

Construction Sand and Gravel Mining: 2002

Issued December 2004

EC02-211-212321 (RV)

2002 Economic Census

Mining

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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Mining

SCOPE

The Mining sector (sector 21) comprises establishments that extract naturally occurring mineral solids, such as coal and ores; liquid minerals, such as crude petroleum; and gases, such as natural gas. The term mining is used in the broad sense to include quarrying, well operations, beneficiating (e.g., crushing, screening, washing, and flotation), and other preparation customarily performed at the mine site, or as a part of mining activity.

The mining sector distinguishes two basic activities: mine operation and mining support activities. Mine operation includes establishments operating mines, quarries, or oil and gas wells on their own account or for others on a contract or fee basis. Mining support activities include establishments that perform exploration (except geophysical surveying) and/or other mining services on a contract or fee basis (except mine site preparation and construction of oil/gas pipelines).

Establishments in the mining sector are grouped and classified according to the natural resource mined or to be mined. Industries include establishments that develop the mine site, extract the natural resources, and/or those that beneficiate (i.e., prepare) the mineral mined. Beneficiation is the process whereby the extracted material is reduced to particles that can be separated into mineral and waste, the former suitable for further processing or direct use. The operations that take place in beneficiation are primarily mechanical, such as grinding, washing, magnetic separation, and centrifugal separation. In contrast, manufacturing operations primarily use chemical and electrochemical processes, such as electrolysis and distillation. However, some treatments, such as heat treatments, take place in both the beneficiation and the manufacturing (i.e., smelting/refining) stages. The range of preparation activities varies by mineral and the purity of any given ore deposit. While some minerals, such as petroleum and natural gas, require little or no preparation, others are washed and screened, while yet others, such as gold and silver, can be transformed into bullion before leaving the mine site.

Mining, beneficiating, and manufacturing activities often occur in a single location. Separate receipts will be collected for these activities whenever possible. When receipts cannot be broken out between mining and manufacturing, establishments that mine or quarry nonmetallic minerals, beneficiate the nonmetallic minerals into more finished manufactured products are classified based on the primary activity of the establishment. A mine that manufactures a small amount of finished products will be classified in Sector 21, Mining. An establishment that mines whose primary output is a more finished manufactured product will be classified in Sector 31-33, Manufacturing.

Exclusions. Hauling and other transportation beyond the mine property and contract hauling (except out of open pits in conjunction with mining).

The tabulations for this sector do not include central administrative offices, warehouses, or other establishments that serve mining 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 moderate for this sector, may be examined at www.census.gov/nonemployerimpact.

The reports described below cover all mining establishments with one or more paid employees.

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 29 reports, each covering a single NAICS industry (six-digit code). These reports include such statistics as number of establishments, employment, payroll, value added by mining, cost of supplies, value of shipments and receipts for services, capital expenditures, etc. The industry reports also include data for states with 100 employees or more in the industry. The data in industry reports are preliminary and subject to change in the following reports.

Geographic Area Series. There are 52 separate reports, one for each state, the District of Columbia, and offshore areas. Each state report presents similar statistics at the “all mining” level for each state. The state reports also include six-digit NAICS level data for industries with 100 employees or more in the state.

Subject Series:

- **Industry-Product Analysis Summary.** This report presents company, establishments, value of shipments and receipts for services, value of product shipments or receipts for services, percentage of product shipments of the total value of shipments and receipts for services, and percentage of distribution of value of product shipments or receipts for services on the NAICS six-digit industry level and by the six- and seven-digit product code levels. It also includes miscellaneous receipts at the six- and seven-digit product code levels by NAICS six-digit industry levels.
- **General 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.
- **Product Summary.** This report summarizes the products data published in the industry reports.
- **Materials Summary.** This report summarizes the materials and fuels data published in the industry reports.
- **Location of Mines Summary.** This report contains statistics on the number of establishments for the three- and six-digit NAICS industry by state and offshore area by employment-size of the establishment.

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. Offshore Areas. Data for offshore areas that are part of Alaska, California, Louisiana, and Texas are included in their respective state area reports and represent offshore operations on these state offshore leases and all federal offshore leases defined by their state plane coordinate systems. State offshore includes the areas extending from the coastline up to 3 geographical miles distance, except for Texas and Florida, which extend 3 marine leagues from the coastline in the Gulf of Mexico. Data for offshore areas not associated with a state are in an Offshore Areas geographic report that includes the following areas:

-
- a. Atlantic Offshore: Atlantic Federal Area, New Hampshire state offshore, Maine state offshore, Massachusetts state offshore, Connecticut state offshore, New York state offshore, New Jersey state offshore, Delaware state offshore, Maryland state offshore, Virginia state offshore, North Carolina state offshore, South Carolina state offshore, Georgia state offshore, and Florida state Atlantic offshore.
 - b. Northern Gulf of Mexico Offshore: Northern Gulf of Mexico Federal Areas defined by the Universal Transverse Mercator Coordinate System (including areas generally south of the state plane coordinate systems of Louisiana and Texas), Mississippi state offshore, Alabama state offshore, and Florida state Gulf offshore.
 - c. Pacific Offshore: Pacific Federal areas defined by Universal Transverse Mercator Coordinate System, Oregon state offshore, and Washington state offshore.

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 several revisions to selected industries in the mining sector, for 2002. These changes were due to industries that are now being classified in the construction sector. These changes are:

- 213112 – Construction of field gathering lines on a contract basis
- 213112 – Site preparation and related construction activities on a contract basis
- 213113 – Site preparation and related construction activities on a contract basis
- 213114 – Site preparation and related construction activities on a contract basis
- 213115 – Site preparation and related construction activities on a contract basis

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 industry-product analysis, e-commerce value of shipments and receipts for services, and leased and nonleased detail employment statistics by subsectors.

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.

The disclosure analysis for "industry statistics" files is based on the total value of shipments and receipts. When the total value of shipments and receipts cannot be shown without disclosing information for individual companies, the complete line is suppressed except for capital expenditures. If capital expenditures alone is a disclosure, only capital expenditures and cost of supplies statistics are suppressed. Nonetheless, the suppressed data are included in higher-level totals.

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

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. Historical Statistics for the Industry: 2002 and 1997

[Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Industry and year	Companies ¹	All establishments ²	All employees		Production, development, and exploration workers			Value added (\$1,000)	Total cost of supplies (\$1,000)	Total value of shipments and receipts for services (\$1,000)	Capital expenditures (\$1,000)
			For pay period including March 12	Annual payroll (\$1,000)	For pay period including March 12	Annual hours (1,000)	Annual wages (\$1,000)				
212321, Construction sand and gravel mining	2002.. 2 029 1997.. 1 877	2 591 2 367	27 154 26 837	1 073 833 905 254	20 489 19 946	41 237 40 487	812 849 676 965	3 604 697 2 632 756	1 332 956 1 205 276	4 509 281 3 471 094	428 372 366 938

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

²Includes establishments with payroll at any time during the year.

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. Industry Statistics for Selected States and Offshore Areas: 2002

[Offshore areas refer to those areas not associated with a state. States that are disclosures or with less than 100 employees are not shown. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, 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]

Industry and geographic area	E ¹	All establishments ²		All employees		Production, development, and exploration workers			Value added (\$1,000)	Total cost of supplies (\$1,000)	Total value of shipments and receipts for services (\$1,000)	Capital expenditures (\$1,000)
		Total	With 20 employees or more	For pay period including March 12	Annual payroll (\$1,000)	For pay period including March 12	Annual hours (1,000)	Annual wages (\$1,000)				
212321. Construction sand and gravel mining												
United States	3	2 591	372	27 154	1 073 833	20 489	41 237	812 849	3 604 697	1 332 956	4 509 281	428 372
Alabama	3	48	7	454	14 891	365	665	11 814	50 102	16 986	62 152	4 936
Arizona	2	58	13	771	23 906	520	1 066	18 206	93 132	39 268	114 372	18 028
Arkansas	5	41	8	418	14 968	340	633	11 843	42 735	23 675	62 285	4 125
California	1	153	46	2 752	142 743	2 208	4 703	117 342	700 419	194 270	795 956	98 733
Colorado	3	59	13	585	19 711	446	894	15 168	61 825	25 459	76 708	10 576
Florida	2	68	8	547	17 529	407	854	13 785	86 221	25 227	107 200	4 248
Idaho	3	31	4	269	7 863	151	244	4 510	24 708	10 845	32 857	2 696
Illinois	2	83	10	1 173	53 155	900	1 375	39 575	121 766	49 113	147 986	22 893
Indiana	2	88	3	655	26 227	514	1 094	21 258	87 523	27 772	107 592	7 703
Kansas	3	29	4	393	19 171	262	585	13 350	48 683	19 092	64 841	2 934
Michigan	2	147	9	966	42 528	734	1 442	29 242	133 090	56 877	173 923	16 044
Mississippi	3	45	7	440	13 891	368	688	11 006	48 889	15 584	61 346	3 127
Missouri	2	54	5	376	13 223	276	552	9 344	47 872	10 461	50 780	7 553
Montana	8	25	1	115	3 875	84	158	2 921	8 585	4 188	11 770	1 003
Nevada	2	30	5	319	11 286	238	464	8 574	33 648	14 880	43 628	4 900
New Hampshire	8	26	3	230	8 789	152	319	6 214	24 323	8 522	29 845	3 000
New Jersey	2	40	9	588	24 563	447	942	17 576	79 393	31 001	102 509	7 885
New York	4	160	12	1 107	49 515	848	1 811	36 965	150 322	48 302	179 987	18 637
North Carolina	-	44	7	452	13 080	398	740	11 288	38 732	14 691	49 453	3 970
Ohio	4	151	25	1 843	70 886	1 346	2 830	52 497	202 865	85 094	261 091	26 868
Oklahoma	3	32	4	360	12 442	252	521	8 953	37 561	15 861	49 215	4 207
Oregon	1	51	13	656	24 794	479	976	19 105	89 146	25 616	108 518	6 244
Pennsylvania	3	112	6	775	27 949	611	1 218	22 336	77 011	35 245	104 805	7 451
Rhode Island	2	10	4	158	4 293	134	196	3 377	14 193	5 144	18 173	1 164
Tennessee	3	32	4	287	9 020	211	375	6 885	29 706	9 791	37 619	1 878
Texas	4	197	50	2 762	96 893	2 147	4 286	74 141	319 183	141 244	424 845	35 582
Virginia	2	25	5	307	12 656	251	475	10 356	44 280	14 694	52 501	6 473
Washington	1	62	9	743	28 162	531	1 077	19 741	76 486	78 936	147 764	7 658
Wisconsin	3	64	5	509	22 704	306	619	13 104	74 814	19 488	85 107	9 195
Wyoming	6	14	2	109	4 144	87	184	3 190	8 967	5 713	13 836	844

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data 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.

²Includes establishments with payroll at any time during the year.

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. Detailed Statistics by Industry: 2002

[Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Item	Value
212321, Construction sand and gravel mining	
Companies ¹	2 029
All establishments ²	2 591
Establishments with 0 to 19 employees	2 219
Establishments with 20 to 99 employees	362
Establishments with 100 employees or more	10
All employees for pay period including March 12	27 154
Total compensation	1 352 050
Annual payroll	1 073 833
Annual fringe benefits not included in payroll	278 217
Production, development, and exploration workers for pay period including March 12	20 489
Production, development, and exploration worker annual hours	41 237
Production, development, and exploration worker annual wages	812 849
Total cost of supplies	1 332 956
Supplies used, minerals received, and purchased machinery installed	821 004
Resales	95 745
Purchased fuels consumed	149 165
Purchased electricity	177 240
Contract work	89 802
Quantity of electricity purchased	2 682 961
Quantity of electricity generated less sold	10 239
Total other expenses	305 195
Response coverage ratio ³	45
Communications services	7 487
Legal services	6 383
Accounting, auditing, and bookkeeping services	3 464
Advertising and promotional services	2 489
All other expenses (not included above)	285 372
Total value of shipments and receipts for services	4 509 281
Primary products value of shipments	4 172 014
Secondary products value of shipments and receipts for services	234 315
Value of resales	102 952
Value of primary products shipments or services produced in all industries	4 639 874
Value of primary products shipments or services produced in this industry	4 172 014
Value of primary products shipments or services produced in other industries	467 860
Value added	3 604 697
Total inventories, end of 2001	550 371
Mineral products, crude petroleum, and natural gas liquids inventories	471 507
Supplies, parts, fuels, etc., inventories	78 864
Total inventories, end of 2002	572 886
Mineral products, crude petroleum, and natural gas liquids inventories	497 073
Supplies, parts, fuels, etc., inventories	75 813
Gross book value of depreciable/depletable assets at beginning of year	4 808 890
Capital expenditures (except land and mineral rights)	428 372
Capital expenditures for buildings, structures, machinery, and equipment (new and used)	412 476
Capital expenditures for mineral exploration and development	15 896
Capital expenditures for mineral land and rights	28 397
Deductions from depreciable/depletable assets during year	113 016
Gross book value of depreciable/depletable assets at end of year	5 152 643
Total depreciation/depletion charges during year	383 356
Total rental payments during year	161 721
Buildings and other structures	16 830
Machinery and equipment	144 891
Lease rents	49 464
Expensed mineral exploration, development, land, and rights	119 092

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

²Includes establishments with payroll at any time during the year.

³A response coverage ratio is derived for this item by calculating the ratio of the employment for those establishments that reported this item to the total employment for all establishments classified in this industry.

Note 1: The amounts shown for other expenses reflect only those services that establishments purchase from other companies.

Note 2: 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 4. Industry Statistics by Employment Size: 2002

[Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Employment size class	E ¹	All establishments ²	All employees		Production, development, and exploration workers			Value added (\$1,000)	Total cost of supplies (\$1,000)	Total value of shipments and receipts for services (\$1,000)	Capital expenditures (\$1,000)
			For pay period including March 12	Annual payroll (\$1,000)	For pay period including March 12	Annual hours (1,000)	Annual wages (\$1,000)				
212321. Construction sand and gravel mining											
All establishments	3	2 591	27 154	1 073 833	20 489	41 237	812 849	3 604 697	1 332 956	4 509 281	428 372
Establishments with—											
0 to 4 employees	5	1 188	2 343	85 779	1 776	3 387	64 158	266 404	101 722	341 414	26 712
5 to 9 employees	2	584	3 949	148 712	3 009	6 020	114 273	541 321	202 580	687 552	56 349
10 to 19 employees	2	447	6 122	238 349	4 677	9 352	186 239	855 188	292 230	1 051 395	96 023
20 to 49 employees	2	298	8 690	354 749	6 529	13 519	266 997	1 246 788	410 273	1 493 570	163 491
50 to 99 employees	4	64	4 209	160 807	3 079	6 408	117 385	485 971	211 055	639 555	57 471
100 to 249 employees	—	8	g	D	D	D	D	D	D	D	D
250 to 499 employees	8	2	f	D	D	D	D	D	D	D	D
500 to 999 employees	—	—	—	—	—	—	—	—	—	—	—
1,000 to 2,499 employees	—	—	—	—	—	—	—	—	—	—	—
2,500 employees or more	—	—	—	—	—	—	—	—	—	—	—
Administrative records ³	9	877	1 945	68 313	1 541	2 948	51 865	171 359	73 502	224 192	20 669

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data 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.

²Includes establishments with payroll at any time during the year.

³Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. Data are also included in respective size classes shown.

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. Industry Statistics by Type of Operation: 2002

[Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Industry and type of operation	All establishments ¹		All employees		Production, development, and exploration workers			Value added (\$1,000)	Total value of shipments and receipts for services (\$1,000)
	Total	With 20 employees or more	For pay period including March 12	Annual payroll (\$1,000)	For pay period including March 12	Annual hours (1,000)	Annual wages (\$1,000)		
212321, Construction sand and gravel mining									
All establishments	2 591	372	27 154	1 073 833	20 489	41 237	812 849	3 604 697	4 509 281
Producing establishments	2 589	372	k	D	D	D	D	3 604 697	4 509 281
Mines or wells only	171	18	1 794	53 535	1 221	2 175	39 063	153 880	202 579
Underground mines	-	-	-	-	-	-	-	-	-
Open-pit mines	169	17	g	D	D	D	D	D	D
Combination mines, well operations, or other types of mines	2	1	b	D	D	D	D	D	D
Mines with preparation plants	826	186	12 947	535 903	9 697	19 391	403 671	2 051 275	2 482 763
Underground mines	1	1	b	D	D	D	D	D	D
Open-pit mines	788	175	12 341	511 802	9 226	18 421	385 372	1 942 765	2 353 463
Combination mines or other types of mines	37	10	f	D	D	D	D	D	D
Separately operated preparation plants	12	3	e	D	D	D	D	67 273	77 758
Undistributed ²	1 580	165	12 078	467 540	9 325	19 135	356 513	1 332 269	1 746 181
Nonproducing establishments	2	-	a	D	D	D	D	-	-

¹Includes establishments with payroll at any time during the year.

²Includes data for establishments that were not possible to classify based on information available.

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 6a. Products or Services Statistics: 2002 and 1997

[Includes quantity and value of products or receipts for services of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Product or service code	Product or service	Quantity of production for all purposes	Product shipments or receipts for services	
			Quantity	Value (\$1,000)
212321	Construction sand and gravel mining	2002.. X	X	4 639 874
		1997.. X	X	3 754 899
2123211	Construction sand and gravel (run of pit or bank)	2002.. X	X	432 254
		1997.. X	X	350 879
21232111	Construction sand and gravel (run of pit or bank)	2002.. X	X	432 063
		1997.. X	X	350 879
2123211111	Construction sand (run of pit or bank)	2002.. mil s tons 54.7	S	226 192
		1997.. 51.3	48.1	170 767
2123211121	Construction gravel (run of pit or bank)	2002.. mil s tons 51.2	S	205 871
		1997.. 53.5	48.1	180 112
2123213	Construction sand and gravel (washed, screened, or otherwise treated)	2002.. X	X	2 486 007
		1997.. X	X	1 962 079
21232131	Construction sand (washed, screened, or otherwise treated)	2002.. X	X	1 150 510
		1997.. X	X	939 537
2123213111	Construction sand (washed, screened, or otherwise treated)	2002.. mil s tons 233.1	S	1 150 510
		1997.. 226.3	216.6	939 537
21232132	Construction gravel (washed, screened, or otherwise treated)	2002.. X	X	1 334 852
		1997.. X	X	1 022 542
2123213221	Construction gravel (washed, screened, or otherwise treated)	2002.. mil s tons 219.9	S	1 334 852
		1997.. 203.8	196.0	1 022 542
212321W	Construction sand and gravel mining, nsk	2002.. X	X	1 721 613
		1997.. X	X	1 441 941
212321WY	Construction sand and gravel mining, nsk	2002.. X	X	1 721 613
		1997.. X	X	1 441 941
212321WYWT	Construction sand and gravel mining, nsk	2002.. X	X	1 721 613
		1997.. X	X	1 441 941

Note 1: For some establishments, data have been estimated from central unit values that are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: p-10 to 19 percent estimated; q-20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by S.

Note 2: 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 6b. **Product Class Shipments or Receipts for Services for Selected States and Offshore Areas: 2002 and 1997**

[Product classes covered are those that are economically significant and whose production is geographically dispersed, provided dispersion is not approximated by data in Table 2. Also, product classes are not shown if they are miscellaneous or "not specified by kind" classes. Statistics for some states are withheld because they are either less than \$2 million in product class shipments or they disclose data for individual companies in 2002. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographic 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]

Product or service class code	Product or service class and geographic area	Value of product shipments or receipts for services (\$1,000)	
2123211	Construction sand and gravel (run of pit or bank)		
	United States	2002.. 432 254 1997.. 350 879	
	Alabama	2002.. 4 772 1997.. N	
	Arizona	2002.. 4 351 1997.. N	
	Arkansas	2002.. 5 000 1997.. 4 579	
	California	2002.. 48 550 1997.. 74 270	
	Colorado	2002.. 18 166 1997.. N	
	Connecticut	2002.. 2 478 1997.. 2 011	
	Florida	2002.. 12 594 1997.. 5 214	
	Idaho	2002.. 5 964 1997.. N	
	Illinois	2002.. 6 427 1997.. 11 899	
	Indiana	2002.. 25 074 1997.. N	
	Iowa	2002.. 4 389 1997.. N	
	Maryland	2002.. 10 126 1997.. N	
	Massachusetts	2002.. 12 394 1997.. 10 904	
	Michigan	2002.. 22 591 1997.. 16 608	
	Minnesota	2002.. 8 441 1997.. N	
	Mississippi	2002.. 4 124 1997.. 2 331	
	Missouri	2002.. 2 766 1997.. 7 685	
	Nevada	2002.. 5 648 1997.. 7 338	
	New Hampshire	2002.. 3 614 1997.. 2 240	
	New Jersey	2002.. 21 452 1997.. 4 467	
	New York	2002.. 17 843 1997.. 13 802	
	North Carolina	2002.. 2 792 1997.. N	
	Ohio	2002.. 30 641 1997.. 24 759	
	Oklahoma	2002.. 2 004 1997.. 2 257	
	Oregon	2002.. 12 995 1997.. N	
	Pennsylvania	2002.. 6 697 1997.. 4 924	
	South Carolina	2002.. 4 430 1997.. 4 349	
	Texas	2002.. 34 294 1997.. 27 078	
	Washington	2002.. 19 370 1997.. 17 696	
	Wisconsin	2002.. 11 428 1997.. 9 473	
	2123213	Construction sand and gravel (washed, screened, or otherwise treated)	
		United States	2002.. 2 486 007 1997.. 1 962 079
		Alabama	2002.. 30 181 1997.. 28 550
		Arizona	2002.. 70 052 1997.. N
		Arkansas	2002.. 25 625 1997.. 31 778
		California	2002.. 620 674 1997.. 272 317
		Colorado	2002.. 38 324 1997.. N
		Connecticut	2002.. 15 759 1997.. 9 162
		Florida	2002.. 63 091 1997.. 54 397
Georgia		2002.. 10 138 1997.. 9 858	
Idaho		2002.. 12 388 1997.. N	
Illinois		2002.. 99 482	

See footnotes at end of table.

Table 6b. **Product Class Shipments or Receipts for Services for Selected States and Offshore Areas: 2002 and 1997—Con.**

[Product classes covered are those that are economically significant and whose production is geographically dispersed, provided dispersion is not approximated by data in Table 2. Also, product classes are not shown if they are miscellaneous or "not specified by kind" classes. Statistics for some states are withheld because they are either less than \$2 million in product class shipments or they disclose data for individual companies in 2002. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographic 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]

Product or service class code	Product or service class and geographic area	Value of product shipments or receipts for services (\$1,000)
2123213	Construction sand and gravel (washed, screened, or otherwise treated)—Con. United States—Con.	
	Indiana	1997.. 77 114 2002.. 50 490
	Iowa	1997.. N 2002.. 17 741 1997.. 41 584
	Kansas	2002.. 51 017 1997.. N
	Kentucky	2002.. 19 800 1997.. N
	Louisiana	2002.. 30 207 1997.. N
	Maryland	1997.. 31 521 2002.. 50 952 1997.. N
	Massachusetts	2002.. 58 811 1997.. 18 053
	Michigan	2002.. 100 411 1997.. 91 537
	Minnesota	2002.. 96 763 1997.. N
	Mississippi	2002.. 33 140 1997.. N
	Missouri	1997.. 32 580 2002.. 20 870 1997.. 19 111
	Montana	2002.. 4 068 1997.. N
	Nebraska	2002.. 34 723 1997.. 8 323
	Nevada	2002.. 31 352 1997.. 21 085
	New Hampshire	2002.. 18 795 1997.. N
	New Jersey	1997.. 40 236 2002.. 79 588 1997.. 65 542
	New Mexico	2002.. 12 741 1997.. 10 803
	New York	2002.. 55 923 1997.. 74 193
	North Carolina	2002.. 29 474 1997.. 35 456
	North Dakota	2002.. 10 765 1997.. N
	Ohio	1997.. 5 304 2002.. 105 440 1997.. 117 731
	Oklahoma	2002.. 26 410 1997.. 24 680
	Oregon	2002.. 73 749 1997.. N
	Pennsylvania	2002.. 52 206 1997.. 46 453
	Rhode Island	2002.. 7 675 1997.. N
	South Carolina	2002.. 24 205 1997.. 20 213
	South Dakota	2002.. 4 187 1997.. N
	Tennessee	2002.. 20 874 1997.. 48 834
	Texas	2002.. 129 884 1997.. 106 978
	Utah	2002.. 13 465 1997.. N
	Virginia	1997.. 31 902 2002.. 44 536
	Washington	2002.. 101 172 1997.. 71 800
	West Virginia	2002.. 7 687 1997.. N
	Wisconsin	2002.. 63 822 1997.. 55 867
	Wyoming	2002.. 9 260 1997.. N

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 7. Selected Supplies, Minerals Received for Preparation, Purchased Machinery, and Fuels Consumed by Type: 2002 and 1997

[Includes quantity and cost of supplies and fuels consumed or put into production by establishments classified only in this industry. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Supply or fuel code	Supply or fuel consumed	Quantity	Delivered cost (\$1,000)
212321	Construction sand and gravel mining		
	Supplies consumed by type		
21231100	Rough blocks, used to produce dressed stone 1,000 s tons 2002..	D	D
	1997..	-	-
21231005	Broken stone, received for preparation (crushing, screening, washing, etc.) mil s tons 2002..	S	21 409
	1997..	4.0	7 521
21232001	Sand and gravel, received for preparation mil s tons 2002..	443.9	178 108
	1997..	29.4	73 467
33300007	Purchased machinery installed, including mobile loading, transportation, and other equipment installed at the operation 2002..	X	109 700
	1997..	X	133 049
33300009	Parts and attachments for mining, mineral preparation, construction, and conveying machinery and equipment 2002..	X	111 250
	1997..	X	102 407
32592003	Explosive materials, excluding ammonium nitrate 2002..	X	4 503
	1997..	X	2 306
32592005	Ammonium nitrate 2002..	X	D
	1997..	X	339
32592007	Blasting accessories 2002..	X	345
	1997..	X	242
32600007	Rubber and plastics products, including tires and tubes 2002..	X	6 684
	1997..	X	7 947
33120059	Steel shapes and forms (excluding castings and forgings) 2002..	X	8 609
	1997..	X	6 945
00970098	All other supplies 2002..	X	42 772
	1997..	X	60 112
00973000	Undistributed minerals, purchased machinery, parts, attachments, and supplies used 2002..	X	337 234
	1997..	X	349 035
	Fuels consumed by type		
32411017	Distillate (light) grade numbers 1, 2, 4, and light diesel fuel used as a fuel 1,000 bbl 2002..	91 068.7	45 223
	1997..	1 403.8	48 795
32411019	Residual (heavy) grade numbers 5 and 6 and heavy diesel fuel used as a fuel 1,000 bbl 2002..	S	7 960
	1997..	315.1	9 652
21111015	Gas (natural, manufactured, and mixed) used as a fuel bil cu ft 2002..	S	2 191
	1997..	1.4	3 759
32411015	Gasoline used as a fuel mil gal 2002..	96.1	7 307
	1997..	5.7	6 044
00960018	Other fuels (liquefied petroleum gas, coke, wood, etc.) 2002..	X	2 162
	1997..	X	D
00974000	Undistributed fuels 2002..	X	84 322
	1997..	X	96 872

Note 1: For some establishments, data have been estimated from central unit values that are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: p-10 to 19 percent estimated; q-20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by S.

Note 2: 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.

Appendix A.

Explanation of Terms

PAYROLL

This item includes the gross earnings of all employees on the payrolls of operating mining establishments paid in the calendar year. Respondents were told they could follow the definition of payrolls used for calculating the federal withholding tax. It includes all forms of compensation, such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick-leave pay, and compensation in kind, prior to such deductions as employees' social security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of corporations; it excludes payments to proprietors or partners of unincorporated concerns. Also excluded are payments to members of Armed Forces and pensioners carried on the active payrolls of mining establishments.

The census definition of payrolls is identical to that recommended to all federal statistical agencies by the Office of Management and Budget. It should be noted that this definition does not include employers' social security contributions or other nonpayroll labor costs, such as employees' pension plans, group insurance premiums, and workers' compensation.

Also collected, but not included in payroll, are employers' total supplemental labor costs (those required by federal and state laws and those incurred voluntarily or as part of collective bargaining agreements).

BEGINNING- AND END-OF-YEAR INVENTORIES

Respondents were asked to report their beginning-of-year and end-of-year inventories at cost or market. Effective with the 1982 Economic Census, this change to a uniform instruction for reporting inventories was introduced for all sector reports. Prior to 1982, respondents were permitted to value inventories using any generally accepted accounting method (FIFO, LIFO, market, to name a few). Beginning in 1982, LIFO users were asked to first report inventory values prior to the LIFO adjustment and, then, to report the LIFO reserve and the LIFO value after adjustment for the reserve.

Inventory data by type

Total inventories and two detailed components (1) mined or quarried products, crude petroleum, and natural gas liquids and (2) supplies, parts, fuels, etc., were collected.

CAPITAL EXPENDITURES

This item includes permanent additions and major alterations as well as new and used machinery and equipment used for replacement and additions to plant capacity for which depreciation, depletion, or Office of Minerals Exploration accounts are ordinarily maintained. Reported capital expenditures include work done on contract, as well as by the mine forces. Totals for expenditures include the costs of assets leased from other concerns through capital leases. In addition, these data include expenditures made during the year for development and exploration of mineral properties. Excluded are expenditures for land and cost of maintenance and repairs charged as current operating expenses and capital expenditures for mineral land and rights. For any equipment or structure transferred for the use of the reporting establishment by the parent company or one of its subsidiaries, the value at which it was transferred to the establishment was to be reported. If an establishment changed ownership during the year, the cost of the fixed assets (building and equipment) was to be reported.

Capital expenditures for mineral land and rights

This item includes all capital expenditures for acquiring either undeveloped or developed acreage. Included are all capitalized lease bonuses and any other outlays necessary to acquire leases, mineral rights, fee lands incident to mineral exploration, development, or production.

PURCHASED SERVICES

Included in the cost of purchased services for communication 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, online access and related services, etc.

Included in the cost of selected purchased services for legal services are payments made to other companies for these services that were paid directly by the establishment. Excluded are the salaries paid to employees of the establishment for these services.

Included in the cost of selected accounting, auditing, and bookkeeping services are payments made to other companies for these services that were paid directly by the establishment. Excluded are the salaries paid to employees of this establishment for these services.

Included in the cost of selected advertising and promotional services are payments made to other companies for these services that were paid directly by the establishment. These include payments for printing, media coverage, and other advertising services and materials. Excluded are the salaries paid to employees of this establishment for these services.

Included in the all other expenses are payments made to other companies for services not included in communication, legal, accounting, auditing, bookkeeping, and advertising and promotional services previously mentioned that were paid directly by the establishment. Excluded are the salaries paid to employees of this establishment for these services.

Response coverage ratio

A response coverage ratio is a measure of the extent to which respondents report for an item. The estimate is derived by calculating the ratio of the employment for those establishments that reported this item to the total employment for all establishments classified in this industry.

COST OF SUPPLIES

This term refers to direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these items. It includes the cost of these items whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year. Included are items charged to both current and capital accounts.

Included in this item are:

1. Costs of supplies used, minerals received for preparation, and purchased machinery installed. Includes all major supplies that were important parts of the cost of production, exploration, and development of a particular industry. Also included are all new and used machinery, equipment, and parts installed whether purchased or received from other establishments of the same company.
2. Cost of products bought and sold in the same condition.
3. Cost of purchased fuels consumed for heat, power, or the generation of electricity. Includes the cost of fuels consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

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4. Cost of purchased electricity. The cost of purchased electric energy represents the amount actually used during the year for heat and power. In addition, information was collected on the quantity of electric energy purchased and also the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other establishments of the same company.
 5. Cost of contract work. This term applies to the cost of all work done for an establishment by others. It includes payments for supplies and equipment furnished by the contractor incidental to the contract work, and cost of services performed by others in the operation or development of the establishment. The term "Contract Work" refers to the fee a company pays to another company to perform a service. It excludes payments to miners paid on a per ton, car, yard, or footage basis. Also excluded are payments to suppliers who mined for their own account on property owned or leased by them and who paid royalties either directly or indirectly on the minerals mined.

Specific supplies used, minerals received for preparation, and purchased machinery installed

In addition to the total cost of supplies, purchased machinery installed, etc., which every establishment was required to report, information also was collected on the consumption of the major supplies used in mining. The inquiries were restricted to those supplies which were important parts of the cost of production, exploration, and development in a particular industry and for which cost information was available from the establishment's records. Except for the crude petroleum and natural gas and the support activities for mining industries, figures were also obtained on crude minerals mined at the establishment, received from other establishments of the company or purchased from others, and received for preparation on a custom or toll basis. If less than \$25,000 of a listed supply was consumed by an establishment, the cost data could be reported in the "All other supplies," census supply code 00970098. Also, the cost of supplies for small establishments for which administrative records or short forms were used was imputed into the "Undistributed – minerals, purchased machinery, parts.....," census supply code 00973000.

Specific fuels consumed

For most industries, separate quantity and cost figures are shown for purchased coal, distillate fuel oil, residual fuel oil, gas, gasoline, and a cost figure for other fuels. Data also were obtained on the quantity of crude petroleum, natural gas, and coal produced and consumed at the same establishment for heat and power. The cost of fuels for small establishments for which administrative records or short forms were used was imputed into the "Undistributed fuels", census fuel code 00974000.

EXPENSED MINERAL EXPLORATION, DEVELOPMENT, LAND AND RIGHTS

This item includes all expenses for mineral properties, exploration, and development charged to current accounts. Included are all supplies, machinery, equipment, parts, fuels, power, etc., used for development or exploration and charged to current operating expenses. Also included are royalty payments, acquisition costs for mineral land and rights that were not associated with exploration or development activity, and the cost of maintenance and repairs associated with exploration or development activity and charged to current accounts.

DEPRECIATION AND/OR DEPLETION CHARGES

This item includes depreciation, depletion, and amortization charged during the year against assets. Depreciation charged against assets acquired since the beginning of the year and against assets sold or retired during the year are components of this category. Respondents were requested to make certain that they did not report accumulated depreciation or depletion.

NUMBER OF EMPLOYEES

These individuals comprise of all full-time and part-time employees on the payrolls of establishments during any part of the pay period that were the 12th of March. Included are all persons on paid sick leave, paid holidays, and paid vacations during this pay period. A distribution of those

employees who work in units that serve manufacturing, distribution, or construction operations also carried on at the mining establishment in addition to the minerals operation is also included. Officers of corporations are included as employees; not included are proprietors and partners of unincorporated firms.

The (all employees) number is the number of production, development, and exploration workers plus the number of all other employees on the payrolls of establishments during any part of the pay period that were the 12th of March.

The (production, development, and exploration workers) number includes workers (up through the working-supervisor level) engaged in manual work (using tools, operating machines, hauling materials, loading and hauling products out of the mine, and caring for mines, plants, mills, shops, or yards). Included are exploration work, mine development, storage, shipping, maintenance, repair, janitorial and guard services, auxiliary production for use at establishments (e.g., power plant), recordkeeping, and other services closely associated with these production operations at the establishment covered by the report. Gang and straw bosses and supervisors who performed manual labor are included, as are employees paid on either a time- or piece-rate basis. Also included are miners paid on a per ton, car, or yard basis and persons engaged by them and paid out of the total amount received by these miners. Employees above the working-supervisor level and those of contractors are excluded from this item.

The (other employees) number covers nonproduction employees of the mining establishment including those engaged in the following activities: supervision above the working-supervisor level, sales, highway trucking or other transportation (by employees not entering mines or pits), advertising, credit, collection, clerical and routine office functions, executive, purchasing, financing, legal, personnel (including cafeteria, medical, etc.), and professional (engineers, geologists, etc.) and technical work. Also included are employees on the payroll of the mining establishment engaged in the construction of major additions or alterations utilized as a separate work force. Workers engaged in regular maintenance and repair operations are not included here but are classified as production, development, and exploration workers. Employees of contractors are excluded from this item.

TOTAL FRINGE BENEFITS

This item is the employer's costs for social security tax, unemployment tax, workmen's compensation insurance, state disability insurance pension plans, stock purchase plans, union-negotiated benefits, life insurance premiums, and insurance premiums on hospital and medical plans for employees.

Fringe benefits include both legally required expenditures and payments for voluntary programs. The legally required portion consists primarily of federal old age and survivors' insurance, unemployment compensation, and workers' compensation. Payments for voluntary programs include all programs not specifically required by legislation, whether they were employer initiated or the result of collective bargaining. They include the employer portion of such plans as insurance premiums, premiums for supplemental accident and sickness insurance, pension plans, supplemental unemployment compensation, welfare plans, stock purchase plans on which the employer payment is not subject to withholding tax, and deferred profit-sharing plans, and payments made directly to retired employees or their survivors that do not pass through a fund. They exclude such items as losses on company-operated cafeterias and snack bars, cost of in-plant medical services, cost of free parking lots, discounts on employee purchases, cost of uniforms and other work clothing supplied to employees and similar expenditures, and wages and salaries reported in payroll (holidays, vacations, sick pay, bonuses, jury pay, costs for training, and partially subsidized housing and safety).

GROSS BOOK VALUE OF DEPRECIABLE AND/OR DEPLETABLE ASSETS AT BEGINNING OF YEAR (BOY) AND END OF YEAR (EOY)

Total value of depreciable and/or depletable assets is collected on all census forms except for the crude petroleum and natural gas form.

It shows the value of depreciable and/or depletable assets for the beginning of year (BOY) and end of year (EOY). The data encompass all depreciable and/or depletable assets on the books of establishments. The values shown (book value) represent the actual cost of assets at the time they were acquired, including all costs incurred in making the assets usable (such as transportation and installation). Included are all buildings, structures, machinery, equipment (production, office, and transportation equipment), capitalized mineral exploration and development, and mineral land and rights for which depreciation, amortization, or depletion reserves are maintained.

The definition of depreciable and/or depletable assets is consistent with the definition of capital expenditures. For example, expenditures include actual capital outlays during the year rather than the final value of equipment put in place and buildings completed during the year.

Accordingly, the value of assets at the end of the year includes the value of construction in progress.

In addition, respondents were requested to make certain that assets at the beginning of the year plus capital expenditures, less retirements, equaled assets at the end of the year.

LEASE RENTS

This item represents the lease rents paid by the establishment for mineral properties. It was not collected on the short form or for the crude petroleum and natural gas, natural gas liquids, and the support activities for mining industries.

ESTABLISHMENT

An establishment is a single physical location where business is conducted or where services or industrial operations are performed. Data in this sector includes those establishments where mineral operations are performed. A separate report was required for each mining establishment of firms with one employee or more that were in operation at any time during the year.

An establishment not in operation for any portion of the year was requested to return the report form with the proper notation in the "Operational Status" section of the form. In addition, the establishment was requested to report data on any employees, capital expenditures, inventories, or shipments from inventories during the year.

For the crude petroleum and support activities for mining industries, the basis for reporting is different from the establishments basis used for other types of mining. Firms operating oil and gas wells, drilling wells, or exploring for oil and gas for their own account were required to submit a separate report for each state or offshore area adjacent to a state in which it conducted such activities. Firms that performed contract services for oil and gas field operation or for mining establishments were required to submit one report covering all such activities in the United States and to include information on receipts for services and production-worker wages and hours by state. These consolidated reports were then allocated to state establishments based on the data reported at the state level.

Company

A company or ("enterprise") is comprised of all the establishments that operate under the ownership or control of a single organization. A company may be a business, service, or membership organization; consist of one or several establishments; and operate at one or several locations. It includes all subsidiary organizations, all establishments that are majority-owned by the company or any subsidiary, and all the establishments that can be directed or managed by the company or any subsidiary.

A company may have one or many establishments. Examples include product and service sales offices (retail and wholesale), industrial production plants, processing or assembly operations, mines or well sites, and support operations (such as an administrative office, warehouse, customer service center, or regional headquarters). Each establishment should receive, complete, and return a separate census form.

If the company operated at different physical locations, even if the individual locations were producing the same mineral product, a separate report was requested for each location. If the company operated in two or more distinct lines of mining at the same location, a separate report was requested for each activity.

PRODUCT CODES AND CLASSES OF PRODUCTS

NAICS United States industries are identified by a six-digit code. The longer code accommodates the large number of sectors and allows more flexibility in designing subsectors. Each product or service is assigned a ten-digit code. The product coding structure represents an extension by the Census Bureau of the six-digit industry classifications of the manufacturing and mining sectors. The classification system operates so that the industrial coverage is progressively narrower with the successive addition of digits.

As in previous censuses, data were collected for most industries on the quantity and value of individual products shipped. Since the 1997 census programs, information is collected on the output of almost 10,000 individual product items.

In the mining sector for 2002, there are 3 subsectors (three-digit NAICS), 5 industry groups (four-digit NAICS), 10 NAICS industries (five-digit NAICS) that are comparable with Canadian and Mexican classification, and 29 U.S. industries (six-digit NAICS). Product classes and products of the mining industries have been assigned codes based on the industry from which they originate. There are 63 product classes (seven-digit codes) and 136 ten-digit product codes. The ten-digit products are considered the primary products of the industry with the same first six digits.

For the 2002 Economic Census — Mining, all establishments were classified in particular industries based on the products they produced. If an establishment made products of more than one industry, it was classified in the industry with the largest product value.

Establishments frequently make products classified both in their industry (primary products) and other industries (secondary products). Industry statistics (employment, payroll, value added by mining, value of shipments and receipts for services, etc.) reflect the activities of the establishments that may make both primary and secondary products. Product statistics, however, represent the output of all establishments without regard for the classification of the producing establishment. For this reason, when relating the industry statistics, especially the value of shipments and receipts for services, to the product statistics, the composition of the industry's output should be considered.

The list of products for which separate information was collected was prepared after consultation with industry and government representatives. Comparability with previous figures was given considerable weight in the selection of product categories, so that comparable 1997 information is presented for most products.

Typically, both quantity and value of shipments and receipts for services information were collected. However, if quantity was not significant or could not be reported by mining establishments, only value of shipments and receipts for services was collected.

Shipments include both commercial shipments and transfers of products to other plants of the same company.

PRODUCTION, DEVELOPMENT, AND EXPLORATION WORKER HOURS

This item covers all hours worked or paid for at the establishment, including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacations, holidays, or sick leave when the employee was not at the establishment. Excluded are hours worked by employees of contractors and hours of proprietors or partners.

QUANTITY OF ELECTRICITY PURCHASED FOR HEAT AND POWER

Data on the quantity and cost of purchased electric energy were collected on all census forms, except for the short forms. In addition, information is collected on the quantity of electric energy generated by the establishment and the quantity of electric energy sold or transferred to other plants of the same company.

RENTAL PAYMENTS

Total rental payments are collected on all census forms. This item includes rental payments for the use of all items for which depreciation reserves would be maintained, if they were owned by the establishment, e.g., structures and buildings, and production, office, and transportation equipment. Excluded are royalties and other payments for the use of intangibles and depletable assets.

When an establishment of a multiestablishment company was charged rent by another part of the same company for the use of assets owned by the company, it was instructed to exclude that cost from rental payments.

However, the book value (original cost) of these company-owned assets was to be reported as assets of the establishment at the end of the year.

If there were assets at an establishment rented from another company and the rents were paid centrally by the head office of the establishment, the company was instructed to report these rental payments as if they were paid directly by the establishment.

RETIREMENTS OF DEPRECIABLE AND/OR DEPLETABLE ASSETS

Included in this item is the gross value of assets sold, retired, scrapped, destroyed, abandoned, etc., during the calendar year at their acquisition cost. It also includes the value of assets transferred to other establishments from a company at their acquisition cost, rather than current market value. Excluded are the charges to depreciation or amortization reserves. When a complete operation or establishment changed ownership, the respondent was instructed to report the value of the assets sold at the original cost as recorded in the books of the seller. The respondent also was requested to report retirements of equipment or structures owned by a parent company that the establishment was using as if it were a tenant.

VALUE ADDED

This measure of mining activity is derived by subtracting the cost of supplies, minerals received for preparation, purchased machinery installed, purchased fuel, purchased electricity, and contract work from the sum of the value of shipments and receipts for services (mining products plus receipts for services rendered) and capital expenditures. The result of this calculation is adjusted by the addition of value added by merchandising operations (i.e., the difference between the sales value and the cost of products sold without further processing).

“Value added” avoids the duplication in the figure for value of shipments and receipts for services that results from the use of products of some establishments as supplies, energy sources, or materials by others. Moreover, it provides a measure of value added not only in mineral production but also in the development of mineral properties. Value added is considered to be the best value measure available for comparing the relative economic importance of mining among industries and geographic areas.

VALUE OF SHIPMENTS AND RECEIPTS FOR SERVICES

This item covers the net selling values, f.o.b. mine or plant after discounts and allowances (exclusive of freight and excise taxes), of all products shipped, both primary and secondary, as well as all miscellaneous receipts, such as installation and repair, sales of scrap, and sales of products bought and sold without further processing. Included are all products physically shipped by the establishments, whether sold, transferred to other plants of the same company, or shipped on consignment. For products transferred to other establishments of the same company, or prepared on a custom or toll basis, companies were requested to report the estimated value, not merely the cost of producing the product.

In the case of multiunit companies, the mineral operation was requested to report the value of products transferred to other establishments of the same company at full economic or commercial value, including not only the direct cost of production but also a reasonable proportion of “all other costs” (including company overhead) and profit.

In addition to the value for NAICS defined products, aggregates of the following categories of miscellaneous receipts are reported as part of a total establishment's value of shipments and receipts for services:

1. Receipts for services — receipts for work or services that an establishment performed for others.
2. Value of resales — sales of products brought and sold without further processing.
3. Other miscellaneous receipts — such as repair work, installation, sales of scrap, etc.

Industry primary product value of shipments and receipts for services represents one of the three components of value of shipments and receipts for services. These components are:

1. Primary products value of shipments and receipts for services.
2. Secondary products value of shipments and receipts for services.
3. Value of resales.

The term "Value of primary products shipments or services produced in this industry" is used in this publication and refers to the same data.

An establishment is classified in a particular NAICS industry, if its shipments of primary products of that industry exceed in value its shipments of the products of any other single industry.

An establishment's value of shipments and receipts for services include those products assigned to an industry (primary products), those considered primary to other industries (secondary products), receipts for services and miscellaneous activities, and the value of resales.

Value of product shipments represents the total value of all products shipped that are classified as primary to an industry and includes those that were shipped by all mining and manufacturing establishments regardless of their industry classification.

Duplication in cost of supplies, etc., and value of shipments and receipts for services

The aggregate of the cost of supplies, etc., and value of shipments and receipts for services figures for industry groups and all mining industries includes some duplication since the products of some industries are used as supplies by others. Some duplication exists because of the inclusion of minerals transferred from one establishment to another for mineral preparation or resale. Duplication may also exist within the products of some individual industries where minerals shipped for preparation are also reported as the prepared product by another establishment.

Appendix B. NAICS Codes, Titles, and Descriptions

212321 CONSTRUCTION SAND AND GRAVEL MINING

This U.S. industry comprises establishments primarily engaged in one or more of the following:

1. operating commercial grade (i.e., construction) sand and gravel pits;
2. dredging for commercial grade sand and gravel; and
3. washing, screening, or otherwise preparing commercial grade sand and gravel.

Appendix C.

Methodology

SOURCES OF THE DATA

The mining sector includes approximately 25,000 establishments. This number includes those industries in the North American Industry Classification System (NAICS) definition of mining. The amount of information requested from mining establishments was dependent upon a number of factors. The more important consideration was the size of the company.

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:
 - a. Large and medium size establishments. Approximately 48 percent of all mining establishments were included in this group. A variable cutoff, based on administrative-record payroll data and determined on an industry-by-industry basis, was used to select those establishments that were to receive 1 of the 15 economic census — mining regular forms. The first seven pages, requesting establishment data for items, such as employment and payroll, costs, assets, and capital expenditures, were fairly standard although some variation occurred depending on the industries collected on the form. The remaining pages of the form contained product, supply, fuel, and special inquiries. The diversity of the mining activities necessitated the use of several forms to canvass the 29 mining industries.
 - b. Small single-establishment companies. This group included approximately 12 percent of all mining establishments. For those industries where application of the variable cutoff for administrative-record cases resulted in a large number of small establishments being included in the mail canvass, an abbreviated or short form was used. Establishments in the crushed stone, sand and gravel, and crude petroleum and natural gas industries with 5 to 19 employees received 1 of 2 versions of the short form. The form requested summary product and material data and totals, but no details on payrolls, cost of supplies and fuels, assets, and capital expenditures.

Use of the short form has no adverse effect on published totals for the industry statistics, because the same data were collected on the short form as on the long form. However, detailed information on products, supplies, and fuels was not collected on the short form; thus, its use would increase the value of the “not specified by kind” (nsk) categories.

2. Establishments not sent a report form:
 - a. Small single-establishment companies not sent a report form. Approximately 40 percent of the mining establishments were small single-establishment companies that were excused from filing a census report. Selection of these establishments was based on two factors: annual payroll and the Census Bureau’s ability to assign the correct six-digit NAICS industry classification to the establishment. For each six-digit NAICS industry code, an annual payroll cutoff was determined. These cutoffs were derived so that the establishments with payroll less than the cutoff were expected to account for no more than 3 percent of the value of shipments and receipts for the industry. Generally, all single-establishment companies with less than 5 employees were excused, while all establishments with more than 20 employees were mailed forms. Establishments below the cutoff that could not be directly assigned a six-digit NAICS code were mailed a classification report that requested information for assigning NAICS industry codes. Establishments below the cutoff that could be

directly assigned a six-digit NAICS code were excused from filing any report. For below cut-off establishments, information on the physical location, payroll, and receipts was obtained from the administrative records of other federal agencies under special arrangements that safeguarded their confidentiality.

Estimates of data for these small establishments were developed using industry averages in conjunction with the administrative information. The value of shipments and receipts, cost of supplies, etc., and cost of fuels were not distributed among specific products, supplies, and fuels for these establishments but were included in the product, supplies, and fuels “not specified by kind” (nsk) categories.

The industry classification codes included in the administrative-record files were assigned on the basis of brief descriptions of the general activity of the establishment. As a result, an indeterminate number of establishments were erroneously coded to a six-digit NAICS industry. This was especially true whenever there was a relatively fine line of demarcation between industries or between mining and nonmining activity.

Sometimes the administrative-record cases had only two- or three-digit NAICS group classification codes available in the files. For mining, these establishments were sent a separate classification form, which requested information on the products and services of the establishment. This form was used to code many of these establishments to the appropriate six-digit NAICS level. Establishments that did not return the classification form were coded later to those six-digit NAICS industries identified as “All other,” a default within the given subsector.

As a result of these situations, a number of small establishments may have been misclassified by industry. However, such possible misclassification has no significant effect on the statistics other than on the number of companies and establishments.

The total establishment count for individual industries should be viewed as an approximation rather than a precise measurement. The counts for establishments with 20 employees or more are far more reliable than the count of total number of establishments.

- b. All nonemployers, i.e., all firms subject to federal income tax, with no paid employees, during 2002 are excluded as in previous censuses. 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 — Mining are classified in 1 of 29 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/ identify those industries that changed between the 1997 North American Industry Classification System (NAICS) and 2002 NAICS. When applicable, Appendix F of this report shows the product class and product comparability between the two systems for data in this report.

In the NAICS system, an industry is generally defined as a group of establishments that have similar processes used to produce the mineral products. 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 its number, value added by mining, value of shipments and receipts, number of employees, and payroll.

The coding system works in such a way that the definitions progressively become narrower with successive additions of numerical digits. In the mining sector for 2002, there are 3 subsectors (three-digit NAICS), 5 industry groups (four-digit NAICS), 10 NAICS industries (five-digit NAICS) that are comparable with Canadian and Mexican classification, and 29 U.S. industries (six-digit NAICS). Product classes and products of the mining industries have been assigned codes based on the industry from which they originate. There are 63 product classes (seven-digit codes) and 136 ten-digit product codes. The ten-digit products are considered the primary products of the industry with the same first six digits.

For the 2002 Economic Census — Mining, all establishments were classified in particular industries based on the products they produced. If an establishment made products of more than one industry, it was classified in the industry with the largest product value.

Establishments frequently make products classified both in their industry (primary products) and other industries (secondary products). Industry statistics (employment, payroll, value added by mining, value of shipments and receipts, etc.) reflect the activities of the establishments that may make both primary and secondary products. Product statistics, however, represent the output of all establishments without regard for the classification of the producing establishment. For this reason, when relating the industry statistics, especially the value of shipments and receipts, to the product statistics, the composition of the industry's output should be considered.

ESTABLISHMENT BASIS OF REPORTING

The 2002 Economic Census — Mining covers each mining establishment of firms with one or more paid employees operating in the United States. A company operating at more than one establishment is required to file a separate report for each location. A mining establishment is defined as a single physical location where mineral operations are conducted. However, a company engaged in distinctly different lines of activity at one location is required to submit a separate report for each activity, if the plant records permit such a separation and, if the activities are substantial in size.

For oil and gas field operations and for contract services, the basis for reporting is different from the “establishment” basis used for other types of mining. Firms operating oil and gas wells, drilling wells, or exploring for oil and gas for their own account were required to submit a separate report for each state or offshore area adjacent to a state in which it conducted such activities. Firms that performed contract services for oil and gas field operations or for mining establishments were required to submit one report covering all such activities in the United States and to include information on receipts for services, production-worker wages, and hours, by state. These consolidated reports were then allocated to state establishments based on the data reported at the state level. The 2002 figures for establishments include the summation of operations for each state allocated from these nationwide reports.

In 2002, as in prior censuses since 1967, data for single-unit firms without paid employees were excluded. This exclusion had only a slight effect on industry aggregates for most industries. Data for firms without employees were included in the 1963, 1958, and 1954 censuses, if they reported more than \$500 in (1) value of shipments and receipts, (2) cost of supplies and purchased machinery, or (3) capital expenditures.

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

RELIABILITY OF DATA

All data compiled in the economic census are subject to nonsampling errors. Nonsampling errors can be attributed to many sources during the development or execution of the census:

- 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.

The Census Bureau obtains limited information extracted from administrative records of other federal agencies, such as gross receipts from federal income tax records and employment and payroll from payroll tax records. This information is used in conjunction with other information available to the Census Bureau to develop estimates for nonemployers, small employers, and other establishments for which responses were not received in time for publication.

DUPLICATION IN COST OF MATERIALS AND VALUE OF SHIPMENTS

Data for cost of materials and value of shipments include varying amounts of duplication, especially at higher levels of aggregation. This is because the products of one establishment may be the materials of another. The value added statistics avoid this duplication and are, for most purposes, the best measure for comparing the relative economic importance of industries and geographic areas.

VALUE OF INDUSTRY SHIPMENTS COMPARED WITH VALUE OF PRODUCT SHIPMENTS

The 2002 Economic Census — Mining shows value of shipments and receipts data for industries and products. In the industry statistics tables and files, these data represent the total value of shipments of all establishments classified in a particular industry. The data include the shipments of the products classified in the industry (primary to the industry), products classified in other industries (secondary to the industry), and miscellaneous receipts (repair work, sale of scrap, research and development, installation receipts, and resales). Value of product shipments shown in the products statistics tables and files represent the total value of all products shipped that are classified as primary to an industry regardless of the classification of the producing establishment. The value of products shipped also may include some products shipped from manufacturing establishments with mining operations.

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.

The disclosure analysis for the industry statistics files is based on the total value of shipments and receipts. When the total value of shipments and receipts cannot be shown without disclosing information for individual companies, the complete line is suppressed except for capital expenditures. If capital expenditures alone is a disclosure, only capital expenditures and cost of supplies statistics are suppressed. Nonetheless, the suppressed data are included in higher-level totals.

Appendix D. Geographic Notes

Not applicable for this report.

Appendix E. Metropolitan Areas and Micropolitan Statistical Areas

Not applicable for this report.

2002 published	2002 collected	1997 published	2002 published	2002 collected	1997 published	2002 published	2002 collected	1997 published
2123994 pt.....	2123993	2123993	2123998 pt.....	2123999	2123999	2123998162 pt	3279920113	3279920111 pt
2123994 pt.....	3279920 pt.....	3279920 pt	2123998 pt.....	3279920 pt.....	3279920 pt	2123998171	2123999171	2123999171
2123994100 pt	2123993100.....	2123993100	2123998112 pt	2123999111.....	2123999111	2123998192 pt	2123999191	2123999191
2123994100 pt	3279920341.....	3279920341	2123998112 pt	3279920364.....	3279920361 pt	2123998192 pt	3279920352.....	3279920351 pt
2123996 pt.....	2123995	2123995	2123998121	2123999121.....	2123999121	2123998YVW	2123999YVW.....	2123999YVW
2123996 pt.....	2123995	2123995	2123998132 pt	2123999131.....	2123999131	2123999W pt.....	2123999W	2123999W
2123996 pt.....	3279920 pt.....	3279920 pt	2123998132 pt	3279920114.....	3279920111 pt	2123999W pt.....	3279920 pt.....	3279920 pt
2123996100 pt	2123995100.....	2123995100	2123998141	2123999141.....	2123999141	2123999WYWT pt ...	2123999WYWT	2123999WYWT
2123996100 pt	3279920366.....	3279920361 pt	2123998151	2123999151.....	2123999151	2123999WYWT pt ...	3279920YVW pt...	3279920YVW pt
2123996100 pt	3279920366.....	3279920361 pt	2123998162 pt	2123999161.....	2123999161	2123999WYWT pt ...	3279920YVW pt ...	3279920YVW pt

