

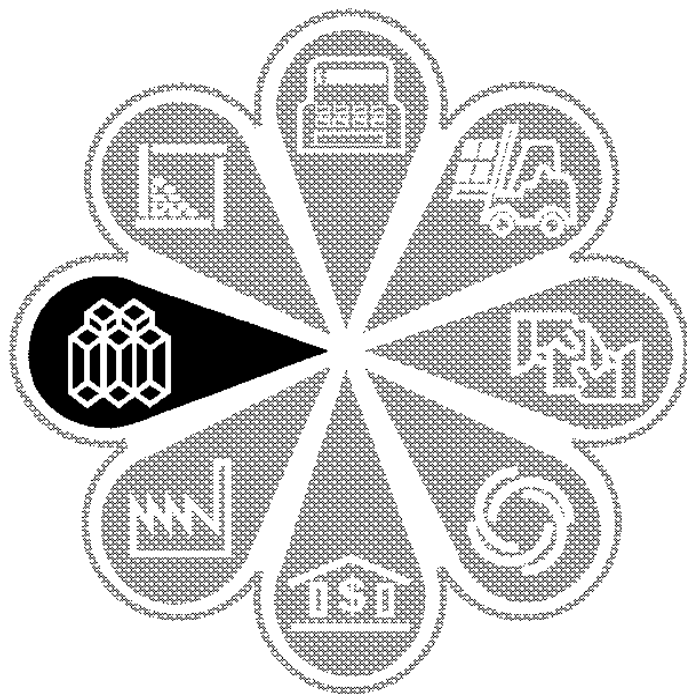
1992 Census of Mineral Industries

MIC92-A-3

GEOGRAPHIC AREA SERIES

East North Central States

Illinois, Indiana, Michigan, Ohio, Wisconsin



Acknowledgments

Many persons participated in the various activities of the 1992 Census of Mineral Industries. The overall planning and review of the census operations were performed by the Economic Census Staff of the Economic Planning and Coordination Division.

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If you have any questions concerning the statistics in this report, call 301-457-4680.

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Introduction to the Economic Census

PURPOSES AND USES OF THE ECONOMIC CENSUS

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

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

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

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

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

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

AUTHORITY AND SCOPE

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

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

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

AVAILABILITY OF THE DATA

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

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

WHAT'S NEW IN 1992

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

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

HISTORICAL INFORMATION

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

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

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

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

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

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

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

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

AVAILABILITY OF MORE FREQUENT ECONOMIC DATA

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

SOURCES FOR MORE INFORMATION

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

Census of Mineral Industries

This report, from the 1992 Census of Mineral Industries, is one of a series of nine geographic division reports; each provides statistics for individual States within a defined geographic area. Additional separate reports are issued for individual industries or groups of related industries and for special subjects, such as fuels and electric energy consumed.

The introduction to the *General Summary* discusses, at greater length, many of the subjects described in this introduction. For example, the *General Summary* text will discuss the economic significance of the mining sector, the relation of value added by mining to value added by manufacture, some of the changes in statistical concepts over the history of the census, and the valuation problems arising from intracompany transfers between mining establishments, manufacturing plants, and sales offices and sales branches of a company.

Scope of Census and Definition of Mineral Industries

The 1992 Census of Mineral Industries covers all establishments with one paid employee or more primarily engaged in mining as defined in the *1987 Standard Industrial Classification (SIC) Manual*¹. This is the system of industrial classification developed by experts on classification in Government and private industry under the guidance of the Office of Information and Regulatory Affairs, Office of Management and Budget. This classification system is used by Government agencies as well as many organizations outside the Government.

The SIC Manual defines mining in the broad sense to include the extraction of minerals occurring naturally: solids such as coal and ores, liquids such as crude petroleum, and gases such as natural gas. The term "mining" is used in the broad sense to include quarrying, well operation, milling (crushing, screening, washing, flotation, etc.), and other preparations needed to make minerals marketable. Exploration is included as is the development of mineral properties. Services performed on a

contract, fee, or other basis in the exploration and development of mineral properties are classified separately but within this division.

Mining operations are classified by industry on the basis of the principal mineral produced or, if there is no production, on the basis of the principal mineral for which exploration or development work is in progress. The recovery of material from culm banks, ore dumps, and other waste mineral piles is classified in the appropriate mining industry according to the mineral product recovered.

The crushing, grinding, or other treatment of certain earths, rocks, and other nonmetallic minerals not in conjunction with mining activities is not included in this division but is classified as manufacturing. Hauling and other transportation beyond the mine property and contract hauling (except out of open pits in conjunction with mining) also are excluded.

Mining operations carried on as secondary activities at manufacturing establishments (such as clay pits at clay products plants or sand and gravel operations at ready-mixed concrete plants) are not within the scope of this census. However, selected data (production workers' wages and hours; total cost of supplies, fuels, electric energy, and contract work; and quantity of production for mined products) on such mining activities have been obtained in the 1992 Census of Manufactures and are included in the mining reports. They are clearly specified wherever included.

Establishment Basis of Reporting

The census of mineral industries covers each mining establishment of firms with one paid employee or more operating in the United States. A company operating more than one establishment is required to file a separate report for each location. A mineral establishment is defined as a single physical location where mineral operations are conducted.

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

¹**Standard Industrial Classification Manual: 1987.** For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

to include information on receipts for services and production-worker wages and hours by State. These consolidated reports were then allocated to State establishments based on the data reported at the State level. The 1992 figures for establishments include the summation of operations for each State allocated from these nationwide reports.

Use of Administrative Records

From a mailout universe of about 28,500 mining establishments, approximately 11,000 small, single-establishment companies were not mailed a questionnaire. For these establishments, some employment, payroll, and receipts data were obtained from the administrative records of other agencies. Selection of the small establishment non-mail cases was done on an industry-by-industry basis, and a variable cutoff was used to determine those establishments for which administrative records were to be used in place of a census report. This information was then used in conjunction with industry averages and other information to estimate the statistics for administrative-record and nonresponse establishments. The first column in tables 2a and 5 provides an indication of the extent that these establishments account for the figures shown. The value of shipments and receipts and cost of supplies were generally not distributed among specific products and supplies for these establishments, but were included in the product and supply "not specified by kind" categories. Overall, establishments for which administrative-record data were used accounted for less than 2 percent of total value of shipments and receipts.

The industry classification codes included in the administrative-record files were used for those establishments excused from filing census forms. Generally, these codes were assigned on the basis of brief descriptions of the general activity of the establishment. Where the description was incomplete or where there were relatively fine lines of demarcation among industries or between mining and nonmining activities, the code assigned to an establishment could differ from that which would have been assigned on the basis of more complete product or activity information. Therefore, the total establishment count should be viewed as an approximate measure. The counts for establishments with 20 employees or more are far more reliable.

In the 1992 census, as in the 1987, 1982, 1977, and 1972 censuses, 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.

Auxiliaries

Statistics for employment and payroll for individual industries and industry groups also include employment and payroll figures for administrative offices, warehouses,

storage facilities, and other auxiliary establishments servicing mining establishments. As in previous censuses, respondents were asked to file separate reports (form ES-9200) for any separately operated auxiliary establishments. Classification of employment and payroll data at such auxiliary establishments was based on the mining establishments served.

Industry Classification of Establishments

Each of the establishments covered in the census was classified in 1 of 31 mineral industries in accordance with the industry definitions in the 1987 SIC Manual. An industry is generally defined as a group of establishments producing the same product or closely related group of products. 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. Application of these criteria led to the formulation of 31 mining industries, each assigned a four-digit code. The classification system also provides broader groups of industries, with 20 three-digit groups and 4 two-digit groups. Within industries, the system provides for seven-digit products and five-digit product classes. Products are considered primary to an industry if the first four digits of the product codes are the same as the industry code. Products whose first four code numbers differ from the industry code are called secondary products. To determine the industry classification of an establishment, the seven-digit products are grouped together according to the first four digits of the product code. The first four digits of the group of products with the largest value of production become the industry code for the establishment. (For mineral service industries, the classification is on the basis of receipts for services performed.)

In most industries, establishments making products falling into the same industry category use a variety of processes. Separate statistics are provided on the various types of operation. Whenever possible, separate figures are shown for establishments with mines only, mines with preparation plants, and preparation plants only. Separate figures are provided by type of mine (underground, open pit, and combination). Separate statistics also are provided on producing and nonproducing operations; an establishment being defined as nonproducing if no mineral products were shipped during the year.

Statistics usually are provided on the production of minerals mined and used in the same establishment for producing prepared minerals or used at the producing establishment for fuel.

Differences in the integration of production processes and types of operation should be considered when relating the general items (employment, payrolls, value added, etc.) to the product and material data.

CENSUS DISCLOSURE RULES

In accordance with Federal law governing census reports, no data are published that would disclose the data for an individual establishment or company. However, the number of establishments classified in a specific industry is not considered a disclosure, so this information may be released even though other information is withheld.

The disclosure analysis for the State statistics in the tables of this report is based on the total value of shipments and receipts and capital expenditures. 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 total capital expenditures and cost of supplies statistics are suppressed. However, the suppressed data are included in higher-level totals.

SPECIAL TABULATIONS

Special tabulations of data collected in the 1992 Census of Mineral Industries may be requested. The data will be in summary form and subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) as are the regular publications. Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact specifications on the type and format of the data to be provided, should be directed to the Chief, Manufacturing and Construction Division, Bureau of the Census, Washington, DC 20233-6901.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used in this publication:

–	Represents zero.
(D)	Withheld to avoid disclosing data for individual companies; data are included in higher level totals.
(NA)	Not available.
(NC)	Not comparable.
(S)	Withheld because estimate did not meet publication standards.
(X)	Not applicable.
(Z)	Less than half the unit shown.
n.e.c.	Not elsewhere classified.
n.s.k.	Not specified by kind.
r	Revised.
SIC	Standard Industrial Classification.

Other abbreviations, such as lb, gal, yd, and bbl, are used in the customary sense.

CONTACTS FOR DATA USERS

Contact	Subject area	Phone
Mineral industries 5-year industry and product statistics	Construction and Mineral Census Branch Manufacturing and Construction Division Bureau of the Census	301-457-4680
Mineral industries Coal and oil and gas production	National Energy Information Center (NEIC) Department of Energy	202-586-8800
To order any Census Bureau publication	Customer Services Bureau of the Census	301-457-4100
Import/ Export statistics	Foreign Trade Division Bureau of the Census	301-457-3041

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

[For explanation of terms, see appendixes]

Item	State historical	State by Industry	State by major group and type of operation	State summary	State by county and industry group	State by county and establishment size
Establishments:						
Total number	1	2a,2b	3	4	5	6
Employment size				4		6
Employment and payroll:						
Number of employees	1	2a	3	4	5	
Payroll	1	2a		4	5	
Production, development, and exploration—						
Workers	1	2a		4	5	
Hours	1	2a,2b		4	5	
Wages	1	2a,2b		4	5	
Supplemental labor costs				4		
Value added, cost of supplies, shipments, and inventories:						
Value added by mining	1	2a	3	4	5	
Cost of supplies	1	2a,2b		4	5	
Resales, cost and value				4		
Purchased fuels consumed				4		
Purchased electricity				4		
Cost of contract work				4		
Value of shipments and receipts	1	2a		4	5	
Inventories				4		
New and used capital expenditures, excluding land and rights:						
Total	1	2a		4	5	
Buildings and structures				4		
Machinery and equipment				4		
Mineral exploration and development ..				4		
Rental payments				4		
Expensed mineral exploration, development, land, and rights				4		

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Illinois

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Summary of Findings

The total value of shipments and receipts for the 858 establishments classified in mineral industries in Illinois was \$2.9 billion in 1992 or 2 percent of the Nation's total. This compares to \$3.0 billion in 1987. Value added by mining amounted to \$2.0 billion in 1992, and payroll in mining amounted to \$686.8 million.

All dollar figures included in this report are shown in current dollars for the years specified and have not been adjusted for inflation.

Mineral industries employment in Illinois was 17.5 thousand in 1992 or 3 percent of the Nation's total. This is a decrease of 22 percent from 1987. The coal mining industry led all other mineral industries in the State, accounting for approximately 57 percent of the State's mineral industries employment.

Table 1. Historical Statistics for the State: 1992 and Earlier Census Years

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

Year	Establishments during year		All employees		Production, development, and exploration workers			Value added by mining (million dollars)	Cost of supplies used, purchased machinery installed, etc. (million dollars)	Value of shipments and receipts (million dollars)	Capital expenditures (million dollars)
	Total (number)	With 20 employees or more (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)				
1992 Census	858	141	17.5	686.8	12.7	25.8	476.3	1 999.9	1 218.3	2 943.6	274.6
1987 Census	977	162	22.5	727.8	16.8	33.1	511.3	2 180.5	1 054.4	3 026.4	208.5
1982 Census	1 095	(NA)	31.3	845.1	23.1	46.2	596.4	2 543.9	1 576.6	3 607.8	512.7
1977 Census	879	187	25.8	451.6	20.9	40.9	349.1	1 162.7	666.2	1 535.1	293.8
1972 Census	864	178	20.5	236.9	16.7	34.9	186.3	545.7	267.9	729.6	84.0

Table 2a. Mineral Establishment Statistics by Industry for the State: 1992 and 1987

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

SIC code	Industry group and industry	1992											1987	
		Establishments during year		All employees		Production, development, and exploration workers			Value added by mining (million dollars)	Cost of supplies used, purchased machinery installed, etc. (million dollars)	Value of shipments and receipts (million dollars)	Capital expenditures (million dollars)	All employees ² (1,000)	Value added by mining (million dollars)
		Total (number)	With 20 employees or more (number)	Number ² (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)						
	All industries	858	141	17.5	686.8	12.7	25.8	476.3	1 999.9	1 218.3	2 943.6	274.6	22.5	2 180.5
12	Coal mining	80	53	9.9	440.7	7.8	15.2	334.1	1 289.5	895.4	2 005.1	179.8	13.6	1 448.9
122	Bituminous coal and lignite mining	74	53	9.9	440.0	7.8	15.1	333.4	1 287.4	894.5	2 002.3	179.7	13.6	1 448.7
1221	Bituminous coal and lignite surface mining	34	21	2.3	104.2	1.7	3.5	77.4	355.0	516.9	809.1	62.8	3.5	528.7
1222	Bituminous coal underground mining	40	32	7.6	335.8	6.1	11.6	256.0	932.4	377.6	1 193.2	116.9	10.1	920.1
13	Oil and gas extraction	522	25	H	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	4.5	387.3
131	Crude petroleum and natural gas	289	15	1.6	42.7	1.1	2.1	23.1	257.1	(D)	301.3	(D)	2.8	317.6
1311	Crude petroleum and natural gas	289	15	1.6	42.7	1.1	2.1	23.1	257.1	(D)	301.3	(D)	2.8	317.6
138	Oil and gas field services	233	10	G	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	G	(D)
1381	Drilling oil and gas wells	65	5	.3	7.0	.3	.6	5.8	18.5	(D)	25.2	(D)	.7	25.9
1389	Oil and gas field services, n.e.c.	147	4	F	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	.9	40.1
14	Nonmetallic minerals, except fuels	253	62	4.9	179.4	3.0	6.8	100.8	398.4	220.1	563.9	54.6	H	(D)
142	Crushed and broken stone, including riprap	116	27	2.1	73.8	1.5	3.5	52.4	208.5	106.3	287.1	27.7	2.2	174.9
1422	Crushed and broken limestone	110	27	2.1	73.4	1.5	3.5	52.2	207.3	104.8	284.5	27.7	2.2	174.3
144	Sand and gravel	122	29	2.0	74.0	1.2	2.6	40.3	162.1	85.9	223.8	24.1	1.6	148.7
1442	Construction sand and gravel	110	22	1.6	60.2	.9	2.0	31.9	115.3	62.1	157.1	20.2	1.0	97.3
1446	Industrial sand	12	7	.4	13.8	.3	.6	8.4	46.8	23.8	66.7	4.0	.5	51.4
145	Clay, ceramic, and refractory minerals	4	3	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	C	(D)
1459	Clay, ceramic, and refractory minerals, n.e.c.	4	3	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	C	(D)
147	Chemical and fertilizer mineral mining	6	3	E	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	E	(D)
1479	Chemical and fertilizer mineral mining, n.e.c.	6	3	E	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	E	(D)

¹Payroll and sales data for some small single-unit companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate the items shown for these small establishments. This technique was also used for other establishments whose reports were not received at time data were tabulated. The following symbols are shown where estimated data account for 10 percent or more of figures shown: E1—10 to 19 percent; E2—20 to 29 percent; E3—30 to 39 percent; E4—40 to 49 percent; E5—50 to 59 percent; E6—60 to 69 percent; E7—70 to 79 percent; E8—80 to 89 percent; E9—90 percent or more.

²General statistics for some industries are withheld to avoid disclosing data for individual companies. However, for such disclosures with 100 employees or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: 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. Statistics for industry groups shown include data for all component industries, regardless of whether data are shown for individual industries in group.

Table 2b. Mining Activities of Manufacturing Establishments With Associated Mines by Industry for the State: 1992

[Represents data reported for mining activities by establishments classified in manufacturing industries. Figures may be understated due to use of administrative records and short forms. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Industry group and industry	Establishments during year (number)	Production, development, and exploration workers		Cost of supplies used, etc. (million dollars)	Quantity of production (1,000 s tons)
		Hours (millions)	Wages (million dollars)		
Nonmetallic mineral mines included in manufactures	5	.1	.8	2.0	(X)

Note: Industries and industry groups with less than 50 thousand hours for employees engaged in production, development, and exploration work are not shown.

Table 3. Selected Statistics by Type of Operation and Major Group for the State: 1992

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

SIC code	Major group and item	All types of establishments	Producing establishments										Nonproducing establishments	
			Mines only					Mines with preparation plants						
			Total	Total	Underground mines	Open pit mines	Combination methods, well operations, and other methods	Total	Underground mines	Open pit mines	Combination and other methods	Separately operated preparation plants		Undistributed ¹
	ALL INDUSTRIES													
	Establishments ----- number..	858	841	295	9	12	274	202	20	173	9	7	337	17
	Employees----- 1,000..	17.5	(D)	(D)	1.5	(D)	(D)	10.2	5.9	4.2	.1	(D)	3.3	(D)
	Value added in mining----- mil dol..	1 999.9	(D)	(D)	162.1	(D)	(D)	1 357.6	802.5	545.9	9.2	(D)	106.9	(D)
10	METAL MINING													
	Establishments ----- number..	3	3	-	-	-	-	-	-	-	-	-	3	-
	Employees----- 1,000..	(D)	(D)	-	-	-	-	-	-	-	-	-	(D)	-
	Value added in mining----- mil dol..	(D)	(D)	-	-	-	-	-	-	-	-	-	(D)	-
12	COAL MINING													
	Establishments ----- number..	80	75	16	9	7	-	27	16	10	1	4	28	5
	Employees----- 1,000..	9.9	(D)	(D)	1.5	(D)	-	6.9	5.5	(D)	(D)	(D)	.7	(D)
	Value added in mining----- mil dol..	1 289.5	(D)	(D)	162.1	(D)	-	1 014.7	770.8	(D)	(D)	(D)	2.1	(D)
13	OIL AND GAS EXTRACTION													
	Establishments ----- number..	522	511	274	-	-	274	-	-	-	-	-	237	11
	Employees----- 1,000..	(D)	(D)	(D)	-	-	(D)	-	-	-	-	-	(D)	(D)
	Value added in mining----- mil dol..	(D)	(D)	(D)	-	-	(D)	-	-	-	-	-	(D)	(D)
14	NONMETALLIC MINERALS, EXCEPT FUELS													
	Establishments ----- number..	253	252	5	-	5	-	175	4	163	8	3	69	1
	Employees----- 1,000..	4.9	4.9	(Z)	-	(Z)	-	3.3	.4	(D)	(D)	(D)	(D)	-
	Value added in mining----- mil dol..	398.4	398.4	.6	-	.6	-	342.9	31.7	(D)	(D)	(D)	(D)	(Z)

¹Includes data for separately operated auxiliary establishments in addition to establishments that were not possible to classify based on the information available.

Table 4. Summary Statistics for the State: 1992

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

Item	1992	Item	1992
Establishments during year ----- number..	858	Cost of supplies ----- mil dol..	1 218.3
With 0 to 19 employees ----- number..	717	Supplies used, minerals received, and purchased machinery installed ----- mil dol..	927.7
With 20 to 99 employees ----- number..	100	Resales ----- mil dol..	20.9
With 100 employees or more ----- number..	41	Purchased fuels consumed ----- mil dol..	47.5
All employees:		Purchased electric energy:	
Average for year ----- 1,000..	17.5	Quantity ----- mil kWh..	1 853.6
Payroll for year ----- mil dol..	686.8	Cost ----- mil dol..	104.9
Production, development, and exploration workers:		Electric energy generated less sold ----- mil kWh..	(D)
Average for year ----- 1,000..	12.7	Contract work ----- mil dol..	117.4
March ----- 1,000..	12.7	Cost of purchased communication services ----- mil dol..	2.4
May ----- 1,000..	13.0	Value of shipments and receipts ----- mil dol..	2 943.6
August ----- 1,000..	12.9	Value of resales ----- mil dol..	23.7
November ----- 1,000..	12.4	Capital expenditures during year (except land and mineral rights) --- mil dol..	274.6
Hours ----- millions..	25.8	New capital expenditures during year ----- mil dol..	154.0
Wages ----- mil dol..	476.3	Buildings and other structures, except land ----- mil dol..	6.9
Supplemental labor costs not included in payroll ----- mil dol..	253.0	Machinery and equipment ----- mil dol..	147.1
Legally required expenditures, including Social Security contributions ----- mil dol..	94.4	Used capital expenditures during year ----- mil dol..	68.4
Payments for voluntary programs ----- mil dol..	158.7	Buildings and other structures, except land ----- mil dol..	1.9
Value added by mining ----- mil dol..	1 999.9	Machinery and equipment ----- mil dol..	66.5
Inventories, beginning of 1992 ----- mil dol..	219.5	Mineral exploration and development ¹ ----- mil dol..	52.3
Inventories, end of 1992 ----- mil dol..	218.2	Rental payments during year ----- mil dol..	27.4
		Buildings and other structures, except land ----- mil dol..	2.6
		Machinery and equipment ----- mil dol..	24.8
		Expensed mineral exploration, development, land, and rights ^{1 2} ----- mil dol..	258.8

¹Excludes data for mining services industries and natural gas liquids industries where data were not collected.

²Excludes data for mineral land and rights for the crude petroleum and natural gas industries where data were not collected.

Table 5. Industry Group Statistics for Counties: 1992

[Data for the crude petroleum and natural gas and mining services industries were not collected by county in 1992 and are not included with the data shown by county. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry group	E ¹	Establishments during year		All employees		Production, development, and exploration workers			Value added by mining (million dollars)	Cost of supplies used, purchased machinery installed, etc. (million dollars)	Value of shipments and receipts (million dollars)	Capital expenditures (million dollars)
			Total (number)	With 20 employees or more (number)	Number ² (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)				
	Illinois.....	-	858	141	17.5	686.8	12.7	25.8	476.3	1 999.9	1 218.3	2 943.6	274.6
14	Adams County.....	-	5	2	E	(D)	(D)	(D)	(D)	(D)	(D)	(D)	1.2
142	Nonmetallic minerals, except fuels.....	-	5	2	E	(D)	(D)	(D)	(D)	(D)	(D)	(D)	1.2
	Crushed and broken stone, including riprap ..	-	4	1	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Clinton County.....	-	2	1	E	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
12	Coal mining.....	-	1	1	E	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
122	Bituminous coal and lignite mining.....	-	1	1	E	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Cook County.....	-	20	9	G	(D)	(D)	(D)	(D)	(D)	(D)	(D)	7.3
14	Nonmetallic minerals, except fuels.....	-	18	8	G	(D)	(D)	(D)	(D)	(D)	(D)	(D)	7.3
142	Crushed and broken stone, including riprap ..	-	7	4	E	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
144	Sand and gravel.....	-	7	2	C	(D)	(Z)	(D)	(D)	(D)	(D)	(D)	(D)
147	Chemical and fertilizer mineral mining.....	-	2	1	C	(D)	(D)	-	-	3.2	(D)	(D)	3.7
	DuPage County.....	-	8	3	.2	7.1	.1	.2	4.5	19.0	(D)	25.4	(D)
14	Nonmetallic minerals, except fuels.....	-	8	3	.2	7.1	.1	.2	4.5	19.0	(D)	25.4	(D)
	Franklin County.....	-	9	8	G	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
12	Coal mining.....	-	9	8	G	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
122	Bituminous coal and lignite mining.....	-	9	8	G	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Fulton County.....	E1	5	1	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Gallatin County.....	-	7	6	F	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
12	Coal mining.....	-	6	5	F	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
122	Bituminous coal and lignite mining.....	-	6	5	F	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Hardin County.....	-	6	3	.2	6.8	.2	.4	5.0	18.5	7.8	24.9	1.4
14	Nonmetallic minerals, except fuels.....	-	6	3	.2	6.8	.2	.4	5.0	18.5	7.8	24.9	1.4
147	Chemical and fertilizer mineral mining.....	-	2	1	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Jefferson County.....	-	1	1	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
12	Coal mining.....	-	1	1	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
122	Bituminous coal and lignite mining.....	-	1	1	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Kane County.....	E1	15	4	.2	8.1	.1	.3	5.8	24.3	13.3	34.3	3.3
14	Nonmetallic minerals, except fuels.....	E1	15	4	.2	8.1	.1	.3	5.8	24.3	13.3	34.3	3.3
144	Sand and gravel.....	E1	11	3	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Lake County.....	-	2	2	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	-	2	2	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	La Salle County.....	-	17	6	.4	14.1	.3	.6	8.7	44.4	23.5	64.0	4.0
14	Nonmetallic minerals, except fuels.....	-	17	6	.4	14.1	.3	.6	8.7	44.4	23.5	64.0	4.0
144	Sand and gravel.....	-	13	6	E	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Logan County.....	-	4	1	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
12	Coal mining.....	-	2	1	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
122	Bituminous coal and lignite mining.....	-	2	1	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	McDonough County.....	-	5	1	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	McHenry County.....	E5	12	4	.2	8.4	.1	.3	7.0	24.6	9.7	32.1	2.3
14	Nonmetallic minerals, except fuels.....	E5	12	4	.2	8.4	.1	.3	7.0	24.6	9.7	32.1	2.3
144	Sand and gravel.....	E5	11	4	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	2.3
	Macoupin County.....	-	5	4	F	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
12	Coal mining.....	-	5	4	F	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
122	Bituminous coal and lignite mining.....	-	5	4	F	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Madison County.....	-	4	2	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	-	4	2	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
142	Crushed and broken stone, including riprap ..	-	3	2	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Perry County.....	-	6	4	E	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
12	Coal mining.....	-	6	4	E	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
122	Bituminous coal and lignite mining.....	-	6	4	E	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Pulaski County.....	-	2	1	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	-	2	1	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
145	Clay, ceramic, and refractory minerals.....	-	1	1	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Randolph County.....	-	10	7	G	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
12	Coal mining.....	-	8	7	G	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
122	Bituminous coal and lignite mining.....	-	8	7	G	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Rock Island County.....	-	9	1	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	-	9	1	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	St. Clair County.....	-	14	10	G	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
12	Coal mining.....	-	8	7	F	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
122	Bituminous coal and lignite mining.....	-	8	7	F	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels.....	-	6	3	.1	3.6	.1	.2	3.0	9.7	3.4	12.3	.7
142	Crushed and broken stone, including riprap ..	-	5	3	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Saline County.....	-	6	5	1.3	58.4	1.2	2.3	51.6	167.7	(D)	235.2	(D)
12	Coal mining.....	-	6	5	1.3	58.4	1.2	2.3	51.6	167.7	(D)	235.2	(D)
122	Bituminous coal and lignite mining.....	-	6	5	1.3	58.4	1.2	2.3	51.6	167.7	(D)	235.2	(D)

See footnotes at end of table.

Table 5. Industry Group Statistics for Counties: 1992—Con.

[Data for the crude petroleum and natural gas and mining services industries were not collected by county in 1992 and are not included with the data shown by county. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry group	E ¹	Establishments during year		All employees		Production, development, and exploration workers			Value added by mining (million dollars)	Cost of supplies used, purchased machinery installed, etc. (million dollars)	Value of shipments and receipts (million dollars)	Capital expenditures (million dollars)
			Total (number)	With 20 employees or more (number)	Number ² (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)				
	Illinois—Con.												
	Sangamon County	—	3	1	E	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
12	Coal mining	—	1	1	E	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
122	Bituminous coal and lignite mining	—	1	1	E	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Wabash County	—	2	2	F	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
12	Coal mining	—	1	1	F	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
122	Bituminous coal and lignite mining	—	1	1	F	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	White County	—	1	1	E	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
12	Coal mining	—	1	1	E	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
122	Bituminous coal and lignite mining	—	1	1	E	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Will County	—	14	4	.3	10.6	.1	.3	6.2	20.3	21.2	37.0	4.6
14	Nonmetallic minerals, except fuels	—	14	4	.3	10.6	.1	.3	6.2	20.3	21.2	37.0	4.6
144	Sand and gravel	—	8	3	.2	6.7	.1	.1	3.1	7.5	(D)	17.4	(D)
	Williamson County	—	8	2	E	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
12	Coal mining	—	8	2	E	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
122	Bituminous coal and lignite mining	—	8	2	E	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

¹Payroll and sales data for some small single-unit companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate the items shown for these small establishments. This technique was also used for other establishments whose reports were not received at time data were tabulated. The following symbols are shown where estimated data account for 10 percent or more of figures shown: E1—10 to 19 percent; E2—20 to 29 percent; E3—30 to 39 percent; E4—40 to 49 percent; E5—50 to 59 percent; E6—60 to 69 percent; E7—70 to 79 percent; E8—80 to 89 percent; E9—90 percent or more.

²General statistics for some industries are withheld to avoid disclosing data for individual companies. However, for such disclosures with 100 employees or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: 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. Statistics for industry groups shown include data for all component industries, regardless of whether data are shown for individual industries in group.

Table 6. Number of Mineral Establishments in Major Groups by Employment-Size Class for Counties: 1992

[Data for the crude petroleum and natural gas and mining services industries were not collected by county in 1992 and are not included with the data shown by county. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Geographic area and employment-size class ¹	All mineral industries	Metal mining (SIC 10)	Coal mining (SIC 12)	Oil and gas extraction (SIC 13)	Non-metallic minerals mining (SIC 14)	Geographic area and employment-size class ¹	All mineral industries	Metal mining (SIC 10)	Coal mining (SIC 12)	Oil and gas extraction (SIC 13)	Non-metallic minerals mining (SIC 14)
Illinois	858	3	80	522	253	Illinois—Con.					
0 to 4 employees	447	2	7	362	76	Clinton	2	—	1	—	1
5 to 9 employees	154	—	12	90	52	0 to 19 employees	1	—	—	—	1
10 to 19 employees	116	—	8	45	63	250 employees or more	1	—	—	—	—
20 to 49 employees	78	1	12	22	43	Coles	4	—	1	—	3
50 to 99 employees	22	—	10	2	10	0 to 19 employees	3	—	1	—	2
100 to 249 employees	25	—	16	1	8	20 to 99 employees	1	—	—	—	1
250 to 499 employees	14	—	13	—	1	Cook	20	—	2	—	18
500 to 999 employees	2	—	2	—	—	0 to 19 employees	11	—	1	—	10
Adams	5	—	—	—	5	20 to 99 employees	5	—	1	—	4
0 to 19 employees	3	—	—	—	3	100 to 249 employees	3	—	—	—	3
20 to 99 employees	1	—	—	—	1	250 employees or more	1	—	—	—	1
100 to 249 employees	1	—	—	—	1	Crawford	3	—	—	—	3
Alexander	1	—	—	—	1	0 to 19 employees	3	—	—	—	3
20 to 99 employees	1	—	—	—	1	DeKalb	3	—	—	—	3
Boone	1	—	—	—	1	0 to 19 employees	2	—	—	—	2
0 to 19 employees	1	—	—	—	1	20 to 99 employees	1	—	—	—	1
Bureau	3	—	—	—	3	Douglas	1	—	—	—	1
0 to 19 employees	3	—	—	—	3	0 to 19 employees	1	—	—	—	1
Carroll	2	—	—	—	2	DuPage	8	—	—	—	8
0 to 19 employees	2	—	—	—	2	0 to 19 employees	5	—	—	—	5
Champaign	2	—	—	—	2	20 to 99 employees	3	—	—	—	3
0 to 19 employees	1	—	—	—	1	Effingham	2	—	—	—	2
20 to 99 employees	1	—	—	—	1	0 to 19 employees	2	—	—	—	2
Clark	2	—	—	—	2	Fayette	1	—	—	—	1
0 to 19 employees	2	—	—	—	2	0 to 19 employees	1	—	—	—	1

See footnotes at end of table.

Table 6. Number of Mineral Establishments in Major Groups by Employment-Size Class for Counties: 1992—Con.

[Data for the crude petroleum and natural gas and mining services industries were not collected by county in 1992 and are not included with the data shown by county. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Geographic area and employment-size class ¹	All mineral industries	Metal mining (SIC 10)	Coal mining (SIC 12)	Oil and gas extraction (SIC 13)	Non-metallic minerals mining (SIC 14)	Geographic area and employment-size class ¹	All mineral industries	Metal mining (SIC 10)	Coal mining (SIC 12)	Oil and gas extraction (SIC 13)	Non-metallic minerals mining (SIC 14)
Illinois—Con.						Illinois—Con.					
Ford	1	—	—	—	1	Livingston	6	—	—	—	6
0 to 19 employees	1	—	—	—	1	0 to 19 employees	5	—	—	—	5
Franklin	9	—	9	—	—	20 to 99 employees	1	—	—	—	1
0 to 19 employees	1	—	1	—	—	Logan	4	—	2	—	2
20 to 99 employees	4	—	4	—	—	0 to 19 employees	3	—	1	—	2
250 employees or more	4	—	4	—	—	100 to 249 employees	1	—	1	—	—
Fulton	5	—	3	—	2	McDonough	5	—	1	—	4
0 to 19 employees	4	—	2	—	2	0 to 19 employees	4	—	—	—	4
20 to 99 employees	1	—	1	—	—	20 to 99 employees	1	—	1	—	—
Gallatin	7	—	6	—	1	McHenry	12	—	—	—	12
0 to 19 employees	1	—	1	—	—	0 to 19 employees	8	—	—	—	8
20 to 99 employees	4	—	3	—	1	20 to 99 employees	4	—	—	—	4
100 to 249 employees	1	—	1	—	—	Macon	1	—	—	—	1
250 employees or more	1	—	1	—	—	0 to 19 employees	1	—	—	—	1
Greene	3	—	—	—	3	Macoupin	5	—	5	—	—
0 to 19 employees	3	—	—	—	3	0 to 19 employees	1	—	1	—	—
Grundy	3	—	—	—	3	20 to 99 employees	1	—	—	—	—
0 to 19 employees	2	—	—	—	2	100 to 249 employees	2	—	2	—	—
20 to 99 employees	1	—	—	—	1	250 employees or more	1	—	1	—	—
Hamilton	1	—	1	—	—	Madison	4	—	—	—	4
0 to 19 employees	1	—	1	—	—	0 to 19 employees	2	—	—	—	2
Hancock	5	—	—	—	5	20 to 99 employees	2	—	—	—	2
0 to 19 employees	5	—	—	—	5	Marshall	1	—	—	—	1
Hardin	6	—	—	—	6	20 to 99 employees	1	—	—	—	1
0 to 19 employees	3	—	—	—	3	Mason	1	—	—	—	1
20 to 99 employees	2	—	—	—	2	0 to 19 employees	1	—	—	—	1
100 to 249 employees	1	—	—	—	1	Menard	1	—	—	—	1
Henderson	2	—	—	—	2	0 to 19 employees	1	—	—	—	1
0 to 19 employees	2	—	—	—	2	Monroe	3	—	1	—	2
Henry	2	—	—	—	2	0 to 19 employees	3	—	1	—	2
0 to 19 employees	2	—	—	—	2	Montgomery	2	—	—	—	2
Iroquois	2	—	—	—	2	0 to 19 employees	2	—	—	—	2
0 to 19 employees	2	—	—	—	2	Moultrie	1	—	—	—	1
Jackson	4	—	1	—	3	0 to 19 employees	1	—	—	—	1
0 to 19 employees	3	—	—	—	3	Ogle	8	—	—	—	8
20 to 99 employees	1	—	1	—	—	0 to 19 employees	6	—	—	—	6
Jefferson	1	—	1	—	—	20 to 99 employees	2	—	—	—	2
100 to 249 employees	1	—	1	—	—	Peoria	2	—	—	—	2
Jersey	1	—	—	—	1	0 to 19 employees	2	—	—	—	2
0 to 19 employees	1	—	—	—	1	Perry	6	—	6	—	—
Jo Daviess	2	—	—	—	2	0 to 19 employees	2	—	—	—	—
0 to 19 employees	2	—	—	—	2	20 to 99 employees	3	—	3	—	—
Johnson	2	—	—	—	2	250 employees or more	1	—	1	—	—
0 to 19 employees	1	—	—	—	1	Pike	7	—	—	—	7
20 to 99 employees	1	—	—	—	1	0 to 19 employees	6	—	—	—	6
Kane	15	—	—	—	15	20 to 99 employees	1	—	—	—	1
0 to 19 employees	11	—	—	—	11	Pulaski	2	—	—	—	2
20 to 99 employees	4	—	—	—	4	0 to 19 employees	1	—	—	—	1
Kankakee	4	—	—	—	4	100 to 249 employees	1	—	—	—	1
0 to 19 employees	3	—	—	—	3	Randolph	10	—	8	—	2
20 to 99 employees	1	—	—	—	1	0 to 19 employees	3	—	1	—	2
Kendall	3	—	—	—	3	20 to 99 employees	1	—	1	—	—
0 to 19 employees	2	—	—	—	2	100 to 249 employees	5	—	5	—	—
20 to 99 employees	1	—	—	—	1	250 employees or more	1	—	1	—	—
Knox	3	—	—	—	3	Rock Island	9	—	—	—	9
0 to 19 employees	3	—	—	—	3	0 to 19 employees	8	—	—	—	8
Lake	2	—	—	—	2	20 to 99 employees	1	—	—	—	1
20 to 99 employees	2	—	—	—	2	St. Clair	14	—	8	—	6
La Salle	17	—	—	—	17	0 to 19 employees	4	—	1	—	3
0 to 19 employees	11	—	—	—	11	20 to 99 employees	7	—	4	—	3
20 to 99 employees	4	—	—	—	4	100 to 249 employees	1	—	1	—	—
100 to 249 employees	2	—	—	—	2	250 employees or more	2	—	2	—	—
Lawrence	1	—	—	—	1	Saline	6	—	6	—	—
0 to 19 employees	1	—	—	—	1	0 to 19 employees	1	—	1	—	—
Lee	5	—	—	—	5	100 to 249 employees	4	—	4	—	—
0 to 19 employees	5	—	—	—	5	250 employees or more	1	—	1	—	—
						Sangamon	3	—	1	—	2
						0 to 19 employees	2	—	—	—	2
						250 employees or more	1	—	1	—	—

See footnotes at end of table.

Table 6. Number of Mineral Establishments in Major Groups by Employment-Size Class for Counties: 1992—Con.

[Data for the crude petroleum and natural gas and mining services industries were not collected by county in 1992 and are not included with the data shown by county. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Geographic area and employment-size class ¹	All mineral industries	Metal mining (SIC 10)	Coal mining (SIC 12)	Oil and gas extraction (SIC13)	Non-metallic minerals mining (SIC14)	Geographic area and employment-size class ¹	All mineral industries	Metal mining (SIC 10)	Coal mining (SIC 12)	Oil and gas extraction (SIC13)	Non-metallic minerals mining (SIC14)
Illinois—Con.						Illinois—Con.					
Schuyler -----	2	—	1	—	1	White -----	1	—	1	—	—
0 to 19 employees -----	1	—	—	—	1	250 employees or more -----	1	—	1	—	—
20 to 99 employees -----	1	—	1	—	—	Whiteside -----	1	—	—	—	1
Stephenson -----	1	—	—	—	1	0 to 19 employees -----	1	—	—	—	1
0 to 19 employees -----	1	—	—	—	1	Will -----	14	—	—	—	14
Tazewell -----	3	—	—	—	3	0 to 19 employees -----	10	—	—	—	10
0 to 19 employees -----	2	—	—	—	2	20 to 99 employees -----	4	—	—	—	4
20 to 99 employees -----	1	—	—	—	1	Williamson -----	8	—	8	—	—
Union -----	2	—	—	—	2	0 to 19 employees -----	6	—	6	—	—
0 to 19 employees -----	1	—	—	—	1	20 to 99 employees -----	1	—	1	—	—
20 to 99 employees -----	1	—	—	—	1	100 to 249 employees -----	1	—	1	—	—
Vermilion -----	4	—	—	—	4	Winnebago -----	6	—	—	—	6
0 to 19 employees -----	3	—	—	—	3	0 to 19 employees -----	6	—	—	—	6
20 to 99 employees -----	1	—	—	—	1	Woodford -----	1	—	—	—	1
Wabash -----	2	—	1	—	1	0 to 19 employees -----	1	—	—	—	1
20 to 99 employees -----	1	—	—	—	1	Undistributed -----	533	3	6	522	2
250 employees or more -----	1	—	1	—	—	0 to 19 employees -----	507	2	6	497	2
Warren -----	1	—	—	—	1	20 to 99 employees -----	25	1	—	24	—
20 to 99 employees -----	1	—	—	—	1	100 to 249 employees -----	1	—	—	1	—

¹Data for crude petroleum and natural gas and mining services industries are excluded from the individual counties and shown at the end of the table as "undistributed."

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Indiana

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Summary of Findings

The total value of shipments and receipts for the 426 establishments classified in mineral industries in Indiana was \$1.2 billion in 1992 or 1 percent of the Nation's total. This compares to \$1.1 billion in 1987. Value added by mining amounted to \$825.6 million in 1992, and payroll in mining amounted to \$258.2 million.

All dollar figures included in this report are shown in current dollars for the years specified and have not been adjusted for inflation.

Mineral industries employment in Indiana was 7.1 thousand in 1992 or 1 percent of the Nation's total. This is a decrease of 8 percent from 1987. The coal mining industry led all other mineral industries in the State, accounting for approximately 58 percent of the State's mineral industries employment.

Table 1. Historical Statistics for the State: 1992 and Earlier Census Years

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

Year	Establishments during year		All employees		Production, development, and exploration workers			Value added by mining (million dollars)	Cost of supplies used, purchased machinery installed, etc. (million dollars)	Value of shipments and receipts (million dollars)	Capital expenditures (million dollars)
	Total (number)	With 20 employees or more (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)				
1992 Census	426	82	7.1	258.2	5.3	11.5	178.7	825.6	465.6	1 190.0	101.1
1987 Census	472	78	7.7	241.5	5.7	12.1	170.2	815.4	394.5	1 118.2	91.7
1982 Census	563	(NA)	10.3	269.1	7.6	15.8	192.7	785.8	460.0	1 155.8	90.0
1977 Census	530	84	8.4	147.5	6.1	12.8	104.1	391.7	239.1	552.6	78.2
1972 Census	465	73	6.3	69.3	5.0	10.5	54.4	211.4	87.3	257.8	40.9

Table 2a. Mineral Establishment Statistics by Industry for the State: 1992 and 1987

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

SIC code	Industry group and industry	1992											1987		
		E ¹	Establishments during year		All employees		Production, development, and exploration workers			Value added by mining (million dollars)	Cost of supplies used, purchased machinery installed, etc. (million dollars)	Value of shipments and receipts (million dollars)	Capital expenditures (million dollars)	All employees ² (1,000)	Value added by mining (million dollars)
			Total (number)	With 20 employees or more (number)	Number ² (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)						
	All industries	E1	426	82	7.1	258.2	5.3	11.5	178.7	825.6	465.6	1 190.0	101.1	7.7	815.4
12	Coal mining	-	79	38	4.1	174.7	3.1	6.6	121.8	566.5	355.1	850.0	71.6	4.6	576.5
122	Bituminous coal and lignite mining	-	73	37	4.1	172.3	3.0	6.5	119.6	561.2	353.1	842.7	71.5	4.5	572.4
1221	Bituminous coal and lignite surface mining	-	71	35	H	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	4.4	557.5
1222	Bituminous coal underground mining	-	2	2	E	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	.1	14.9
13	Oil and gas extraction	E4	156	2	F	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	F	(D)
131	Crude petroleum and natural gas	E4	90	2	E	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	E	(D)
1311	Crude petroleum and natural gas	E4	90	2	E	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	E	(D)
138	Oil and gas field services	E4	65	-	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	E	(D)
1389	Oil and gas field services, n.e.c.	E2	34	-	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	C	(D)
14	Nonmetallic minerals, except fuels	E1	187	42	2.5	71.6	1.8	4.2	50.1	217.7	(D)	286.2	(D)	2.3	168.8
142	Crushed and broken stone, including riprap	-	78	23	1.3	38.0	1.0	2.3	26.3	134.2	50.0	172.0	12.2	1.1	83.8
1422	Crushed and broken limestone	-	67	19	1.1	33.9	.8	2.0	22.9	107.9	43.9	142.0	9.7	1.0	66.3
1429	Crushed and broken stone, n.e.c.	-	11	4	.2	4.1	.2	.3	3.4	26.3	6.1	30.0	2.5	C	(D)
144	Sand and gravel	E3	100	14	1.0	28.7	.7	1.6	20.2	77.7	37.9	103.7	11.9	1.0	77.7
1442	Construction sand and gravel	E2	94	10	.9	26.1	.7	1.5	18.6	70.0	(D)	92.8	(D)	F	(D)
1446	Industrial sand	E5	6	4	.1	2.7	.1	.1	1.6	7.7	(D)	10.9	(D)	(NA)	(NA)

¹Payroll and sales data for some small single-unit companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate the items shown for these small establishments. This technique was also used for other establishments whose reports were not received at time data were tabulated. The following symbols are shown where estimated data account for 10 percent or more of figures shown: E1—10 to 19 percent; E2—20 to 29 percent; E3—30 to 39 percent; E4—40 to 49 percent; E5—50 to 59 percent; E6—60 to 69 percent; E7—70 to 79 percent; E8—80 to 89 percent; E9—90 percent or more.

²General statistics for some industries are withheld to avoid disclosing data for individual companies. However, for such disclosures with 100 employees or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: 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. Statistics for industry groups shown include data for all component industries, regardless of whether data are shown for individual industries in group.

Table 2b. Mining Activities of Manufacturing Establishments With Associated Mines by Industry for the State: 1992

[Represents data reported for mining activities by establishments classified in manufacturing industries. Figures may be understated due to use of administrative records and short forms. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Industry group and industry	Establishments during year (number)	Production, development, and exploration workers		Cost of supplies used, etc. (million dollars)	Quantity of production (1,000 s tons)
		Hours (millions)	Wages (million dollars)		
Nonmetallic mineral mines included in manufactures	14	.6	8.0	10.4	(X)
Dimension stone	3	.3	4.5	5.1	68.3
Crushed and broken stone, including riprap	2	(D)	(D)	(D)	(D)
Crushed and broken limestone	2	(D)	(D)	(D)	(D)
Gypsum	2	(D)	(D)	(D)	(D)

Note: Industries and industry groups with less than 50 thousand hours for employees engaged in production, development, and exploration work are not shown.

Table 3. Selected Statistics by Type of Operation and Major Group for the State: 1992

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

SIC code	Major group and item	All types of establishments	Producing establishments											Nonproducing establishments	
			Mines only					Mines with preparation plants					Separately operated preparation plants		Undistrib ¹
			Total	Total	Underground mines	Open pit mines	Combination methods, well operations, and other methods	Total	Underground mines	Open pit mines	Combination and other methods				
	ALL INDUSTRIES														
	Establishments ----- number..	426	421	136	—	49	87	149	4	135	10	4	132	5	
	Employees----- 1,000..	7.1	(D)	1.2	—	(D)	(D)	4.7	(D)	4.1	(D)	(D)	1.2	(D)	
	Value added in mining----- mil dol..	825.6	(D)	144.5	—	(D)	(D)	638.1	(D)	556.0	(D)	(D)	43.7	(D)	
10	METAL MINING														
	Establishments ----- number..	4	4	—	—	—	—	—	—	—	—	—	4	—	
	Employees----- 1,000..	(D)	(D)	—	—	—	—	—	—	—	—	—	(D)	—	
	Value added in mining----- mil dol..	(D)	(D)	—	—	—	—	—	—	—	—	—	(D)	—	
12	COAL MINING														
	Establishments ----- number..	79	76	37	—	37	—	21	2	19	—	1	17	3	
	Employees----- 1,000..	4.1	4.1	.8	—	.8	—	2.8	(D)	(D)	—	(D)	(D)	(Z)	
	Value added in mining----- mil dol..	566.5	566.6	106.1	—	106.1	—	454.7	(D)	(D)	—	(D)	(D)	(Z)	
13	OIL AND GAS EXTRACTION														
	Establishments ----- number..	156	155	87	—	—	87	—	—	—	—	1	67	1	
	Employees----- 1,000..	(D)	(D)	(D)	—	—	(D)	—	—	—	—	(D)	(D)	—	
	Value added in mining----- mil dol..	(D)	(D)	(D)	—	—	(D)	—	—	—	—	(D)	(D)	—	
14	NONMETALLIC MINERALS, EXCEPT FUELS														
	Establishments ----- number..	187	186	12	—	12	—	128	2	116	10	2	44	1	
	Employees----- 1,000..	2.5	(D)	(D)	—	(D)	—	1.8	(D)	(D)	(D)	(D)	.4	(D)	
	Value added in mining----- mil dol..	217.7	(D)	(D)	—	(D)	—	183.5	(D)	(D)	(D)	(D)	28.7	(D)	

¹Includes data for separately operated auxiliary establishments in addition to establishments that were not possible to classify based on the information available.

Table 4. Summary Statistics for the State: 1992

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

Item	1992	Item	1992
Establishments during year ----- number..	426	Cost of supplies ----- mil dol..	465.6
With 0 to 19 employees ----- number..	344	Supplies used, minerals received, and purchased machinery installed ----- mil dol..	281.5
With 20 to 99 employees ----- number..	66	Resales ----- mil dol..	19.0
With 100 employees or more ----- number..	16	Purchased fuels consumed ----- mil dol..	40.0
All employees:		Purchased electric energy:	
Average for year ----- 1,000..	7.1	Quantity ----- mil kWh..	756.5
Payroll for year ----- mil dol..	258.2	Cost ----- mil dol..	35.0
Production, development, and exploration workers:		Electric energy generated less sold ----- mil kWh..	(D)
Average for year ----- 1,000..	5.3	Contract work ----- mil dol..	90.1
March ----- 1,000..	5.1	Cost of purchased communication services ----- mil dol..	1.1
May ----- 1,000..	5.5	Value of shipments and receipts ----- mil dol..	1 190.0
August ----- 1,000..	5.5	Value of resales ----- mil dol..	20.7
November ----- 1,000..	5.1	Capital expenditures during year (except land and mineral rights) --- mil dol..	101.1
Hours ----- millions..	11.5	New capital expenditures during year ----- mil dol..	50.0
Wages ----- mil dol..	178.7	Buildings and other structures, except land ----- mil dol..	7.6
Supplemental labor costs not included in payroll ----- mil dol..	72.1	Machinery and equipment ----- mil dol..	42.4
Legally required expenditures, including Social Security contributions ----- mil dol..	23.2	Used capital expenditures during year ----- mil dol..	41.1
Payments for voluntary programs ----- mil dol..	48.9	Buildings and other structures, except land ----- mil dol..	1.3
Value added by mining ----- mil dol..	825.6	Machinery and equipment ----- mil dol..	40.8
Inventories, beginning of 1992 ----- mil dol..	95.5	Mineral exploration and development ¹ ----- mil dol..	10.0
Inventories, end of 1992 ----- mil dol..	102.3	Rental payments during year ----- mil dol..	28.3
		Buildings and other structures, except land ----- mil dol..	1.2
		Machinery and equipment ----- mil dol..	27.1
		Expensed mineral exploration, development, land, and rights ^{1 2} ----- mil dol..	66.8

¹Excludes data for mining services industries and natural gas liquids industries where data were not collected.

²Excludes data for mineral land and rights for the crude petroleum and natural gas industries where data were not collected.

Table 5. Industry Group Statistics for Counties: 1992

[Data for the crude petroleum and natural gas and mining services industries were not collected by county in 1992 and are not included with the data shown by county. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry group	E ¹	Establishments during year		All employees		Production, development, and exploration workers			Value added by mining (million dollars)	Cost of supplies used, purchased machinery installed, etc. (million dollars)	Value of shipments and receipts (million dollars)	Capital expenditures (million dollars)
			Total (number)	With 20 employees or more (number)	Number ² (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)				
	Indiana	E1	426	82	7.1	258.2	5.3	11.5	178.7	825.6	465.6	1 190.0	101.1
	Allen County	-	9	2	.1	3.7	.1	.2	2.7	10.1	4.8	14.3	.5
14	Nonmetallic minerals, except fuels	-	9	2	.1	3.7	.1	.2	2.7	10.1	4.8	14.3	.5
	Clark County	-	5	4	.1	3.0	.1	.2	2.3	11.8	6.8	17.4	1.2
14	Nonmetallic minerals, except fuels	-	5	4	.1	3.0	.1	.2	2.3	11.8	6.8	17.4	1.2
142	Crushed and broken stone, including riprap ..	-	4	4	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Clay County	-	5	2	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
12	Coal mining	-	4	2	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
122	Bituminous coal and lignite mining	-	4	2	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Crawford County	-	4	3	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels	-	4	3	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
142	Crushed and broken stone, including riprap ..	-	4	3	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Daviess County	E1	10	6	.7	24.0	.6	1.4	20.1	99.7	46.6	135.4	10.9
12	Coal mining	E1	10	6	.7	24.0	.6	1.4	20.1	99.7	46.6	135.4	10.9
122	Bituminous coal and lignite mining	E1	10	6	.7	24.0	.6	1.4	20.1	99.7	46.6	135.4	10.9
	Dubois County	-	3	2	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
12	Coal mining	-	3	2	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
122	Bituminous coal and lignite mining	-	3	2	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Gibson County	E1	5	3	E	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
12	Coal mining	E1	5	3	E	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
122	Bituminous coal and lignite mining	E1	5	3	E	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Knox County	-	5	3	.1	4.8	.1	.3	3.8	10.1	(D)	18.7	(D)
12	Coal mining	-	4	3	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
122	Bituminous coal and lignite mining	-	4	3	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Marion County	-	16	6	.7	34.3	.4	1.2	17.2	72.7	28.6	93.3	7.9
12	Coal mining	-	7	2	E	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
122	Bituminous coal and lignite mining	-	7	2	E	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels	E1	7	4	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
142	Crushed and broken stone, including riprap ..	-	2	2	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
144	Sand and gravel	E2	5	2	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Monroe County	E1	9	6	.2	5.7	.2	.3	3.7	10.8	5.0	15.2	.7
14	Nonmetallic minerals, except fuels	E1	9	6	.2	5.7	.2	.3	3.7	10.8	5.0	15.2	.7
142	Crushed and broken stone, including riprap ..	E1	5	2	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Pike County	-	6	4	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
12	Coal mining	-	6	4	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
122	Bituminous coal and lignite mining	-	6	4	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Spencer County	E4	9	3	.1	4.5	.1	.3	4.2	21.2	7.5	26.4	2.4
12	Coal mining	E4	8	3	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	2.4
122	Bituminous coal and lignite mining	E4	8	3	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	2.4
	Sullivan County	-	4	2	E	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
12	Coal mining	-	4	2	E	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
122	Bituminous coal and lignite mining	-	4	2	E	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Vanderburgh County	-	9	4	.4	14.4	.2	.4	5.3	56.8	(D)	138.7	(D)
12	Coal mining	-	7	4	E	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
122	Bituminous coal and lignite mining	-	7	4	E	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Vermillion County	-	3	1	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
12	Coal mining	-	1	1	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
122	Bituminous coal and lignite mining	-	1	1	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Warrick County	-	10	4	F	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
12	Coal mining	-	8	4	F	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
122	Bituminous coal and lignite mining	-	8	4	F	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

¹Payroll and sales data for some small single-unit companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate the items shown for these small establishments. This technique was also used for other establishments whose reports were not received at time data were tabulated. The following symbols are shown where estimated data account for 10 percent or more of figures shown: E1—10 to 19 percent; E2—20 to 29 percent; E3—30 to 39 percent; E4—40 to 49 percent; E5—50 to 59 percent; E6—60 to 69 percent; E7—70 to 79 percent; E8—80 to 89 percent; E9—90 percent or more.

²General statistics for some industries are withheld to avoid disclosing data for individual companies. However, for such disclosures with 100 employees or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: 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. Statistics for industry groups shown include data for all component industries, regardless of whether data are shown for individual industries in group.

Table 6. Number of Mineral Establishments in Major Groups by Employment-Size Class for Counties: 1992

[Data for the crude petroleum and natural gas and mining services industries were not collected by county in 1992 and are not included with the data shown by county. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendices]

Geographic area and employment-size class ¹	All mineral industries	Metal mining (SIC 10)	Coal mining (SIC 12)	Oil and gas extraction (SIC13)	Non-metallic minerals mining (SIC14)	Geographic area and employment-size class ¹	All mineral industries	Metal mining (SIC 10)	Coal mining (SIC 12)	Oil and gas extraction (SIC13)	Non-metallic minerals mining (SIC14)
Indiana	426	4	79	156	187	Indiana—Con.					
0 to 4 employees	174	3	17	118	36	Hancock	3	—	—	—	3
5 to 9 employees	82	—	6	26	50	0 to 19 employees	2	—	—	—	2
10 to 19 employees	88	1	18	10	59	20 to 99 employees	1	—	—	—	1
20 to 49 employees	57	—	16	2	39	Harrison	6	—	—	—	6
50 to 99 employees	9	—	6	—	3	0 to 19 employees	5	—	—	—	5
100 to 249 employees	12	—	12	—	—	20 to 99 employees	1	—	—	—	1
250 to 499 employees	4	—	4	—	—	Hendricks	1	—	—	—	1
Adams	4	—	—	—	4	0 to 19 employees	1	—	—	—	1
0 to 19 employees	4	—	—	—	4	Henry	1	—	—	—	1
Allen	9	—	—	—	9	0 to 19 employees	1	—	—	—	1
0 to 19 employees	7	—	—	—	7	Howard	3	—	—	—	3
20 to 99 employees	2	—	—	—	2	0 to 19 employees	3	—	—	—	3
Bartholomew	1	—	—	—	1	Huntington	1	—	—	—	1
0 to 19 employees	1	—	—	—	1	20 to 99 employees	1	—	—	—	1
Blackford	2	—	—	—	2	Jackson	1	—	—	—	1
0 to 19 employees	2	—	—	—	2	0 to 19 employees	1	—	—	—	1
Boone	2	—	—	—	2	Jasper	3	—	—	—	3
0 to 19 employees	2	—	—	—	2	0 to 19 employees	3	—	—	—	3
Carroll	1	—	—	—	1	Jay	3	—	—	—	3
20 to 99 employees	1	—	—	—	1	0 to 19 employees	2	—	—	—	2
Cass	1	—	—	—	1	20 to 99 employees	1	—	—	—	1
20 to 99 employees	1	—	—	—	1	Jennings	3	—	—	—	3
Clark	5	—	—	—	5	0 to 19 employees	3	—	—	—	3
0 to 19 employees	1	—	—	—	1	Johnson	1	—	1	—	—
20 to 99 employees	4	—	—	—	4	0 to 19 employees	1	—	1	—	—
Clay	5	—	4	—	1	Knox	5	—	4	—	1
0 to 19 employees	3	—	2	—	1	0 to 19 employees	2	—	1	—	1
20 to 99 employees	1	—	1	—	—	20 to 99 employees	3	—	3	—	—
100 to 249 employees	1	—	1	—	—	Kosciusko	2	—	—	—	2
Crawford	4	—	—	—	4	0 to 19 employees	2	—	—	—	2
0 to 19 employees	1	—	—	—	1	Lagrange	1	—	—	—	1
20 to 99 employees	3	—	—	—	3	0 to 19 employees	1	—	—	—	1
Daviess	10	—	10	—	—	Lake	2	—	—	—	2
0 to 19 employees	4	—	4	—	—	0 to 19 employees	2	—	—	—	2
20 to 99 employees	2	—	2	—	—	La Porte	2	1	—	—	1
100 to 249 employees	4	—	4	—	—	0 to 19 employees	2	1	—	—	1
Decatur	2	—	—	—	2	Lawrence	4	—	—	—	4
0 to 19 employees	2	—	—	—	2	0 to 19 employees	3	—	—	—	3
De Kalb	4	—	—	—	4	20 to 99 employees	1	—	—	—	1
0 to 19 employees	4	—	—	—	4	Madison	2	—	—	—	2
Delaware	2	—	—	—	2	0 to 19 employees	2	—	—	—	2
0 to 19 employees	1	—	—	—	1	Marion	16	2	7	—	7
20 to 99 employees	1	—	—	—	1	0 to 19 employees	10	2	5	—	3
Dubois	3	—	3	—	—	20 to 99 employees	4	—	—	—	4
0 to 19 employees	1	—	1	—	—	100 to 249 employees	1	—	—	—	1
20 to 99 employees	2	—	2	—	—	250 employees or more	1	—	1	—	—
Elkhart	1	—	—	—	1	Marshall	1	—	—	—	1
20 to 99 employees	1	—	—	—	1	0 to 19 employees	1	—	—	—	1
Fayette	2	—	—	—	2	Miami	2	—	—	—	2
0 to 19 employees	2	—	—	—	2	0 to 19 employees	1	—	—	—	1
Fountain	1	—	—	—	1	20 to 99 employees	1	—	—	—	1
0 to 19 employees	1	—	—	—	1	Monroe	9	—	—	—	9
Franklin	3	—	—	—	3	0 to 19 employees	3	—	—	—	3
0 to 19 employees	3	—	—	—	3	20 to 99 employees	6	—	—	—	6
Gibson	5	—	5	—	—	Morgan	5	—	—	—	5
0 to 19 employees	2	—	2	—	—	0 to 19 employees	4	—	—	—	4
20 to 99 employees	2	—	2	—	—	20 to 99 employees	1	—	—	—	1
250 employees or more	1	—	1	—	—	Newton	1	—	—	—	1
Grant	3	—	—	—	3	20 to 99 employees	1	—	—	—	1
0 to 19 employees	2	—	—	—	2	Noble	2	—	—	—	2
20 to 99 employees	1	—	—	—	1	0 to 19 employees	2	—	—	—	2
Greene	3	—	2	—	1	Orange	2	—	—	—	2
0 to 19 employees	2	—	1	—	1	0 to 19 employees	1	—	—	—	1
20 to 99 employees	1	—	1	—	—	20 to 99 employees	1	—	—	—	1
Hamilton	8	—	—	—	8						
0 to 19 employees	7	—	—	—	7						
20 to 99 employees	1	—	—	—	1						

See footnotes at end of table.

Table 6. Number of Mineral Establishments in Major Groups by Employment-Size Class for Counties: 1992—Con.

[Data for the crude petroleum and natural gas and mining services industries were not collected by county in 1992 and are not included with the data shown by county. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Geographic area and employment-size class ¹	All mineral industries	Metal mining (SIC 10)	Coal mining (SIC 12)	Oil and gas extraction (SIC 13)	Non-metallic minerals mining (SIC 14)	Geographic area and employment-size class ¹	All mineral industries	Metal mining (SIC 10)	Coal mining (SIC 12)	Oil and gas extraction (SIC 13)	Non-metallic minerals mining (SIC 14)
Indiana—Con.						Indiana—Con.					
Owen	1	—	—	—	1	Sullivan	4	—	4	—	—
0 to 19 employees	1	—	—	—	1	0 to 19 employees	2	—	2	—	—
Pike	6	—	6	—	—	100 to 249 employees	1	—	1	—	—
0 to 19 employees	2	—	2	—	—	250 employees or more	1	—	1	—	—
20 to 99 employees	3	—	3	—	—	Switzerland	1	—	—	—	1
100 to 249 employees	1	—	1	—	—	20 to 99 employees	1	—	—	—	1
Porter	4	—	—	—	4	Tippecanoe	7	—	—	—	7
0 to 19 employees	1	—	—	—	1	0 to 19 employees	6	—	—	—	6
20 to 99 employees	3	—	—	—	3	20 to 99 employees	1	—	—	—	1
Posey	1	—	—	—	1	Vanderburgh	9	—	7	—	2
0 to 19 employees	1	—	—	—	1	0 to 19 employees	5	—	3	—	2
Pulaski	3	—	—	—	3	20 to 99 employees	3	—	3	—	—
0 to 19 employees	3	—	—	—	3	100 to 249 employees	1	—	1	—	—
Putnam	7	—	—	—	7	Vermillion	3	—	1	—	2
0 to 19 employees	3	—	—	—	3	0 to 19 employees	2	—	—	—	2
Ripley	2	—	—	—	2	100 to 249 employees	1	—	1	—	—
0 to 19 employees	2	—	—	—	2	Vigo	7	—	3	—	4
Rush	1	—	—	—	1	0 to 19 employees	6	—	3	—	3
0 to 19 employees	1	—	—	—	1	20 to 99 employees	1	—	—	—	1
St. Joseph	3	—	—	—	3	Warren	2	—	—	—	2
0 to 19 employees	3	—	—	—	3	0 to 19 employees	2	—	—	—	2
Scott	1	—	—	—	1	Warrick	10	—	8	1	1
0 to 19 employees	1	—	—	—	1	0 to 19 employees	6	—	4	1	1
Shelby	6	—	—	—	6	20 to 99 employees	1	—	1	—	—
0 to 19 employees	5	—	—	—	5	100 to 249 employees	2	—	2	—	—
20 to 99 employees	1	—	—	—	1	250 employees or more	1	—	1	—	—
Spencer	9	—	8	—	1	Washington	2	—	—	—	2
0 to 19 employees	6	—	5	—	1	0 to 19 employees	2	—	—	—	2
20 to 99 employees	3	—	3	—	—	Wayne	4	—	—	—	4
Steuben	2	—	—	—	2	0 to 19 employees	4	—	—	—	4
0 to 19 employees	1	—	—	—	1	Wells	3	—	—	—	3
20 to 99 employees	1	—	—	—	1	0 to 19 employees	3	—	—	—	3
Undistributed	164	1	6	155	2	White	1	—	—	—	1
0 to 19 employees	161	1	5	153	2	0 to 19 employees	1	—	—	—	1
20 to 99 employees	3	—	1	2	—	Undistributed	164	1	6	155	2

¹Data for crude petroleum and natural gas and mining services industries are excluded from the individual counties and shown at the end of the table as "undistributed."

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-- Not applicable for this report.

Summary of Findings

The total value of shipments and receipts for the 531 establishments classified in mineral industries in Michigan was \$2.5 billion in 1992 or 2 percent of the Nation's total. This compares to \$2.4 billion in 1987. Value added by mining amounted to \$1.7 billion in 1992, and payroll in mining amounted to \$289.7 million.

All dollar figures included in this report are shown in current dollars for the years specified and have not been adjusted for inflation.

Mineral industries employment in Michigan was 8.7 thousand in 1992 or 1 percent of the Nation's total. This is a decrease of 11 percent from 1987. The oil and gas extraction industry led all other mineral industries in the State, accounting for approximately 40 percent of the State's mineral industries employment.

Table 1. Historical Statistics for the State: 1992 and Earlier Census Years

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

Year	Establishments during year		All employees		Production, development, and exploration workers			Value added by mining (million dollars)	Cost of supplies used, purchased machinery installed, etc. (million dollars)	Value of shipments and receipts (million dollars)	Capital expenditures (million dollars)
	Total (number)	With 20 employees or more (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)				
1992 Census	531	80	8.7	289.7	6.8	14.5	213.5	1 675.9	1 041.7	2 523.5	194.2
1987 Census	543	86	9.8	273.0	7.5	15.8	191.8	1 499.6	1 097.4	2 425.9	171.1
1982 Census	539	(NA)	10.7	276.7	7.2	14.7	181.7	1 934.7	980.8	2 659.4	256.1
1977 Census	499	87	11.3	203.3	8.6	19.5	148.2	938.9	764.6	1 344.3	359.2
1972 Census	409	69	11.4	119.9	9.2	18.9	91.9	306.3	229.3	467.3	68.3

Table 2a. Mineral Establishment Statistics by Industry for the State: 1992 and 1987

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

SIC code	Industry group and industry	1992											1987		
		Establishments during year		All employees		Production, development, and exploration workers			Value added by mining (million dollars)	Cost of supplies used, purchased machinery installed, etc. (million dollars)	Value of shipments and receipts (million dollars)	Capital expenditures (million dollars)	All employees ² (1,000)	Value added by mining (million dollars)	
		E ¹	Total (number)	With 20 employees or more (number)	Number ² (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)							Wages (million dollars)
	All industries	-	531	80	8.7	289.7	6.8	14.5	213.5	1 675.9	1 041.7	2 523.5	194.2	9.8	1 499.6
10	Metal mining	-	20	7	H	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	H	(D)
101	Iron ores	-	8	5	G	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	G	(D)
1011	Iron ores	-	8	5	G	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	G	(D)
102	Copper ores	-	3	1	F	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	F	(D)
1021	Copper ores	-	3	1	F	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	F	(D)
13	Oil and gas extraction	-	330	49	3.5	110.5	2.5	5.2	71.0	1 102.2	730.2	1 670.7	161.6	4.1	981.4
131	Crude petroleum and natural gas	-	129	20	1.4	52.8	.8	1.5	26.7	927.7	186.7	966.5	147.9	1.4	787.6
1311	Crude petroleum and natural gas	-	129	20	1.4	52.8	.8	1.5	26.7	927.7	186.7	966.5	147.9	1.4	787.6
138	Oil and gas field services	E2	190	28	G	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	2.6	137.7
1381	Drilling oil and gas wells	E2	50	9	F	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	.8	49.0
1382	Oil and gas field exploration services	E6	33	2	.1	3.9	.1	.2	2.4	8.4	3.7	11.2	1.0	.6	20.0
1389	Oil and gas field services, n.e.c.	E1	107	17	1.3	36.6	1.0	2.2	27.4	104.1	(D)	131.9	(D)	1.2	68.6
14	Nonmetallic minerals, except fuels	-	181	24	G	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	H	(D)
142	Crushed and broken stone, including riprap	-	23	6	F	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	4.1	.9
1422	Crushed and broken limestone	-	16	6	F	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	.9	65.4
144	Sand and gravel	E1	143	13	G	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	14.4	1.3
1442	Construction sand and gravel	E1	133	10	1.1	31.9	.8	1.9	23.0	85.0	(D)	115.7	(D)	1.0	89.9
1446	Industrial sand	-	10	3	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	.2	13.7
149	Miscellaneous nonmetallic minerals, except fuels	-	9	5	.2	4.4	.2	.4	3.7	15.4	(D)	20.2	(D)	E	(D)
1499	Miscellaneous nonmetallic minerals, except fuels	-	9	5	.2	4.4	.2	.4	3.7	15.4	(D)	20.2	(D)	E	(D)

¹Payroll and sales data for some small single-unit companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate the items shown for these small establishments. This technique was also used for other establishments whose reports were not received at time data were tabulated. The following symbols are shown where estimated data account for 10 percent or more of figures shown: E1—10 to 19 percent; E2—20 to 29 percent; E3—30 to 39 percent; E4—40 to 49 percent; E5—50 to 59 percent; E6—60 to 69 percent; E7—70 to 79 percent; E8—80 to 89 percent; E9—90 percent or more.

²General statistics for some industries are withheld to avoid disclosing data for individual companies. However, for such disclosures with 100 employees or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: 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. Statistics for industry groups shown include data for all component industries, regardless of whether data are shown for individual industries in group.

Table 2b. Mining Activities of Manufacturing Establishments With Associated Mines by Industry for the State: 1992

[Represents data reported for mining activities by establishments classified in manufacturing industries. Figures may be understated due to use of administrative records and short forms. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Industry group and industry	Establishments during year (number)	Production, development, and exploration workers		Cost of supplies used, etc. (million dollars)	Quantity of production (1,000 s tons)
		Hours (millions)	Wages (million dollars)		
Nonmetallic mineral mines included in manufactures	11	.1	1.7	3.4	(X)
Sand and gravel	7	.1	.7	1.0	1 517.0

Note: Industries and industry groups with less than 50 thousand hours for employees engaged in production, development, and exploration work are not shown.

Table 3. Selected Statistics by Type of Operation and Major Group for the State: 1992

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

SIC code	Major group and item	All types of establishments	Producing establishments										Nonproducing establishments	
			Mines only					Mines with preparation plants						
			Total	Total	Underground mines	Open pit mines	Combination methods, well operations, and other methods	Total	Underground mines	Open pit mines	Combination and other methods	Separately operated preparation plants		Undistributed ¹
	ALL INDUSTRIES													
	Establishments ----- number..	531	525	134	—	12	122	87	1	85	1	11	293	6
	Employees----- 1,000..	8.7	(D)	1.2	—	(Z)	1.2	4.6	(D)	(D)	(D)	(D)	(D)	(D)
	Value added in mining----- mil dol..	1 675.9	(D)	931.4	—	3.8	927.7	537.6	(D)	(D)	(D)	(D)	(D)	(D)
10	METAL MINING													
	Establishments ----- number..	20	19	5	—	5	—	4	1	3	—	—	10	1
	Employees----- 1,000..	(D)	(D)	(D)	—	(D)	—	(D)	(D)	(D)	—	—	(D)	(D)
	Value added in mining----- mil dol..	(D)	(D)	(D)	—	(D)	—	(D)	(D)	(D)	—	—	(D)	(D)
13	OIL AND GAS EXTRACTION													
	Establishments ----- number..	330	327	122	—	—	122	—	—	—	—	11	194	3
	Employees----- 1,000..	3.5	3.5	1.2	—	—	1.2	—	—	—	—	(D)	(D)	—
	Value added in mining----- mil dol..	1 102.2	1 102.2	927.7	—	—	927.7	—	—	—	—	(D)	(D)	—
14	NONMETALLIC MINERALS, EXCEPT FUELS													
	Establishments ----- number..	181	179	7	—	7	—	83	—	82	1	—	89	2
	Employees----- 1,000..	(D)	(D)	(D)	—	(D)	—	(D)	—	(D)	(D)	—	(D)	(D)
	Value added in mining----- mil dol..	(D)	(D)	(D)	—	(D)	—	(D)	—	(D)	(D)	—	(D)	(D)

¹Includes data for separately operated auxiliary establishments in addition to establishments that were not possible to classify based on the information available.

Table 4. Summary Statistics for the State: 1992

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

Item	1992	Item	1992
Establishments during year ----- number..	531	Cost of supplies ----- mil dol..	1 041.7
With 0 to 19 employees ----- number..	451	Supplies used, minerals received, and purchased machinery installed ----- mil dol..	770.1
With 20 to 99 employees ----- number..	69	Resales ----- mil dol..	3.2
With 100 employees or more ----- number..	11	Purchased fuels consumed ----- mil dol..	57.1
All employees:		Purchased electric energy:	
Average for year ----- 1,000..	8.7	Quantity ----- mil kWh..	2 654.7
Payroll for year ----- mil dol..	289.7	Cost ----- mil dol..	110.7
Production, development, and exploration workers:		Electric energy generated less sold ----- mil kWh..	(D)
Average for year ----- 1,000..	6.8	Contract work ----- mil dol..	100.6
March ----- 1,000..	6.5	Cost of purchased communication services ----- mil dol..	2.0
May ----- 1,000..	6.9	Value of shipments and receipts ----- mil dol..	2 523.5
August ----- 1,000..	6.9	Value of resales ----- mil dol..	3.4
November ----- 1,000..	6.7	Capital expenditures during year (except land and mineral rights) --- mil dol..	194.2
Hours ----- millions..	14.5	New capital expenditures during year ----- mil dol..	78.0
Wages ----- mil dol..	213.5	Buildings and other structures, except land ----- mil dol..	3.2
Supplemental labor costs not included in payroll ----- mil dol..	86.2	Machinery and equipment ----- mil dol..	74.8
Legally required expenditures, including Social Security contributions ----- mil dol..	36.3	Used capital expenditures during year ----- mil dol..	9.6
Payments for voluntary programs ----- mil dol..	49.9	Buildings and other structures, except land ----- mil dol..	.7
Value added by mining ----- mil dol..	1 675.9	Machinery and equipment ----- mil dol..	8.9
Inventories, beginning of 1992 ----- mil dol..	152.4	Mineral exploration and development ¹ ----- mil dol..	106.6
Inventories, end of 1992 ----- mil dol..	152.8	Rental payments during year ----- mil dol..	16.6
		Buildings and other structures, except land ----- mil dol..	2.9
		Machinery and equipment ----- mil dol..	13.7
		Expensed mineral exploration, development, land, and rights ^{1 2} ----- mil dol..	64.7

¹Excludes data for mining services industries and natural gas liquids industries where data were not collected.

²Excludes data for mineral land and rights for the crude petroleum and natural gas industries where data were not collected.

Table 5. Industry Group Statistics for Counties: 1992

[Data for the crude petroleum and natural gas and mining services industries were not collected by county in 1992 and are not included with the data shown by county. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry group	E ¹	Establishments during year		All employees		Production, development, and exploration workers			Value added by mining (million dollars)	Cost of supplies used, purchased machinery installed, etc. (million dollars)	Value of shipments and receipts (million dollars)	Capital expenditures (million dollars)
			Total (number)	With 20 employees or more (number)	Number ² (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)				
	Michigan	-	531	80	8.7	289.7	6.8	14.5	213.5	1 675.9	1 041.7	2 523.5	194.2
	Alpena County	-	3	1	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels	-	3	1	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
142	Crushed and broken stone, including riprap ..	-	2	1	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Iosco County	-	4	3	.1	3.4	.1	.3	2.9	13.4	4.0	15.4	1.9
14	Nonmetallic minerals, except fuels	-	4	3	.1	3.4	.1	.3	2.9	13.4	4.0	15.4	1.9
149	Miscellaneous nonmetallic minerals, except fuels	-	3	2	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Mackinac County	-	3	1	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels	-	3	1	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
142	Crushed and broken stone, including riprap ..	-	1	1	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Marquette County	-	10	5	G	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
10	Metal mining	-	10	5	G	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
101	Iron ores	-	8	5	G	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Monroe County	E2	7	3	.2	4.9	.2	.4	3.9	19.2	(D)	24.2	(D)
14	Nonmetallic minerals, except fuels	E2	7	3	.2	4.9	.2	.4	3.9	19.2	(D)	24.2	(D)
144	Sand and gravel	E7	3	1	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Oakland County	-	23	3	.2	7.4	.2	.4	6.0	22.2	11.6	31.6	2.1
14	Nonmetallic minerals, except fuels	-	22	3	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
144	Sand and gravel	-	21	3	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Ontonagon County	-	2	1	F	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
10	Metal mining	-	2	1	F	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
102	Copper ores	-	2	1	F	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Ottawa County	-	9	1	.1	3.0	.1	.2	2.2	10.0	4.1	13.1	.9
14	Nonmetallic minerals, except fuels	-	9	1	.1	3.0	.1	.2	2.2	10.0	4.1	13.1	.9
144	Sand and gravel	-	8	1	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	.9
	Presque Isle County	-	2	1	E	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels	-	2	1	E	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
142	Crushed and broken stone, including riprap ..	-	1	1	E	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

¹Payroll and sales data for some small single-unit companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate the items shown for these small establishments. This technique was also used for other establishments whose reports were not received at time data were tabulated. The following symbols are shown where estimated data account for 10 percent or more of figures shown: E1—10 to 19 percent; E2—20 to 29 percent; E3—30 to 39 percent; E4—40 to 49 percent; E5—50 to 59 percent; E6—60 to 69 percent; E7—70 to 79 percent; E8—80 to 89 percent; E9—90 percent or more.

²General statistics for some industries are withheld to avoid disclosing data for individual companies. However, for such disclosures with 100 employees or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: 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. Statistics for industry groups shown include data for all component industries, regardless of whether data are shown for individual industries in group.

Table 6. Number of Mineral Establishments in Major Groups by Employment-Size Class for Counties: 1992

[Data for the crude petroleum and natural gas and mining services industries were not collected by county in 1992 and are not included with the data shown by county. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Geographic area and employment-size class ¹	All mineral industries	Metal mining (SIC 10)	Coal mining (SIC 12)	Oil and gas extraction (SIC 13)	Non-metallic minerals mining (SIC 14)	Geographic area and employment-size class ¹	All mineral industries	Metal mining (SIC 10)	Coal mining (SIC 12)	Oil and gas extraction (SIC 13)	Non-metallic minerals mining (SIC 14)
Michigan	531	20	-	330	181	Michigan—Con.					
Allegan						Allegan	6	-	-	-	6
0 to 4 employees	289	11	-	191	87	0 to 19 employees	4	-	-	-	4
5 to 9 employees	98	2	-	61	35	20 to 99 employees	2	-	-	-	2
10 to 19 employees	64	-	-	29	35	Alpena	3	-	-	-	3
20 to 49 employees	54	4	-	32	18	0 to 19 employees	2	-	-	-	2
50 to 99 employees	15	-	-	13	2	100 to 249 employees	1	-	-	-	1
100 to 249 employees	7	-	-	4	3	Antrim	3	-	-	-	3
250 to 499 employees	1	-	-	-	1	0 to 19 employees	3	-	-	-	3
500 to 999 employees	2	2	-	-	-	Arenac	2	-	-	-	2
1,000 to 2,499 employees	1	1	-	-	-	0 to 19 employees	2	-	-	-	2
Alcona	1	-	-	-	1						
0 to 19 employees	1	-	-	-	1	0 to 19 employees	2	-	-	-	2

See footnotes at end of table.

Table 6. Number of Mineral Establishments in Major Groups by Employment-Size Class for Counties: 1992—Con.

[Data for the crude petroleum and natural gas and mining services industries were not collected by county in 1992 and are not included with the data shown by county. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendices]

Geographic area and employment-size class ¹	All mineral industries	Metal mining (SIC 10)	Coal mining (SIC 12)	Oil and gas extraction (SIC13)	Non-metallic minerals mining (SIC14)	Geographic area and employment-size class ¹	All mineral industries	Metal mining (SIC 10)	Coal mining (SIC 12)	Oil and gas extraction (SIC13)	Non-metallic minerals mining (SIC14)
Michigan—Con.						Michigan—Con.					
Baraga	1	—	—	—	1	Lenawee	1	—	—	—	1
0 to 19 employees	1	—	—	—	1	0 to 19 employees	1	—	—	—	1
Berrien	6	—	—	—	6	Livingston	4	—	—	—	4
0 to 19 employees	5	—	—	—	5	0 to 19 employees	3	—	—	—	3
20 to 99 employees	1	—	—	—	1	20 to 99 employees	1	—	—	—	1
Branch	1	—	—	—	1	Mackinac	3	—	—	—	3
20 to 99 employees	1	—	—	—	1	0 to 19 employees	2	—	—	—	2
Calhoun	2	—	—	—	2	100 to 249 employees	1	—	—	—	1
0 to 19 employees	2	—	—	—	2	Macomb	2	—	—	—	2
Cass	2	—	—	—	2	0 to 19 employees	2	—	—	—	2
0 to 19 employees	2	—	—	—	2	Marquette	10	10	—	—	—
Cheboygan	1	—	—	—	1	0 to 19 employees	5	5	—	—	—
0 to 19 employees	1	—	—	—	1	20 to 99 employees	3	3	—	—	—
Chippewa	2	—	—	—	2	250 employees or more	2	2	—	—	—
0 to 19 employees	2	—	—	—	2	Mason	4	1	—	—	3
Clare	1	—	—	—	1	0 to 19 employees	3	—	—	—	3
0 to 19 employees	1	—	—	—	1	20 to 99 employees	1	1	—	—	—
Clinton	4	—	—	—	4	Mecosta	2	—	—	—	2
0 to 19 employees	4	—	—	—	4	0 to 19 employees	2	—	—	—	2
Delta	1	—	—	—	1	Missaukee	2	—	—	1	1
0 to 19 employees	1	—	—	—	1	0 to 19 employees	2	—	—	1	1
Dickinson	1	—	—	—	1	Monroe	7	—	—	—	7
0 to 19 employees	1	—	—	—	1	0 to 19 employees	4	—	—	—	4
Eaton	2	—	—	—	2	20 to 99 employees	2	—	—	—	2
0 to 19 employees	2	—	—	—	2	100 to 249 employees	1	—	—	—	1
Genesee	3	—	—	—	3	Montmorency	1	—	—	—	1
0 to 19 employees	3	—	—	—	3	0 to 19 employees	1	—	—	—	1
Grand Traverse	3	1	—	—	2	Muskegon	2	—	—	1	1
0 to 19 employees	3	1	—	—	2	0 to 19 employees	1	—	—	1	—
Gratiot	2	—	—	—	2	20 to 99 employees	1	—	—	—	1
0 to 19 employees	2	—	—	—	2	Newaygo	1	—	—	—	1
Hillsdale	4	—	—	2	2	0 to 19 employees	1	—	—	—	1
0 to 19 employees	4	—	—	2	2	Oakland	23	1	—	—	22
Houghton	1	—	—	—	1	0 to 19 employees	20	1	—	—	19
0 to 19 employees	1	—	—	—	1	20 to 99 employees	3	—	—	—	3
Huron	1	—	—	—	1	Oceana	1	—	—	—	1
0 to 19 employees	1	—	—	—	1	0 to 19 employees	1	—	—	—	1
Ingham	5	—	—	1	4	Ogemaw	2	—	—	1	1
0 to 19 employees	5	—	—	1	4	0 to 19 employees	2	—	—	1	1
Ionia	2	—	—	—	2	Ontonagon	2	2	—	—	—
0 to 19 employees	2	—	—	—	2	0 to 19 employees	1	1	—	—	—
Iosco	4	—	—	—	4	250 employees or more	1	1	—	—	—
0 to 19 employees	1	—	—	—	1	Osceola	1	—	—	—	1
20 to 99 employees	3	—	—	—	3	0 to 19 employees	1	—	—	—	1
Iron	1	—	—	—	1	Oscoda	1	—	—	1	—
20 to 99 employees	1	—	—	—	1	0 to 19 employees	1	—	—	1	—
Isabella	5	—	—	—	5	Otsego	1	—	—	—	1
0 to 19 employees	5	—	—	—	5	0 to 19 employees	1	—	—	—	1
Jackson	2	—	—	—	2	20 to 99 employees	1	—	—	1	—
0 to 19 employees	2	—	—	—	2	Ottawa	9	—	—	—	9
Kalamazoo	2	—	—	—	2	0 to 19 employees	8	—	—	—	8
0 to 19 employees	2	—	—	—	2	20 to 99 employees	1	—	—	—	1
Kalkaska	2	—	—	2	—	Presque Isle	2	—	—	—	2
0 to 19 employees	1	—	—	1	—	0 to 19 employees	1	—	—	—	1
20 to 99 employees	1	—	—	1	—	250 employees or more	1	—	—	—	1
Kent	8	—	—	—	8	Roscommon	1	—	—	—	1
0 to 19 employees	8	—	—	—	8	20 to 99 employees	1	—	—	—	1
Lapeer	2	—	—	—	2	Saginaw	5	—	—	—	5
0 to 19 employees	2	—	—	—	2	0 to 19 employees	5	—	—	—	5
Leelanau	1	—	—	—	1	St. Clair	4	—	—	1	3
0 to 19 employees	1	—	—	—	1	0 to 19 employees	4	—	—	1	3
Leelanau	1	—	—	—	1	St. Joseph	1	—	—	—	1
0 to 19 employees	1	—	—	—	1	0 to 19 employees	1	—	—	—	1
Leelanau	1	—	—	—	1	Sanilac	5	—	—	—	5
0 to 19 employees	1	—	—	—	1	0 to 19 employees	3	—	—	—	3
						20 to 99 employees	2	—	—	—	2

See footnotes at end of table.

Table 6. Number of Mineral Establishments in Major Groups by Employment-Size Class for Counties: 1992—Con.

[Data for the crude petroleum and natural gas and mining services industries were not collected by county in 1992 and are not included with the data shown by county. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Geographic area and employment-size class ¹	All mineral industries	Metal mining (SIC 10)	Coal mining (SIC 12)	Oil and gas extraction (SIC13)	Non-metallic minerals mining (SIC14)	Geographic area and employment-size class ¹	All mineral industries	Metal mining (SIC 10)	Coal mining (SIC 12)	Oil and gas extraction (SIC13)	Non-metallic minerals mining (SIC14)
Michigan—Con.						Michigan—Con.					
Shiawassee -----	2	—	—	—	2	Washtenaw —Con.					
0 to 19 employees -----	2	—	—	—	2	0 to 19 employees -----	6	—	—	—	6
Tuscola -----	4	—	—	1	3	Wayne -----	8	1	—	—	7
0 to 19 employees -----	4	—	—	1	3	0 to 19 employees -----	7	1	—	—	6
Van Buren -----	1	—	—	—	1	20 to 99 employees -----	1	—	—	—	1
0 to 19 employees -----	1	—	—	—	1	Undistributed -----	326	4	—	319	3
Washtenaw -----	6	—	—	—	6	0 to 19 employees -----	278	4	—	271	3
						20 to 99 employees -----	44	—	—	44	—
						100 to 249 employees-----	4	—	—	4	—

¹Data for crude petroleum and natural gas and mining services industries are excluded from the individual counties and shown at the end of the table as "undistributed."

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Summary of Findings

The total value of shipments and receipts for the 1,022 establishments classified in mineral industries in Ohio was \$2.1 billion in 1992 or 1 percent of the Nation's total. This compares to \$2.7 billion in 1987. Value added by mining amounted to \$1.5 billion in 1992, and payroll in mining amounted to \$486.5 million.

All dollar figures included in this report are shown in current dollars for the years specified and have not been adjusted for inflation.

Mineral industries employment in Ohio was 15.0 thousand in 1992 or 2 percent of the Nation's total. This is a decrease of 21 percent from 1987. The coal mining industry led all other mineral industries in the State, accounting for approximately 38 percent of the State's mineral industries employment.

Table 1. Historical Statistics for the State: 1992 and Earlier Census Years

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

Year	Establishments during year		All employees		Production, development, and exploration workers			Value added by mining (million dollars)	Cost of supplies used, purchased machinery installed, etc. (million dollars)	Value of shipments and receipts (million dollars)	Capital expenditures (million dollars)
	Total (number)	With 20 employees or more (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)				
1992 Census	1 022	157	15.0	486.5	10.5	22.0	303.3	1 453.9	747.7	2 064.2	137.4
1987 Census	1 240	199	19.0	550.1	13.8	29.7	379.5	1 839.8	1 054.1	2 662.8	231.1
1982 Census	1 507	(NA)	28.9	707.6	21.9	45.2	509.5	2 325.5	1 459.5	3 237.1	547.9
1977 Census	1 209	231	27.6	446.6	22.0	41.6	336.6	1 181.1	744.6	1 661.9	263.8
1972 Census	1 115	196	20.1	211.3	16.1	32.9	156.3	464.9	280.0	628.1	116.8

Table 2a. Mineral Establishment Statistics by Industry for the State: 1992 and 1987

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

SIC code	Industry group and industry	1992											1987		
		E ¹	Establishments during year		All employees		Production, development, and exploration workers			Value added by mining (million dollars)	Cost of supplies used, purchased machinery installed, etc. (million dollars)	Value of shipments and receipts (million dollars)	Capital expenditures (million dollars)	All employees ² (1,000)	Value added by mining (million dollars)
			Total (number)	With 20 employees or more (number)	Number ² (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)						
	All industries	E1	1 022	157	15.0	486.5	10.5	22.0	303.3	1 453.9	747.7	2 064.2	137.4	19.0	1 839.8
10	Metal mining	-	5	4	E	(D)	-	-	-	-	-	-	-	E	(D)
101	Iron ores	-	3	3	E	(D)	-	-	-	-	-	-	-	E	-
1011	Iron ores	-	3	3	E	(D)	-	-	-	-	-	-	-	E	-
12	Coal mining	-	140	57	5.7	201.1	4.6	9.4	150.6	609.1	396.7	982.1	23.7	8.7	943.6
122	Bituminous coal and lignite mining	-	112	48	5.2	184.7	4.2	8.5	138.7	555.7	368.8	904.2	20.3	8.3	913.6
1221	Bituminous coal and lignite surface mining	-	98	38	2.9	84.5	2.3	4.7	63.3	276.1	223.8	485.0	14.8	4.9	570.1
1222	Bituminous coal underground mining	-	14	10	2.3	100.2	1.9	3.8	75.5	279.6	145.0	419.2	5.4	3.4	343.5
124	Coal mining services	-	28	9	.5	16.4	.4	.9	11.8	53.4	27.9	77.9	3.4	.5	29.9
1241	Coal mining services	-	28	9	.5	16.4	.4	.9	11.8	53.4	27.9	77.9	3.4	.5	29.9
13	Oil and gas extraction	E2	585	37	4.6	133.1	2.7	5.7	63.1	508.6	174.1	616.8	65.9	I	(D)
131	Crude petroleum and natural gas	E2	300	19	3.0	97.5	1.4	3.0	37.1	426.1	134.3	501.7	58.7	2.4	430.7
1311	Crude petroleum and natural gas	E2	300	19	3.0	97.5	1.4	3.0	37.1	426.1	134.3	501.7	58.7	2.4	430.7
138	Oil and gas field services	E2	285	18	1.6	35.7	1.3	2.7	26.0	82.5	39.8	115.1	7.2	H	(D)
1381	Drilling oil and gas wells	E2	90	5	.5	11.6	.4	.9	9.3	28.1	(D)	40.6	(D)	1.2	67.5
1382	Oil and gas field exploration services	E4	33	3	.2	3.8	.2	.4	3.2	8.4	(D)	10.4	(D)	C	(D)
1389	Oil and gas field services, n.e.c.	E2	162	10	.9	20.2	.6	1.4	13.5	46.0	(D)	64.1	(D)	1.5	79.6
14	Nonmetallic minerals, except fuels	E1	292	59	H	(D)	(D)	(D)	(D)	(D)	(D)	(D)	47.8	4.5	310.3
142	Crushed and broken stone, including riprap	E1	91	26	1.8	53.2	1.3	2.8	35.6	130.5	77.7	191.9	16.2	1.7	108.4
1422	Crushed and broken limestone	E1	87	24	G	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	G	(D)
1429	Crushed and broken stone, n.e.c.	-	4	2	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
144	Sand and gravel	E1	176	28	2.0	55.6	1.4	3.2	39.1	144.3	69.1	193.9	19.5	2.2	163.9
1442	Construction sand and gravel	E2	166	24	1.8	50.0	1.3	2.8	35.6	132.6	(D)	172.9	(D)	1.9	144.4
1446	Industrial sand	-	10	4	.2	5.6	.1	.3	3.5	11.7	(D)	20.9	(D)	.2	19.5
145	Clay, ceramic, and refractory minerals	E2	9	3	.2	6.0	.2	.3	4.7	20.3	17.2	36.4	1.1	.1	8.4
1459	Clay, ceramic, and refractory minerals, n.e.c.	E2	9	3	.2	6.0	.2	.3	4.7	20.3	17.2	36.4	1.1	.1	8.4
147	Chemical and fertilizer mineral mining	-	5	2	E	(D)	(D)	(D)	(D)	(D)	(D)	(D)	10.8	E	(D)
1479	Chemical and fertilizer mineral mining, n.e.c.	-	4	2	E	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	E	(D)

¹Payroll and sales data for some small single-unit companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate the items shown for these small establishments. This technique was also used for other establishments whose reports were not received at time data were tabulated. The following symbols are shown where estimated data account for 10 percent or more of figures shown: E1—10 to 19 percent; E2—20 to 29 percent; E3—30 to 39 percent; E4—40 to 49 percent; E5—50 to 59 percent; E6—60 to 69 percent; E7—70 to 79 percent; E8—80 to 89 percent; E9—90 percent or more.

²General statistics for some industries are withheld to avoid disclosing data for individual companies. However, for such disclosures with 100 employees or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: 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. Statistics for industry groups shown include data for all component industries, regardless of whether data are shown for individual industries in group.

Table 2b. Mining Activities of Manufacturing Establishments With Associated Mines by Industry for the State: 1992

[Represents data reported for mining activities by establishments classified in manufacturing industries. Figures may be understated due to use of administrative records and short forms. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Industry group and industry	Establishments during year (number)	Production, development, and exploration workers		Cost of supplies used, etc. (million dollars)	Quantity of production (1,000 s tons)
		Hours (millions)	Wages (million dollars)		
Nonmetallic mineral mines included in manufactures -----	25	.4	3.9	5.9	(X)
Crushed and broken stone, including riprap -----	8	(D)	(D)	(D)	(D)
Crushed and broken limestone -----	7	.2	2.1	3.0	3 381.1
Clay and related minerals -----	13	.1	1.2	1.5	903.3

Note: Industries and industry groups with less than 50 thousand hours for employees engaged in production, development, and exploration work are not shown.

Table 3. Selected Statistics by Type of Operation and Major Group for the State: 1992

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

SIC code	Major group and item	All types of establishments	Producing establishments										Nonproducing establishments	
			Total	Mines only			Mines with preparation plants				Separately operated preparation plants	Undistributed ¹		
				Total	Underground mines	Open pit mines	Combination methods, well operations, and other methods	Total	Underground mines	Open pit mines				Combination and other methods
ALL INDUSTRIES														
	Establishments ----- number..	1 022	1 013	383	8	82	293	210	8	194	8	5	415	9
	Employees ----- 1,000..	15.0	(D)	4.0	.3	1.3	2.4	6.6	2.3	3.9	.4	.1	(D)	(D)
	Value added in mining ----- mil dol..	1 453.9	(D)	569.3	38.9	95.6	434.7	681.8	271.3	363.4	47.1	17.4	(D)	(D)
10	METAL MINING													
	Establishments ----- number..	5	5	--	--	--	--	--	--	--	--	--	5	--
	Employees ----- 1,000..	(D)	(D)	--	--	--	--	--	--	--	--	--	(D)	--
	Value added in mining ----- mil dol..	--	--	--	--	--	--	--	--	--	--	--	--	--
12	COAL MINING													
	Establishments ----- number..	140	139	75	8	64	3	28	6	15	7	5	31	1
	Employees ----- 1,000..	5.7	(D)	(D)	.3	(D)	.1	(D)	(D)	(D)	(D)	.1	(D)	(D)
	Value added in mining ----- mil dol..	609.1	(D)	(D)	38.9	(D)	8.6	(D)	(D)	(D)	(D)	17.4	(D)	(D)
13	OIL AND GAS EXTRACTION													
	Establishments ----- number..	585	578	290	--	--	290	--	--	--	--	--	288	7
	Employees ----- 1,000..	4.6	(D)	2.3	--	--	2.3	--	--	--	--	--	(D)	(D)
	Value added in mining ----- mil dol..	508.6	(D)	426.1	--	--	426.1	--	--	--	--	--	(D)	(D)
14	NONMETALLIC MINERALS, EXCEPT FUELS													
	Establishments ----- number..	292	291	18	--	18	--	182	2	179	1	--	91	1
	Employees ----- 1,000..	(D)	(D)	(D)	--	(D)	--	(D)	(D)	(D)	(D)	--	(D)	(Z)
	Value added in mining ----- mil dol..	(D)	(D)	(D)	--	(D)	--	(D)	(D)	(D)	(D)	--	(D)	--

¹Includes data for separately operated auxiliary establishments in addition to establishments that were not possible to classify based on the information available.

Table 4. Summary Statistics for the State: 1992

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

Item	1992	Item	1992
Establishments during year	1 022	Cost of supplies	747.7
With 0 to 19 employees	865	Supplies used, minerals received, and purchased machinery installed	434.6
With 20 to 99 employees	140	Resales	54.5
With 100 employees or more	17	Purchased fuels consumed	57.8
All employees:		Purchased electric energy:	
Average for year	15.0	Quantity	1 071.3
Payroll for year	486.5	Cost	55.6
Production, development, and exploration workers:		Electric energy generated less sold	-1.5
Average for year	10.5	Contract work	145.3
March	10.5	Cost of purchased communication services	2.6
May	10.8	Value of shipments and receipts	2 064.2
August	10.6	Value of resales	56.7
November	10.0	Capital expenditures during year (except land and mineral rights)	137.4
Hours	22.0	New capital expenditures during year	75.7
Wages	303.3	Buildings and other structures, except land	6.7
Supplemental labor costs not included in payroll	149.4	Machinery and equipment	69.1
Legally required expenditures, including Social Security contributions	59.6	Used capital expenditures during year	19.0
Payments for voluntary programs	89.7	Buildings and other structures, except land	2.2
Value added by mining	1 453.9	Machinery and equipment	16.8
Inventories, beginning of 1992	169.6	Mineral exploration and development ¹	42.7
Inventories, end of 1992	183.4	Rental payments during year	70.8
		Buildings and other structures, except land	10.2
		Machinery and equipment	60.7
		Expensed mineral exploration, development, land, and rights ^{1 2}	22.8

¹Excludes data for mining services industries and natural gas liquids industries where data were not collected.

²Excludes data for mineral land and rights for the crude petroleum and natural gas industries where data were not collected.

Table 5. Industry Group Statistics for Counties: 1992

[Data for the crude petroleum and natural gas and mining services industries were not collected by county in 1992 and are not included with the data shown by county. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry group	E ¹	Establishments during year		All employees		Production, development, and exploration workers			Value added by mining (million dollars)	Cost of supplies used, purchased machinery installed, etc. (million dollars)	Value of shipments and receipts (million dollars)	Capital expenditures (million dollars)
			Total (number)	With 20 employees or more (number)	Number ² (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)				
	Ohio	E1	1 022	157	15.0	486.5	10.5	22.0	303.3	1 453.9	747.7	2 064.2	137.4
	Belmont County	-	17	7	.8	28.8	.6	1.1	21.4	92.3	64.5	156.1	.7
12	Coal mining	-	14	6	.7	28.2	.6	1.1	21.0	90.1	(D)	153.2	(D)
122	Bituminous coal and lignite mining	-	14	6	.7	28.2	.6	1.1	21.0	90.1	(D)	153.2	(D)
	Butler County	E3	6	2	.1	3.4	.1	.2	3.0	10.6	4.9	13.6	1.9
14	Nonmetallic minerals, except fuels	E3	6	2	.1	3.4	.1	.2	3.0	10.6	4.9	13.6	1.9
144	Sand and gravel	E3	6	2	.1	3.4	.1	.2	3.0	10.6	4.9	13.6	1.9
	Columbiana County	E2	17	6	.6	10.3	.5	1.1	9.4	35.4	35.0	68.9	1.6
12	Coal mining	E2	13	6	.6	10.1	.5	1.1	9.2	34.7	(D)	67.9	(D)
122	Bituminous coal and lignite mining	E2	13	6	.6	10.1	.5	1.1	9.2	34.7	(D)	67.9	(D)
	Coshocton County	-	6	3	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
12	Coal mining	-	4	3	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
122	Bituminous coal and lignite mining	-	4	3	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Cuyahoga County	E3	12	6	.7	35.7	.3	.7	12.1	45.3	13.2	54.3	4.2
10	Metal mining	-	3	3	E	(D)	-	-	-	-	-	-	-
101	Iron ores	-	3	3	E	(D)	-	-	-	-	-	-	-
12	Coal mining	E9	4	1	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
122	Bituminous coal and lignite mining	E9	4	1	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels	-	5	2	E	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
147	Chemical and fertilizer mineral mining	-	1	1	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Erie County	-	2	2	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels	-	2	2	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
142	Crushed and broken stone, including riprap	-	2	2	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Franklin County	-	11	5	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels	-	11	5	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
144	Sand and gravel	-	8	3	.1	5.2	.1	.3	3.5	13.1	(D)	18.8	(D)
	Gallia County	-	5	2	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Guernsey County	-	4	1	F	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
12	Coal mining	-	2	1	F	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
122	Bituminous coal and lignite mining	-	2	1	F	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Hamilton County	-	16	7	.3	8.2	.1	.3	4.8	12.8	8.3	19.8	1.3
14	Nonmetallic minerals, except fuels	E1	15	6	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
144	Sand and gravel	E1	14	5	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Hancock County	-	3	2	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels	-	3	2	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
142	Crushed and broken stone, including riprap	-	3	2	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

See footnotes at end of table.

Table 5. Industry Group Statistics for Counties: 1992—Con.

[Data for the crude petroleum and natural gas and mining services industries were not collected by county in 1992 and are not included with the data shown by county. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry group	E ¹	Establishments during year		All employees		Production, development, and exploration workers			Value added by mining (million dollars)	Cost of supplies used, purchased machinery installed, etc. (million dollars)	Value of shipments and receipts (million dollars)	Capital expenditures (million dollars)
			Total (number)	With 20 employees or more (number)	Number ² (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)				
	Ohio—Con.												
	Harrison County	—	6	3	.2	10.0	.2	.3	7.4	34.1	(D)	68.4	(D)
12	Coal mining	—	6	3	.2	10.0	.2	.3	7.4	34.1	(D)	68.4	(D)
122	Bituminous coal and lignite mining	—	6	3	.2	10.0	.2	.3	7.4	34.1	(D)	68.4	(D)
	Jefferson County	E3	12	4	.2	6.7	.2	.3	5.2	20.9	6.8	26.9	.8
12	Coal mining	E3	12	4	.2	6.7	.2	.3	5.2	20.9	6.8	26.9	.8
122	Bituminous coal and lignite mining	E3	12	4	.2	6.7	.2	.3	5.2	20.9	6.8	26.9	.8
	Lake County	—	7	2	.2	5.8	.1	.2	3.3	6.6	(D)	9.8	(D)
14	Nonmetallic minerals, except fuels	—	7	2	.2	5.8	.1	.2	3.3	6.6	(D)	9.8	(D)
147	Chemical and fertilizer mineral mining	—	1	1	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Lucas County	—	7	2	.1	3.7	.1	.2	2.7	7.3	4.0	10.4	.9
14	Nonmetallic minerals, except fuels	—	7	2	.1	3.7	.1	.2	2.7	7.3	4.0	10.4	.9
	Mahoning County	—	6	3	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Meigs County	—	2	2	G	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
12	Coal mining	—	1	1	G	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
122	Bituminous coal and lignite mining	—	1	1	G	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Monroe County	—	3	1	E	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
12	Coal mining	—	1	1	E	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
122	Bituminous coal and lignite mining	—	1	1	E	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Montgomery County	E3	14	4	.3	8.7	.1	.3	3.2	8.4	3.9	11.8	.5
14	Nonmetallic minerals, except fuels	E3	11	3	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
144	Sand and gravel	E4	8	3	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Muskingum County	—	12	4	.2	5.1	.2	.4	3.9	11.5	5.4	16.0	.9
12	Coal mining	E1	6	2	.1	2.2	.1	.2	1.9	6.0	(D)	7.9	(D)
122	Bituminous coal and lignite mining	E1	6	2	.1	2.2	.1	.2	1.9	6.0	(D)	7.9	(D)
14	Nonmetallic minerals, except fuels	—	6	2	.1	2.9	.1	.2	2.0	5.5	(D)	8.1	(D)
	Ottawa County	E4	5	1	.1	3.2	.1	.2	2.6	21.7	(D)	21.1	(D)
14	Nonmetallic minerals, except fuels	E4	5	1	.1	3.2	.1	.2	2.6	21.7	(D)	21.1	(D)
	Perry County	E1	8	2	.1	3.1	.1	.3	2.8	8.3	(D)	12.8	(D)
	Portage County	E3	19	2	.2	5.0	.1	.3	3.7	14.3	7.7	19.7	2.3
14	Nonmetallic minerals, except fuels	E3	19	2	.2	5.0	.1	.3	3.7	14.3	7.7	19.7	2.3
144	Sand and gravel	E3	18	2	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Seneca County	—	4	3	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels	—	4	3	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Stark County	E1	13	1	.1	2.6	.1	.2	2.1	11.0	2.5	13.0	.5
	Tuscarawas County	E2	18	6	.4	11.6	.3	.7	9.1	32.4	22.7	52.6	2.4
12	Coal mining	—	9	5	.3	7.0	.2	.4	5.8	20.1	18.3	36.7	1.7
122	Bituminous coal and lignite mining	—	9	5	.3	7.0	.2	.4	5.8	20.1	18.3	36.7	1.7
14	Nonmetallic minerals, except fuels	E6	9	1	.1	4.6	.1	.2	3.3	12.3	4.4	15.9	.7
	Vinton County	—	7	3	.2	5.9	.1	.4	4.3	18.3	9.9	27.0	1.2
12	Coal mining	—	7	3	.2	5.9	.1	.4	4.3	18.3	9.9	27.0	1.2
122	Bituminous coal and lignite mining	—	7	3	.2	5.9	.1	.4	4.3	18.3	9.9	27.0	1.2
	Wyandot County	—	5	2	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels	—	5	2	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
142	Crushed and broken stone, including riprap	—	3	2	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

¹Payroll and sales data for some small single-unit companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate the items shown for these small establishments. This technique was also used for other establishments whose reports were not received at time data were tabulated. The following symbols are shown where estimated data account for 10 percent or more of figures shown: E1—10 to 19 percent; E2—20 to 29 percent; E3—30 to 39 percent; E4—40 to 49 percent; E5—50 to 59 percent; E6—60 to 69 percent; E7—70 to 79 percent; E8—80 to 89 percent; E9—90 percent or more.

²General statistics for some industries are withheld to avoid disclosing data for individual companies. However, for such disclosures with 100 employees or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: 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. Statistics for industry groups shown include data for all component industries, regardless of whether data are shown for individual industries in group.

Table 6. Number of Mineral Establishments in Major Groups by Employment-Size Class for Counties: 1992

[Data for the crude petroleum and natural gas and mining services industries were not collected by county in 1992 and are not included with the data shown by county. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendices]

Geographic area and employment-size class ¹	All mineral industries	Metal mining (SIC 10)	Coal mining (SIC 12)	Oil and gas extraction (SIC13)	Non-metallic minerals mining (SIC14)	Geographic area and employment-size class ¹	All mineral industries	Metal mining (SIC 10)	Coal mining (SIC 12)	Oil and gas extraction (SIC13)	Non-metallic minerals mining (SIC14)
Ohio	1 022	5	140	585	292	Ohio—Con.					
0 to 4 employees	482	—	36	378	68	Fulton	1	—	—	—	1
5 to 9 employees	218	—	27	104	87	0 to 19 employees	1	—	—	—	1
10 to 19 employees	165	1	20	66	78	Gallia	5	—	2	—	3
20 to 49 employees	99	2	33	24	40	0 to 19 employees	3	—	1	—	2
50 to 99 employees	41	1	16	9	15	20 to 99 employees	2	—	1	—	1
100 to 249 employees	11	1	3	3	4	Geauga	7	—	—	—	7
250 to 499 employees	3	—	3	—	—	0 to 19 employees	6	—	—	—	6
500 to 999 employees	2	—	1	1	—	20 to 99 employees	1	—	—	—	1
1,000 to 2,499 employees	1	—	1	—	—	Greene	7	—	—	—	7
Adams	1	—	—	—	1	0 to 19 employees	5	—	—	—	5
20 to 99 employees	1	—	—	—	—	20 to 99 employees	2	—	—	—	2
Allen	3	—	—	—	3	Guernsey	4	—	2	—	2
0 to 19 employees	2	—	—	—	2	0 to 19 employees	3	—	1	—	2
20 to 99 employees	1	—	—	—	1	250 employees or more	1	—	1	—	—
Ashland	1	—	—	—	1	Hamilton	16	—	1	—	15
0 to 19 employees	1	—	—	—	—	0 to 19 employees	9	—	—	—	9
Ashtabula	6	—	1	—	5	20 to 99 employees	7	—	1	—	6
0 to 19 employees	5	—	—	—	5	Hancock	3	—	—	—	3
20 to 99 employees	1	—	1	—	—	0 to 19 employees	1	—	—	—	1
Auglaize	3	—	—	—	3	20 to 99 employees	1	—	—	—	1
0 to 19 employees	3	—	—	—	3	100 to 249 employees	1	—	—	—	1
Belmont	17	—	14	—	3	Hardin	1	—	—	—	1
0 to 19 employees	10	—	8	—	2	0 to 19 employees	1	—	—	—	1
20 to 99 employees	5	—	4	—	1	Harrison	6	—	6	—	—
100 to 249 employees	1	—	1	—	—	0 to 19 employees	3	—	3	—	—
250 employees or more	1	—	1	—	—	20 to 99 employees	3	—	3	—	—
Brown	1	—	—	—	1	Highland	4	—	—	—	4
0 to 19 employees	1	—	—	—	1	0 to 19 employees	3	—	—	—	3
Butler	6	—	—	—	6	20 to 99 employees	1	—	—	—	1
0 to 19 employees	4	—	—	—	4	Hocking	3	—	2	—	1
20 to 99 employees	2	—	—	—	2	0 to 19 employees	3	—	2	—	1
Carroll	8	—	5	—	3	Holmes	5	—	2	—	3
0 to 19 employees	7	—	4	—	3	0 to 19 employees	4	—	1	—	3
20 to 99 employees	1	—	1	—	—	20 to 99 employees	1	—	1	—	—
Champaign	2	—	—	—	2	Huron	3	—	—	—	3
0 to 19 employees	2	—	—	—	2	0 to 19 employees	3	—	—	—	3
Clark	7	—	—	—	7	Jackson	3	—	2	—	1
0 to 19 employees	7	—	—	—	7	0 to 19 employees	1	—	—	—	1
Clermont	1	—	—	—	1	20 to 99 employees	2	—	2	—	—
0 to 19 employees	1	—	—	—	1	Jefferson	12	—	12	—	—
Clinton	1	—	—	—	1	0 to 19 employees	8	—	8	—	—
20 to 99 employees	1	—	—	—	1	20 to 99 employees	4	—	4	—	—
Columbiana	17	—	13	—	4	Knox	4	—	—	—	4
0 to 19 employees	11	—	7	—	4	0 to 19 employees	3	—	—	—	3
20 to 99 employees	5	—	5	—	—	20 to 99 employees	1	—	—	—	1
250 employees or more	1	—	1	—	—	Lake	7	—	—	—	7
Coshocton	6	—	4	—	2	0 to 19 employees	5	—	—	—	5
0 to 19 employees	3	—	1	—	2	20 to 99 employees	1	—	—	—	1
20 to 99 employees	3	—	3	—	—	100 to 249 employees	1	—	—	—	1
Crawford	1	—	—	—	1	Lawrence	2	—	2	—	—
0 to 19 employees	1	—	—	—	1	0 to 19 employees	2	—	2	—	—
20 to 99 employees	1	—	—	—	—	Licking	3	—	—	—	3
Cuyahoga	12	3	4	—	5	0 to 19 employees	1	—	—	—	1
0 to 19 employees	6	—	3	—	3	20 to 99 employees	2	—	—	—	2
20 to 99 employees	3	2	—	—	1	Logan	3	—	—	—	3
100 to 249 employees	3	1	1	—	1	0 to 19 employees	3	—	—	—	3
Darke	2	—	—	—	2	Lorain	1	—	—	—	1
0 to 19 employees	2	—	—	—	2	0 to 19 employees	1	—	—	—	1
Delaware	3	—	—	—	3	20 to 99 employees	2	—	—	—	—
0 to 19 employees	1	—	—	—	2	Lucas	7	—	—	—	7
20 to 99 employees	2	—	—	—	1	0 to 19 employees	5	—	—	—	5
Erie	2	—	—	—	2	20 to 99 employees	2	—	—	—	2
0 to 19 employees	1	—	—	—	1	Madison	1	—	—	—	1
20 to 99 employees	1	—	—	—	1	0 to 19 employees	1	—	—	—	1
100 to 249 employees	1	—	—	—	—	Mahoning	6	—	4	—	2
Fairfield	1	—	—	—	1	0 to 19 employees	3	—	2	—	1
0 to 19 employees	1	—	—	—	1	20 to 99 employees	3	—	2	—	1
Franklin	11	—	—	—	11						
0 to 19 employees	6	—	—	—	6						
20 to 99 employees	5	—	—	—	5						

See footnotes at end of table.

Table 6. Number of Mineral Establishments in Major Groups by Employment-Size Class for Counties: 1992—Con.

[Data for the crude petroleum and natural gas and mining services industries were not collected by county in 1992 and are not included with the data shown by county. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Geographic area and employment-size class ¹	All mineral industries	Metal mining (SIC 10)	Coal mining (SIC 12)	Oil and gas extraction (SIC13)	Non-metallic minerals mining (SIC14)	Geographic area and employment-size class ¹	All mineral industries	Metal mining (SIC 10)	Coal mining (SIC 12)	Oil and gas extraction (SIC13)	Non-metallic minerals mining (SIC14)
Ohio—Con.						Ohio—Con.					
Marion	2	—	—	—	2	Ross	4	—	—	—	4
0 to 19 employees	2	—	—	—	2	0 to 19 employees	3	—	—	—	3
Medina	2	—	—	—	2	20 to 99 employees	1	—	—	—	1
0 to 19 employees	1	—	—	—	1	Sandusky	1	—	—	—	1
20 to 99 employees	1	—	—	—	1	0 to 19 employees	1	—	—	—	1
Meigs	2	—	1	—	1	Scioto	4	—	1	—	3
0 to 19 employees	1	—	—	—	1	0 to 19 employees	4	—	1	—	3
250 employees or more	1	—	1	—	1	Seneca	4	—	—	—	4
Mercer	1	—	—	—	1	0 to 19 employees	1	—	—	—	1
0 to 19 employees	1	—	—	—	1	20 to 99 employees	3	—	—	—	3
Miami	3	—	—	—	3	Shelby	3	—	—	—	3
0 to 19 employees	3	—	—	—	3	0 to 19 employees	2	—	—	—	2
Monroe	3	—	1	—	2	20 to 99 employees	1	—	—	—	1
0 to 19 employees	2	—	—	—	2	Stark	13	—	2	—	11
250 employees or more	1	—	1	—	—	0 to 19 employees	12	—	1	—	11
Montgomery	14	2	1	—	11	20 to 99 employees	1	—	1	—	—
0 to 19 employees	10	1	1	—	8	Summit	6	—	—	—	6
20 to 99 employees	4	1	—	—	3	0 to 19 employees	6	—	—	—	6
Morgan	2	—	—	—	2	Tuscarawas	18	—	9	—	9
0 to 19 employees	2	—	—	—	2	0 to 19 employees	12	—	4	—	8
Morrow	2	—	—	—	2	20 to 99 employees	6	—	5	—	1
0 to 19 employees	2	—	—	—	2	Union	1	—	—	—	1
Muskingum	12	—	6	—	6	0 to 19 employees	1	—	—	—	1
0 to 19 employees	8	—	4	—	4	Van Wert	1	—	—	—	1
20 to 99 employees	4	—	2	—	2	0 to 19 employees	1	—	—	—	1
Noble	2	—	1	—	1	Vinton	7	—	7	—	—
0 to 19 employees	1	—	—	—	1	0 to 19 employees	4	—	4	—	—
20 to 99 employees	1	—	1	—	—	20 to 99 employees	3	—	3	—	—
Ottawa	5	—	—	—	5	Warren	6	—	—	—	6
0 to 19 employees	4	—	—	—	4	0 to 19 employees	6	—	—	—	6
20 to 99 employees	1	—	—	—	1	Washington	5	—	—	—	5
Paulding	2	—	—	—	2	0 to 19 employees	5	—	—	—	5
0 to 19 employees	2	—	—	—	2	Wayne	5	—	2	—	3
Perry	8	—	5	—	3	0 to 19 employees	5	—	2	—	3
0 to 19 employees	6	—	4	—	2	Williams	2	—	—	—	2
20 to 99 employees	2	—	1	—	1	0 to 19 employees	2	—	—	—	2
Pickaway	1	—	—	—	1	Wood	5	—	—	—	5
0 to 19 employees	1	—	—	—	1	0 to 19 employees	4	—	—	—	4
Pike	4	—	—	—	4	20 to 99 employees	1	—	—	—	1
0 to 19 employees	4	—	—	—	4	Wyandot	5	—	—	—	5
Portage	19	—	—	—	19	0 to 19 employees	3	—	—	—	3
0 to 19 employees	17	—	—	—	17	20 to 99 employees	2	—	—	—	2
20 to 99 employees	2	—	—	—	2	Undistributed	617	—	28	585	4
Preble	3	—	—	—	3	0 to 19 employees	571	—	19	548	4
0 to 19 employees	3	—	—	—	3	20 to 99 employees	41	—	8	33	—
Putnam	2	—	—	—	2	100 to 249 employees	4	—	1	3	—
0 to 19 employees	2	—	—	—	2	250 employees or more	1	—	—	1	—

¹Data for crude petroleum and natural gas and mining services industries are excluded from the individual counties and shown at the end of the table as "undistributed."

Summary of Findings

The total value of shipments and receipts for the 167 establishments classified in mineral industries in Wisconsin was \$322.7 million in 1992 compared to \$209.3 million in 1987. Value added by mining amounted to \$251.2 million in 1992, and payroll in mining amounted to \$79.2 million.

All dollar figures included in this report are shown in current dollars for the years specified and have not been adjusted for inflation.

Mineral industries employment in Wisconsin was 2.3 thousand in 1992. This is an increase of 28 percent from 1987. The nonmetallic minerals, except fuels, industry led all other mineral industries in the State, accounting for most of the State's mineral industries employment.

Table 1. Historical Statistics for the State: 1992 and Earlier Census Years

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

Year	Establishments during year		All employees		Production, development, and exploration workers			Value added by mining (million dollars)	Cost of supplies used, purchased machinery installed, etc. (million dollars)	Value of shipments and receipts (million dollars)	Capital expenditures (million dollars)
	Total (number)	With 20 employees or more (number)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)				
1992 Census	167	28	2.3	79.2	1.6	3.7	54.6	251.2	122.5	322.7	51.0
1987 Census	169	27	1.8	46.3	1.4	2.9	32.3	155.2	78.5	209.3	24.4
1982 Census	201	(NA)	1.9	38.4	1.4	2.7	27.2	85.8	56.2	131.5	10.4
1977 Census	217	30	2.6	39.5	2.1	4.4	30.0	87.1	54.4	128.1	13.4
1972 Census	214	27	2.5	25.7	1.9	4.0	17.6	63.5	28.7	84.5	7.7

Table 2a. Mineral Establishment Statistics by Industry for the State: 1992 and 1987

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

SIC code	Industry group and industry	1992											1987		
		E ¹	Establishments during year		All employees		Production, development, and exploration workers			Value added by mining (million dollars)	Cost of supplies used, purchased machinery installed, etc. (million dollars)	Value of shipments and receipts (million dollars)	Capital expenditures (million dollars)	All employees ² (1,000)	Value added by mining (million dollars)
			Total (number)	With 20 employees or more (number)	Number ² (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)						
	All industries	-	167	28	2.3	79.2	1.6	3.7	54.6	251.2	122.5	322.7	51.0	1.8	155.2
14	Nonmetallic minerals, except fuels	-	158	27	G	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	G	(D)
141	Dimension stone	E4	10	3	.2	3.5	.1	.2	2.3	8.1	(D)	10.6	(D)	.1	8.7
1411	Dimension stone	E4	10	3	.2	3.5	.1	.2	2.3	8.1	(D)	10.6	(D)	.1	8.7
142	Crushed and broken stone, including riprap	-	63	12	1.2	46.9	.9	2.1	33.6	158.1	85.0	217.4	25.8	.9	92.6
1422	Crushed and broken limestone	-	42	9	.7	29.6	.5	1.3	20.7	79.0	(D)	111.4	(D)	.7	54.5
1429	Crushed and broken stone, n.e.c.	-	12	2	.4	14.7	.3	.7	10.8	71.1	(D)	95.5	(D)	C	(D)
144	Sand and gravel	E1	76	10	.8	23.1	.5	1.2	15.8	60.9	27.6	78.9	9.6	.7	45.0
1442	Construction sand and gravel	E2	69	6	F	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	F	(D)
1446	Industrial sand	-	7	4	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	C	(D)
148	Nonmetallic minerals services, except fuels	-	5	2	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)
1481	Nonmetallic minerals services, except fuels	-	5	2	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)	(NA)

¹Payroll and sales data for some small single-unit companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate the items shown for these small establishments. This technique was also used for other establishments whose reports were not received at time data were tabulated. The following symbols are shown where estimated data account for 10 percent or more of figures shown: E1—10 to 19 percent; E2—20 to 29 percent; E3—30 to 39 percent; E4—40 to 49 percent; E5—50 to 59 percent; E6—60 to 69 percent; E7—70 to 79 percent; E8—80 to 89 percent; E9—90 percent or more.

²General statistics for some industries are withheld to avoid disclosing data for individual companies. However, for such disclosures with 100 employees or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: 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. Statistics for industry groups shown include data for all component industries, regardless of whether data are shown for individual industries in group.

Table 2b. Mining Activities of Manufacturing Establishments With Associated Mines by Industry for the State: 1992

[Represents data reported for mining activities by establishments classified in manufacturing industries. Figures may be understated due to use of administrative records and short forms. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Industry group and industry	Establishments during year (number)	Production, development, and exploration workers		Cost of supplies used, etc. (million dollars)	Quantity of production (1,000 s tons)
		Hours (millions)	Wages (million dollars)		
Nonmetallic mineral mines included in manufactures	13	.1	1.6	2.9	(X)
Dimension stone	2	(D)	(D)	(D)	(D)

Note: Industries and industry groups with less than 50 thousand hours for employees engaged in production, development, and exploration work are not shown.

Table 3. Selected Statistics by Type of Operation and Major Group for the State: 1992

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

SIC code	Major group and item	All types of establishments	Producing establishments										Nonproducing establishments	
			Mines only					Mines with preparation plants						
			Total	Total	Underground mines	Open pit mines	Combination methods, well operations, and other methods	Total	Underground mines	Open pit mines	Combination and other methods	Separately operated preparation plants		Undistributed ¹
	ALL INDUSTRIES													
	Establishments ----- number..	167	165	14	—	14	—	95	1	93	1	3	53	2
	Employees----- 1,000..	2.3	(D)	(D)	—	(D)	—	(D)	(D)	(D)	(D)	(D)	.4	(D)
	Value added in mining----- mil dol..	251.2	(D)	(D)	—	(D)	—	(D)	(D)	(D)	(D)	(D)	31.9	(D)
10	METAL MINING													
	Establishments ----- number..	7	5	—	—	—	—	—	—	—	—	—	5	2
	Employees----- 1,000..	(D)	(D)	—	—	—	—	—	—	—	—	—	(D)	(D)
	Value added in mining----- mil dol..	(D)	(D)	—	—	—	—	—	—	—	—	—	(D)	(D)
13	OIL AND GAS EXTRACTION													
	Establishments ----- number..	2	2	—	—	—	—	—	—	—	—	—	2	—
	Employees----- 1,000..	(D)	(D)	—	—	—	—	—	—	—	—	—	(D)	—
	Value added in mining----- mil dol..	(D)	(D)	—	—	—	—	—	—	—	—	—	(D)	—
14	NONMETALLIC MINERALS, EXCEPT FUELS													
	Establishments ----- number..	158	158	14	—	14	—	95	1	93	1	3	46	—
	Employees----- 1,000..	(D)	(D)	(D)	—	(D)	—	(D)	(D)	(D)	(D)	(D)	(D)	—
	Value added in mining----- mil dol..	(D)	(D)	(D)	—	(D)	—	(D)	(D)	(D)	(D)	(D)	(D)	—

¹Includes data for separately operated auxiliary establishments in addition to establishments that were not possible to classify based on the information available.

Table 4. Summary Statistics for the State: 1992

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

Item	1992	Item	1992
Establishments during year ----- number..	167	Cost of supplies ----- mil dol..	122.5
With 0 to 19 employees ----- number..	139	Supplies used, minerals received, and purchased machinery installed ----- mil dol..	84.5
With 20 to 99 employees ----- number..	24	Resales ----- mil dol..	4.0
With 100 employees or more ----- number..	4	Purchased fuels consumed ----- mil dol..	16.1
All employees:		Purchased electric energy:	
Average for year ----- 1,000..	2.3	Quantity ----- mil kWh..	174.9
Payroll for year ----- mil dol..	79.2	Cost ----- mil dol..	8.2
Production, development, and exploration workers:		Electric energy generated less sold ----- mil kWh..	.5
Average for year ----- 1,000..	1.6	Contract work ----- mil dol..	9.7
March ----- 1,000..	1.4	Cost of purchased communication services ----- mil dol..	.5
May ----- 1,000..	1.7	Value of shipments and receipts ----- mil dol..	322.7
August ----- 1,000..	1.8	Value of resales ----- mil dol..	4.9
November ----- 1,000..	1.6	Capital expenditures during year (except land and mineral rights) ----- mil dol..	51.0
Hours ----- millions..	3.7	New capital expenditures during year ----- mil dol..	33.4
Wages ----- mil dol..	54.6	Buildings and other structures, except land ----- mil dol..	2.8
Supplemental labor costs not included in payroll ----- mil dol..	20.7	Machinery and equipment ----- mil dol..	30.6
Legally required expenditures, including Social Security contributions ----- mil dol..	9.5	Used capital expenditures during year ----- mil dol..	(D)
Payments for voluntary programs ----- mil dol..	11.2	Buildings and other structures, except land ----- mil dol..	.8
Value added by mining ----- mil dol..	251.2	Machinery and equipment ----- mil dol..	(D)
Inventories, beginning of 1992 ----- mil dol..	34.1	Mineral exploration and development ¹ ----- mil dol..	(D)
Inventories, end of 1992 ----- mil dol..	34.8	Rental payments during year ----- mil dol..	4.4
		Buildings and other structures, except land ----- mil dol..	.6
		Machinery and equipment ----- mil dol..	3.9
		Expensed mineral exploration, development, land, and rights ^{1 2} ----- mil dol..	6.5

¹Excludes data for mining services industries and natural gas liquids industries where data were not collected.

²Excludes data for mineral land and rights for the crude petroleum and natural gas industries where data were not collected.

Table 5. Industry Group Statistics for Counties: 1992

[Data for the crude petroleum and natural gas and mining services industries were not collected by county in 1992 and are not included with the data shown by county. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

SIC code	Geographic area and industry group	E ¹	Establishments during year		All employees		Production, development, and exploration workers			Value added by mining (million dollars)	Cost of supplies used, purchased machinery installed, etc. (million dollars)	Value of shipments and receipts (million dollars)	Capital expenditures (million dollars)
			Total (number)	With 20 employees or more (number)	Number ² (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)				
	Wisconsin	-	167	28	2.3	79.2	1.6	3.7	54.6	251.2	122.5	322.7	51.0
	Dane County	E1	11	3	.2	6.1	.1	.2	3.2	8.6	4.8	12.4	1.0
14	Nonmetallic minerals, except fuels	E1	11	3	.2	6.1	.1	.2	3.2	8.6	4.8	12.4	1.0
	Fond du Lac County	E4	12	5	.2	5.4	.1	.3	3.1	11.0	5.2	14.6	1.5
14	Nonmetallic minerals, except fuels	E4	12	5	.2	5.4	.1	.3	3.1	11.0	5.2	14.6	1.5
	La Crosse County	-	1	1	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels	-	1	1	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
142	Crushed and broken stone, including riprap ..	-	1	1	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Marathon County	-	8	1	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels	-	8	1	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
142	Crushed and broken stone, including riprap ..	-	3	1	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Marinette County	-	2	1	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels	-	2	1	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
142	Crushed and broken stone, including riprap ..	-	2	1	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Sauk County	-	4	1	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
14	Nonmetallic minerals, except fuels	-	4	1	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
142	Crushed and broken stone, including riprap ..	-	3	1	C	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	Waukesha County	E1	20	1	.2	9.0	.2	.3	6.3	27.7	10.1	33.9	3.9
14	Nonmetallic minerals, except fuels	E1	20	1	.2	9.0	.2	.3	6.3	27.7	10.1	33.9	3.9
144	Sand and gravel	E2	15	-	.1	4.0	.1	.2	3.2	13.7	3.9	15.6	2.0

¹Payroll and sales data for some small single-unit companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate the items shown for these small establishments. This technique was also used for other establishments whose reports were not received at time data were tabulated. The following symbols are shown where estimated data account for 10 percent or more of figures shown: E1—10 to 19 percent; E2—20 to 29 percent; E3—30 to 39 percent; E4—40 to 49 percent; E5—50 to 59 percent; E6—60 to 69 percent; E7—70 to 79 percent; E8—80 to 89 percent; E9—90 percent or more.

²General statistics for some industries are withheld to avoid disclosing data for individual companies. However, for such disclosures with 100 employees or more, number of establishments is shown and employment-size range is indicated by one of the following symbols: 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. Statistics for industry groups shown include data for all component industries, regardless of whether data are shown for individual industries in group.

Table 6. Number of Mineral Establishments in Major Groups by Employment-Size Class for Counties: 1992

[Data for the crude petroleum and natural gas and mining services industries were not collected by county in 1992 and are not included with the data shown by county. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Geographic area and employment-size class ¹	All mineral industries	Metal mining (SIC 10)	Coal mining (SIC 12)	Oil and gas extraction (SIC 13)	Non-metallic minerals mining (SIC 14)	Geographic area and employment-size class ¹	All mineral industries	Metal mining (SIC 10)	Coal mining (SIC 12)	Oil and gas extraction (SIC 13)	Non-metallic minerals mining (SIC 14)
Wisconsin	167	7	-	2	158	Wisconsin—Con.					
0 to 4 employees	62	4	-	1	57	Clark	2	-	-	-	2
5 to 9 employees	38	2	-	-	36	0 to 19 employees	2	-	-	-	2
10 to 19 employees	39	-	-	1	38	Columbia	2	-	-	-	2
20 to 49 employees	20	1	-	-	19	0 to 19 employees	1	-	-	-	1
50 to 99 employees	4	-	-	-	4	20 to 99 employees	1	-	-	-	1
100 to 249 employees	4	-	-	-	4	Dane	11	-	-	-	11
Barron	1	-	-	-	1	0 to 19 employees	8	-	-	-	8
0 to 19 employees	1	-	-	-	1	20 to 99 employees	3	-	-	-	3
Bayfield	1	-	-	-	1	Dodge	2	-	-	-	2
0 to 19 employees	1	-	-	-	1	0 to 19 employees	2	-	-	-	2
Brown	3	-	-	-	3	Door	1	-	-	-	1
0 to 19 employees	2	-	-	-	2	0 to 19 employees	1	-	-	-	1
20 to 99 employees	1	-	-	-	1	Douglas	2	-	-	-	2
Burnett	1	-	-	-	1	0 to 19 employees	2	-	-	-	2
0 to 19 employees	1	-	-	-	1	Eau Claire	1	-	-	-	1
Calumet	3	-	-	-	3	0 to 19 employees	1	-	-	-	1
0 to 19 employees	2	-	-	-	2						
20 to 99 employees	1	-	-	-	1						

See footnotes at end of table.

Table 6. Number of Mineral Establishments in Major Groups by Employment-Size Class for Counties: 1992—Con.

[Data for the crude petroleum and natural gas and mining services industries were not collected by county in 1992 and are not included with the data shown by county. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Geographic area and employment-size class ¹	All mineral industries	Metal mining (SIC 10)	Coal mining (SIC 12)	Oil and gas extraction (SIC13)	Non-metallic minerals mining (SIC14)	Geographic area and employment-size class ¹	All mineral industries	Metal mining (SIC 10)	Coal mining (SIC 12)	Oil and gas extraction (SIC13)	Non-metallic minerals mining (SIC14)
Wisconsin—Con.						Wisconsin—Con.					
Fond du Lac	12	—	—	—	12	Ozaukee	1	—	—	—	1
0 to 19 employees	7	—	—	—	7	0 to 19 employees	1	—	—	—	1
20 to 99 employees	5	—	—	—	5	Pepin	1	—	—	—	1
Forest	2	1	—	—	1	0 to 19 employees	1	—	—	—	1
0 to 19 employees	2	1	—	—	1	Pierce	2	—	—	—	2
Grant	5	—	—	—	5	0 to 19 employees	2	—	—	—	2
0 to 19 employees	5	—	—	—	5	Polk	3	—	—	—	3
Green	2	—	—	—	2	0 to 19 employees	3	—	—	—	3
0 to 19 employees	2	—	—	—	2	Portage	3	—	—	—	3
Green Lake	4	—	—	—	4	0 to 19 employees	3	—	—	—	3
0 to 19 employees	4	—	—	—	4	Price	2	—	—	—	2
Iowa	1	—	—	—	1	0 to 19 employees	2	—	—	—	2
0 to 19 employees	1	—	—	—	1	Racine	5	—	—	—	5
Iron	1	—	—	—	1	0 to 19 employees	4	—	—	—	4
0 to 19 employees	1	—	—	—	1	20 to 99 employees	1	—	—	—	1
Jackson	1	—	—	—	1	Rock	5	—	—	—	5
20 to 99 employees	1	—	—	—	1	0 to 19 employees	5	—	—	—	5
Jefferson	1	—	—	—	1	Rusk	2	1	—	—	1
0 to 19 employees	1	—	—	—	1	0 to 19 employees	2	1	—	—	1
Juneau	1	—	—	—	1	St. Croix	2	—	—	—	2
0 to 19 employees	1	—	—	—	1	0 to 19 employees	2	—	—	—	2
Kenosha	1	—	—	—	1	Sauk	4	—	—	—	4
0 to 19 employees	1	—	—	—	1	0 to 19 employees	3	—	—	—	3
La Crosse	1	—	—	—	1	100 to 249 employees	1	—	—	—	1
100 to 249 employees	1	—	—	—	1	Shawano	1	—	—	—	1
Langlade	1	—	—	—	1	20 to 99 employees	1	—	—	—	1
20 to 99 employees	1	—	—	—	1	Sheboygan	1	—	—	—	1
Lincoln	1	—	—	—	1	0 to 19 employees	1	—	—	—	1
0 to 19 employees	1	—	—	—	1	Trempealeau	1	—	—	—	1
Manitowoc	5	—	—	—	5	20 to 99 employees	1	—	—	—	1
0 to 19 employees	5	—	—	—	5	Walworth	3	—	—	—	3
Marathon	8	—	—	—	8	0 to 19 employees	2	—	—	—	2
0 to 19 employees	7	—	—	—	7	20 to 99 employees	1	—	—	—	1
100 to 249 employees	1	—	—	—	1	Washington	5	—	—	—	5
Marinette	2	—	—	—	2	0 to 19 employees	4	—	—	—	4
0 to 19 employees	1	—	—	—	1	20 to 99 employees	1	—	—	—	1
100 to 249 employees	1	—	—	—	1	Waukesha	20	—	—	—	20
Milwaukee	4	—	—	—	4	0 to 19 employees	19	—	—	—	19
0 to 19 employees	4	—	—	—	4	20 to 99 employees	1	—	—	—	1
Oconto	3	—	—	—	3	Winnebago	3	—	—	—	3
0 to 19 employees	2	—	—	—	2	0 to 19 employees	3	—	—	—	3
20 to 99 employees	1	—	—	—	1	Wood	1	—	—	—	1
0 to 19 employees	2	—	—	—	2	0 to 19 employees	1	—	—	—	1
Outagamie	4	—	—	—	4	Undistributed	12	5	—	2	5
0 to 19 employees	3	—	—	—	3	0 to 19 employees	9	4	—	2	3
20 to 99 employees	1	—	—	—	1	20 to 99 employees	3	1	—	—	2

¹Data for crude petroleum and natural gas and mining services industries are excluded from the individual counties and shown at the end of the table as "undistributed."

Appendix A. Explanation of Terms

Employment and related items. The report forms requested separate information on production, development, and exploration workers for a specific payroll period within each quarter of the year and on other employees as of the payroll period which included the 12th of March.

All employees. This item includes all full-time and part-time employees on the payrolls of mining establishments during any part of the pay period which included the 12th of the months specified on the report form. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Also included are employees working for miners paid on a per ton, car, or yard basis. Excluded are employees at the mine but on the payroll of another employer (such as employees of contractors) and employees at company stores, boardinghouses, bunkhouses, and recreational centers. Also excluded are members of the Armed Forces and pensioners carried on the active rolls but not working during the period. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded.

Production, development, and exploration workers. This item includes employees (up through the working-supervisor level) engaged in manual work (using tools, operating machines, hauling materials, loading and hauling products out of the mine in mine cars or trucks, and caring for mines, plants, mills, shops, or yards). Included are exploration work, mine development, storage, shipping, maintenance, repair, janitorial, and guard services, auxiliary production for use at establishments (such as power plant), recordkeeping, and other services closely associated with these production and development operations at the establishment covered by the report. Gang and straw bosses and supervisors who performed manual labor are included, as are employees paid on either a time- or piece-rate basis. Also included are miners paid on a per ton, car, or yard basis and persons engaged by them and paid out of the total amount received by these miners. In addition, other employees at the establishment but not on its payroll are included if paid directly through its own employees, such as superintendents and supervisors. The payments received by these types of employees are included as part of the establishments payroll. Employees above the working-supervisor level are excluded from this category.

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

Separately operated auxiliary establishments employees. This item includes employment at separate central administrative offices or auxiliary units of multiestablishment companies and at those offices or units servicing more than one establishment during the payroll period which included March 12. Establishments are classified on the basis of the industry or principal industry served. Employees at an office located at or near the mining establishment are usually included in the mine report.

All employees, average for year. The 1992 census report form requested employment figures for production, development, and exploration workers for four selected pay periods (mid-March, May, August, and November). For all other employees, only a mid-March figure was requested. The annual average is an average of the four monthly figures for production, development, and exploration workers plus the March figure for all other employees. This approach was used to simplify the schedule format and lighten the reporting burden of respondents, since it was found that the average of these selected pay periods closely approximates, for most industries, the average employment for the year that would be obtained from 12 monthly pay periods.

Payroll. This item includes the gross earnings of all employees on the payroll of mining establishments paid in the calendar year 1992. It includes all forms of compensation such as salaries; wages; commissions; payments received on a ton, car, or yard basis; dismissal pay;

bonuses; vacation and sick leave pay; employee contributions to pension plans (such as 401(k) plan); and compensation in kind, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of corporations; it excludes payments to proprietors or partners of unincorporated concerns, and payments to members of Armed Forces and pensioners carried on the active payroll of mining establishments. Also excluded are royalty payments to unions and costs of smithing, explosives, fuses, electric cap lamps, and mine supplies used in production, development, and exploration work but charged to employees and deducted from their wages.

As in the case of employment and establishment figures, the annual payrolls of separate auxiliary establishments of multiestablishment companies are included in the totals for individual industries and for States.

Production-, development-, and exploration-worker hours. This item represents all hours that production, development, and exploration workers worked, both on active days during which there was production or development work and on inactive days when only security guards, inspectors, repair persons, and other maintenance persons were on duty. It includes all hours worked or paid for at the mining operations, except hours paid for vacations, holidays, or sick leave, when the employee was not at the establishment. Included are actual overtime hours, not straight time equivalent hours. Hours of working proprietors or partners and employees of contractors are excluded.

Supplemental labor costs. This item represents employers' costs for fringe benefits not included in payrolls.

Legally required expenditures, including Social Security contributions. This cost includes employer contributions for all programs required under Federal and State legislation, such as Federal Old Age and Survivors' Insurance, unemployment compensation, and workers' compensation. Also included are legally required State temporary disability payments.

Payments for voluntary programs. Included in this cost are payments resulting from union negotiated contracts and all employer payments of insurance premiums on hospital and medical plans, life insurance premiums, and premiums on supplementary accident and sickness insurance. For programs supported by joint employer-employee contributions, only the employer payments are included. Also included are payments or allocations on all pension plans regardless of methods of administration, supplemental unemployment compensation plans, welfare plans, stock purchase plans in which the employer payment is not subject to withholding tax, and deferred profit sharing plans.

Value added by mining. This measure of mining activity is derived by subtracting the cost of supplies, minerals received for preparation, purchased machinery installed,

purchased fuel, purchased electricity, and contract work from the sum of the value of shipments (mining products plus receipts for services rendered) and total capital expenditures. This statistic avoids the duplication in value of shipments and receipts which results from the use of products of some establishments as supplies, energy sources, or materials by others. Moreover, it provides a measure of value added not only in mineral production but also in the development of mineral properties. For these reasons, it is considered to be the best value measure for comparing the relative economic importance of mining among industries and geographic areas.

Cost of supplies used, purchased machinery installed, etc. Besides supplies used and purchased machinery installed, this cost includes fuels and electric energy used and contract work done by others for each establishment. It includes charges to both the current and capital accounts. It also includes the cost of items used during 1992 whether they were purchased, withdrawn from inventories, or received from other establishments of the company. For selected supplies and fuels and for electric energy, both quantity and cost data were requested. The cost data refer to direct charges actually paid or payable (after discounts) for items used during the year. Freight charges and other direct charges incurred by the establishment in acquiring the item are included. Companies whose records did not show actual amounts used were asked to approximate use by adding purchases (or receipts) during the year to beginning inventory and subtracting ending inventory. Separate figures were requested for (1) selected supplies used, minerals received for preparation, and purchased machinery installed; (2) electric energy purchased; (3) purchased fuels used for heat, power, or the generation of electricity; (4) contract work done by others; and (5) products bought and resold in the same condition. Supplies and equipment used in mine development, plant expansion, and capitalized repairs, which are chargeable to fixed assets accounts, are included in this item, as are supplies furnished without charge to contractors for use at the mining operation and supplies sold to employees for use at the establishment. Excluded are such costs as advertising, insurance, telephone, and research and consulting services of other establishments or such overhead costs as depreciation charges, rent, interest, and royalties.

Value of shipments and receipts. The amounts shown as value of shipments and receipts for each industry and State are the net selling values, f.o.b. mine or plant after discounts and allowances, excluding freight charges and excise taxes. Shipments includes all products physically shipped from the establishment during 1992, including material withdrawn from stockpiles and products shipped on consignment, whether or not sold in 1992. Prepared material or concentrates includes preparation from ores mined at the same establishment, purchased, received from other operations of the same company, or received for milling on a custom or toll basis. For products transferred to other establishments of the same company or

prepared on a custom basis, companies were requested to report the estimated value, not merely the cost of producing the items. Multiestablishment companies were asked to report value information for each establishment as if it were a separate economic unit. They were instructed to report the value of all products transferred to other plants of the company at their full economic value; to include, in addition to direct cost of production, a reasonable proportion of company overhead and profits.

For all establishments classified in an industry, value of shipments and receipts includes (1) the value of all primary products of the industry; (2) the value of secondary products which are primary to other industries; (3) the receipts for contract work done for others, except custom milling; and (4) the value of products purchased and resold without further processing. Receipts for custom milling are not included to avoid duplication with the value of custom milled ores included in an industry's primary and secondary products. Some duplication exists in industry and industry group totals because of the inclusion of materials transferred from one establishment to another for mineral preparation or resale.

Capital expenditures. This item covers expenditures made during the year for development and exploration of mineral properties, for new construction, and for purchased machinery chargeable to fixed assets accounts of the mineral establishment. They are the type for which depreciation, depletion, or Office of Minerals Exploration accounts are ordinarily maintained. Capital expenditures during 1992 were determined as "additions completed during the year plus construction in progress at the end of the year minus construction in progress at the beginning of the year." Reported capital expenditures include work done on contract, as well as by the mine forces. Expenditures for machinery and equipment include those made for replacement purposes, as well as those for additions to capacity. Excluded from these expenditures were costs of maintenance and repairs charged as current operating expense and expenditures for land and mineral rights.

Whenever applicable, separate figures were provided for expenditures for development and exploration of mineral property, construction of preparation plants and

other construction, new machinery and equipment, used plant, and used equipment acquired from others.

Rental payments. This item consists of rental payments made to other companies for use of such depreciable assets as buildings, other structures, machinery, and equipment. It does not include payments made to the parent company or another subsidiary of the parent company for the use of buildings and equipment owned by the parent company or its subsidiary. The value of such company-owned assets is included in the gross value of depreciable assets.

Rented equipment is reported according to the type of lease negotiated with the lessor. If the lease qualified as an "operating lease" the periodic payments made to the producer or the lessor are reported in the rental section. However, if the leasing arrangement met the criteria set down by the Financial Accounting Standards Board for a "capital lease," the original cost or market value of the equipment or building is reported as a value of fixed assets and not as rental payments.

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

Inventories. This item includes inventories of mined or quarried products and supplies, parts, fuels, etc., at the beginning and end of the year. Included as mined or quarried products are stockpiles of products ready for shipment and stocks of raw products awaiting treatment or beneficiation. Beginning with the 1982 Census of Mineral Industries, all respondents were requested to report their inventories at (the lower of) cost or market prior to adjustment to LIFO cost. This is a change from the 1977 census in which respondents were permitted to value their inventories using any generally accepted accounting method.

Appendix B. Geographic Divisions and States

NEW ENGLAND STATES

Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont

MIDDLE ATLANTIC STATES

New Jersey
New York
Pennsylvania

EAST NORTH CENTRAL STATES

Illinois
Indiana
Michigan
Ohio
Wisconsin

WEST NORTH CENTRAL STATES

Iowa
Kansas
Minnesota
Missouri
Nebraska
North Dakota
South Dakota

SOUTH ATLANTIC STATES

Delaware
District of Columbia
Florida
Georgia
Maryland

SOUTH ATLANTIC STATES—Con.

North Carolina
South Carolina
Virginia
West Virginia

EAST SOUTH CENTRAL STATES

Alabama
Kentucky
Mississippi
Tennessee

WEST SOUTH CENTRAL STATES

Arkansas
Louisiana
Oklahoma
Texas
Offshore Areas

MOUNTAIN STATES

Arizona
Colorado
Idaho
Montana
Nevada
New Mexico
Utah
Wyoming

PACIFIC STATES

Alaska
California
Hawaii
Oregon
Washington

Publication Program

1992 CENSUS OF MINERAL INDUSTRIES

Publications of the 1992 Census of Mineral Industries, containing data on establishments primarily engaged in the extraction of minerals, are described below. Publications order forms for the specific reports may be obtained from any Department of Commerce district office or from Customer Services, Bureau of the Census, Washington, DC 20233-8300.

Preliminary Reports

Industry series—12 reports (MIC92-I-10A(P) to -14E(P))

Preliminary data from the 1992 census are issued in 12 separate reports covering 31 mineral industries. Preliminary summary data for the United States and States are released in one report.

Final Reports

Industry series—12 reports (MIC92-I-10A to -14E)

Each of the 12 reports provides information for an industry or a group of related industries (e.g., clay, ceramic, and refractory minerals). Final figures for the United States are shown for each of 31 mineral industries on quantity and value of products shipped and supplies used; inventories; quantity and cost of fuels and electric energy purchased and the quantities of fuels produced and consumed; capital expenditures; assets; rents; employment; depreciation, amortization, and depletion; payroll; hours worked; cost of purchased machinery; value added by mining; mineral development, and exploration costs; number of establishments; and number of companies. Comparative statistics for earlier years are included. Industry statistics are shown by State, type of operation, and size of establishment.

Geographic area series—9 reports (MIC92-A-1 to -9)

A separate report for each of the nine geographic divisions presents statistics for individual States and offshore areas for two- and three-digit industry groups by

type of operation and by county. Also, data are shown for value of shipments; value added by mining; employment; payroll; hours worked; capital expenditures; cost of supplies, etc.; purchased machinery installed; and number of mining establishments, with comparative 1987 data on employment and value added by mining.

Subject series—2 reports (MIC92-S-1 and -2)

One of these reports is a general national-level summary; the other report contains detailed statistics on fuels and electric energy consumed by mineral industries.

Reference series—1 report (MC92-R-1)

The *Numerical List of Manufactured and Mineral Products* includes a description of the principal products and services published in the 1992 Censuses of Manufactures and Mineral Industries.

Electronic Media

All data included in the printed reports are available on compact disc—read only memory (CD-ROM). The CD-ROM's provide the same information found in the reports. Electronic media products are available for users who wish to summarize, rearrange, or process large amounts of data. These products, with corresponding technical documentation, are sold by Customer Services, Bureau of the Census, Washington, DC 20233-8300.

OTHER ECONOMIC CENSUSES REPORTS

Data on retail trade, wholesale trade, service industries, financial, insurance, real estate, construction industries, manufactures, transportation, communications, utilities, enterprise statistics, minority-owned businesses, and women-owned businesses also are available from the 1992 Economic Census. A separate series of reports covers the census of outlying areas—Puerto Rico, Virgin Islands of the United States, Guam, and the Commonwealth of the Northern Mariana Islands. Separate announcements describing these reports are available free of charge from Customer Services, Bureau of the Census, Washington, DC 20233-8300.