

New Housing Operative Builders: 2002

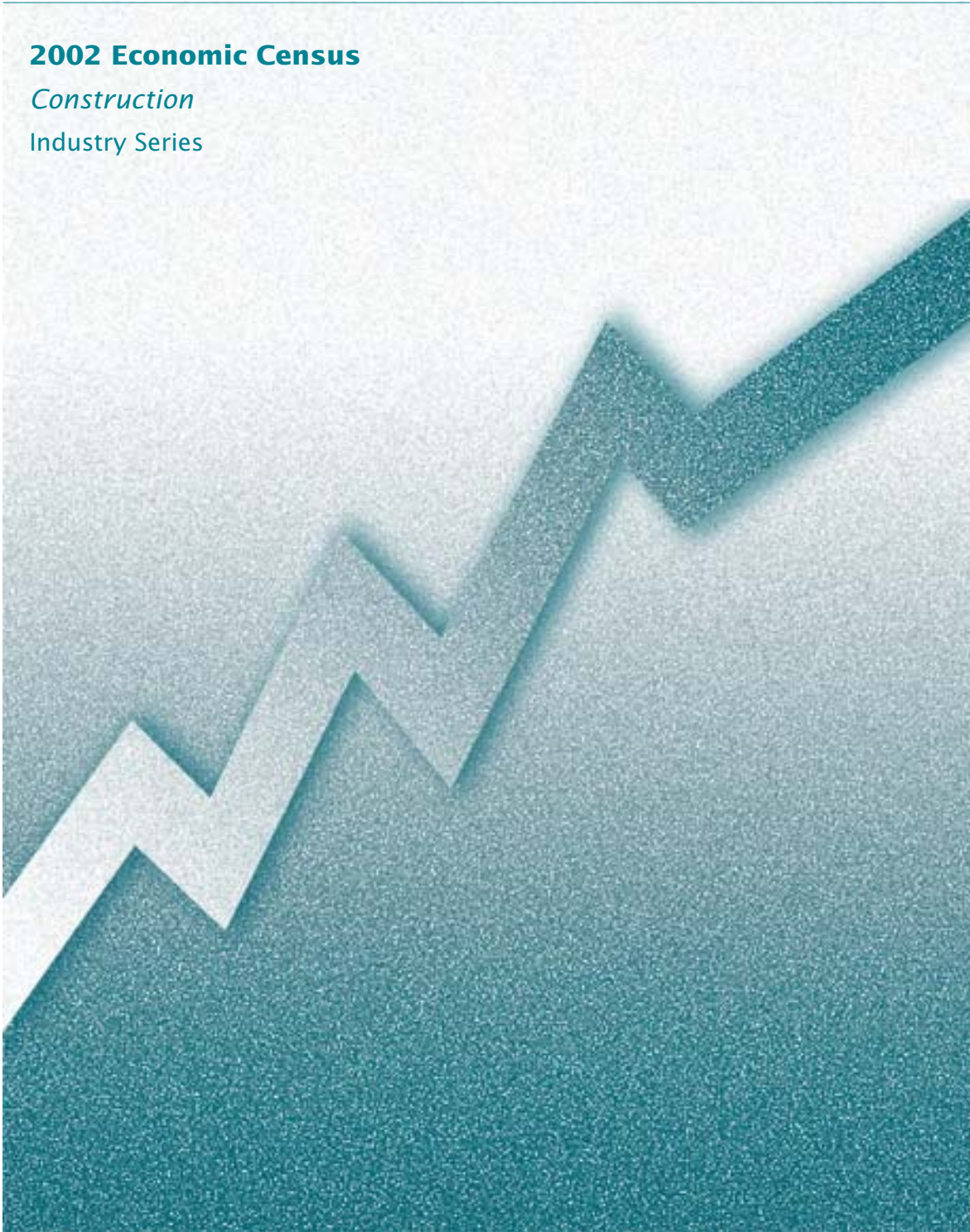
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2002 Economic Census

Construction

Industry Series



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-- Not applicable for this report.

Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

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

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) 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

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. 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.

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Construction

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.

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.

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.

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.

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.

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.

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

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 ¹	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
236117		New housing operative builders	'26 043	'240 292	'10 458 127	'139 021 424	'87 134 367	'51 361 146	'36 779 337	'904 254
	23321000	Single family housing construction (pt)	'25 614	'232 372	'10 141 736	'136 363 170	'85 375 428	'49 887 609	'36 395 226	D
	23322000	Multifamily housing construction (pt)	'429	'7 920	'316 391	'2 658 253	'1 758 939	'1 473 537	'384 110	D

¹For 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 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 establishments	Number of employees		Number of construction workers				Payroll (thousand dollars)		Relative standard error of estimate (percent) for column—
		Total	Construction workers	January to March	April to June	July to September	October to December	Total	Construction workers	
236117, New housing operative builders										
United States	'26 043	'240 292	'119 509	'116 252	'120 928	'122 239	'118 616	'10 458 127	'4 087 088	1
Alabama	'482	'2 453	'1 253	'1 224	'1 349	'1 240	'1 200	'80 514	'38 340	10
Alaska	'81	'548	D	D	'350	'400	'358	'19 487	D	9
Arizona	'404	'7 627	'3 611	'3 366	'3 669	'3 761	'3 646	'333 293	'118 756	4
Arkansas	'205	'678	'356	'398	'336	'335	'356	'16 871	'7 587	'19
California	'2 016	'33 069	'15 556	'14 901	'15 611	'15 907	'15 807	'1 501 627	'584 716	'4
Colorado	'561	'7 598	'3 541	'3 552	'3 586	'3 565	'3 462	'379 115	'125 410	3
Connecticut	'269	'1 440	'866	'875	'890	'875	'825	'66 256	'31 191	'9
Delaware	'67	'772	'422	'393	'411	'442	'443	'35 870	D	'8
District of Columbia	'7	D	D	D	D	D	D	D	D	—
Florida	'1 310	'23 476	'9 774	'9 682	'9 901	'9 904	'9 607	'1 037 279	'365 945	'3
Georgia	'1 325	'8 845	'4 718	'4 609	'4 826	'4 720	'4 718	'372 267	'155 889	'9
Hawaii	'86	'865	'495	'527	'512	'454	'488	'38 122	'15 056	'10
Idaho	'283	'1 369	'759	'682	'787	'785	'781	'42 223	'18 668	'9
Illinois	'1 173	'10 434	'5 679	'5 400	'5 837	'5 828	'5 651	'503 519	'199 108	'5
Indiana	'613	'4 631	D	D	'2 314	'2 233	'2 373	'189 604	D	5
Iowa	'176	'1 339	'769	'733	'778	'826	'738	'46 520	D	'9
Kansas	'187	'1 380	D	D	'815	'831	'827	'49 119	D	'9
Kentucky	'291	'3 705	'1 589	'1 495	'1 594	'1 628	'1 637	'146 015	'47 676	'7
Louisiana	'323	'1 372	'854	'906	'904	'827	'781	'53 789	'28 175	'18
Maine	'157	'656	'448	'421	'457	'472	'440	'19 614	'11 281	'13
Maryland	'455	'5 761	'3 187	'3 043	'3 102	'3 336	'3 266	'278 547	D	6
Massachusetts	'396	'2 077	'1 180	'1 117	'1 248	'1 188	'1 168	'94 495	'43 419	9
Michigan	'1 096	'5 756	D	'3 072	'3 232	D	'2 917	'214 579	D	'8
Minnesota	'743	'5 906	D	'3 032	'3 109	'3 066	D	'238 185	'89 660	'9
Mississippi	'148	'939	'551	'540	'541	'570	'551	'24 268	'11 396	'20
Missouri	'633	'4 823	D	D	D	'3 005	'2 951	'169 104	D	'6
Montana	'208	'642	'385	'357	'406	'405	'373	'16 578	'8 383	'12
Nebraska	'180	'1 292	'755	'743	'760	'779	'738	'52 612	'20 877	'12
Nevada	'180	'5 103	'2 494	'2 310	'2 433	'2 609	'2 626	'267 685	'107 533	'7
New Hampshire	'168	'1 170	D	D	'723	'755	'715	'45 587	'20 969	'12
New Jersey	'722	'5 759	'2 842	'2 869	D	'2 906	D	'269 051	'100 701	'10
New Mexico	'222	'1 384	D	D	'734	'726	D	'46 609	'19 104	'9
New York	'1 167	'6 588	'3 912	'3 751	'4 029	'4 044	'3 825	'238 226	'110 861	'10
North Carolina	'1 308	'9 471	D	'4 615	D	'4 847	'4 687	'387 617	D	5
North Dakota	'58	'314	'200	'171	'201	'222	'204	'8 984	'4 226	'23
Ohio	'900	'7 763	'3 906	'3 740	'3 932	'4 108	'3 844	'323 877	'125 577	5
Oklahoma	'318	'1 410	'662	'668	'644	'678	'658	'43 032	'18 810	'15
Oregon	'633	'2 837	'1 576	'1 466	'1 724	'1 571	'1 543	'95 527	'39 892	'8
Pennsylvania	'912	'7 861	'4 121	D	'4 162	'4 264	D	'321 381	'129 626	'5
Rhode Island	'141	'474	'275	'269	'296	'268	'267	'14 452	'6 754	'22
South Carolina	'500	'3 152	'1 561	'1 606	'1 514	'1 586	'1 537	'114 710	'40 904	'7
South Dakota	'108	'532	'328	'304	'340	'364	'305	'13 705	'7 439	'15
Tennessee	'533	'3 831	'2 492	'2 598	'2 463	'2 494	'2 412	'189 664	S	'17
Texas	'1 210	'19 859	'8 249	'8 136	'8 436	'8 231	'8 195	'1 141 353	'375 871	'3
Utah	'415	'2 314	'1 222	'1 208	D	'1 249	D	'73 399	'29 941	'9
Vermont	'76	'259	'161	'182	'192	'148	'125	'9 089	D	'18
Virginia	'875	'11 105	'4 530	'4 411	'4 474	'4 709	'4 526	'496 764	'167 148	4
Washington	'998	'5 736	'3 221	'3 141	'3 228	'3 356	'3 157	'207 100	'90 675	7
West Virginia	'220	'1 025	'685	'698	'665	'709	'670	'21 857	'12 087	'13
Wisconsin	'444	'2 393	'1 381	'1 335	'1 404	'1 534	'1 252	'93 048	D	'8
Wyoming	'60	D	D	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 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 ¹	Value of construction work ²	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
236117, New housing operative builders											
United States	'1	'139 021 424	'87 134 367	'51 361 146	'36 779 337	'51 897 057	'503 835	'904 254	'5 487 007	1	3
Alabama	'1	'1 110 839	'693 910	'191 090	'518 829	'416 929	'3 943	'6 182	'72 127	'10	'11
Alaska	'1	'248 994	'168 659	'81 215	'91 807	'80 335	'1 077	'2 820	'16 468	'8	'26
Arizona	—	'6 067 710	'3 348 578	'2 550 926	'842 183	'2 719 132	'22 530	'28 160	'136 953	2	4
Arkansas	—	'222 740	'151 839	'67 667	'88 231	'70 901	'1 955	'1 904	'10 925	'16	'34
California	'1	'20 767 733	'12 304 151	'9 336 450	'3 096 596	'8 463 581	'79 467	'142 449	'765 347	'3	'8
Colorado	—	'5 630 408	'3 319 848	'2 054 665	'1 280 644	'2 310 560	'19 258	'80 101	'217 805	'3	'20
Connecticut	'1	'574 967	'359 303	'186 908	'174 453	'215 664	'3 064	'3 307	'27 530	'10	8
Delaware	—	'442 730	'296 547	'181 553	'118 766	'146 183	'1 681	'3 109	'16 433	'9	4
District of Columbia	'6	D	D	D	D	D	D	D	D	—	—
Florida	—	'13 415 093	'8 874 227	'5 602 046	'3 340 690	'4 540 866	'48 750	'86 879	'633 025	5	3
Georgia	'1	'6 414 852	'4 131 171	'1 772 629	'2 388 849	'2 283 680	'14 318	'37 550	'185 755	7	16
Hawaii	—	'561 504	'221 824	D	'49 820	'339 680	'2 829	'3 185	D	'2	'19
Idaho	'2	'724 772	'428 523	'181 613	'253 520	'296 249	'1 873	'3 971	'24 995	'9	'17
Illinois	—	'6 327 546	'3 708 281	'2 212 487	'1 521 664	'2 619 265	'20 406	'31 539	'247 103	'4	'7
Indiana	1	'2 468 088	'1 529 876	'659 492	'878 212	'938 212	'9 405	'13 804	'92 284	'5	'8
Iowa	'1	'471 521	'288 682	'126 507	'169 135	'182 839	'2 047	'4 424	'34 817	'8	'10
Kansas	—	'782 476	'474 263	'177 957	'304 276	'308 213	'1 746	'5 779	'31 220	'8	'11
Kentucky	—	'1 797 576	'1 093 423	'488 724	'650 662	'704 153	'4 828	'11 993	'100 423	'8	'21
Louisiana	'3	'513 084	'324 524	'156 114	'171 484	'188 561	'1 885	'2 472	'20 846	'19	'19
Maine	'3	'152 632	'103 385	D	'55 051	'49 247	'687	'2 257	'12 803	'11	'16
Maryland	'1	'3 194 749	'2 059 645	'1 321 751	'772 550	'1 135 104	'16 000	'16 394	'107 630	'5	7
Massachusetts	'1	'1 097 877	'736 444	'429 777	'311 214	'361 433	'4 094	'9 458	'60 586	'9	'18
Michigan	'1	'3 125 634	'1 999 914	'981 874	'1 042 845	'1 125 720	'9 276	'16 013	'115 518	8	'11
Minnesota	'1	'3 735 538	'2 113 885	'1 184 561	'997 180	'1 621 653	'9 687	'25 797	'154 966	'6	'15
Mississippi	'1	'366 804	'287 125	'133 955	'155 871	'79 680	'758	'2 102	'14 390	22	6
Missouri	'1	'2 228 080	'1 385 155	'658 133	'745 541	'842 925	'6 654	'13 350	'171 388	'10	'8
Montana	'2	'241 651	'144 885	'73 251	'73 302	'96 766	'1 173	'1 900	'11 165	'19	'17
Nebraska	—	'643 467	'338 572	'188 925	'156 805	'304 895	'3 494	'3 890	'29 024	'6	3
Nevada	—	'3 466 135	'2 052 332	'1 696 776	'376 261	'1 413 803	'14 633	'15 471	'117 987	'3	'8
New Hampshire	'2	'346 082	'230 319	'151 211	'81 816	'115 763	'1 582	'3 906	'28 024	'9	'17
New Jersey	'1	'3 468 489	'2 441 492	'1 453 261	'996 926	'1 026 997	'9 941	'14 747	'103 395	'10	'17
New Mexico	'1	'682 726	'416 865	D	'183 818	'265 861	'2 945	'3 557	'22 246	'4	'7
New York	'2	'2 685 479	'1 496 962	'720 519	'794 887	'1 188 517	'12 749	'13 913	'199 992	'11	'16
North Carolina	'1	'5 213 752	'3 456 290	'1 760 404	'1 729 290	'1 757 462	'21 476	'35 113	'222 171	'4	'7
North Dakota	'2	'86 582	'52 458	D	'33 227	'34 124	'539	'1 419	'5 901	17	'32
Ohio	—	'4 054 827	'2 332 258	'1 285 884	'1 141 147	'1 722 570	'19 301	'23 822	'142 491	'4	'7
Oklahoma	'2	'704 024	'498 831	'153 999	'351 978	'205 193	'1 577	'5 563	'37 419	'17	'20
Oregon	'1	'1 252 274	'821 563	'468 347	'362 964	'430 711	'4 070	'5 261	'48 799	7	'8
Pennsylvania	'1	'3 381 606	'2 277 790	'1 098 086	'1 207 527	'1 103 816	'14 804	'21 659	'157 885	'4	'7
Rhode Island	'5	'187 597	'122 262	'65 965	'56 426	'65 334	'554	D	'7 119	'23	S
South Carolina	'1	'1 784 169	'1 202 735	'550 351	'671 258	'581 434	'6 347	'10 463	'62 845	'10	'17
South Dakota	'1	'180 725	'114 534	D	'69 761	'66 191	'567	'1 665	'8 334	'12	10
Tennessee	'1	'1 756 998	'1 264 703	'650 723	'623 773	'492 294	'5 546	'15 294	'115 255	'25	'11
Texas	—	'15 081 415	'9 777 736	'5 304 713	'4 496 228	'5 303 679	'51 653	'88 550	'375 276	'2	'2
Utah	'1	'1 171 434	'702 719	'377 392	'360 799	'468 715	'4 150	'5 797	'35 578	'8	'7
Vermont	'2	'84 048	'43 687	D	'24 596	'40 361	'475	'556	'8 953	'6	8
Virginia	—	'5 802 356	'4 010 488	'2 316 065	'1 749 070	'1 791 869	'22 795	'26 446	'179 175	3	'6
Washington	'1	'3 098 165	'2 160 771	'1 354 876	'827 624	'937 394	'10 942	'20 583	'135 070	6	'10
West Virginia	'1	'157 780	'120 303	'69 852	'57 002	'37 477	'540	'2 203	'30 022	'12	'16
Wisconsin	'2	'958 612	'594 200	'303 426	'308 562	'364 412	'3 444	S	'106 814	'10	S
Wyoming	'3	D	D	D	D	D	D	'712	'5 619	S	'11

¹Construction receipts were obtained from census respondent forms. Data for establishments whose respondent forms were not received at the time data were tabulated 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.

²For 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 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)
236117, New housing operative builders		
All establishments number	'26 043	'2
All employees number	'240 292	1
Construction workers in March number	'116 252	2
Construction workers in May number	'120 928	2
Construction workers in August number	'122 239	2
Construction workers in November number	'118 616	2
Average number of construction workers number	'119 509	2
Other employees in March number	'118 109	1
Other employees in May number	'118 255	1
Other employees in August number	'122 741	1
Other employees in November number	'124 028	1
Average number of other employees number	'120 783	1
Total payroll \$1,000	'10 458 127	1
Construction workers \$1,000	'4 087 088	2
Other employees \$1,000	'6 371 039	1
First-quarter payroll, all employees \$1,000	'2 418 504	1
Fringe benefits, all employees \$1,000	'1 542 647	1
Legally required expenditures \$1,000	'1 075 153	1
Voluntary expenditures \$1,000	'467 494	1
Value of business done ¹ \$1,000	'140 027 539	1
Value of construction work ¹ \$1,000	'139 021 424	1
Value of construction work on government owned projects \$1,000	'12 407 571	2
Value of construction work on federally owned projects \$1,000	'5 495 016	2
Value of construction work on state and locally owned projects \$1,000	'6 912 555	2
Value of construction work on privately owned projects \$1,000	'126 613 852	1
Other business receipts \$1,000	'1 006 116	5
Value of construction work subcontracted in from others \$1,000	'15 432 483	2
Net value of construction work \$1,000	'87 134 367	1
Value added \$1,000	'51 361 146	1
Selected costs \$1,000	'88 666 393	1
Materials, parts, and supplies \$1,000	'35 738 130	1
Construction work subcontracted out to others \$1,000	'51 887 057	1
Selected power, fuels, and lubricants \$1,000	'1 041 207	'2
Purchased electricity \$1,000	'372 573	'2
Natural gas and manufactured gas \$1,000	'140 317	'2
Gasoline and diesel fuel \$1,000	'492 506	'2
On-highway use of gasoline and diesel fuel \$1,000	'413 258	2
Off-highway use of gasoline and diesel fuel \$1,000	'79 248	2
All other fuels and lubricants \$1,000	'35 811	2
Total rental costs \$1,000	'503 835	1
Machinery and equipment \$1,000	'165 051	'1
Buildings \$1,000	'338 784	1
Selected purchased services \$1,000	'2 913 124	3
Communication services \$1,000	'999 313	'2
Repairs to buildings and other structures \$1,000	'349 011	'10
Repairs to machinery and equipment \$1,000	'317 621	'7
Legal services \$1,000	'198 797	5
Accounting, auditing, and bookkeeping services \$1,000	'154 172	13
Advertising and promotional services \$1,000	S	S
Beginning-of-year gross book value of depreciable assets \$1,000	'4 905 005	2
Capital expenditures, other than land \$1,000	'904 254	3
Retirements and disposition of depreciable assets \$1,000	'322 251	2
End-of-year gross book value of depreciable assets \$1,000	'5 487 007	2
Depreciation charges during year \$1,000	'555 823	'1
Establishments with inventories number	'3 763	—
Value of construction work for establishments with inventories \$1,000	'26 927 116	—
End-of-2002, inventories of materials and supplies \$1,000	'7 779 478	4
End-of-2001, inventories of materials and supplies \$1,000	'6 662 884	3
Establishments with no inventories number	'22 122	—
Value of construction work for establishments with no inventories \$1,000	'111 650 083	—
Establishments not reporting inventories number	'158	—
Value of construction work for establishment not reporting inventores \$1,000	'444 224	—

¹For the 2002 Economic Census, the definitions of value of business done and value of construction work have been modified from the 1997 Economic Census definitions. 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 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 ¹	Number of establishments	Total number of employees	Total payroll	Value of business done ²	Value of construction work ²	Net value of construction work	Value added	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted out to others	Relative standard error of estimate (percent) for column—
	A	B	C	D	E	F	G	H	I	J	C
236117, New housing operative builders											
All establishments	'1	'26 043	'240 292	'10 458 127	'140 027 539	'139 021 424	'87 134 367	'51 361 146	'36 779 337	'51 887 057	1
Establishments with—											
1 to 4 employees	—	'16 439	'34 724	'1 005 471	'15 864 474	'15 732 340	'9 838 030	'4 154 539	'5 815 625	'5 894 310	'3
5 to 9 employees	—	'5 350	'34 429	'1 161 049	'14 762 522	'14 593 659	'9 287 059	'4 666 788	'4 789 134	'5 306 601	'4
10 to 19 employees	—	'2 329	'30 819	'1 152 008	'14 089 999	'13 978 847	'9 041 482	'4 789 972	'4 362 661	'4 937 365	4
20 to 49 employees	—	'1 149	'34 205	'1 568 406	'19 760 052	'19 571 171	'12 183 128	'7 296 136	'5 075 873	'7 388 043	'4
50 to 99 employees	—	'430	'30 193	'1 617 170	'20 472 491	'20 345 750	'13 229 935	'8 240 942	'5 115 734	'7 115 815	'2
100 to 249 employees	—	'266	'39 955	'2 098 983	'32 817 364	'32 688 080	'20 556 739	'13 471 154	'7 214 869	'12 131 341	1
250 to 499 employees	—	'65	'22 151	'1 188 779	'14 955 506	'14 861 969	'8 377 807	'5 774 828	'2 696 516	'6 484 162	—
500 to 999 employees	—	'11	'8 082	'455 599	'4 637 799	'4 615 809	'2 934 146	'1 970 122	'986 014	'1 681 663	—
1,000 employees or more	—	'4	'5 734	210 662	'2 667 332	'2 633 799	'1 686 042	'996 665	722 910	'947 757	—

¹Construction receipts were obtained from census respondent forms. Data for establishments whose respondent forms were not received at the time data were tabulated 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.

²For the 2002 Economic Census, the definitions of value of business done and value of construction work have been modified from the 1997 Economic Census definitions. 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 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 ¹	Number of establishments	Total number of employees	Total payroll	Value of business done ²	Value of construction work ²	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
236117, New housing operative builders											
All establishments	'1	'26 043	'240 292	'10 458 127	'140 027 539	'139 021 424	'87 134 367	'51 361 146	'36 779 337	'51 887 057	1
Establishments with value of business done—											
Less than \$25,000	9	'10	D	'31	'80	'80	'52	'32	'20	'28	—
\$25,000 to \$49,999	—	'327	D	'3 506	'12 719	'12 540	'9 269	'6 345	'3 104	'3 271	'24
\$50,000 to \$99,999	—	'1 138	'1 567	'22 176	'85 399	'85 355	'60 003	'36 505	'23 542	'25 352	'13
\$100,000 to \$249,999	—	'3 200	'6 438	'121 689	'543 635	'537 746	'376 771	'215 734	'166 925	'160 975	'8
\$250,000 to \$499,999	—	'4 214	'11 803	'285 677	'1 534 985	'1 527 340	'1 072 487	'578 119	'502 012	'454 853	'6
\$500,000 to \$999,999	—	'4 245	'15 697	'406 612	'3 060 920	'3 021 949	'2 019 354	'948 432	'1 109 893	'1 002 595	'6
\$1,000,000 to \$2,499,999	—	'6 040	'29 094	'928 346	'9 525 946	'9 411 334	'6 052 916	'2 702 162	'3 465 366	'3 358 418	'5
\$2,500,000 to \$4,999,999	—	'2 989	'23 516	'866 300	'10 600 298	'10 512 863	'6 493 653	'3 005 715	'3 575 373	'4 019 210	'6
\$5,000,000 to \$9,999,999	—	'1 869	'22 669	'950 506	'12 569 201	'12 403 085	'7 774 025	'3 617 228	'4 322 914	'4 629 060	'5
\$10,000,000 or more	—	'2 010	'129 179	'6 873 284	'102 094 356	'101 509 130	'63 275 837	'40 250 874	'23 610 189	'38 233 293	1

¹Construction receipts were obtained from census respondent forms. Data for establishments whose respondent forms were not received at the time data were tabulated 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.

²For the 2002 Economic Census, the definitions of value of business done and value of construction work have been modified from the 1997 Economic Census definitions. 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 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 ¹				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
236117, New housing operative builders								
Total	'139 021 424	'138 009 559	'811 475	'200 389	1	1	'4	'5
Building construction, total	'125 395 138	'124 437 218	'778 523	'179 397	1	1	'5	'6
Single-family houses, detached and attached	'121 405 410	'120 584 552	'657 455	'163 403	1	1	'5	'6
Single-family houses, detached	'107 845 838	'107 157 120	'543 731	'144 987	1	1	'6	'6
Single-family houses, attached	'13 559 572	'13 427 432	'113 724	'18 416	2	2	'16	'18
Apartment buildings (2 or more units), such as rentals, apartment type condominiums and cooperatives	'3 317 820	'3 279 740	'30 498	'7 582	6	6	'13	'29
Other building construction	'671 908	'572 925	'90 571	'8 412	'5	'5	'8	'13
Nonbuilding construction, total	D	D	'32 952	'20 992	S	S	5	4
Other nonbuilding construction	D	D	'32 952	'20 992	S	S	5	4
Construction work, nsk	D	D	—	—	—	—	—	—

¹For 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 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
236117, New housing operative builders								
Total	'26 043	'240 292	'10 458 127	X	'87 134 367	'51 361 146	'51 887 057	1
Establishments specializing 51 percent or more...	'25 835	'236 604	'10 297 615	'128 441 345	'85 935 613	'50 436 393	'51 402 010	1
Building construction, total								
Establishments specializing 51 percent or more...	'17 111	D	D	D	D	D	D	S
Specialization 100 percent	'14 126	D	D	D	D	D	D	S
Specialization 90 to 99 percent	'967	'19 569	'944 842	'13 324 721	'9 231 822	'5 629 193	'4 996 163	'2
Specialization 80 to 89 percent	'627	'12 899	'666 081	'6 688 985	'5 531 926	'3 606 513	'2 467 160	'3
Specialization 70 to 79 percent	'518	'12 032	'594 414	'6 222 862	'5 019 249	'3 285 146	'3 433 381	'3
Specialization 60 to 69 percent	'388	'8 536	'396 045	'3 732 577	'3 763 046	'2 558 539	'2 128 099	'4
Specialization 51 to 59 percent	'484	'9 493	'429 186	'2 675 472	'3 298 241	'2 051 368	'1 671 809	'4
Single-family houses, detached and attached								
Establishments specializing 51 percent or more...	'16 682	'184 943	'8 699 336	'113 346 175	'76 315 059	'44 521 010	'45 702 373	1
Specialization 100 percent	'13 798	'124 976	'5 773 691	'81 164 286	'49 975 955	'27 763 226	'31 188 331	1
Specialization 90 to 99 percent	'951	'19 165	'929 200	'13 185 349	'9 105 727	'5 524 920	'4 973 239	'2
Specialization 80 to 89 percent	'617	'12 747	'660 037	'6 646 978	'5 492 654	'3 579 272	'2 453 923	'3
Specialization 70 to 79 percent	'512	'11 773	'582 302	'6 164 956	'4 947 738	'3 223 187	'3 425 461	'3
Specialization 60 to 69 percent	'361	'8 300	'387 760	'3 668 640	'3 714 334	'2 527 788	'2 075 117	'4
Specialization 51 to 59 percent	'444	'7 982	'366 345	'2 515 967	'3 078 651	'1 902 618	'1 586 302	'4
Single-family houses, detached								
Establishments specializing 51 percent or more...	'15 051	'170 487	'8 063 842	'105 822 502	'70 986 229	'41 477 744	'42 097 620	1
Specialization 100 percent	'12 734	'118 247	'5 489 175	'77 233 550	'47 553 245	'26 470 248	'29 680 305	1
Specialization 90 to 99 percent	'837	'17 556	'863 495	'12 289 068	'8 474 469	'5 160 688	'4 641 107	'2
Specialization 80 to 89 percent	'508	'11 468	'605 114	'6 007 839	'4 958 129	'3 323 858	'2 209 321	'4
Specialization 70 to 79 percent	'380	'10 090	'506 822	'5 400 415	'4 439 580	'2 957 669	'2 882 726	2
Specialization 60 to 69 percent	'242	'6 757	'317 603	'3 038 486	'3 174 205	'2 104 588	'1 614 013	'5
Specialization 51 to 59 percent	'351	'6 368	'281 633	'1 853 144	'2 386 601	'1 460 692	'1 070 147	'7
Single-family houses, attached								
Establishments specializing 51 percent or more...	'1 632	'14 456	'635 494	'7 523 673	'5 328 830	'3 043 267	'3 604 752	'5
Specialization 100 percent	'1 064	'6 729	'284 517	'3 930 736	'2 422 710	'1 292 978	'1 508 025	'9
Specialization 90 to 99 percent	'114	'1 609	'65 706	'896 281	'631 258	'364 233	'332 131	6
Specialization 80 to 89 percent	'110	'1 279	'54 923	'639 139	'534 525	'255 413	'244 601	'11
Specialization 70 to 79 percent	'132	'1 683	'75 479	'764 540	'508 158	'265 518	'542 735	'19
Specialization 60 to 69 percent	'119	'1 542	'70 157	'630 154	'540 129	'423 199	'461 104	4
Specialization 51 to 59 percent	'93	'1 613	'84 712	'662 823	'692 050	'441 926	'516 155	1
Apartment buildings (2 or more units), such as rentals, apartment type condominiums and cooperatives								
Establishments specializing 51 percent or more...	'429	D	D	D	D	D	D	S
Specialization 100 percent	'328	D	D	D	D	D	D	S
Specialization 90 to 99 percent	'16	'404	'15 641	'139 372	'126 095	'104 272	'22 924	'16
Specialization 80 to 89 percent	'10	'152	'6 044	'42 007	S	'27 242	'13 237	'31
Specialization 70 to 79 percent	7	259	12 113	57 906	71 511	61 959	S	S
Specialization 60 to 69 percent	'28	'236	'8 285	'63 938	'48 711	'30 752	'52 981	'24
Specialization 51 to 59 percent	S	'1 512	'62 841	'159 505	'219 590	'148 750	'85 507	'11
Construction work, nsk								
Establishments specializing 51 percent or more...	'8 724	D	D	D	D	D	D	—
Specialization 100 percent	'8 724	D	D	D	D	D	D	—
Specialization 90 to 99 percent	—	—	—	—	—	—	—	—
Specialization 80 to 89 percent	—	—	—	—	—	—	—	—
Specialization 70 to 79 percent	—	—	—	—	—	—	—	—
Specialization 60 to 69 percent	—	—	—	—	—	—	—	—
Specialization 51 to 59 percent	—	—	—	—	—	—	—	—

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 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 ¹	Relative standard error of estimate (percent)
236117, New housing operative builders		
Total	140 027 539	1
Building construction, total	119 885 588	1
Building construction on land owned by you, for sale	119 885 588	1
All other construction activities	6 501 775	4
Other business activities secondary to construction activities, total	978 203	5
All other business activities secondary to construction activities	978 203	5
Kind of business activity, nsk	12 661 973	4

¹For 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 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
236117, New housing operative builders								
Total	'26 043	'240 292	'10 458 127	X	'87 134 367	'51 361 146	'51 887 057	1
Establishments specializing 51 percent or more...	'26 039	'240 292	'10 458 127	'131 817 169	'87 134 367	'51 361 146	'51 887 057	1
Building construction, total								
Establishments specializing 51 percent or more...	'17 315	'196 551	'9 176 239	'119 155 231	'79 272 753	'46 919 300	'47 086 733	1
Specialization 100 percent	'8 085	'118 965	'5 994 788	'86 380 767	'54 222 472	'32 851 545	'32 158 295	1
Specialization 90 to 99 percent	'2 391	'29 115	'1 391 492	'18 782 685	'12 659 740	'6 846 039	'7 032 227	2
Specialization 80 to 89 percent	'1 596	'12 273	'476 887	'5 015 136	'3 443 678	'1 992 654	'2 565 954	3
Specialization 70 to 79 percent	'1 424	'9 494	'346 105	'3 626 120	'2 897 165	'1 657 165	'1 995 666	5
Specialization 60 to 69 percent	'1 185	'10 049	'389 611	'2 664 837	'2 678 350	'1 620 805	'1 530 624	'8
Specialization 51 to 59 percent	'2 635	'16 655	'577 356	'2 685 687	'3 371 348	'1 951 092	'1 803 967	'8
Building construction on land owned by you, for sale								
Establishments specializing 51 percent or more...	'17 315	'196 551	'9 176 239	'119 155 231	'79 272 753	'46 919 300	'47 086 733	1
Specialization 100 percent	'8 085	'118 965	'5 994 788	'86 380 767	'54 222 472	'32 851 545	'32 158 295	1
Specialization 90 to 99 percent	'2 391	'29 115	'1 391 492	'18 782 685	'12 659 740	'6 846 039	'7 032 227	2
Specialization 80 to 89 percent	'1 596	'12 273	'476 887	'5 015 136	'3 443 678	'1 992 654	'2 565 954	3
Specialization 70 to 79 percent	'1 424	'9 494	'346 105	'3 626 120	'2 897 165	'1 657 165	'1 995 666	5
Specialization 60 to 69 percent	'1 185	'10 049	'389 611	'2 664 837	'2 678 350	'1 620 805	'1 530 624	'8
Specialization 51 to 59 percent	'2 635	'16 655	'577 356	'2 685 687	'3 371 348	'1 951 092	'1 803 967	'8
Kind of business activity, nsk								
Establishments specializing 51 percent or more...	8 724	43 741	1 281 888	12 661 938	7 861 614	4 441 846	4 800 324	4
Specialization 100 percent	8 724	43 741	1 281 888	12 661 938	7 861 614	4 441 846	4 800 324	4
Specialization 90 to 99 percent	—	—	—	—	—	—	—	—
Specialization 80 to 89 percent	—	—	—	—	—	—	—	—
Specialization 70 to 79 percent	—	—	—	—	—	—	—	—
Specialization 60 to 69 percent	—	—	—	—	—	—	—	—
Specialization 51 to 59 percent	—	—	—	—	—	—	—	—

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 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 ¹	Relative standard error of estimate (percent) for column—
236117, New housing operative builders		
Total	'139 021 424	1
Construction work done in—		
Alabama	'998 809	'11
Alaska	'249 013	'8
Arizona	'6 361 851	2
Arkansas	'222 725	'16
California	'20 194 081	2
Colorado	'5 877 083	2
Connecticut	'627 868	'9
Delaware	'469 511	'8
District of Columbia	'32 514	'25
Florida	'13 748 205	4
Georgia	'6 663 183	7
Hawaii	'568 953	5
Idaho	'884 611	'16
Illinois	'5 961 704	4
Indiana	'2 558 250	'5
Iowa	'489 836	'8
Kansas	'776 242	'7
Kentucky	'1 057 679	'10
Louisiana	'495 735	'20
Maine	'153 781	11
Maryland	'3 260 978	5
Massachusetts	'1 075 762	'9
Michigan	'3 148 164	8
Minnesota	'3 661 752	7
Mississippi	'382 389	'19
Missouri	'2 222 029	'11
Montana	'243 017	'17
Nebraska	'662 275	'7
Nevada	'3 785 315	'2
New Hampshire	'310 934	'9
New Jersey	'3 750 792	'9
New Mexico	'761 021	'4
New York	'2 695 729	'11
North Carolina	'5 554 378	4
North Dakota	'114 768	'24
Ohio	'4 255 291	4
Oklahoma	'712 641	'15
Oregon	'1 250 100	'7
Pennsylvania	'3 087 304	'5
Rhode Island	'209 296	'22
South Carolina	'2 058 169	'7
South Dakota	'174 165	'13
Tennessee	'1 859 876	'17
Texas	'13 725 971	'2
Utah	'1 291 645	'7
Vermont	'84 189	'4
Virginia	'5 754 893	'3
Washington	'3 153 582	6
West Virginia	'248 514	8
Wisconsin	'1 064 767	'8
Wyoming	'70 084	'14

¹For 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 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

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'

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.

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.

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.

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.

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

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.

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

236117 NEW HOUSING OPERATIVE BUILDERS

This U.S. industry comprises operative builders primarily responsible for the entire construction of new houses and other residential buildings, single-family and multifamily, on their own account for sale. Operative builders are also known as speculative or merchant builders.

Appendix C.

Methodology

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/.

A more detailed examination of census methodology is presented in the *History of the Economic Census* at 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 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.

Appendix D. Geographic Notes

Not applicable for this report.

Appendix E. Metropolitan and Micropolitan Statistical Areas

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

