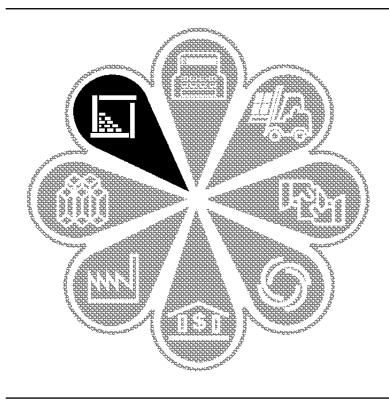
1992Census of Construction Industries

CC92-I-11

INDUSTRY SERIES

Painting and Paper Hanging Special Trade Contractors

Industry 1721



1992 Census of Construction Industries

CC92-I-11

INDUSTRY SERIES

Painting and Paper Hanging Special Trade Contractors

Industry 1721

Issued May 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 John P. Govoni, Acting Chief

Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC **CENSUS**

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

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

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

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

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

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

AUTHORITY AND SCOPE

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

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

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

AVAILABILITY OF THE DATA

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

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

WHAT'S NEW IN 1992

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

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

HISTORICAL INFORMATION

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

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

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

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

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

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

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

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

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

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

SOURCES FOR MORE INFORMATION

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

Census of Construction

GENERAL

The 1992 Census of Construction Industries covers all employer establishments (establishments with payroll) primarily engaged in contract construction or construction on their own account for sale as defined in the Standard Industrial Classification Manual: 19871 (SIC). This industrial classification system has been developed by experts on classification in government and private industry under the guidance of the Office of Management and Budget and is in general use among government agencies and among organizations outside the government.

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

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

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

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

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

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

ESTABLISHMENT BASIS OF REPORTING

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

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

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

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

$$i = 1$$

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

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

p_i is the selection probability of that firm.

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

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

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

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

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

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

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

Nonemployer Companies

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

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

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

CENSUS REPORT FORMS

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

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

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

DATA PROCESSING

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

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

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

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

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

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

GEOGRAPHIC CLASSIFICATION

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

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

CHANGE IN COLLECTION METHODOLOGY FOR VALUE OF CONSTRUCTION WORK DONE

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

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

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

DUPLICATION IN VALUE OF CONSTRUCTION WORK

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

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

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

SPECIAL TABULATIONS

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

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

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

COMPARABILITY OF CENSUS OF CONSTRUCTION INDUSTRIES DATA WITH OTHER DATA

Data contained in the reports of the 1992 Census of Construction Industries are not the same as the data published in the Census Bureau's monthly Construction Reports, Series C30, Value of New Construction Put in Place. The main difference is that the C30 series covers all new construction put in place without regard to who is performing the construction activity; whereas, the construction census figures cover both new construction and maintenance and repair work done by establishments classified in the construction industry. Significant amounts of construction are done by establishments classified outside of construction (in real estate, manufacturing, utilities, and communications, for example), both as "force account" construction and construction done for others. In addition, the value in place series includes constructionrelated expenses such as architectural and engineering costs and the costs of materials supplied by owners which are normally not reflected in the census of construction industries.

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

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used in this publication:

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

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

Statistics	For the United States	By State	By employment size	By size class of dol- lar value of busi- ness done	By type, class, kind of business, and location of construction 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 New buildings—machinery and equipment Used buildings—machinery and equipment	1, 3 3 3	1	5	6		
Communication services, costs for	2					
Employees: All employees—average number Construction workers—average number Construction workers—quarterly Other employees—average number Other employees—quarterly	1, 2, 8 1, 2, 9 2, 9 2	1 1, 9 9	5	6		8
Establishments—number in business during year	1, 2, 4, 8, 9	1, 9	5	6		8
Fringe benefits—legally required and voluntary expenditures	2					
Inventories	4					
Materials, components, supplies, and fuels—costs for	1, 2	1	5	6		
Ownership—private or government owned	2					
Payroll: First-quarter, all employees	2 1, 2, 8 1, 2	1 1	5	6		8
Other employees	2					
Power, fuels, and lubricants—costs for	2					
Proprietors and working partners	2					
Ratios, selected industry	12	13				
Receipts and value: Dollar value of business done, total	2, 11 1, 2, 4, 7, 8, 10 1, 2 2	1, 10	5 5	6 6	11 7, 10	8
Net value of construction work Value added.	1, 2, 8 1, 2, 8	1 1	5 5	6 6		8 8
Rental costs:						
Total For machinery and equipment For buildings	1, 2 2 2	1	5	6		
Repairs to buildings and other structures	2					
Repairs to machinery and equipment	2					
Subcontract work to others, costs for	1, 2, 8	1	5	6		8

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

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

Contents

Painting and Paper Hanging Special Trade Contractors

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

		Page
Cen Use	sus of Construction	III V X 2
FIG	URES	
1. 2.	Value of Construction Work by Type of Construction	3
TAE	BLES	
Sta	tistics for Establishments With Payroll	
1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12.	General Statistics by State: 1992 and 1987. Detailed Statistics: 1992 and Earlier Census Years Assets, Capital Expenditures, and Depreciation: 1992 and 1987. Value of Inventories: 1992 and 1991. Selected Statistics by Employment Size Class: 1992 and 1987. Selected Statistics by Size Class of the Dollar Value of Business Done: 1992 and 1987. Value of Construction Work by Type of Construction: 1992 and 1987. Selected Statistics by Specialization in Types of Construction: 1992 Quarterly Construction Worker Employment by State: 1992 Value of Construction Work by Location of Construction Work: 1992 and 1987 Dollar Value of Business Done by Kind-of-Business Activity: 1992 and 1987 Selected Industry Ratios: 1992 and 1987 Selected Industry Ratios by State: 1992	44 66 77 78 8 9 10 12 13 14 15
	tistics for Establishments Without Payroll appear in the U.S. Industry mmary Report.	
APF	PENDIXES	
A. B. C.	Explanation of Terms	A-1 B-1 C-1
Publ	lication Program	cover

Summary of Findings

Establishments classified in this industry are primarily engaged in interior and exterior painting (except roofs), and paper hanging. 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 \$8.74 billion in total dollar value of business. Of this amount, \$8.69 billion were for the value of construction work. These establishments paid out \$2.1 billion for materials, components, and supplies and \$595 million for construction work subcontracted to others. Costs for selected power, fuels, and lubricants for the industry were \$181 million. Value added for 1992 was \$5.9 billion.

There were 31,920 establishments with total employment averaging 162,587 during the year. Total payroll for 1992 was \$3.2 billion.

Larger establishments with 20 employees or more, while representing only 4 percent of the total number of employer establishments in this industry, accounted for 39 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.

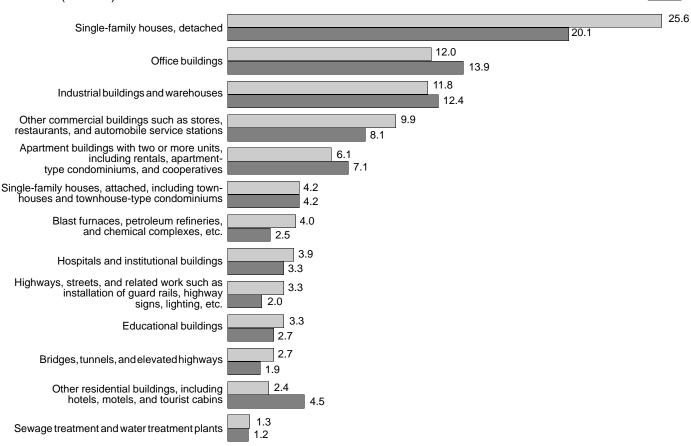
For 1987 and earlier censuses, receipts from the sale of land were collected separately for general contractors and operative builders. These receipts were included in the total dollar value of business done but excluded from the value of construction work done. For 1992, receipts from the sale of land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

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





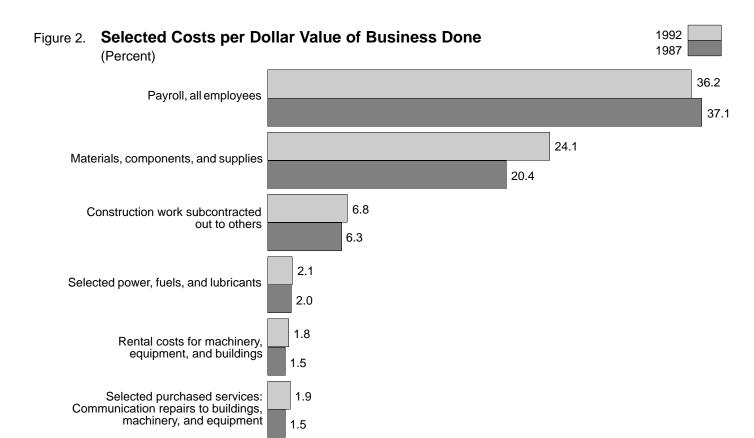


Table 1. General Statistics for Establishments With Payroll by State: 1992 and 1987

	1992												
		Emplo	yees**	Pay	roll		Net		Cost of				
Location of establishment	Number of establish-		Construction	All	Construction	Value of construction	value of construction	Value	materials, components, supplies, and				
	ments	All	workers	employees	workers	work	work†	added††	fuels				
United States	31 920	162 587	C 136 427	3 164 065	2 470 237	8 689 828	8 094 749	5 854 779	2 289 916				
Alabama	374	2 575	2 127	48 723	35 993	129 873	119 110	85 163	34 717				
Alaska Arizona Arkansas California	105	437	372	9 852	7 904	30 462	28 204	21 092	7 572				
	511	3 305	2 734	54 461	42 188	151 525	143 802	98 005	46 953				
	187	1 057	901	17 285	14 224	51 723	46 322	33 087	13 339				
	4 099	19 574	16 304	409 128	315 842	1 163 246	1 108 605	789 780	319 411				
Colorado	647	3 048	2 657	51 009	42 501	143 507	133 201	88 968	44 356				
	542	1 948	1 629	42 674	33 390	113 843	108 973	84 908	24 174				
	128	542	448	9 683	7 248	22 946	20 805	16 449	4 401				
	16	243	208	(D)	4 823	15 447	(D)	10 933	(D)				
	1 977	9 487	7 612	156 223	118 632	465 632	429 659	294 264	137 004				
Georgia	628	4 153	3 516	79 151	60 857	237 998	202 945	146 136	57 185				
	162	1 539	1 273	47 034	36 631	112 046	103 754	76 558	27 272				
	191	532	466	7 879	6 631	25 904	25 238	17 543	7 695				
	1 351	6 852	5 665	177 844	141 410	419 478	394 352	296 801	99 412				
	757	4 243	3 518	81 247	63 608	223 245	203 652	149 114	56 010				
lowa	362	1 509	1 324	26 071	21 427	73 411	69 025	51 306	18 138				
Kansas	312	1 334	1 171	23 698	19 227	63 385	60 301	44 627	(D)				
Kentucky	361	2 124	1 796	32 709	25 979	102 628	88 524	59 773	29 211				
Louisiana	291	3 561	3 099	69 397	55 647	180 269	167 479	123 719	44 760				
Maine	171	586	482	8 636	7 169	25 514	24 616	18 420	6 428				
Maryland	762	4 906	4 244	90 690	68 677	221 997	205 673	148 236	59 361				
Massachusetts	712	3 055	2 539	61 771	48 154	163 573	154 155	117 088	37 418				
Michigan	926	4 507	3 668	91 685	71 233	263 413	244 661	175 093	72 096				
Minnesota	466	2 321	1 881	58 109	45 144	157 873	147 156	106 474	41 294				
Mississippi	211	924	811	13 603	11 515	36 596	35 098	27 201	(D)				
Missouri	774	3 533	2 994	79 394	62 275	189 948	185 397	135 808	50 537				
	114	442	359	7 118	5 639	22 487	21 351	16 175	6 669				
	194	909	773	15 610	12 399	45 564	43 032	32 253	10 827				
	140	796	641	16 583	13 049	45 449	43 678	29 536	14 201				
	183	524	435	8 019	6 390	25 931	22 945	16 529	(D)				
New Jersey	1 049	4 130	3 523	89 769	70 937	250 453	232 508	175 312	60 299				
	158	583	511	8 313	6 846	24 508	23 849	16 788	7 085				
	2 092	11 155	9 382	242 732	190 233	644 565	605 022	452 106	154 882				
	1 132	4 961	4 084	79 570	61 324	217 098	199 202	144 822	57 273				
	72	367	319	6 681	5 717	20 586	19 841	13 896	6 415				
Ohio Oklahoma Oregon Pennsylvania Rhode Island	1 369	6 549	5 405	125 592	96 895	359 890	336 004	244 206	96 910				
	306	1 278	1 082	21 934	17 345	64 939	59 922	43 530	16 395				
	480	2 029	1 684	35 097	28 204	94 838	92 175	63 081	29 310				
	1 372	7 370	6 192	149 253	118 498	401 497	385 310	274 464	114 334				
	186	546	449	9 342	7 173	26 041	23 583	18 162	5 430				
South Carolina South Dakota Tennessee Texas Utah	475	2 169	1 824	32 070	25 412	92 974	83 960	59 892	24 601				
	106	412	336	6 103	4 834	19 153	18 415	12 822	5 615				
	405	2 598	2 166	46 639	34 363	124 509	117 014	82 707	34 587				
	1 613	12 448	10 846	224 309	174 970	666 612	583 410	417 755	167 913				
	234	1 104	918	16 532	13 796	52 127	50 823	36 432	16 037				
Vermont Virginia Washington West Virginia Wisconsin Wyoming	139	421	362	6 335	5 507	16 224	15 719	11 533	4 185				
	1 156	5 554	4 640	97 665	74 945	256 904	234 934	172 663	63 074				
	1 000	4 482	3 825	88 817	68 640	233 275	225 634	160 423	65 962				
	95	294	262	5 467	4 224	13 906	13 608	10 342	(D)				
	748	3 283	2 713	65 853	51 056	173 822	167 517	124 027	48 324				
	79	290	254	(D)	3 509	10 992	(D)	8 775	(D)				

		1992—Con.				1987						
Cost of construction work sub-contracted out to others	Value of construction work subcontracted in from others	Rental cost for machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Value of construction work	Value added††	†		nate or	esta	ation of ablish- ent
J	к	L	М	N	0	Р	Q	В	G	М		
595 079	4 487 597	158 190	144 930	1 084 015	169 968	7 953 323	5 716 473	1	1	3		U.S.
10 762	79 193	3 319	2 484	20 003	2 277	103 009	70 047	6	5	22	AL	
2 259	18 860	240	965	6 304	263	20 807	14 909	10	8	24	AK	
7 723	107 380	1 962	4 082	17 723	2 682	99 106	71 477	7	6	23	AZ	
5 401	23 002	640	1 061	4 914	713	35 463	24 939	11	11	31	AR	
54 642	676 339	24 787	17 280	120 960	21 370	1 144 368	836 719	2	2	9	CA	
10 305	88 721	1 473	3 288	14 598	2 323	100 452	69 868	5	5	20	CO	
4 870	44 964	1 518	1 813	13 783	3 457	178 456	125 084	4	5	31	CT	
2 141	11 550	291	*370	2 343	462	25 393	19 352	14	12	41	DE	
(D)	(D)	(D)	(D)	1 556	268	17 454	13 356	(Z)	(D)	(D)	DC	
35 973	248 541	10 538	6 826	52 642	10 776	400 418	271 441	4	4	15	FL	
35 053	134 103	4 643	2 836	29 687	4 142	183 033	128 760	5	6	16	GA	
8 292	63 721	1 967	937	14 917	1 295	83 159	65 566	5	3	16	HI	
666	16 293	348	*705	3 442	224	8 146	5 105	14	11	48	ID	
25 126	190 895	5 520	5 855	55 891	7 999	428 609	322 896	4	3	17	IL	
19 594	132 328	3 422	4 316	40 234	3 165	137 922	103 109	4	4	15	IN	
*4 386	26 892	511	1 697	13 907	1 108	47 478	36 196	8	8	24	IA	
3 084	38 239	1 350	651	10 926	1 259	52 826	38 052	8	7	21	KS	
14 104	37 244	1 482	1 757	13 378	1 732	79 006	57 997	7	6	32	KY	
12 791	66 262	5 058	4 452	20 628	3 050	128 311	90 509	4	4	8	LA	
898	10 839	768	615	3 797	1 218	39 157	31 023	11	10	19	ME	
16 325	111 191	3 035	2 282	21 471	4 983	249 416	165 316	6	4	31	MD	
9 417	88 482	2 729	2 502	18 737	5 210	264 982	198 646	4	5	18	MA	
18 751	129 824	5 178	3 833	44 825	5 662	304 613	202 149	5	5	13	MI	
10 718	90 263	3 205	5 040	28 972	2 692	143 589	102 721	6	5	22	MN	
1 498	20 973	1 242	405	5 642	815	30 614	21 099	9	12	22	MS	
4 551	120 762	3 221	4 058	21 437	4 683	203 370	154 850	4	3	27	MO	
1 136	9 706	245	780	4 405	151	6 462	5 010	12	14	18	MT	
2 532	19 587	953	*2 050	7 613	861	35 478	25 152	9	8	70	NE	
1 771	29 408	434	(D)	4 878	703	34 102	22 963	9	11	(D)	NV	
2 987	12 816	289	285	2 447	1 155	42 409	33 941	13	12	30	NH	
17 944	110 560	5 578	3 815	33 906	5 141	275 169	198 969	4	3	15	NJ	
658	16 453	331	441	2 755	814	31 799	21 068	8	8	21	NM	
39 544	281 170	9 604	8 163	57 228	12 182	675 524	487 626	3	3	9	NY	
17 896	100 978	(D)	4 652	27 358	5 049	168 080	116 462	5	4	21	NC	
745	11 816	512	663	3 892	410	15 108	10 720	15	19	18	ND	
23 886	168 156	6 899	6 298	47 730	6 564	303 382	224 404	4	4	15	OH	
5 017	26 330	731	1 295	9 010	998	43 812	32 356	7	7	10	OK	
2 663	62 143	2 273	2 364	15 454	1 620	71 186	53 067	7	6	24	OR	
16 186	169 132	8 096	4 768	60 230	8 015	400 263	300 946	4	3	20	PA	
2 459	10 406	303	*437	3 198	877	38 086	29 191	9	7	44	RI	
9 014	46 918	1 806	1 686	11 604	2 790	96 043	61 875	8	7	24	SC	
*737	9 552	331	531	2 048	243	9 473	6 964	14	13	36	SD	
7 495	81 106	2 049	3 563	18 221	2 598	102 111	68 061	5	5	23	TN	
83 202	341 350	12 228	6 941	67 006	12 022	494 542	340 316	3	4	10	TX	
1 305	33 950	462	1 369	6 044	750	31 233	21 617	13	12	38	UT	
506	9 239	231	*207	1 588	622	18 538	13 543	13	12	55	VT	
21 970	135 829	3 834	3 409	23 622	6 218	248 746	174 181	4	4	23	VA	
7 641	126 608	5 437	6 204	41 052	3 023	156 752	115 693	6	4	34	WA	
298	(D)	410	219	2 965	289	14 615	11 548	23	19	39	WV	
6 304	79 349	2 323	4 013	24 684	2 904	125 782	94 758	5	5	23	WI	
(D)	6 448	85	254	2 358	119	5 452	4 831	14	(D)	36	WY	

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

Item						ive star stimate		
	1992	1987	1982	1977	1992	1987	1982	1977
Number of establishments in business during year	31 920	29 867	24 779	27 369	1	1	1	1
Proprietors and working partners	17 637	11 525	12 750	21 248	1	2	2	2
All employees**	162 587	169 968	136 130	133 106	1	1	1	1
Construction workers: March May August November Average	115 216 141 506 158 841 130 145 136 427	126 443 148 094 164 936 142 139 145 385	102 476 122 997 133 837 114 607 121 353	101 365 127 571 136 342 119 388 121 288	1 1 1 1 1	1 1 1 1	1 1 1 1 1	1 1 1 1
Other employees: March	26 766 25 555 26 952 25 367 26 160	24 829 24 399 24 607 24 441 24 583	14 670 (NA) (NA) (NA) (NA)	11 160 (NA) (NA) (NA) (NA)	1 1 1 1 1	1 1 1 1	2 (NA) (NA) (NA) (NA)	2 (NA) (NA) (NA) (NA)
Payroll, all employees	3 164 065 2 470 237 693 828	2 978 578 2 386 175 592 402	1 875 744 1 589 420 286 324	1 361 463 1 191 130 170 333	1 1 1	1 1 1	1 1 1	1 1 1
First-quarter payroll, all employees	636 112	625 980	386 532	267 898	1	1	1	1
Fringe benefits, all employees	704 963 546 248 158 715	627 051 478 480 148 570	324 644 264 049 60 595	249 079 161 131 87 949	1 1 2	1 1 1	1 1 1	1 1 1
Dollar value of business done	8 739 774 8 689 828 4 487 597 49 947	8 027 973 7 953 323 3 405 709 74 650	4 688 082 4 652 154 1 806 303 35 927	3 205 318 3 171 129 1 442 314 34 189	1 1 2 6	1 1 2 5	1 1 1 5	1 1 1 4
Net value of construction work†	8 094 749	7 445 552	4 398 612	3 051 294	1	1	1	1
Value added††	5 854 779	5 716 473	3 359 932	2 362 004	1	1	1	1
Selected costs Materials, components, and supplies Construction work subcontracted out to others Selected power, fuels, and lubricants Electricity Natural and manufactured gas Gasoline and diesel fuel On highway use Off highway use Other, including lubricating oils and greases	2 884 995 2 108 529 595 079 181 387 27 675 6 936 139 912 124 392 15 520 6 865	2 311 499 1 641 607 507 770 162 121 19 761 4 543 129 315 114 005 15 309 8 501	1 328 150 958 511 253 542 116 096 13 837 4 365 91 239 (NA) (NA) 6 654	843 314 652 394 119 835 71 086 5 840 4 371 54 882 (NA) (NA) 5 994	1 1 4 1 3 4 1 1 4 5	1 1 3 1 2 4 1 1 3 3	1 1 2 1 3 4 2 (NA) (NA)	1 1 2 1 3 4 1 (NA) (NA)
Rental cost for machinery, equipment, and buildings	158 190 97 582 60 608	123 717 75 966 47 751	63 242 42 210 21 032	34 766 24 914 9 852	2 2 3	2 2 3	2 2 3	1 1 2
Selected purchased services Communication services Repairs to buildings and other structures Repairs to machinery and equipment	164 397 71 296 8 665 84 436	121 371 54 894 8 289 58 188	78 661 32 365 5 166 41 130	67 955 28 045 3 400 36 511	2 2 4 2	2 2 5 2	1 2 3 2	4 6 6 5
Ownership of construction projects: Value of construction work Government owned Federal State and local Privately owned	8 689 828 1 529 898 388 392 1 141 506 7 159 929	7 953 323 1 171 608 393 823 777 785 6 781 714	4 652 154 588 562 (NA) (NA) 4 063 592	3 171 129 376 108 (NA) (NA) 2 795 021	1 3 5 4 1	1 3 4 3 1	1 5 (NA) (NA) 1	1 (NA) (NA)

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 cent)
	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	986 237 144 930 107 194 37 736 47 152	759 537 147 339 114 268 33 070 33 253	2 3 4 5 7	2 4 4 6 7
End-of-year gross book value of depreciable assets	1 084 015	873 623	2	2
Depreciation charges during year	128 538	119 375	2	2
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets Capital expenditures, other than land New buildings and other structures Used buildings and other structures Retirements and disposition of depreciable assets	163 167 13 990 9 159 4 831 4 167	181 271 19 153 12 406 6 747 6 079	5 13 18 14 9	4 8 11 10 21
End-of-year gross book value of depreciable assets	172 989	194 346	5	4
Depreciation charges during year	13 973	19 278	5	6
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets Capital expenditures, other than land New machinery and equipment, including automobiles and trucks New automobiles and trucks, intended primarily for highway use Used machinery and equipment, including automobiles and trucks Retirements and disposition of depreciable assets	823 070 130 941 98 036 45 852 32 905 42 985	578 266 128 185 101 862 69 509 26 323 27 174	23 4 6 5 8	2 4 4 4 7 7
End-of-year gross book value of depreciable assets	911 026	679 277	2	2
Depreciation charges during year	114 565	100 097	2	2

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

ltem	Establishments with payroll	Relative standard error of estimate (percent)
All establishments: Number Value of construction work	31 920 8 689 828	1
Establishments with inventories: Number	6 216 2 980 579	2 1
End of 1992, materials and supplies End of 1991, materials and supplies	69 265 66 038	5 4
Establishments with no inventories: Number	12 854 3 422 755	1
Establishments not reporting: NumberValue of construction work	12 850 2 286 494	1

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

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

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

					Establishr	nents with an a	average of—			
Selected statistics	Total	1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees or more
1992										
Number of establishments	31 920 162 587 3 164 065 8 739 774 8 689 828 8 094 749	23 021 40 905 580 112 2 160 777 2 154 415 1 975 197	5 306 33 919 584 483 1 626 572 1 620 002 1 497 475	2 269 29 445 600 193 1 580 079 1 568 908 1 452 715	1 072 31 170 753 602 1 850 735 1 835 404 1 735 848	172 11 597 314 139 722 280 717 770 682 489	66 9 583 228 883 564 909 560 021 525 763	11 3 839 81 631 185 530 184 417 225 261	3 2 128 21 021 48 892 48 892 (D)	- - - - -
Value added††—————————————————————————————————	5 854 779 2 289 916 595 079 158 190 144 930 1 084 015	1 399 720 581 841 179 217 27 818 40 579 271 108	1 070 720 433 324 122 527 28 678 28 020 190 278	1 047 255 416 631 116 193 24 188 22 336 183 544	1 275 073 476 107 99 555 37 418 30 686 242 165	501 315 185 685 35 280 15 502 9 640 97 115	378 163 152 488 34 258 18 157 11 515 78 920	149 875 43 841 8 048 6 429 2 154 20 885	32 658 (D) (D) (D) (D) (D)	- - - - -
1987										
All employees** Value of construction work	169 968 7 953 323 5 716 473	(S) (S) (S)	36 981 1 527 383 1 093 401	32 590 1 381 694 1 001 397	34 174 1 731 396 1 281 510	13 374 749 964 565 820	9 522 504 939 369 114	4 130 249 321 164 222	- - -	- - -
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)										
All employees** Net value of construction work† Capital expenditures, other than land	1 1 3	2 2 7	3 3 9	3 3 8	2 2 8	1 1 1	3 (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]

			Establishments with dollar value of business done										
Selected statistics	Total	Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more		
1992													
Number of establishments	31 920 162 587 3 164 065 8 739 774 8 689 828 8 094 749	(9) (9) (9) (9) (9) (9) (9)	(9) (9) (9) (9) (9) (9)	7 454 13 727 161 669 544 997 543 597 520 730	9 568 34 247 497 018 1 492 092 1 487 620 1 396 947	3 471 25 073 444 741 1 198 407 1 193 659 1 117 027	1 971 24 207 498 578 1 348 422 1 337 046 1 223 567	1 105 26 354 632 477 1 631 949 1 620 998 1 516 733	296 13 021 374 982 1 010 824 1 003 829 928 691	106 9 618 272 999 711 102 707 784 646 138	40 8 695 219 800 587 578 581 487 538 944		
Value added††Cost of materials, components, supplies, and	5 854 779	(S)	(S)	376 916	999 484	806 087	873 620	1 099 729	687 563	473 013	393 877		
fuelsCost of construction work subcontracted out	2 289 916	(S)	(S)	145 213	401 936	315 688	361 323	427 955	248 123	176 443	151 158		
to othersRental cost for machinery, equipment, and	595 079	(S)	(S)	22 867	90 672	76 632	113 479	104 265	75 138	61 646	42 543		
buildings	158 190 144 930	(S) (S)	(S) (S)	6 120 13 964	21 092 28 321	19 475 16 212	23 188 19 384	31 939 25 944	20 096 15 678	14 748 11 074	19 518 9 656		
End-of-year gross book value of depreciable assets	1 084 015	(S)	(S)	83 526	165 071	142 299	149 908	213 450	134 675	90 904	74 501		
1987													
All employees** Value of construction work Value added††	169 968 7 953 323 5 716 473	(S) (S) (S)	(S) (S) (S)	(S) (S) (S)	36 996 1 382 442 976 844	28 054 1 175 312 830 751	26 085 1 278 071 924 425	25 572 1 447 895 1 046 975	13 725 900 099 656 541	8 666 593 676 438 641	6 266 468 278 327 970		
1992 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)													
All employees** Net value of construction work† Capital expenditures, other than land	1 1 3	(S) (S) (S)	(S) (S) (S)	3 3 10	3 2 9	4 3 12	3 3 13	2 2 6	2 2 6	(Z) 1 (Z)	(Z) (Z) (Z)		

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

11-8 PAINTING AND PAPER HANGING

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

				-1-45	andard error			
Type of construction	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair		of estimat	andard er e (percen lumn—	
	А	В	С	D	А	В	С	D
1992								
Value of construction work	8 689 828	2 974 580	1 650 183	3 869 515	1	1	2	1
Building construction	7 102 870 2 585 553 2 222 793 362 760	2 669 616 1 174 927 1 029 193 145 734	1 468 106 377 872 324 251 53 621	2 965 148 1 032 753 869 349 163 405	1 2 2	2 3 3	2 5 5	1 2 2 5
condominiums Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives Other residential buildings, including hotels, motels, and tourist cabins Hotels, motels, and tourist cabins Other residential buildings Office buildings	531 817 210 184 150 335 59 849 1 046 095	114 103 66 699 55 883 10 816 349 732	79 197 65 331 53 054 12 277 340 690	338 517 78 154 41 397 36 756 355 673	4 5 6 10 2	7 8 8 20 2	7 11 13 19 3	4 6 4 11 3
Other commercial buildings such as stores, restaurants, and automobile service stations	863 277 1 023 818 879 591 144 227 111 339 283 974 335 711 111 102	340 166 303 943 246 299 57 643 34 828 124 925 127 829 32 464	163 678 192 273 162 038 30 235 27 403 77 560 121 580 22 520	359 433 527 602 471 254 56 348 49 109 81 488 86 301 56 118	3 2 3 4 7 4 4 6	3 6 8 4 11 5 6 8	4 4 4 5 5 5 6 10	4 2 2 6 8 6 5 11
Nonbuilding construction	1 391 408	304 964	182 077	904 367	2	4	6	3
Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc. Bridges, tunnels, and elevated highways Blast furnaces, petroleum refineries, chemical complexes, etc. Power plants Sewage treatment and water treatment plants Sewage treatment plants Water treatment plants Water storage facilities Ships Other nonbuilding construction	284 974 233 760 343 681 105 801 114 268 59 030 55 239 71 765 81 226 155 932	104 568 22 895 58 414 10 675 50 013 28 517 21 497 11 147 2 870 44 383	79 489 29 563 21 716 13 252 21 437 14 085 7 351 1 356 *986 14 280	100 917 181 303 263 551 81 874 42 818 16 428 26 391 59 262 77 371 97 269	5 5 3 4 4 6 6 26 4 5	7 7 9 13 5 7 6 7 3 11	9 23 5 17 4 5 5 9 57 10	6 7 3 3 8 11 10 32 4 5
Construction work, n.s.k.	195 550	(NA)	(NA)	(NA)	6	(NA)	(NA)	(NA)
1987								
Value of construction work	7 953 323	3 001 279	1 339 642	2 926 718	1	1	2	1
Building construction	6 291 053 1 929 573 1 594 775	2 768 344 932 192 740 161	1 231 058 264 553 228 026	2 291 652 732 827 626 586	1 2 2	1 2 3	2 3 4	2 3 3
condominiums Apartment buildings with two or more units, including rentals, apartment-type condominiums, and cooperatives Other residential buildings, including hotels, motels, and tourist cabins Hotels, motels, and tourist cabins Other residential buildings Office buildings	334 798 567 725 360 642 224 176 136 466 1 105 840	192 031 224 681 157 085 113 255 43 830 489 963	36 527 75 973 91 273 59 696 31 577 296 245	106 241 267 070 112 283 51 224 61 059 319 631	4 4 4 7 2	5 7 4 3 10 2	8 7 10 14 10 3	5 5 4 9 3
Other commercial buildings such as stores, restaurants, and automobile service stations Industrial buildings and warehouses Industrial buildings Warehouses Religious buildings Educational buildings Hospitals and institutional buildings Other nonresidential buildings	839 501 149 315 99 174 213 712 263 224	298 006 417 459 332 701 84 758 28 869 72 659 108 944 38 486	144 539 161 893 140 439 21 454 23 577 64 139 88 005 20 861	203 653 409 463 366 360 43 103 46 727 76 913 66 274 56 811	2 2 2 5 3 4 3 10	3 3 7 6 6 3 17	3 3 4 5 5 6 4 12	3 3 7 5 6 8 13
Nonbuilding construction Highways, streets, and related work such as installation of guard rails, highway signs, lighting, etc. Bridges, tunnels, and elevated highways Blast furnaces, petroleum refineries, chemical complexes, etc. Power plants Sewage treatment and water treatment plants Ships Other nonbuilding construction	201 543 90 827 93 871	232 936 54 397 18 204 24 85 35 575 59 147 6 584 34 171	108 584 30 149 11 367 20 039 8 553 12 688 5 901 19 887	635 066 74 285 123 784 156 645 46 698 22 036 70 391 141 226	3 7 10 3 2 6 6 9	4 10 13 3 3 7 17	5 14 22 8 5 8 6 17	3 9 12 4 2 14 6 10
Construction work, n.s.k.	685 683	(NA)	(NA)	(NA)	3	(NA)	(NA)	(NA)

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

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

see appendix A]											
				Value of co		Net		Cost of construction	star	Relative dard e	error
Item	Number of establishments	All employees**	Payroll, all employees	For all types	For specialized type	value of construction work†	Value added††	work sub- contracted out to others	(pe	rcent) olumn-	for
	А	В	С	D	E	F	G	н	В	D	Н
All establishments	31 920	162 587	3 164 065	8 689 828	5 394 461	8 094 749	5 854 779	595 079	1	1	4
Establishments not specializing by type Establishments specializing 51 percent or more	5 475 26 445	44 804 117 783	971 440 2 192 624	2 444 822 6 245 006	(NA) 5 394 461	2 296 147 5 798 602	1 680 292 4 174 487	148 675 446 404	2	2 1	6 4
SINGLE-FAMILY HOUSES, DETACHED											
All establishments specializing in type	16 483	48 569	721 913	2 135 557	1 901 659	1 983 869	1 420 102	151 688	2	2	6
Establishments with — 100 percent specialization — 90 to 99 percent specialization — 80 to 89 percent specialization — 70 to 79 percent specialization — 60 to 69 percent specialization — 51 to 59 percent specialization — 51 to 50 to 5	8 189 2 877 2 018 1 741 1 300 357	21 911 8 836 6 775 5 548 4 230 1 270	315 477 135 778 99 557 83 108 69 132 18 861	986 678 399 713 266 382 240 109 191 513 51 161	986 678 373 087 219 338 175 674 118 620 28 263	908 861 372 726 252 983 226 298 175 412 47 590	642 204 265 441 187 811 163 227 128 291 33 127	77 817 26 987 13 399 13 812 16 102 3 572	3 5 6 6 8 14	3 5 5 6 7 13	10 16 11 10 21 32
SINGLE-FAMILY HOUSES, ATTACHED, INCLUDING TOWNHOUSES AND TOWNHOUSE-TYPE CONDOMINIUMS											
All establishments specializing in type	1 239	4 925	76 085	202 499	168 855	193 358	140 781	9 140	8	7	16
Establishments with — 100 percent specialization	512 207 (S) (S) 155 *17	1 544 966 756 760 813 *86	22 226 14 177 12 887 10 559 14 941 *1 296	61 699 32 992 34 200 32 124 38 186 *3 298	61 699 30 532 27 889 23 468 23 442 *1 825	58 469 32 104 33 412 (D) 36 372 (D)	43 178 23 362 22 483 21 627 27 830 *2 301	3 230 888 788 (D) 1 815 (D)	14 25 13 17 15 56	12 21 13 17 14 42	33 30 31 (D) 13 (D)
APARTMENT BUILDINGS WITH TWO OR MORE UNITS, INCLUDING RENTALS, APARTMENT-TYPE CONDOMINIUMS, AND COOPERATIVES											
All establishments specializing in type	1 620	7 415	123 839	347 008	300 308	311 729	229 682	35 279	6	6	14
Establishments with — 100 percent specialization	761 260 (S) 195 146 *8	2 950 1 281 961 1 323 861 *40	51 010 20 062 12 076 25 715 13 803 *1 174	137 953 55 310 44 118 66 783 36 155 *6 689	137 953 51 856 36 063 48 534 22 154 *3 750	123 343 46 934 38 475 64 722 34 177 *4 078	95 828 33 970 26 476 45 192 25 725 *2 492	14 610 8 376 5 643 2 060 1 978 *2 611	10 15 16 13 21 49	10 12 19 10 19 60	24 28 38 16 25 65
HOTELS, MOTELS, AND TOURIST CABINS											
All establishments specializing in type	82	569	14 727	44 081	37 467	35 947	29 795	8 134	19	15	24
Establishments with — 100 percent specialization	(S) (S) (S) *20 2	194 *57 *9 207 (D) (D)	4 093 (D) (S) 5 794 (D) (D)	21 204 *3 205 (D) 12 264 (D) (D)	21 204 *2 884 (D) 8 861 (D) (D)	15 369 *2 684 (D) 11 229 (D) (D)	14 213 *1 757 (D) 8 669 (D) (D)	5 835 (S) (D) *1 035 (D) (D)	39 64 74 31 (D) (D)	23 67 (D) 31 (D) (D)	31 (S) (D) 46 (D) (D)
OTHER RESIDENTIAL BUILDINGS											
All establishments specializing in type	190	785	13 279	49 193	41 431	45 525	32 098	3 668	16	14	28
Establishments with — 100 percent specialization	116 *16 *13 *35 (S) *4	389 *26 *11 190 (S) *102	5 907 *488 (S) 3 093 (S) 2 609	27 014 *1 392 (S) 8 513 (S) 7 285	27 014 *1 292 (S) 6 252 (S) 3 735	25 034 *1 248 (D) 7 954 (S) (D)	17 406 *1 064 (S) 5 550 (S) 5 677	1 980 (S) (D) *558 (S) (D)	20 64 71 38 (S) 45	16 67 (S) 37 (S) 22	36 (S) (D) 45 (S) (D)
OFFICE BUILDINGS											
All establishments specializing in type	1 225	11 617	292 433	695 176	531 983	655 065	470 913	40 110	3	3	9
Establishments with —	342 121 188 201 281 91	2 264 990 1 679 2 643 3 081 960	53 933 26 460 48 881 64 640 74 174 24 346	133 791 59 745 108 777 151 506 184 315 57 042	133 791 55 247 88 215 110 393 113 206 31 130	125 595 58 058 104 072 143 442 169 304 54 594	90 564 43 404 77 996 103 386 116 805 38 759	8 196 1 687 4 705 8 064 15 011 2 447	8 11 8 7 5 14	8 8 7 6 5 11	32 17 23 8 12 32
OTHER COMMERCIAL BUILDINGS SUCH AS STORES, RESTAURANTS, AND AUTOMOBILE SERVICE STATIONS											
All establishments specializing in type	1 483	9 847	197 906	532 276	450 594	500 180	365 728	32 096	4	4	10
Establishments with — 100 percent specialization — 90 to 99 percent specialization — 80 to 89 percent specialization — 70 to 79 percent specialization — 60 to 69 percent specialization — 51 to 59 percent specia	601 150 206 215 235 (S)	3 737 1 015 1 862 1 185 1 438 611	78 957 19 777 36 994 23 257 24 313 14 608	213 105 62 800 89 049 63 721 61 850 41 751	213 105 57 538 73 073 46 259 38 092 22 528	201 522 57 196 85 944 60 874 58 339 36 305	149 957 41 866 63 732 46 359 39 531 24 282	11 583 5 604 3 105 2 847 3 511 (S)	8 14 9 13 13 12	6 20 9 11 13 10	17 36 15 18 25 (S)

11-10 PAINTING AND PAPER HANGING

CONSTRUCTION-INDUSTRY SERIES

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

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

INDUSTRIAL BUILDINGS	Number of establishments A	All employees**	Payroll, all employees	Value of co wo For all types		Net value of construction work†	Value	Cost of construction work sub-contracted	stan of (pe	Relative dard e estima rcent) olumn-	error ate for
item	establish- ments	employees**	employees		specialized	construction		contracted			
INDUSTRIAL BUILDINGS		В	С				added††	out to others			
INDUSTRIAL BUILDINGS	681			D	Е	F	G	Н	В	D	Н
	681										
All establishments specializing in type		9 184	215 329	624 121	517 489	565 033	417 185	59 088	4	4	20
Establishments with — 100 percent specialization — 90 to 99 percent specialization — 80 to 89 percent specialization — 70 to 79 percent specialization — 60 to 69 percent specialization — 51 to 59 percent specialization	231 68 88 81 173 40	2 806 1 340 1 501 1 287 1 466 783	66 069 30 992 36 316 27 135 32 482 22 336	218 575 83 472 97 963 64 003 91 334 68 775	218 575 77 619 79 815 46 379 56 179 38 921	191 357 79 208 88 166 63 151 86 177 56 974	136 502 59 467 68 086 44 364 64 075 44 691	*27 218 4 264 9 796 852 5 157 11 802	7 9 10 6 11 9	10 6 7 7 9 8	44 1 13 14 15 2
EDUCATIONAL BUILDINGS											
All establishments specializing in type	282	1 562	30 778	82 004	62 051	75 891	54 444	6 113	13	12	28
Establishments with — 100 percent specialization	100 *7 61 *24 84 8	(S) *19 621 147 451 120	4 519 *669 8 950 3 851 9 839 2 950	(S) *1 263 26 943 9 141 24 084 6 774	(S) *1 238 21 734 6 577 14 914 3 789	10 327 *1 181 25 500 8 853 23 716 6 313	5 519 *887 18 937 6 496 17 742 4 863	(S) *82 *1 443 (S) 368 461	(S) 65 28 30 18 30	(S) 59 28 28 17 26	(S) 59 56 (S) 37 34
HOSPITALS AND INSTITUTIONAL BUILDINGS											
All establishments specializing in type	295	1 881	37 801	98 939	69 184	93 546	63 592	*5 394	14	16	48
Establishments with — 100 percent specialization	(S) 49 *23 63 87 *25	(S) 215 *141 351 811 187	(S) 3 816 *1 792 7 128 19 211 3 684	(S) 10 152 *11 113 16 813 46 214 8 230	(S) 9 254 *8 954 11 982 28 059 4 518	(S) 9 895 *8 326 16 261 44 588 8 084	(S) 6 429 *4 365 10 921 29 871 6 092	(S) *257 (S) *552 1 626 *145	(S) 31 52 25 27 37	(S) 35 73 24 26 31	(S) 50 (S) 44 22 46
HIGHWAYS, STREETS, AND RELATED WORK SUCH AS INSTALLATION OF GUARD RAILS, HIGHWAY SIGNS, LIGHTING, ETC.											
All establishments specializing in type	202	2 893	79 234	289 596	275 707	280 299	172 824	9 297	6	5	4
Establishments with — 100 percent specialization — 90 to 99 percent specialization — 80 to 89 percent specialization — 70 to 79 percent specialization — 60 to 69 percent specialization — 51 to 59 percent specialization —	174 10 5 - *5 *9	2 163 387 98 - 73 171	56 826 11 902 4 923 - 2 356 3 227	214 540 38 682 19 262 *6 545 10 566	214 540 35 905 15 434 - *4 278 5 549	209 971 34 846 (D) - *6 545 (D)	125 738 23 920 12 515 - *3 889 6 762	4 570 3 837 (D) — (D)	7 11 20 - 37 8	6 6 10 - 40 10	6 4 (D) - (D)
BLAST FURNACES, PETROLEUM REFINERIES, CHEMICAL COMPLEXES, ETC.											
All establishments specializing in type	195	4 917	117 148	298 504	273 283	284 235	215 330	14 269	4	5	27
Establishments with — 100 percent specialization	113 28 6 9 (S) *6	2 737 1 325 323 147 293 *91	59 842 34 360 10 595 4 613 5 550 2 188	146 305 83 520 23 822 11 468 28 434 *4 955	146 305 78 722 19 432 8 393 17 765 *2 667	141 025 79 748 (D) (D) (D) *4 955	110 283 61 423 13 985 8 620 17 236 *3 783	5 280 3 772 (D) (D) (D)	5 6 14 19 23 41	6 6 10 18 33 45	(Z) 18 (D) (D) (D)
SHIPS											
All establishments specializing in type	40	1 729	28 883	82 581	68 841	75 756	56 010	6 825	7	4	3
Establishments with — 100 percent specialization	37 1 1 - - 1	(D) (D) (D) - - (D)	(D) (D) (D) - - (D)	39 400 (D) (D) - - (D)	39 400 (D) (D) - (D)	(D) (D) (D) - - (D)	32 022 (D) (D) - (D)	(D) (D) - - - (D)	(D) (D) (D)	8 (D) (D) - (D)	(D) (D) - - (D)

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

	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—					
	А	В	С	D	Е	F	А	В	С	D	Е	F
United States	31 920	136 427	115 216	141 506	158 841	130 145	1	1	1	1	1	1
Alabama	374	2 127	1 900	1 995	2 419	2 192	6	6	7	7	7	7
	105	372	218	433	584	255	11	11	17	13	13	14
	511	2 734	2 156	2 769	3 108	2 904	5	7	7	7	8	8
	187	901	859	871	1 012	863	9	12	15	12	12	11
	4 099	16 304	14 947	16 630	18 371	15 266	1	2	2	2	2	2
Colorado	647	2 657	2 119	2 856	3 174	2 479	4	5	5	5	6	5
	542	1 629	1 153	1 642	2 174	1 545	4	4	7	5	4	5
	128	448	372	461	534	424	10	14	10	14	16	12
	16	208	156	257	238	181	(Z)	(Z)	(Z)	(Z)	(Z)	(Z)
	1 977	7 612	7 810	7 518	7 877	7 242	3	4	4	4	5	5
Georgia	628	3 516	3 223	3 641	3 889	3 310	5	5	5	5	6	5
	162	1 273	1 229	1 246	1 407	1 210	4	5	6	6	6	5
	191	466	306	444	591	524	8	12	12	9	16	15
	1 351	5 665	4 756	5 962	6 645	5 297	2	4	3	5	5	3
	757	3 518	2 937	3 712	4 069	3 354	4	4	5	5	5	5
lowa	362	1 324	1 171	1 353	1 561	1 214	5	8	10	8	7	9
Kansas	312	1 171	1 117	1 194	1 286	1 089	6	8	9	9	8	9
Kentucky	361	1 796	1 486	1 840	2 123	1 737	6	8	9	7	8	8
Louisiana	291	3 099	2 704	3 255	3 388	3 050	5	4	6	5	5	5
Maine	171	482	329	462	614	524	8	11	12	11	12	15
Maryland	762	4 244	3 162	4 948	5 060	3 807	4	6	4	10	9	4
	712	2 539	1 721	2 717	3 319	2 398	4	4	5	4	5	5
	926	3 668	2 975	3 742	4 428	3 526	3	6	6	5	6	7
	466	1 881	1 451	1 913	2 414	1 748	5	6	6	6	6	8
	211	811	786	818	858	784	8	10	11	10	10	10
Missouri Montana Nebraska Nevada New Hampshire	774	2 994	2 584	3 091	3 412	2 888	3	4	5	4	4	5
	114	359	241	370	468	357	8	12	14	14	14	14
	194	773	682	803	831	776	8	9	12	8	9	10
	140	641	573	643	825	525	11	9	10	9	14	9
	183	435	208	510	601	422	6	13	15	14	15	13
New Jersey	1 049	3 523	2 586	3 633	4 300	3 572	3	4	4	4	4	4
	158	511	427	516	546	558	7	8	10	9	10	10
	2 092	9 382	6 843	10 456	11 913	8 316	2	3	3	3	3	3
	1 132	4 084	3 720	4 192	4 441	3 984	4	5	5	5	5	5
	72	319	221	309	426	321	13	14	17	17	13	15
OhioOklahoma Oregon Pennsylvania Rhode Island	1 369 306 480 1 372 186	5 405 1 082 1 684 6 192 449	3 964 948 1 536 4 938 267	5 585 1 100 1 674 6 222 466	6 859 1 181 1 970 7 417 575	5 212 1 100 1 555 6 192 486	3 6 4 3 2	4 7 7 4 10	5 9 7 4 12	4 8 8 4 9	4 6 8 4 11	4 8 7 4 13
South Carolina South Dakota Tennessee Texas Utah	475	1 824	1 768	1 863	1 929	1 737	3	8	9	8	8	8
	106	336	285	370	430	260	13	11	13	14	14	10
	405	2 166	2 023	2 174	2 370	2 098	3	4	5	5	5	6
	1 613	10 846	9 406	11 348	11 961	10 668	2	3	3	3	4	3
	234	918	791	989	1 002	889	7	11	13	14	12	11
Vermont Virginia Washington West Virginia Wisconsin Wyoming	139	362	214	383	533	317	7	13	17	15	12	13
	1 156	4 640	4 185	4 824	5 058	4 493	3	4	4	4	4	4
	1 000	3 825	3 208	3 945	4 675	3 474	3	6	5	7	8	6
	95	262	210	269	330	240	15	22	26	22	19	21
	748	2 713	2 181	2 820	3 325	2 527	4	5	6	6	6	5
	79	254	166	274	318	256	6	14	12	14	17	17

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

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

	1992									
Location of construction work		Construction establishmen this	work done by its located in State	Construction work done by establishments not located in this State		1987	Percent change 1987	Relative standard error of estimate (percent) for		nate or
Eccation of Constitution work	Value of construction work done in this State	Number	Value of construction work	Number	Value of construction work	value of construction work done in this State	(col F) to 1992 (col A)	C	olumn —	
	А	В	С	D	Е	F	G	Α	С	E
United States	8 689 828	31 692	7 911 831	4 051	777 997	7 953 323	9.3	1	1	2
Alabama	139 994	(S)	112 251	92	27 742	90 792	54.2	5	6	13
	39 419	105	30 462	6	8 956	23 979	64.4	6	8	(Z)
	147 346	509	144 635	25	2 712	105 537	39.6	7	7	14
	57 097	187	48 783	33	8 314	42 752	33.6	12	13	30
	1 165 925	4 083	1 145 784	85	20 142	1 136 578	2.6	2	2	5
Colorado Connecticut Delaware District of Columbia Florida	143 441	644	140 177	30	3 264	102 953	39.3	6	6	17
	127 439	541	107 897	111	19 542	180 211	-29.3	5	6	11
	33 152	120	21 761	78	11 390	34 723	-4.5	10	12	18
	40 473	(S)	8 616	157	31 857	50 091	-19.2	9	(Z)	12
	466 359	1 977	423 297	116	43 062	415 140	12.3	4	4	5
Georgia Hawaii	188 870 125 018 27 107 417 812 203 383	620 162 191 1 348 753	168 763 112 046 24 926 378 336 180 682	107 *23 50 145 125	20 106 12 972 2 182 39 476 22 702	198 111 91 242 7 439 417 688 145 666	-4.7 37.0 264.4 - 39.6	9 3 10 3 4	10 3 10 3 5	19 10 30 4 15
lowa	83 791	361	67 823	76	15 969	44 835	86.9	9	9	27
Kansas	76 304	307	55 405	120	20 898	61 878	23.3	6	7	9
Kentucky	94 581	357	83 829	97	10 751	69 991	35.1	6	7	10
Louisiana	190 779	291	162 917	55	27 862	145 012	31.6	3	3	4
Maine	24 764	166	22 894	21	1 870	40 432	–38.8	10	10	22
Maryland	198 011 169 892 267 918 142 168 46 155	749 704 925 466 211	164 091 159 590 253 609 135 429 32 880	174 88 69 61 58	33 920 10 301 14 309 6 739 13 275	215 476 274 492 303 461 134 020 32 210	-8.1 -38.1 -11.7 6.1 43.3	4 5 5 6 9	5 5 6 12	9 12 10 18 6
Missouri Montana Nebraska Nevada New Hampshire	173 113	764	160 716	104	12 397	177 415	-2.4	4	4	14
	24 783	114	21 082	21	3 701	6 890	259.7	12	13	10
	46 117	194	43 959	30	2 157	36 286	27.1	8	8	21
	46 685	140	40 422	47	6 263	36 709	27.2	11	11	27
	27 053	183	24 943	48	2 110	43 191	-37.4	12	12	32
New Jersey	252 716	1 035	218 588	199	34 128	281 748	-10.3	3	4	5
	27 405	158	23 971	*27	3 433	32 421	-15.5	7	7	26
	630 086	2 090	600 373	219	29 713	667 947	-5.7	3	3	10
	236 474	1 123	210 448	109	26 026	170 999	38.3	4	4	11
	15 996	72	13 568	11	2 428	14 583	9.7	17	20	9
Ohio Oklahoma Oregon Pennsylvania Rhode Island	364 513	1 357	340 445	115	24 068	298 031	22.3	4	4	16
	61 088	306	53 288	37	7 801	40 372	51.3	8	9	11
	102 677	480	90 313	37	12 364	72 613	41.4	6	6	1
	358 674	1 350	335 044	165	23 630	335 947	6.8	4	4	8
	32 735	182	24 657	41	8 078	41 566	–21.2	6	8	6
South Carolina	104 377	475	84 644	98	19 733	109 559	-4.7	7	8	13
	17 962	98	15 666	32	2 296	8 072	122.5	12	13	26
	129 722	397	114 313	99	15 409	104 976	23.6	4	5	6
	648 795	1 604	618 037	109	30 759	458 341	41.6	4	4	17
	50 741	233	47 327	27	3 413	32 542	55.9	10	10	34
Vermont	16 671	134	15 177	28	1 493	23 577	-29.3	12	13	17
	271 612	1 140	221 386	168	50 226	293 278	-7.4	3	4	3
	228 332	1 000	219 815	77	8 518	155 415	46.9	4	4	12
	20 657	95	12 940	78	7 718	22 755	-9.2	13	20	11
	169 363	732	162 910	80	6 454	114 686	47.7	5	5	5
	14 283	79	10 917	41	3 367	8 669	64.8	11	14	20

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]

Drimon, and other kind of husiness activities	Dollar value of	business done	Relative standard error of estimate (percent)			
Primary and other kind of business activities	1992	1987	1992	1987		
All kinds of business	8 739 774	8 027 973	1	1		
SPECIAL TRADE CONTRACTORS						
Bridge painting contractor	6 961 779 694 145 86 165	156 596 45 480 6 362 909 723 624 69 912 171 005	5 7 1 2 3 5	10 5 1 2 6 7		
Other construction activities	295 565	221 710	4	(NA)		
Other business activities	44 084	97 128	7	(NA)		
Kind of business activity, n.s.k.	73 579	179 607	7	6		

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

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

Selected statistics	1992	1987	Relative standard error of estimate (percent) for 1992
AVERAGE PER ESTABLISHMENT			
Number of employees** Number of construction workers	5.1 4.3 .8 99.1 77.4 21.7	5.7 4.9 .8 99.7 79.9 19.8	(Z) (Z) (Z) (Z) 1
Dollar value of business done	273.8 272.2 71.7 18.6 5.0 4.5 34.0	268.8 266.3 60.4 17.0 4.1 4.9 29.3	1 1 1 4 2 4 2
AVERAGE PER EMPLOYEE			
Payroll, all employees	19.5 53.8 36.0	17.5 47.2 33.6	(Z) 1 1
AVERAGE PER CONSTRUCTION WORKER			
Payroll, construction workers \$1,000_ Value of construction work do_	18.1 63.7	16.4 54.7	(Z)
AVERAGE PER OTHER EMPLOYEE			
Payroll, other employees\$1,000	26.5	24.1	1
AVERAGE PER DOLLAR VALUE OF CONSTRUCTION WORK			
Payroll, all employees	.364 .264 .068 .516	.375 .227 .064 .428 .016	(Z) 1 3 2 2

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

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

to meaning or abbreviations and symbols, see introductory					Average per o	Iollar value of co	nstruction 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	5.1	19.5	63.7	.364	.264	.068	.516	.018
Alabama Alaska Arizona Arkansas California	6.9	18.9	61.1	.375	.267	.083	.610	.026
	4.1	22.5	81.9	.323	.249	.074	.619	.008
	6.5	16.5	55.4	.359	.310	.051	.709	.013
	5.7	16.4	57.4	.334	.258	.104	.445	.012
	4.8	20.9	71.3	.352	.275	.047	.581	.021
Colorado Connecticut Delaware District of Columbia Florida	4.7	16.7	54.0	.355	.309	.072	.618	.010
	3.6	21.9	69.9	.375	.212	.043	.395	.013
	4.2	17.9	51.2	.422	.192	.093	.503	.013
	15.2	(D)	74.3	(D)	(D)	(D)	(D)	(D)
	4.8	16.5	61.2	.336	.294	.077	.534	.023
Georgia	6.6	19.1	67.7	.333	.240	.147	.563	.020
Hawaii	9.5	30.6	88.0	.420	.243	.074	.569	.018
Idaho	2.8	14.8	55.6	.304	.297	.026	.629	.013
Illinois	5.1	26.0	74.0	.424	.237	.060	.455	.013
Indiana	5.6	19.1	63.5	.364	.251	.088	.593	.015
lowa	4.2	17.3	55.4	.355	.247	*.060	.366	.007
Kansas	4.3	17.8	54.1	.374	(D)	.049	.603	.021
Kentucky	5.9	15.4	57.1	.319	.285	.137	.363	.014
Louisiana	12.2	19.5	58.2	.385	.248	.071	.368	.028
Maine	3.4	14.7	52.9	.338	.252	.035	.425	.030
Maryland Massachusetts Michigan Minnesota Mississippi	6.4	18.5	52.3	.409	.267	.074	.501	.014
	4.3	20.2	64.4	.378	.229	.058	.541	.017
	4.9	20.3	71.8	.348	.274	.071	.493	.020
	5.0	25.0	83.9	.368	.262	.068	.572	.020
	4.4	14.7	45.1	.372	(D)	.041	.573	.034
Missouri Montana	4.6	22.5	63.4	.418	.266	.024	.636	.017
	3.9	16.1	62.6	.317	.297	.051	.432	.011
	4.7	17.2	58.9	.343	.238	.056	.430	.021
	5.7	20.8	70.9	.365	.312	.039	.647	.010
	2.9	15.3	59.6	.309	(D)	.115	.494	.011
New Jersey New Mexico New York North Carolina North Dakota	3.9	21.7	71.1	.358	.241	.072	.441	.022
	3.7	14.3	48.0	.339	.289	.027	.671	.014
	5.3	21.8	68.7	.377	.240	.061	.436	.015
	4.4	16.0	53.2	.367	.264	.082	.465	(D)
	5.1	18.2	64.5	.325	.312	.036	.574	.025
Ohio Oklahoma Oregon Pennsylvania Rhode Island	4.8	19.2	66.6	.349	.269	.066	.467	.019
	4.2	17.2	60.0	.338	.252	.077	.405	.011
	4.2	17.3	56.3	.370	.309	.028	.655	.024
	5.4	20.3	64.8	.372	.285	.040	.421	.020
	2.9	17.1	58.0	.359	.209	.094	.400	.012
South Carolina	4.6	14.8	51.0	.345	.265	.097	.505	.019
	3.9	14.8	57.0	.319	.293	*.039	.499	.017
	6.4	18.0	57.5	.375	.278	.060	.651	.016
	7.7	18.0	61.5	.336	.252	.125	.512	.018
	4.7	15.0	56.8	.317	.308	.025	.651	.009
Vermont	3.0 4.8 4.5 3.1 4.4 3.7	15.0 17.6 19.8 18.6 20.1 (D)	44.8 55.4 61.0 53.1 64.1 43.3	.390 .380 .381 .393 .379 (D)	.258 .246 .283 (D) .278 (D)	.031 .086 .033 .021 .036 (D)	.569 .529 .543 (D) .456 .587	.014 .015 .023 .029 .013

Appendix A. **Explanation of Terms**

Construction. Is composed of three broad categories:

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

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

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

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

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

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

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

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

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

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

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

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

Dollar value of business done comprises the following detail:

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

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

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

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

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

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

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

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

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

Costs for materials, components, and supplies include:

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

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

Excluded from this item are:

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

Costs for construction work subcontracted out to others include:

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

Excluded from this item are:

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

Costs for selected power, fuels, and lubricants include:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Building construction:

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

- Other commercial buildings, such as stores, restaurants, and automobile service stations. Includes all buildings which are intended for use primarily in the retail and service trades. For example, shopping centers, department stores, drug stores, restaurants, public garages, auto service stations, and one or two story bank or financial institutions.
- Industrial buildings. Includes all industrial buildings and plants which are used to house production and assembly activities. Note that industrial parks should be classified under its primary usage such as warehouses, office space, commercial or industrial type buildings. Heavy industrial facilities such as blast furnaces, petroleum refineries, and chemical complexes are not included in this category but are reported under nonbuilding construction.
- Warehouses. Includes commercial warehouses, cold storage plants, grain elevators, mini-warehouses, and other such storage buildings.
- Religious buildings. Includes all buildings which are intended for religious services or functions such as churches, synagogues, convents, monasteries, and seminaries.
- Educational buildings. Includes all buildings which are used directly in administrative and instructional activities such as colleges, universities, elementary and secondary schools, correspondence, commercial, and trade schools. Libraries, museums, and art galleries, as well as laboratories which are not a part of a manufacturing or commercial establishment, are also included.
- Hospitals and institutional buildings. Includes medical office buildings and all other buildings which are intended to provide hospital and institutional care such as clinics, infirmaries, sanitariums, nursing homes, homes for the aged, and orphanages.
- Farm buildings, nonresidential. Includes nonresidential farm buildings such as barns, poultry houses, implement sheds, and farm silos.
- Amusement, social, and recreational buildings. Includes buildings which are used primarily for entertainment, social, and recreational activities such as sports arenas, convention centers, theaters, music halls, golf and country club buildings, skating rinks, fitness centers, bowling alleys, and indoor swimming pools.
- Other nonresidential buildings. Includes nonresidential buildings which are not classified elsewhere such as fire stations, post offices, bus and air passenger terminals and hangars, and prisons.

Nonbuilding construction:

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

- Outdoor swimming pools. Includes wading pools and reflecting pools.
- Airport runways and related work. Includes runways, taxiways, aprons, and related work.
- Private driveways and parking areas. Includes all nonstructural parking areas and private driveways of all surface types.
- Fencing. Includes all types of fencing.
- Recreational facilities. Includes athletic fields, golf courses, outdoor tennis courts, trails, and camps.
- Tunnels. Includes highway, pedestrian, railroad, and water distribution tunnels.
- Bridges and elevated highways. Includes viaducts and overpasses, roads, highways, railroads, and causeways built on structural supports.
- Dam and reservoir construction. Includes hydroelectric, water supply, and flood control dams and reservoirs.
- Marine construction. Includes dredging, underwater rock removal, breakwaters, navigational channels, and locks.
- Harbor and port facilities. Includes docks, piers, and wharves.
- Conservation and development construction. Includes land reclamation, irrigation projects, drainage canals, levees, jetties, breakwaters, and flood control projects.
- Power and communication transmission lines, towers, and related facilities. Includes electric power lines, telephone and telegraph lines, fiber optic cables, cable television lines, television and radio towers, and electric light and power facilities.
- Sewers, sewerlines, septic tanks, and related facilities. Includes sanitary and storm sewers, pumping stations, septic systems, and related facilities.
- Water mains and related facilities. Includes water supply systems, pumping stations, and related facilities.
- Pipeline construction other than sewer or waterlines. Includes pipelines for the transmission of gas, petroleum products, and liquefied gases.
- Urban mass transit. Includes subways, trollies, street cars, and light rail systems.
- Railroad construction. Includes the construction of railroad beds, tracks, freight yards, and signal towers for systems other than urban mass transit.
- Blast furnaces, petroleum refineries, chemical complexes, etc. Includes coke ovens and mining appurtenances such as tipples and washeries.

JOBNAME: No Job Name PAGE: 5 SESS: 29 OUTPUT: Thu Mar 30 15:14:06 1995 / pssw01/ disk2/ economic/ cc92i/ 00/ 14apdxa

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

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

SIC code	Industry titles	SIC code	Industry titles
15	BUILDING CONSTRUCTION—GENERAL CONTRACTORS AND OPERATIVE BUILDERS	17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS—Con.
152	General Building Contractors—Residential Buildings	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	Operative Builders	1741	Masonry, Stone Setting, and Other Stone Work Special Trade Contractors
1531 154	Operative Builders General Building Contractors—Nonresidential	1742	Plastering, Drywall, Acoustical, and Insulation Work Special Trade Contractors
	Buildings	1743	Terrazzo, Tile, Marble, and Mosaic Work Special Trade Contractors
1541	General Contractors—Industrial Buildings and Warehouses	475	
1542	General Contractors—Nonresidential Buildings, Other Than Industrial Buildings and Warehouses	175	Carpentry and Floor Work Special Trade Contractors
16	HEAVY CONSTRUCTION OTHER THAN BUILDING CONSTRUCTION— CONTRACTORS	1751 1752	Carpentry Work Special Trade Contractors Floor Laying and Other Floor Work Special Trade Contractors, Not Elsewhere Classified
161	Highway and Street Construction, Except Elevated Highways	176	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
1611	Highway and Street Construction Contractors, Except Elevated Highways	1761	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
162	Heavy Construction, Except Highway and Street Construction	177	Concrete Work Special Trade Contractors
1622	Bridge, Tunnel, and Elevated Highway Construction Contractors	1771	Concrete Work Special Trade Contractors
1623 1629	Water, Sewer, Pipeline, and Communications and Power Line Construction Contractors Heavy Construction Contractors, Not Elsewhere	178 1781	Water Well Drilling Special Trade Contractors Water Well Drilling Special Trade Contractors
1029	Classified	179	Miscellaneous Special Trade Contractors
17	CONSTRUCTION—SPECIAL TRADE CONTRACTORS	1791 1793	Structural Steel Erection Special Trade Contractors Glass and Glazing Work Special Trade
171	Plumbing, Heating, and Air-Conditioning	1794	Contractors Excavation Work Special Trade Contractors
1711	Special Trade Contractors Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1795	Wrecking and Demolition Work Special Trade Contractors
172	Painting and Paper Hanging	1796	Installation or Erection of Building Equipment, Special Trade Contractors, Not Elsewhere
1721	Special Trade Contractors Painting and Paper Hanging Special Trade Contractors	1799	Classified Special Trade Contractors, Not Elsewhere Classified

Appendix C.

Geographic Divisions and States

NEW ENGLAND STATES

Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont

MIDDLE ATLANTIC STATES

New Jersey New York Pennsylvania

EAST NORTH CENTRAL STATES

Illinois Indiana Michigan Ohio Wisconsin

WEST NORTH CENTRAL STATES

Iowa Kansas Minnesota Missouri Nebraska North Dakota South Dakota

SOUTH ATLANTIC STATES

Delaware
District of Columbia
Florida
Georgia
Maryland

SOUTH ATLANTIC STATES—Con.

North Carolina South Carolina Virginia West Virginia

EAST SOUTH CENTRAL STATES

Alabama Kentucky Mississippi Tennessee

WEST SOUTH CENTRAL STATES

Arkansas Louisiana Oklahoma Texas

MOUNTAIN STATES

Arizona Colorado Idaho Montana Nevada New Mexico Utah Wyoming

PACIFIC STATES

Alaska California Hawaii Oregon Washington JOBNAME: No Job Name PAGE: 1 SESS: 30 OUTPUT: Thu Apr 13 15:20:29 1995 / pssw01/disk2/economic/cc92i/00/07txtpub

Publication Program

1992 CENSUS OF CONSTRUCTION INDUSTRIES

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

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

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

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

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

(Available July 1994 through January 1995) [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.