	22	13 857	37	14 600	25 054	13.6	12	24	7
	83 004	78	65 035	24	17 968	53 026	56.5	7	9	(Z)
	7 732	6	(D)	9	(D)	10 724	-27.9	4	(D)	(D)

21–12 STRUCTURAL STEEL ERECTION

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

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

Primary and other kind of business activities	Dollar value of	business done	Relative standard error of estimate (percent)			
	1992	1987	1992	1987		
All kinds of business	5 094 705	5 003 883	1	1		
HEAVY CONSTRUCTION OTHER THAN BUILDING CONSTRUCTION-CONTRACTORS						
Heavy construction contractor	55 500	(NA)	2	(NA)		
SPECIAL TRADE CONTRACTORS						
Curtain wall installation contractor Glass and glazing contractor Millwright Precast concrete installation contractor Reinforcing steel contractor	241 219 61 766 53 096 303 008 1 041 360	209 561 27 972 53 252 236 869 933 933	3 4 4 2	2 1 9 3 2		
Special cases Storage tanks, metal: erection contractor Structural steel erection contractor	36 817 467 820 2 468 542	(NA) 230 367 2 888 258	13 3 1	(NA) 11 1		
Other construction activities	213 718	237 082	5	(NA)		
OTHER BUSINESS ACTIVITIES						
Manufacturing Rental of construction machinery or equipment to others Other business activities	60 997 30 391 47 061	17 923 29 294 97 373	5 3 6	7 7 (NA)		
Kind of business activity, n.s.k.	13 410	41 999	6	6		

CONSTRUCTION-INDUSTRY SERIES

STRUCTURAL STEEL ERECTION 21-13

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**	15.3 12.4 2.9 429.6 323.6 106.0	16.3 13.6 2.6 396.8 306.6 90.2	2 2 2 2 2 2 2 2 2
Dollar value of business done do	1 343.7 1 306.0 424.2 122.7 36.9 20.4 214.8	1 245.7 1 210.5 348.0 87.7 31.9 17.7 163.0	2 2 2 3 3 5 3
AVERAGE PER EMPLOYEE			
Payroll, all employees \$1,000 Dollar value of business done do Value addedtt do	28.1 87.9 52.1	24.4 76.6 49.8	1 1 1
AVERAGE PER CONSTRUCTION WORKER			
Payroll, construction workers	26.0 105.1	22.5 88.8	1
AVERAGE PER OTHER EMPLOYEE			
Payroll, other employees \$1,000	37.1	34.1	1
AVERAGE PER DOLLAR VALUE OF CONSTRUCTION WORK			
Payroll, all employees Cost of materials, components, supplies, and fuels Cost of construction work subcontracted out to others Value of construction work subcontracted in from others Rental cost for machinery, equipment, and buildings	.329 .325 .094 .691 .028	.328 .288 .072 .587 .026	1 1 1 1 2

21–14 STRUCTURAL STEEL ERECTION

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	15.3	28.1	105.1	.329	.325	.094	.691	.028
Alabama	20.0	23.4	58.1	.472	(D)	.054	.540	.060
Alaska	9.8	65.8	315.2	.299	.318	(D)	.620	.024
Arizona	17.7	21.9	100.5	.273	.471	.113	.751	(S)
Arkansas	13.2	19.8	94.7	.257	.331	.040	(S)	*.008
California	16.3	31.0	128.2	.310	.397	.063	.842	.028
Colorado Connecticut Delaware District of Columbia	18.8 10.3 15.8	28.0 31.3 33.2	103.7 149.7 146.1	.324 .281 .309	.283 .470 .302	.138 .149 .260	.721 .492 .736	.025 .050 .018
Florida	12.1	21.2	87.3	.301	.405	.124	.756	.026
Georgia	13.6	20.9	85.9	.301	.342	.167	.594	.032
Hawaii	25.6	47.1	185.4	.303	(D)	.084	.823	.015
Idaho	7.4	25.1	95.5	.329	.317	.095	.321	.056
Illinois	17.5	30.8	106.6	.357	.308	.083	.835	.035
Indiana	17.7	28.0	78.8	.423	.300	.061	.734	.038
lowa	19.0	25.6	61.7	.496	(D)	(D)	.885	.025
Kansas	23.8	24.4	72.9	.391	.339	.024	.844	.028
Kentucky	17.1	26.4	97.5	.344	(D)	.062	.719	.033
Louisiana	11.3	22.3	96.3	.291	.293	.053	.542	.023
Maine	(D)	(D)	75.4	.411	.385	–	(S)	(S)
Maryland	18.6	30.9	106.2	.349	.361	.054	.797	.018
Massachusetts	21.5	33.4	97.7	.392	.222	.087	.901	.014
Michigan	14.4	29.9	132.9	.285	.322	.126	.507	.017
Minnesota	19.1	35.3	118.8	.354	.238	.062	.916	.029
Mississippi	11.7	16.7	78.7	.250	.366	.117	.652	.022
Missouri	21.8	33.4	158.6	.264	.254	.112	.500	.023
Montana	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Nebraska	9.6	19.1	51.7	.474	(D)	(D)	.744	.026
Nevada	24.1	34.7	135.4	.305	(D)	.068	(S)	.017
New Hampshire	8.7	23.3	81.7	.366	(D)	.063	.902	.022
New Jersey	21.7	29.9	115.2	.317	.258	.118	.440	.021
New Mexico	17.6	17.9	60.3	.338	.482	.023	.488	.025
New York	10.5	35.1	133.6	.341	.265	.109	.713	.028
North Carolina	12.0	19.2	63.9	.359	.244	.076	.611	.046
North Dakota	12.2	24.1	145.7	.264	(D)	(D)	*.433	.032
Ohio	18.6	26.8	89.9	.354	.346	.113	.698	.029
Oklahoma	13.3	23.3	81.0	.355	.413	.094	.355	.023
Oregon	10.5	21.4	99.5	.248	.350	*.170	.602	.029
Pennsylvania	13.7	27.3	106.0	.314	.279	.078	.572	.034
Rhode Island	14.3	46.3	182.5	.328	(D)	(D)	(D)	(D)
South Carolina	12.0	21.9	65.5	.407	.213	.117	.740	*.046
South Dakota	5.7	17.7	88.4	.239	(D)	.193	(S)	(D)
Tennessee	21.6	23.3	71.3	.391	.338	.071	.681	.023
Texas	15.9	23.7	79.9	.355	.338	.090	.573	.041
Utah	11.1	33.8	124.3	.334	.362	.138	.912	.015
Vermont Virginia Wast Virginia Wisconsin Wyoming	11.6 16.5 22.8 11.6 11.3 6.8	33.3 27.0 37.1 18.9 31.2 (D)	126.2 91.4 134.1 88.4 103.4 (D)	.340 .360 .349 .287 .363 (D)	.189 .296 (D) .345 (D) (D)	.039 .117 .101 .072 .036 (D)	(S) .830 .669 .461 .578 (D)	.033 .030 .034 *.050 .019 (D)

CONSTRUCTION-INDUSTRY SERIES

STRUCTURAL STEEL ERECTION 21-15

Appendix A. Explanation of Terms

Construction. Is composed of three broad categories:

- 1. **New construction.** Includes the complete, original building of structures and essential service facilities and the initial installation of integral equipment such as elevators and plumbing, heating, and air-conditioning supplies and equipment.
- 2. Additions, alterations, or reconstruction. Includes construction work which adds to the value or useful life of an existing building or structure, or which adapts a building or structure to a new or different use. Included are "major replacements" of building systems such as the installation of a new roof or heating system and the resurfacing of streets or highways. This contrasts to the repair of a hole in a roof or the routine patching of highways and streets, which would be classified as maintenance and repair.
- 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 cause-ways built on structural supports.
- Dam and reservoir construction. Includes hydroelectric, water supply, and flood control dams and reservoirs.
- Marine construction. Includes dredging, underwater rock removal, breakwaters, navigational channels, and locks.
- Harbor and port facilities. Includes docks, piers, and wharves.
- Conservation and development construction. Includes land reclamation, irrigation projects, drainage canals, levees, jetties, breakwaters, and flood control projects.
- Power and communication transmission lines, towers, and related facilities. Includes electric power lines, telephone and telegraph lines, fiber optic cables, cable television lines, television and radio towers, and electric light and power facilities.
- Sewers, sewerlines, septic tanks, and related facilities. Includes sanitary and storm sewers, pumping stations, septic systems, and related facilities.
- Water mains and related facilities. Includes water supply systems, pumping stations, and related facilities.
- Pipeline construction other than sewer or waterlines. Includes pipelines for the transmission of gas, petroleum products, and liquefied gases.
- Urban mass transit. Includes subways, trollies, street cars, and light rail systems.
- Railroad construction. Includes the construction of railroad beds, tracks, freight yards, and signal towers for systems other than urban mass transit.
- Blast furnaces, petroleum refineries, chemical complexes, etc. Includes coke ovens and mining appurtenances such as tipples and washeries.

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

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

SIC		SIC	
code	Industry titles	code	Industry titles
15	BUILDING CONSTRUCTION—GENERAL CONTRACTORS AND OPERATIVE BUILDERS	17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS—Con.
152	General Building Contractors—Residential Buildings	173 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
153 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		Special Trade Contractors
1542	General Contractors—Nonresidential Buildings, Other Than Industrial Buildings and Warehouses	175 1751	Carpentry and Floor Work Special Trade Contractors Carpentry Work Special Trade Contractors
16	HEAVY CONSTRUCTION OTHER THAN BUILDING CONSTRUCTION— CONTRACTORS	1752	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	177	Constate Work Spacial Trada Contractors
1622	Street Construction Bridge, Tunnel, and Elevated Highway Construction Contractors	1771	Concrete Work Special Trade Contractors Concrete Work Special Trade Contractors
1623	Water, Sewer, Pipeline, and Communications and Power Line Construction Contractors	178 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	Structural Steel Erection Special Trade Contractors
474		1793	Glass and Glazing Work Special Trade Contractors
171	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1794	Excavation Work Special Trade Contractors
1711	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1795 1796	Wrecking and Demolition Work Special Trade Contractors Installation or Erection of Building Equipment,
172	Painting and Paper Hanging Special Trade Contractors	1730	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

Publication Program

1992 CENSUS OF CONSTRUCTION INDUSTRIES

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(Available August 1995) [P] [C]

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

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

OTHER ECONOMIC CENSUS REPORTS

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

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

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

HOW TO ORDER DATA PRODUCTS

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