

# Flooring Contractors: 2002

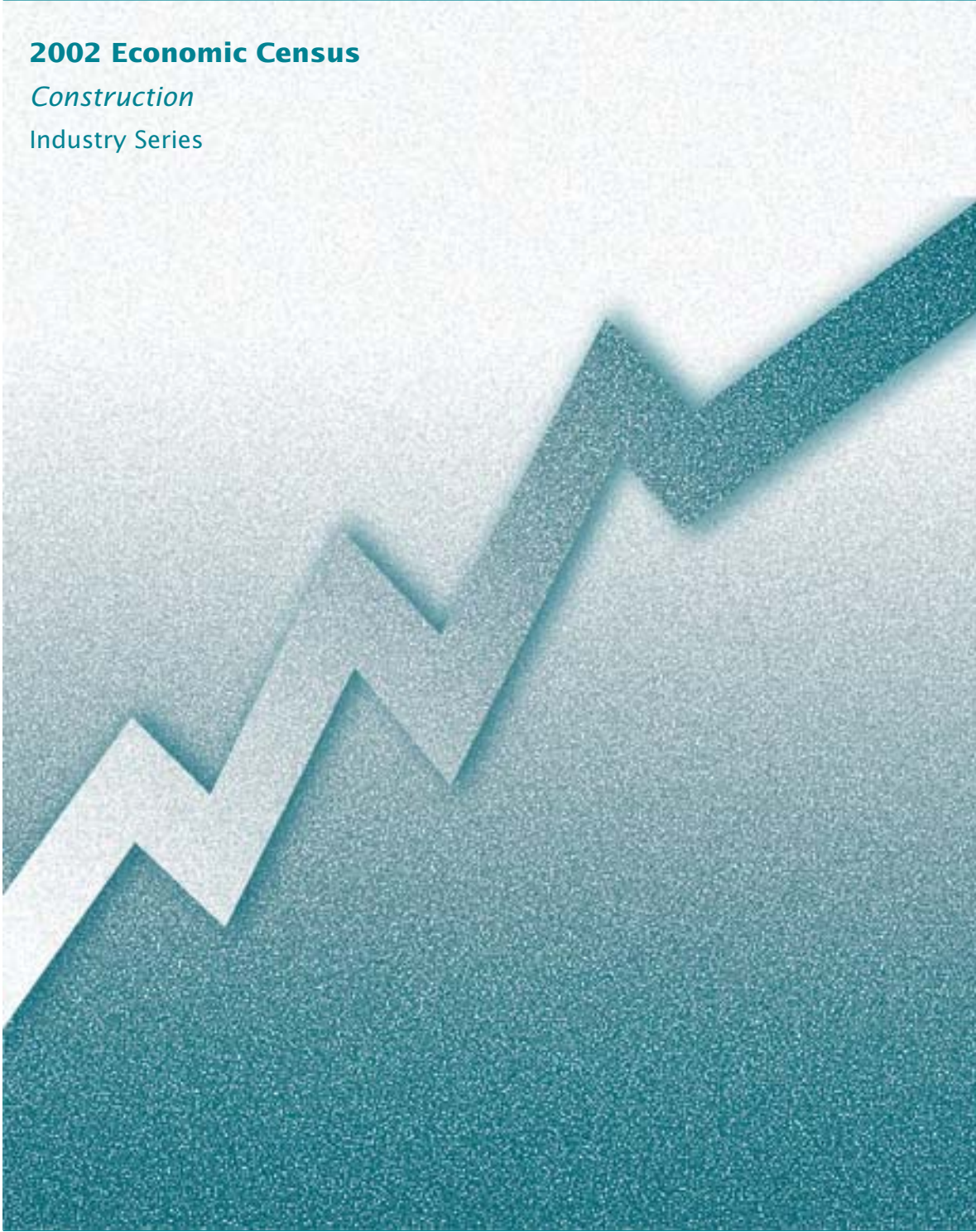
Issued December 2004

EC02-231-238330

## 2002 Economic Census

*Construction*

Industry Series



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## ACKNOWLEDGMENTS

This report was prepared in the Manufacturing and Construction Division under the direction of **Judy M. Dodds**, Assistant Division Chief for Census and Related Programs who was responsible for the overall planning, management, and coordination. **Susan Bucci**, Chief, Construction and Minerals Branch, assisted by **Michael Blake**, Section Chief, and **Raphael Corrado**, **Tom Flood**, **Robert Miller**, and **Robert Rosati**, Special Assistants, performed the planning and implementation. **Delsey Newman**, **Donald Powers**, **John Roehl**, **Linda Taylor**, **Michael Taylor**, and **Robert Wright** provided primary staff assistance. **Mendel D. Gayle**, Chief, Census and Related Programs Support Branch, assisted by **Kimberly DePhillip**, Section Chief, performed overall coordination of the publication process. **Patrick Duck**, **Michael Flaherty**, **Taylor C. Murph**, **Wanda Sledd**, and **Veronica White** provided primary staff assistance.

Mathematical and statistical techniques, as well as the coverage operations, were provided by **Paul Hsen**, Assistant Division Chief for Research and Methodology Programs, assisted by **Stacey Cole**, Chief, Manufacturing Methodology Branch, and **Robert Struble**, Section Chief. **Jeffrey Dalzell** and **Cathy Gregor** provided primary staff assistance.

**Eddie J. Salyers**, Assistant Division Chief of Economic Planning and Coordination Division, was responsible for overseeing the editing and tabulation procedures and the interactive analytical software. **Dennis Shoemaker** and **Kim Wortman**, Special Assistants, **John D. Ward**, Chief, Analytical Branch, and **Brandy L. Yarbrough**, Chief, Edit Branch, were responsible for developing the systems and procedures for data collection, editing, review, and correction. **Donna L. Hambric**, Chief of the Economic Planning Staff, was responsible for overseeing the systems and information for dissemination. **Douglas J. Miller**, Chief, Tables and Dissemination Branch, assisted by **Lisa Aispuro**, **Jamie Fleming**, **Keith Fuller**, **Andrew W. Hait**, and **Kathy G. Padgett** were responsible for developing the data dissemination systems and procedures.

The Geography Division staff, **Robert LaMacchia**, Chief, developed geographic coding procedures and associated computer programs.

The Economic Statistical Methods and Programming Division, **Howard R. Hogan**, Chief, developed and coordinated the computer processing systems. **Barry F. Sessamen**, Assistant Division Chief for Post Collection, was responsible for design and implementation of the processing system and computer programs. **Gary T. Sheridan**, Chief, Macro Analytical Branch, assisted by **Apparao V. Katikineni** and **Edward F. Johnson** provided computer programming and implementation.

The Systems Support Division provided the table composition system. **Robert Joseph Brown**, Table Image Processing System (TIPS) Senior Software Engineer, was responsible for the design and development of the TIPS, under the supervision of **Robert J. Bateman**, Assistant Division Chief, Information Systems.

The staff of the National Processing Center performed mailout preparation and receipt operations, clerical and analytical review activities, and data entry.

**Margaret A. Smith**, **Bernadette J. Beasley**, **Michael T. Browne**, and **Alan R. Plisch** of the Administrative and Customer Services Division, **Walter C. Odom**, Chief, provided publication and printing management, graphics design and composition, and editorial review for print and electronic media. General direction and production management were provided by **James R. Clark**, Assistant Division Chief, and **Susan L. Rappa**, Chief, Publications Services Branch.

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

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-- Not applicable for this report.

# Introduction to the Economic Census

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## **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. 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 economic census furnishes an important part of the framework for such composite measures as the gross domestic product estimates, input/output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions. Specific uses of economic census data include the following:

- Policymaking agencies of the federal government use the data to monitor economic activity and to assess the effectiveness of policies.
- 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, which allows them to 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.

## **INDUSTRY CLASSIFICATIONS**

Data from the 2002 Economic Census are published primarily according to the 2002 North American Industry Classification System (NAICS). NAICS was first adopted in the United States, Canada, and Mexico in 1997. The 2002 Economic Census covers the following NAICS sectors:

21	Mining
22	Utilities
23	Construction
31-33	Manufacturing
42	Wholesale Trade
44-45	Retail Trade
48-49	Transportation and Warehousing
51	Information
52	Finance and Insurance
53	Real Estate and Rental and Leasing
54	Professional, Scientific, and Technical Services
55	Management of Companies and Enterprises
56	Administrative and Support and Waste Management and Remediation Services
61	Educational Services
62	Health Care and Social Assistance
71	Arts, Entertainment, and Recreation
72	Accommodation and Food Services
81	Other Services (except Public Administration)

(Not listed above are the Agriculture, Forestry, Fishing, and Hunting sector (NAICS 11), partially covered by the census of agriculture conducted by the U.S. Department of Agriculture, and the Public Administration sector (NAICS 92), largely covered by the census of governments conducted by the Census Bureau.)

The 20 NAICS sectors are subdivided into 100 subsectors (three-digit codes), 317 industry groups (four-digit codes), and, as implemented in the United States, 1,179 industries (six-digit codes).



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## **RELATIONSHIP TO HISTORICAL INDUSTRY CLASSIFICATIONS**

Prior to the 1997 Economic Census, data were published according to the Standard Industrial Classification (SIC) system. While many of the individual NAICS industries correspond directly to industries as defined under the SIC system, most of the higher level groupings do not. Particular care should be taken in comparing data for retail trade, wholesale trade, and manufacturing, which are sector titles used in both NAICS and SIC, but cover somewhat different groups of industries. The 1997 Economic Census *Bridge Between NAICS and SIC* demonstrates the relationships between NAICS and SIC industries. Where changes are significant, it may not be possible to construct time series that include data for points both before and after 1997.

Most industry classifications remained unchanged between 1997 and 2002, but NAICS 2002 includes substantial revisions within the construction and wholesale trade sectors, and a number of revisions for the retail trade and information sectors. These changes are noted in industry definitions and will be demonstrated in the *Bridge Between NAICS 2002 and NAICS 1997*.

For 2002, data for enterprise support establishments (those functioning primarily to support the activities of their company's operating establishments, such as a warehouse or a research and development laboratory) are included in the industry that reflects their activities (such as warehousing). For 1997, such establishments were termed auxiliaries and were excluded from industry totals.

## **BASIS OF REPORTING**

The economic census is conducted on an establishment basis. A company operating at more than one location is required to file a separate report for each store, factory, shop, or other location. Each establishment is assigned a separate industry classification based on its primary activity and not that of its parent company. (For selected industries, only payroll, employment, and classification are collected for individual establishments, while other data are collected on a consolidated basis.)

## **GEOGRAPHIC AREA CODING**

Accurate and complete information on the physical location of each establishment is required to tabulate the census data for states, metropolitan and micropolitan statistical areas, counties, and corporate municipalities (places) including cities, towns, townships, villages, and boroughs. Respondents were required to report their physical location (street address, municipality, county, and state) if it differed from their mailing address. For establishments not surveyed by mail (and those single-establishment companies that did not provide acceptable information on physical location), location information from administrative sources is used as a basis for coding.

## **AVAILABILITY OF ADDITIONAL DATA**

All results of the 2002 Economic Census are available on the Census Bureau Internet site ([www.census.gov](http://www.census.gov)) and on digital versatile discs (DVD-ROMs) for sale by the Census Bureau. The American FactFinder system at the Internet site allows selective retrieval and downloading of the data. For more information, including a description of reports being issued, see the Internet site, write to the U.S. Census Bureau, Washington, DC 20233-6100, or call Customer Services at 301-763-4100.

## **HISTORICAL INFORMATION**

The economic census has been taken as an integrated program at 5-year intervals since 1967 and before that for 1954, 1958, and 1963. Prior to that time, individual components 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 the 1840 Decennial Census and subsequent censuses to include mining and some commercial activities. The 1905 Manufactures Census was the first time a census was taken apart

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from the regular decennial population census. Censuses covering retail and wholesale trade and construction industries were added in 1930, as were some service trades in 1933. Censuses of construction, manufacturing, and the other business censuses were suspended during World War II.

The 1954 Economic Census was the first census to be fully integrated, providing comparable census data across economic sectors and 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 report forms.

The range of industries covered in the economic census expanded between 1967 and 2002. The census of construction industries began on a regular basis in 1967, and the scope of service industries, introduced in 1933, was broadened in 1967, 1977, and 1987. While a few transportation industries were covered as early as 1963, it was not until 1992 that the census broadened to include all of transportation, communications, and utilities. Also new for 1992 was coverage of financial, insurance, and real estate industries. With these additions, the economic census and the separate census of governments and census of agriculture collectively covered roughly 98 percent of all economic activity. New for 2002 is coverage of four industries classified in the agriculture, forestry, and fishing sector under the SIC system: landscape architectural services, landscaping services, veterinary services, and pet care services.

Printed statistical reports from the 1992 and earlier censuses provide historical figures for the study of long-term time series and are available in some large libraries. Reports for 1997 were published primarily on the Internet and copies of 1992 reports are also available there. CD-ROMs issued from the 1987, 1992, and 1997 Economic Censuses contain databases that include all or nearly all data published in print, plus additional statistics, such as ZIP Code statistics, published only on CD-ROM.

#### **SOURCES FOR MORE INFORMATION**

More information about the scope, coverage, classification system, data items, and publications for the 2002 Economic Census and related surveys is published in the *Guide to the 2002 Economic Census* at [www.census.gov/econ/census02/guide](http://www.census.gov/econ/census02/guide). More information on the methodology, procedures, and history of the census will be published in the *History of the 2002 Economic Census* at [www.census.gov/econ/www/history.html](http://www.census.gov/econ/www/history.html).



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# Construction

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## SCOPE

The Construction sector (sector 23) comprises establishments primarily engaged in the construction of buildings or engineering projects (e.g., highways and utility systems). Establishments primarily engaged in the preparation of sites for new construction and establishments primarily engaged in subdividing land for sale, as building sites also are included in this sector.

Construction work done may include new work, additions, alterations, or maintenance and repairs. Activities of these establishments generally are managed at a fixed place of business, but they usually perform construction activities at multiple project sites. Production responsibilities for establishments in this sector are usually specified in (1) contracts with the owners of construction projects (prime contracts) or (2) contracts with other construction establishments (subcontracts).

Establishments primarily engaged in contracts that include responsibility for all aspects of individual construction projects are commonly known as general contractors, but also may be known as design-builders, construction managers, turnkey contractors, or (in cases where two or more establishments jointly secure a general contract) joint-venture contractors. Construction managers that provide oversight and scheduling only (i.e., agency) as well as construction managers that are responsible for the entire project (i.e., at risk) are included as general contractor type establishments. Establishments of the "general contractor type" frequently arrange construction of separate parts of their projects through subcontracts with other construction establishments.

Establishments primarily engaged in activities to produce a specific component (e.g., masonry, painting, and electrical work) of a construction project are commonly known as specialty trade contractors. Activities of specialty trade contractors are usually subcontracted from other construction establishments but, especially in remodeling and repair construction, the work may be done directly for the owner of the property.

Establishments primarily engaged in activities to construct buildings to be sold on sites that they own are known as operative builders, but also may be known as speculative builders or merchant builders. Operative builders produce buildings in a manner similar to general contractors, but their production processes also include site acquisition and securing of financial backing. Operative builders are most often associated with the construction of residential buildings. Like general contractors, they may subcontract all or part of the actual construction work on their buildings.

There are substantial differences in the types of equipment, work force skills, and other inputs required by establishments in this sector. To highlight these differences and variations in the underlying production functions, this sector is divided into three subsectors.

Subsector 236, Construction of Buildings, comprises establishments of the general contractor type and operative builders involved in the construction of buildings. Subsector 237, Heavy and Civil Engineering Construction, comprises establishments involved in the construction of engineering projects. Subsector 238, Specialty Trade Contractors, comprises establishments engaged in specialty trade activities generally needed in the construction of all types of buildings.

**Exclusions.** Force account construction is construction work performed by an enterprise primarily engaged in some business other than construction for its own account and use, using employees of the enterprise. This activity is not included in the construction sector unless the construction work performed is the primary activity of a separate establishment of the enterprise.

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The installation and the ongoing repair and maintenance of telecommunications and utility networks is excluded from construction when the establishments performing the work are not independent contractors. Although a growing proportion of this work is subcontracted to independent contractors in the Construction Sector, the operating units of telecommunications and utility companies performing this work are included with the telecommunications or utility activities.

The tabulations for this sector do not include central administrative offices, warehouses, or other establishments that serve construction establishments within the same organization. Data for such establishments are classified according to the nature of the service they provide. For example, separate headquarters establishments are reported in NAICS Sector 55, Management of Companies and Enterprises.

The reports described below exclude establishments of firms with no paid employees. These “nonemployers,” typically self-employed individuals or partnerships operating businesses that they have not chosen to incorporate, are reported separately in *Nonemployer Statistics*. The contribution of nonemployers, relatively large for this sector, may be examined at [www.census.gov/nonemployerimpact](http://www.census.gov/nonemployerimpact).

**Definitions.** Industry categories are defined in Appendix B, NAICS Codes, Titles, and Descriptions. Other terms are defined in Appendix A, Explanation of Terms.

## REPORTS

The following reports provide statistics on this sector.

**Industry Series.** There are 31 reports, each covering a single NAICS industry (six-digit code). These reports include such statistics as number of establishments, employment, payroll, value added by construction, cost of materials, value of construction work, value of business done, capital expenditures, etc. The industry reports also include selected statistics for states. While most of the state data in the industry series reports are by physical location of the establishment, some data are available by reported location of the construction work. The data in industry reports are preliminary and subject to change in the following reports.

**Geographic Area Series.** There are 51 separate reports, one for each state and the District of Columbia. Each state report present similar statistics at the “all construction” level for each state.

### Subject Series:

- **Industry General Summary.** This report contains industry statistics summarized in one report. It includes higher levels of aggregation than the industry reports, as well as revisions to the data made after the release of the industry reports.
- **Industry Kind Of Business and Type of Construction Summary.** This report contains industry kind of business and types of construction statistics summarized in one report. It includes higher levels of aggregation than the industry reports, as well as revisions to the data made after the release of the industry reports.
- **Geographic Area Summary.** This report contains industry and geographic area statistics summarized in one report. It includes higher levels of aggregation than the industry and state reports, as well as revisions to the data made after the release of the industry and state reports.

**Other reports.** Data for this sector are also included in reports with multisector coverage, including *Nonemployer Statistics*, *Comparative Statistics*, *Bridge Between 2002 NAICS and 1997 NAICS*, *Business Expenses*, and the Survey of Business Owners reports.

## GEOGRAPHIC AREAS COVERED

1. The United States as a whole.
2. States and the District of Columbia.

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3. Census regions. The regions are made up of groups of states as follows:

- a. Northeast region: Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont
- b. Midwest region: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin
- c. South region: Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, West Virginia
- d. West region: Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming

### **DOLLAR VALUES**

All dollar values presented are expressed in current dollars; i.e., 2002 data are expressed in 2002 dollars, and 1997 data, in 1997 dollars. Consequently, when making comparisons with prior years, users of the data should consider the changes in prices that have occurred.

All dollar values are shown in thousands of dollars.

### **COMPARABILITY OF THE 1997 AND 2002 ECONOMIC CENSUSES**

Both the 2002 Economic Census and the 1997 Economic Census present data based on the North American Industry Classification System (NAICS). There were substantial revisions made to the entire construction sector, for 2002. These changes are:

1. Each subsector has been reclassified in 2002 to:
  - 236—Construction of Buildings
  - 237—Heavy and Civil Engineering Construction
  - 238—Specialty Trade Contractors
2. Adopted several mining industries:
  - oil and gas pipeline and related structures construction, now in Industry 237120
  - site preparation and related construction activities on a contract or fee basis, now in Industry 238910.

More detailed information of NAICS changes from 1997 to 2002, may be examined at <http://www.census.gov/epcd/naics02/n02ton97.htm>.

In addition, there have been several additional data tables added, which did not exist in 1997. These tables for 2002 include e-commerce value of business done and leased and nonleased detail employment statistics by subsectors. Also included is housing starts by single NAICS industry (six-digit code).

### **RELIABILITY OF DATA**

All data compiled for this sector are subject to nonsampling errors. Nonsampling errors can be attributed to many sources: inability to identify all cases in the actual universe; definition and classification difficulties; differences in the interpretation of questions; errors in recording or coding the data obtained; and other errors of collection, response, coverage, processing, and estimation for missing or misreported data.

No direct measurement of these effects has been obtained except for estimation for missing or misreported data, as by the percentages shown in the tables. Precautionary steps were taken in all phases of the collection, processing, and tabulation of the data in an effort to minimize the effects of nonsampling errors. More information on the reliability of the data is included in Appendix C, Methodology.

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## DISCLOSURE

In accordance with federal law governing census reports (Title 13 of the United States Code), no data are published that would disclose the operations of an individual establishment or company. However, the number of establishments in a specific industry or geographic area is not considered a disclosure; therefore, this information may be released even though other information is withheld. Techniques employed to limit disclosure are discussed at [www.census.gov/epcd/ec02/disclosure.htm](http://www.census.gov/epcd/ec02/disclosure.htm).

## AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

The U.S. Census Bureau's monthly Construction Reports, Series C30, Value of New Construction Put in Place contain data related to construction sector census data. The main difference is that the C30 series covers all new construction put in place without regard to who is performing the construction activity. The construction sector census data covers both new construction and maintenance and repair work done by establishments classified in the construction industries. Significant amounts of construction are done by establishments classified outside of construction (real estate, manufacturing, utilities, and communications, for example), as both "force account" construction and construction done for others. In addition, the C30 series includes construction-related expenses such as architectural and engineering costs and the costs of materials supplied by owners that are normally not reflected in construction sector census data.

Data contained in the 2002 construction sector 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.

In addition, the County Business Patterns program offers annual statistics on the number of establishments, employment, and payroll classified by industry within each county, and Statistics of U.S. Businesses provides annual statistics classified by the employment size of the enterprise, further classified by industry for the United States, and by broader categories for states and metropolitan areas.

## CONTACTS FOR DATA USERS

Questions about these data may be directed to the U.S. Census Bureau, Manufacturing & Construction Division, Information Services Center, 301-763-4673 or [ask.census.gov](http://ask.census.gov).

## ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used with these data:

A	Standard error of 100 percent or more
D	Withheld to avoid disclosing data of individual companies; data are included in higher level totals
F	Exceeds 100 percent because data include establishments with payroll exceeding revenue
N	Not available or not comparable
S	Withheld because estimates did not meet publication standards
X	Not applicable
Z	Less than half the unit shown
a	0 to 19 employees
b	20 to 99 employees
c	100 to 249 employees
e	250 to 499 employees
f	500 to 999 employees
g	1,000 to 2,499 employees
h	2,500 to 4,999 employees
i	5,000 to 9,999 employees
j	10,000 to 24,999 employees
k	25,000 to 49,999 employees
l	50,000 to 99,999 employees
m	100,000 employees or more

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p 10 to 19 percent estimated  
q 20 to 29 percent estimated  
r Revised  
s Sampling error exceeds 40 percent  
nsk Not specified by kind  
– Represents zero (page image/print only)  
(CC) Consolidated city  
(IC) Independent city



**Table 1. Industry Statistics on 2002 NAICS Basis Distributed Among 1997 NAICS-Based Industries for the United States: 2002**

[Thousand dollars unless otherwise noted. Detail may not add to total because of rounding. Data based on the 2002 Economic Census. For information on confidentiality protection, sampling error, and nonsampling error, see note at end of table. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see Appendix A. For detailed title descriptions, see Appendix F]

2002 NAICS code	1997 bridge code	Industry or bridge	Number of establishments	Total number of employees	Total payroll	Value of construction work <sup>1</sup>	Net value of construction work	Value added	Cost of materials, components, supplies, and fuels	Capital expenditures, other than land
			A	B	C	D	E	F	G	H
238330		Flooring contractors .....	12 865	79 813	2 420 569	9 775 438	8 623 387	4 868 960	3 886 512	137 830
	23552000	Floor laying and other floor contractors .....	12 865	79 813	2 420 569	9 775 438	8 623 387	4 868 960	3 886 512	137 830

<sup>1</sup>For the 2002 Economic Census, the definition of value of construction work has been modified from the 1997 Economic Census definition. See Appendix A for the modified definition.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

**Table 2. Employment Statistics for Establishments by State: 2002**

[Detail may not add to total because of rounding. Data based on the 2002 Economic Census. For information on confidentiality protection, sampling error, nonsampling error, and geographical definitions, see note at end of table. For information on geographic areas followed by \*, see Appendix D. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see Appendix A.]

Location of establishment	Number of employees			Number of construction workers				Payroll (thousand dollars)		Relative standard error of estimate (percent) for column—	
	Number of establishments	Total	Construction workers	January to March	April to June	July to September	October to December	Total	Construction workers		
											A
<b>238330, Flooring contractors</b>											
United States .....	12 865	79 813	51 933	S	53 003	54 335	52 223	2 420 569	1 446 241	2	
Alabama .....	122	880	553	535	567	576	535	21 707	13 556	24	
Alaska .....	48	151	110	89	94	127	129	4 448	2 561	53	
Arizona .....	318	1 797	1 108	1 078	1 141	1 105	1 106	62 974	35 532	15	
Arkansas .....	92	489	276	223	277	328	278	9 362	6 164	28	
California .....	1 803	14 911	9 272	8 559	9 487	9 503	9 539	454 950	266 474	7	
Colorado .....	330	2 901	2 052	1 491	2 292	2 306	2 120	92 961	57 378	7	
Connecticut .....	107	802	557	522	572	554	579	30 406	18 486	18	
Delaware .....	94	426	D	D	315	282	288	11 763	7 283	19	
District of Columbia .....	22	96	60	59	62	63	54	3 312	1 605	15	
Florida .....	584	2 398	D	D	1 567	1 620	1 535	61 708	D	12	
Georgia .....	225	1 423	D	D	884	797	814	40 586	D	17	
Hawaii .....	74	368	257	252	260	260	254	10 903	7 690	16	
Idaho .....	177	492	314	310	308	313	326	9 662	5 509	27	
Illinois .....	569	3 875	2 421	2 413	2 451	2 510	2 309	158 428	100 058	9	
Indiana .....	148	1 261	D	874	850	889	D	40 738	23 109	11	
Iowa .....	82	594	D	D	445	434	392	20 678	D	11	
Kansas .....	120	627	450	402	463	494	440	19 958	13 414	16	
Kentucky .....	103	1 033	746	474	830	852	828	23 620	14 246	8	
Louisiana .....	146	720	465	479	453	450	478	17 955	D	21	
Maine .....	59	334	D	D	190	199	191	9 474	D	26	
Maryland .....	291	3 226	2 299	2 261	2 259	2 270	2 407	83 219	49 926	13	
Massachusetts .....	387	2 199	1 527	1 578	1 494	1 574	1 462	77 426	46 957	14	
Michigan .....	366	2 129	1 387	1 247	1 465	1 449	1 386	68 016	43 129	14	
Minnesota .....	308	1 632	1 131	980	1 104	1 200	1 241	54 467	37 231	9	
Mississippi .....	47	183	145	128	157	151	142	4 234	2 900	28	
Missouri .....	334	2 173	1 427	1 398	1 466	1 452	1 391	76 051	44 855	11	
Montana .....	63	127	D	D	D	104	D	2 374	D	34	
Nebraska .....	209	681	394	386	408	399	380	13 848	7 147	22	
Nevada .....	46	1 054	D	D	653	728	677	33 917	D	13	
New Hampshire .....	97	806	514	452	519	549	534	30 589	17 768	48	
New Jersey .....	439	3 002	2 029	1 945	2 016	2 157	1 996	101 442	62 274	16	
New Mexico .....	29	259	162	165	160	163	161	9 223	5 889	25	
New York .....	909	3 987	2 607	2 269	2 492	2 993	2 674	128 444	77 023	11	
North Carolina .....	517	1 927	1 286	1 235	1 396	1 289	1 222	46 733	27 350	11	
North Dakota .....	21	D	68	D	68	74	D	2 070	D	S	
Ohio .....	413	3 609	2 234	1 818	2 345	2 492	2 283	89 510	53 810	16	
Oklahoma .....	33	225	144	135	156	151	132	5 873	3 555	13	
Oregon .....	171	1 046	742	676	773	770	751	30 382	20 100	10	
Pennsylvania .....	440	2 623	1 686	1 648	1 729	1 726	1 640	86 657	47 585	10	
Rhode Island .....	64	306	240	220	236	255	248	7 374	5 236	30	
South Carolina .....	169	988	651	582	664	700	659	23 871	14 402	12	
South Dakota .....	60	96	57	89	44	46	51	2 757	1 599	33	
Tennessee .....	76	506	367	318	361	402	386	14 633	8 990	13	
Texas .....	419	3 214	1 810	1 767	1 828	1 851	1 792	100 821	50 572	11	
Utah .....	140	564	397	346	441	418	382	14 470	8 923	21	
Vermont .....	41	129	89	71	95	98	92	3 678	2 455	37	
Virginia .....	582	2 992	1 984	2 087	1 900	1 966	1 985	87 725	D	13	
Washington .....	548	2 512	1 701	1 564	1 782	1 757	1 700	60 276	36 819	18	
West Virginia .....	93	258	D	D	177	239	197	4 264	2 736	38	
Wisconsin .....	323	1 653	1 135	1 028	1 187	1 238	1 087	50 273	35 081	17	
Wyoming .....	8	D	D	12	D	16	D	260	251	S	

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C. For geographical definitions, see Appendix D.

**Table 3. General Statistics for Establishments by State: 2002**

[Thousand dollars unless otherwise noted. Detail may not add to total because of rounding. Data based on the 2002 Economic Census. For information on confidentiality protection, sampling error, nonsampling error, and geographical definitions, see note at end of table. For information on geographic areas followed by \*, see Appendix D. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see Appendix A]

Location of establishment	E <sup>1</sup>	Value of construction work <sup>2</sup>	Net value of construction work	Value added	Cost of materials, components, supplies, and fuels	Cost of construction work subcontracted out to others	Total rental costs	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	Relative standard error of estimate (percent) for column—	
										C	H
	A	B	C	D	E	F	G	H	I	C	H
<b>238330, Flooring contractors</b>											
United States .....	2	9 775 438	8 623 387	4 868 960	3 886 512	1 152 051	166 892	137 830	1 042 304	2	5
Alabama .....	3	88 051	78 509	48 651	30 249	9 542	991	2 004	12 993	13	10
Alaska .....	—	20 981	18 785	D	8 902	2 196	468	93	1 694	45	56
Arizona .....	—	210 378	180 150	102 905	79 499	30 228	4 570	3 997	26 942	17	22
Arkansas .....	3	43 452	D	26 322	14 581	D	1 826	1 150	8 830	S	61
California .....	2	1 709 598	1 543 823	885 051	679 393	165 775	31 766	17 504	132 407	7	14
Colorado .....	1	376 861	312 733	167 515	146 946	64 128	5 545	6 102	34 589	6	6
Connecticut .....	4	124 099	D	63 932	50 544	D	1 938	3 401	18 944	S	68
Delaware .....	2	56 213	54 199	34 979	19 405	2 013	1 130	406	3 839	34	5
District of Columbia .....	4	11 120	D	7 126	2 594	D	215	170	1 155	S	10
Florida .....	2	306 521	264 011	154 056	111 539	42 510	5 570	7 971	32 486	9	57
Georgia .....	1	209 269	164 677	83 197	90 395	44 591	2 845	1 486	12 667	8	10
Hawaii .....	2	38 115	35 917	23 961	14 683	2 198	868	1 091	4 664	15	3
Idaho .....	4	42 816	38 721	18 968	21 883	4 096	1 229	257	5 798	27	37
Illinois .....	—	501 446	457 897	285 325	176 542	43 549	8 776	8 206	42 242	7	28
Indiana .....	—	172 873	150 253	70 933	82 594	22 620	2 484	1 261	20 639	10	36
Iowa .....	4	68 762	63 192	42 039	23 194	5 570	1 536	1 061	6 697	13	14
Kansas .....	3	64 916	59 923	31 561	29 095	4 993	1 207	1 584	6 616	15	61
Kentucky .....	4	95 777	83 504	D	37 083	12 273	1 434	997	12 772	7	6
Louisiana .....	2	103 255	88 515	51 866	38 996	14 740	2 031	1 032	9 487	25	28
Maine .....	3	49 542	41 953	27 133	14 821	7 589	875	513	7 827	29	25
Maryland .....	1	663 979	595 324	219 830	377 118	68 655	8 751	12 462	114 554	8	6
Massachusetts .....	2	290 578	258 319	159 117	109 957	32 259	3 301	7 157	62 213	10	16
Michigan .....	3	238 718	210 161	126 825	85 381	28 558	3 644	2 421	19 078	14	16
Minnesota .....	1	173 527	159 653	108 775	58 092	13 874	4 711	2 813	21 454	8	16
Mississippi .....	1	12 012	11 582	5 887	5 696	430	209	216	1 337	32	18
Missouri .....	—	228 456	218 843	129 257	93 539	9 613	3 457	3 681	29 847	13	35
Montana .....	1	8 419	6 607	5 295	1 312	1 531	93	69	D	34	44
Nebraska .....	2	87 441	74 429	35 383	41 188	13 013	1 812	2 176	10 184	30	43
Nevada .....	5	98 223	D	53 500	34 757	D	1 841	770	7 848	S	7
New Hampshire .....	1	68 848	D	37 868	20 386	D	986	743	4 168	S	24
New Jersey .....	2	400 093	337 817	211 300	129 630	62 276	6 831	3 578	29 962	14	18
New Mexico .....	—	30 056	27 672	12 415	15 408	2 384	391	545	D	22	73
New York .....	2	498 468	429 875	242 158	194 897	68 594	10 046	5 118	50 522	10	16
North Carolina .....	2	230 382	201 088	116 922	85 066	29 294	3 528	3 391	26 391	8	24
North Dakota .....	—	D	D	D	3 075	1 452	358	181	1 988	S	87
Ohio .....	1	353 540	308 556	185 062	126 929	44 984	5 116	2 184	39 586	18	24
Oklahoma .....	4	25 831	D	13 314	9 209	D	465	991	5 908	S	3
Oregon .....	2	116 274	107 639	58 115	51 592	8 635	1 926	874	10 611	6	12
Pennsylvania .....	2	303 465	277 935	160 761	128 657	25 530	5 677	3 183	27 560	7	15
Rhode Island .....	2	25 027	22 401	D	13 200	2 625	472	608	2 341	12	11
South Carolina .....	1	112 870	93 021	D	52 023	19 849	2 465	1 664	13 131	14	47
South Dakota .....	5	10 606	9 236	5 455	3 782	1 370	320	799	2 127	27	51
Tennessee .....	2	67 368	56 668	29 079	32 076	10 700	1 329	727	8 492	10	18
Texas .....	2	565 810	489 853	269 369	221 822	75 957	7 477	6 846	44 588	11	26
Utah .....	2	76 665	69 089	D	31 800	7 576	1 129	1 064	7 994	25	36
Vermont .....	6	13 952	12 944	8 979	3 971	1 008	258	129	1 075	32	34
Virginia .....	2	326 150	273 411	159 433	120 147	52 738	5 770	3 777	36 590	10	12
Washington .....	2	250 855	216 039	125 048	92 448	34 815	4 601	4 247	26 207	16	37
West Virginia .....	4	14 937	13 916	9 830	4 086	1 021	127	84	1 300	24	26
Wisconsin .....	4	179 678	164 870	102 839	65 822	14 808	2 474	4 998	27 600	17	33
Wyoming .....	—	D	D	D	507	D	22	51	D	S	—

<sup>1</sup>Construction receipts were obtained from census respondent forms. For establishments whose respondent forms were not received at the time data were tabulated, these data were calculated using industry averages and imputation for nonresponse. The following symbols are shown where estimated imputation-based data on construction receipts account for 10 percent or more of the figures shown: 1—10 to 19 percent; 2—20 to 29 percent; 3—30 to 39 percent; 4—40 to 49 percent; 5—50 to 59 percent; 6—60 to 69 percent; 7—70 to 79 percent; 8—80 to 89 percent; 9—90 percent or more.

<sup>2</sup>For the 2002 Economic Census, the definition of value of construction work has been modified from the 1997 Economic Census definition. See Appendix A for the modified definition.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C. For geographical definitions, see Appendix D.

**Table 4. Detailed Statistics for Establishments: 2002**

[Detail may not add to total because of rounding. Data based on the 2002 Economic Census. For information on confidentiality protection, sampling error, and nonsampling error, see note at end of table. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see Appendix A]

Item	Value	Relative standard error of estimate (percent)
<b>238330, Flooring contractors</b>		
All establishments . . . . . number . . . . .	12 865	3
All employees . . . . . number . . . . .	79 813	2
Construction workers in March . . . . . number . . . . .	S	S
Construction workers in May . . . . . number . . . . .	53 003	2
Construction workers in August . . . . . number . . . . .	54 335	3
Construction workers in November . . . . . number . . . . .	52 223	3
Average number of construction workers . . . . . number . . . . .	51 933	3
Other employees in March . . . . . number . . . . .	S	S
Other employees in May . . . . . number . . . . .	26 439	3
Other employees in August . . . . . number . . . . .	27 935	3
Other employees in November . . . . . number . . . . .	28 314	3
Average number of other employees . . . . . number . . . . .	27 881	3
Total payroll . . . . . \$1,000 . . . . .	2 420 569	2
Construction workers . . . . . \$1,000 . . . . .	1 446 241	2
Other employees . . . . . \$1,000 . . . . .	974 329	2
First-quarter payroll, all employees . . . . . \$1,000 . . . . .	562 568	2
Fringe benefits, all employees . . . . . \$1,000 . . . . .	498 016	2
Legally required expenditures . . . . . \$1,000 . . . . .	310 073	3
Voluntary expenditures . . . . . \$1,000 . . . . .	187 943	2
Value of business done <sup>1</sup> . . . . . \$1,000 . . . . .	9 907 523	2
Value of construction work <sup>1</sup> . . . . . \$1,000 . . . . .	9 775 438	2
Value of construction work on government owned projects . . . . . \$1,000 . . . . .	1 647 720	3
Value of construction work on federally owned projects . . . . . \$1,000 . . . . .	533 735	3
Value of construction work on state and locally owned projects . . . . . \$1,000 . . . . .	1 113 985	4
Value of construction work on privately owned projects . . . . . \$1,000 . . . . .	8 127 717	2
Other business receipts . . . . . \$1,000 . . . . .	132 086	7
Value of construction work subcontracted in from others . . . . . \$1,000 . . . . .	5 648 437	3
Net value of construction work . . . . . \$1,000 . . . . .	8 623 387	2
Value added . . . . . \$1,000 . . . . .	4 868 960	2
Selected costs . . . . . \$1,000 . . . . .	5 038 563	2
Materials, parts, and supplies . . . . . \$1,000 . . . . .	3 746 171	2
Construction work subcontracted out to others . . . . . \$1,000 . . . . .	1 152 051	3
Selected power, fuels, and lubricants . . . . . \$1,000 . . . . .	140 341	3
Purchased electricity . . . . . \$1,000 . . . . .	30 801	4
Natural gas and manufactured gas . . . . . \$1,000 . . . . .	11 164	5
Gasoline and diesel fuel . . . . . \$1,000 . . . . .	93 992	3
On-highway use of gasoline and diesel fuel . . . . . \$1,000 . . . . .	91 664	3
Off-highway use of gasoline and diesel fuel . . . . . \$1,000 . . . . .	2 328	18
All other fuels and lubricants . . . . . \$1,000 . . . . .	4 383	6
Total rental costs . . . . . \$1,000 . . . . .	166 892	4
Machinery and equipment . . . . . \$1,000 . . . . .	31 535	5
Buildings . . . . . \$1,000 . . . . .	135 357	4
Selected purchased services . . . . . \$1,000 . . . . .	283 206	4
Communication services . . . . . \$1,000 . . . . .	85 668	2
Repairs to buildings and other structures . . . . . \$1,000 . . . . .	45 118	4
Repairs to machinery and equipment . . . . . \$1,000 . . . . .	53 700	5
Legal services . . . . . \$1,000 . . . . .	11 107	6
Accounting, auditing, and bookkeeping services . . . . . \$1,000 . . . . .	34 077	7
Advertising and promotional services . . . . . \$1,000 . . . . .	S	S
Beginning-of-year gross book value of depreciable assets . . . . . \$1,000 . . . . .	952 747	3
Capital expenditures, other than land . . . . . \$1,000 . . . . .	137 830	5
Retirements and disposition of depreciable assets . . . . . \$1,000 . . . . .	48 273	5
End-of-year gross book value of depreciable assets . . . . . \$1,000 . . . . .	1 042 304	3
Depreciation charges during year . . . . . \$1,000 . . . . .	121 564	3
Establishments with inventories . . . . . number . . . . .	2 336	-
Value of construction work for establishments with inventories . . . . . \$1,000 . . . . .	4 452 725	-
End-of-2002, inventories of materials and supplies . . . . . \$1,000 . . . . .	200 920	5
End-of-2001, inventories of materials and supplies . . . . . \$1,000 . . . . .	206 485	5
Establishments with no inventories . . . . . number . . . . .	8 960	-
Value of construction work for establishments with no inventories . . . . . \$1,000 . . . . .	4 265 141	-
Establishments not reporting inventories . . . . . number . . . . .	1 570	-
Value of construction work for establishment not reporting inventores . . . . . \$1,000 . . . . .	1 057 571	-

<sup>1</sup>For the 2002 Economic Census, the definitions of value of business done and value of construction work has been modified from the 1997 Economic Census definition. See Appendix A for the modified definitions.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

**Table 5. Selected Statistics for Establishments by Employment Size Class: 2002**

[Detail may not add to total because of rounding. Data based on the 2002 Economic Census. For information on confidentiality protection, sampling error, and nonsampling error, see note at end of table. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see Appendix A]

Employment size class	E <sup>1</sup>	Number of establishments	Total number of employees	Total payroll	Value of business done <sup>2</sup>	Value of construction work <sup>2</sup>	Net value of construction work	Value added	Cost of materials, components, supplies, and fuels	Cost of construction work subcontracted out to others	Relative standard error of estimate (percent) for column—
	A	B	C	D	E	F	G	H	I	J	C
<b>238330, Flooring contractors</b>											
All establishments .....	2	12 865	79 813	2 420 569	9 907 523	9 775 438	8 623 387	4 868 960	3 886 512	1 152 051	2
Establishments with—											
1 to 4 employees .....	—	8 910	16 394	325 672	1 641 847	1 625 582	1 429 658	901 463	544 461	195 923	5
5 to 9 employees .....	—	2 103	12 847	339 035	1 346 994	1 318 909	1 176 617	728 074	476 628	142 292	8
10 to 19 employees .....	—	1 142	14 993	460 902	1 785 814	1 770 627	1 522 707	894 617	643 277	247 920	7
20 to 49 employees .....	—	542	16 020	600 613	2 276 401	2 233 303	1 972 984	1 089 288	926 794	260 319	6
50 to 99 employees .....	—	106	7 182	282 689	1 103 106	1 080 614	963 277	537 962	447 807	117 337	4
100 to 249 employees .....	—	46	6 538	240 566	867 250	863 795	788 970	412 816	379 609	74 825	7
250 to 499 employees .....	—	13	D	D	D	D	D	D	D	D	S
500 to 999 employees .....	—	2	D	D	D	D	D	D	D	D	S
1,000 employees or more .....	—	—	—	—	—	—	—	—	—	—	—

<sup>1</sup>Construction receipts were obtained from census respondent forms. For establishments whose respondent forms were not received at the time data were tabulated, these data were calculated using industry averages and imputation for nonresponse. The following symbols are shown where estimated imputation-based data on construction receipts account for 10 percent or more of the figures shown: 1—10 to 19 percent; 2—20 to 29 percent; 3—30 to 39 percent; 4—40 to 49 percent; 5—50 to 59 percent; 6—60 to 69 percent; 7—70 to 79 percent; 8—80 to 89 percent; 9—90 percent or more.

<sup>2</sup>For the 2002 Economic Census, the definitions of value of business done and value of construction work has been modified from the 1997 Economic Census definition. See Appendix A for the modified definitions.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

**Table 6. Selected Statistics for Establishments by Value of Business Done Size Class: 2002**

[Detail may not add to total because of rounding. Data based on the 2002 Economic Census. For information on confidentiality protection, sampling error, and nonsampling error, see note at end of table. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see Appendix A]

Dollar value size class	E <sup>1</sup>	Number of establishments	Total number of employees	Total payroll	Value of business done <sup>2</sup>	Value of construction work <sup>2</sup>	Net value of construction work	Value added	Cost of materials, components, supplies, and fuels	Cost of construction work subcontracted out to others	Relative standard error of estimate (percent) for column—
	A	B	C	D	E	F	G	H	I	J	G
<b>238330, Flooring contractors</b>											
All establishments .....	2	12 865	79 813	2 420 569	9 907 523	9 775 438	8 623 387	4 868 960	3 886 512	1 152 051	2
Establishments with value of business done—											
Less than \$25,000 .....	2	389	S	S	S	S	S	S	S	S	S
\$25,000 to \$49,999 .....	—	1 040	S	S	S	S	S	S	S	S	S
\$50,000 to \$99,999 .....	—	2 226	3 175	41 314	167 301	166 929	150 071	102 743	47 700	16 858	9
\$100,000 to \$249,999 .....	—	3 821	8 805	165 103	615 710	611 542	559 932	377 109	186 991	51 610	7
\$250,000 to \$499,999 .....	—	2 154	9 433	202 389	768 419	747 151	665 332	451 958	234 641	81 820	8
\$500,000 to \$999,999 .....	—	1 407	9 528	252 187	1 006 015	997 221	889 382	563 707	334 469	107 839	9
\$1,000,000 to \$2,499,999 .....	—	1 064	13 339	436 442	1 594 861	1 569 151	1 399 999	827 935	597 775	169 151	7
\$2,500,000 to \$4,999,999 .....	—	434	10 540	400 029	1 535 183	1 513 633	1 322 677	725 272	618 955	190 956	6
\$5,000,000 to \$9,999,999 .....	—	206	8 761	326 924	1 395 991	1 366 219	1 168 469	608 466	589 775	197 750	6
\$10,000,000 or more .....	—	125	14 730	583 430	2 779 080	2 758 728	2 426 229	1 182 843	1 263 737	332 499	2

<sup>1</sup>Construction receipts were obtained from census respondent forms. For establishments whose respondent forms were not received at the time data were tabulated, these data were calculated using industry averages and imputation for nonresponse. The following symbols are shown where estimated imputation-based data on construction receipts account for 10 percent or more of the figures shown: 1—10 to 19 percent; 2—20 to 29 percent; 3—30 to 39 percent; 4—40 to 49 percent; 5—50 to 59 percent; 6—60 to 69 percent; 7—70 to 79 percent; 8—80 to 89 percent; 9—90 percent or more.

<sup>2</sup>For the 2002 Economic Census, the definitions of value of business done and value of construction work has been modified from the 1997 Economic Census definition. See Appendix A for the modified definitions.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.



**Table 7. Value of Construction Work for Establishments by Type of Construction: 2002**

[Detail may not add to total because of rounding. Data based on the 2002 Economic Census. For information on confidentiality protection, sampling error, and nonsampling error, see note at end of table. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see Appendix A]

Type of construction	Value of construction work <sup>1</sup>				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction	Maintenance and repair	A	B	C	D
	A	B	C	D	A	B	C	D
<b>238330, Flooring contractors</b>								
Total .....	9 775 438	4 942 353	3 373 935	1 459 149	2	2	3	3
Building construction, total .....	9 750 118	4 933 929	3 363 797	1 452 392	2	2	3	3
Single-family houses, detached and attached .....	5 012 178	3 016 959	1 408 872	586 347	3	3	5	5
Single-family houses, detached .....	3 951 008	2 288 562	1 221 645	440 801	4	4	6	6
Single-family houses, attached .....	1 061 170	728 397	187 227	145 546	4	3	9	9
Office buildings .....	1 315 752	549 698	598 980	167 075	3	5	4	7
Other building construction .....	3 422 187	1 367 272	1 355 945	698 970	3	3	4	5
Nonbuilding construction, total .....	D	D	10 139	6 757	S	S	21	8
Other nonbuilding construction .....	D	D	10 139	6 757	S	S	21	8
Construction work, nsk .....	D	D	—	—	S	S	—	—

<sup>1</sup>For the 2002 Economic Census, the definition of value of construction work has been modified from the 1997 Economic Census definition. See Appendix A for the modified definition.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

**Table 8. Selected Statistics for Establishments by Specialization in Types of Construction: 2002**

[Thousand dollars unless otherwise noted. 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. Data based on the 2002 Economic Census. For information on confidentiality protection, sampling error, and nonsampling error, see note at the end of table. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see Appendix A.]

Item	Number of establishments	Total number of employees	Total payroll	Value of construction work for specialized type	Net value of construction work	Value added	Cost of construction work subcontracted out to others	Relative standard error of estimate (percent) for column—
	A	B	C	D	E	F	G	G
<b>238330, Flooring contractors</b>								
Total .....	12 865	79 813	2 420 569	X	8 623 387	4 868 960	1 152 051	3
Establishments specializing 51 percent or more...	10 756	58 982	1 693 907	6 089 302	6 178 560	3 528 761	831 520	4
<b>Building construction, total</b>								
Establishments specializing 51 percent or more...	10 754	D	D	D	D	D	D	S
Specialization 100 percent .....	5 378	23 932	618 129	2 773 920	2 437 467	1 324 401	336 453	7
Specialization 90 to 99 percent .....	1 687	11 013	365 808	1 332 157	1 265 094	715 658	161 490	7
Specialization 80 to 89 percent .....	1 361	7 852	221 792	712 178	771 926	472 478	98 051	9
Specialization 70 to 79 percent .....	1 150	6 986	192 106	588 328	706 851	438 581	D	S
Specialization 60 to 69 percent .....	881	6 856	225 426	506 283	718 099	413 840	96 001	14
Specialization 51 to 59 percent .....	298	D	D	D	D	D	D	S
<b>Single-family houses, detached and attached</b>								
Establishments specializing 51 percent or more...	8 448	41 856	1 108 892	4 140 934	4 074 997	2 322 609	583 597	5
Specialization 100 percent .....	4 543	19 158	453 796	2 132 344	1 868 206	976 064	264 138	8
Specialization 90 to 99 percent .....	1 273	7 731	243 320	865 223	813 855	482 622	112 370	9
Specialization 80 to 89 percent .....	872	4 714	126 367	401 707	433 035	267 096	56 760	10
Specialization 70 to 79 percent .....	856	4 608	125 032	383 776	450 482	271 332	68 400	19
Specialization 60 to 69 percent .....	638	4 135	125 288	283 148	390 894	243 025	60 635	20
Specialization 51 to 59 percent .....	266	1 510	35 090	74 737	118 524	82 470	21 293	33
<b>Single-family houses, detached</b>								
Establishments specializing 51 percent or more...	7 719	37 474	1 012 325	3 499 670	3 488 529	2 133 152	485 125	6
Specialization 100 percent .....	4 170	16 443	405 819	1 637 308	1 447 644	878 544	189 665	11
Specialization 90 to 99 percent .....	1 182	7 296	230 325	825 324	776 161	457 041	107 514	9
Specialization 80 to 89 percent .....	817	4 438	115 220	368 911	398 182	253 204	51 758	9
Specialization 70 to 79 percent .....	731	3 975	111 887	333 145	388 369	234 989	61 646	20
Specialization 60 to 69 percent .....	557	3 884	116 467	263 673	365 375	231 607	53 945	21
Specialization 51 to 59 percent .....	261	1 439	32 607	71 307	112 800	77 767	20 597	34
<b>Single-family houses, attached</b>								
Establishments specializing 51 percent or more...	729	4 382	96 568	641 265	586 468	189 457	98 472	7
Specialization 100 percent .....	373	2 715	47 977	495 036	420 563	97 520	74 473	3
Specialization 90 to 99 percent .....	91	435	12 995	39 899	37 694	25 581	4 856	18
Specialization 80 to 89 percent .....	54	276	11 147	32 795	34 854	13 892	5 003	64
Specialization 70 to 79 percent .....	125	633	13 146	50 630	62 114	36 343	6 754	59
Specialization 60 to 69 percent .....	81	251	8 821	19 475	25 520	11 418	6 691	48
Specialization 51 to 59 percent .....	5	71	2 482	3 430	5 724	4 702	696	55
<b>Office buildings</b>								
Establishments specializing 51 percent or more...	422	4 849	197 839	659 049	676 644	352 881	90 212	9
Specialization 100 percent .....	208	1 620	62 461	278 854	240 253	139 458	38 601	15
Specialization 90 to 99 percent .....	42	843	45 428	134 006	136 357	56 288	10 080	—
Specialization 80 to 89 percent .....	83	1 138	43 169	139 978	145 447	83 919	26 844	22
Specialization 70 to 79 percent .....	59	432	13 154	28 258	36 209	24 513	D	S
Specialization 60 to 69 percent .....	26	690	29 429	60 441	92 760	39 097	6 609	9
Specialization 51 to 59 percent .....	4	126	4 199	17 511	25 618	9 606	D	S
<b>Other building construction</b>								
Establishments specializing 51 percent or more...	1 884	D	D	D	D	D	D	S
Specialization 100 percent .....	627	3 154	101 872	362 723	329 008	208 879	33 715	14
Specialization 90 to 99 percent .....	372	2 439	77 060	332 928	314 882	176 748	39 040	17
Specialization 80 to 89 percent .....	406	2 000	52 256	170 493	193 444	121 463	14 447	22
Specialization 70 to 79 percent .....	236	1 946	53 920	176 294	220 160	142 736	23 481	25
Specialization 60 to 69 percent .....	216	2 031	70 709	162 693	234 445	131 718	28 756	25
Specialization 51 to 59 percent .....	27	D	D	D	D	D	D	S
<b>Nonbuilding construction, total</b>								
Establishments specializing 51 percent or more...	2	D	D	D	D	D	D	S
Specialization 100 percent .....	1	D	D	D	D	D	D	S
Specialization 70 to 79 percent .....	1	D	D	D	D	D	D	S
<b>Other nonbuilding construction</b>								
Establishments specializing 51 percent or more...	2	D	D	D	D	D	D	S
Specialization 100 percent .....	1	D	D	D	D	D	D	S
Specialization 70 to 79 percent .....	1	D	D	D	D	D	D	S

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

**Table 9. Value of Business Done for Establishments by Kind-of-Business Activity: 2002**

[Thousand dollars unless otherwise noted. 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. Data based on the 2002 Economic Census. For information on confidentiality protection, sampling error, and nonsampling error, see note at end of table. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see Appendix A]

Primary and other kind of business activities	Value of business done <sup>1</sup>	Relative standard error of estimate (percent)
<b>238330, Flooring contractors</b>		
Total .....	9 907 523	2
Special trade contractors, total .....	8 716 682	2
Carpet laying or removal contractor .....	3 818 418	3
Flooring contractor, wood .....	3 051 589	4
Floor laying contractor, resilient .....	1 846 675	4
All other construction activities .....	1 059 192	3
Other business activities secondary to construction activities, total .....	131 649	7
All other business activities secondary to construction activities .....	131 649	7

<sup>1</sup>For the 2002 Economic Census, the definition of value of business done has been modified from the 1997 Economic Census definition. See Appendix A for the modified definition.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

**Table 10. Selected Statistics for Establishments by Specialization in Kind-of-Business Activity: 2002**

[Thousand dollars unless otherwise noted. Detail may not add to total because of rounding. This table presents selected statistics for establishments according to degree of specialization by major activity 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 business done by kind of business activity was not provided in Table 9. Data based on the 2002 Economic Census. For information on confidentiality protection, sampling error, and nonsampling error, see note at end of table. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see Appendix A.]

Item	Number of establishments	Total number of employees	Total payroll	Value of construction work for specialized kind of business	Net value of construction work	Value added	Cost of construction work subcontracted out to others	Relative standard error of estimate (percent) for column—
	A	B	C	D	E	F	G	G
<b>238330, Flooring contractors</b>								
Total .....	12 865	79 813	2 420 569	X	8 623 387	4 868 960	1 152 051	3
Establishments specializing 51 percent or more...	11 004	61 281	1 787 020	6 300 974	6 422 762	3 685 204	828 878	4
<b>Special trade contractors, total</b>								
Establishments specializing 51 percent or more...	10 883	59 956	1 729 090	6 127 407	6 243 796	3 585 890	809 056	4
Specialization 100 percent .....	7 617	33 292	848 798	3 517 590	3 172 873	1 896 894	344 717	6
Specialization 90 to 99 percent .....	877	5 940	194 708	665 148	620 039	352 036	95 149	10
Specialization 80 to 89 percent .....	650	5 448	180 969	578 389	605 558	315 913	97 079	6
Specialization 70 to 79 percent .....	679	5 886	201 107	591 390	739 472	405 488	72 490	10
Specialization 60 to 69 percent .....	730	6 232	208 803	548 880	755 657	427 938	128 966	10
Specialization 51 to 59 percent .....	330	3 158	94 706	226 011	350 196	187 619	70 656	15
<b>Carpet laying or removal contractor</b>								
Establishments specializing 51 percent or more...	4 601	26 592	795 354	2 752 291	2 953 337	1 714 047	467 989	4
Specialization 100 percent .....	2 843	9 870	223 652	924 891	826 382	569 330	98 509	11
Specialization 90 to 99 percent .....	313	2 865	106 175	397 770	354 631	182 122	79 090	12
Specialization 80 to 89 percent .....	492	3 951	128 957	453 369	463 968	241 084	88 015	7
Specialization 70 to 79 percent .....	401	3 974	135 910	450 434	557 852	289 728	61 516	11
Specialization 60 to 69 percent .....	407	3 686	132 503	364 978	501 783	295 059	86 978	7
Specialization 51 to 59 percent .....	143	2 246	68 158	160 849	248 721	136 725	53 882	18
<b>Flooring contractor, wood</b>								
Establishments specializing 51 percent or more...	4 398	23 395	637 522	2 466 332	2 367 957	1 261 475	258 443	7
Specialization 100 percent .....	3 503	17 037	452 425	1 956 340	1 762 478	926 490	193 862	7
Specialization 90 to 99 percent .....	366	2 349	64 773	205 756	203 606	121 811	12 652	19
Specialization 80 to 89 percent .....	103	941	29 227	63 780	70 532	44 478	5 352	23
Specialization 70 to 79 percent .....	125	800	25 568	75 797	97 633	54 717	7 291	36
Specialization 60 to 69 percent .....	160	1 617	47 798	117 906	162 988	78 611	24 253	39
Specialization 51 to 59 percent .....	140	650	17 730	46 752	70 719	35 368	15 032	30
<b>Floor laying contractor, resilient</b>								
Establishments specializing 51 percent or more...	1 885	9 970	296 214	908 784	922 503	610 368	82 624	12
Specialization 100 percent .....	1 271	6 385	172 721	636 358	584 013	401 074	52 345	13
Specialization 90 to 99 percent .....	197	726	23 760	61 622	61 802	48 104	3 407	25
Specialization 80 to 89 percent .....	55	556	22 785	61 240	71 058	30 351	3 712	34
Specialization 70 to 79 percent .....	153	1 112	39 628	65 158	83 987	61 043	3 683	34
Specialization 60 to 69 percent .....	162	929	28 502	65 997	90 886	54 269	17 735	38
Specialization 51 to 59 percent .....	46	262	8 818	18 410	30 757	15 527	1 741	39
<b>All other construction activities</b>								
Establishments specializing 51 percent or more...	121	1 325	57 930	173 566	178 966	99 314	19 822	9
Specialization 100 percent .....	61	765	34 084	95 047	90 975	54 507	4 071	27
Specialization 90 to 99 percent .....	21	191	8 239	38 912	34 197	20 110	D	S
Specialization 80 to 89 percent .....	4	64	1 981	5 728	5 726	3 497	1 434	65
Specialization 70 to 79 percent .....	6	79	2 104	3 753	4 039	2 369	D	S
Specialization 60 to 69 percent .....	5	138	7 615	19 712	28 783	12 646	3 096	9
Specialization 51 to 59 percent .....	25	87	3 906	10 414	15 245	6 183	3 924	9

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

**Table 11. Value of Construction Work for Establishments by Location of Construction Work: 2002**

[Thousand dollars unless otherwise noted. Detail may not add to total because of rounding. Data based on the 2002 Economic Census. For information on confidentiality protection, sampling error, nonsampling error, and geographical definitions, see note at end of table. For information on geographic areas followed by \*, see Appendix D. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see Appendix A]

Location of construction work	Value of construction work <sup>1</sup>	Relative standard error of estimate (percent) for column—
<b>238330, Flooring contractors</b>		
United States .....	9 775 438	2
Construction work done in—		
Alabama .....	87 694	14
Alaska .....	21 081	41
Arizona .....	209 426	17
Arkansas .....	37 142	26
California .....	1 685 997	7
Colorado .....	378 587	5
Connecticut .....	140 607	17
Delaware .....	64 366	29
District of Columbia .....	22 428	7
Florida .....	318 924	8
Georgia .....	207 986	8
Hawaii .....	40 327	14
Idaho .....	42 120	26
Illinois .....	510 398	7
Indiana .....	178 822	10
Iowa .....	74 178	12
Kansas .....	58 347	14
Kentucky .....	92 153	7
Louisiana .....	104 452	25
Maine .....	44 283	30
Maryland .....	630 743	8
Massachusetts .....	264 563	10
Michigan .....	286 411	12
Minnesota .....	166 349	8
Mississippi .....	13 379	28
Missouri .....	223 840	10
Montana .....	8 617	37
Nebraska .....	87 591	30
Nevada .....	120 311	13
New Hampshire .....	69 343	38
New Jersey .....	366 297	16
New Mexico .....	28 894	20
New York .....	505 801	10
North Carolina .....	227 756	8
North Dakota .....	7 842	54
Ohio .....	332 626	20
Oklahoma .....	23 921	14
Oregon .....	114 041	7
Pennsylvania .....	305 178	7
Rhode Island .....	24 474	11
South Carolina .....	107 040	16
South Dakota .....	11 063	22
Tennessee .....	74 217	7
Texas .....	569 822	11
Utah .....	63 393	25
Vermont .....	14 853	31
Virginia .....	346 646	10
Washington .....	250 052	15
West Virginia .....	19 669	16
Wisconsin .....	187 302	19
Wyoming .....	4 084	36

<sup>1</sup>For the 2002 Economic Census, the definition of value of construction work has been modified from the 1997 Economic Census definition. See Appendix A for the modified definition.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C. For geographical definitions, see Appendix D.

# Appendix A.

## Explanation of Terms

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### **ESTABLISHMENT**

A relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. Generally, 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.

Number of establishments 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.

### **NUMBER OF EMPLOYEES**

Includes all full-time and part-time individuals on the payrolls of construction establishments during any part of the pay period which included the 12th of March, May, August, and November. Included are individuals on paid sick leave, paid holidays, paid vacations, and salaried officers and executives of a corporation. Excluded are subcontractors and their employees; full- or part-time leased employees whose payroll was filed under an employee leasing company's Employer Identification Number; temporary staffing obtained from a staffing service; and proprietors and partners of unincorporated businesses.

Includes all permanent full-time and part-time employees who are on the payrolls of establishments who worked or received pay for any part of the pay period including the 12th of March, May, August, and November.

The all employees or total number of employees number is the sum of construction workers plus other employees who were on the payroll during the pay periods including the 12th of March, May, August, and November, divided by four.

### **Construction workers**

Includes all payroll workers (up through the working supervisory 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, on-site record keepers, and security guards. Supervisory employees above the working foreman level are excluded from this category and are included in the other employees category.

The average number of construction workers is the sum of construction workers who were on the payroll during the pay periods including the 12th of March, May, August, and November, divided by four.

### **Other employees**

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

The average number of other employees is the sum of other employees who were on the payroll during the pay periods including the 12th of March, May, August, and November, divided by four.

### **PAYROLL**

Includes the gross earnings paid in the reporting year to all employees on the payroll of construction establishments. It includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, and vacation and sick leave pay, prior to deductions such as employees'



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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.

### **Payroll for Construction Workers**

Includes the gross earnings paid in the reporting year to all construction workers on the payroll of construction establishments. It includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, and vacation and sick leave pay, prior to deductions such as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds.

### **Payroll for Other Employees**

Includes the gross earnings paid in the reporting year to all other employees on the payroll of construction establishments. It includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, and vacations and sick leave pay, prior to deductions such as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. Payroll of other employees excludes salaries of the proprietor or partners, if unincorporated.

### **FIRST-QUARTER PAYROLL FOR ALL EMPLOYEES**

Includes the gross earnings paid in the first quarter of the reporting year to all employees on the payroll of construction establishments. The first-quarter payroll period is the first quarterly pay period which includes March 12. Included are all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, and vacation and sick leave pay, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. It also includes salaries of officers of these establishments, if a corporation, but excludes payments to the proprietor or partners, if unincorporated.

### **FRINGE BENEFITS FOR ALL EMPLOYEES**

Includes the total sum of fringe benefits of all full-time and part-time employees on the payrolls of construction establishments during any part of the pay period which included the 12th of the months specified on the report form. Includes expenditures made by the employer for legally required and voluntary fringe benefit programs for employees.

### **Legally Required Expenditures**

Includes expenditures made by the employer for Social Security and Medicare contributions, unemployment compensation, worker's compensation, and state temporary disability payments.

### **Voluntary Expenditures**

Includes expenditures made by the employer for life insurance premiums, pension plans, insurance premiums on hospital and medical plans, welfare plans, and union negotiated benefits.

### **VALUE OF BUSINESS DONE**

Includes the sum of value of construction work and other business receipts. Value of business done is the sum of receipts, billings, or sales from establishments of construction business activities plus receipts from other business activities.

### **Value of Construction Work**

In the 1987-1997 censuses, the value of construction work was collected to measure actual construction activity done during the year. Studies have shown that respondents were not able to accurately report these data. In 2002, receipts, billings, or sales for construction work was collected.

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This item includes the receipts, billings, or sales for construction work done by building contractors, heavy and civil engineering construction contractors, and specialty trade contractors. Included are new construction, additions, alterations or reconstruction, and maintenance and repair construction work. Establishments engaged in the sale and installation of construction components such 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 receipts covering the price of the items installed. Excluded are the cost of industrial and other special machinery and equipment that are not an integral part of a structure and receipts from business operations in foreign countries.

The value of construction work consists of several components that are summed up individually to get the total value of construction work. These components are:

1. Value of construction work on government owned projects. This is the total of all projects owned by federal, state, and local governments:
  - a. Value of construction work on federally owned projects. This is the value of construction work for projects owned by the federal government.
  - b. Value of construction work on state and locally owned projects. This is the summed total value of construction work for all projects owned by state and local governments.
2. Value of construction work on privately owned projects. This is the value of construction work for projects owned privately (excluding government owned projects).

### **Other Business Receipts**

Includes the receipts for all other business activities done by an establishment in the current year. Includes business receipts not reported as value of construction work. This includes business receipts from retail and wholesale trade, rental of equipment without operator, manufacturing, transportation, legal services, 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 are nonoperating income such as interest, dividends, the sale of fixed assets, or receipts from other business operations in foreign countries.

### **NET VALUE OF CONSTRUCTION WORK**

Includes the value of construction work less the cost of construction work subcontracted out to others.

### **VALUE ADDED**

This measure of construction activity is equal to value of business done, less costs for construction work subcontracted out to others and costs for materials, components, supplies, and fuels.

### **VALUE OF CONSTRUCTION WORK SUBCONTRACTED IN FROM OTHERS**

Includes the value of construction work done by reporting establishments as subcontractors to other contractors or builders. 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 dollar value.

### **CONSTRUCTION RECEIPTS PERCENT ESTIMATED**

Construction receipts were obtained from census respondent forms. For establishments whose respondent forms were not received at the time data were tabulated, the data were calculated using industry averages and imputation for nonresponse.

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## **SELECTED COSTS**

Includes the direct charges actually paid or payable for costs incurred for purchases of materials, components, and supplies; costs of 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 not included.

### **Cost of Materials, Components, and Supplies**

Includes the costs for materials, components, and supplies used by establishments in the construction or reconstruction of buildings, structures, or other facilities plus costs for materials bought and resold to others. Also included are costs made for direct purchases of materials, components, and supplies although the purchases were subsequently provided to subcontractors for their use. Supplies include expendable tools which are charged to current accounts. Freight and other direct charges representing only that amount paid after discounts and the value of materials, components, and supplies obtained from other establishments of the respondent's company are also included. Excluded from this item are the cost of fuels, lubricants, electric energy, and industrial and other specialized machinery and equipment such as printing presses; computer systems that are not an integral part of a structure; and materials furnished to contractors by the owners of projects.

### **Cost of Construction Work Subcontracted Out to Others**

Includes all costs for construction work subcontracted out to other construction contractors during the reporting year. Excluded from this item are costs to the reporting establishment for its purchases of materials, components, and supplies provided to a subcontractor for use. These costs are reported under costs for materials, components, and supplies. Also excluded are costs for the rental of machinery or equipment.

### **Cost of Selected Power, Fuels, and Lubricants**

Includes costs for fuels including gasoline, diesel fuel and lubricants, and electric energy purchased during the year from other companies or received from other establishments of the company. Also included are costs for natural gas, manufactured gas, fuel oil, and coal and coke products.

The components of selected power, fuels, and lubricants are:

1. Purchased electricity. This is the cost of electric energy purchased during the year from other companies or received from other establishments of the company.
2. Natural gas and manufactured gas. This is the cost of natural gas and manufactured gas purchased during the year from other companies or received from other establishments of the company.
3. Gasoline and diesel fuel. This is the cost of gasoline and diesel fuel purchased during the year from other companies or received from other establishments of the company. This cost is broken down into two different uses of gasoline and diesel fuel. They are:
  - a. On-highway use of gasoline and diesel fuel. This is the cost of gasoline and diesel fuel purchased during the year to fuel highway vehicles. A highway vehicle is any self-propelled vehicle designed to carry a load over public highways, whether or not the vehicle was also designed to perform other functions. Examples of vehicles designed to carry a load over public highways are passenger automobiles, trucks, and truck tractors. If a vehicle can be used for a combination of on-highway and off-highway uses and has one fuel tank, the fuel use is not considered off-highway. An example of this is a concrete-mixer truck where the truck engine operates both the engine and the mixing unit by a power take-off and is fueled by a single tank. None of the fuel used in this vehicle is off-highway because of the on-highway use. If the vehicle has separate fuel tanks and engines, the fuel in a tank used for non-highway use may be considered off-highway use.

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- b. Off-highway use of gasoline and diesel fuel. This is the cost of gasoline and diesel fuel purchased during the reporting year for off-highway use. Off-highway fuel use is the use of fuel for trade, business, or income producing activity. In most cases, off-highway fuel use does not include use in a highway vehicle registered or required to be registered for use on public highways.
  4. All other fuels and lubricants. This is the cost of fuels and lubricants purchased during the year from other companies or received from other establishments of the company that are not included as costs in any of these categories: natural gas; manufactured gas; gasoline; and diesel fuel.

### **COSTS OF MATERIALS, COMPONENTS, SUPPLIES, AND FUELS**

Includes the costs for materials, components, and supplies used by establishments in the construction or reconstruction of buildings, structures, or other facilities plus costs for materials bought and resold to others. Also included is the costs for fuels. These include gasoline, diesel fuel, lubricants, electric energy purchased during the year from other companies or received from other establishments of the company, and costs for natural and manufactured gas, fuel oil, and coal and coke products. Excluded from this item are industrial and other specialized machinery and equipment, such as printing presses; computer systems that are not an integral part of a structure; and materials furnished to contractors by the owners of projects.

### **RENTAL PAYMENTS**

Includes the total rental costs for renting and/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 that in effect are conditional sales contracts such as capital leases. Such costs are included in capital expenditures.

### **SELECTED PURCHASED SERVICES**

Includes the costs for services purchased from other companies that are paid directly by an establishment that are normally considered as overhead or non-job-related costs. Included are only the cost of repairs necessary to maintain property and equipment. Excluded are the cost of improvements that increase the value of property or the cost of adapting the property for another use. Such costs are included in capital expenditures. Also excluded are the salaries paid to employees and cost of construction activities subcontracted to others already reported within the selected costs of an establishment.

Included in the cost of selected purchased services for communication services is the actual expense incurred or payable during the year for any type of communication. Such types of communication include telephone, data transmission, telegraph, Internet, connectivity, FAX, telex, photo transmission, paging, cellular telephone, on-line access and related services, etc.

Included in the cost of selected purchased services for repairs to buildings and other structures is the actual expense incurred or payable during the year for any type of repair to buildings and other structures. Such types of repair include maintenance and repair of buildings, job-site trailers, and other structures. Excluded are janitorial services.

The cost of selected purchased services for repairs to machinery and equipment is the actual expense incurred or payable during the year for any type of repairs made to structures and equipment by outside companies or from other establishments of the same company. Such types of repairs to machinery and equipment include maintenance and repair of construction equipment and tools; machinery; and office equipment, furniture, and vehicles, including related service contracts.

Included in the cost of selected purchased services for legal services is the actual expense incurred or payable during the year for any type of legal services. Excluded are the salaries paid to employees of the establishment for these services.

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Included in the cost of selected purchased services for accounting, auditing, and bookkeeping services is the actual expense incurred or payable during the year for these services. Excluded are the salaries paid to employees of the establishment for these services.

Included in the cost of selected purchased services for advertising and promotional services is the actual expense incurred or payable during the year for these services. Such types of advertising and promotional services include advertising, marketing, promotional, or public relations services.

### **GROSS BOOK VALUE OF DEPRECIABLE ASSETS AT BEGINNING OF YEAR (BOY) AND END OF YEAR (EOY)**

Includes the value of depreciable assets for the beginning of year (BOY) and end of year (EOY). Gross value of depreciable assets are usually the original costs of the assets at the beginning of the year. The gross value of depreciable assets (BOY), plus any capital expenditures for new and used depreciable assets in the reporting year, minus the gross value of depreciable assets sold, retired, scrapped, destroyed, etc. in the reporting year, comprise gross book value of depreciable assets (EOY). Depreciable assets are the fixed tangible property of the establishment for which depreciation accounts are ordinarily maintained.

### **CAPITAL EXPENDITURES, OTHER THAN LAND**

Includes capital expenditures that will be charged to the fixed assets accounts and for which depreciation accounts are ordinarily maintained. Includes the cost of capital improvements that were made during the year that increased the value of property or adapted the property for another use. Capital expenditures for leasehold improvements made to property leased from others are also included. Land expenditures are not included as capital expenditures. If any building or equipment had been acquired under a capital leasing arrangement that meet the criteria set down by the Financial Accounting Standards Board (FASB), respondents were instructed to report the original cost or market value as a fixed asset and as a capital expenditure, if acquired in the reporting year. If the lease qualified as an operating lease, respondents were instructed not to include the value of the building and equipment as a fixed asset or capital expenditure. If capital expenditures were not recorded directly at the establishment level but handled centrally at a company or division level, respondents were requested to report appropriate estimates for the individual establishments.

### **RETIREMENTS AND DISPOSITION OF DEPRECIABLE ASSETS**

Includes the gross value of depreciable assets sold, retired, scrapped, destroyed, abandoned, etc., during the year. The values shown are the acquisition costs of the retired assets. This item also includes the value of assets (at acquisition cost rather than current market value) transferred to other establishments of the same company.

### **DEPRECIATION CHARGES DURING YEAR**

Includes the depreciation expenses of the establishment during the reporting year. These expenses are charged against depreciable assets which are the fixed tangible property of the establishment for which depreciation accounts are ordinarily maintained.

### **NUMBER OF ESTABLISHMENTS WITH INVENTORIES**

Includes all establishments with payroll that reported a dollar amount of inventory. Includes the number of establishments that were in business at any time during the reporting year. It covers all full-year and part-year operations. Construction establishments that were inactive or idle for the entire year were not included.

### **Value of Construction Work for Establishments With Inventories**

Includes the value of construction work for establishments with payroll that reported a dollar amount of inventory in the reporting year.

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## **BEGINNING- AND END-OF-YEAR INVENTORIES OF MATERIALS AND SUPPLIES**

Includes the inventories of materials and supplies owned at the beginning and end of the reporting year by establishments with payroll. Includes all of the materials and supplies that are owned regardless of where they are held. Excludes materials that 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.

## **NUMBER OF ESTABLISHMENTS WITH NO INVENTORIES**

Includes all establishments with payroll that reported having no inventories of materials and supplies during the reporting year. Includes the number of establishments that were in business at any time during the reporting year. It covers all full-year and part-year operations. Construction establishments that were inactive or idle for the entire reporting year were not included.

## **Value of Construction Work for Establishments With No Inventories**

Includes the value of construction work for establishments with payroll that reported having no dollar amount of inventory in the reporting year.

## **NUMBER OF ESTABLISHMENTS NOT REPORTING INVENTORIES**

Includes all establishments with payroll that did not report a dollar amount for inventories of materials and supplies during the reporting year. It covers all full-year and part-year operations. Construction establishments that were inactive or idle for the entire reporting year were not included.

## **Value of Construction Work for Establishments Not Reporting Inventories**

Includes the value of construction work for establishments that did not report a dollar amount for inventories of materials and supplies, and the value of construction work for establishments that did not complete a census form.

## **VALUE OF CONSTRUCTION WORK BY TYPE OF CONSTRUCTION**

Includes the dollar value of construction work according to the specified types of construction. There are three categories of construction. They are:

1. New construction. The original construction work done on a project including all finishing work on the original building or structure. Land development work on the site and demolition of existing structures are also included.
2. Additions, alterations, or reconstruction. The construction work which adds to the value or useful life of an existing building or structure or which adapts a building or structure to a new or different use. Included are "major replacements" of building systems such as the installation of a new roof or heating system and the resurfacing of streets or highways. This contrasts to the repair of a hole in a roof or the routine patching of highways and streets, which would be classified as maintenance and repair.
3. Maintenance and repair. The incidental construction work which keeps a property in ordinary working condition. Excluded are trash and snow removal, lawn maintenance and landscaping, cleaning, and janitorial services.

## **Types of Construction**

Provides data by the types of buildings, structures, or other facilities being constructed or worked on by construction establishments in the reporting year. 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

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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 its 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. There are two types of construction:

1. Building Construction. The details for this type of construction are defined as:

- Single-family houses, detached. Includes all fully detached 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, apartment-type condominiums, and cooperatives. Includes apartment rentals, high-rise, low-rise, or any structures containing two or more housing units, excluding attached single-family houses.
- Dormitories and barracks. Includes school dormitories and military or nonmilitary barracks that are nonhousekeeping structures.
- Other manufacturing and industrial buildings. Includes all manufacturing and industrial buildings and plants that 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.
- Manufacturing and industrial warehouses. Includes all warehouses which are intended for industrial activities.
- Hotels and motels. Includes hotels, motels, bed-and-breakfast inns, and tourist cabins intended for transient accommodations. Also included are hotel and motel conference centers.
- Office buildings. Includes all buildings that are used primarily for office space or for government administrative offices. Also included are banks or financial buildings that are three stories or more. Medical office buildings are reported under hospitals and institutional buildings.
- All other miscellaneous commercial buildings. Includes all buildings that are intended for use primarily in the retail and service trades, i.e., shopping centers, department stores, drug stores, restaurants, public garages, auto service stations, and one or two story bank or financial institutions.
- Commercial warehouses. Includes distribution buildings and mini-storage units intended for commercial use. Also included are storage warehouses.
- Religious buildings. Includes all buildings that are intended for religious services or functions such as churches, synagogues, convents, monasteries, and seminaries.
- Educational buildings. Includes all buildings that 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 that are not a part of a manufacturing or commercial establishment, are also included.



- Health care and institutional buildings. Includes hospitals, medical office buildings, and all other buildings that are intended to provide health and institutional care such as clinics, infirmaries, sanitariums, nursing homes, homes for the aged, and orphanages.
- Public safety buildings. Includes detention centers, prisons, fire stations, and rescue squad buildings.
- Farm buildings, nonresidential. Includes nonresidential farm buildings such as barns, poultry houses, implement sheds, and farm silos.
- Amusement, social, and recreational buildings. Includes buildings that are used primarily for entertainment, social, and recreational activities such as sports arenas, convention centers, theaters, music halls, golf and country club buildings, fitness centers, and bowling alleys.
- Indoor swimming pools. Includes pools that are inside a building.
- Indoor ice rinks. Includes ice rinks that are inside a building.
- Grain elevators and dry cleaning plants. Includes grain and storage elevators and dry cleaning plants.
- Waste disposal plants. Includes recycling centers, garbage disposal plants, incinerator disposed facilities, and material recovery facilities.
- Miscellaneous building construction. Includes all other nonresidential buildings such as fire stations, post offices, and bus and air passenger terminals and hangars.

2. Nonbuilding Construction. The details for this type of construction are defined as:

- Highways, streets, and related work. Includes streets, roads, alleys, sidewalks, curbs and gutters, culverts, erosion control, installation of guard rails, highway signs, and lighting. Also includes earthwork protective structures when used in connection with road improvements.
- Airport runways and related work. Includes airport runways, taxiways, aprons, and related work.
- Private driveways and parking areas. Includes all nonstructural parking areas and private driveways of all surface types.
- Bridges and elevated highways. Includes viaducts and overpasses, roads, highways, railroads, and causeways built on structural supports.
- Tunnels. Includes highway, pedestrian, railroad, and water distribution tunnels.
- Sewers, sewer lines, 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.
- Oil and gas pipeline construction. Includes pipelines for the transmission of gas, petroleum products, and liquefied gases.
- 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.
- Power plants and cogeneration plants, except hydroelectric. Includes electric and steam generating plants, cogenerating plants, and nuclear plants.
- Power plant, hydroelectric. Includes all types of hydroelectric power generating plants.
- Blast furnaces, chemical complexes, etc. Includes coke ovens and mining appurtenances such as tipples and washeries.



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- Sewage treatment plants. Includes sewage treatment and waste disposal plants.
  - Water treatment plants. Includes water filtration and water softening plants.
  - Urban mass transit. Includes subways, street cars, and light rail systems.
  - Railroad construction. Includes the construction of railroad beds, tracks, freight yards, and signal towers for railroad systems, excluding urban mass transit.
  - Conservation and development construction. Includes land reclamation, irrigation projects, drainage canals, levees, jetties, breakwaters, and flood control projects.
  - Dam and reservoir construction. Includes hydroelectric, water supply, and flood control dams and reservoirs.
  - Dry and Solid waste disposal. Includes all dry and solid waste disposal sites where non-hazardous waste is buried.
  - Harbor and port facilities. Includes docks, piers, and wharves.
  - Marine construction. Includes dredging, underwater rock removal, breakwaters, navigational channels, and locks.
  - Petrochemical plants and petroleum refineries. Includes petroleum related facilities.
  - Outdoor swimming pools. Includes wading pools and reflecting pools.
  - Fencing. Includes all types of fencing, except electronic containment fencing for pets.
  - Electronic containment fencing. Includes all types of electronic containment fencing for pets.
  - Recreational facilities. Includes athletic fields, golf courses, outdoor tennis courts, trails, and camps.
  - Ships. Includes special trade contractors working on ships and boats such as painters, carpenters, joiners, electricians, etc.
  - Oil and gas fields. Includes road construction, land clearing contracting, land moving contracting, and land leveling contracting in oil and gas fields.
  - Oil and gas field gathering lines. Includes land clearing contracting, land moving contracting, and land leveling contracting.
  - Coal mines. Includes land clearing contracting, land moving contracting, and land leveling contracting.
  - Metal mines. Includes land clearing contracting, land moving contracting, and land leveling contracting.
  - Nonmetallic mines. Includes land clearing contracting, land moving contracting, and land leveling contracting.
  - All other miscellaneous nonbuilding construction. Includes all other types of nonbuilding construction.

### **KINDS OF BUSINESS ACTIVITIES**

Includes dollar value of business done by business activity. Primary activities are construction activities that generate fifty-one percent or more of an establishment's dollar value of business done. Also included are other kinds of business activities. Other kinds of business activities include business receipts not reported as value of construction work. This item includes business receipts from retail and wholesale trade, rental of equipment without an operator, manufacturing, transportation, legal services, 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 in other kinds of business activities.

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## **VALUE OF CONSTRUCTION WORK FOR SPECIALIZED TYPE AND KIND OF BUSINESS**

Includes value of construction work for one of two specialized categories. These categories include types of construction and kind-of-business activity. A construction establishment specializes in a type of construction when fifty-one percent or more of the construction work done is in one construction industry. The construction establishment reports each type of construction it performs as a percent of value of construction work. Types of construction refers to the types of buildings, structures, or facilities constructed or worked on by construction establishments in the reporting year. Specialization in types of construction displays data for establishments with payroll that falls within each percent range of specialization. A construction establishment specializes in a kind-of-business activity when fifty-one percent or more of the construction work done by the establishment is performed in one type of business activity. The construction establishment reports each kind-of-business activity engaged in as a percent of value of construction work. Kind-of-business activity refers to the kinds of business activities construction establishments perform throughout the reporting year. Examples of kind-of-business activity include highway and street construction, electrical contracting, carpentry contracting, and concrete contracting. Specialization in kind-of-business activity displays data for establishments with payroll that fall within each percent range of specialization.

### **SPECIALIZATION PERCENT**

Includes data for establishments with payroll that fall within each percent range of specialization.

## **VALUE OF CONSTRUCTION WORK FOR ESTABLISHMENTS BY LOCATION OF WORK**

This is the value of construction done in particular states by establishment. An establishment can do construction in one or more states.

# Appendix B.

## NAICS Codes, Titles, and Descriptions

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### **238330 FLOORING CONTRACTORS**

This U.S. industry comprises establishments primarily engaged in the installation of resilient floor tile, carpeting, linoleum, and hard wood flooring. The work performed may include new work, additions, alterations, maintenance, and repairs.

# Appendix C.

## Methodology

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### SOURCES OF THE DATA

The construction sector includes approximately 650,000 establishments that were determined to be in-scope of the 2002 Economic Census — Construction. This number includes those industries in the North American Industry Classification System (NAICS) definition of construction with at least one paid employee in 2002.

Establishments in the 2002 Economic Census are divided into those sent report forms and those not sent report forms. The coverage of and the method of obtaining census information from each are described below:

1. Establishments sent a report form:

Sample frame establishments. The sample frame consisted of the entire construction universe; there were no subpopulations that were explicitly removed from the sample frame. The sample frame was compiled from a list of all construction companies in the active records of the Internal Revenue Service (IRS) and the Social Security Administration (SSA) that are subject to the payment of Federal Insurance Contributions Act taxes. Under special arrangements, to safeguard their confidentiality, the U.S. Census Bureau obtains information on the location and classification of the companies, as well as their payroll and receipts data from these sources. Unfortunately, these sources do not provide establishment level information for companies with multiple locations. For multilocation companies, the establishment level information is directly obtained from the U.S. Census Bureau's Company Organization Survey. For single-location companies, the IRS-SSA information is generally sufficient for assigning the company to a specific six-digit NAICS industry code.

The 2002 NAICS structure for the construction sector was significantly revised from the 1997 NAICS structure. Initially, only a small proportion of the establishments in the sample frame could be directly assigned a 2002 NAICS industry code with a high degree of confidence. Therefore, a special classification card was mailed to 150,000 construction establishments in early 2002. The goal of this classification card was to obtain the current NAICS industry code prior to assembly of the sample frame for the economic census — construction sample.

2. Establishments not sent a report form:

a. Nonsample frame establishments. There were a limited number of establishments included in the business register who were completely unclassified at the time of the economic census — construction sampling operation. These establishments were mailed a general classification card in early 2003. A portion of these were ultimately determined to be in-scope of the economic census — construction. Since this determination was not made until after the sample selection operation had been completed; these establishments were treated as a supplement to the original universe and were sampled independently for inclusion in the derived estimates.

b. All nonemployers, i.e., all firms subject to federal income tax, with no paid employees, were also excluded from the 2002 sample frame, as in previous censuses. Nonemployers with significant levels of receipts data were identified and included in the census mailout under the presumption that the nonemployer status may have been incorrect. Those determined to have employees are included in this report. Data for nonemployers are not included in this report, but are released in the annual *Nonemployer Statistics* series.

The report forms used to collect information for establishments in this sector are available at [help.econ.census.gov/econhelp/resources/](http://help.econ.census.gov/econhelp/resources/).

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A more detailed examination of census methodology is presented in the *History of the Economic Census* at [www.census.gov/econ/www/history.html](http://www.census.gov/econ/www/history.html).

## **INDUSTRY CLASSIFICATION OF ESTABLISHMENTS**

The classifications for all establishments covered in the 2002 Economic Census — Construction are classified in 1 of 31 industries in accordance with the industry definitions in the *North American Industry Classification System (NAICS), United States, 2002* manual. Changes between 1997 and 2002 affecting this sector are discussed in the text at the beginning of this report. Tables at [www.census.gov/epcd/naics02/n02ton97.htm](http://www.census.gov/epcd/naics02/n02ton97.htm) identify those industries that changed between the 1997 North American Industry Classification System (NAICS) and 2002 NAICS.

In the NAICS system, an industry is generally defined as a group of establishments that use similar processes or have similar business activities. To the extent practical, the system uses supply-based or production-oriented concepts in defining industries. The resulting group of establishments must be significant in terms of number, value added by construction, value of business done, and number of employees.

The coding system works in such a way that the definitions progressively become narrower with successive additions of numerical digits. In the construction sector for 2002, there are 3 subsectors (three-digit NAICS), 10 industry groups (four-digit NAICS), 28 NAICS industries (five-digit NAICS) that are comparable with Canadian and Mexican classification, and 31 U.S. industries (six-digit NAICS).

## **ESTABLISHMENT BASIS OF REPORTING**

The 2002 Economic Census — Construction 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 that has been established for the management of more than one project or job and that 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 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 any part of the census year. The construction sector figures represent a tabulation 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 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. 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 value of construction work exceeded the gross receipts from each of its other activities.

The 2002 Economic Census — Construction excludes data for central administrative offices (CAOs). These would include separately operated administrative offices, warehouses, garages, and other auxiliary units that service construction establishments of the same company. These data are published in a separate report series.

## **DESCRIPTION OF THE SAMPLE FRAME**

The major objective of the sample design was to provide a sample that would provide reliable estimates at the state by industry level. For sample efficiency considerations, the establishments in the initial 2002 construction frame were partitioned into two components for developing estimates within the sample frame. The details of each are described below:

1. Probability-proportionate-to-size (pps) sample. There were three non-overlapping strata for sample selection. An independent sample was selected within each state by industry cell. The details of each stratum were defined as:

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- Stratum 1. This stratum was comprised of approximately 12,000 establishments associated with multilocation companies. The establishments of these multiunit companies were included in the construction sample with certainty.
  - Stratum 2. This stratum was comprised of approximately 145,000 single-location companies that could be classified into a valid 2002 NAICS industry. These cases accounted for approximately 75 percent of the payroll associated with single-location companies in construction. The industry code for most of these establishments was determined from the special classification card that was mailed in early 2002. This group was partitioned into state by NAICS (six-digit) cells and an independent sample selected from each cell. Within each cell, a probability-proportionate-to-size (pps) sampling strategy was used. Under this approach, the probability of selection for the sample for larger establishments is higher than for smaller establishments. There were approximately 80,000 establishments selected from this group.
  - Stratum 3. This stratum was comprised of the remaining single-location companies. For these companies, we did not have an updated 2002 NAICS industry code. The most recent classification information available for these companies was their 1997 NAICS. Using this 1997 NAICS industry code, this stratum was partitioned into state by NAICS (four-digit) cells; and an independent sample selected from each cell. Again, probability-proportionate-to-size sampling methodology was utilized. There were approximately 30,000 establishments selected from this group.

Subsequent to the initial census mail-out, companies that initiated operations in 2002 were identified via administrative sources. To assure proper representation of the entire in-scope population, simple random samples of these new operations were selected and mailed separately.

2. Estimation and variances. Based on the response data, establishments were assigned to the appropriate NAICS (six-digit) industry. At each level of tabulation, unbiased estimates were derived by summing the weighted establishment data where the establishment sample weight was equal to the inverse of its probability of selection for the construction sample.

The resulting estimates were generated from one of many possible samples and are subject to sampling variability. Estimates of this sample variability were independently derived at all levels of aggregation. These sampling variances were then aggregated to the publication levels for the computation of the relative standard errors.

### **RELIABILITY OF DATA**

The estimates developed from the sample can differ somewhat from the results of a survey covering all companies in the sample lists, but are otherwise conducted under essentially the same conditions as the actual sample survey. The estimates of the magnitude of the sampling errors (the difference between the estimates obtained and the results theoretically obtained from a comparable, complete-coverage survey) are provided by the standard errors of estimates.

The particular sample selected for the construction sector is one of many similar probability samples that, by chance, might have been selected under the same specifications. Each of the possible samples would yield somewhat different sets of results, and the standard errors are measures of the variation of all the possible sample estimates around the theoretically, comparable, complete-coverage values.

Estimates of the standard errors have been computed from the sample data. They are presented in the form of relative standard errors that are the standard errors divided by the estimated values to which they refer.

In conjunction with its associated estimate, the relative standard error may be used to define confidence intervals, or ranges that would include the comparable, complete-coverage value for specified percentages of all the possible samples.

The complete-coverage value would be included in the range:

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- From one standard error below to one standard error above the derived estimate for about two-thirds of all possible samples.
  - From two standard errors below to two standard errors above the derived estimate for about 19 out of 20 of all possible samples.
  - From three standard errors below to three standard errors above the derived estimate for nearly all samples.

An inference is that the comparable complete-survey result would fall within the indicated ranges and the relative frequencies shown. Those proportions, therefore, may be interpreted as defining the confidence that the estimates from a particular sample would differ from complete-coverage results by as much as one, two, or three standard errors, respectively.

For example, suppose an estimated total is shown at 50,000 with an associated relative standard error of 2 percent, that is, a standard error of 1,000 (2 percent of 50,000). There is approximately 67 percent confidence that the interval 49,000 to 51,000 includes the complete-coverage total, about 95 percent confidence that the interval 48,000 to 52,000 includes the complete-coverage total, and almost certain confidence that the interval 47,000 to 53,000 includes the complete-coverage total.

In addition to the sample errors, the estimates are subject to various response and operational errors: errors of collection; reporting; coding; transcription; imputation for nonresponse, etc. These operational errors also would occur if a complete canvass were to be conducted under the same conditions as the survey. Explicit measures of their effects generally are not available. However, it is believed that most of the important operational errors were detected and corrected during the U.S. Census Bureau's review of the data for reasonableness and consistency. The small operational errors usually remain. To some extent, they are compensating in the aggregated totals shown. When important operational errors were detected too late to correct the estimates, the data were suppressed or were specifically qualified in the tables.

As derived, the estimated standard errors included part of the effect of the operational errors. The total errors, which depend upon the joint effect of the sampling and operational errors, are usually of the order of size indicated by the standard error, or moderately higher. However, for particular estimates, the total error may considerably exceed the standard errors shown. Any figures shown in the tables of this publication having an associated standard error exceeding 75 percent may be combined with higher level totals, creating a broader aggregate, which then may be of acceptable reliability.

### **DUPLICATION IN VALUE OF CONSTRUCTION WORK**

The aggregate of value of construction work reported by all construction establishments in each of the industry, geographic area, or other groupings contains varying amounts of duplication. This is because 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. Also, part of the value of construction results from the use of products of nonconstruction industries as input materials. These products are counted in the nonconstruction industry, as well as part of the value of construction. Value added avoids this duplication and is, for most purposes, the best measure for comparing the relative economic importance of industries or geographic areas. Value added for construction industries is defined as the dollar value of business done less costs for construction work subcontracted to others and payments for materials, components, supplies, and fuels.

### **DISCLOSURE**

In accordance with federal law governing census reports (Title 13 of the United States Code), no data are published that would disclose the operations of an individual establishment or company. However, the number of establishments in a specific industry or geographic area is not considered a disclosure; therefore, this information may be released even though other information is withheld. Techniques employed to limit disclosure are discussed at [www.census.gov/epcd/ec02/disclosure.htm](http://www.census.gov/epcd/ec02/disclosure.htm).

# Appendix D. Geographic Notes

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Not applicable for this report.



# Appendix E. Metropolitan and Micropolitan Statistical Areas

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Not applicable for this report.

# Appendix F.

## Detailed NAICS and Bridge Code Titles: 2002

[The NAICS code title shown in Table 1 is a standard NAICS title from the North American Industry Classification System Manual. A more detailed title description for the NAICS code shown in Table 1 is included in this appendix]

2002 NAICS code	1997 bridge code	Detailed 2002 NAICS and 1997 bridge code title description
236115	23321000	New single family housing construction (except operative builders) Single family housing construction, general contractors
236116	23322000	New multifamily housing construction (except operative builders) Multifamily housing construction, general contractors
236117	23321000 23322000	New housing operative builders Single family housing construction, operative builders Multifamily housing construction, operative builders
236118	23321000 23322000	Residential remodelers Remodeling contractors, single family housing Remodeling contractors, multifamily housing
236210	23331000 23493000 23499000	Industrial building construction Other manufacturing and industrial building construction Other industrial nonbuilding construction Waste disposal plant construction
236220	23322000 23331000 23332000 23599000	Commercial and institutional building construction Barrack and dormitory construction Grain elevators, dry cleaning plants, and manufacturing and industrial warehouses construction Commercial and institutional building construction Indoor swimming pool contractors
237110	23491000 23499000 23581000	Water and sewer line and related structures construction Water and sewer line, mains, and related structures (including pumping stations, etc.) construction Sewage and water treatment plants and irrigation systems construction Water well drilling contractors
237120	21311200 23491000 23493000	Oil and gas pipeline and related structures construction Construction of oil and gas field gathering lines Oil and gas pipelines, mains, and related and related structures ( including oil storage tanks, etc) construction Petrochemical plants and refineries construction
237130	23492000 23493000	Power and communication line and related structures construction Power and communication transmission line construction Power generation plants and transformer stations construction, except hydroelectric
237210	23311000	Land subdivision Land subdivision and land development
237310	23411000 23412000 23521000	Highway, street, and bridge construction Highway and street construction Bridge construction Highway and traffic line painting contractors
237990	22412000 23499000 23599000	Other heavy and civil engineering construction Tunnel construction All other heavy and civil engineering construction Anchored earth retention contractors
238110	23571000	Poured concrete foundation and structure contractors Concrete (except paving) contractors
238120	23591000	Structural steel and precast concrete contractors Other structural steel erection contractors
238130	23551000	Framing contractors Framing carpentry contractors
238140	23541000 23542000	Masonry contractors Masonry and stone contractors Stucco contractors
238150	23592000	Glass and glazing contractors Glass and glazing contractors
238160	23561000	Roofing contractors Roofing contractors
238170	23561000	Siding contractors Siding (including gutters and downspouts) contractors
238190	23591000 23599000	Other foundation, structure, and building exterior contractors Metal curtain walls and metal furring installation contractors Forming, ornamental metal work installation, and foundation, structure, and building exterior contractors
238210	23511000 23531000	Electrical contractors Environmental controls installation contractors Electrical contractors
238220	23511000 23595000	Plumbing, heating, and air-conditioning contractors Other plumbing, heating, and air-conditioning contractors Scrubber, dust collection, and other industrial ventilation installation contractors
238290	23595000 23599000	Other building equipment contractors Other building equipment and machinery installation contractors Boiler, duct, and pipe insulation and service station equipment, lightning rod, bowling alley, church bell, and tower clock installation contractors
238310	23542000	Drywall and insulation contractors Other drywall, plastering, acoustical, and insulation contractors
238320	23521000	Painting and wall covering contractors Other painting and wall covering contractors

[The NAICS code title shown in Table 1 is a standard NAICS title from the North American Industry Classification System Manual. A more detailed title description for the NAICS code shown in Table 1 is included in this appendix]

2002 NAICS code	1997 bridge code	Detailed 2002 NAICS and 1997 bridge code title description
238330	23552000	Flooring contractors Floor laying and other floor contractors
238340	23543000	Tile and terrazzo contractors Tile, marble, terrazzo, and mosaic contractors
238350	23551000	Finish carpentry contractors Finish carpentry contractors
238390	23561000 23599000	Other building finishing contractors Sheet metal, except roofing and siding contractors Trade show exhibits installation and dismantling, spectator seating, modular furniture, window covering fixture installation, and other building finishing contractors
238910	21311200 21311300 21311400 21311500 23499000 23593000 23594000 23599000	Site preparation contractors Site preparation and related construction activities for oil and gas operations Site preparation and related construction activities for coal mining Site preparation and related construction activities for metal mining Site preparation and related construction activities for nonmetallic mining, except fuels Construction equipment (except cranes) rental with operator and right-of-way clearing and line slashing, blasting, and trenching contractors Excavation contractors Wrecking and demolition contractors Dewatering and core drilling and test boring for construction contractors
238990	23499000 23571000 23599000 56172000	All other specialty trade contractors Crane rental with operator Residential and commercial asphalt, brick, and concrete paving contractors All other special trade contractors Cleaning building exteriors, except sand blasting

