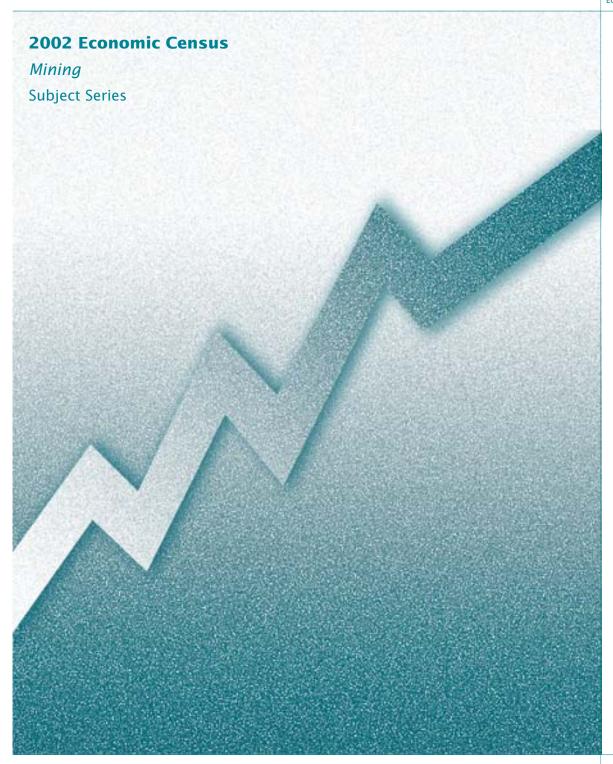
Materials and Fuels Consumed Summary: 2002

Issued January 2006

EC02-21SM-1





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2002 Economic Census

Mining
Subject Series





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CONTENTS

Introd Minin	duction to the Economic Census	v ix
Table	es	
1.	Selected Supplies, Minerals Received for Preparation, Purchased Machinery, and Fuels Consumed by Type by Industry: 2002 and 1997	1
Appe	endixes	
A. B. C. D. E.	Explanation of Terms NAICS Codes, Titles, and Descriptions Methodology Geographic Notes Metropolitan and Micropolitan Statistical Areas	A-1 B-1 C-1

-- 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 North American Industry Classification System (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.

2002 Economic Census

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 North American Industry Classification System (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 North American Industry Classification System (NAICS) level data for industries with 100 employees or more in the state.

Subject Series:

- Industry-Product Analysis Summary. This report presents 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 North American Industry Classification System (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 North American Industry Classification System (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 www.census.gov/epcd/naics02/n02ton97.htm.

In addition, there has been a report added, which did not exist in 1997. Included for 2002 is the **Industry-Product Analysis Summary.**

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.

Mining xi

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
- 1 50,000 to 99,999 employees
- m 100,000 employees or more
- p 10 to 19 percent estimated 20 to 29 percent estimated
- q 20 to 29 perc 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

[Includes quantity and cost of supplies and fuels consumed or put into production by establishments classified in the specified 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]

y or fuel consumed Quantity	Delivered cos (\$1,000)
ion, and other equipment2002. X	3 090 290
and conveying machinery X	3 829 117 541 532
1997 X fluids	689 404 598 817
hickeners, and purifiers)	1 121 428 797 164
	664 132 62 871 68 022
	358 635
1997 X 	371 819 1 348 588 1 369 649
1997 X 	127 890
1997 X 	301 906 154 207
1997 X 	195 644 79 763 71 595
1997 X 	556 402
	615 125 920 093 1 660 701
fuel	109 967 61 219
as a fuel	41 409 20 549
	341 618 459 812
	15 583 105 255
mil bbl . 2002. D 1997	103 233
bil cu ft. 2002 255.3 1997 715.9	>
	46 412 38 537
	248 697 217 570
mil bbl2002 P17.0	255 030 69 109
bil cu ft . 2002 . P5 108.3 1997 . 7 239.5	14 612 666 16 113 360
mil bbl . 2002 . 508.6 1997 . 227.4	7 453 013 2 994 116
on, and other equipment	222 825
and conveying machinery	318 943
	45 198 42 411
	29 971
1997 X d hydrocarbon gases)	31 181 43 796
1997 X 	26 225
1997 X 	59 422
	53 731 26 225 18 475 59 422 53 994 86 139
fuel	1 359
	1 353 344 523 137 784
	2 24 ⁴
))
	12 767 F
	32 085 D

[Includes quantity and cost of supplies and fuels consumed or put into production by establishments classified in the specified 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]

NAICS and supply or fuel code	Industry and supply or fuel consumed	Quantity	Delivered cost (\$1,000)
212111	Bituminous coal and lignite surface mining—Con.		
	Supplies consumed by type		
21211005	Run-of-mine (raw) coal, received for washing (wet-washing, pneumatic, etc.) mill s tons2002.	41.4 180.4	458 447 2 368 122
21211007	Run-of-mine (raw) coal, mined and processed at same establishment by washing (wet-washing, pneumatic, etc.) mil s tons. 2002.	112.8	X X
21211009	Run-of-mine (raw) coal, received for processing by other methods (including mechanical crushing, screening, or sizing) mil s tons. 2002.	98.2 S	220 616
21211011	Run-of-mine (raw) coal mined and processed at same establishment by other methods (including mechanically crushing, screening and sizing).	9.8 555.7	184 043 X
33300007	Purchased machinery installed, including mobile loading, transportation, and other equipment	490.6	X
	installed at the operation	X	592 334 488 185
33300009	Parts and attachments for mining, mineral preparation, construction, and conveying machinery and equipment	x	674 111
31320029	Filter and brattice cloth	X	549 976 10 784
11300000	Wood products and stumpage, round and hewn	X	3 271 1 783
32592003	Explosive materials, excluding ammonium nitrate	X	1 070 124 442
32592005	1997	X X X X X X X	88 255 164 122
00500007	1997		164 934
32592007 32419100	Blasting accessories	\$	45 069 43 460 56 107
32621001	Lubricating oils and greases (including hydraulic oils)	ŝ	42 663 71 706
32600009	Rubber and plastics products (hose, conveyor belting, etc.) excluding tires, tubes, and gaskets	\$	70 231 16 992
32700037	Concrete products (105e, conveyor betting, etc.) excluding thes, tubes, and gaskets	X X X X X X X	7 486 3 155
32700007	1997	â	1 782
32799217	Nonmetallic mineral products (rock dust, other prepared nonmetallic minerals and earths, etc.)	X	9 006 5 871
33120049	Steel shapes and forms (excluding castings, forgings, and wire products)	X	27 962 13 273
33100085	Nonferrous metal wire including trolley wire	X	2 847 1 049
33272200	Roof bolts	X X X X X X X	7 150 1 940
33290007	Wire rope, cable, springs, and other fabricated wire products (excluding wire)	X	21 826 22 681
33300005	Drill bits and reamers	X	16 947 11 458
00970098	All other supplies		353 258 351 324
00973000	Undistributed minerals, purchased machinery, parts, attachments, and supplies used	X X X X X	416 701 272 034
	Fuels consumed by type		
21211003	Coal (bituminous, subbituminous, lignite, and anthracite) consumed as a fuel	D D	D D
21211013	Coal (bituminous, subbituminous, lignite, and anthracite) produced and used in the same plant as a fuel	1.1	Х
32411017	Distillate (light) grade numbers 1, 2, 4, and light diesel fuel used as a fuel	31.5 P7 281.7	X 264 656
32411019	Residual (heavy) grade numbers 5 and 6 and heavy diesel fuel used as a fuel	7 420.4 9973.4	219 512 37 479
21111015	Gas (natural, manufactured, and mixed) used as a fuel bil cu ft. 2002. 1997. 1	721.2 D .7	20 461 D 2 011
32411015	Gasoline used as a fuel	P12.0	13 139
00960018	Other fuels (liquefied petroleum gas, coke, wood, etc.)	29.4 X	24 031 2 874
00974000	1997. Undistributed fuels	X X X	D 26 843 89 002
212112	Bituminous coal underground mining		
	Supplies consumed by type		
21211005	Run-of-mine (raw) coal, received for washing (wet-washing, pneumatic, etc.) mill s tons2002.	P25.2	329 994
21211007	Run-of-mine (raw) coal, mined and processed at same establishment by washing (wet-washing, pneumatic, etc.) mil s tons. 2002.	20.4 272.8	276 910 X X
21211009	Run-of-mine (raw) coal, received for processing by other methods (including mechanical crushing, screening, or sizing)	410.5 3.1	X 69 791
21211011	Run-of-mine (raw) coal mined and processed at same establishment by other methods (including	-	_
33300007	mechanically crushing, screening and sizing). mil s tons2002. Purchased machinery installed, including mobile loading, transportation, and other equipment	48.3 49.6	X
	installed at the operation	X	381 048 615 542

[Includes quantity and cost of supplies and fuels consumed or put into production by establishments classified in the specified 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]

ground mining—Con. type—Con. mining, mineral preparation, construction, and conveying machinery 2002. 1997. 2002. 1997. 2002. 1997. 1997. 1997. 1997. 1997. 1997. 1997. 1997. 2002. 2003. 2003. 2003. 2003.	x x x x x x x x x x x x x x x x x x x	456 04: 587 79: 13 46- 12 78: 56 91: 53 26: 6 09: 5 25: 4 05: 7 81: 1 05- 4 100: 40 33: 48 72: 40 78: 21 81: 57 04: 18 54: 22 44: 24 34 81: 55 32: 19 02: 139 11: 165 13: 16 86: 11 25: 19 02: 139 11: 165 62: 17 77: 345 19: 433 11: 555 52: 215 29:
mining, mineral preparation, construction, and conveying machinery	x x x x x x x x x x x x x x x x x x x	587 79 13 46 12 78 56 91 53 26 6 09 5 25 4 05 7 81 1 05 4 10 40 33 48 72 40 78 21 81 57 04 108 71 18 55 11 25 22 44 34 81 55 91 68 60 11 25 19 02 139 11 165 11 10 29 50 62 47 77 345 19 433 11 555 51
2002 1997 2002 age, round and hewn	x x x x x x x x x x x x x x x x x x x	587 79 13 46 12 78 56 91 53 26 6 09 5 25 4 05 7 81 1 04 40 33 48 72 40 78 21 81 57 04 108 71 18 55 11 25 22 44 34 81 55 91 68 60 11 25 19 02 139 11 165 11 10 29 50 62 47 77 345 19 433 11 555 51
1997.	x x x x x x x x x x x x x x x x x x x	13 46 12 78 56 91 53 26 6 6 09 5 25 4 05 7 81 1 05 4 10 40 33 48 72 40 78 21 81 57 04 108 71 18 54 22 44 34 81 55 60 11 25 19 02 139 11 165 11 165 11 165 13 16 29 50 62 47 77 345 19 433 11 555 52
1997.	x x x x x x x x x x x x x x x x x x x	12 78 56 91 53 26 6 09 5 25 4 05 7 81 1 05 7 81 1 05 7 81 1 05 7 81 1 05 7 81 1 05 7 81 1 05 7 81 1 05 7 81 1 05 7 91 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1997. 1997	x x x x x x x x x x x x x x x x x x x	53 26 6 6 09 5 25 4 05 7 81 1 05 4 10 40 33 48 72 40 78 21 81 57 04 108 71 118 54 25 12 22 44 81 34 81 55 91 16 6 11 16 5 11 10 33 16 29 50 62 47 77 345 19 433 11 555 51
1997 2002 1997 2002 1997 s (including hydraulic oils) 1997 s (including hydraulic oils) 2002 1997 the state of the state	x x x x x x x x x x x x x x x x x x x	5 25 4 05 7 81 1 05 4 10 40 33 48 72 40 78 21 81 57 04 108 71 18 54 25 12 22 43 34 81 55 91 68 60 11 25 19 02 139 11 165 11 10 33 16 29 50 62 47 77 345 19 433 11 555 55 55
1997 2002 1997 s (including hydraulic oils)	x x x x x x x x x x x x x x x x x x x	7 81 1 05 4 10 40 33 48 72 40 78 21 81 57 04 108 71 18 54 25 12 22 44 34 81 55 91 68 60 11 25 19 02 139 11 165 11 10 33 16 29 50 62 47 77 345 19 433 11 555 52
s (including hydraulic oils)	x x x x x x x	4 10 40 33 48 72 40 78 21 81 57 04 108 71 18 54 25 12 22 44 34 81 55 91 68 60 68 60 61 1 25 19 02 139 11 165 11 10 33 16 29 47 77 345 19 433 11 555 55
s (including hydraulic oils)	x x x x x x x	40 33 48 72 40 78 21 81 557 04 34 81 55 91 68 60 11 125 19 02 47 77 345 19 433 11 555 55 55
	x x x x x x x	40 78 21 81 57 04 108 71 18 54 25 12 22 44 34 81 55 91 68 66 11 25 19 02 139 11 165 11 10 33 16 29 47 77 345 19 433 11 555 55 52
ts (hose, conveyor belting, etc.) excluding tires, tubes, and gaskets	x x x x x x x	57 04 108 71 18 54 25 12 22 44 34 81 55 91 68 66 11 25 19 02 139 11 105 11 10 33 16 25 47 77 345 15 433 11 555 52
2002	x x x x x x x	18 54 25 12 22 44 34 81 55 91 68 60 11 25 19 05 139 11 165 11 10 33 16 29 47 77 345 19 433 11 555 55
tts (rock dust, other prepared nonmetallic minerals and earths, etc.)	x x x x x x x	22 44 34 81 55 91 68 60 11 25 19 02 139 11 165 11 10 33 16 29 50 62 47 77 345 19 433 11 555 52
1997 1997 2002 1997 1997 1997 1997 2002 1997 2002 1997 2002 1997 2002 1997 2002 1997 2002 1997 2002 1997 2002 1997 2002 1997 1997 1997 1997 1997 1997 1997 1997 1997 1997 1997 1997 1997 1997 1997		34 81.1 55 91 68 60 11 25 19 02 139 11 165 11 10 33 16 29 50 62 47 77 345 19 433 11.555 52
1997 1997 2002 2002		68 60 11 25 19 02 139 11 165 11 10 33 16 29 50 62 47 77 345 19 433 11 555 52
1997 2002 1997		19 02 139 11 165 11 10 33 16 29 50 62 47 77 345 19 433 11 555 52
and other fabricated wire products (excluding wire)		165 11 10 33 16 29 50 62 47 77 345 19 433 11 555 52
1997 2002 1997 2002 1997 2002 1997 1997 1997 1997 1997 e		16 29 50 62 47 77 345 19 433 11 555 52
thased machinery, parts, attachments, and supplies used	X X X X	47 77 345 19 433 11 555 52
	X X X X	345 19 433 11 555 52
chased machinery, parts, attachments, and supplies used	X X	555 52
ninous, lignite, and anthracite) produced and used in the same plant		
ninous, lignite, and anthracite) produced and used in the same plant		
1 UOU S 100S - 2002 - 1	179.8	
1997 pers 1, 2, 4, and light diesel fuel used as a fuel	221.4 S	14 83
1997 mbers 5 and 6 and heavy diesel fuel used as a fuel	655.9 9178.3	20 58 6 63
t, and mixed) used as a fuel	144.8 D	4 05
1997	.5	2 55
	^q 1.5 4.0	1 72 4 38
eum gas, coke, wood, etc.)	X X X	
	X	12 03 10 58
type		
eived for washing (wet-washing, pneumatic, etc.)	P.2 D	5 84
ned and processed at same establishment by washing (wet-washing,	D	
1997	2.2	:
eived for processing by other methods (including mechanical ring)mil s tons2002	s	12 42 9 54
ed and processed at same establishment by other methods (including reening and sizing)mil s tons. 2002.	.6 D	9 54
illed, including mobile loading, transportation, and other equipment	D X X	
1997 mining, mineral preparation, construction, and conveying machinery		21 98
1997	X	2 11 7 28
1997	X	
age, round and hewn	X X	5
ling ammonium nitrate	χ̈́	70
	x X	89 87
	X X	29
	XX	41 54
	Y	1 55
	χ̈́	
li	2002 1997 2002 2002	Section Sect

[Includes quantity and cost of supplies and fuels consumed or put into production by establishments classified in the specified 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]

confidentiality pr	otection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]	
NAICS and supply or fuel code	Industry and supply or fuel consumed	Quantity	Delivered cost (\$1,000)
212113	Anthracite mining—Con.		
	Supplies consumed by type—Con.		
33120049	Steel shapes and forms (excluding castings, forgings, and wire products)	×	102
33100085	Nonferrous metal wire including trolley wire	ŝ	1 099 D
33290007	Wire rope, cable, springs, and other fabricated wire products (excluding wire)	ŝ	D D
33300005	Drill bits and reamers	X	121 38
00970098	All other supplies	X	144 4 287
00973000	Undistributed minerals, purchased machinery, parts, attachments, and supplies used	× × × × × × × × ×	5 991 20 668 6 965
	Fuels consumed by type		
32411017	Distillate (light) grade numbers 1, 2, 4, and light diesel fuel used as a fuel	S 103.2	409 3 003
32411019	Residual (heavy) grade numbers 5 and 6 and heavy diesel fuel used as a fuel	D	D 1 190
32411015	Gasoline used as a fuel	34.9 D .3	D
00974000	Undistributed fuels	.3 X X	342 1 037 D
212210	Iron ore mining		
	Supplies consumed by type		
21221001	Crude iron ore, received for concentration	D D	D D
21221003	Crude iron ore, produced and concentrated at same establishmentmil metric tons (wet basis).,2002., 1997	164.3 196.8	D X X X X X
21221007	Iron ore concentrates, produced and agglomerated at same establishmentmil metric tons (dry basis). 2002 1997	46.9 61.0	X
33300007	Purchased machinery installed, including mobile loading, transportation, and other equipment installed at the operation	X	D 51 661
33300009	Parts and attachments for mining, mineral preparation, construction, and conveying machinery and equipment	X	D 126 611
21232009	Bentonite and other clay nonmetallic minerals	x	D
32500073	Industrial chemicals (chemical reagents, calcium chloride, etc.) excluding explosive materials and blasting accessories	X X	34 043 D
32592005	1997	X	32 366 D
32621001	Tires and inner tubes	X	18 725 D
33151003	1997. Iron and steel castings	X X X X X	D 6 664 61 144
33211101	Iron and steel forgings	x	D
33120059	Steel shapes and forms (excluding castings and forgings)	X	36 998 3 382
00970098	1997	X	D 134 041
00973000	Undistributed minerals, purchased machinery, parts, attachments, and supplies used	X X X X X X	104 590 7 064 2 521
	Fuels consumed by type		
21211003	Coal (bituminous, subbituminous, lignite, and anthracite) consumed as a fuel	81.0 D	3 815 D
32411017	Distillate (light) grade numbers 1, 2, 4, and light diesel fuel used as a fuel	597.7 910.7	23 886 24 505
32411019	Residual (heavy) grade numbers 5 and 6 and heavy diesel fuel used as a fuel	910.7 D	24 303 D
21111015	Gas (natural, manufactured, and mixed) used as a fuel bil cu ft 2002.	P22.1	72 998 80 835
32411015	1997	34.3 D 1.4	D 1 296
00960018	Other fuels (liquefied petroleum gas, coke, wood, etc.)	X X	4 597 5 340
00974000	Undistributed fuels. 1997 2002 1997	x x	1 561 D
212221	Gold ore mining		
	Supplies consumed by type		
21220001	Crude ore and residues, received for concentration	D D	D D
21220003	Crude ore and residues, mined and concentrated at same establishment	112.1 275.2	X
33300007	Purchased machinery installed, including mobile loading, transportation, and other equipment installed at the operation	X X	275 674 592 481
33300009	Parts and attachments for mining, mineral preparation, construction, and conveying machinery and equipment	×	196 135 285 324
32500073	Industrial chemicals (chemical reagents, calcium chloride, etc.) excluding explosive materials		
	and blasting accessories	X	88 106 174 042

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NAICS and supply or fuel code	Industry and supply or fuel consumed	Quantity	Delivered cost (\$1,000)
212221	Gold ore mining—Con.		
	Supplies consumed by type—Con.		
32592001	Explosive materials (including ammonium nitrate) and blasting accessories	×	39 975 86 402
32621001	Tires and inner tubes	x	27 482 76 204
32741001	Lime	x	51 404 48 577
33151003	Iron and steel castings	X	D 24 074
33211101	Iron and steel forgings	X X X X X X X	943 13 453
33120059	Steel shapes and forms (excluding castings and forgings)	X	D 38 252
00970098	All other supplies	X	156 263 208 700
00973000	Undistributed minerals, purchased machinery, parts, attachments, and supplies used	× × × ×	68 173 D
	Fuels consumed by type		
21211003	Coal (bituminous, subbituminous, lignite, and anthracite) consumed as a fuel	D D	D D
32411017	Distillate (light) grade numbers 1, 2, 4, and light diesel fuel used as a fuel	91 914.7 3 130.5	79 253 103 489
21111015	Gas (natural, manufactured, and mixed) used as a fuel	5 130.5 D	103 469 D D
32411015	Gasoline used as a fuel	D 13.1	D 14 297
00960018	Other fuels (liquefied petroleum gas, coke, wood, etc.)		D 22 411
00974000	Undistributed fuels	X X X	11 654 6 567
212222	Silver ore mining		
	Supplies consumed by type		
21220003	Crude ore and residues, mined and concentrated at same establishment	D D	X X
33300007	Purchased machinery installed, including mobile loading, transportation, and other equipment installed at the operation	X	D
33300009	Parts and attachments for mining, mineral preparation, construction, and conveying machinery and equipment	X X X	3 203 D
32500073	Industrial chemicals (chemical reagents, calcium chloride, etc.) excluding explosive materials and blasting accessories		6 582 D
32592001	Explosive materials (including ammonium nitrate) and blasting accessories	X X X	6 341 D 2 773
32621001	Tires and inner tubes		D D
32741001	1997 Lime	X	D D
33151003	1997 Iron and steel castings	X X X X X X X X	1 406 D
33120059	Steel shapes and forms (excluding castings and forgings)	X	D D
00970098	1997 All other supplies	X	1 798 D
00973000	Undistributed minerals, purchased machinery, parts, attachments, and supplies used	X X X	D 1 583 496
	Fuels consumed by type		100
32411017	Distillate (light) grade numbers 1, 2, 4, and light diesel fuel used as a fuel	D	D
32411019	Residual (heavy) grade numbers 5 and 6 and heavy diesel fuel used as a fuel	D D	D D
21111015	Gas (natural, manufactured, and mixed) used as a fuel bil cu ft . 2002.	D D	D D
32411015	1997 Gasoline used as a fuel	D D	D D
00974000	1997. Undistributed fuels	.1 X X	154 157 D
212231	Lead ore and zinc ore mining		J
	Supplies consumed by type		
21220001	Crude ore and residues, received for concentration	D	D
21220003	Crude ore and residues, mined and concentrated at same establishment	D D	D X X
3330007	Purchased machinery installed, including mobile loading, transportation, and other equipment installed at the operation	10.4 X	X D
33300009	Parts and attachments for mining, mineral preparation, construction, and conveying machinery and equipment	X	66 583 D
32500073	and equipment	X	30 336
	and blasting accessories	X X	D 8 407

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NAICS and supply or fuel code	otection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory in the state of the	Quantity	Delivered cost (\$1,000)
212231	Lead ore and zinc ore mining—Con.		
	Supplies consumed by type—Con.		
32592001	Explosive materials (including ammonium nitrate) and blasting accessories	X	D 9 591
32621001	Tires and inner tubes	ŝ	8 581 D
32741001	Lime	X	3 563 D
33151003	1997 Iron and steel castings	X	D D D D
33120059	Steel shapes and forms (excluding castings and forgings)	X	
00970098	All other supplies	X	1 883 7 881 16 855
00973000	Undistributed minerals, purchased machinery, parts, attachments, and supplies used	X X X X X X X X X X	16 855 51 511 440
	Fuels consumed by type		
21211003	Coal (bituminous, subbituminous, lignite, and anthracite) consumed as a fuel	D	D
32411017	Distillate (light) grade numbers 1, 2, 4, and light diesel fuel used as a fuel	D D	D D D D
32411015	Gasoline used as a fuel	D D	D
00960018	Other fuels (liquefied petroleum gas, coke, wood, etc.)	.1 X	91 D D
00974000	1997 Undistributed fuels	X X X	4 044 94
212234	Copper ore and nickel ore mining		
	Supplies consumed by type		
21220001	Crude ore and residues, received for concentration	D 77.7	D 212 140
21220003	Crude ore and residues, mined and concentrated at same establishment	D 652.6	X
33300007	Purchased machinery installed, including mobile loading, transportation, and other equipment installed at the operation	X	D 277 435
33300009	Parts and attachments for mining, mineral preparation, construction, and conveying machinery and equipment	X	186 699 284 288
32500073	Industrial chemicals (chemical reagents, calcium chloride, etc.) excluding explosive materials and blasting accessories	×	89 384 99 791
32592001	Explosive materials (including ammonium nitrate) and blasting accessories		36 512
32621001	Tires and inner tubes	X	52 293 32 180
32741001	Lime	X	74 746 7 871
33151003	1997 Iron and steel castings	X	23 778 D
33211101	1997 Iron and steel forgings	× × × × × × ×	48 084 D
33120059	Steel shapes and forms (excluding castings and forgings)		17 029 22 521
00970098	All other supplies	ŝ	47 064 D
00970098	Undistributed minerals, purchased machinery, parts, attachments, and supplies used	X X X X	195 059 4 411
	Fuels consumed by type	X	1 873
32411017	Distillate (light) grade numbers 1, 2, 4, and light diesel fuel used as a fuel	P1 631.2	58 770
32411019	Residual (heavy) grade numbers 5 and 6 and heavy diesel fuel used as a fuel	3 057.9 D	95 634 D
21111015	1997 Gas (natural, manufactured, and mixed) used as a fuel	D D	D D
32411015	Gasoline used as a fuel 1997 mil gal., 2002	1.8 D	4 085 D
00960018	Other fuels (liquefied petroleum gas, coke, wood, etc.)	3.1	3 307 D
00974000	1997 Undistributed fuels	X X X	357 386 D
212291	Uranium-radium-vanadium ore mining Supplies consumed by type	^	D
21220005	Ores and concentrates, received for treatment	D	D
21220007	1997 Ores and concentrates, mined and treated at the same establishment mil metric tons (dry basis) 2002	D -	D D X X
33300007	Purchased machinery installed, including mobile loading, transportation, and other equipment installed at the operation	-	1 818
33300009	Parts and attachments for mining, mineral preparation, construction, and conveying machinery and equipment	X	8 962
32500073	and equipment	X	4 472 5 708
00070000	1997	X X X X	D 4 931
00970098	All other supplies	X	7 050 5 896
00973000	Undistributed minerals, purchased machinery, parts, attachments, and supplies used	X	2 207 3 748

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NAICS and supply or fuel code	Industry and supply or fuel consumed	Quantity	Delivered cost (\$1,000)
212291	Uranium-radium-vanadium ore mining—Con.		
	Fuels consumed by type		
32411017	Distillate (light) grade numbers 1, 2, 4, and light diesel fuel used as a fuel	D 1.5	D 59 D
21111015	Gas (natural, manufactured, and mixed) used as a fuel	D	D 834
32411015	Gasoline used as a fuel mil gal. 2002.	.3 D .1	834 D 153
00960018	Other fuels (liquefied petroleum gas, coke, wood, etc.)	X	159 135
00974000	Undistributed fuels	X	740 661
212299	All other metal ore mining		
	Supplies consumed by type		
21220005	Ores and concentrates, received for treatment	.1 Z	4 308 7 926
21220007	Ores and concentrates, mined and treated at the same establishment	11.0 30.0	X X
33300007	Purchased machinery installed, including mobile loading, transportation, and other equipment installed at the operation	×	8 259
33300009	Parts and attachments for mining, mineral preparation, construction, and conveying machinery and equipment	x	33 602 40 927
32500073	1997 Industrial chemicals (chemical reagents, calcium chloride, etc.) excluding explosive materials	X	45 455
0200070	and blasting accessories	X	13 684 21 468
32592005	Ammonium nitrate		D. 188
32621001	1997 Tires and inner tubes	X	4 062 D
33151003	Iron and steel castings	X	2 796 D
33120059	Steel shapes and forms (excluding castings and forgings)	X	8 390 D
00970098	1997 All other supplies	X	D 49 686
00973000	Undistributed minerals, purchased machinery, parts, attachments, and supplies used	× × × × × × × × ×	18 139 3 242
	1997	X	2 464
	Fuels consumed by type		
21211003	Coal (bituminous, subbituminous, lignite, and anthracite) consumed as a fuel	D -	D -
32411017	Distillate (light) grade numbers 1, 2, 4, and light diesel fuel used as a fuel	S 123.0	2 366 4 081
32411019	Residual (heavy) grade numbers 5 and 6 and heavy diesel fuel used as a fuel	83.3 171.2	2 156 3 899
21111015	Gas (natural, manufactured, and mixed) used as a fuel	q.5 .5 q.7	1 322 1 129
32411015	Gasoline used as a fuel	9.7 .4	859 423
00960018	Other fuels (liquefied petroleum gas, coke, wood, etc.)	X	D 666
00974000	Undistributed fuels	.4 X X X	913 586
212311	Dimension stone mining and quarrying		
	Supplies consumed by type		
21231100	Rough blocks, used to produce dressed stone	S 6.0	11 292 209
21231005	Broken stone, received for preparation (crushing, screening, washing, etc.)	D _	D _
21232001	Sand and gravel, received for preparation	D	D
33300007	Purchased machinery installed, including mobile loading, transportation, and other equipment installed at the operation	x	4 372 2 925
33300009	Parts and attachments for mining, mineral preparation, construction, and conveying machinery and equipment	X X	2 925 2 490
2050000	Explosive materials, excluding ammonium nitrate	X	676
32592003 32592005	Explosive materials, excluding animonium nitrate 2002. Ammonium nitrate 2002.	ŝ	2 027 259
	1997	ŝ	D -
32592007	Blasting accessories	X	305 39
32600007	Rubber and plastics products, including tires and tubes	X	512 162
33120059	Steel shapes and forms (excluding castings and forgings)	X X X X X X X X	162 448 36
00970098	All other supplies	X	3 384 3 477
00973000	Undistributed minerals, purchased machinery, parts, attachments, and supplies used	X	18 040 11 163
	Fuels consumed by type		
32411017	Distillate (light) grade numbers 1, 2, 4, and light diesel fuel used as a fuel	S 27.5	1 572 972
32411019	Residual (heavy) grade numbers 5 and 6 and heavy diesel fuel used as a fuel	S 6.0	429 176
21111015	Gas (natural, manufactured, and mixed) used as a fuel bil cu ft. 2002.	DI	D 16
32411015	Gasoline used as a fuel mil gal. 2002.	Z P1.0	1 213

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NAICS and supply or fuel code	Industry and supply or fuel consumed	Quantity	Delivered cost (\$1,000)
12311	Dimension stone mining and quarrying—Con.		
	Fuels consumed by type—Con.		
960018	Other fuels (liquefied petroleum gas, coke, wood, etc.)	.3 X	352 D
974000	1997	.3 X X X X	32 3 046
10010	1997	*	2 207
12312	Crushed and broken limestone mining and quarrying Supplies consumed by type		
231100	Rough blocks, used to produce dressed stone	S D	9 051
231005	Broken stone, received for preparation (crushing, screening, washing, etc.)	16.1	61 260
232001	Sand and gravel, received for preparation	16.3 93.6	48 488 13 831
300007	Purchased machinery installed, including mobile loading, transportation, and other equipment installed at the operation	D	253 581
300009	Parts and attachments for mining, mineral preparation, construction, and conveying machinery	X	268 723
	and equipment	X	173 265 199 677
592003	Explosive materials, excluding ammonium nitrate		69 141
592005	1997 Ammonium nitrate	X	81 648 21 382
592007	1997 Blasting accessories	X	26 459 11 432
600007	Rubber and plastics products, including tires and tubes	X	9 022 22 497
120059	Steel shapes and forms (excluding castings and forgings)	X	31 225 13 201
970098	1997 All other supplies	\$	11 569 112 701
973000	1997. Undistributed minerals, purchased machinery, parts, attachments, and supplies used	× × × × × × × × ×	145 571 361 411 243 149
	Fuels consumed by type		
211003	Coal (bituminous, subbituminous, lignite, and anthracite) consumed as a fuel	D	0
411017	Distillate (light) grade numbers 1, 2, 4, and light diesel fuel used as a fuel	43.0 S	1 569 80 318
411019	Residual (heavy) grade numbers 5 and 6 and heavy diesel fuel used as a fuel	2 312.4 9240.4	75 817 8 807
111015	Gas (natural, manufactured, and mixed) used as a fuel	308.4 D 2.3	8 896 E 6 595
411015	Gasoline used as a fuel	S	12 384 12 149
960018	Other fuels (liquefied petroleum gas, coke, wood, etc.)	X	3 742 2 458
974000	Undistributed fuels	11.3 X X X X	63 825 56 418
12313	Crushed and broken granite mining and quarrying		
	Supplies consumed by type		
231005	Broken stone, received for preparation (crushing, screening, washing, etc.) mil s tons2002	.8 D	4 697
232001	Sand and gravel, received for preparation	S	98 D
300007	Purchased machinery installed, including mobile loading, transportation, and other equipment installed at the operation	X	101 879
300009	Parts and attachments for mining, mineral preparation, construction, and conveying machinery	x	164 804
	and equipment	X X X	76 931 101 298
592003	Explosive materials, excluding ammonium nitrate	X	19 917 27 249
592005	Ammonium nitrate	X	2 199 4 930
592007	Blasting accessories	x X	3 230 3 854
600007	Rubber and plastics products, including tires and tubes	X X	12 226 13 54
120059	Steel shapes and forms (excluding castings and forgings)	X	19 916 16 577
970098	All other supplies	× × × × × × × × ×	89 158 52 883
973000	Undistributed minerals, purchased machinery, parts, attachments, and supplies used	X	84 075 33 373
	Fuels consumed by type		
411017	Distillate (light) grade numbers 1, 2, 4, and light diesel fuel used as a fuel	S 602.7	21 146
411019	1997 Residual (heavy) grade numbers 5 and 6 and heavy diesel fuel used as a fuel	692.7 950.4 170.9	20 387 1 920 4 700
111015	Gas (natural, manufactured, and mixed) used as a fuel	D D	4 706 C
411015	Gasoline used as a fuel	D 19	1 971
960018	Other fuels (liquefied petroleum gas, coke, wood, etc.)	X X X X	5 355
974000	Undistributed fuels 1997 Undistributed fuels 2002.	â l	11 127

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NAICS and supply or fuel code	Industry and supply or fuel consumed	Quantity	Delivered cost (\$1,000)
212319	Other crushed and broken stone mining and quarrying		
	Supplies consumed by type		
21231100	Rough blocks, used to produce dressed stone	D	D
21231005	Broken stone, received for preparation (crushing, screening, washing, etc.)	- S	11 289
21232001	Sand and gravel, received for preparation	3.4 92.0	11 580 8 272
33300007	Purchased machinery installed, including mobile loading, transportation, and other equipment installed at the operation	3.1 X X	8 723 42 783 47 348
33300009	Parts and attachments for mining, mineral preparation, construction, and conveying machinery and equipment	X	34 284 52 560
32592003	Explosive materials, excluding ammonium nitrate	X	9 006 9 475
32592005	Ammonium nitrate	X	1 001 5 826
32592007	Blasting accessories	X	D 2 141
32600007	Rubber and plastics products, including tires and tubes	Ŷ	3 548 6 102
33120059	Steel shapes and forms (excluding castings and forgings)	Ŷ	6 872 5 602
00970098	All other supplies	Ŷ	21 683 30 908
00973000	Undistributed minerals, purchased machinery, parts, attachments, and supplies used	x x x x x x x x x x x	109 082 95 780
	Fuels consumed by type		
21211003	Coal (bituminous, subbituminous, lignite, and anthracite) consumed as a fuel	D	D
32411017	Distillate (light) grade numbers 1, 2, 4, and light diesel fuel used as a fuel	9491.3 468.4	18 121 15 887
32411019	Residual (heavy) grade numbers 5 and 6 and heavy diesel fuel used as a fuel	60.3	2 175 1 685
21111015	Gas (natural, manufactured, and mixed) used as a fuel	S 1.8	7 464 5 851
32411015	Gasoline used as a fuel	D 1.5	D 1 583
00960018	Other fuels (liquefied petroleum gas, coke, wood, etc.)	X	858 174
00974000	Undistributed fuels	X	16 671 20 770
212321	Construction sand and gravel mining		
	Supplies consumed by type		
21231100	Rough blocks, used to produce dressed stone	D	D
21231005	Broken stone, received for preparation (crushing, screening, washing, etc.)	S 4.0	21 552 7 521
21232001	Sand and gravel, received for preparation	943.9 29.4	178 208 73 467
33300007	Purchased machinery installed, including mobile loading, transportation, and other equipment installed at the operation	X X	110 935 133 049
33300009	Parts and attachments for mining, mineral preparation, construction, and conveying machinery and equipment	X	111 934
32592003	Explosive materials, excluding ammonium nitrate		102 407 4 503
32592005	1997 Ammonium nitrate 2002	Ŷ	2 306 D
32592007	1997. Blasting accessories 2002.	Ŷ	339 345
32600007	Rubber and plastics products, including tires and tubes	Ŷ	242 6 684
33120059	Steel shapes and forms (excluding castings and forgings)	x	7 947 8 609
00970098	1997	Ŷ	6 945 43 058
00973000	Undistributed minerals, purchased machinery, parts, attachments, and supplies used	x x x x x x x x x x	60 112 330 534
	Fuels consumed by type	X	349 035
32411017	Distillate (light) grade numbers 1, 2, 4, and light diesel fuel used as a fuel	^q 1 078.4	45 712
32411019	1997. Residual (heavy) grade numbers 5 and 6 and heavy diesel fuel used as a fuel	1 403.8 S	48 795 8 019
21111015	1997	315.1 S	9 652 2 266
32411015	1997	1.4 96.1	3 759 7 337
00960018	Other fuels (liquefied petroleum gas, coke, wood, etc.)	5.7 X	6 044 2 127
00974000	Undistributed fuels	x x	D 83 479 96 872
212322	Industrial sand mining	^	90 8/2

[Includes quantity and cost of supplies and fuels consumed or put into production by establishments classified in the specified 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]

NAICS and supply or fuel code	Industry and supply or fuel consumed	Quantity	Delivered cost (\$1,000)
212322	Industrial sand mining—Con.		
	Supplies consumed by type		
21231005	Broken stone, received for preparation (crushing, screening, washing, etc.)	S D	3 802 D
21232001	Sand and gravel, received for preparation	1.5	6 680 4 943
33300007	Purchased machinery installed, including mobile loading, transportation, and other equipment installed at the operation	.7 X X	15 890 24 632
33300009	Parts and attachments for mining, mineral preparation, construction, and conveying machinery and equipment		23 735
32592003	Explosive materials, excluding ammonium nitrate	X X X	24 619 D 1 411
32592005	Ammonium nitrate	X	1 465 D
32592007	Blasting accessories	x x x x x x x x	D 129
32600007	Rubber and plastics products, including tires and tubes	x	1 412 636
33120059	Steel shapes and forms (excluding castings and forgings)	χ̂	3 218 1 541
00970098	All other supplies	ŝ	27 016 28 570
00973000	Undistributed minerals, purchased machinery, parts, attachments, and supplies used	X X	10 439 13 569
01011000	Fuels consumed by type		_
21211003	Coal (bituminous, subbituminous, lignite, and anthracite) consumed as a fuel	D D	D D
32411017	Distillate (light) grade numbers 1, 2, 4, and light diesel fuel used as a fuel	^q 134.4 87.6	5 492 2 797
32411019	Residual (heavy) grade numbers 5 and 6 and heavy diesel fuel used as a fuel	S 33.3	1 457 824
21111015	Gas (natural, manufactured, and mixed) used as a fuel	^p 5.2 6.4	17 901 17 103
32411015	Gasoline used as a fuel mil gal2002 1997	D D	D D
00960018	Other fuels (liquefied petroleum gas, coke, wood, etc.)	X X X	2 470 1 235
00974000	Undistributed fuels	X	4 728 3 542
212324	Kaolin and ball clay mining		
	Supplies consumed by type		_
21232013	Crude clay, ceramic, and refractory minerals, received for preparation	X	D 3 468
21232015	Crude clay, ceramic, and refractory minerals, mined and prepared at same establishment	12 993.8 9 027.3	X
33300007	Purchased machinery installed, including mobile loading, transportation, and other equipment installed at the operation	X	D 55 456
33300009	Parts and attachments for mining, mineral preparation, construction, and conveying machinery and equipment	x	38 073
32500073	Industrial chemicals (chemical reagents, calcium chloride, etc.) excluding explosive materials	X	27 366
	and blasting accessories	X	59 114 68 189
33120059	Steel shapes and forms (excluding castings and forgings)	X	D
00970098	All other supplies	X X X	D 45 341
00973000	Undistributed minerals, purchased machinery, parts, attachments, and supplies used	X X X	49 718 14 051 D
	Fuels consumed by type		
21211003	Coal (bituminous, subbituminous, lignite, and anthracite) consumed as a fuel	D D	D D
32411017	Distillate (light) grade numbers 1, 2, 4, and light diesel fuel used as a fuel	D D	D D
32411019	Residual (heavy) grade numbers 5 and 6 and heavy diesel fuel used as a fuel	D D	D D D D
21111015	Gas (natural, manufactured, and mixed) used as a fuel	13.2 14.0	46 745 43 932
32411015	Gasoline used as a fuel mil gal, 2002.	.3 .7	344 805
00960018	Other fuels (liquefied petroleum gas, coke, wood, etc.)	X	548 582
00974000	Undistributed fuels 2002. 1997.	X	5 319 2 403
212325	Clay and ceramic and refractory minerals mining		
	Supplies consumed by type		
21232013	Crude clay, ceramic, and refractory minerals, received for preparation	X	D D
21232015 33300007	Crude clay, ceramic, and refractory minerals, mined and prepared at same establishment	4 344.4 12 353.7	X X
	installed at the operation	X	7 654 33 281
33300009	Parts and attachments for mining, mineral preparation, construction, and conveying machinery and equipment	X	18 654

[Includes quantity and cost of supplies and fuels consumed or put into production by establishments classified in the specified 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]

Natics and supply of tuel consumed Quentity		/ text]	otection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory	confidentiality pro
Supplies consumed by type — Con.	Delivered cost (\$1,000)	Quantity	Industry and supply or fuel consumed	supply or fuel
Industrial chamicals (chamicals (chamicals respents, calcium chloride, etc.) excluding explosive materials 1,000 c. 3,3120059 1,000 c. 3,000 c.			Clay and ceramic and refractory minerals mining—Con.	212325
and blasting accessories			Supplies consumed by type—Con.	
Tuels consumed by type 1997. X	14 605 16 136	X	and blasting accessories	32500073
Tuels consumed by hype 1997. X	D D	x	Steel shapes and forms (excluding castings and forgings)	33120059
Tuels consumed by hype 1997. X	30 379 44 106	\hat{x}	All other supplies	00970098
21211003 Coal (bituminous, subbituminous, lignite, and anthracite) consumed as a fuel 1,000 stons, 2002. 182,5 1937. 241,3 2411,3 2	100 818 18 403	X	Undistributed minerals, purchased machinery, parts, attachments, and supplies used	00973000
32411017 Distillate (light) grade numbers 1, 2, 4, and light diesel fuel used as a fuel 1,000 bbl 2002 2003 20111019 Residual (heavy) grade numbers 5 and 6 and heavy diesel fuel used as a fuel 1,000 bbl 2002 1,000 bbl 2			Fuels consumed by type	
Distillate (light) grade numbers 1, 2, 4, and light diesef fuel used as a fuel 1,000 bbl 2002. S 207 S	7 079 6 897			21211003
Residual (heavy) grade numbers 5 and 6 and heavy diesel fuel used as a fuel. 1,000 bbl., 2002. 568,6 688,6 6	5 439 4 696	S	Distillate (light) grade numbers 1, 2, 4, and light diesel fuel used as a fuel	32411017
2111015 Gas (natural, manufactured, and mixed) used as a fuel	D 1 333	D	Residual (heavy) grade numbers 5 and 6 and heavy diesel fuel used as a fuel	32411019
Sacistical used as a fuel	14 920 20 077	S	Gas (natural, manufactured, and mixed) used as a fuel bil cu ft2002.	21111015
1997. X 212391 Potash, soda, and borate mineral mining Supplies consumed by type 21239003 Crude minerals, received for preparation	1 785 427	S	Gasoline used as a fuel	32411015
212391 Potash, soda, and borate mineral mining Supplies consumed by type	D 1 064	X	Other fuels (liquefied petroleum gas, coke, wood, etc.)	00960018
Supplies consumed by type	9 803 4 194	x x	Undistributed fuels	00974000
21239003 Crude minerals, received for preparation mil metric tons (dry basis) .2002 1997			Potash, soda, and borate mineral mining	212391
21239005 Crude minerals, mined and prepared at same establishment 1997 D D D D D D D D D D D D D D D D D			Supplies consumed by type	
21239005 Crude minerals, mined and prepared at same establishment mil metric tons (dry basis) 2002 35.6	D	D		21239003
Purchased machinery installed, including mobile loading, transportation, and other equipment installed at the operation 1997. X X X X X X X X X	D D X X	D	Crude minerals, mined and prepared at same establishment	21239005
Parts and attachments for mining, mineral preparation, construction, and conveying machinery and equipment	36 047		Purchased machinery installed, including mobile loading, transportation, and other equipment installed at the operation	33300007
Industrial chemicals (chemical reagents, calcium chloride, etc.) excluding explosive materials and blasting accessories. 2002. X 1997. X	69 009 36 392 67 167	x	Parts and attachments for mining, mineral preparation, construction, and conveying machinery and equipment	33300009
Explosive materials (including ammonium nitrate) and blasting accessories 2002. X 33120059 Steel shapes and forms (excluding castings and forgings) 2002. X 1997. X 2007.	22 690 93 749	x	Industrial chemicals (chemical reagents, calcium chloride, etc.) excluding explosive materials and blasting accessories	32500073
1997	D			32592001
Fuels consumed by type 21211003 Coal (bituminous, subbituminous, lignite, and anthracite) consumed as a fuel 1,000 s tons .2002. 1997. 1 712.2 32411017 Distillate (light) grade numbers 1, 2, 4, and light diesel fuel used as a fuel 1,000 bbl .2002. 1997. D 21111015 Gas (natural, manufactured, and mixed) used as a fuel 5 bil cu ft .2002. S 32411015 Gasoline used as a fuel 97. 25.2 32411015 Gasoline used as a fuel 997. 3 00960018 Other fuels (liquefied petroleum gas, coke, wood, etc.) 1997. 3 00974000 Undistributed fuels	2 765 4 067	X	1997	
Fuels consumed by type 21211003 Coal (bituminous, subbituminous, lignite, and anthracite) consumed as a fuel 1,000 s tons .2002. 1997. 1 712.2 32411017 Distillate (light) grade numbers 1, 2, 4, and light diesel fuel used as a fuel 1,000 bbl .2002. 1997. D 21111015 Gas (natural, manufactured, and mixed) used as a fuel 5 bil cu ft .2002. S 32411015 Gasoline used as a fuel 97. 25.2 32411015 Gasoline used as a fuel 997. 3 00960018 Other fuels (liquefied petroleum gas, coke, wood, etc.) 1997. 3 00974000 Undistributed fuels	4 543 54 458 45 168	X	1997	00970098
Fuels consumed by type 21211003 Coal (bituminous, subbituminous, lignite, and anthracite) consumed as a fuel 1,000 s tons .2002. 1997. 1 712.2 32411017 Distillate (light) grade numbers 1, 2, 4, and light diesel fuel used as a fuel 1,000 bbl .2002. 1997. D 21111015 Gas (natural, manufactured, and mixed) used as a fuel 5 bil cu ft .2002. S 32411015 Gasoline used as a fuel 97. 25.2 32411015 Gasoline used as a fuel 997. 3 00960018 Other fuels (liquefied petroleum gas, coke, wood, etc.) 1997. 3 00974000 Undistributed fuels	45 168 24 698	X	1997	00973000
Coal (bituminous, subbituminous, lignite, and anthracite) consumed as a fuel	D	X	1997	
1997. 1712.2 2011 20				
1997 D 1997 D 1997 S 1997 S 1997 S 1997 25.2 S 1997 25.2 S 1997 25.2 S 1997 S S 1997 S 199	D 43 827		1997	21211003
1997. 25.2 32411015 Gasoline used as a fuel	D D	D D	1997	32411017
00960018 Other fuels (liquefied petroleum gas, coke, wood, etc.) 1997. X V 00974000 Undistributed fuels. 2002. X V	77 333 51 901			21111015
00960018 Other fuels (liquefied petroleum gas, coke, wood, etc.) .2002. X 1997. X 00974000 Undistributed fuels. .2002. X	D 322	D .3	1997	32411015
00974000 Undistributed fuels	D	X	1997	00960018
1997	D 11 422 D	X	Undistributed fuels	00974000
212392 Phosphate rock mining				212392
Supplies consumed by type				
21239003 Crude minerals, received for preparation	D -	_	1997	
21239005 Crude minerals, mined and prepared at same establishment	X		1997	
Purchased machinery installed, including mobile loading, transportation, and other equipment installed at the operation X 1997 X	46 479 98 240	X	installed at the operation	33300007
Parts and attachments for mining, mineral preparation, construction, and conveying machinery and equipment	93 063 104 313	x	Parts and attachments for mining, mineral preparation, construction, and conveying machinery and equipment	33300009
32500073 Industrial chemicals (chemical reagents, calcium chloride, etc.) excluding explosive materials and blasting accessories	54 388 33 257	x	Industrial chemicals (chemical reagents, calcium chloride, etc.) excluding explosive materials and blasting accessories	32500073
	D 207			32592001
32592001 Explosive materials (including ammonium nitrate) and blasting accessories	D	Ŷ	1997	
00970098 All other supplies	D 20 279	X	1997	
00973000 Undistributed minerals, purchased machinery, parts, attachments, and supplies used	49 898 611 325	X X X	Undistributed minerals, purchased machinery, parts, attachments, and supplies used	

[Includes quantity and cost of supplies and fuels consumed or put into production by establishments classified in the specified 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]

Delivered of (\$1,0	Quantity	Industry and supply or fuel consumed	NAICS and supply or fuel code
		Phosphate rock mining—Con.	212392
		Fuels consumed by type	
	D D	Coal (bituminous, subbituminous, lignite, and anthracite) consumed as a fuel	21211003
8 0 10 0	^q 231.3 315.1	Distillate (light) grade numbers 1, 2, 4, and light diesel fuel used as a fuel	32411017
2 3	D 108.6	Residual (heavy) grade numbers 5 and 6 and heavy diesel fuel used as a fuel	32411019
1 (S .7	Gas (natural, manufactured, and mixed) used as a fuel	21111015
1 5	D 1.4	Gasoline used as a fuel	32411015
2 8	X	Undistributed fuels	00974000
		Other chemical and fertilizer mineral mining	212393
		Supplies consumed by type	
1 9	S D	Crude minerals, received for preparation	21239003
	15.0 15.2	Crude minerals, mined and prepared at same establishment	21239005
26		Purchased machinery installed, including mobile loading, transportation, and other equipment installed at the operation	33300007
9 4	X	1997	2222222
26 2	X	Parts and attachments for mining, mineral preparation, construction, and conveying machinery and equipment	33300009
11 (Industrial chemicals (chemical reagents, calcium chloride, etc.) excluding explosive materials	32500073
2 7	X	and blasting accessories	
7 :	X	Explosive materials (including ammonium nitrate) and blasting accessories	32592001
3 9	X	Steel shapes and forms (excluding castings and forgings)	33120059
18 7	X	1997 All other supplies	00970098
16 4 10 7	x x x x x	Undistributed minerals, purchased machinery, parts, attachments, and supplies used	00973000
		Fuels consumed by type	
2 -	P56.2	Distillate (light) grade numbers 1, 2, 4, and light diesel fuel used as a fuel	32411017
	D D	Residual (heavy) grade numbers 5 and 6 and heavy diesel fuel used as a fuel	32411019
1.3	D 9.4	Gas (natural, manufactured, and mixed) used as a fuel	21111015
	D D	1997 Gasoline used as a fuel	32411015
	D X	Other fuels (liquefied petroleum gas, coke, wood, etc.)	00960018
2 (X X X	1997. Undistributed fuels. 2002. 1997.	00974000
		All other nonmetallic mineral mining	212399
		Supplies consumed by type	
13 (S .2	Crude minerals, received for preparation	21239003
3 -	6.9	Crude minerals, mined and prepared at same establishment	21239005
51 (10.4 X	Purchased machinery installed, including mobile loading, transportation, and other equipment installed at the operation	33300007
75 4	x	1997	0000000
14 2 19 (X	Parts and attachments for mining, mineral preparation, construction, and conveying machinery and equipment	33300009
12 ⁻ 4 6	X	Industrial chemicals (chemical reagents, calcium chloride, etc.) excluding explosive materials and blasting accessories	32500073
2		Explosive materials (including ammonium nitrate) and blasting accessories	32592001
1 4	X	1997 Steel shapes and forms (excluding castings and forgings)	33120059
36 5	X	1997 All other supplies	00970098
52 7 19 3 27 6	X X X X X X	Undistributed minerals, purchased machinery, parts, attachments, and supplies used	00973000
		Fuels consumed by type	
3	S D	Coal (bituminous, subbituminous, lignite, and anthracite) consumed as a fuel	21211003
5 4 6 -	S 174.1	Distillate (light) grade numbers 1, 2, 4, and light diesel fuel used as a fuel	32411017
1 (54.6	Residual (heavy) grade numbers 5 and 6 and heavy diesel fuel used as a fuel	32411019
18 G 10 7	P6.2	Gas (natural, manufactured, and mixed) used as a fuel	21111015
Ş	3.6 S	1997 Gasoline used as a fuel	32411015
1 2	1.1 X X X X	Other fuels (liquefied petroleum gas, coke, wood, etc.)	00960018
	Α	1997	

[Includes quantity and cost of supplies and fuels consumed or put into production by establishments classified in the specified 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	Industry and supply or fuel consumed	Quantity	Delivered cost (\$1,000)
213111	Drilling oil and gas wells		
	Supplies consumed by type		
33300007	Purchased machinery installed, including mobile loading, transportation, and other equipment installed at the operation	×	946 141
33300009	Parts and attachments for mining, mineral preparation, construction, and conveying machinery and equipment		1 920 176 209 366
32500075	Industrial chemicals (including acidizing materials), excluding drilling fluids	X	189 155 7 546
32592001	Explosive materials (including ammonium nitrate) and blasting accessories	X	7 498 259
32599803	Drilling fluids (drilling mud and drilling mud materials; mud thinners, thickeners, and purifiers)	X X X X X X	2 613 56 944 54 745
32419100	Lubricating oils and greases (including hydraulic oils)	X	25 743 28 330
32731001	Cement	X X X X X	23 669 22 868
33120059	Steel shapes and forms (excluding castings and forgings)	â	207 650 139 420
33300005	Drill bits and reamers	ŝ	64 019 80 074
33451900	Measuring and controlling instruments and devices (seismometers, surveying and plotting instruments, etc.)		168 133
00970098	1997 All other supplies	â	56 463 371 396
	1997	X X X X	219 423 211 383
00973000	Undistributed minerals, purchased machinery, parts, attachments, and supplies used	X	288 331
	Fuels consumed by type		
32411017	Distillate (light) grade numbers 1, 2, 4, and light diesel fuel used as a fuel	91 144.2 3 355.3	49 780 107 442
32411019	Residual (heavy) grade numbers 5 and 6 and heavy diesel fuel used as a fuel	S 1 954.1	7 278 51 921
21111015	Gas (natural, manufactured, and mixed) used as a fuel	S .6	313 1 184
32411015	Gasoline used as a fuel	S 26.0	12 855 26 348
00960018	Other fuels (liquefied petroleum gas, coke, wood, etc.)		9 543 2 410
00974000	Undistributed fuels	X X X	87 421 60 739
213112	Support activities for oil and gas operations		
	Supplies consumed by type		
33300007	Purchased machinery installed, including mobile loading, transportation, and other equipment installed at the operation	×	239 450
33300009	Parts and attachments for mining, mineral preparation, construction, and conveying machinery and equipment		391 680 139 845
32500075	Industrial chemicals (including acidizing materials), excluding drilling fluids	X	130 015 18 984
32592001	1997 Explosive materials (including ammonium nitrate) and blasting accessories	X	276 282 25 527
32599803	Drilling fluids (drilling mud and drilling mud materials; mud thinners, thickeners, and purifiers)	X X X X X	25 667 14 989 4 465
32419100	Lubricating oils and greases (including hydraulic oils)	x	10 228
32731001	1997 Cement	X	18 513 13 720
33120059	Steel shapes and forms (excluding castings and forgings)	X X X X X	158 002 58 187
33300005	Drill bits and reamers	X	85 157 2 916
33451900	Measuring and controlling instruments and devices (seismometers, surveying and plotting instruments, etc.)		1 977 4 040
00970098	1997 All other supplies	X	10 136 379 741
00973000	Undistributed minerals, purchased machinery, parts, attachments, and supplies used	X X X X	438 536 649 476 473 902
	Fuels consumed by type	^	473 302
32411017	Distillate (light) grade numbers 1, 2, 4, and light diesel fuel used as a fuel	s	31 017
32411019	Residual (heavy) grade numbers 5 and 6 and heavy diesel fuel used as a fuel	1 424.8 D	52 028 D
21111015	Gas (natural, manufactured, and mixed) used as a fuel bil cu ft2002.	1 032.1 D	24 203 D
32411015	1997 Gasoline used as a fuel mil gal . 2002.	1.4 S	2 662 63 468
00960018	Other fuels (liquefied petroleum gas, coke, wood, etc.)	37.6	59 115 18 991
	1997	â	8 954
00974000	Undistributed fuels 2002.	X X X	59 212 133 204

[Includes quantity and cost of supplies and fuels consumed or put into production by establishments classified in the specified 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]

NAICS and supply or fuel code	otection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory Industry and supply or fuel consumed	Quantity	Delivered cost (\$1,000)
213113	Support activities for coal mining—Con.		(* /***/
	Supplies consumed by type		
33300007	Purchased machinery installed, including mobile loading, transportation, and other equipment installed at the operation	X X	28 998
33300009	Parts and attachments for mining, mineral preparation, construction, and conveying machinery and equipment		16 282 43 864
32592005	1997 Ammonium nitrate	X	24 556 7 962
32592013	Explosive materials (excluding ammonium nitrate) and blasting accessories	X	3 789 11 084
33120059	Steel shapes and forms (excluding castings and forgings)	X	5 837 5 393
00970098	1997 All other supplies	X	4 759 70 784
00973000	Undistributed minerals, purchased machinery, parts, attachments, and supplies used	X X X X X X X X	19 235 6 651 45 724
	Fuels consumed by type		
21211003	Coal (bituminous, subbituminous, lignite, and anthracite) consumed as a fuel	D	D
32411017	Distillate (light) grade numbers 1, 2, 4, and light diesel fuel used as a fuel	D 166.4	D 5 583
32411019	Residual (heavy) grade numbers 5 and 6 and heavy diesel fuel used as a fuel	157.6 47.8	6 503 1 327
21111015	Gas (natural, manufactured, and mixed) used as a fuel		96 D
32411015	Gasoline used as a fuel	S	4 108 990
00960018	Other fuels (liquefied petroleum gas, coke, wood, etc.)	X X	804 D
00974000	1997 Undistributed fuels	S D S .9 X X X X	8 526 D
213114	Support activities for metal mining		
	Supplies consumed by type		
33300007	Purchased machinery installed, including mobile loading, transportation, and other equipment installed at the operation	X	6 898 11 514
33300009	Parts and attachments for mining, mineral preparation, construction, and conveying machinery and equipment		3 229 18 648
32592005	Ammonium nitrate	X	D D
32592013	Explosive materials (excluding ammonium nitrate) and blasting accessories	$\hat{\mathbf{x}}$	504 D
33120059	Steel shapes and forms (excluding castings and forgings)	$\hat{\mathbf{x}}$	D 6 963
00970098	All other supplies	$\hat{\mathbf{x}}$	41 615 D
00973000	Undistributed minerals, purchased machinery, parts, attachments, and supplies used	X X X X X X X X	28 628 19 175
	Fuels consumed by type		
32411017	Distillate (light) grade numbers 1, 2, 4, and light diesel fuel used as a fuel	S 113.9	658 3 988
32411019	Residual (heavy) grade numbers 5 and 6 and heavy diesel fuel used as a fuel	D	D _
21111015	Gas (natural, manufactured, and mixed) used as a fuel	Z D S	44 D
32411015	Gasoline used as a fuel	S 1.8	620 2 169
00960018	Other fuels (liquefied petroleum gas, coke, wood, etc.)	V	D D
00974000	Undistributed fuels	X X X	7 040 D
213115	Support activities for nonmetallic minerals (except fuels) mining Supplies consumed by type		
33300007	Purchased machinery installed, including mobile loading, transportation, and other equipment installed at the operation	X	7 343
33300009	Parts and attachments for mining, mineral preparation, construction, and conveying machinery and equipment	x	8 519 17 537
32592013	Explosive materials (excluding ammonium nitrate) and blasting accessories	XX	8 620 460
33120059	Steel shapes and forms (excluding castings and forgings)	X	2 199 2 020
00970098	1997. All other supplies	X X X X X	627 25 140
00973000	Undistributed minerals, purchased machinery, parts, attachments, and supplies used	X X X	5 793 82 025 18 970
	Fuels consumed by type		
21211003	Coal (bituminous, subbituminous, lignite, and anthracite) consumed as a fuel	D	D -
32411017	Distillate (light) grade numbers 1, 2, 4, and light diesel fuel used as a fuel	S 127.4	11 798 4 465
32411019	Residual (heavy) grade numbers 5 and 6 and heavy diesel fuel used as a fuel	D 33.0	D 972
21111015	Gas (natural, manufactured, and mixed) used as a fuel bil cu ft .: 2002	P.4 D	1 457 D

[Includes quantity and cost of supplies and fuels consumed or put into production by establishments classified in the specified 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]

NAICS and supply or fuel code	Industry and supply or fuel consumed	Quantity	Delivered cost (\$1,000)
213115	Support activities for nonmetallic minerals (except fuels) mining—Con.		
	Fuels consumed by type—Con.		
32411015	Gasoline used as a fuel	q.6	735 786
00960018	Other fuels (liquefied petroleum gas, coke, wood, etc.)	., X	287 287
00974000	Undistributed fuels	X X	16 970 4 339

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

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:

- 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.
- 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 that 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

Mining Appendix A A-1

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.

A–2 Appendix A Mining

Appendix B. NAICS Codes, Titles, and Descriptions

211111 CRUDE PETROLEUM AND NATURAL GAS EXTRACTION

This U.S. industry group comprises establishments primarily engaged in the following:

- the exploration, development, and/or the production of petroleum or natural gas from wells in which the hydrocarbons will initially flow or can be produced using normal pumping techniques or
- 2. the production of crude petroleum from surface shales or tar sands or from reservoirs in which the hydrocarbons are semisolids.

Establishments in this industry operate oil and gas wells on their own account or for others on a contract or fee basis.

211112 NATURAL GAS LIQUID EXTRACTION

This U.S. industry comprises establishments primarily engaged in the recovery of liquid hydrocarbons from oil and gas field gases. Establishments primarily engaged in sulfur recovery from natural gas are included in this industry.

212111 BITUMINOUS COAL AND LIGNITE SURFACE MINING

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

- 1. surface mining of bituminous coal and lignite;
- 2. developing bituminous coal and lignite surface mine sites;
- 3. surface mining and beneficiating (e.g., cleaning, washing, screening, and sizing coal) of bituminous coal: or
- 4. beneficiating (e.g., cleaning, washing, screening, and sizing coal), but not mining, bituminous coal.

212112 BITUMINOUS COAL UNDERGROUND MINING

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

- 1. underground mining of bituminous coal;
- 2. developing bituminous coal underground mine sites; and
- 3. underground mining and beneficiating of bituminous coal (e.g., cleaning, washing, screening, and sizing coal).

212113 ANTHRACITE MINING

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

- 1. mining anthracite coal;
- 2. developing anthracite coal mine sites; and
- 3. beneficiating anthracite coal (e.g., cleaning, washing, screening, and sizing coal).

Mining Appendix B B-1

212210 IRON ORE MINING

This U.S. industry comprises establishments primarily engaged in:

- 1. developing mine sites, mining, and/or beneficiating (i.e., preparing) iron ores and manganiferous ores valued chiefly for their iron content and/or
- producing sinter iron ore (except iron ore produced in iron and steel mills) and other iron ore agglomerates.

212221 GOLD ORE MINING

This U.S. industry comprises establishments primarily engaged in developing the mine site, mining, and/or beneficiating (i.e., preparing) ores valued chiefly for their gold content. Establishments primarily engaged in transformation of the gold into bullion or dore bar in combination with mining activities are included in this industry.

212222 SILVER ORE MINING

This U.S. industry comprises establishments primarily engaged in developing the mine site, mining, and/or beneficiating (i.e., preparing) ores valued chiefly for their silver content. Establishments primarily engaged in transformation of the silver into bullion or dore bar in combination with mining activities are included in this industry.

212231 LEAD ORE AND ZINC ORE MINING

This U.S. industry comprises establishments primarily engaged in developing the mine site, mining, and/or beneficiating (i.e., preparing) lead ores, zinc ores, or lead-zinc ores.

212234 COPPER ORE AND NICKEL ORE MINING

This U.S. industry comprises establishments primarily engaged in:

- 1. developing the mine site, mining, and/or beneficiating (i.e, preparing) copper and/or nickel ores; and
- 2. recovering copper concentrates by the precipitation, leaching, or electrowinning of copper ore

212291 URANIUM-RADIUM-VANADIUM ORE MINING

This U.S. industry comprises establishments primarily engaged in developing the mine site, mining, and/or beneficiating (i.e., preparing) uranium-radium-vanadium ores.

212299 ALL OTHER METAL ORE MINING

This U.S. industry comprises establishments primarily engaged in developing the mine site, mining, and/or beneficiating (i.e., preparing) metal ores (except iron and manganiferous ores valued for their iron content, gold ore, silver ore, copper, nickel, lead, zinc, and uranium-radium-vanadium ore).

212311 DIMENSION STONE MINING AND QUARRYING

This U.S. industry comprises establishments primarily engaged in developing the mine site and/or mining or quarrying dimension stone (i.e., rough blocks and/or slabs of stone).

212312 CRUSHED AND BROKEN LIMESTONE MINING AND QUARRYING

This U.S. industry comprises establishments primarily engaged in:

- 1. developing the mine site, mining or quarrying crushed and broken limestone (including related rocks, such as dolomite, cement rock, marl, travertine, and calcareous tufa); and
- 2. beneficiating limestone (e.g., grinding or pulverizing).

B–2 Appendix B Mining

212313 CRUSHED AND BROKEN GRANITE MINING AND OUARRYING

This U.S. industry comprises establishments primarily engaged in:

- 1. developing the mine site, and/or mining or quarrying crushed and broken granite (including related rocks, such as gneiss, syenite, and diorite); and
- 2. beneficiating granite (e.g., grinding or pulverizing).

212319 OTHER CRUSHED AND BROKEN STONE MINING AND QUARRYING

This U.S. industry comprises establishments primarily engaged in the following:

- 1. developing the mine site and/or mining or quarrying crushed and broken stone (except limestone and granite);
- 2. beneficiating (e.g., grinding and pulverizing) stone (except limestone and granite); and
- 3. mining or quarrying bituminous limestone and bituminous sandstone.

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.

212322 INDUSTRIAL SAND MINING

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

- 1. operating industrial grade sand pits;
- 2. dredging for industrial grade sand;
- 3. washing, screening, or otherwise preparing industrial grade sand.

212324 KAOLIN AND BALL CLAY MINING

This U.S. industry comprises establishments primarily engaged in:

- 1. developing the mine site and/or mining kaolin or ball clay (e.g., china clay, paper clay, and slip clay) and
- 2. beneficiating (i.e., preparing) kaolin or ball clay.

212325 CLAY AND CERAMIC AND REFRACTORY MINERALS MINING

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

- 1. mining clay (except kaolin and ball), ceramic, or refractory minerals;
- 2. developing the mine site for clay, ceramic, or refractory minerals; and
- 3. beneficiating (i.e., preparing) clay (except kaolin and ball), ceramic, or refractory minerals.

212391 POTASH, SODA, AND BORATE MINERAL MINING

This U.S. industry comprises establishments primarily engaged in developing the mine site, mining and/or milling, or otherwise beneficiating (i.e., preparing) natural potassium, sodium, or boron compounds. Drylake brine operations are included in this industry, as well as establishments engaged in producing the specified minerals from underground and open pit mines.

Mining Appendix B B-3

212392 PHOSPHATE ROCK MINING

This U.S. industry comprises establishments primarily engaged in developing the mine site, mining, milling, and/or drying or otherwise beneficiating (i.e., preparing) phosphate rock.

212393 OTHER CHEMICAL AND FERTILIZER MINERAL MINING

This U.S. industry comprises establishments primarily engaged in developing the mine site, mining, milling, and/or drying or otherwise beneficiating (i.e., preparing) chemical or fertilizer mineral raw materials (except potash, soda, boron, and phosphate rock).

212399 ALL OTHER NONMETALLIC MINERAL MINING

This U.S. industry comprises establishments primarily engaged in developing the mine site, mining and/or milling, or otherwise beneficiating (i.e., preparing) nonmetallic minerals (except stone, sand, gravel, clay, ceramic, refractory minerals, and chemical and fertilizer minerals).

213111 DRILLING OIL AND GAS WELLS

This U.S. industry comprises establishments primarily engaged in drilling oil and gas wells for others on a contract or fee basis. This industry includes contractors that specialize in spudding in, drilling in, redrilling, and directional drilling.

213112 SUPPORT ACTIVITIES FOR OIL AND GAS OPERATIONS

This U.S. industry comprises establishments primarily engaged in performing support activities on a contract or fee basis for oil and gas operations (except site preparation and related construction activities). Services included are exploration (except geophysical surveying and mapping); excavating slush pits and cellars; well surveying; running, cutting, and pulling casings, tubes, and rods; cementing wells; shooting wells; perforating well casings; acidizing and chemically treating wells; and cleaning out, bailing, and swabbing wells.

213113 SUPPORT ACTIVITIES FOR COAL MINING

This U.S. industry comprises establishments primarily engaged in providing support activities for coal mining (except site preparation and related construction activities) on a contract or fee basis. Exploration for coal is included in this industry. Exploration includes traditional prospecting methods, such as taking core samples and making geological observations at prospective sites.

213114 SUPPORT ACTIVITIES FOR METAL MINING

This U.S. industry comprises establishments primarily engaged in providing support activities (except site preparation and related construction activities) on a contract or fee basis for the mining and quarrying of metallic minerals and for the extraction of metal ores. Exploration for minerals is included in this industry. Exploration (except geophysical surveying and mapping services) includes traditional prospecting methods, such as taking core samples and making geological observations at prospective sites.

213115 SUPPORT ACTIVITIES FOR NONMETALLIC MINERALS (EXCEPT FUELS) MINING

This U.S. industry comprises establishments primarily engaged in providing support activities, on a fee or contract basis, for the mining and quarrying of nonmetallic minerals (except fuel) and for the extraction of nonmetallic minerals (except site preparation and related construction activities). Exploration for minerals is included in this industry. Exploration (except geophysical surveying and mapping services) includes traditional prospecting methods, such as taking core samples and making geological observations at prospective sites.

B–4 Appendix B Mining

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

Mining Appendix C C-1

directly assigned a six-digit NAICS code were excused from filing any report. For below cutoff 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.

C-2 Appendix C Mining

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;

Mining Appendix C C-3

- 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.

C-4 Appendix C Mining

Appendix D. Geographic Notes

Not applicable for this report.

Appendix E. Metropolitan and Micropolitan Statistical Areas

Not applicable for this report.

2002 Economic Census

U.S. Census Bureau, 2002 Economic Census