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Coal Industry Annual 1996

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Preface

Coal Industry Annual 1996 provides comprehensive information about U.S. coal production, number of mines, prices, productivity, employment, productive capacity, and recoverable reserves. U.S. coal production for 1996 and previous years is based on the annual survey EIA-7A, "Coal Production Report."

This report presents data on coal consumption, coal distribution, coal stocks, coal prices, coal quality, and emissions for Congress, Federal and State agencies, the coal industry, and the general public. Appendix A contains a compilation of coal statistics for the major coal-producing States. This report does not include coal consumption data for nonutility power producers that are not in the manufacturing, agriculture, mining, construction, or commercial sectors. Consumption for nonutility power producers not included in this report is estimated to be 24 million short tons for 1996.

The data presented in the report were collected and published by the Energy Information Administration (EIA), to fulfill its data collection and dissemination responsibilities, as specified in the Federal Energy Administration Act of 1974 (Public Law 93-275), as amended. Data for the Demonstrated Reserve Base (DRB) are now reported in *U.S. Coal Reserves: A Review and Update* (DOE/EIA-0529). However, this report presents data on the recoverable portion of the DRB in Table 105.

The base year for the implicit price deflator, which is used to convert nominal figures to real figures is 1992, the same as the previous year (Table D3).

This report constitutes the 21st annual report on coal production published by EIA and continues the series formerly included in the *Minerals Yearbook* published by the Bureau of Mines.

The Office of Coal, Nuclear, Electric and Alternate Fuels gratefully acknowledges the cooperation of the respondents in supplying the information presented in this report and appreciates the valuable assistance of State coal mining agencies; the U.S. Department of the Interior: the Bureau of Land Management, the Minerals Management Service; the U.S. Department of Labor: the Mine Safety and Health Administration, the Bureau of Labor Statistics; the U.S. Department of Commerce: the Bureau of the Census; and the King Publishing Corporation.

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Executive Summary

Coal's Role in the U.S. Energy Picture

Total U.S. energy production in 1996 continued the upward swing begun in 1994, rising 2 percent to 72.61 quadrillion Btu. Coal production in Btu terms went up 3 percent to a record high of 22.61 quadrillion Btu (1,064 million short tons). Renewable energy sources, in particular hydroelectric power, and natural gas production went up from their 1995 levels, while oil and nuclear electric power production declined (Table ES1).

Total U.S. energy consumption reached a record level of 93.81 quadrillion Btu in 1996, the fifth consecutive year of growth. Coal consumption reached 20.99 quadrillion Btu, a 5-percent increase over the 1995 level. Consumption of natural gas, petroleum, hydroelectric power, and renewable energy sources also rose, while consumption of nuclear electric power declined slightly.

The electric utility sector accounted for 89 percent of the total coal consumed in 1996. Coal-fired units represented 57 percent of utility generation of electricity, 2 percent more than in 1995. Petroleum and hydroelectric power generation paralleled this increase, while electricity generated by natural gas and nuclear power decreased (Table ES2).

U.S. coal exports went up for the second consecutive year and retained its role as the primary U.S. energy export. In 1996, U.S. coal exports rose to 2.37 quadrillion Btu (90 million short tons), 2 percent more than in 1995. In comparison, coal imports, accounting for less than 1 percent of U.S. energy imports, remained about the same as in 1995 at 0.18 quadrillion Btu (7 million short tons).

Production

U.S. coal production totaled 1,064 million short tons, 31 million short tons higher than in 1995 (Table ES3). Wyoming and Utah set record high production levels. Wyoming remained the leading coal-producing State, followed by West Virginia, and Kentucky. In comparison, Kentucky and Arizona's production was at the lowest level since 1985; Washingtons's coal output was the lowest since 1987; Oklahoma's coal production was the lowest since 1990; and, New Mexico and North Dakota had the lowest production levels since 1991. On the other hand, Maryland had the highest production level since 1984; Texas had the highest coal output since 1990; and Tennessee had the highest coal production since 1991. (The total U.S. coal output does not include about 4 million short tons of low-Btu waste coal, which is recovered and used by independent power producers and reported to their respective State governments.)

Coal production for States east of the Mississippi River were 564 million short tons, 19 million short tons more than in 1995. The States with the largest increase in production were West Virginia, Pennsylvania, Indiana, and Ohio, which together had 20 million short tons more coal output than in 1995. The eastern States had a combined net loss of 192 mines and 5,211 miners. However, miner productivity in this region rose 5 percent in 1996 to 3.63 short tons per miner per hour, the third consecutive year of substantial gain.

Coal production west of the Mississippi River reached a record 500 million short tons, despite 9 fewer mines in the region and 1,579 fewer miners. Wyoming's coal output, which was 15 million short tons higher than in 1995, accounted for most of the growth. Miner productivity in the region rose 10 percent to 15.66 tons per miner per hour, in part due to the use of new, upgraded equipment at the mines.

Coal Mine Prices

The average price of U.S. coal in 1996 was $18.50 per short ton, 2 percent less than in 1995. The price of coal from mines east of the Mississippi River fell 3 percent from the 1995 level, while coal prices at mines West of the Mississippi River also dipped, but by less than 1 percent.

Coal Imports

U.S. coal imports in 1996 were 7 million short tons, about the same as in 1995. An increase in shipments from Indonesia (500 thousand short tons) and Canada (100 thousand short tons) partially offset a decrease in shipment from Venezuela (400 thousand short tons) and Colombia (200 thousand short tons). Venezuela exported 7 percent less coal and Indonesia almost doubled its shipments to the U.S. electric utility sector.

Table ES1. U.S. Energy Overview, Selected Years, 1987, 1992-1996
(Quadrillion Btu)

Activity and Energy Source	1996 P	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
Production	**72.61**	R **71.12**	R **70.68**	**68.32**	**69.96**	**64.95**	**2.1**	**0.9**	**1.2**
Fossil Fuels	58.41	R 57.41	R 57.91	55.71	57.55	57.17	1.8	.4	.2
Coal	22.61	R 21.98	22.07	20.22	21.59	20.14	2.9	1.2	1.3
Natural Gas (Dry)	19.53	R 19.10	R 19.35	18.58	18.38	17.14	2.3	1.5	1.5
Crude Oil[1]	13.74	R 13.89	14.10	14.49	15.22	17.67	–1.1	–2.5	–2.8
Natural Gas Plant Liquids	2.53	2.44	2.39	2.41	2.36	2.22	3.6	1.7	1.5
Nuclear Electric Power	7.17	R 7.18	6.84	6.52	6.61	4.91	–.1	2.0	4.3
Hydroelectric Pumped Storage[2]	–.03	–.03	–.03	–.04	–.04	(3)	–	–	–
Renewable Energy	7.06	R 6.56	R 5.97	6.13	5.84	2.88	7.6	4.8	10.5
Conventional Hydroelectric Power	3.59	R 3.21	2.67	2.88	2.61	2.63	12.0	8.3	3.5
Geothermal Energy	.35	.33	.38	.38	.37	.23	9.0	–.9	4.9
Biofuels[4]	3.02	R 2.95	R 2.84	2.78	2.79	.02	2.4	2.0	79.8
Solar Energy	.07	.07	.07	.07	.07	–	–	–	–
Wind Energy	.04	R .03	.04	.03	.03	*	10.0	4.8	84.5
Imports	**23.68**	R **22.48**	**22.71**	**21.54**	**19.66**	**15.76**	**5.3**	**4.8**	**4.6**
Natural Gas	2.90	R 2.90	2.68	2.40	2.16	.99	.1	7.7	12.7
Crude Oil[5]	16.24	R 15.63	15.34	14.75	13.25	10.07	3.9	5.2	5.4
Petroleum Products[6]	3.86	R 3.23	3.91	3.76	3.71	4.10	19.5	.9	–.7
Coal	.18	.18	.19	.18	.10	.04	–5.2	6.3	1.2
Other[7]	.50	R .54	.59	.45	.43	.57	–5.2	6.3	1.2
Exports	**4.69**	**4.58**	**4.12**	**4.35**	**5.02**	**3.85**	–	–	–
Coal	2.37	2.32	1.88	1.96	2.68	2.09	2.2	–3.0	1.4
Crude Oil	2.06	1.99	1.99	2.12	2.01	1.63	3.5	.7	2.6
Other[8]	.26	.27	.26	.27	.33	.13	–4.8	–6.0	7.8
Adjustments[9]	**2.21**	R **1.92**	R **–.05**	R **1.83**	R **.92**	**.03**	**14.7**	**24.5**	**60.8**
Consumption[10]	**93.81**	R **90.94**	R **89.21**	R **87.34**	R **85.52**	**76.89**	**3.1**	**2.3**	**2.2**
Fossil Fuels	79.29	R 76.94	R 76.06	R 74.51	R 72.89	68.63	3.1	2.1	1.6
Coal	20.99	R 20.08	R 20.02	R 19.83	R 19.21	18.01	4.5	2.2	1.7
Coal Coke Net Imports	*	.03	.02	.02	.03	.01	–	–	–
Natural Gas[11]	22.59	R 22.16	R 21.29	20.83	20.13	17.74	1.9	2.9	2.7
Petroleum[12]	35.72	R 34.66	34.73	33.84	33.53	32.87	3.0	1.6	.9
Nuclear Electric Power	7.17	R 7.18	6.84	6.52	6.61	4.91	–.1	2.0	4.3
Hydroelectric Pumped Storage[2]	–.03	–.03	–.03	–.04	–.04	(3)	–	–	–
Renewable Energy	7.39	R 6.85	R 6.28	6.40	6.11	3.36	8.0	4.9	9.1
Conventional Hydroelectric Power[13]	3.91	R 3.47	2.96	3.14	2.85	3.12	12.7	8.2	2.5
Geothermal Energy[14]	.35	R .33	.38	.38	.37	.23	9.0	–.9	4.9
Biofuels[4]	3.02	R 2.95	R 2.84	2.78	2.79	.02	2.4	2.0	79.8
Solar Energy	.07	.07	.07	.07	.07	–	–	–	–
Wind Energy	.04	R .03	.04	.03	.03	*	10.0	4.8	84.5

1 Includes lease condensate.
2 Represents total pumped storage facility production minus energy used for pumping.
3 Pumped storage is included in conventional hydroelectric power.
4 Includes wood, wood waste, peat, wood liquors, railroad ties, pitch, wood sludge, municipal solid waste, agricultural waste, straw, tires, landfill gases, fish oils, and/or other waste.
5 Includes imports of crude oil for the Stategic Petroleum Reserve, which began in 1977.
6 Includes imports of unfinished oils and natural gas plant liquids.
7 ''Other'' imports are electricity and coal coke.
8 ''Other'' exports are natural gas, petroleum products, electricity and coal coke.
9 A balancing item. Includes stock changes, losses, gains, miscellaneous blending components, and unaccounted for supply.
10 From 1990, the portion of net imports of electricity that is derived from nonrenewable energy sources is included directly in ''Consumption.''
11 Includes supplemental gaseous fuels.
12 Petroleum products supplied, including natural gas plant liquids and crude oil burned as fuel.
13 Includes net imports of electricity.
14 Includes electricity imports from Mexico that are derived from geothermal energy.
* Data round to zero.
R Revised data.
P Preliminary data.

Notes: Coal Consumption does not include coal consumed by independent power producers. Total may not equal sum of components due to independent rounding.

Source: Energy Information Administration, *Annual Energy Review 1996*, DOE/EIA-0384(96), Table 1.1.

Table ES2. Share of U.S. Electric Utility Net Generation of Electricity by Source, 1987, 1992-1996
(Percent)

Energy Source	1996	1995	1994	1993	1992	1987
Coal	56.5	55.2	56.2	56.9	56.3	56.9
Natural Gas	8.5	10.3	10.0	9.0	9.4	10.6
Petroleum[1]	2.2	2.0	3.1	3.5	3.2	4.6
Nuclear Power	21.9	22.5	22.0	21.2	22.1	17.7
Hydroelectric Power	10.7	9.8	8.4	9.2	8.6	9.7
Geothermal and Other[2]	.2	.2	.3	.3	.4	.5
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

1 Distillate fuel oil, residual fuel oil (including crude oil burned as fuel), jet fuel, and petroleum coke.
2 Other is wood, waste, wind, photovoltaic, and solar thermal energy used to generate electricity for distribution.
Note: Total may not equal sum of components due to independent rounding.
Source: Energy Information Administration, Form EIA-759, ''Monthly Power Plant Report.''

The average price of imported coal in 1996 declined 2 percent to $33.45 per short ton. Coal imports were valued at $238 million, down from $246 million in 1995.

Coal Consumption

In 1996, domestic coal consumption rose to a record of 983 million short tons, a 4-percent increase over 1995. (This total does not include about 24 million short tons of coal consumed by independent power producers in 1996.) The increase is attributable to electric utility coal consumption, which rose by 6 percent to a record level of 875 million short tons, even though net generation at electric utilities rose by 3 percent. Coal consumption at electric utilities was indirectly affected by: a 10-percent increase in hydroelectric generation; a record level of nuclear power generation (up less than 1 percent); and, the lowest level of natural gas-fired generation since 1993 (down 14 percent from 1995).

Industrial plants consumed 71 million short tons of coal, 3 percent less than in 1995. Coal carbonized at coke plants decreased by 4 percent to 32 million short tons, while the residential and commercial sectors consumed about 6 million short tons.

The average sulfur content (measured as percent sulfur by weight) of coal received at electric utilities in 1996 was 1.10 percent, up 2 percent from 1995. The quality of coal received at manufacturing and coke plants showed a sulfur content of 1.17, a 2-percent increase.

Table ES3. Trends in U.S. Coal Production, Imports, Consumption, Exports, and Stocks, 1987, 1992-1996
(Million Short Tons)

Activity	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
Production	1,064	1,033	1,034	945	998	919	3.0	1.6	1.6
Imports	7	7	8	7	4	2	–1.0	17.0	16.9
Producer and Distributor Stocks[1]	29	34	33	25	34	34	–16.8	–4.2	–1.9
Consumption	983	941	930	926	892	837	4.5	2.4	1.8
Exports	90	89	71	75	103	80	2.2	–3.1	1.4
Consumer Stocks[1]	123	135	136	120	164	185	–8.6	–6.9	–4.4

1 Reported as of the last day of the quarter.
Note: Consumption does not include coal consumed by independent power producers.
Sources: • Production: Energy Information Administration (EIA), Form EIA-7A, ''Coal Production Report''; U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, ''Quarterly Mine Employment and Coal Production Report''; and State Mining Agency Coal Production Reports. • Imports: U.S. Department of Commerce, Bureau of the Census, ''Monthly Report IM 145.'' • Producer and Distributor Stocks: EIA, Form EIA-6, ''Coal Distribution Report.'' • Exports: U.S. Department of Commerce, Bureau of the Census, ''Monthly Report EM 545.''
• Consumption and Consumer Stocks: EIA, Form EIA-759, ''Monthly Power Plant Report''; Form EIA-3, Quarterly Coal Consumption Report - Manufacturing Plants''; Form EIA-5, ''Coke Plant Report - Quarterly''; and Form EIA-6, ''Coal Distribution Report.''

Coal Stocks

Coal stocks held by consumers on December 31, 1996, totaled 123 million short tons, 12 million short tons less than in 1995. Compared with 1995, year-end 1996 coal stocks at electric utility plants declined by 12 million short tons, while coal stocks at other industrial plants and coke plants remained about the same. Producer and distributor stocks at the end of 1996 were 29 million short tons, a decrease of 6 million short tons.

Delivered Coal Prices

The price of coal delivered to all consuming sectors declined in 1996. The delivered price of coal to the electric utility and other industrial sectors dropped by 2 percent and less than 1 percent, respectively, to $26.45 per short ton and $32.32 per short ton. The price of coal delivered to coke plants remained about the same at $47.33 per short ton.

Coal Exports

U.S. coal exports went up 2 percent to 90 million short tons in 1996. An increase in shipments to Canada, the United Kingdom, Mexico, and the Republic of South Africa offset a decrease in shipments to Europe and Asia.

Compared with 1995, steam coal exports rose 3 percent in 1996 to 38 million short tons. Steam coal exports to North America and Asia increased by 26 percent and 13 percent, respectively, while steam coal exports to Europe dropped by 11 percent to 19 million short tons.

U.S. metallurgical coal exports increased by 2 percent from the 1995 level, to 53 million short tons. Greater demand from foreign metallurgical coal markets, particularly in Canada, Italy, and the Republic of South Africa, were partially offset by lower demand from Japan.

West Virginia continued to dominate coal exports in 1996, shipping over 42 million short tons, a 5-percent decrease from 1995. About 75 percent, or 32 million short tons, went to overseas metallurgical markets, while exports to overseas steam markets amounted to 10 million short tons.

The average price of U.S. coal exports in 1996 was $40.76 per short ton, a 1-percent increase from 1995. U.S. metallurgical coal export prices rose 3 percent to $45.49 per short ton, while U.S. steam coal export prices went down slightly to $34.09 per short ton. Coal exports in 1996 were valued at $3.7 billion.

Company Mergers & Sales

In the second largest railroad merger this decade, Conrail has been jointly acquired by CSX and Norfolk Southern. Conrail controls 11,000 miles of track in 12 States (including the District of Columbia) in the Northeast, Midwest, and Quebec, Canada. Conrail (for Consolidated Rail Corporation) was formed by the Federal government when Penn Central (which formerly merged with New York Central and five other Eastern lines) collapsed in bankruptcy in 1976. This consolidation of smaller lines allowed Conrail to have a monopoly of rail freight service along the eastern seaboard and west to Chicago.

Since the 1980's, freight railroads have become more profitable, increasing freight traffic and operating more efficiently. These factors created the climate for recent mergers such as the one between Burlington Northern and Santa Fe Pacific in 1994. CSX and Norfolk Southern have each been trying to buy Conrail for some time, in a move to dominate the rail industry in the East. Under the agreement announced April 8, 1997, the two rail giants would divide the former Conrail lines with CSX getting 42 percent of the assets (for $4.3 billion) and Norfolk Southern having the remaining assets (for $5.9 billion). CSX would run the old New York Central's Hudson River route, which links New York City to Albany, then continues to Buffalo and Cleveland. In addition, they will serve the lines between New York and Philadelphia and Crestline, Ohio, and Chicago. Norfolk Southern will take over the Erie-Lackawanna route which runs through upstate New York, the old Pennsylvania Railroad line, and a section of the New York Central line from New Jersey to Chicago.

The joint merger application, filed with the U.S. Surface Transportation Board in June 1997, could take a year for final approval. If approved, the CSX-Norfolk Southern jointly-owned railroad would span 22 States and cover nearly 30,000 miles of track. Since Conrail's former rail lines will be divided between the two successors, competition will return to freight rail service in New York, Philadelphia, and other important Eastern ports after a nearly 30-year absence.

In January 1997, Nerox Energy Corp. acquired 1,410 acres of Alaskan coal-bearing lands from San Francisco-based Placer Dome U.S. Inc. Nerox set up offices in Anchorage prior to development of the site, located near Sutton, Alaska. Placer Dome's Evan Jones mine was renamed the Jonesville mine. The company negotiated a contract for an annual amount of 500 thousand metric tons of coal for the Asian export market and has submitted a bid with the Department of Defense to supply coal to military bases in Alaska.

Anker Energy took over Island Creek/Occidental Petroleum's jointly-owned coal properties from Glenn Springs Holdings in early 1996. The site, located in Upshur County, near Buckhannon, West Virginia, was not part of the large sale of Island Creek's assets to Consol in 1993. The property consists of haul roads, a prep plant and the Upshur deep mine, which has been

idle since the middle 1980's. Spokespersons for Anker Energy said that the company will not mine the site, but instead will test its acid mine drainage techonology there.

Kerr-McGee Coal sold the stock of its subsidiary Pioneer Fuel to Ruhr American Coal Corp., in February 1996. Rhur American, owned by Germany's Ruhrkohl AG, purchased Pioneer's surface mine and the accompanying reserves, located in Wyoming County, West Virginia.

Cyprus AMAX Minerals Company, the second largest coal producing company in the U.S. purchased a 50 percent interest in an Australian mine in 1996. The Springvale mine, co-owned by Samsung Development, is a longwall-equipped deep mine which is currently producing at an annual rate of 2 million tons. Cyprus AMAX also successfully bid on the lease to 24 million tons of Federally-owned coal reserves at their Twentymile underground mine in Colorado. This addition brings the total to an estimated 140 million short tons of reserves at the mine. The Twentymile, which produced nearly 6 million tons in 1996, is estimated to produce 8 million tons in 1997.

Arch Minerals the 11th largest U.S. coal-producing company in 1995 sold land in Wyoming that included their Pilot Butte mine, to Union Pacific Corp., in 1996. The Pilot Butte, a small underground mine located near Rock Springs, Wyoming, had been supplying coal to the nearby Jim Bridger power plant. This arrangement did not prove profitable for Arch, and the mine has been idle for the past few years. Union Pacific, which already owned land near the mine, will have the lease for the coal reserves, including reserves which are controlled by the Bureau of Land Management. In August, 1996, Arch's subsidiary, Arch on the North Fork, closed its Ridgeline surface mine, located in Breathitt County, Kentucky. The mine was closed due to depletion of available reserves. In the West, Arch of Wyoming purchased an 80-thousand-acre tract of coal bearing land in Wyoming's Hanna Basin from Commonwealth Edison's Development. The site is located near Elk Mountain, Wyoming, and is estimated to have over 100 million tons in recoverable reserves.

Financially-troubled Morrison Knudsen agreed to merge with Washington Construction Group, a large-project construction company located in Highland, California. Texas-based Morrison Knudsen intends to keep operating its contract mines for the near term. The merger is aimed at pooling the resources of several construction and mining-related interests that the two companies have in common.

Westmoreland Coal sold two of its idle Wise County, Virginia coal operations in 1996. The Wentz facilities (a mine and preparation plant) were transferred to Stonega Mining and Processing, and the Pine Branch Mine was sold to Roaring Fork Mining of Big Stone Gap, Virginia. The deal was a non-cash sale; Stonega and Roaring Fork agreed to perform reclamation and be responsible for environmental liabilities and meet the UMWA-demands for medical benefit obligations to former Westmoreland employees affected by the sale.

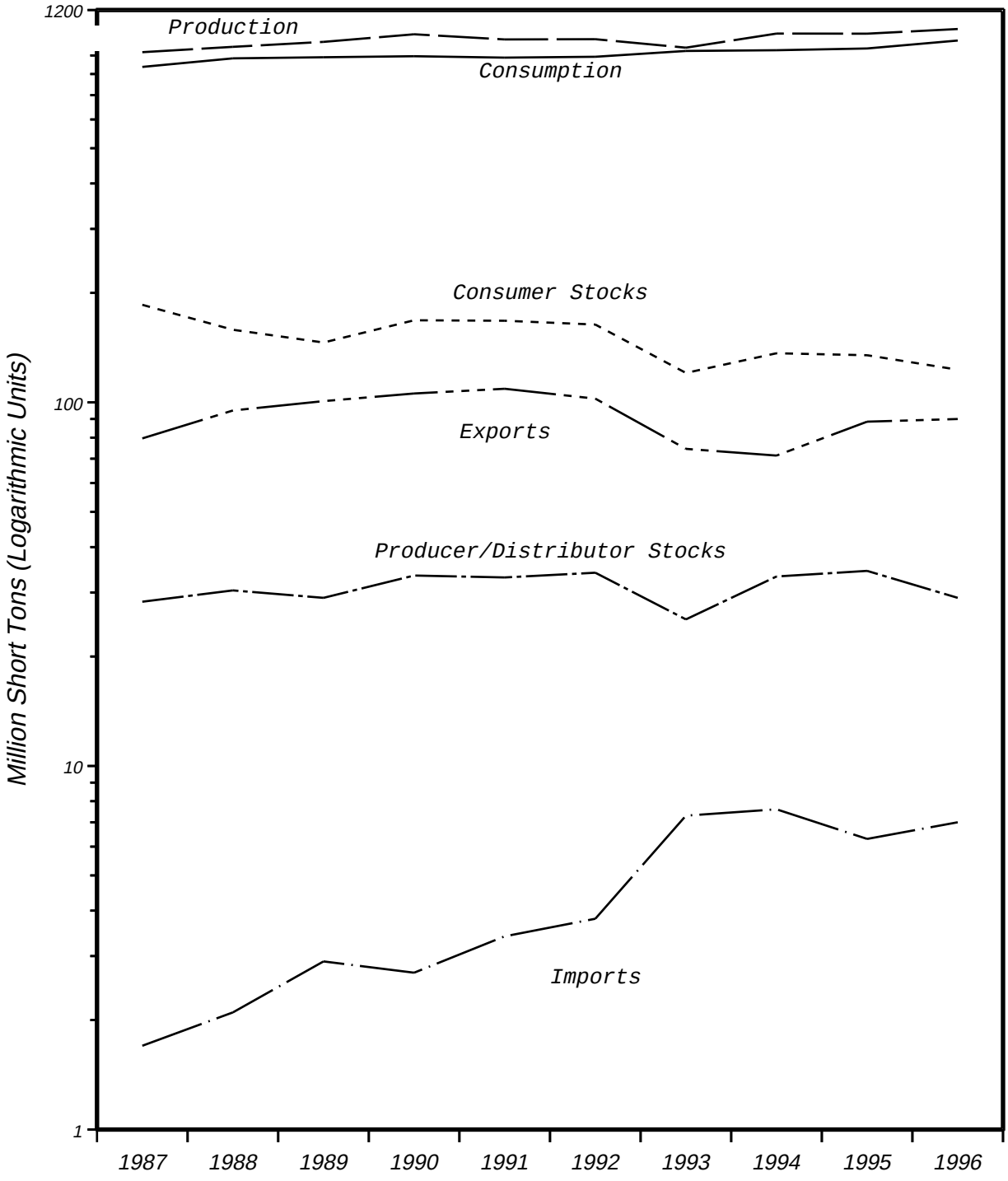
In 1996, Jimmy Ryan, president of two Alabama coal companies, Kodiak Coal and Boone Resources opened the Kodiak No. 1 mine in Shelby County, despite union opposition. The UMWA claimed it had a right to representation at the mine since Ryan is leasing it from U.S. Steel, which is unionized. This was disputed by subsidiary U.S. Steel Mining, the actual operating company, which is non-union. The Kodiak No. 1 Mine produced just over 73 thousand tons of coal in 1996.

In September 1996, Beacon Group Energy Investment Fund purchased MAPCO Coal and MC Mining from MAPCO Inc. The terms of the sale included 100 percent of stock from these two companies. Other assets include mining operations in Kentucky, Maryland, Illinois, and Virgnia, a coal terminal on the Ohio River, and supply contracts with Delmarva Power, Seminole Electric, Virginia Power, Cogentrix, TVA, and U.S. Steel. Joe Craft III continues to serve as MAPCO Coal's President, and the company will maintain facilities at MAPCO Inc.'s headquarters in Tulsa, Oklahoma and in Lexington, Kentucky. MAPCO Coal was the 19th largest coal producer in 1996, producing 12.8 million short tons.

In late December 1996, Coastal Corp. was finalizing the sale of its SUFCO, Skyline, and Soldier Creek mining operations in Utah to ARCO Coal and Japanese-owned ITOCHU Corp. The sale was concluded after several months of negotiations, including a period in which ANR Coal- Coastal's Appalachian subsidiary - was being considered as part of the purchase. The main sticking point in the negotiations was the future value of the long-term supply contracts held by Coastal with Intermountain Power Agency and Sierra Pacific Power. Coastal reassured ARCO and ITOCHU by offering to insure the contracts from devaluation due to the effects of arbitration or utility deregulation. The SUFCO, Skyline, and Soldier Creek controlled mines together produced nearly 9 million tons of high volatile, low- sulfur, bituminous coal in 1996. Ninety percent of this output went to U.S. electric utilities and 10 percent was exported to the Pacific Rim. There are an estimated 300 million tons of recoverable reserves on these properties, according to ARCO. Also included in the sale was Coastal's 9-percent share of the Los Angeles Export Terminal.

In November 1996, British-owned Costain PLC sold its U.S. coal company Costain Coal, to Rencoal, Inc., a subisdiary of New York-based Renco Group. Costain PLC had been trying to divest itself of its U.S. coal holdings since 1994. Costain Coal produced 9.3 million short tons in 1996.

Figure ES1. Trends in U.S. Coal Production, Imports, Consumption, Exports, and Stocks, 1987-1996



Note: Consumption does not include coal consumed by independent power producers.
Sources: Production: Energy Information Administration (EIA), Form EIA-7A, "Coal Production"; U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report"; and State Mining Agency Coal Production Reports. Imports: U.S. Department of Commerce, Bureau of the Census, "Monthly Report IM 145." Producer and Distributor Stocks: EIA, Form EIA-6, "Coal Distribution Report." Exports: U.S. Department of Commerce, Bureau of the Census, "Monthly Report EM 545." Consumption and Consumer Stocks: EIA, Form EIA-759, "Monthly Power Plant Report"; Form EIA-3, "Quarterly Coal Consumption Report - Manufacturing Plants"; Form EIA-5, "Coke Plant Report - Quarterly"; and Form EIA-6, "Coal Distribution Report."

Table ES4. U.S. Coal Statistics, 1987, 1992-1996

Category	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
Supply (thousand short tons)									
Recoverable Reserves	19,427,980	20,105,197	21,016,526	21,535,283	21,626,971	24,241,218	–3.4	–2.6	–2.4
Productive Capacity[1]	1,324,712	1,299,054	1,320,656	1,261,873	1,241,054	1,183,404	2.0	1.6	1.3
Production Total	1,063,856	1,032,974	1,033,504	945,424	997,545	918,762	3.0	1.6	1.6
Underground	409,849	396,249	399,103	351,053	407,239	372,874	3.4	.1	1.0
Surface	654,007	636,725	634,401	594,371	590,306	545,888	2.7	2.6	2.0
Capacity Utilization[2]	80.21	79.40	78.11	74.77	80.20	77.29	1.0	*	.4
Ratio of Recoverable Reserves to Production	18.3	19.5	20.3	22.8	21.7	26.4	–6.2	–4.2	–4.0
Number of Miners	83,462	90,252	97,500	101,322	110,196	142,667	–7.5	–6.7	–5.8
Productivity Total[2]	5.69	5.38	4.98	4.70	4.36	3.30	5.8	6.9	6.3
Underground	3.57	3.39	3.19	2.95	2.93	2.20	5.6	5.1	5.5
Surface	9.05	8.48	7.67	7.23	6.59	4.98	6.7	8.3	6.9
Producer/Distributor Stocks	28,648	34,444	33,219	25,284	33,993	34,090	–16.8	–4.2	–1.9
Imports[3]	6,476	6,317	6,599	5,496	1,806	765	2.5	37.6	26.8
Distribution (thousand short tons)									
Distribution Total	1,059,892	1,030,330	1,022,523	959,445	998,647	NA	2.9	1.5	NA
Domestic Distribution Total	967,693	940,423	949,843	883,934	897,267	NA	2.9	1.9	NA
Within State	340,005	336,821	353,765	339,034	355,232	NA	.9	–1.1	NA
To Other States	627,688	603,602	596,078	544,900	542,035	NA	4.0	3.7	NA
Foreign Distribution Total	92,199	89,907	72,680	75,510	101,380	NA	2.5	–2.3	NA
Metallurgical	56,162	R 54,077	R 52,206	R 52,591	R 61,432	NA	3.9	–2.2	NA
Steam	36,037	R 35,830	R 20,474	R 22,919	R 39,948	NA	.6	–2.5	NA
Canada Total	10,599	8,023	8,467	7,751	13,919	NA	32.1	–6.6	NA
Metallurgical	8,472	R 6,986	7,464	6,666	9,394	NA	21.3	–2.5	NA
Steam	2,127	1,037	1,003	1,085	4,525	NA	105.0	–17.2	NA
Overseas Total[4]	81,600	81,884	64,214	67,759	87,461	NA	–.3	–1.7	NA
Metallurgical	47,690	R 47,091	R 44,743	R 45,925	R 52,038	NA	1.3	–2.2	NA
Steam	33,910	R 34,793	R 19,471	R 21,834	R 35,423	NA	–2.5	–1.1	NA
Demand (thousand short tons)									
Consumption Total	983,334	940,880	930,201	925,944	892,421	836,860	4.5	2.4	1.8
Electric Utility	874,681	829,007	817,270	813,508	779,860	717,894	5.5	2.9	2.2
Industrial	70,941	73,055	75,179	74,892	74,042	75,175	–2.9	–1.1	–.6
Coke	31,706	33,011	31,740	31,323	32,366	36,877	–3.9	–.5	–1.7
Residential/Commercial	6,006	5,807	6,013	6,221	6,153	6,914	3.4	–.6	–1.5
Consumer Stocks Total	123,024	134,639	136,139	120,458	163,692	185,459	–8.6	–6.9	–4.4
Electric Utility	114,669	126,304	126,897	111,341	154,130	170,797	–9.2	–7.1	–4.3
All Other	8,355	8,334	9,243	9,117	9,562	14,662	.3	–3.3	–6.0
Coal Prices (nominal dollars per short ton)									
Mine Total	$18.50	$18.83	$19.41	$19.85	$21.03	$23.07	–1.8	–3.1	–2.4
Underground	25.96	26.18	26.39	26.92	27.83	29.63	–.9	–1.7	–1.5
Surface	13.82	14.25	15.02	15.67	16.34	18.58	–3.0	–4.1	–3.2
Consumer									
Electric Utility	26.45	27.01	28.03	28.58	29.36	31.83	–2.1	–2.6	–2.0
Industrial	32.32	32.42	32.55	32.23	32.78	33.71	–.3	–.3	–.5
Coke	47.33	47.34	46.56	47.44	47.92	46.55	*	–.3	.2

1 For 1987, the Form EIA-7A solicited data on ''Daily Productive Capacity.'' To obtain annual productive capacity for a mine in 1987, each mine's daily productive capacity was multiplied by the number of days worked during the year.

2 Capacity utilization (percent) is the ratio of total production to annual productive capacity as reported by mining companies on Form EIA-7A. Productivity (short tons per miner per hour) is calculated by dividing total coal production by the total direct labor hours worked by all employees engaged in production, preparation, processing, development, maintenance, repair, and shop or yard work at mining operations.

3 Imports for 1992 through 1996 include imports to electric utilities, manufacturing plants and coke plants. Imports for 1987 include only imports to electric utilities.

4 Includes Mexico.

* Data round to zero.

NA Not available.

R Revised Data.

Notes: Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Consumption Total does not include coal consumed by independent power producers. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-3, ''Quarterly Coal Consumption Report - Manufacturing Plants''; Form EIA-5, ''Coke Plant Report - Quarterly''; Form EIA-6, ''Coal Distribution Report''; Form EIA-7A, ''Coal Production Report''; Form EIA-759, ''Monthly Power Plant Report''; and U.S. Department of Commerce, Bureau of the Census, ''Monthly Report EM 545'' and ''Monthly Report IM 145.''

Supply

Production

U.S. coal production during 1996 increased 3 percent to 1,064 million short tons, setting a record level (Table 1). As in 1995, the largest coal-producing State was Wyoming, followed by West Virginia and Kentucky. Wyoming's coal production in 1996 increased 6 percent over its 1995 level to reach a record of 278 million short tons. West Virginina increased its coal production by 5 percent to a level of 170 million short tons, 3 percent less than the record level of 176 million short tons in 1947. Kentucky, the third largest coal-producing State, declined by 1 percent in 1996, to a level of 152 million short tons. Only 11 of the 25 coal producing States showed an increase in 1996.

Regionally, coal production increased in all regions. In Appalachia, increases in production in 1996 occured in Maryland, Ohio, Pennsylvania, Tennessee, Virginia, and West Virginia, resulting in the largest increase of any region, 17 million short tons (3.9 percent). The Interior Region registered increases in production in Indiana, Missouri, and Texas. Overall, the Interior Region increased in 1996 by 4.3 million short tons (2.6 percent). In the Western Region, two of the nine States (Utah and Wyoming) increased their coal production in 1996, with both States reaching record levels. Coal production in the Western Region increased 9.6 million short tons, an increase of 2.2 percent. Over the last decade, the Appalachian Region has only increased at an average annual rate of 0.2 percent, while the Western Region has increased 5.4 percent. During the same time period, the Interior Region has declined at an average annual rate of 1.7 percent.

U.S. coal producers operated 1,903 mines during 1996, including 885 underground mines and 1,018 surface mines (Table 3). Underground mines produced 410 million short tons and represented 39 percent of total coal production. Underground mines east of the Mississippi accounted for 89 percent of all underground coal production in 1996. Surface mines west of the Mississippi represented 69 percent of total surface coal production in 1996. Of the top 20 coal mines in the United States, 18 are surface mines, all located west of the Mississippi; they accounted for 28.6 percent of total U.S. coal production. Nine of the top ten mines in the United States are in Wyoming and represent 19.4 percent of total U.S. coal production.

Productive Capacity

The total estimated productive capacity of U.S. coal mines in 1996 was 1,325 million short tons, an increase of 2.0 percent compared with the total estimated productive capacity of 1,299 million short tons in 1995 (Table 16). Following the same pattern as coal production, the total estimated productive capacity increased in all regions. Total coal mine capacity utilization, (defined as the ratio of actual production to productive capacity) rose to 80 percent in 1996 (Table 17). Capacity utilization increased for all three regions in 1996, with the Appalachian Region showing the largest increase.

Recoverable Reserves

Estimated recoverable U.S. coal reserves at producing mines in 1996 totaled 19 billion short tons. This 3-percent decrease continued a decline that started in 1986 (Table 25). Recoverable reserves at producing mines in the Western Region accounted for 62.5 percent of total reserves, with reserves at producing mines in the Appalachian and Interior Regions representing 23.3 percent and 14.2 percent, respectively.

The average recovery percentage for all U.S. producing mines in 1996 increased slightly to 80.8 percent from the 80.1 percent in 1995 (Table 26). The estimated recovery percent for all underground mines in 1996 was 57.2 percent, an increase from the 54.5 percent in 1995. The estimated recovery percent at surface mines remained unchanged in 1996 at 90 percent.

Producers and Distributors Stocks

Coal stocks held by U.S. coal producers and distributors at the end of 1996 totaled 29 million short tons, a decrease of 17 percent compared with stocks at year-end 1995.

Coal Imports

U.S. coal imports during 1996 totaled 7.1 million short tons, 1 percent less than the 7.2 million short tons imported during 1995 (Table 35). Since 1987, U.S. coal imports have increased at an average annual rate of 17 percent.

Colombia, Indonesia, Venezuela, and Canada were the major sources of imported coal during 1996. They contributed 6.9 million short tons and accounted for 98 percent of total coal imports.

Production

Table 1. Coal Production by State, 1987, 1992-1996
(Thousand Short Tons)

Coal-Producing State and Region	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
Alabama	24,637	24,640	23,266	24,768	25,796	25,540	*	–1.1	–0.4
Alaska	1,481	1,698	1,567	1,601	1,534	1,492	–12.8	–.9	–.1
Arizona	10,442	11,947	13,056	12,173	12,512	11,379	–12.6	–4.4	–.9
Arkansas	21	29	51	44	58	84	–28.0	–22.6	–14.3
California	–	–	–	–	103	46	–	–	–
Colorado	24,886	25,710	25,304	21,886	19,226	14,420	–3.2	6.7	6.3
Illinois	46,656	48,180	52,797	41,098	59,857	59,155	–3.2	–6.0	–2.6
Indiana	29,670	26,007	30,927	29,295	30,466	34,208	14.1	–.6	–1.6
Iowa	–	–	46	175	289	468	–	–	–
Kansas	232	285	284	341	363	2,021	–18.4	–10.5	–21.4
Kentucky Total	152,425	153,739	161,642	156,299	161,068	165,192	–.8	–1.4	–.9
Eastern	116,951	118,541	124,447	120,191	119,382	119,906	–1.3	–.5	–.3
Western	35,474	35,198	37,195	36,108	41,686	45,285	.8	–3.9	–2.7
Louisiana	3,221	3,719	3,463	3,134	3,240	2,751	–13.4	–.1	1.8
Maryland	4,093	3,667	3,632	3,355	3,341	3,962	11.6	5.2	.3
Missouri	710	548	838	653	2,886	4,292	29.6	–29.6	–18.1
Montana	37,891	39,451	41,640	35,917	38,889	34,399	–3.9	–.6	1.1
New Mexico	24,067	26,813	28,041	28,268	24,549	19,131	–10.2	–.5	2.6
North Dakota	29,861	30,112	32,286	31,973	31,744	25,142	–.8	–1.5	1.9
Ohio	28,572	26,118	29,897	28,816	30,403	35,788	9.4	–1.5	–2.5
Oklahoma	1,701	1,876	1,911	1,758	1,741	2,870	–9.3	–.6	–5.6
Pennsylvania Total	67,942	61,576	62,237	59,700	68,981	70,423	10.3	–.4	–.4
Anthracite	4,751	4,682	4,621	4,306	3,483	3,560	1.5	8.1	3.3
Bituminous	63,190	56,893	57,616	55,394	65,498	66,863	11.1	–.9	–.6
Tennessee	3,651	3,221	2,987	3,047	3,476	6,442	13.3	1.2	–6.1
Texas	55,164	52,684	52,346	54,567	55,071	50,529	4.7	*	1.0
Utah	27,507	25,167	24,399	21,847	21,339	16,508	9.3	6.5	5.8
Virginia	35,590	34,099	37,129	39,317	43,024	44,543	4.4	–4.6	–2.5
Washington	4,565	4,868	4,893	4,739	5,251	4,449	–6.2	–3.4	.3
West Virginia Total	170,433	162,997	161,776	130,525	162,164	136,676	4.6	1.3	2.5
Northern	45,910	46,114	49,316	33,802	50,022	52,003	–.4	–2.1	–1.4
Southern	124,523	116,883	112,460	96,723	112,142	84,673	6.5	2.6	4.4
Wyoming	278,440	263,822	237,092	210,129	190,172	146,850	5.5	10.0	7.4
Appalachian Total[1]	**451,868**	**434,861**	**445,370**	**409,718**	**456,565**	**443,281**	**3.9**	**–.3**	**.2**
Interior Total[1]	**172,848**	**168,526**	**179,858**	**167,174**	**195,659**	**201,663**	**2.6**	**–3.0**	**–1.7**
Western Total[1]	**439,140**	**429,587**	**408,276**	**368,532**	**345,321**	**273,818**	**2.2**	**6.2**	**5.4**
East of Miss. River	**563,668**	**544,246**	**566,289**	**516,219**	**588,575**	**581,929**	**3.6**	**–1.1**	**–.3**
West of Miss. River	**500,188**	**488,728**	**467,216**	**429,205**	**408,970**	**336,833**	**2.3**	**5.2**	**4.5**
U.S. Total	**1,063,856**	**1,032,974**	**1,033,504**	**945,424**	**997,545**	**918,762**	**3.0**	**1.6**	**1.6**

[1] For a definition of coal-producing regions, see Appendix C.

* Data round to zero.

Notes: Coal production excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-7A, ''Coal Production Report''; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, ''Quarterly Mine Employment and Coal Production Report.''

Table 2. Number of Coal Mines by State, 1987, 1992-1996

Coal-Producing State and Region	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
Alabama	53	73	85	85	88	99	–27.4	–11.9	–6.7
Alaska	1	1	1	1	2	1	–	–15.9	–
Arizona	2	2	2	2	2	2	–	–	–
Arkansas	5	3	6	6	6	8	66.7	–4.4	–5.1
California	–	–	–	–	1	1	–	–	–
Colorado	15	17	18	20	21	22	–11.8	–8.1	–4.2
Illinois	31	31	34	39	43	51	–	–7.8	–5.4
Indiana	37	42	55	56	51	67	–11.9	–7.7	–6.4
Iowa	–	–	1	2	2	4	–	–	–
Kansas	1	1	1	2	2	5	–	–15.9	–16.4
Kentucky Total	544	598	673	696	752	1,428	–9.0	–7.8	–10.2
Eastern	484	540	607	622	684	1,323	–10.4	–8.3	–10.6
Western	60	58	66	74	68	105	3.4	–3.1	–6.0
Louisiana	2	2	2	2	2	1	–	–	8.0
Maryland	18	20	20	21	24	35	–10.0	–6.9	–7.1
Missouri	5	6	6	7	5	12	–16.7	–	–9.3
Montana	8	8	8	8	8	8	–	–	–
New Mexico	6	7	7	7	7	10	–14.3	–3.8	–5.5
North Dakota	5	6	6	8	8	11	–16.7	–11.1	–8.4
Ohio	99	113	134	135	149	210	–12.4	–9.7	–8.0
Oklahoma	12	13	14	17	20	19	–7.7	–12.0	–5.0
Pennsylvania Total	402	459	505	524	578	683	–12.4	–8.7	–5.7
Anthracite	127	134	143	148	166	200	–5.2	–6.5	–4.9
Bituminous	275	325	362	376	412	483	–15.4	–9.6	–6.1
Tennessee	26	25	24	37	50	93	4.0	–15.1	–13.2
Texas	13	14	13	14	15	15	–7.1	–3.5	–1.6
Utah	11	13	14	15	15	21	–15.4	–7.5	–6.9
Virginia	191	194	231	237	258	477	–1.5	–7.2	–9.7
Washington	3	3	3	3	3	4	–	–	–3.1
West Virginia Total	386	424	462	502	604	778	–9.0	–10.6	–7.5
Northern	93	98	116	137	166	255	–5.1	–13.5	–10.6
Southern	293	326	346	365	438	523	–10.1	–9.6	–6.2
Wyoming	27	29	29	29	30	29	–6.9	–2.6	–.8
Appalachian Total[1]	**1,659**	**1,848**	**2,068**	**2,163**	**2,435**	**3,698**	**–10.2**	**–9.1**	**–8.5**
Interior Total[1]	**166**	**170**	**198**	**219**	**214**	**287**	**–2.3**	**–6.1**	**–5.9**
Western Total[1]	**78**	**86**	**88**	**93**	**97**	**109**	**–9.3**	**–5.3**	**–3.6**
East of Miss. River	**1,787**	**1,979**	**2,223**	**2,332**	**2,597**	**3,921**	**–9.7**	**–8.9**	**–8.4**
West of Miss. River	**116**	**125**	**131**	**143**	**149**	**173**	**–7.2**	**–6.1**	**–4.3**
U.S. Total	**1,903**	**2,104**	**2,354**	**2,475**	**2,746**	**4,094**	**–9.5**	**–8.8**	**–8.1**

[1] For a definition of coal-producing regions, see Appendix C.

Note: Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite.

Sources: Energy Information Administration, Form EIA-7A, ''Coal Production Report''; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, ''Quarterly Mine Employment and Coal Production Report.''

Table 3. Coal Production and Number of Mines by State and Mine Type, 1996
(Thousand Short Tons)

Coal-Producing State and Region	Underground		Surface		Total	
	Number of Mines	Production	Number of Mines	Production	Number of Mines	Production
Alabama	11	18,217	42	6,420	53	24,637
Alaska	–	–	1	1,481	1	1,481
Arizona	–	–	2	10,442	2	10,442
Arkansas	–	–	5	21	5	21
Colorado	11	15,581	4	9,305	15	24,886
Illinois	20	38,948	11	7,707	31	46,656
Indiana	3	2,963	34	26,707	37	29,670
Kansas	–	–	1	232	1	232
Kentucky Total	307	94,306	237	58,119	544	152,425
Eastern	287	69,172	197	47,779	484	116,951
Western	20	25,135	40	10,340	60	35,474
Louisiana	–	–	2	3,221	2	3,221
Maryland	3	3,296	15	797	18	4,093
Missouri	–	–	5	710	5	710
Montana	1	147	7	37,744	8	37,891
New Mexico	–	–	6	24,067	6	24,067
North Dakota	–	–	5	29,861	5	29,861
Ohio	9	15,912	90	12,660	99	28,572
Oklahoma	1	137	11	1,564	12	1,701
Pennsylvania Total	83	47,247	319	20,694	402	67,942
Anthracite	40	391	87	4,360	127	4,751
Bituminous	43	46,856	232	16,334	275	63,190
Tennessee	13	1,794	13	1,857	26	3,651
Texas	–	–	13	55,164	13	55,164
Utah	11	27,507	–	–	11	27,507
Virginia	147	25,568	44	10,022	191	35,590
Washington	–	–	3	4,565	3	4,565
West Virginia Total	264	115,585	122	54,848	386	170,433
Northern	50	40,274	43	5,637	93	45,910
Southern	214	75,311	79	49,211	293	124,523
Wyoming	1	2,641	26	275,799	27	278,440
Appalachian Total[1]	**817**	**296,791**	**842**	**155,077**	**1,659**	**451,868**
Interior Total[1]	**44**	**67,183**	**122**	**105,665**	**166**	**172,848**
Western Total[1]	**24**	**45,876**	**54**	**393,265**	**78**	**439,140**
East of Miss. River	**860**	**363,837**	**927**	**199,831**	**1,787**	**563,668**
West of Miss. River	**25**	**46,012**	**91**	**454,176**	**116**	**500,188**
U.S. Total	**885**	**409,849**	**1,018**	**654,007**	**1,903**	**1,063,856**

[1] For a definition of coal-producing regions, see Appendix C.

Notes: Coal production excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-7A, ''Coal Production Report''; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, ''Quarterly Mine Employment and Coal Production Report.''

Table 4. Coal Production and Number of Mines by State, County, and Mine Type, 1996
(Thousand Short Tons)

Coal-Producing State and County	Underground		Surface		Total	
	Number of Mines	Production	Number of Mines	Production	Number of Mines	Production
Alabama	**11**	**18,217**	**42**	**6,420**	**53**	**24,637**
Bibb	–	–	1	33	1	33
Cullman	–	–	2	82	2	82
Fayette	1	2,066	–	–	1	2,066
Jackson	–	–	1	66	1	66
Jefferson	4	8,917	4	1,217	8	10,134
Marion	–	–	4	191	4	191
Shelby	2	878	–	–	2	878
Tuscaloosa	3	5,241	4	825	7	6,066
Walker	1	1,115	24	3,806	25	4,921
Winston	–	–	2	201	2	201
Alaska	–	–	**1**	**1,481**	**1**	**1,481**
Yukon River	–	–	1	1,481	1	1,481
Arizona	–	–	**2**	**10,442**	**2**	**10,442**
Navajo	–	–	2	10,442	2	10,442
Arkansas	–	–	**5**	**21**	**5**	**21**
Johnson	–	–	2	16	2	16
Scott	–	–	1	*	1	*
Sebastian	–	–	2	4	2	4
Colorado	**11**	**15,581**	**4**	**9,305**	**15**	**24,886**
Delta	1	603	–	–	1	603
Fremont	1	170	–	–	1	170
Gunnison	3	7,475	–	–	3	7,475
La Plata	1	199	–	–	1	199
Las Animas	1	129	–	–	1	129
Mesa	2	626	–	–	2	626
Moffat	–	–	2	7,721	2	7,721
Montrose	–	–	1	362	1	362
Rio Blanco	1	543	–	–	1	543
Routt	1	5,837	1	1,222	2	7,059
Illinois	**20**	**38,948**	**11**	**7,707**	**31**	**46,656**
Clinton	1	1,701	–	–	1	1,701
Franklin	2	3,635	–	–	2	3,635
Fulton	–	–	1	205	1	205
Gallatin	1	1,324	–	–	1	1,324
Jefferson	2	4,299	–	–	2	4,299
Logan	1	1,982	–	–	1	1,982
Macoupin	3	5,454	–	–	3	5,454
McDonough	–	–	1	533	1	533
Perry	1	1,850	3	5,213	4	7,064
Randolph	2	2,103	–	–	2	2,103
Saline	3	8,660	1	673	4	9,333
Schuyler	–	–	1	415	1	415
Vermilion	1	130	–	–	1	130
Wabash	1	2,340	–	–	1	2,340
Washington	1	3,674	–	–	1	3,674
White	1	1,796	–	–	1	1,796
Williamson	–	–	4	668	4	668
Indiana	**3**	**2,963**	**34**	**26,707**	**37**	**29,670**
Clay	–	–	4	1,893	4	1,893
Daviess	–	–	4	3,187	4	3,187
Dubois	–	–	1	370	1	370
Gibson	1	900	1	146	2	1,046
Greene	–	–	3	2,083	3	2,083
Knox	2	2,063	3	1,662	5	3,725
Owen	–	–	2	413	2	413
Pike	–	–	6	4,359	6	4,359
Sullivan	–	–	2	4,772	2	4,772
Vigo	–	–	2	1,694	2	1,694
Warrick	–	–	6	6,129	6	6,129
Kansas	–	–	**1**	**232**	**1**	**232**
Crawford	–	–	1	232	1	232
Kentucky	**307**	**94,306**	**237**	**58,119**	**544**	**152,425**
Bell	13	2,654	12	2,391	25	5,044
Breathitt	–	–	8	2,271	8	2,271
Butler	–	–	2	244	2	244
Christian	–	–	1	32	1	32
Clay	–	–	5	98	5	98
Daviess	–	–	6	894	6	894
Floyd	35	3,227	11	3,920	46	7,147
Harlan	31	9,436	9	866	40	10,302

See footnotes at end of table.

Table 4. Coal Production and Number of Mines by State, County, and Mine Type, 1996 (Continued)
(Thousand Short Tons)

Coal-Producing State and County	Underground		Surface		Total	
	Number of Mines	Production	Number of Mines	Production	Number of Mines	Production
Kentucky (Continued)						
Henderson	1	631	2	1,453	3	2,084
Hopkins	6	4,271	12	4,384	18	8,655
Johnson	4	1,363	7	448	11	1,812
Knott	29	4,801	17	7,407	46	12,208
Knox	11	417	4	50	15	467
Laurel	–	–	1	52	1	52
Lawrence	–	–	3	69	3	69
Leslie	10	8,017	8	1,701	18	9,718
Letcher	17	5,381	22	2,665	39	8,046
Magoffin	1	34	7	944	8	978
Martin	14	6,332	9	5,453	23	11,785
McLean	1	80	2	114	3	194
Morgan	–	–	3	5	3	5
Muhlenberg	3	3,032	4	739	7	3,771
Ohio	1	20	10	2,122	11	2,142
Owsley	–	–	4	171	4	171
Perry	13	3,991	14	6,377	27	10,368
Pike	100	23,041	45	12,557	145	35,598
Union	3	7,361	–	–	3	7,361
Webster	5	9,740	1	357	6	10,097
Whitley	9	478	8	333	17	811
Louisiana	–	–	**2**	**3,221**	**2**	**3,221**
De Soto	–	–	1	2,434	1	2,434
Red River	–	–	1	787	1	787
Maryland	**3**	**3,296**	**15**	**797**	**18**	**4,093**
Allegany	–	–	10	597	10	597
Garrett	3	3,296	5	200	8	3,496
Missouri	–	–	**5**	**710**	**5**	**710**
Barton	–	–	1	88	1	88
Bates	–	–	2	487	2	487
Randolph	–	–	1	25	1	25
Vernon	–	–	1	110	1	110
Montana	**1**	**147**	**7**	**37,744**	**8**	**37,891**
Big Horn	–	–	4	24,686	4	24,686
Musselshell	1	147	–	–	1	147
Richland	–	–	1	256	1	256
Rosebud	–	–	2	12,802	2	12,802
New Mexico	–	–	**6**	**24,067**	**6**	**24,067**
Colfax	–	–	1	1,259	1	1,259
McKinley	–	–	2	9,527	2	9,527
San Juan	–	–	3	13,281	3	13,281
North Dakota	–	–	**5**	**29,861**	**5**	**29,861**
McLean	–	–	1	7,024	1	7,024
Mercer	–	–	2	16,908	2	16,908
Oliver	–	–	2	5,929	2	5,929
Ohio	**9**	**15,912**	**90**	**12,660**	**99**	**28,572**
Belmont	1	4,741	9	1,175	10	5,916
Carroll	–	–	6	329	6	329
Columbiana	2	299	9	271	11	569
Coshocton	–	–	5	757	5	757
Gallia	–	–	1	268	1	268
Guernsey	–	–	6	302	6	302
Harrison	1	1,117	8	295	9	1,411
Holmes	–	–	2	175	2	175
Jackson	–	–	3	1,042	3	1,042
Jefferson	2	422	9	412	11	833
Mahoning	–	–	1	4	1	4
Meigs	2	5,951	–	–	2	5,951
Monroe	1	3,383	–	–	1	3,383
Morgan	–	–	1	1,543	1	1,543
Muskingum	–	–	3	176	3	176
Noble	–	–	2	857	2	857
Perry	–	–	5	1,024	5	1,024
Stark	–	–	7	606	7	606
Tuscarawas	–	–	9	1,404	9	1,404
Vinton	–	–	4	2,020	4	2,020
Oklahoma	**1**	**137**	**11**	**1,564**	**12**	**1,701**
Craig	–	–	1	130	1	130
Latimer	–	–	1	193	1	193
Le Flore	1	137	6	1,047	7	1,184

See footnotes at end of table.

Table 4. Coal Production and Number of Mines by State, County, and Mine Type, 1996 (Continued)
(Thousand Short Tons)

Coal-Producing State and County	Underground		Surface		Total	
	Number of Mines	Production	Number of Mines	Production	Number of Mines	Production
Oklahoma (Continued)						
Nowata	–	–	2	187	2	187
Okmulgee	–	–	1	6	1	6
Pennsylvania	**83**	**47,247**	**319**	**20,694**	**402**	**67,942**
Allegheny	–	–	2	14	2	14
Armstrong	9	3,974	23	1,371	32	5,346
Beaver	–	–	4	239	4	239
Blair	–	–	1	59	1	59
Butler	–	–	6	56	6	56
Cambria	2	60	11	1,255	13	1,315
Carbon	–	–	1	318	1	318
Centre	–	–	3	328	3	328
Clarion	–	–	6	543	6	543
Clearfield	2	154	48	4,273	50	4,428
Columbia	1	141	5	270	6	411
Dauphin	1	2	1	8	2	11
Elk	–	–	6	460	6	460
Fayette	–	–	20	428	20	428
Greene	9	29,746	2	48	11	29,794
Indiana	8	4,190	19	952	27	5,143
Jefferson	3	553	22	870	25	1,423
Lackawanna	–	–	5	243	5	243
Lawrence	–	–	2	139	2	139
Luzerne	–	–	17	1,030	17	1,030
Lycoming	–	–	1	333	1	333
Mercer	–	–	2	5	2	5
Northumberland	9	35	8	246	17	281
Schuylkill	29	213	48	2,206	77	2,419
Snyder	–	–	1	1	1	1
Somerset	7	1,848	31	3,533	38	5,381
Sullivan	–	–	1	37	1	37
Venango	–	–	1	31	1	31
Washington	3	6,330	8	705	11	7,035
Westmoreland	–	–	14	690	14	690
Tennessee	**13**	**1,794**	**13**	**1,857**	**26**	**3,651**
Anderson	1	207	1	273	2	479
Bledsoe	–	–	1	3	1	3
Campbell	7	723	3	344	10	1,067
Claiborne	1	240	4	386	5	625
Fentress	–	–	1	256	1	256
Marion	–	–	2	46	2	46
Morgan	1	42	–	–	1	42
Scott	1	155	–	–	1	155
Sequatchie	2	428	1	550	3	978
Texas	–	–	**13**	**55,164**	**13**	**55,164**
Atascosa	–	–	1	3,324	1	3,324
Freestone	–	–	1	5,196	1	5,196
Grimes	–	–	1	567	1	567
Harrison	–	–	2	4,173	2	4,173
Hopkins	–	–	1	2,152	1	2,152
Leon	–	–	1	8,865	1	8,865
Milam	–	–	1	6,615	1	6,615
Panola	–	–	1	6,814	1	6,814
Robertson	–	–	1	1,933	1	1,933
Rusk	–	–	1	6,509	1	6,509
Titus	–	–	1	8,569	1	8,569
Webb	–	–	1	446	1	446
Utah	**11**	**27,507**	–	–	**11**	**27,507**
Carbon	6	12,066	–	–	6	12,066
Emery	4	11,238	–	–	4	11,238
Sevier	1	4,202	–	–	1	4,202
Virginia	**147**	**25,568**	**44**	**10,022**	**191**	**35,590**
Buchanan	65	13,364	9	1,419	74	14,784
Dickenson	13	1,693	8	1,296	21	2,988
Lee	7	1,492	3	544	10	2,036
Russell	6	915	1	430	7	1,346
Scott	1	5	–	–	1	5
Tazewell	16	1,717	1	122	17	1,840
Wise	39	6,380	22	6,211	61	12,591
Washington	–	–	**3**	**4,565**	**3**	**4,565**
King	–	–	1	173	1	173

See footnotes at end of table.

Table 4. Coal Production and Number of Mines by State, County, and Mine Type, 1996 (Continued)

(Thousand Short Tons)

Coal-Producing State and County	Underground		Surface		Total	
	Number of Mines	Production	Number of Mines	Production	Number of Mines	Production
Washington (Continued)						
Lewis	–	–	1	2,423	1	2,423
Thurston	–	–	1	1,969	1	1,969
West Virginia	**264**	**115,585**	**122**	**54,848**	**386**	**170,433**
Barbour	6	1,498	4	49	10	1,547
Boone	32	18,841	15	12,183	47	31,024
Braxton	1	42	–	–	1	42
Brooke	1	1,438	1	10	2	1,448
Clay	–	–	5	5,507	5	5,507
Fayette	5	1,193	6	2,772	11	3,964
Gilmer	1	30	–	–	1	30
Grant	2	2,810	2	228	4	3,039
Greenbrier	3	766	2	38	5	804
Harrison	5	4,600	6	82	11	4,682
Kanawha	6	4,689	5	4,274	11	8,964
Logan	17	3,769	12	15,020	29	18,789
Marion	2	3,118	2	18	4	3,135
Marshall	2	8,721	–	–	2	8,721
McDowell	66	4,928	11	1,207	77	6,135
Mineral	–	–	2	134	2	134
Mingo	34	17,612	15	5,351	49	22,963
Monongalia	9	11,816	4	1,135	13	12,951
Nicholas	13	2,085	3	437	16	2,522
Preston	7	1,771	8	158	15	1,929
Raleigh	17	10,413	2	797	19	11,209
Randolph	4	540	1	30	5	570
Tucker	–	–	2	602	2	602
Upshur	4	1,323	8	411	12	1,734
Wayne	4	2,934	2	1,197	6	4,131
Webster	6	2,567	3	2,778	9	5,345
Wyoming	17	8,082	1	428	18	8,510
Wyoming	**1**	**2,641**	**26**	**275,799**	**27**	**278,440**
Campbell	–	–	17	245,534	17	245,534
Carbon	1	2,641	2	1,832	3	4,473
Converse	–	–	2	15,839	2	15,839
Lincoln	–	–	2	4,419	2	4,419
Sheridan	–	–	1	16	1	16
Sweetwater	–	–	2	8,159	2	8,159
U.S. Total	**885**	**409,849**	**1,018**	**654,007**	**1,903**	**1,063,856**

* Data round to zero.

Notes: Coal production excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-7A, ''Coal Production Report''; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, ''Quarterly Mine Employment and Coal Production Report.''

Table 5. Underground Coal Production by State and Mining Method, 1996
(Thousand Short Tons)

Coal-Producing State and Region	Continuous[1]	Conventional[2]	Longwall[3]	Other[4]	Total
Alabama	1,410	73	16,734	–	18,217
Colorado	3,087	129	12,365	–	15,581
Illinois	21,823	130	16,995	–	38,948
Indiana	2,963	–	–	–	2,963
Kentucky Total	69,153	10,247	14,582	324	94,306
Eastern	51,596	9,779	7,473	324	69,172
Western	17,557	468	7,109	–	25,135
Maryland	346	–	2,950	–	3,296
Montana	147	–	–	–	147
Ohio	1,837	–	14,075	–	15,912
Oklahoma	137	–	–	–	137
Pennsylvania Total	11,924	1,645	33,635	43	47,247
Anthracite	141	207	–	43	391
Bituminous	11,783	1,438	33,635	–	46,856
Tennessee	1,775	19	–	–	1,794
Utah	2,069	588	24,849	–	27,507
Virginia	11,888	5,755	7,925	–	25,568
West Virginia Total	54,974	12,507	47,592	512	115,585
Northern	6,795	1,430	31,537	512	40,274
Southern	48,179	11,078	16,055	–	75,311
Wyoming	–	–	2,641	–	2,641
Appalachian Total[5]	**135,750**	**29,778**	**130,384**	**878**	**296,791**
Interior Total[5]	**42,480**	**598**	**24,104**	**–**	**67,183**
Western Total[5]	**5,303**	**717**	**39,856**	**–**	**45,876**
East of Miss. River	**178,093**	**30,377**	**154,488**	**878**	**363,837**
West of Miss. River	**5,440**	**717**	**39,856**	**–**	**46,012**
U.S. Total	**183,533**	**31,093**	**194,344**	**878**	**409,849**

1 Mines that produce greater than 50 percent of coal by continuous mining method.
2 Mines that produce greater than 50 percent of coal by conventional mining method.
3 Mines that have any production from longwall mining method. A typical longwall mining operation uses 80 percent longwall mining and 20 percent continuous mining.
4 Mines that produce coal using shortwall, scoop loading, hand loading, or other mining methods or a 50/50 percent continuous/conventional split in mining method.
5 For a definition of coal-producing regions, see Appendix C.
Note: Totals may not equal sum of components due to independent rounding.
Source: Energy Information Administration, Form EIA-7A, ''Coal Production Report.''

Table 6. Coal Production and Number of Mines by State, Mine Type, and Mine Production Range, 1996
(Thousand Short Tons)

Coal-Producing State, Region and Type of Mining	Number of Mines						Production					
	Mine Production Range (thousand short tons)											
	1,000 and over	500 to 1,000	200 to 500	100 to 200	10 to 100	Less than 10	1,000 and over	500 to 1,000	200 to 500	100 to 200	10 to 100	Less than 10
Alabama	**8**	**6**	**4**	**6**	**25**	**4**	**17,488**	**3,866**	**1,036**	**977**	**1,256**	**14**
Underground	7	3	–	–	1	–	16,209	1,935	–	–	73	–
Surface	1	3	4	6	24	4	1,279	1,931	1,036	977	1,182	14
Alaska	**1**	–	–	–	–	–	**1,481**	–	–	–	–	–
Surface	1	–	–	–	–	–	1,481	–	–	–	–	–
Arizona	**2**	–	–	–	–	–	**10,442**	–	–	–	–	–
Surface	2	–	–	–	–	–	10,442	–	–	–	–	–
Arkansas	–	–	–	–	–	**5**	–	–	–	–	–	**21**
Surface	–	–	–	–	–	5	–	–	–	–	–	21
Colorado	**6**	**2**	**4**	**3**	–	–	**21,920**	**1,145**	**1,323**	**498**	–	–
Underground	3	2	3	3	–	–	12,976	1,145	962	498	–	–
Surface	3	–	1	–	–	–	8,944	–	362	–	–	–
Illinois	**18**	**4**	**3**	**1**	**4**	**1**	**42,938**	**2,306**	**1,119**	**130**	**160**	**3**
Underground	16	1	1	1	1	–	37,728	578	499	130	13	–
Surface	2	3	2	–	3	1	5,210	1,727	620	–	147	3
Indiana	**10**	**11**	**8**	**3**	**4**	**1**	**18,426**	**7,335**	**3,326**	**381**	**199**	**3**
Underground	1	2	–	–	–	–	1,466	1,497	–	–	–	–
Surface	9	9	8	3	4	1	16,960	5,839	3,326	381	199	3
Kansas	–	–	**1**	–	–	–	–	–	**232**	–	–	–
Surface	–	–	1	–	–	–	–	–	232	–	–	–
Kentucky Total	**31**	**62**	**102**	**83**	**195**	**71**	**54,592**	**43,633**	**33,111**	**12,013**	**8,742**	**333**
Underground	21	31	60	56	111	28	39,280	21,900	19,372	8,254	5,347	153
Surface	10	31	42	27	84	43	15,312	21,734	13,740	3,759	3,395	180
Eastern	**21**	**48**	**93**	**77**	**180**	**65**	**34,071**	**33,349**	**29,916**	**11,182**	**8,136**	**297**
Underground	12	25	57	56	109	28	20,103	17,155	18,259	8,254	5,247	153
Surface	9	23	36	21	71	37	13,968	16,194	11,657	2,928	2,889	144
Western	**10**	**14**	**9**	**6**	**15**	**6**	**20,521**	**10,285**	**3,196**	**831**	**606**	**36**
Underground	9	6	3	–	2	–	19,177	4,745	1,113	–	100	–
Surface	1	8	6	6	13	6	1,343	5,540	2,083	831	506	36
Louisiana	**1**	**1**	–	–	–	–	**2,434**	**787**	–	–	–	–
Surface	1	1	–	–	–	–	2,434	787	–	–	–	–
Maryland	**1**	–	**2**	**1**	**10**	**4**	**2,950**	–	**520**	**160**	**437**	**25**
Underground	1	–	1	–	1	–	2,950	–	300	–	46	–
Surface	–	–	1	1	9	4	–	–	221	160	391	25
Missouri	–	–	**1**	**2**	**2**	–	–	–	**290**	**307**	**112**	–
Surface	–	–	1	2	2	–	–	–	290	307	112	–
Montana	**5**	**1**	**1**	**1**	–	–	**36,886**	**602**	**256**	**147**	–	–
Underground	–	–	–	1	–	–	–	–	–	147	–	–
Surface	5	1	1	–	–	–	36,886	602	256	–	–	–
New Mexico	**6**	–	–	–	–	–	**24,067**	–	–	–	–	–
Surface	6	–	–	–	–	–	24,067	–	–	–	–	–
North Dakota	**5**	–	–	–	–	–	**29,861**	–	–	–	–	–
Surface	5	–	–	–	–	–	29,861	–	–	–	–	–
Ohio	**7**	**5**	**11**	**16**	**47**	**13**	**17,826**	**3,170**	**3,248**	**2,483**	**1,792**	**53**
Underground	5	–	1	3	–	–	15,191	–	271	449	–	–
Surface	2	5	10	13	47	13	2,635	3,170	2,977	2,034	1,792	53
Oklahoma	–	–	**3**	**5**	**2**	**2**	–	–	**909**	**738**	**40**	**14**
Underground	–	–	–	1	–	–	–	–	–	137	–	–
Surface	–	–	3	4	2	2	–	–	909	601	40	14
Pennsylvania Total	**12**	**8**	**33**	**39**	**172**	**138**	**39,573**	**5,698**	**10,399**	**5,597**	**6,143**	**530**
Underground	11	4	13	4	19	32	38,198	3,245	4,340	673	683	108
Surface	1	4	20	35	153	106	1,375	2,453	6,059	4,924	5,460	423
Anthracite	–	**1**	**6**	**4**	**49**	**67**	–	**537**	**1,866**	**583**	**1,558**	**207**
Underground	–	–	–	1	8	31	–	–	–	141	143	107
Surface	–	1	6	3	41	36	–	537	1,866	442	1,415	101
Bituminous	**12**	**7**	**27**	**35**	**123**	**71**	**39,573**	**5,162**	**8,534**	**5,014**	**4,585**	**323**
Underground	11	4	13	3	11	1	38,198	3,245	4,340	532	539	1
Surface	1	3	14	32	112	70	1,375	1,917	4,193	4,482	4,045	322
Tennessee	–	**1**	**9**	**4**	**7**	**5**	–	**550**	**2,257**	**572**	**241**	**30**
Underground	–	–	5	3	4	1	–	–	1,224	415	152	4
Surface	–	1	4	1	3	4	–	550	1,034	157	89	26
Texas	**10**	**1**	**2**	–	–	–	**53,869**	**567**	**727**	–	–	–
Surface	10	1	2	–	–	–	53,869	567	727	–	–	–

See footnotes at end of table.

Table 6. Coal Production and Number of Mines by State, Mine Type, and Mine Production Range, 1996 (Continued)

(Thousand Short Tons)

Coal-Producing State, Region and Type of Mining	Number of Mines						Production					
	Mine Production Range (thousand short tons)											
	1,000 and over	500 to 1,000	200 to 500	100 to 200	10 to 100	Less than 10	1,000 and over	500 to 1,000	200 to 500	100 to 200	10 to 100	Less than 10
Utah	**8**	**2**	–	–	–	**1**	**25,942**	**1,557**	–	–	–	**7**
Underground	8	2	–	–	–	1	25,942	1,557	–	–	–	7
Virginia	**3**	**11**	**37**	**36**	**82**	**22**	**7,925**	**7,054**	**11,302**	**5,065**	**4,150**	**95**
Underground	3	4	26	29	69	16	7,925	2,423	7,594	3,964	3,593	68
Surface	–	7	11	7	13	6	–	4,631	3,707	1,101	556	27
Washington	**2**	–	–	**1**	–	–	**4,393**	–	–	**173**	–	–
Surface	2	–	–	1	–	–	4,393	–	–	173	–	–
West Virginia Total	**42**	**43**	**73**	**44**	**147**	**37**	**101,588**	**32,292**	**24,001**	**5,910**	**6,482**	**160**
Underground	27	29	54	32	104	18	66,871	21,784	17,500	4,413	4,928	88
Surface	15	14	19	12	43	19	34,717	10,508	6,501	1,497	1,553	72
Northern	**12**	**5**	**10**	**10**	**38**	**18**	**35,632**	**4,023**	**3,311**	**1,299**	**1,573**	**73**
Underground	10	4	8	6	17	5	32,888	3,068	2,616	840	838	23
Surface	2	1	2	4	21	13	2,744	955	695	459	735	50
Southern	**30**	**38**	**63**	**34**	**109**	**19**	**65,956**	**28,270**	**20,690**	**4,611**	**4,909**	**87**
Underground	17	25	46	26	87	13	33,982	18,716	14,884	3,573	4,090	65
Surface	13	13	17	8	22	6	31,973	9,554	5,805	1,038	819	22
Wyoming	**22**	**2**	**1**	**1**	**1**	–	**276,349**	**1,599**	**278**	**198**	**16**	–
Underground	1	–	–	–	–	–	2,641	–	–	–	–	–
Surface	21	2	1	1	1	–	273,708	1,599	278	198	16	–
Appalachian Total[1]	**94**	**122**	**262**	**223**	**670**	**288**	**221,422**	**85,979**	**82,680**	**31,947**	**28,637**	**1,204**
Underground	66	65	157	127	307	95	167,447	46,542	49,488	18,168	14,724	421
Surface	28	57	105	96	363	193	53,975	39,437	33,191	13,778	13,913	783
Interior Total[1]	**49**	**31**	**27**	**17**	**27**	**15**	**138,188**	**21,279**	**9,799**	**2,388**	**1,117**	**77**
Underground	26	9	4	2	3	–	58,371	6,820	1,613	267	113	–
Surface	23	22	23	15	24	15	79,817	14,460	8,186	2,121	1,004	77
Western Total[1]	**57**	**7**	**6**	**6**	**1**	**1**	**431,339**	**4,903**	**1,858**	**1,016**	**16**	**7**
Underground	12	4	3	4	–	1	41,558	2,703	962	645	–	7
Surface	45	3	3	2	1	–	389,781	2,201	896	371	16	–
East of Miss. River	**132**	**151**	**282**	**233**	**693**	**296**	**303,306**	**105,904**	**90,320**	**33,289**	**29,601**	**1,246**
Underground	92	74	161	128	310	95	225,818	53,362	51,101	18,298	14,837	421
Surface	40	77	121	105	383	201	77,488	52,543	39,219	14,991	14,764	825
West of Miss. River	**68**	**9**	**13**	**13**	**5**	**8**	**487,643**	**6,257**	**4,016**	**2,062**	**168**	**42**
Underground	12	4	3	5	–	1	41,558	2,703	962	782	–	7
Surface	56	5	10	8	5	7	446,085	3,554	3,054	1,280	168	35
U.S. Total	**200**	**160**	**295**	**246**	**698**	**304**	**790,949**	**112,162**	**94,336**	**35,351**	**29,769**	**1,288**
Underground	104	78	164	133	310	96	267,377	56,064	52,063	19,080	14,837	428
Surface	96	82	131	113	388	208	523,573	56,097	42,274	16,271	14,932	860

[1] For a definition of coal-producing regions, see Appendix C.

Notes: Coal production excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-7A, ''Coal Production Report''; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, ''Quarterly Mine Employment and Coal Production Report.''

Table 7. U.S. Coal Production by Coalbed Thickness and Mine Type, 1996
(Thousand Short Tons)

Coalbed Thickness (inches)	Underground	Surface	Total
< 7	–	48	48
7-12	–	1,938	1,938
13-18	–	8,602	8,602
19-24	385	19,274	19,659
25-30	5,997	22,801	28,798
31-36	34,894	35,680	70,574
37-42	27,811	22,250	50,061
43-48	33,835	28,441	62,276
49-54	32,354	14,823	47,176
55-60	46,440	14,803	61,244
61-66	46,723	12,354	59,077
67-72	35,067	16,971	52,037
73-78	21,643	6,771	28,413
79-84	38,309	11,885	50,195
85-90	8,000	8,917	16,917
91-96	28,244	6,785	35,029
97-102	5,926	12,426	18,352
103-108	3,881	5,982	9,863
109-114	5,837	1,400	7,237
115-120	9,870	5,546	15,415
> 120	24,205	395,452	419,657
Unknown[1]	**428**	**860**	**1,288**
U.S. Total	**409,849**	**654,007**	**1,063,856**

[1] Includes mines with production of less than 10,000 short tons, which are required to provide only production data.

Notes: Coal production excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-7A, ''Coal Production Report''; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, ''Quarterly Mine Employment and Coal Production Report.''

Table 8. U.S. Coal Production and Coalbed Thickness by Major Coalbeds and Mine Type, 1996

Coalbed ID Number [1] Coalbed Name [2]	Production (thousand short tons)			Thickness (inches)		
	Underground	Surface	Total	Average[3]	Low	High
1699 Wyodak	–	243,432	243,432	836	300	1,264
0036 Pittsburgh	71,962	1,957	73,919	74	18	108
0489 No. 9	30,011	9,859	39,871	63	42	84
0111 Hazard No. 5-A	15,326	22,902	38,228	74	20	226
0484 No. 6	28,228	4,147	32,375	78	45	100
1569 Beulah-Zap	–	28,701	28,701	155	132	180
0135 Hazard No. 4	18,347	3,020	21,367	45	20	102
0084 Lower Kittanning	4,757	14,970	19,727	55	12	174
0103 Stockton-Lewiston	3,886	14,996	18,882	75	14	120
0168 Lower Elkhorn	14,983	1,636	16,619	58	18	96
0071 Upper Freeport	12,302	3,638	15,940	63	6	96
1808 Rosebud	–	15,416	15,416	257	216	276
0344 Pocahontas No. 3	14,980	0	14,980	64	38	83
0151 Elkhorn No. 1	10,856	3,871	14,727	49	12	96
0154 Elkhorn No. 2	11,634	2,610	14,244	52	14	66
0157 Elkhorn No. 3	9,388	2,970	12,359	72	15	120
0121 Hazard No. 5	7,191	2,887	10,078	54	10	95
Major Coalbeds Total	**253,852**	**377,012**	**630,865**	**372**	**6**	**1,264**
Other Coalbeds	**155,568**	**276,135**	**431,703**	**134**	**1**	**960**
Unknown[4]	**428**	**860**	**1,288**	**NA**	**NA**	**NA**
U.S. Total	**409,849**	**654,007**	**1,063,856**	**275**	**1**	**1,264**

[1] The coalbed ID number is a unique code assigned by EIA to each correlated coalbed or to coal-bearing geologic formations, coal groups, or coal zones.

[2] The coalbed name given is the name most commonly used in the State having the greatest production from that coalbed. The States having the greatest production for each coalbed are: Eastern Kentucky (coalbeds 0111, 0135, 0151, 0154, 0157, 0168); West Virginia (0036, 0084, 0103, 0344); Pennsylvania (0071,0076); Western Kentucky (0489); Illinois (0484); North Dakota (1569); Montana (1808); Wyoming (1699). In some other States where these are major producing beds, the following alternate coalbed names are also used: 0084, No. 5 Block (Eastern Kentucky); 0111, Coalburg (West Virginia); 0135, Chilton (West Virginia); 0151, Jellico (Tennesee), Taggert (Virginia), Cedar Grove (West Virginia); 0154, Lower Cedar Grove (West Virginia); 0157, Upper Standiford (Virginia), Alma (West Virginia); 0168, No. 2 Gas (West Virginia); 0483, No. 12 (Western Kentucky); 0484, No. 11 (Western Kentucky); 0489, No. 5 (Illinois and Indiana).

[3] Average thickness is the bed thickness weighted by bed production.

[4] Includes mines with production of less than 10,000 short tons, which are required to provide only production data.

NA Not available.

Notes: Coal production excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. A major coalbed is defined here as a coalbed from which 10 million or more short tons were produced during the year. The category ''Other Coalbeds'' includes all coalbeds from which less than 10 million short tons were produced during the year. In some regions, coalbeds are characteristically discontinuous or uncorrelatable from one location to another, and production is identified by the geological formations, coal groups, or coal zones of the native rock where the coalbeds occur. These types of coalbeds are found primarily in the Rocky Mountain States and even in the Gulf Coast lignite belt. Coalbeds of these types are also included in ''Other Coalbeds,'' even though production may exceed 10 million short tons. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-7A, ''Coal Production Report''; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, ''Quarterly Mine Employment and Coal Production Report.''

Table 9. Coal Production and Number of Mines by State and Coal Rank, 1996
(Thousand Short Tons)

Coal-Producing State and Region	Bituminous		Subbituminous		Lignite		Anthracite		Total	
	Number of Mines	Production	Number of Mines	Production	Number of Mines	Production	Number of Mines	Production	Number of Mines	Production
Alabama	53	24,637	–	–	–	–	–	–	53	24,637
Alaska	–	–	1	1,481	–	–	–	–	1	1,481
Arizona	2	10,442	–	–	–	–	–	–	2	10,442
Arkansas	3	5	–	–	–	–	2	16	5	21
Colorado	12	15,942	3	8,944	–	–	–	–	15	24,886
Illinois	31	46,656	–	–	–	–	–	–	31	46,656
Indiana	37	29,670	–	–	–	–	–	–	37	29,670
Kansas	1	232	–	–	–	–	–	–	1	232
Kentucky Total	544	152,425	–	–	–	–	–	–	544	152,425
Eastern	484	116,951	–	–	–	–	–	–	484	116,951
Western	60	35,474	–	–	–	–	–	–	60	35,474
Louisiana	–	–	–	–	2	3,221	–	–	2	3,221
Maryland	18	4,093	–	–	–	–	–	–	18	4,093
Missouri	5	710	–	–	–	–	–	–	5	710
Montana	–	–	7	37,635	1	256	–	–	8	37,891
New Mexico	4	12,837	2	11,230	–	–	–	–	6	24,067
North Dakota	–	–	–	–	5	29,861	–	–	5	29,861
Ohio	99	28,572	–	–	–	–	–	–	99	28,572
Oklahoma	12	1,701	–	–	–	–	–	–	12	1,701
Pennsylvania Total	275	63,190	–	–	–	–	127	4,751	402	67,942
Anthracite	–	–	–	–	–	–	127	4,751	127	4,751
Bituminous	275	63,190	–	–	–	–	–	–	275	63,190
Tennessee	26	3,651	–	–	–	–	–	–	26	3,651
Texas	1	446	–	–	12	54,718	–	–	13	55,164
Utah	11	27,507	–	–	–	–	–	–	11	27,507
Virginia	191	35,590	–	–	–	–	–	–	191	35,590
Washington	1	173	2	4,393	–	–	–	–	3	4,565
West Virginia Total	386	170,433	–	–	–	–	–	–	386	170,433
Northern	93	45,910	–	–	–	–	–	–	93	45,910
Southern	293	124,523	–	–	–	–	–	–	293	124,523
Wyoming	2	1,832	25	276,608	–	–	–	–	27	278,440
Appalachian Total[1]	**1,532**	**447,116**	–	–	–	–	**127**	**4,751**	**1,659**	**451,868**
Interior Total[1]	**150**	**114,893**	–	–	**14**	**57,939**	**2**	**16**	**166**	**172,848**
Western Total[1]	**32**	**68,732**	**40**	**340,291**	**6**	**30,117**	–	–	**78**	**439,140**
East of Miss. River	**1,660**	**558,916**	–	–	–	–	**127**	**4,751**	**1,787**	**563,668**
West of Miss. River	**54**	**71,825**	**40**	**340,291**	**20**	**88,056**	**2**	**16**	**116**	**500,188**
U.S. Total	**1,714**	**630,741**	**40**	**340,291**	**20**	**88,056**	**129**	**4,768**	**1,903**	**1,063,856**

[1] For a definition of coal-producing regions, see Appendix C.

Notes: Coal production excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-7A, ''Coal Production Report''; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, ''Quarterly Mine Employment and Coal Production Report.''

Table 10. Coal Production by State, Coal Rank, and Group, 1996
(Thousand Short Tons)

Coal-Producing State and Region	Bituminous Low Volatile	Bituminous Medium Volatile	Bituminous High Volatile	Bituminous Total[1]	Subbituminous	Lignite	Anthracite	Total
Alabama	7,359	3,654	13,303	24,637	–	–	–	24,637
Alaska	–	–	–	–	1,481	–	–	1,481
Arizona	–	–	10,442	10,442	–	–	–	10,442
Arkansas	5	–	–	5	–	–	16	21
Colorado	–	129	15,814	15,942	8,944	–	–	24,886
Illinois	–	–	46,656	46,656	–	–	–	46,656
Indiana	–	–	29,670	29,670	–	–	–	29,670
Kansas	–	–	232	232	–	–	–	232
Kentucky Total	966	2,121	148,414	152,425	–	–	–	152,425
Eastern	966	2,121	113,864	116,951	–	–	–	116,951
Western	–	–	34,550	35,474	–	–	–	35,474
Louisiana	–	–	–	–	–	3,221	–	3,221
Maryland	4,093	–	–	4,093	–	–	–	4,093
Missouri	–	–	710	710	–	–	–	710
Montana	–	–	–	–	37,635	256	–	37,891
New Mexico	–	–	12,837	12,837	11,230	–	–	24,067
North Dakota	–	–	–	–	–	29,861	–	29,861
Ohio	13	474	27,394	28,572	–	–	–	28,572
Oklahoma	268	909	524	1,701	–	–	–	1,701
Pennsylvania Total	4,121	11,564	46,839	63,190	–	–	4,751	67,942
Anthracite	–	–	–	–	–	–	4,751	4,751
Bituminous	4,121	11,564	46,839	63,190	–	–	–	63,190
Tennessee	–	1,219	2,432	3,651	–	–	–	3,651
Texas	–	446	–	446	–	54,718	–	55,164
Utah	–	–	27,507	27,507	–	–	–	27,507
Virginia	6,928	7,085	21,577	35,590	–	–	–	35,590
Washington	–	–	173	173	4,393	–	–	4,565
West Virginia Total	17,312	12,641	139,952	170,433	–	–	–	170,433
Northern	3,927	1,803	39,669	45,910	–	–	–	45,910
Southern	13,385	10,838	100,283	124,523	–	–	–	124,523
Wyoming	–	–	1,832	1,832	276,608	–	–	278,440
Appalachian Total[2]	**40,792**	**38,758**	**365,361**	**447,116**	–	–	**4,751**	**451,868**
Interior Total[2]	**273**	**1,354**	**112,342**	**114,893**	–	**57,939**	**16**	**172,848**
Western Total[2]	–	**129**	**68,603**	**68,732**	**340,291**	**30,117**	–	**439,140**
East of Miss. River	**40,792**	**38,758**	**476,237**	**558,916**	–	–	**4,751**	**563,668**
West of Miss. River	**273**	**1,483**	**70,069**	**71,825**	**340,291**	**88,056**	**16**	**500,188**
U.S. Total	**41,065**	**40,241**	**546,307**	**630,741**	**340,291**	**88,056**	**4,768**	**1,063,856**

1 Includes bituminous production with volatile content not reported.
2 For a definition of coal-producing regions, see Appendix C.

Notes: Refer to the *Classification of Coals by Rank* table in Appendix C for coal group definitions. Coal production excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-7A, ''Coal Production Report''; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, ''Quarterly Mine Employment and Coal Production Report.''

Table 11. Coal Production by State, Mine Type, and Union Type, 1996
(Thousand Short Tons)

Coal-Producing State and Region	UMWA	Other Unions	Union Total	Nonunion	Total
Alabama	**17,060**	–	**17,060**	**7,563**	**24,623**
Underground	14,519	–	14,519	3,698	18,217
Surface	2,541	–	2,541	3,865	6,406
Alaska	–	**1,481**	**1,481**	–	**1,481**
Surface	–	1,481	1,481	–	1,481
Arizona	**10,442**	–	**10,442**	–	**10,442**
Surface	10,442	–	10,442	–	10,442
Colorado	**2,591**	**2,008**	**4,599**	**20,287**	**24,886**
Underground	1,007	–	1,007	14,574	15,581
Surface	1,584	2,008	3,592	5,714	9,305
Illinois	**32,104**	**3,449**	**35,553**	**11,099**	**46,652**
Underground	25,635	2,776	28,411	10,538	38,948
Surface	6,469	673	7,143	561	7,704
Indiana	**14,933**	–	**14,933**	**14,734**	**29,667**
Underground	900	–	900	2,063	2,963
Surface	14,033	–	14,033	12,672	26,704
Kansas	**232**	–	**232**	–	**232**
Surface	232	–	232	–	232
Kentucky Total	**20,430**	**779**	**21,209**	**130,883**	**152,092**
Underground	15,903	245	16,148	78,005	94,153
Surface	4,528	533	5,061	52,878	57,939
Eastern	**10,455**	**779**	**11,234**	**105,420**	**116,654**
Underground	7,149	245	7,395	61,624	69,018
Surface	3,306	533	3,839	43,796	47,635
Western	**9,975**	–	**9,975**	**25,463**	**35,438**
Underground	8,754	–	8,754	16,381	25,135
Surface	1,222	–	1,222	9,082	10,304
Louisiana	–	–	–	**3,221**	**3,221**
Surface	–	–	–	3,221	3,221
Maryland	–	–	–	**4,068**	**4,068**
Underground	–	–	–	3,296	3,296
Surface	–	–	–	772	772
Missouri	–	–	–	**710**	**710**
Surface	–	–	–	710	710
Montana	**16,241**	**12,476**	**28,717**	**9,174**	**37,891**
Underground	–	–	–	147	147
Surface	16,241	12,476	28,717	9,027	37,744
New Mexico	**6,587**	**13,281**	**19,868**	**4,199**	**24,067**
Surface	6,587	13,281	19,868	4,199	24,067
North Dakota	**2,675**	**4,538**	**7,212**	**22,648**	**29,861**
Surface	2,675	4,538	7,212	22,648	29,861
Ohio	**15,673**	–	**15,673**	**12,847**	**28,520**
Underground	14,075	–	14,075	1,837	15,912
Surface	1,598	–	1,598	11,010	12,608
Oklahoma	–	–	–	**1,687**	**1,687**
Underground	–	–	–	137	137
Surface	–	–	–	1,550	1,550
Pennsylvania Total	**25,899**	**65**	**25,964**	**41,447**	**67,411**
Underground	23,992	–	23,992	23,147	47,140
Surface	1,907	65	1,972	18,300	20,272
Anthracite	**986**	**65**	**1,052**	**3,492**	**4,544**
Underground	–	–	–	284	284
Surface	986	65	1,052	3,208	4,259
Bituminous	**24,913**	–	**24,913**	**37,955**	**62,868**
Underground	23,992	–	23,992	22,863	46,855
Surface	920	–	920	15,092	16,012
Tennessee	–	–	–	**3,621**	**3,621**
Underground	–	–	–	1,790	1,790
Surface	–	–	–	1,830	1,830
Texas	–	**36,136**	**36,136**	**19,027**	**55,164**
Surface	–	36,136	36,136	19,027	55,164
Utah	**9,256**	–	**9,256**	**18,243**	**27,499**
Underground	9,256	–	9,256	18,243	27,499
Virginia	**7,309**	**707**	**8,017**	**27,478**	**35,495**
Underground	6,999	–	6,999	18,501	25,500
Surface	310	707	1,018	8,978	9,995
Washington	–	**4,393**	**4,393**	**173**	**4,565**
Surface	–	4,393	4,393	173	4,565
West Virginia Total	**89,208**	–	**89,208**	**81,065**	**170,273**
Underground	65,086	–	65,086	50,411	115,497
Surface	24,122	–	24,122	30,654	54,776

See footnotes at end of table.

Table 11. Coal Production by State, Mine Type, and Union Type, 1996 (Continued)

(Thousand Short Tons)

Coal-Producing State and Region	UMWA	Other Unions	Union Total	Nonunion	Total
Northern	**31,636**	–	**31,636**	**14,201**	**45,838**
Underground	31,636	–	31,636	8,614	40,251
Surface	–	–	–	5,587	5,587
Southern	**57,572**	–	**57,572**	**66,863**	**124,435**
Underground	33,449	–	33,449	41,796	75,246
Surface	24,122	–	24,122	25,067	49,189
Wyoming	**4,435**	**10,114**	**14,549**	**263,891**	**278,440**
Underground	–	–	–	2,641	2,641
Surface	4,435	10,114	14,549	261,250	275,799
Appalachian Total[1]	**165,605**	**1,551**	**167,156**	**283,508**	**450,664**
Underground	131,820	245	132,066	164,304	296,370
Surface	33,785	1,306	35,090	119,204	154,294
Interior Total[1]	**57,245**	**39,585**	**96,830**	**75,941**	**172,771**
Underground	35,289	2,776	38,064	29,118	67,183
Surface	21,956	36,809	58,765	46,823	105,588
Western Total[1]	**52,227**	**48,290**	**100,517**	**338,616**	**439,133**
Underground	10,263	–	10,263	35,605	45,868
Surface	41,963	48,290	90,253	303,011	393,265
East of Miss. River	**222,617**	**5,000**	**227,617**	**334,804**	**562,422**
Underground	167,109	3,021	170,130	193,286	363,416
Surface	55,508	1,979	57,487	141,519	199,006
West of Miss. River	**52,459**	**84,426**	**136,885**	**363,261**	**500,146**
Underground	10,263	–	10,263	35,742	46,005
Surface	42,196	84,426	126,622	327,519	454,141
Unknown[2]	**NA**	**NA**	**NA**	**NA**	**1,288**
Underground	NA	NA	NA	NA	428
Surface	NA	NA	NA	NA	860
U.S. Total	**275,076**	**89,426**	**364,502**	**698,065**	**1,063,856**
Underground	177,373	3,021	180,394	229,027	409,849
Surface	97,704	86,405	184,109	469,038	654,007

1 For a definition of coal-producing regions, see Appendix C.
2 Includes mines with production of less than 10,000 short tons, which are required to provide only production data.
NA Not available.

Notes: Coal production excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Totals may not equal sum of components due to independent rounding. See Glossary for listing of other unions.

Sources: Energy Information Administration, Form EIA-7A, ''Coal Production Report''; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, ''Quarterly Mine Employment and Coal Production Report.''

Table 12. Coal Production by State and Disposition, 1996
(Thousand Short Tons)

Coal-Producing State and Region	Open Market[1]	Captive[2]	Total
Alabama	23,749	874	24,623
Alaska	1,478	2	1,481
Arizona	10,442	0	10,442
Colorado	24,886	0	24,886
Illinois	46,080	573	46,652
Indiana	29,666	1	29,667
Kansas	232	0	232
Kentucky Total	149,169	2,923	152,092
Eastern	113,733	2,921	116,654
Western	35,437	2	35,438
Louisiana	3,221	0	3,221
Maryland	4,042	25	4,068
Missouri	710	0	710
Montana	34,909	2,982	37,891
New Mexico	24,067	0	24,067
North Dakota	28,959	901	29,861
Ohio	20,591	7,929	28,520
Oklahoma	1,687	0	1,687
Pennsylvania Total	64,992	2,420	67,411
Anthracite	2,853	1,691	4,544
Bituminous	62,139	729	62,868
Tennessee	3,603	17	3,621
Texas	15,136	40,027	55,164
Utah	19,294	8,205	27,499
Virginia	33,519	1,976	35,495
Washington	173	4,393	4,565
West Virginia Total	167,700	2,573	170,273
Northern	44,756	1,082	45,838
Southern	122,944	1,491	124,435
Wyoming	262,384	16,056	278,440
Appalachian Total[3]	**431,930**	**18,734**	**450,664**
Interior Total[3]	**132,168**	**40,603**	**172,771**
Western Total[3]	**406,593**	**32,540**	**439,133**
East of Miss. River	**543,112**	**19,310**	**562,422**
West of Miss. River	**427,579**	**72,567**	**500,146**
Total[4]	**970,691**	**91,877**	**1,062,568**
Unknown[5]	**NA**	**NA**	**1,288**
U.S. Total	**NA**	**NA**	**1,063,856**

1 Open Market includes all coal sold on the open market to other coal companies or consumers.
2 Captive includes all coal used by the producing company or sold to affiliated or parent companies.
3 For a definition of coal-producing regions, see Appendix C.
4 Excludes mines producing less than 10,000 short tons, which are not required to provide these data.
5 Includes mines producing less than 10,000 short tons, which are required to provide only production data.
NA Not available.

Notes: Coal production excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite.

Sources: Energy Information Administration, Form EIA-7A, ''Coal Production Report''; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, ''Quarterly Mine Employment and Coal Production Report.''

Table 13. Coal Mining Acreage, Production and Royalties from Federal and Indian Leases by State, 1996

Coal-Producing State and Region	Federal Leases			Indian Leases		
	Acres Leased	Production (thousand short tons)	Royalties (thousand dollars)	Acres Leased	Production (thousand short tons)	Royalties (thousand dollars)
Alabama	1,610	49	169	–	–	–
Arizona	–	–	–	64,858	12,185	33,226
Colorado	49,633	18,765	28,560	–	–	–
Kentucky	2,413	249	268	–	–	–
Montana	31,540	24,816	32,935	14,746	4,681	2,139
New Mexico	12,132	5,861	20,844	36,026	9,439	27,697
North Dakota	5,472	1,835	1,012	–	–	–
Oklahoma	10,251	769	746	–	–	–
Utah	44,215	26,403	39,456	–	–	–
Washington	241	570	1,233	–	–	–
Wyoming	118,403	248,866	176,655	–	–	–
Appalachian Total[1]	**1,610**	**49**	**170**	–	–	–
Interior Total[1]	**12,664**	**1,018**	**1,015**	–	–	–
Western Total[1]	**261,636**	**327,121**	**300,701**	**115,630**	**26,305**	**63,064**
East of Miss. River	**4,023**	**298**	**438**	–	–	–
West of Miss. River	**271,887**	**327,890**	**301,448**	**115,630**	**26,305**	**63,064**
U.S. Total	**275,910**	**328,188**	**301,885**	**115,630**	**26,305**	**63,064**

[1] For a definition of coal-producing regions, see Appendix C.

Notes: U.S. Total for this table represents Federal and Indian Leases only. Output from Federal and Indian Lands is reported as sales volume, the basis for royalties. It is approximately equivalent to production, which includes coal sold and coal added to stockpiles. Totals may not equal sum of components due to independent rounding.

Source: U.S. Department of the Interior, Minerals Management Service (MMS), *Mineral Revenues, 1996, Report on Receipts from Federal and Indian Leases.*

Table 14. Major U.S. Coal Mines, 1996

Rank	Mine Name/Company	Mine Type	State	Production (short tons)
1	Black Thunder/Thunder Basin Coal	Surface	Wyoming	39,258,024
2	North Antelope/Powder River Coal	Surface	Wyoming	28,623,169
3	Rochelle/Powder River Coal	Surface	Wyoming	26,248,241
4	Jacobs Ranch/Kerr-McGee Coal	Surface	Wyoming	24,522,960
5	Caballo/Caballo Coal	Surface	Wyoming	22,003,064
6	Belle Ayr/AMAX Coal West	Surface	Wyoming	19,970,300
7	Eagle Butte/AMAX Coal West	Surface	Wyoming	15,642,744
8	Freedom-Coteau/Coteau Properties	Surface	North Dakota	15,624,702
9	Caballo Rojo/Caballo Rojo	Surface	Wyoming	15,082,891
10	Rawhide/Caballo Coal	Surface	Wyoming	15,068,358
11	Cordero/Cordero Mining	Surface	Wyoming	13,071,242
12	Antelope/Antelope Coal	Surface	Wyoming	12,045,854
13	Buckskin/Triton Coal	Surface	Wyoming	12,005,334
14	West Decker/Decker Coal	Surface	Montana	10,388,948
15	Spring Creek/Spring Creek Coal	Surface	Montana	9,026,789
16	Jewett/Northwestern Resources	Surface	Texas	8,865,214
17	Enlow Fork/Enlow Fork Mining	Underground	Pennsylvania	8,723,644
18	Monticello-Winfield/Texas Utilities Mining	Surface	Texas	8,568,801
19	Rosebud No 6/Western Energy	Surface	Montana	7,807,347
20	Bailey No 1/CONSOL	Underground	Pennsylvania	7,469,255
21	Navajo/BHP Minerals	Surface	New Mexico	7,031,000
22	Falkirk/Falkirk Mining	Surface	North Dakota	7,023,633
23	Martin Lake/Texas Utilities Mining	Surface	Texas	6,813,996
24	Galatia No 56/Kerr-McGee Coal	Underground	Illinois	6,629,282
25	Sandow-Rockdale/ALCOA	Surface	Texas	6,615,490
26	Martin Lake-Oak Hill/Texas Utilities Mining	Surface	Texas	6,508,728
27	Jim Bridger/Bridger Coal	Surface	Wyoming	6,321,161
28	Kayenta/Peabody Western	Surface	Arizona	6,236,855
29	Mount Gunnison/Mountain Coal	Underground	Colorado	5,986,138
30	Foidel Creek/Twenty Mile Coal	Underground	Colorado	5,836,673
31	Coal Creek/Thunder Basin Coal	Surface	Wyoming	5,769,025
32	Colowyo/Colowyo Coal	Surface	Colorado	5,713,565
33	Cumberland/Cyprus Cumberland	Underground	Pennsylvania	5,327,908
34	McKinley/Pittsburg & Midway Coal	Surface	New Mexico	5,327,649
35	Mountaineer/Mingo Logan Coal	Underground	West Virginia	5,245,650
36	Big Brown/Texas Utilities Mining	Surface	Texas	5,195,579
37	Big Sky/Big Sky Coal	Surface	Montana	4,994,234
38	Peats Branch No 3/Hobet Mining	Surface	West Virginia	4,847,375
39	Powhatan No 6/Ohio Valley Coal	Underground	Ohio	4,741,214
40	Absaloka/Westmoreland Resources	Surface	Montana	4,668,495
41	Skyline/Coastal States Energy	Underground	Utah	4,628,282
42	Federal No 2/Eastern Associated Coal	Underground	West Virginia	4,580,428
43	No 37/Arch of Kentucky	Underground	Kentucky	4,547,046
44	Center/BNI Coal	Surface	North Dakota	4,537,957
45	Samples(Boone)/Catenary Coal	Surface	West Virginia	4,493,734
46	No 50/US Steel Mining	Underground	West Virginia	4,492,196
47	Shoemaker/CONSOL	Underground	West Virginia	4,415,744
48	Deer Creek/PacifiCorp	Underground	Utah	4,337,999
49	McElory/CONSOL	Underground	West Virginia	4,305,682
50	Robinson Run/CONSOL	Underground	West Virginia	4,216,327
51	Black Mesa/Peabody Western	Surface	Arizona	4,204,908
52	Southern Utah Fuel/Coastal States Energy	Underground	Utah	4,202,439
53	Lee Ranch/Lee Ranch Coal	Surface	New Mexico	4,199,387
54	No 13 Baker/Costain Coal	Underground	Kentucky	3,986,028
55	South Hallsville No 1/Sabine Mining	Surface	Texas	3,892,053
56	San Juan/San Juan Coal	Surface	New Mexico	3,875,153
57	Trail Mountain/PacifiCorp	Underground	Utah	3,825,647
58	Dave Johnston/PacifiCorp	Surface	Wyoming	3,792,706
59	Marissa(Washington)/Peabody Coal	Underground	Illinois	3,673,750
60	Kemmerer/Pittsburg & Midway Coal	Surface	Wyoming	3,650,865
61	Dilworth/CONSOL	Underground	Pennsylvania	3,632,018
62	Buchanan No 1/CONSOL	Underground	Virginia	3,556,890
63	Blacksville No 2/CONSOL	Underground	West Virginia	3,459,798
64	Shoal Creek/Drummond Co	Underground	Alabama	3,417,799
65	Lynnville/Peabody Coal	Surface	Indiana	3,404,172
66	Powhatan No 4/CONSOL	Underground	Ohio	3,382,895
67	No 21/Hobet Mining	Surface	West Virginia	3,366,564
68	San Miguel/Atascosa Mining	Surface	Texas	3,324,110
69	Hawthorn/Peabody Coal	Surface	Indiana	3,317,693
*	**Subtotal**			**551,570,801**
*	**All Other Mines**			**512,284,712**
*	**U.S. Total**			**1,063,855,513**

Notes: Major mines are mines that produced more than 3.3 million short tons in 1996. The company is the firm operating the mine.

Sources: Energy Information Administration, Form EIA-7A, ''Coal Production Report''; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, ''Quarterly Mine Employment and Production Report.''

Table 15. Major U.S. Coal Producers, 1996

Rank	Company Name	Production (thousand short tons)	Percent of Total Production
1	Peabody Holding Co., Inc.	142,811	13.4
2	Cyprus AMAX Minerals Co.	74,738	7.0
3	Consol Energy Inc.	70,072	6.6
4	Kennecott Energy Co.	62,527	5.9
5	ARCO Coal Co	51,013	4.8
6	Kerr-McGee Coal Corp.	31,350	2.9
7	Zeigler Coal Holding Co.	31,001	2.9
8	Marrowbone Development Co.	29,239	2.7
9	Texas Utilities Co.	28,214	2.6
10	A.T. Massey Coal Co.	27,327	2.6
11	North American Coal Corp.	26,284	2.5
12	Arch Mineral Corp.	20,153	1.9
13	Montana Power Co.	19,623	1.8
14	Ashland Coal Inc.	16,091	1.5
15	Marigold Land Co.	14,731	1.4
16	Pittston Coal Group	13,281	1.2
17	BHP Utah Minerals	13,228	1.2
18	Pittsburg & Midway Coal Mining Co.	12,946	1.2
19	Mapco Coal Inc.	12,844	1.2
20	Kiewit Coal Properties Inc.	9,863	.9
21	Costain Coal Inc.	9,342	.9
22	Coastal Corp (The)	8,932	.8
23	AEP Service Corp.	8,652	.8
24	Jamer River Coal Co.	8,025	.8
25	Anadalex Resources Inc.	7,613	.7
26	Drummond Company Inc.	7,342	.7
27	Rochester & Pittsburgh Coal Co.	7,315	.7
28	Jim Walter Resources Inc.	7,313	.7
29	U S steele Mining Co., Inc.	7,169	.7
30	Black Beauty Coal Co.	6,628	.6
31	Teco Coal Corp.	6,615	.6
32	Aluminum Company of America	5,379	.5
33	Westmoreland Resources Inc.	5,111	.5
34	General Dynamics Corp.	4,741	.4
35	Ohio Valley Resources Inc.	4,538	.4
36	Minnesota Power & Light	4,199	.4
37	Hanson PLC	4,132	.4
38	Lee Ranch Coal Company	3,828	.4
39	Exxon Corporation	3,689	.3
40	Sun Co., Inc.	3,554	.3
41	Kindill Mining Inc.	3,324	.3
42	Golden Oak Mining Co. LP	3,243	.3
43	San Miguel Electric CoOp	3,209	.3
44	Black Hills Corp.	2,982	.3
45	A N R Coal Co.	2,948	.3
46	Leslie Resources Inc.	2,931	.3
47	Addington Enterprises Inc.	2,758	.3
48	MDU Resources Group Inc.	2,660	.2
49	Pen Coal Corp.	2,482	.2
50	Fola Coal Co.	2,455	.2
51	Dorchester Coal Co., Inc.	2,434	.2
52	Mincorp Inc.	2,306	.2
53	Dolet Hills Mining Venture	2,225	.2
54	Anker Group Inc.	2,056	.2
55	Maple Creek Mining Inc.	2,056	.2
56	Appolo Fuels Inc.	2,014	.2
57	Waterloo Coal Co., Inc.	2,008	.2
*	**Subtotal**	**875,548**	**82.3**
*	**All other coal producers**	**188,308**	**17.7**
*	**U.S. Total**	**1,063,856**	**100.0**

Notes: Major coal producers are companies that produced more than 2 million short tons in 1996. The company is the firm owning the mineral rights to the mined coal.

Sources: Energy Information Administration, Form EIA-7A, ''Coal Production Report''; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, ''Quarterly Mine Employment and Production Report.''

Productive Capacity

Table 16. Productive Capacity of Coal Mines by State, 1987, 1992-1996
(Thousand Short Tons)

Coal-Producing State and Region	1996	1995	1994	1993	1992	1987[1]	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
Alabama	32,159	32,546	33,049	27,916	29,815	29,189	–1.2	1.9	1.1
Alaska	w	w	w	w	w	w	w	w	w
Arizona	w	w	w	w	w	w	w	w	w
Arkansas	–	w	w	w	w	w	w	w	w
California	–	–	–	–	w	w	w	w	w
Colorado	29,330	32,435	31,075	30,040	25,848	21,321	–9.6	3.2	3.6
Illinois	61,727	56,627	69,414	69,320	75,787	75,852	9.0	–5.0	–2.3
Indiana	35,564	35,256	38,931	43,955	42,990	45,344	.9	–4.6	–2.7
Iowa	–	–	w	w	w	w	w	w	w
Kansas	w	w	w	w	w	w	w	w	w
Kentucky Total	189,225	203,173	213,427	204,805	195,352	185,985	–6.9	–.8	.2
Eastern	145,691	152,111	161,731	157,318	149,046	128,874	–4.2	–.6	1.4
Western	43,534	51,062	51,696	47,486	46,306	57,110	–14.7	–1.5	–3.0
Louisiana	w	w	w	w	w	w	w	w	w
Maryland	4,935	4,408	4,332	3,927	3,902	4,647	11.9	6.0	.7
Missouri	1,046	1,081	1,209	w	w	w	–3.2	w	–16.6
Montana	56,175	51,597	51,104	50,849	48,582	42,848	8.9	3.7	3.0
New Mexico	32,695	32,760	32,807	33,360	29,512	33,295	–.2	2.6	–.2
North Dakota	32,184	34,464	35,920	36,371	36,986	39,166	–6.6	–3.4	–2.1
Ohio	37,584	34,011	43,925	42,236	41,329	46,337	10.5	–2.3	–2.3
Oklahoma	1,981	2,557	2,251	2,422	2,486	3,818	–22.5	–5.5	–7.0
Pennsylvania Total	81,684	77,187	80,975	82,148	82,968	86,765	5.8	–.4	–.7
Anthracite	5,504	6,547	5,776	5,806	4,143	3,871	–15.9	7.4	4.0
Bituminous	76,180	70,640	75,200	76,342	78,825	82,895	7.8	–.8	–.9
Tennessee	4,009	3,750	3,409	3,763	3,932	7,305	6.9	.5	–6.4
Texas	59,604	54,758	55,856	57,115	58,541	51,636	8.8	.4	1.6
Utah	30,230	30,888	27,640	25,933	25,534	22,976	–2.1	4.3	3.1
Virginia	41,593	43,037	46,462	50,879	54,471	49,676	–3.3	–6.5	–1.9
Washington	w	w	w	w	w	w	w	w	w
West Virginia Total	217,409	204,837	201,684	191,706	198,083	158,356	6.1	2.3	3.6
Northern	54,602	56,355	59,295	60,015	62,811	59,630	–3.1	–3.4	–1.0
Southern	162,807	148,482	142,388	131,691	135,271	98,726	9.6	4.7	5.7
Wyoming	350,908	337,184	321,046	277,875	253,312	247,476	4.1	8.5	3.9
Appalachian Total[2]	**565,064**	**551,888**	**575,568**	**559,893**	**563,545**	**511,150**	**2.4**	**.1**	**1.1**
Interior Total[2]	**207,658**	**205,393**	**223,897**	**225,938**	**235,040**	**245,624**	**1.1**	**–3.0**	**–1.8**
Western Total[2]	**551,990**	**541,773**	**521,191**	**476,042**	**442,469**	**426,630**	**1.9**	**5.7**	**2.9**
East of Miss. River	**705,890**	**694,832**	**735,609**	**720,654**	**728,628**	**689,457**	**1.6**	**–.8**	**.3**
West of Miss. River	**618,823**	**604,222**	**585,047**	**541,219**	**512,426**	**493,948**	**2.4**	**4.8**	**2.5**
U.S. Total	**1,324,712**	**1,299,054**	**1,320,656**	**1,261,873**	**1,241,054**	**1,183,404**	**2.0**	**1.6**	**1.3**

1 For 1987, the Form EIA-7A solicited data on ''Daily Productive Capacity.'' To obtain annual productive capacity for a mine in 1987, each mine's daily productive capacity was multiplied by the number of days worked during the year.

2 For a definition of coal-producing regions, see Appendix C.

Notes: Productive capacity is the maximum amount of coal that can be produced annually as reported by mining companies on Form EIA-7A. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons, which are not required to provide these data. Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration, Form EIA-7A, ''Coal Production Report.''

Table 17. Capacity Utilization of Coal Mines by State, 1987, 1992-1996
(Percent)

Coal-Producing State and Region	1996	1995	1994	1993	1992	1987[1]
Alabama	76.57	75.52	70.19	88.46	86.26	87.23
Alaska	w	w	w	w	w	w
Arizona	w	w	w	w	w	w
Arkansas	–	w	w	w	w	w
California	–	–	–	–	w	w
Colorado	84.85	79.27	81.41	72.84	74.35	67.59
Illinois	75.58	85.08	76.06	59.28	78.98	77.98
Indiana	83.42	73.70	79.37	66.60	70.86	75.36
Iowa	–	–	w	w	w	w
Kansas	w	w	w	w	w	w
Kentucky Total	80.38	75.49	75.54	76.11	82.15	88.03
Eastern	80.07	77.71	76.70	76.15	79.72	91.94
Western	81.40	68.89	71.89	76.00	89.95	79.20
Louisiana	w	w	w	w	w	w
Maryland	82.42	82.65	83.07	85.01	84.50	84.48
Missouri	67.85	49.88	69.35	w	w	w
Montana	67.45	76.44	81.47	70.64	80.03	80.28
New Mexico	73.61	81.85	85.47	84.74	83.18	57.46
North Dakota	92.78	87.37	89.88	87.89	85.83	64.19
Ohio	75.88	76.55	67.87	67.94	73.19	76.72
Oklahoma	85.16	73.14	83.98	71.95	69.73	74.77
Pennsylvania Total	82.53	78.81	75.89	71.79	82.20	80.04
Anthracite	82.56	67.12	74.02	68.80	75.22	79.83
Bituminous	82.53	79.89	76.03	72.02	82.57	80.05
Tennessee	90.32	85.51	87.27	79.73	86.50	86.94
Texas	92.55	96.21	93.72	95.54	94.07	97.86
Utah	90.97	81.48	88.27	84.22	83.57	71.85
Virginia	85.34	79.07	79.61	77.07	78.70	88.93
Washington	w	w	w	w	w	w
West Virginia Total	78.32	79.50	80.07	67.91	81.70	85.84
Northern	83.95	81.70	83.04	56.15	79.44	86.72
Southern	76.43	78.67	78.83	73.28	82.75	85.31
Wyoming	79.35	78.24	73.85	75.62	75.07	59.34
Appalachian Total[2]	**79.75**	**78.53**	**77.07**	**72.85**	**80.63**	**85.95**
Interior Total[2]	**83.20**	**82.01**	**80.29**	**73.95**	**83.22**	**82.05**
Western Total[2]	**79.55**	**79.29**	**78.33**	**77.41**	**78.04**	**64.18**
East of Miss. River	**79.68**	**78.11**	**76.73**	**71.37**	**80.47**	**83.82**
West of Miss. River	**80.82**	**80.88**	**79.85**	**79.29**	**79.80**	**68.18**
U.S. Total	**80.21**	**79.40**	**78.11**	**74.77**	**80.20**	**77.29**

1 For 1987, the Form EIA-7A solicited data on ''Daily Productive Capacity.'' To obtain annual productive capacity for a mine in 1987, each mine's daily productive capacity was multiplied by the number of days worked during the year.

2 For a definition of coal-producing regions, see Appendix C.

Notes: Capacity utilization is the ratio of total production to annual productive capacity as reported by mining companies on Form EIA-7A. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons, which are not required to provide these data.

Source: Energy Information Administration, Form EIA-7A, ''Coal Production Report.''

Table 18. Production, Productive Capacity, and Capacity Utilization of Coal Mines by State and Mine Type, 1996

(Thousand Short Tons)

Coal-Producing State and Region	Underground			Surface			Total		
	Production	Productive Capacity	Capacity Utilization (percent)	Production	Productive Capacity	Capacity Utilization (percent)	Production	Productive Capacity	Capacity Utilization (percent)
Alabama	18,217	23,207	78.50	6,406	8,952	71.55	24,623	32,159	76.57
Alaska	–	–	–	1,481	w	w	1,481	w	w
Arizona	–	–	–	10,442	w	w	10,442	w	w
Colorado	15,581	18,530	84.08	9,305	10,800	86.16	24,886	29,330	84.85
Illinois	38,948	51,816	75.17	7,704	9,912	77.73	46,652	61,727	75.58
Indiana	2,963	w	w	26,704	w	w	29,667	35,564	83.42
Kansas	–	–	–	232	w	w	232	w	w
Kentucky Total	94,153	114,922	81.93	57,939	74,302	77.98	152,092	189,225	80.38
Eastern	69,018	86,042	80.21	47,635	59,649	79.86	116,654	145,691	80.07
Western	25,135	28,880	87.03	10,304	14,653	70.32	35,438	43,534	81.40
Louisiana	–	–	–	3,221	w	w	3,221	w	w
Maryland	3,296	w	w	772	w	w	4,068	4,935	82.42
Missouri	–	–	–	710	1,046	67.85	710	1,046	67.85
Montana	147	w	w	37,744	w	w	37,891	56,175	67.45
New Mexico	–	–	–	24,067	32,695	73.61	24,067	32,695	73.61
North Dakota	–	–	–	29,861	32,184	92.78	29,861	32,184	92.78
Ohio	15,912	17,313	91.91	12,608	20,272	62.19	28,520	37,584	75.88
Oklahoma	137	w	w	1,550	w	w	1,687	1,981	85.16
Pennsylvania Total	47,140	54,579	86.37	20,272	27,105	74.79	67,411	81,684	82.53
Anthracite	284	459	61.96	4,259	5,045	84.44	4,544	5,504	82.56
Bituminous	46,855	54,120	86.58	16,012	22,060	72.58	62,868	76,180	82.53
Tennessee	1,790	w	w	1,830	w	w	3,621	4,009	90.32
Texas	–	–	–	55,164	59,604	92.55	55,164	59,604	92.55
Utah	27,499	30,230	90.97	–	–	–	27,499	30,230	90.97
Virginia	25,500	30,146	84.59	9,995	11,448	87.31	35,495	41,593	85.34
Washington	–	–	–	4,565	w	w	4,565	w	w
West Virginia Total	115,497	143,797	80.32	54,776	73,612	74.41	170,273	217,409	78.32
Northern	40,251	46,028	87.45	5,587	8,575	65.16	45,838	54,602	83.95
Southern	75,246	97,769	76.96	49,189	65,038	75.63	124,435	162,807	76.43
Wyoming	2,641	w	w	275,799	w	w	278,440	350,908	79.35
Appalachian Total[1]	**296,370**	**361,103**	**82.07**	**154,294**	**203,961**	**75.65**	**450,664**	**565,064**	**79.75**
Interior Total[1]	**67,183**	**84,166**	**79.82**	**105,588**	**123,492**	**85.50**	**172,771**	**207,658**	**83.20**
Western Total[1]	**45,868**	**52,160**	**87.94**	**393,265**	**499,830**	**78.68**	**439,133**	**551,990**	**79.55**
East of Miss. River	**363,416**	**444,969**	**81.67**	**199,006**	**260,920**	**76.27**	**562,422**	**705,890**	**79.68**
West of Miss. River	**46,005**	**52,460**	**87.70**	**454,141**	**566,363**	**80.19**	**500,146**	**618,823**	**80.82**
Unknown[2]	**428**	**NA**	**NA**	**860**	**NA**	**NA**	**1,288**	**NA**	**NA**
U.S. Total	**409,849**	**497,429**	**82.31**	**654,007**	**827,283**	**78.95**	**1,063,856**	**1,324,712**	**80.21**

1 For a definition of coal-producing regions, see Appendix C.
2 Includes mines with production of less than 10,000 short tons, which are required to provide only production data.
NA Not available.

Notes: Productive capacity is the maximum amount of coal that can be produced annually as reported by mining companies on Form EIA-7A. Capacity utilization is the ratio of total production to annual productive capacity as reported by mining companies on Form EIA-7A. Coal production excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-7A, ''Coal Production Report''; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, ''Quarterly Mine Employment and Coal Production Report.''

Table 19. Productive Capacity and Capacity Utilization of Underground Coal Mines by State and Mining Method, 1996

(Thousand Short Tons)

Coal-Producing State and Region	Continuous[1]		Conventional[1]		Longwall[1]		Other[1 2]	
	Productive Capacity	Capacity Utilization (percent)	Productive Capacity	Capacity Utilization (percent)	Productive Capacity	Capacity Utilization (percent)	Productive Capacity	Capacity Utilization (percent)
Alabama	w	w	w	w	16,277	80.11	–	–
Colorado	w	w	w	w	9,677	96.60	w	w
Illinois	34,219	72.07	w	w	w	w	–	–
Indiana	w	w	–	–	–	–	–	–
Kentucky Total	87,876	82.75	w	w	12,450	87.52	w	w
Eastern	65,449	81.61	w	w	w	w	w	w
Western	22,427	86.09	w	w	w	w	–	–
Maryland	w	w	–	–	w	w	–	–
Montana	w	w	–	–	–	–	–	–
Ohio	4,633	80.34	–	–	12,680	96.13	–	–
Oklahoma	w	w	–	–	–	–	–	–
Pennsylvania Total	20,869	83.43	w	w	31,250	90.08	w	w
Anthracite	w	w	w	w	–	–	w	w
Bituminous	w	w	w	w	31,250	90.08	–	–
Tennessee	w	w	w	w	–	–	–	–
Utah	w	w	w	w	21,763	91.55	–	–
Virginia	14,781	89.14	w	w	w	w	–	–
West Virginia Total	82,132	76.69	16,700	76.71	44,965	86.42	–	–
Northern	13,357	81.42	2,486	71.92	30,185	91.29	–	–
Southern	68,776	75.78	14,213	77.55	14,780	76.49	–	–
Wyoming	w	w	–	–	w	w	–	–
Appalachian Total[3]	**198,144**	**79.93**	**w**	**w**	**w**	**w**	**w**	**w**
Interior Total[3]	**60,116**	**78.29**	**w**	**w**	**w**	**w**	**–**	**–**
Western Total[3]	**15,257**	**80.81**	**w**	**w**	**34,050**	**92.95**	**w**	**w**
East of Miss. River	**257,960**	**79.59**	**w**	**w**	**145,311**	**86.83**	**w**	**w**
West of Miss. River	**15,557**	**80.13**	**w**	**w**	**34,050**	**92.95**	**w**	**w**
U.S. Total	**273,517**	**79.62**	**43,910**	**72.16**	**179,361**	**87.99**	**640**	**63.11**

1 Calculated by multiplying reported mining method percentages by the individual mine capacity.
2 Includes shortwall, scoop loading, hand loading and unknown.
3 For a definition of coal-producing regions, see Appendix C.

Notes: Productive capacity is the maximum amount of coal that can be produced annually as reported by mining companies on Form EIA-7A. Capacity utilization is the ratio of total production to annual productive capacity as reported by mining companies on Form EIA-7A. Excludes mines producing less than 10,000 short tons, which are not required to provide these data. Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration, Form EIA-7A, ''Coal Production Report.''

Table 20. Productive Capacity and Capacity Utilization of Coal Mines by State and Coal Rank, 1996

(Thousand Short Tons)

Coal-Producing State and Region	Bituminous		Subbituminous		Lignite		Anthracite	
	Productive Capacity	Capacity Utilization (percent)	Productive Capacity	Capacity Utilization (percent)	Productive Capacity	Capacity Utilization (percent)	Productive Capacity	Capacity Utilization (percent)
Alabama	32,159	76.57	–	–	–	–	–	–
Alaska	–	–	w	w	–	–	–	–
Arizona	w	w	–	–	–	–	–	–
Colorado	18,930	84.22	10,400	86.00	–	–	–	–
Illinois	61,727	75.58	–	–	–	–	–	–
Indiana	35,564	83.42	–	–	–	–	–	–
Kansas	w	w	–	–	–	–	–	–
Kentucky Total	189,225	80.38	–	–	–	–	–	–
Eastern	145,691	80.07	–	–	–	–	–	–
Western	43,534	81.40	–	–	–	–	–	–
Louisiana	–	–	–	–	w	w	–	–
Maryland	4,935	82.42	–	–	–	–	–	–
Missouri	1,046	67.85	–	–	–	–	–	–
Montana	–	–	w	w	w	w	–	–
New Mexico	w	w	w	w	–	–	–	–
North Dakota	–	–	–	–	32,184	92.78	–	–
Ohio	37,584	75.88	–	–	–	–	–	–
Oklahoma	1,981	85.16	–	–	–	–	–	–
Pennsylvania Total	76,180	82.53	–	–	–	–	5,504	82.56
Anthracite	–	–	–	–	–	–	5,504	82.56
Bituminous	76,180	82.53	–	–	–	–	–	–
Tennessee	4,009	90.32	–	–	–	–	–	–
Texas	w	w	–	–	w	w	–	–
Utah	30,230	90.97	–	–	–	–	–	–
Virginia	41,593	85.34	–	–	–	–	–	–
Washington	w	w	w	w	–	–	–	–
West Virginia Total	217,409	78.32	–	–	–	–	–	–
Northern	54,602	83.95	–	–	–	–	–	–
Southern	162,807	76.43	–	–	–	–	–	–
Wyoming	w	w	w	w	–	–	–	–
Appalachian Total[1]	**559,560**	**79.73**	–	–	–	–	**5,504**	**82.56**
Interior Total[1]	**w**	**w**	–	–	**w**	**w**	–	–
Western Total[1]	**w**	**w**	**433,106**	**78.57**	**w**	**w**	–	–
East of Miss. River	**700,386**	**79.65**	–	–	–	–	**5,504**	**82.56**
West of Miss. River	**90,138**	**79.66**	**433,106**	**78.57**	**95,579**	**92.13**	–	–
U.S. Total	**790,523**	**79.65**	**433,106**	**78.57**	**95,579**	**92.13**	**5,504**	**82.56**

[1] For a definition of coal-producing regions, see Appendix C.

w Withheld to avoid disclosure of individual company data.

Notes: Refer to the *Classification of Coals by Rank* table in Appendix C for coal rank definitions. Productive capacity is the maximum amount of coal that can be produced annually as reported by mining companies on Form EIA-7A. Capacity utilization is the ratio of total production to annual productive capacity as reported by mining companies on Form EIA-7A. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons, which are not required to provide these data. Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration, Form EIA-7A, ''Coal Production Report.''

Table 21. Productive Capacity and Capacity Utilization of Coal Mines by State and Mine Production Range, 1996

(Thousand Short Tons, Percent)

Coal-Producing State and Region	Productive Capacity					Capacity Utilization (percent)				
	Mine Production Range (thousand short tons)									
	1,000 and over	500 to 1,000	200 to 500	100 to 200	10 to 100	1,000 and over	500 to 1,000	200 to 500	100 to 200	10 to 100
Alabama	20,947	5,887	w	w	w	83.49	65.66	w	w	w
Alaska	w	–	–	–	–	w	–	–	–	–
Arizona	w	–	–	–	–	w	–	–	–	–
Colorado	23,700	w	1,420	w	w	92.49	w	93.19	w	w
Illinois	48,996	w	w	w	3,954	87.64	w	w	w	4.04
Indiana	19,988	10,305	4,187	w	w	92.19	71.18	79.43	w	w
Kansas	–	–	w	–	–	–	–	w	–	–
Kentucky Total	59,849	50,784	42,994	16,250	19,348	91.22	85.92	77.01	73.93	45.18
Eastern	37,253	37,518	38,421	15,371	17,128	91.46	88.89	77.86	72.75	47.50
Western	22,596	13,266	4,573	878	2,220	90.81	77.53	69.89	94.66	27.29
Louisiana	w	w	–	–	–	w	w	–	–	–
Maryland	w	–	w	w	850	w	–	w	w	51.42
Missouri	–	–	w	w	w	–	–	w	w	w
Montana	51,234	w	w	w	–	71.99	w	w	w	–
New Mexico	32,695	–	–	–	–	73.61	–	–	–	–
North Dakota	32,184	–	–	–	–	92.78	–	–	–	–
Ohio	19,851	4,421	3,974	3,824	5,515	89.80	71.69	81.73	64.94	32.50
Oklahoma	–	–	w	1,150	w	–	–	w	64.17	w
Pennsylvania Total	45,356	6,175	13,089	8,498	8,566	87.25	92.28	79.45	65.87	71.72
Anthracite	–	w	2,013	583	2,305	–	w	92.66	100.00	67.61
Bituminous	45,356	w	11,076	7,915	6,260	87.25	w	77.05	63.35	73.23
Tennessee	–	w	2,303	717	w	–	w	98.03	79.73	w
Texas	55,004	w	w	–	–	97.94	w	w	–	–
Utah	28,649	w	–	–	–	90.55	w	–	–	–
Virginia	w	w	12,713	5,858	6,096	w	w	88.90	86.46	68.08
Washington	w	–	–	w	–	w	–	–	w	–
West Virginia Total	119,864	35,418	29,692	7,655	24,780	84.75	91.17	80.83	77.20	26.16
Northern	39,698	5,396	4,317	1,434	3,757	89.76	74.55	76.69	90.60	41.87
Southern	80,166	30,022	25,375	6,221	21,023	82.27	94.16	81.54	74.12	23.35
Wyoming	340,508	w	w	w	w	81.16	w	w	w	w
Appalachian Total[1]	**255,770**	**97,396**	**102,284**	**44,458**	**65,156**	**86.57**	**88.28**	**80.83**	**71.86**	**43.95**
Interior Total[1]	**149,584**	**32,703**	**15,048**	**w**	**w**	**92.38**	**65.07**	**65.12**	**w**	**w**
Western Total[1]	**529,234**	**10,056**	**3,861**	**w**	**w**	**81.50**	**48.76**	**48.12**	**w**	**w**
East of Miss. River	**347,351**	**125,649**	**115,009**	**45,848**	**72,033**	**87.32**	**84.29**	**78.53**	**72.61**	**41.09**
West of Miss. River	**587,238**	**14,506**	**6,184**	**10,197**	**698**	**83.04**	**43.14**	**64.94**	**20.22**	**24.08**
U.S. Total	**934,589**	**140,154**	**121,193**	**56,045**	**72,731**	**84.63**	**80.03**	**77.84**	**63.08**	**40.93**

[1] For a definition of coal-producing regions, see Appendix C.

Notes: Productive capacity is the maximum amount of coal that can be produced annually as reported by mining companies on Form EIA-7A. Capacity utilization is the ratio of total production to annual productive capacity as reported by mining companies on Form EIA-7A. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons, which are not required to provide these data. Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration, Form EIA-7A, ''Coal Production Report.''

Table 22. Productive Capacity and Productivity of Coal Mines by State and Capacity Utilization Range, 1996

(Thousand Short Tons, Short Tons per Miner per Hour)

Coal-Producing State and Region	Productive Capacity						Productivity					
	Capacity Utilization Range (percent)											
	90 and over	80 to 90	70 to 80	60 to 70	Less than 60	Total	90 and over	80 to 90	70 to 80	60 to 70	Less than 60	Total
Alabama	9,825	8,405	w	w	6,595	32,159	2.73	2.28	2.06	2.59	1.28	2.20
Alaska	–	–	–	w	–	w	–	–	–	6.81	–	6.81
Arizona	–	w	w	–	–	w	–	6.92	6.33	–	–	6.30
Colorado	19,700	w	w	w	w	29,330	9.02	2.80	7.92	6.22	2.62	7.32
Illinois	29,045	w	7,083	w	13,850	61,727	4.92	3.98	3.38	4.28	2.36	4.18
Indiana	19,239	w	w	w	6,075	35,564	4.86	5.23	5.96	5.54	4.56	4.98
Kansas	w	–	–	–	–	w	2.17	–	–	–	–	2.17
Kentucky Total	88,434	34,232	16,258	14,524	35,777	189,225	4.39	4.39	4.28	3.82	1.71	3.80
Eastern	70,120	24,050	w	w	28,667	145,691	4.33	4.39	4.10	3.77	1.55	3.68
Western	18,314	10,182	w	w	7,110	43,534	4.63	4.38	4.64	4.16	2.68	4.29
Louisiana	–	w	–	–	–	w	–	10.86	–	–	–	10.86
Maryland	3,191	w	–	w	1,039	4,935	5.22	2.98	–	2.26	2.26	4.13
Missouri	w	–	–	–	w	1,046	4.66	–	–	–	1.49	3.49
Montana	w	w	w	–	21,075	56,175	22.32	18.60	30.75	–	15.96	21.88
New Mexico	w	w	w	w	–	32,695	7.93	5.47	7.63	10.70	–	8.45
North Dakota	w	–	–	w	–	32,184	17.76	–	–	13.42	–	17.20
Ohio	18,220	3,838	2,772	1,900	10,854	37,584	4.11	4.51	4.56	4.19	2.95	3.95
Oklahoma	841	w	–	w	w	1,981	2.99	4.49	–	2.88	1.98	2.61
Pennsylvania Total	43,668	10,397	4,749	13,497	9,372	81,684	4.54	2.89	2.83	3.09	.97	3.36
Anthracite	2,522	1,732	w	w	1,046	5,504	2.91	3.75	.94	2.20	.37	1.92
Bituminous	41,146	8,666	w	w	8,326	76,180	4.70	2.76	2.85	3.11	1.24	3.56
Tennessee	3,224	–	w	w	568	4,009	2.78	–	2.36	1.01	.71	2.20
Texas	52,564	–	w	–	w	59,604	10.36	–	7.16	–	8.40	10.13
Utah	20,230	w	w	–	w	30,230	7.54	7.82	4.20	–	–	7.23
Virginia	23,847	7,584	1,690	3,114	5,358	41,593	3.19	3.46	2.73	2.98	.87	2.72
Washington	w	w	–	–	–	w	4.21	1.63	–	–	–	3.97
West Virginia Total	113,215	22,381	16,479	20,424	44,910	217,409	4.90	3.98	4.73	3.63	1.50	3.91
Northern	32,009	5,610	2,354	9,069	5,560	54,602	4.50	4.39	4.21	3.84	1.59	4.05
Southern	81,205	16,771	14,125	11,355	39,350	162,807	5.08	3.86	4.84	3.48	1.48	3.86
Wyoming	120,958	105,750	w	w	40,200	350,908	32.43	31.55	42.93	47.35	14.36	32.06
Appalachian Total[1]	**285,310**	**76,944**	**41,672**	**53,775**	**107,364**	**565,064**	**4.31**	**3.57**	**3.57**	**3.41**	**1.44**	**3.48**
Interior Total[1]	**120,853**	**28,812**	**19,142**	**6,588**	**32,264**	**207,658**	**6.23**	**4.79**	**4.44**	**4.33**	**2.91**	**5.39**
Western Total[1]	**207,123**	**127,864**	**81,860**	**70,568**	**64,575**	**551,990**	**17.08**	**20.73**	**15.40**	**20.53**	**11.27**	**17.41**
East of Miss. River	**351,908**	**101,626**	**57,774**	**60,183**	**134,399**	**705,890**	**4.40**	**3.75**	**3.71**	**3.50**	**1.58**	**3.63**
West of Miss. River	**261,377**	**131,994**	**84,900**	**70,748**	**69,804**	**618,823**	**14.69**	**20.11**	**14.77**	**20.20**	**9.81**	**15.66**
U.S. Total	**613,285**	**233,620**	**142,674**	**130,931**	**204,202**	**1,324,712**	**6.25**	**6.92**	**6.71**	**6.34**	**2.23**	**5.69**

[1] For a definition of coal-producing regions, see Appendix C.

Notes: Productivity is calculated by dividing total coal production by the total direct labor hours worked by all employees engaged in production, preparation, processing, development, maintenance, repair, and shop or yard work at mining operations. Excludes office workers. Includes mining operations management and all technical and engineering personnel. Productive capacity is the maximum amount of coal that can be produced annually as reported by mining companies on Form EIA-7A. Capacity utilization is the ratio of total production to annual productive capacity as reported by mining companies on Form EIA-7A. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons and preparation plants with less than 5,000 employee hours, which are not required to provide these data. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-7A, ''Coal Production Report''; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, ''Quarterly Mine Employment and Coal Production Report.''

Table 23. Productive Capacity and Capacity Utilization of Coal Mines by State and Recoverable Reserves Range, 1996

(Thousand Short Tons)

Coal-Producing State and Region	Recoverable Reserves Range (million short tons)							
	50 and over		10 to 50		0 to 10		Total	
	Productive Capacity	Capacity Utilization (percent)	Productive Capacity	Capacity Utilization (percent)	Productive Capacity	Capacity Utilization (percent)	Productive Capacity	Capacity Utilization (percent)
Alabama	12,093	84.41	6,996	77.60	13,070	68.75	32,159	76.57
Alaska	w	w	–	–	–	–	w	w
Arizona	w	w	–	–	–	–	w	w
Colorado	19,500	90.59	8,795	69.98	1,035	103.06	29,330	84.85
Illinois	16,361	88.87	30,808	64.03	14,559	85.08	61,727	75.58
Indiana	w	w	w	w	16,959	78.89	35,564	83.42
Kansas	–	–	–	–	w	w	w	w
Kentucky Total	10,913	85.00	38,572	78.39	139,740	80.56	189,225	80.38
Eastern	w	w	w	w	116,942	81.09	145,691	80.07
Western	w	w	w	w	22,798	77.87	43,534	81.40
Louisiana	w	w	w	w	–	–	w	w
Maryland	–	–	w	w	w	w	4,935	82.42
Missouri	–	–	–	–	1,046	67.85	1,046	67.85
Montana	w	w	w	w	–	–	56,175	67.45
New Mexico	w	w	w	w	–	–	32,695	73.61
North Dakota	32,184	92.78	–	–	–	–	32,184	92.78
Ohio	w	w	w	w	18,384	61.45	37,584	75.88
Oklahoma	–	–	w	w	w	w	1,981	85.16
Pennsylvania Total	31,456	88.31	14,024	82.32	36,204	77.59	81,684	82.53
Anthracite	–	–	w	w	w	w	5,504	82.56
Bituminous	31,456	88.31	w	w	w	w	76,180	82.53
Tennessee	–	–	w	w	w	w	4,009	90.32
Texas	48,852	97.90	w	w	w	w	59,604	92.55
Utah	w	w	15,549	91.32	w	w	30,230	90.97
Virginia	–	–	9,912	80.20	31,681	86.94	41,593	85.34
Washington	–	–	w	w	w	w	w	w
West Virginia Total	41,800	89.23	56,832	78.92	118,776	74.19	217,409	78.32
Northern	24,400	89.89	13,903	79.87	16,300	78.54	54,602	83.95
Southern	17,400	88.30	42,930	78.61	102,477	73.50	162,807	76.43
Wyoming	340,608	80.20	–	–	10,300	51.04	350,908	79.35
Appalachian Total[1]	**99,399**	**89.19**	**125,237**	**78.81**	**340,428**	**77.35**	**565,064**	**79.75**
Interior Total[1]	**81,243**	**93.87**	**64,520**	**76.26**	**61,895**	**76.43**	**207,658**	**83.20**
Western Total[1]	**489,425**	**79.56**	**41,945**	**83.76**	**20,620**	**70.89**	**551,990**	**79.55**
East of Miss. River	**128,791**	**89.02**	**182,355**	**77.29**	**394,744**	**77.73**	**705,890**	**79.68**
West of Miss. River	**541,277**	**81.22**	**49,347**	**85.31**	**28,198**	**65.26**	**618,823**	**80.82**
U.S. Total	**670,067**	**82.72**	**231,702**	**79.00**	**422,942**	**76.90**	**1,324,712**	**80.21**

1 For a definition of coal-producing regions, see Appendix C.

Notes: Recoverable reserves represent the quantity of coal that can be recovered (i.e., mined) from existing coal reserves at reporting mines. Productive capacity is the maximum amount of coal that can be produced annually as reported by mining companies on Form EIA-7A. Capacity utilization is the ratio of total production to productive capacity as reported by mining companies on Form EIA-7A. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons, which are not required to provide these data. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-7A, ''Coal Production Report''; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, ''Quarterly Mine Employment and Coal Production Report.''

Table 24. Productive Capacity and Capacity Utilization of Coal Mines by State, Mine Type, and Union Type, 1996
(Thousand Short Tons)

Coal-Producing State and Region	UMWA		Other Unions		Nonunion		Total	
	Productive Capacity	Capacity Utilization (percent)	Productive Capacity	Capacity Utilization (percent)	Productive Capacity	Capacity Utilization (percent)	Productive Capacity	Capacity Utilization (percent)
Alabama	**22,685**	**75.20**	–	–	**9,474**	**79.82**	**32,159**	**76.57**
Underground	w	w	–	–	w	w	23,207	78.50
Surface	w	w	–	–	w	w	8,952	71.55
Alaska	–	–	**w**	**w**	–	–	**w**	**w**
Surface	–	–	w	w	–	–	w	w
Arizona	**w**	**w**	–	–	–	–	**w**	**w**
Surface	w	w	–	–	–	–	w	w
Colorado	**w**	**w**	**w**	**w**	**21,630**	**93.79**	**29,330**	**84.85**
Underground	w	w	–	–	w	w	18,530	84.08
Surface	w	w	w	w	w	w	10,800	86.16
Illinois	**46,792**	**68.61**	**w**	**w**	**w**	**w**	**61,727**	**75.58**
Underground	38,332	66.88	w	w	w	w	51,816	75.17
Surface	8,460	76.47	w	w	w	w	9,912	77.73
Indiana	**18,368**	**81.30**	–	–	**17,197**	**85.68**	**35,564**	**83.42**
Underground	w	w	–	–	w	w	w	w
Surface	w	w	–	–	w	w	w	w
Kansas	**w**	**w**	–	–	–	–	**w**	**w**
Surface	w	w	–	–	–	–	w	w
Kentucky Total	**w**	**w**	**w**	**w**	**163,284**	**80.16**	**189,225**	**80.38**
Underground	w	w	w	w	97,216	80.24	114,922	81.93
Surface	w	w	w	w	66,068	80.04	74,302	77.98
Eastern	**w**	**w**	**w**	**w**	**130,927**	**80.52**	**145,691**	**80.07**
Underground	w	w	w	w	w	w	86,042	80.21
Surface	w	w	w	w	w	w	59,649	79.86
Western	**w**	**w**	–	–	**32,356**	**78.70**	**43,534**	**81.40**
Underground	w	w	–	–	w	w	28,880	87.03
Surface	w	w	–	–	w	w	14,653	70.32
Louisiana	–	–	–	–	**w**	**w**	**w**	**w**
Surface	–	–	–	–	w	w	w	w
Maryland	–	–	–	–	**4,935**	**82.42**	**4,935**	**82.42**
Underground	–	–	–	–	w	w	w	w
Surface	–	–	–	–	w	w	w	w
Missouri	–	–	–	–	**1,046**	**67.85**	**1,046**	**67.85**
Surface	–	–	–	–	1,046	67.85	1,046	67.85
Montana	**21,041**	**77.19**	**w**	**w**	**w**	**w**	**56,175**	**67.45**
Underground	–	–	–	–	w	w	w	w
Surface	21,041	77.19	w	w	w	w	w	w
New Mexico	**w**	**w**	**w**	**w**	**w**	**w**	**32,695**	**73.61**
Surface	w	w	w	w	w	w	32,695	73.61
North Dakota	**w**	**w**	**w**	**w**	**w**	**w**	**32,184**	**92.78**
Surface	w	w	w	w	w	w	32,184	92.78
Ohio	**w**	**w**	**w**	**w**	**20,959**	**61.29**	**37,584**	**75.88**
Underground	w	w	–	–	w	w	17,313	91.91
Surface	w	w	–	–	w	w	20,272	62.19
Oklahoma	–	–	–	–	**1,981**	**85.16**	**1,981**	**85.16**
Underground	–	–	–	–	w	w	w	w
Surface	–	–	–	–	w	w	w	w
Pennsylvania Total	**w**	**w**	**w**	**w**	**50,350**	**82.32**	**81,684**	**82.53**
Underground	w	w	–	–	w	w	54,579	86.37
Surface	w	w	w	w	w	w	27,105	74.79
Anthracite	**w**	**w**	**w**	**w**	**4,124**	**84.68**	**5,504**	**82.56**
Underground	–	–	–	–	w	w	459	61.96
Surface	w	w	w	w	w	w	5,045	84.44
Bituminous	**29,954**	**83.17**	–	–	**46,226**	**82.11**	**76,180**	**82.53**
Underground	28,856	83.14	–	–	25,264	90.50	54,120	86.58
Surface	1,097	83.85	–	–	20,963	72.00	22,060	72.58
Tennessee	–	–	–	–	**4,009**	**90.32**	**4,009**	**90.32**
Underground	–	–	–	–	2,146	83.44	2,146	83.44
Surface	–	–	–	–	1,863	98.24	1,863	98.24
Texas	–	–	**36,664**	**98.56**	**22,940**	**82.94**	**59,604**	**92.55**
Surface	–	–	36,664	98.56	22,940	82.94	59,604	92.55
Utah	**w**	**w**	–	–	**w**	**w**	**30,230**	**90.97**
Underground	w	w	–	–	w	w	30,230	90.97
Virginia	**w**	**w**	**w**	**w**	**31,305**	**87.78**	**41,593**	**85.34**
Underground	w	w	–	–	w	w	30,146	84.59
Surface	w	w	w	w	w	w	11,448	87.31

See footnotes at end of table.

Table 24. Productive Capacity and Capacity Utilization of Coal Mines by State, Mine Type, and Union Type, 1996 (Continued)

(Thousand Short Tons)

Coal-Producing State and Region	UMWA		Other Unions		Nonunion		Total	
	Productive Capacity	Capacity Utilization (percent)	Productive Capacity	Capacity Utilization (percent)	Productive Capacity	Capacity Utilization (percent)	Productive Capacity	Capacity Utilization (percent)
Washington	–	–	**w**	**w**	**w**	**w**	**w**	**w**
Surface	–	–	w	w	w	w	w	w
West Virginia Total	**116,539**	**76.55**	–	–	**100,870**	**80.37**	**217,409**	**78.32**
Underground	80,918	80.43	–	–	62,879	80.17	143,797	80.32
Surface	35,621	67.72	–	–	37,991	80.69	73,612	74.41
Northern	**34,930**	**90.57**	–	–	**19,672**	**72.19**	**54,602**	**83.95**
Underground	34,930	90.57	–	–	11,098	77.62	46,028	87.45
Surface	–	–	–	–	8,575	65.16	8,575	65.16
Southern	**81,609**	**70.55**	–	–	**81,198**	**82.35**	**162,807**	**76.43**
Underground	45,988	72.74	–	–	51,781	80.72	97,769	76.96
Surface	35,621	67.72	–	–	29,417	85.21	65,038	75.63
Wyoming	**w**	**w**	**w**	**w**	**333,758**	**79.07**	**350,908**	**79.35**
Underground	–	–	–	–	w	w	w	w
Surface	w	w	w	w	w	w	w	w
Appalachian Total[1]	**209,969**	**78.87**	**2,265**	**68.47**	**352,830**	**80.35**	**565,064**	**79.75**
Underground	w	w	w	w	200,634	81.89	361,103	82.07
Surface	w	w	w	w	152,195	78.32	203,961	75.65
Interior Total[1]	**76,589**	**74.74**	**40,372**	**98.05**	**90,698**	**83.73**	**207,658**	**83.20**
Underground	w	w	w	w	32,447	89.74	84,166	79.82
Surface	w	w	w	w	58,251	80.38	123,492	85.50
Western Total[1]	**69,125**	**75.55**	**65,143**	**74.13**	**417,722**	**81.06**	**551,990**	**79.55**
Underground	13,000	78.95	–	–	39,160	90.92	52,160	87.94
Surface	56,125	74.77	65,143	74.13	378,562	80.04	499,830	78.68
East of Miss. River	**286,306**	**77.76**	**5,973**	**83.71**	**413,610**	**80.95**	**705,890**	**79.68**
Underground	209,082	79.93	3,106	97.26	232,781	83.03	444,969	81.67
Surface	77,224	71.88	2,867	69.04	180,829	78.26	260,920	76.27
West of Miss. River	**69,377**	**75.61**	**101,807**	**82.93**	**447,639**	**81.15**	**618,823**	**80.82**
Underground	13,000	78.95	–	–	39,460	90.58	52,460	87.70
Surface	56,377	74.85	101,807	82.93	408,179	80.24	566,363	80.19
U.S. Total	**355,683**	**77.34**	**107,780**	**82.97**	**861,249**	**81.05**	**1,324,712**	**80.21**
Underground	222,082	79.87	3,106	97.26	272,241	84.13	497,429	82.31
Surface	133,601	73.13	104,674	82.55	589,008	79.63	827,283	78.95

[1] For a definition of coal-producing regions, see Appendix C.

Notes: Productive capacity is the maximum amount of coal that can be produced annually as reported by mining companies on Form EIA-7A. Capacity utilization is the ratio of total production to annual productive capacity as reported by mining companies on Form EIA-7A. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons, which are not required to provide these data. Totals may not equal sum of components due to independent rounding. See Glossary for listing of other unions.

Source: Energy Information Administration, Form EIA-7A, ''Coal Production Report.''

Recoverable Coal Reserves at Producing Mines

Figure 1. Recoverable Coal Reserves at Producing U.S. Mines by Mine Type and by Region, 1987 - 1996

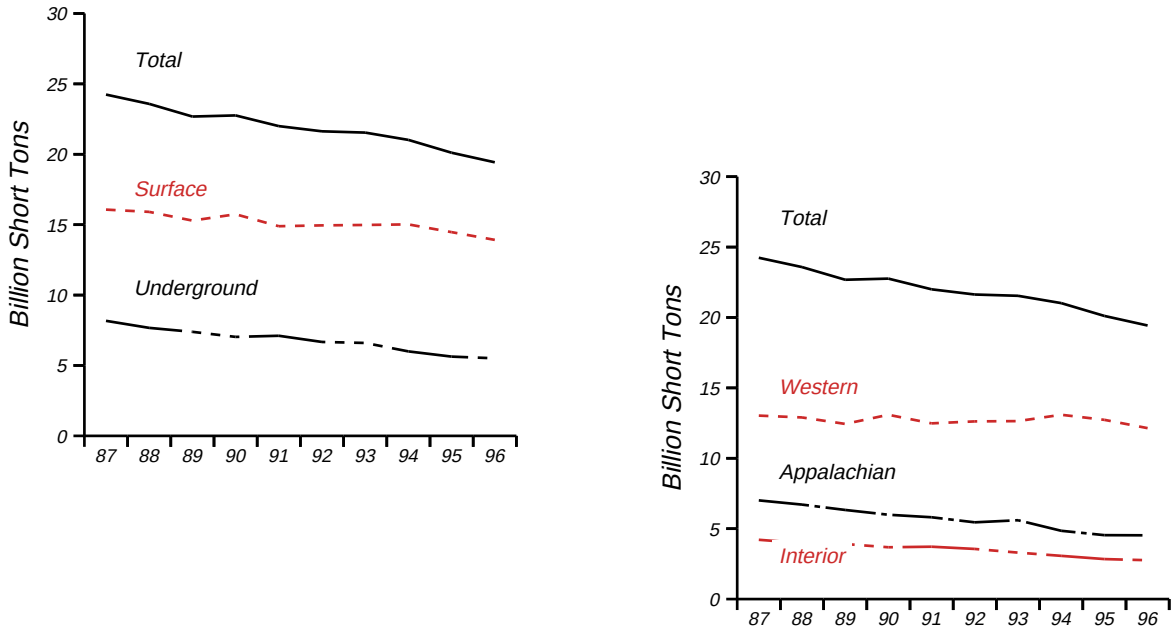
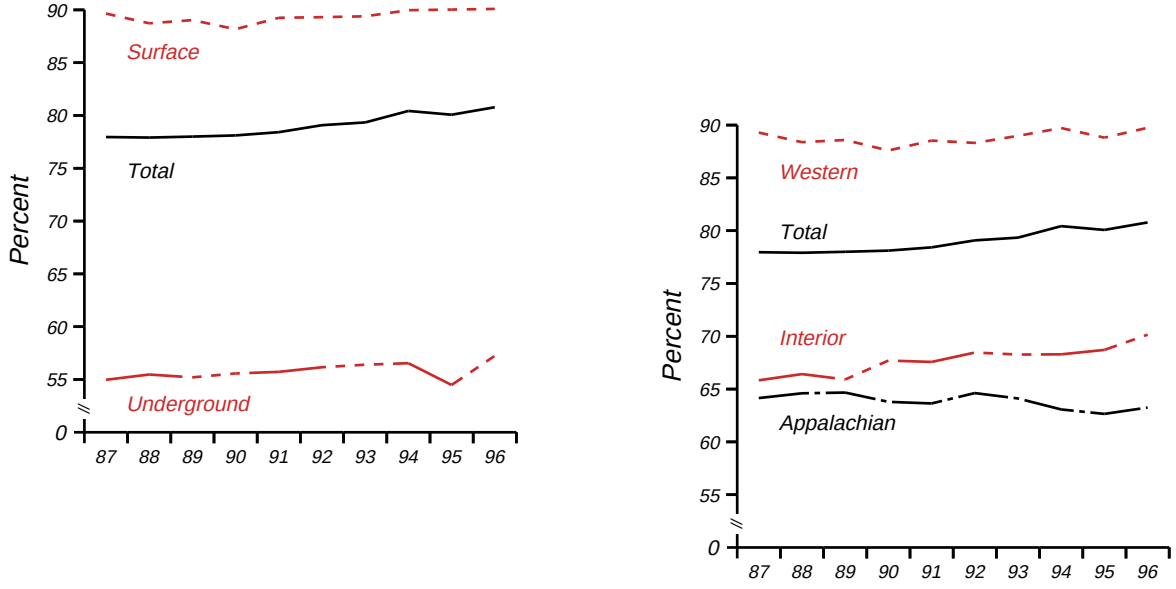


Figure 2. Average Recovery Percentage at Producing U.S. Coal Mines by Mine Type and by Region, 1987 - 1996



Sources: Energy Information Administration, Form EIA-7A, "Coal Production Report"; State Mining Agency Coal Production Reports and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table 25. Recoverable Coal Reserves at Producing Mines by State, 1987, 1992-1996
(Million Short Tons)

Coal-Producing State and Region	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
Alabama	452	510	457	427	468	538	–11.5	–0.9	–1.9
Alaska	w	w	w	w	w	w	w	w	w
Arizona	w	w	w	w	w	w	w	w	w
Arkansas	–	w	w	w	w	w	w	w	w
California	–	–	–	–	w	w	w	w	w
Colorado	642	692	676	609	608	668	–7.3	1.3	–.4
Illinois	891	882	963	1,064	1,199	1,431	1.0	–7.1	–5.1
Indiana	386	324	304	379	405	514	19.3	–1.2	–3.1
Iowa	–	–	w	w	w	36	w	w	w
Kansas	w	w	w	w	w	w	w	w	w
Kentucky Total	1,255	1,279	1,365	1,828	1,453	1,739	–1.8	–3.6	–3.5
Eastern	818	763	809	1,347	955	1,115	7.3	–3.8	–3.4
Western	437	516	556	481	498	624	–15.3	–3.2	–3.9
Louisiana	w	w	w	w	w	w	w	w	w
Maryland	71	58	89	66	59	75	23.1	4.7	–.7
Missouri	3	2	12	w	w	155	13.1	w	–36.4
Montana	1,309	1,251	1,283	1,285	1,352	1,611	4.6	–.8	–2.3
New Mexico	1,436	1,480	1,458	1,473	1,495	1,557	–2.9	–1.0	–.9
North Dakota	1,301	1,668	1,695	1,411	1,335	1,384	–21.9	–.6	–.7
Ohio	415	468	479	520	576	755	–11.4	–7.9	–6.4
Oklahoma	19	19	43	46	48	49	–1.3	–21.1	–10.2
Pennsylvania Total	796	737	913	940	937	1,369	8.1	–4.0	–5.8
Anthracite	90	49	38	65	70	60	81.4	6.3	4.5
Bituminous	706	687	875	874	867	1,308	2.8	–5.0	–6.6
Tennessee	59	68	42	29	43	103	–12.9	8.3	–6.0
Texas	878	940	1,026	1,105	1,188	1,215	–6.5	–7.3	–3.5
Utah	284	375	423	447	488	490	–24.1	–12.6	–5.8
Virginia	188	203	237	336	366	508	–7.3	–15.3	–10.4
Washington	w	w	w	w	w	w	w	w	w
West Virginia Total	1,731	1,731	1,830	1,931	2,043	2,548	*	–4.0	–4.2
Northern	741	782	861	824	960	1,271	–5.2	–6.3	–5.8
Southern	990	949	969	1,107	1,083	1,277	4.3	–2.2	–2.8
Wyoming	6,591	6,724	6,999	6,831	6,751	6,596	–2.0	–.6	*
Appalachian Total[1]	**4,530**	**4,538**	**4,855**	**5,596**	**5,446**	**7,009**	**–.2**	**–4.5**	**–4.7**
Interior Total[1]	**2,757**	**2,835**	**3,069**	**3,300**	**3,559**	**4,206**	**–2.8**	**–6.2**	**–4.6**
Western Total[1]	**12,141**	**12,732**	**13,093**	**12,639**	**12,622**	**13,027**	**–4.6**	**–1.0**	**–.8**
East of Miss. River	**6,244**	**6,260**	**6,679**	**7,520**	**7,549**	**9,579**	**–.2**	**–4.6**	**–4.6**
West of Miss. River	**13,184**	**13,845**	**14,337**	**14,016**	**14,078**	**14,663**	**–4.8**	**–1.6**	**–1.2**
U.S. Total	**19,428**	**20,105**	**21,017**	**21,535**	**21,627**	**24,241**	**–3.4**	**–2.6**	**–2.4**

[1] For a definition of coal-producing regions, see Appendix C.

* Data round to zero.

Notes: Recoverable reserves represent the quantity of coal that can be recovered (i.e., mined) from existing coal reserves at reporting mines. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons, which are not required to provide these data. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-7A, ''Coal Production Report''; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, ''Quarterly Mine Employment and Coal Production Report.''

Table 26. Average Recovery Percentage at Producing Coal Mines by State, 1987, 1992-1996

Coal-Producing State and Region	1996	1995	1994	1993	1992	1987
Alabama	55.56	58.74	60.20	63.16	61.97	63.87
Alaska	w	w	w	w	w	w
Arizona	w	w	w	w	w	w
Arkansas	–	w	w	w	w	w
California	–	–	–	–	w	w
Colorado	79.12	66.06	77.12	71.99	71.56	61.61
Illinois	54.20	52.05	52.92	51.19	51.53	47.35
Indiana	78.85	76.23	72.75	73.12	74.48	73.31
Iowa	–	–	w	w	w	84.96
Kansas	w	w	w	w	w	w
Kentucky Total	58.99	57.71	59.45	62.26	63.24	63.92
Eastern	62.59	60.87	62.60	64.00	66.84	68.72
Western	52.27	53.03	54.86	57.38	56.36	55.35
Louisiana	w	w	w	w	w	w
Maryland	61.45	58.34	55.50	67.82	66.16	66.33
Missouri	59.87	61.04	81.48	w	w	90.17
Montana	89.05	90.38	90.51	90.43	89.70	90.12
New Mexico	93.35	92.62	92.42	92.28	91.92	92.18
North Dakota	89.72	89.58	89.84	90.96	90.62	90.25
Ohio	71.61	68.73	67.81	68.86	69.15	67.30
Oklahoma	65.94	62.39	63.89	66.11	66.73	85.87
Pennsylvania Total	65.59	65.26	68.23	67.95	66.12	66.12
Anthracite	59.90	64.39	65.06	61.04	62.62	54.93
Bituminous	66.32	65.32	68.37	68.47	66.41	66.63
Tennessee	63.33	64.14	65.18	68.92	69.80	69.65
Texas	88.32	87.09	86.10	84.23	85.39	81.53
Utah	45.61	46.10	46.10	47.51	49.04	58.44
Virginia	54.81	58.14	58.37	62.72	64.78	64.06
Washington	w	w	w	w	w	w
West Virginia Total	63.49	62.44	61.10	61.30	62.05	59.97
Northern	58.91	55.10	53.06	52.17	54.04	52.42
Southern	66.92	68.49	68.24	68.09	69.15	67.48
Wyoming	92.16	92.27	92.98	91.94	91.19	93.71
Appalachian Total[1]	**63.25**	**62.65**	**63.07**	**64.11**	**64.62**	**64.16**
Interior Total[1]	**70.15**	**68.71**	**68.29**	**68.27**	**68.46**	**65.83**
Western Total[1]	**89.74**	**88.81**	**89.72**	**88.98**	**88.31**	**89.29**
East of Miss. River	**62.16**	**61.06**	**61.36**	**62.31**	**62.52**	**61.56**
West of Miss. River	**89.60**	**88.66**	**89.32**	**88.48**	**87.96**	**88.66**
U.S. Total	**80.78**	**80.07**	**80.43**	**79.34**	**79.08**	**77.96**

[1] For a definition of coal-producing regions, see Appendix C.

Notes: Average recovery percentage represents the percentage of coal that can be recovered from coal reserves at reporting mines, weighted for all mines in the geographic area. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons, which are not required to provide these data.

Sources: Energy Information Administration, Form EIA-7A, ''Coal Production Report''; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, ''Quarterly Mine Employment and Coal Production Report.''

Table 27. Recoverable Coal Reserves and Average Recovery Percentage at Producing Mines by State and Mine Type, 1996

(Million Short Tons)

Coal-Producing State and Region	Underground		Surface		Total	
	Recoverable Coal Reserves	Average Recovery Percentage	Recoverable Coal Reserves	Average Recovery Percentage	Recoverable Coal Reserves	Average Recovery Percentage
Alabama	417	52.98	35	86.25	452	55.56
Alaska	–	–	w	w	w	w
Arizona	–	–	w	w	w	w
Colorado	411	73.72	230	88.76	642	79.12
Illinois	861	53.40	30	77.32	891	54.20
Indiana	w	w	w	w	386	78.85
Kansas	–	–	w	w	w	w
Kentucky Total	985	53.26	270	79.90	1,255	58.99
Eastern	605	55.68	213	82.17	818	62.59
Western	380	49.41	57	71.37	437	52.27
Louisiana	–	–	w	w	w	w
Maryland	w	w	w	w	71	61.45
Missouri	–	–	3	59.87	3	59.87
Montana	w	w	w	w	1,309	89.05
New Mexico	–	–	1,436	93.35	1,436	93.35
North Dakota	–	–	1,301	89.72	1,301	89.72
Ohio	228	56.85	186	89.68	415	71.61
Oklahoma	w	w	w	w	19	65.94
Pennsylvania Total	614	63.27	182	73.42	796	65.59
Anthracite	23	73.55	66	55.13	90	59.90
Bituminous	591	62.87	116	83.92	706	66.32
Tennessee	w	w	w	w	59	63.33
Texas	–	–	878	88.32	878	88.32
Utah	284	45.61	–	–	284	45.61
Virginia	171	51.47	18	86.77	188	54.81
Washington	–	–	w	w	w	w
West Virginia Total	1,256	58.41	475	76.93	1,731	63.49
Northern	641	57.81	100	65.96	741	58.91
Southern	615	59.03	375	79.85	990	66.92
Wyoming	w	w	w	w	6,591	92.16
Appalachian Total[1]	**3,410**	**57.79**	**1,120**	**79.89**	**4,530**	**63.25**
Interior Total[1]	**1,295**	**52.12**	**1,462**	**86.12**	**2,757**	**70.15**
Western Total[1]	**801**	**63.18**	**11,339**	**91.61**	**12,141**	**89.74**
East of Miss. River	**4,691**	**56.22**	**1,554**	**80.10**	**6,244**	**62.16**
West of Miss. River	**815**	**63.12**	**12,368**	**91.35**	**13,184**	**89.60**
U.S. Total	**5,506**	**57.24**	**13,922**	**90.09**	**19,428**	**80.78**

1 For a definition of coal-producing regions, see Appendix C.

Notes: Recoverable reserves represent the quantity of coal that can be recovered (i.e., mined) from existing coal reserves at reporting mines. Average recovery percentage represents the percentage of coal that can be recovered from coal reserves at reporting mines, weighted for all mines in the reported geographic area. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons, which are not required to provide these data. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-7A, ''Coal Production Report''; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, ''Quarterly Mine Employment and Coal Production Report.''

Table 28. Recoverable Coal Reserves at Producing Underground Mines by State and Mining Method, 1996

(Million Short Tons)

Coal-Producing State and Region	Continuous[1]	Conventional[2]	Longwall[3]	Other[4]	Total
Alabama	w	w	372	–	417
Colorado	w	w	296	–	411
Illinois	443	–	418	–	861
Indiana	w	–	–	–	w
Kentucky Total	827	w	121	w	985
Eastern	558	w	12	w	605
Western	269	1	109	–	380
Maryland	w	–	w	–	w
Montana	w	–	–	–	w
Ohio	5	–	223	–	228
Oklahoma	w	–	–	–	w
Pennsylvania Total	138	w	425	w	614
Anthracite	w	w	–	w	23
Bituminous	w	w	425	–	591
Tennessee	w	*	–	–	w
Utah	w	w	190	–	284
Virginia	84	w	w	–	171
West Virginia Total	433	53	771	–	1,256
Northern	54	18	570	–	641
Southern	378	35	201	–	615
Wyoming	–	w	w	–	w
Appalachian Total[5]	**1,345**	**w**	**w**	**22**	**3,410**
Interior Total[5]	w	**1**	**w**	**–**	**1,295**
Western Total[5]	w	w	w	–	**801**
East of Miss. River	**2,096**	**w**	**w**	**22**	**4,691**
West of Miss. River	**270**	**w**	**w**	**–**	**815**
U.S. Total	**2,366**	**199**	**2,919**	**22**	**5,506**

1 Mines that produce greater than 50 percent of coal by continuous mining method.
2 Mines that produce greater than 50 percent of coal by conventional mining method.
3 Mines that have any production from longwall mining method. A typical longwall mining operation uses 80 percent longwall mining and 20 percent continuous mining.
4 Mines that produce coal using shortwall, scoop loading, hand loading, or other mining methods or a 50/50 percent continuous/conventional split in mining method.
5 For a definition of coal-producing regions, see Appendix C.
* Data round to zero.

Notes: Recoverable reserves represent the quantity of coal that can be recovered (i.e., mined) from existing coal reserves at reporting mines. Excludes mines producing less than 10,000 short tons, which are not required to provide these data. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-7A, ''Coal Production Report''; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, ''Quarterly Mine Employment and Coal Production Report.''

Table 29. Average Recovery Percentage at Producing Underground Coal Mines by State and Mining Method, 1996

Coal-Producing State and Region	Continuous[1]	Conventional[2]	Longwall[3]	Other[4]	Total
Alabama	w	w	54.16	–	52.98
Colorado	w	w	83.66	–	73.72
Illinois	50.30	–	56.69	–	53.40
Indiana	w	–	–	–	w
Kentucky Total	53.22	w	52.18	w	53.26
Eastern	55.52	w	55.92	w	55.68
Western	48.45	49.00	51.78	–	49.41
Maryland	w	–	w	–	w
Montana	w	–	–	–	w
Ohio	54.90	–	56.90	–	56.85
Oklahoma	w	–	–	–	w
Pennsylvania Total	65.82	w	62.00	w	63.27
Anthracite	w	w	–	w	73.55
Bituminous	w	w	62.00	–	62.87
Tennessee	w	70.00	–	–	w
Utah	w	w	47.55	–	45.61
Virginia	60.46	w	w	–	51.47
West Virginia Total	55.78	54.31	60.16	–	58.41
Northern	64.89	64.67	56.93	–	57.81
Southern	54.48	49.06	69.31	–	59.03
Wyoming	–	w	w	–	w
Appalachian Total[5]	**57.01**	**w**	**w**	**74.58**	**57.79**
Interior Total[5]	w	**49.00**	**w**	–	**52.12**
Western Total[5]	**52.71**	**w**	**w**	–	**63.18**
East of Miss. River	**54.31**	**w**	**w**	**74.58**	**56.22**
West of Miss. River	**53.09**	**w**	**w**	–	**63.12**
U.S. Total	**54.17**	**56.44**	**59.65**	**74.58**	**57.24**

1 Mines that produce greater than 50 percent of coal by continuous mining method.
2 Mines that produce greater than 50 percent of coal by conventional mining method.
3 Mines that have any production from longwall mining method. A typical longwall mining operation uses 80 percent longwall mining and 20 percent continuous mining.
4 Mines that produce coal using shortwall, scoop loading, hand loading, or other mining methods or a 50/50 percent continuous/conventional split in mining method.
5 For a definition of coal-producing regions, see Appendix C.

Notes: Average recovery percentage represents the percentage of coal that can be recovered from coal reserves at reporting mines, weighted for all mines in the reported geographic area. Excludes mines producing less than 10,000 short tons, which are not required to provide these data.

Sources: Energy Information Administration, Form EIA-7A, ''Coal Production Report''; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, ''Quarterly Mine Employment and Coal Production Report.''

Table 30. Recoverable Coal Reserves and Average Recovery Percentage at Producing U.S. Mines by Mine Production Range and Mine Type, 1996

(Million Short Tons)

Mine Production Range (thousand short tons)	Underground		Surface		Total	
	Recoverable Coal Reserves	Average Recovery Percentage	Recoverable Coal Reserves	Average Recovery Percentage	Recoverable Coal Reserves	Average Recovery Percentage
Over 1,000	3,938	57.19	12,637	91.00	16,575	82.97
500 to 1,000	653	53.04	651	82.54	1,304	67.77
200 to 500	378	59.41	313	80.11	691	68.78
100 to 200	262	62.64	211	83.34	473	71.88
50 to 100	77	64.09	42	67.98	119	65.46
10 to 50	199	58.18	68	74.46	267	62.32
U.S. Total	**5,506**	**57.24**	**13,922**	**90.09**	**19,428**	**80.78**

Notes: Recoverable reserves represent the quantity of coal that can be recovered (i.e., mined) from existing coal reserves at reporting mines. Average recovery percentage represents the percentage of coal that can be recovered from coal reserves at reporting mines, weighted for all mines in the reported geographic area. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons, which are not required to provide these data. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-7A, ''Coal Production Report''; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, ''Quarterly Mine Employment and Coal Production Report.''

Table 31. Recoverable Coal Reserves and Average Recovery Percentage at Producing U.S. Mines by Coalbed Thickness and Mine Type, 1996

(Million Short Tons)

Coalbed Thickness (inches)	Underground		Surface		Total	
	Recoverable Coal Reserves	Average Recovery Percentage	Recoverable Coal Reserves	Average Recovery Percentage	Recoverable Coal Reserves	Average Recovery Percentage
< 7	–	–	*	65.33	*	65.33
7-12	–	–	23	87.13	23	87.13
13-18	–	–	56	88.49	56	88.49
19-24	1	55.68	213	84.18	214	84.00
25-30	61	57.07	176	84.38	238	77.33
31-36	165	62.14	319	83.39	484	76.16
37-42	269	54.41	186	79.70	454	64.75
43-48	460	62.61	552	85.86	1,012	75.30
49-54	435	56.82	264	88.62	699	68.81
55-60	508	56.65	126	84.19	634	62.12
61-66	489	54.79	218	88.38	706	65.14
67-72	678	54.21	120	79.68	798	58.04
73-78	293	56.26	162	88.16	455	67.61
79-84	926	56.01	458	92.11	1,384	67.96
85-90	197	65.12	299	89.57	496	79.87
91-96	359	53.02	69	85.66	428	58.30
97-102	25	50.14	225	91.80	250	87.67
103-108	112	46.86	115	80.98	227	64.16
109-114	106	62.00	7	85.52	113	63.49
115-120	64	47.08	43	79.45	107	59.97
> 120	360	68.67	10,290	91.32	10,650	90.55
U.S. Total	**5,506**	**57.24**	**13,922**	**90.09**	**19,428**	**80.78**

* Data round to zero.

Notes: Recoverable reserves represent the quantity of coal that can be recovered (i.e., mined) from existing coal reserves at reporting mines. Average recovery percentage represents thet percentage of coal that can be recovered from coal reserves at reporting mines, weighted for all mines in the reported geographic area. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons, which are not required to provide these data. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-7A, ''Coal Production Report''; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, ''Quarterly Mine Employment and Coal Production Report.''

Table 32. Recoverable Coal Reserves and Average Recovery Percentage at Producing Mines by State, Mine Type, and Union Type, 1996

(Million Short Tons)

Coal-Producing State and Region	UMWA		Other Unions		Nonunion		Total	
	Recoverable Coal Reserves	Average Recovery Percentage	Recoverable Coal Reserves	Average Recovery Percentage	Recoverable Coal Reserves	Average Recovery Percentage	Recoverable Coal Reserves	Average Recovery Percentage
Alabama	**346**	**54.95**	–	–	**105**	**57.58**	**452**	**55.56**
Underground	w	w	–	–	w	w	417	52.98
Surface	w	w	–	–	w	w	35	86.25
Alaska	–	–	**w**	**w**	–	–	**w**	**w**
Surface	–	–	w	w	–	–	w	w
Arizona	**w**	**w**	–	–	–	–	**w**	**w**
Surface	w	w	–	–	–	–	w	w
Colorado	**w**	**w**	**w**	**w**	**504**	**79.94**	**642**	**79.12**
Underground	w	w	–	–	w	w	411	73.72
Surface	w	w	w	w	w	w	230	88.76
Illinois	**437**	**47.24**	**w**	**w**	**w**	**w**	**891**	**54.20**
Underground	423	46.29	w	w	w	w	861	53.40
Surface	14	75.15	w	w	w	w	30	77.32
Indiana	**179**	**82.53**	–	–	**207**	**75.66**	**386**	**78.85**
Underground	w	w	–	–	w	w	w	w
Surface	w	w	–	–	w	w	w	w
Kansas	**w**	**w**	–	–	–	–	**w**	**w**
Surface	w	w	–	–	–	–	w	w
Kentucky Total	**w**	**w**	**w**	**w**	**1,062**	**59.03**	**1,255**	**58.99**
Underground	w	w	w	w	843	54.13	985	53.26
Surface	w	w	w	w	219	77.86	270	79.90
Eastern	**w**	**w**	**w**	**w**	**744**	**61.16**	**818**	**62.59**
Underground	w	w	w	w	w	w	605	55.68
Surface	w	w	w	w	w	w	213	82.17
Western	**w**	**w**	–	–	**318**	**54.05**	**437**	**52.27**
Underground	w	w	–	–	w	w	380	49.41
Surface	w	w	–	–	w	w	57	71.37
Louisiana	–	–	–	–	**w**	**w**	**w**	**w**
Surface	–	–	–	–	w	w	w	w
Maryland	–	–	–	–	**71**	**61.45**	**71**	**61.45**
Underground	–	–	–	–	w	w	w	w
Surface	–	–	–	–	w	w	w	w
Missouri	–	–	–	–	**3**	**59.87**	**3**	**59.87**
Surface	–	–	–	–	3	59.87	3	59.87
Montana	**195**	**90.37**	**w**	**w**	**w**	**w**	**1,309**	**89.05**
Underground	–	–	w	w	w	w	w	w
Surface	195	90.37	w	w	w	w	w	w
New Mexico	**w**	**w**	**w**	**w**	**w**	**w**	**1,436**	**93.35**
Surface	w	w	w	w	w	w	1,436	93.35
North Dakota	**w**	**w**	**w**	**w**	**w**	**w**	**1,301**	**89.72**
Surface	w	w	w	w	w	w	1,301	89.72
Ohio	**w**	**w**	–	–	**115**	**84.48**	**415**	**71.61**
Underground	w	w	–	–	w	w	228	56.85
Surface	w	w	–	–	w	w	186	89.68
Oklahoma	–	–	–	–	**19**	**65.94**	**19**	**65.94**
Underground	–	–	–	–	14	60.00	14	60.00
Surface	–	–	–	–	5	83.85	5	83.85
Pennsylvania Total	**w**	**w**	**w**	**w**	**367**	**72.99**	**796**	**65.59**
Underground	w	w	–	–	w	w	614	63.27
Surface	w	w	w	w	w	w	182	73.42
Anthracite	**w**	**w**	**w**	**w**	**29**	**69.11**	**90**	**59.90**
Underground	–	–	–	–	w	w	23	73.55
Surface	w	w	w	w	w	w	66	55.13
Bituminous	**368**	**59.89**	–	–	**338**	**73.32**	**706**	**66.32**
Underground	363	59.61	–	–	227	68.08	591	62.87
Surface	5	80.11	–	–	110	84.10	116	83.92
Tennessee	–	–	–	–	**59**	**63.33**	**59**	**63.33**
Underground	–	–	–	–	57	62.56	57	62.56
Surface	–	–	–	–	2	85.10	2	85.10
Texas	–	–	**484**	**90.24**	**394**	**85.98**	**878**	**88.32**
Surface	–	–	484	90.24	394	85.98	878	88.32
Utah	**w**	**w**	–	–	**w**	**w**	**284**	**45.61**
Underground	w	w	–	–	w	w	284	45.61
Virginia	**w**	**w**	**w**	**w**	**126**	**59.18**	**188**	**54.81**
Underground	w	w	–	–	w	w	171	51.47
Surface	w	w	w	w	w	w	18	86.77

See footnotes at end of table.

Table 32. Recoverable Coal Reserves and Average Recovery Percentage at Producing Mines by State, Mine Type, and Union Type, 1996 (Continued)

(Million Short Tons)

Coal-Producing State and Region	UMWA		Other Unions		Nonunion		Total	
	Recoverable Coal Reserves	Average Recovery Percentage	Recoverable Coal Reserves	Average Recovery Percentage	Recoverable Coal Reserves	Average Recovery Percentage	Recoverable Coal Reserves	Average Recovery Percentage
Washington	–	–	**w**	**w**	**w**	**w**	**w**	**w**
Surface	–	–	w	w	w	w	w	w
West Virginia Total	**1,112**	**63.11**	–	–	**619**	**64.17**	**1,731**	**63.49**
Underground	918	59.24	–	–	338	56.15	1,256	58.41
Surface	194	81.46	–	–	281	73.80	475	76.93
Northern	**570**	**56.92**	–	–	**172**	**65.50**	**741**	**58.91**
Underground	570	56.92	–	–	72	64.85	641	57.81
Surface	–	–	–	–	100	65.96	100	65.96
Southern	**543**	**69.61**	–	–	**447**	**63.66**	**990**	**66.92**
Underground	349	63.02	–	–	266	53.80	615	59.03
Surface	194	81.46	–	–	181	78.12	375	79.85
Wyoming	**w**	**w**	**w**	**w**	**6,229**	**92.21**	**6,591**	**92.16**
Underground	–	–	–	–	w	w	w	w
Surface	w	w	w	w	w	w	w	w
Appalachian Total[1]	**2,314**	**61.64**	**11**	**58.22**	**2,206**	**64.97**	**4,530**	**63.25**
Underground	w	w	w	w	1,495	58.25	3,410	57.79
Surface	w	w	w	w	711	79.09	1,120	79.89
Interior Total[1]	**738**	**55.93**	**533**	**88.17**	**1,486**	**70.75**	**2,757**	**70.15**
Underground	w	w	w	w	717	55.88	1,295	52.12
Surface	w	w	w	w	769	84.62	1,462	86.12
Western Total[1]	**1,195**	**84.89**	**2,566**	**91.47**	**8,379**	**89.90**	**12,141**	**89.74**
Underground	167	55.08	–	–	635	65.31	801	63.18
Surface	1,028	89.73	2,566	91.47	7,745	91.91	11,339	91.61
East of Miss. River	**3,049**	**60.26**	**60**	**65.99**	**3,135**	**63.93**	**6,244**	**62.16**
Underground	2,450	55.03	43	59.78	2,198	57.47	4,691	56.22
Surface	600	81.61	17	82.15	937	79.09	1,554	80.10
West of Miss. River	**1,198**	**84.85**	**3,050**	**91.27**	**8,935**	**89.67**	**13,184**	**89.60**
Underground	167	55.08	–	–	649	65.19	815	63.12
Surface	1,031	89.68	3,050	91.27	8,287	91.59	12,368	91.35
U.S. Total	**4,247**	**67.19**	**3,111**	**90.78**	**12,070**	**82.98**	**19,428**	**80.78**
Underground	2,617	55.03	43	59.78	2,846	59.23	5,506	57.24
Surface	1,630	86.71	3,067	91.22	9,224	90.32	13,922	90.09

[1] For a definition of coal-producing regions, see Appendix C.

Notes: Recoverable reserves represent the quantity of coal that can be recovered (i.e., mined) from existing coal reserves at reporting mines. Average recovery percentage represents the percentage of coal that can be recovered from coal reserves at reporting mines, weighted for all mines in the reported geographic area. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons, which are not required to provide these data. Totals may not equal sum of components due to independent rounding. See Glossary for listing of other unions.

Sources: Energy Information Administration, Form EIA-7A, ''Coal Production Report''; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, ''Quarterly Mine Employment and Coal Production Report.''

Table 33. Status of Recoverable Coal Reserves and Coal Production from Producing Federal Coal Leases by State, 1996
(Million Short Tons)

Coal-Producing State	Number of Leases	Recoverable Coal Reserves	Production
Alabama	1	30	*
Alaska	–	20	–
Colorado	31	1,506	18.8
Kentucky	3	10	.3
Montana	13	886	25.0
New Mexico	6	262	5.9
North Dakota	3	144	1.8
Oklahoma	6	48	.8
Utah	31	2,987	26.4
Washington	1	–	.6
Wyoming	39	6,148	248.9
U.S. Total	**134**	**12,041**	**328.2**

* Less than 0.05 million short tons.

Notes: Output from Federal Lands is reported as sales volume, the basis for royalties. It is approximately equivalent to production, which includes coal sold and coal added to stockpiles. Totals may not equal sum of components because of independent rounding.

Source: U.S. Department of the Interior, Minerals Management Service, *Mineral Revenues 1996* and Bureau of Land Management.

Producer/Distributor Stocks

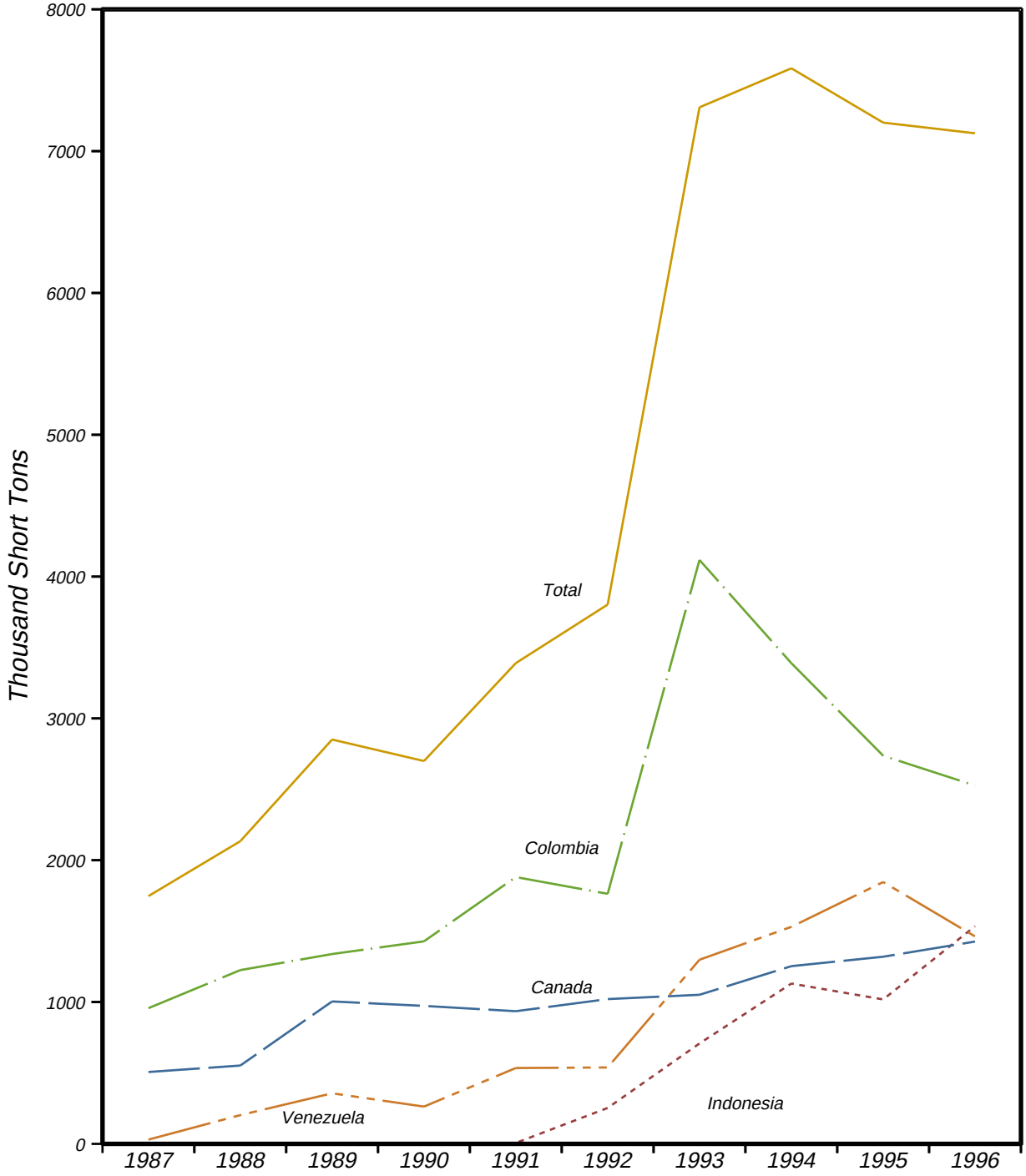
Table 34. Year-End Producer and Distributor Coal Stocks by State, 1992-1996
(Thousand Short Tons)

Coal-Producing State and Region	1996	1995	1994	1993	1992	Percent Change 1995-1996	Average Annual Percent Change 1992-1996
Alabama	1,031	1,358	1,204	1,698	2,185	–24.1	–17.1
Alaska	6	26	58	19	71	–78.0	–46.8
Arizona	2,232	2,760	2,634	1,590	1,555	–19.1	9.4
Arkansas	1	4	2	5	6	–59.9	–28.9
California	–	–	–	–	36	–	–
Colorado	494	1,063	1,575	1,155	955	–53.5	–15.2
Illinois	1,190	2,069	1,651	713	1,969	–42.5	–11.8
Indiana	574	611	803	527	1,016	–6.1	–13.3
Kansas	19	27	31	25	28	–27.4	–9.2
Kentucky Total	4,460	4,777	5,025	3,216	3,796	–6.6	4.1
Eastern	3,720	4,088	4,235	2,558	2,809	–9.0	7.3
Western	740	689	790	658	987	7.4	–7.0
Louisiana	38	309	202	12	2	–87.8	100.2
Maryland	143	269	179	123	59	–47.0	24.9
Missouri	–	–	–	2	–	–	–
Montana	580	718	635	876	694	–19.3	–4.4
New Mexico	1,890	2,015	1,467	2,343	1,648	–6.2	3.5
North Dakota	1,574	1,797	1,812	1,607	1,614	–12.4	–.6
Ohio	532	1,374	833	550	1,087	–61.3	–16.4
Oklahoma	7	2	4	5	19	188.8	–23.2
Pennsylvania Total	3,113	2,487	2,787	1,826	2,903	25.2	1.8
Anthracite	1,323	389	249	234	198	240.2	60.9
Bituminous	1,790	2,098	2,538	1,592	2,706	–14.7	–9.8
Tennessee	23	88	57	35	21	–73.7	2.4
Texas	1,254	864	1,430	1,237	543	45.1	23.3
Utah	1,337	1,946	1,301	1,203	1,827	–31.3	–7.5
Virginia	1,644	1,649	1,180	1,389	1,714	–.3	–1.0
Washington	55	59	65	72	47	–5.9	3.9
West Virginia Total	4,947	6,176	6,692	4,059	7,405	–19.9	–9.6
Northern	584	1,959	1,940	685	3,222	–70.2	–34.8
Southern	4,362	4,217	4,752	3,374	4,183	3.4	1.1
Wyoming	1,504	1,997	1,592	998	2,794	–24.7	–14.3
Appalachian Total[1]	**15,153**	**17,489**	**17,166**	**12,239**	**13,891**	**–13.3**	**–3.1**
Interior Total[1]	**3,823**	**4,575**	**4,913**	**3,182**	**4,570**	**–16.4**	**–4.4**
Western Total[1]	**9,672**	**12,381**	**11,140**	**9,863**	**11,241**	**–21.9**	**–3.7**
East of Miss. River	**17,657**	**20,858**	**20,410**	**14,137**	**17,680**	**–15.3**	**–5.4**
West of Miss. River	**10,991**	**13,587**	**12,809**	**11,147**	**11,838**	**–19.1**	**–1.8**
U.S. Total	**28,648**	**34,444**	**33,219**	**25,284**	**33,993**	**–16.8**	**–4.2**

[1] For a definition of coal-producing regions, see Appendix C.
Note: Totals may not equal sum of components due to independent rounding.
Source: Energy Information Administration, Form EIA-6, ''Coal Distribution Report.''

Imports

Figure 3. U.S. Coal Imports, 1987-1996



Source: U.S. Department of Commerce, Bureau of the Census, "Monthly Report IM 145."

Table 35. U.S. Coal Imports by Continent and Country of Origin, 1987, 1992-1996
(Short Tons)

Continent and Country of Origin	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
North America Total	**1,433,813**	**1,344,614**	**1,253,417**	**1,053,576**	**1,020,852**	**549,292**	**6.6**	**8.9**	**11.2**
Canada	1,426,504	1,319,742	1,253,196	1,051,273	1,020,852	506,760	8.1	8.7	12.2
Guatemala	–	–	–	4	–	–	–	–	–
Mexico	7,309	216	221	2,299	–	42,532	NM	–	–17.8
Netherlands Antilles	–	24,656	–	–	–	–	–100.0	–	–
South America Total	**3,989,640**	**4,583,283**	**4,920,202**	**5,415,318**	**2,301,933**	**986,967**	**–12.9**	**14.7**	**16.8**
Colombia	2,526,804	2,736,933	3,389,654	4,117,036	1,763,150	956,899	–7.7	9.4	11.4
Venezuela	1,462,836	1,846,350	1,530,548	1,298,282	538,783	30,068	–20.8	28.4	54.0
Europe Total	**2,613**	**522**	**40**	**62**	**89**	**240**	**400.6**	**132.8**	**30.4**
Belgium & Luxembourg	2,473	–	–	–	–	–	–	–	–
Denmark	–	236	–	60	–	–	–100.0	–	–
Poland	–	–	40	2	–	–	–	–	–
Spain	99	–	–	–	–	44	–	–	9.4
Turkey	41	–	–	–	–	–	–	–	–
United Kingdom	–	286	–	–	89	196	–100.0	–100.0	–100.0
Asia Total	**1,534,989**	**1,018,512**	**1,153,561**	**708,080**	**373,145**	**–**	**50.7**	**42.4**	**–**
China (Mainland)	–	53	111	–	284	–	–100.0	–100.0	–
Hong Kong	1	–	–	–	1	–	–	–	–
India	–	–	–	–	66,154	–	–	–100.0	–
Indonesia	1,534,986	1,018,433	1,130,468	708,080	253,287	–	50.7	56.9	–
Japan	2	26	1	–	–	–	–92.3	–	–
Malaysia	–	–	–	–	53,419	–	–	–100.0	–
Vietnam	–	–	22,981	–	–	–	–	–	–
Oceania & Australia Total	**164,793**	**254,141**	**100,313**	**105,452**	**100,986**	**210,639**	**–35.1**	**13.0**	**–2.7**
Australia	164,793	211,702	92,204	100,076	100,986	210,639	–22.1	13.0	–2.7
New Zealand	–	42,439	8,109	5,376	–	–	–100.0	–	–
Africa Total	**–**	**–**	**156,452**	**26,419**	**5,762**	**–**	**–**	**–100.0**	**–**
South Africa, Rep of	–	–	149,748	20,319	5,762	–	–	–100.0	–
Swaziland	–	–	6,704	6,100	–	–	–	–	–
Total	**7,125,848**	**7,201,072**	**7,583,985**	**7,308,907**	**3,802,767**	**1,747,138**	**–1.0**	**17.0**	**16.9**

NM Not meaningful as value is greater than 500 percent.
Note: Coal imports include coal to Puerto Rico and the Virgin Islands.
Source: U.S. Department of Commerce, Bureau of the Census, ''Monthly Report IM 145.''

Table 36. Coal Imports by Customs District, 1987, 1992-1996
(Short Tons)

Customs District	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
Eastern Total	**2,144,142**	**1,935,401**	**1,554,466**	**1,275,919**	**340,317**	**127,308**	**10.8**	**58.4**	**36.8**
Boston, MA	1,803,234	1,484,886	977,473	674,086	128,667	28,736	21.4	93.5	58.4
Baltimore, MD	99	28,328	88,668	224,579	–	–	–99.6	–	–
Portland, ME	246,852	364,232	385,097	236,473	108,863	25,279	–32.2	22.7	28.8
Buffalo, NY	2,658	2,034	–	–	–	671	30.7	–	16.5
New York City, NY	65	522	–	2	–	222	–87.5	–	–12.8
Ogdensburg, NY	50	–	–	–	–	–	–	–	–
Philadelphia, PA	91,184	55,399	78,387	140,779	102,787	72,400	64.6	–2.9	2.6
Norfolk, VA	–	–	24,841	–	–	–	–	–	–
Southern Total	**2,745,266**	**3,101,069**	**4,106,306**	**4,321,336**	**2,053,672**	**1,040,055**	**–11.5**	**7.5**	**11.4**
Mobile, AL	288,484	1,108,555	1,033,368	935,232	–	155,173	–74.0	–	7.1
Savannah, GA	118,509	–	29,582	–	–	–	–	–	–
Miami, FL	–	26,035	7,496	–	–	–	–100.0	–	–
Tampa, FL	1,419,408	1,284,109	2,080,757	2,263,893	1,419,581	96,743	10.5	*	34.8
New Orleans, LA	808,592	387,861	524,256	675,827	154,600	422,590	108.5	51.2	7.5
Wilmington, NC	–	–	26,648	–	–	–	–	–	–
San Juan, PR	96,901	272,296	80,016	107,506	169,707	323,001	–64.4	–13.1	–12.5
Houston-Galveston, TX	6,063	–	154,938	121,505	83,466	16	–	–48.1	93.4
Laredo, TX	7,309	167	221	2,299	–	42,532	NM	–	–17.8
Virgin Islands	–	22,046	169,024	215,074	226,318	–	–100.0	–100.0	–
Western Total	**830,157**	**863,707**	**710,576**	**730,662**	**461,675**	**273,772**	**–3.9**	**15.8**	**13.1**
Los Angeles, CA	2	–	12	–	–	–	–	–	–
San Diego, CA	–	49	–	–	–	–	–100.0	–	–
San Francisco, CA	–	–	–	–	284	22,048	–	–100.0	–100.0
Honolulu, HI	810,176	844,785	670,005	660,379	407,692	89,832	–4.1	18.7	27.7
Great Falls, MT	25	645	34,426	41,580	36,237	104,798	–96.1	–83.8	–60.4
Seattle, WA	19,954	18,228	6,133	28,703	17,462	57,094	9.5	3.4	–11.0
Northern Total	**1,406,283**	**1,300,895**	**1,212,637**	**980,990**	**947,103**	**306,003**	**8.1**	**10.4**	**18.5**
Chicago, IL	238,592	64,394	283,106	134,485	230,677	244,481	270.5	.8	–.3
Detroit, MI	374,566	421,633	312,214	203,067	58,937	79	–11.2	58.8	156.1
Duluth, MN	291,346	244,278	77,355	12,811	–	–	19.3	–	–
Pembina, ND	501,778	570,590	539,962	630,627	657,400	61,443	–12.0	–6.5	26.3
Cleveland, OH	–	–	–	–	89	–	–	–100.0	–
Total	**7,125,848**	**7,201,072**	**7,583,985**	**7,308,907**	**3,802,767**	**1,747,138**	**–1.0**	**17.0**	**16.9**

* Data round to zero.
NM Not meaningful as value is greater than 500 percent.
Source: U.S. Department of Commerce, Bureau of the Census, ''Monthly Report IM 145.''

Table 37. U.S. Receipts of Imported Coal by Country of Origin and Destination State, 1987, 1992-1996
(Short Tons)

Country of Origin and Destination State	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996
Australia Total	**147,204**	**211,099**	**109,737**	**98,947**	**–**	**83,174**	**–30.3**
Florida	–	–	–	–	–	26,074	–
Hawaii	147,204	211,099	109,737	98,947	–	–	–30.3
Texas	–	–	–	–	–	57,100	–
Canada Total	**1,332,243**	**1,401,960**	**1,317,929**	**664,835**	**48,090**	**15,600**	**–5.0**
Illinois	215,959	222,876	346,192	50,936	–	–	–3.1
Indiana	735,342	760,508	592,655	582,689	–	–	–3.3
Massachusetts	–	–	–	–	32,800	–	–
Michigan	361,458	393,367	371,097	–	–	–	–8.1
New Hampshire	–	–	–	–	–	15,600	–
Ohio	1,454	1,410	1,635	2,000	–	–	3.1
Washington	18,030	23,799	6,350	29,210	15,290	–	–24.2
Colombia Total	**2,285,840**	**2,202,005**	**3,150,128**	**3,642,728**	**1,504,138**	**568,116**	**3.8**
Alabama	160,675	161,950	178,330	57,602	–	–	–.8
Delaware	–	7,143	22,031	–	–	–	–100.0
Florida	1,417,220	1,340,640	2,348,550	2,999,303	1,418,580	426,846	5.7
Georgia	–	–	11,902	–	–	–	–
Maine	45,220	–	–	–	–	–	–
Maryland	–	–	88,000	224,000	–	–	–
Massachusetts	630,400	557,900	135,500	187,200	–	29,000	13.0
Mississippi	–	–	–	–	–	65,870	–
New Hampshire	32,325	134,372	163,311	52,143	48,400	9,200	–75.9
New Jersey	–	–	22,500	–	–	–	–
North Carolina	–	–	26,600	–	–	–	–
Texas	–	–	153,404	122,480	37,158	37,200	–
Indonesia Total	**833,706**	**428,554**	**437,292**	**118,981**	**13,100**	**–**	**94.5**
Florida	807,803	348,854	147,215	–	–	–	131.5
Indiana	–	–	–	11,100	–	–	–
Louisiana	–	–	169,181	–	–	–	–
Maine	–	–	–	3,135	–	–	–
Massachusetts	–	–	7,938	–	–	–	–
Mississippi	–	–	–	67,547	–	–	–
New Hampshire	25,903	79,700	112,958	37,199	–	–	–67.5
Ohio	–	–	–	–	13,100	–	–
Mexico Total	**15,561**	**–**	**–**	**33,520**	**–**	**–**	**–**
Texas	15,561	–	–	33,520	–	–	–
South Africa Total	**–**	**–**	**127,300**	**–**	**–**	**79,300**	**–**
Florida	–	–	127,300	–	–	79,300	–
Venezuela Total	**1,861,504**	**2,073,645**	**1,456,645**	**936,945**	**240,584**	**19,266**	**–10.2**
Alabama	–	–	–	30,278	–	–	–
Connecticut	28,000	–	–	–	–	–	–
Florida	298,200	891,400	421,674	312,193	–	19,266	–66.5
Georgia	209,907	–	26,835	–	–	–	–
Maine	13,966	81,392	91,436	9,123	–	–	–82.8
Massachusetts	1,135,500	903,700	916,700	476,100	163,800	–	25.6
New Hampshire	96,033	82,425	–	109,251	34,300	–	16.5
New York	–	28,189	–	–	–	–	–100.0
Pennsylvania	79,898	86,539	–	–	–	–	–7.7
Texas	–	–	–	–	42,484	–	–
Total	**6,476,058**	**6,317,263**	**6,599,031**	**5,495,956**	**1,805,912**	**765,456**	**2.5**
Alabama	160,675	161,950	178,330	87,880	–	–	–.8
Connecticut	28,000	–	–	–	–	–	–
Delaware	–	7,143	22,031	–	–	–	–100.0
Florida	2,523,223	2,580,894	3,044,739	3,311,496	1,418,580	551,486	–2.2
Georgia	209,907	–	38,737	–	–	–	–
Hawaii	147,204	211,099	109,737	98,947	–	–	–30.3
Illinois	215,959	222,876	346,192	50,936	–	–	–3.1
Indiana	735,342	760,508	592,655	593,789	–	–	–3.3
Louisiana	–	–	169,181	–	–	–	–
Maine	59,186	81,392	91,436	12,258	–	–	–27.3
Maryland	–	–	88,000	224,000	–	–	–
Massachusetts	1,765,900	1,461,600	1,060,138	663,300	196,600	29,000	20.8
Michigan	361,458	393,367	371,097	–	–	–	–8.1

See footnotes at end of table.

Table 37. U.S. Receipts of Imported Coal by Country of Origin and Destination State, 1987, 1992-1996 (Continued)

(Short Tons)

Country of Origin and Destination State	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996
Total (Continued)							
Mississippi	–	–	–	67,547	–	65,870	–
New Hampshire	154,261	296,497	276,269	198,593	82,700	24,800	–48.0
New Jersey	–	–	22,500	–	–	–	–
New York	–	28,189	–	–	–	–	–100.0
North Carolina	–	–	26,600	–	–	–	–
Ohio	1,454	1,410	1,635	2,000	13,100	–	3.1
Pennsylvania	79,898	86,539	–	–	–	–	–7.7
Texas	15,561	–	153,404	156,000	79,642	94,300	–
Washington	18,030	23,799	6,350	29,210	15,290	–	–24.2

Notes: Data for 1987 are only for receipts at electric utilities. Data for 1992 through 1996 are for receipts at electric utilities, manufacturing plants and coke plants. See Table 38 and Table 39 for related data. See Technical Note 1 for the difference between receipts of imported coal and U.S. coal imports.

Sources: • 1987: Federal Energy Regulatory Commission (FERC), FERC Form 423, ''Monthly Report of Cost and Quality of Fuels for Electric Plants.'' • 1992-1996: Energy Information Administration, Form EIA-3A, ''Annual Coal Quality Report - Manufacturing Plants''; Form EIA-5A, ''Annual Coal Quality Report - Coke Plants''; and FERC, FERC Form 423, ''Monthly Report of Cost and Quality of Fuels for Electric Plants.''

Table 38. Imported Coal Received at Electric Utilities by Country of Origin and Destination State, 1987, 1992-1996

(Short Tons)

Country of Origin and Destination State	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
Australia Total	–	–	–	–	–	83,174	–	–	–100.0
Florida	–	–	–	–	–	26,074	–	–	–100.0
Texas	–	–	–	–	–	57,100	–	–	–100.0
Canada Total	**18,030**	**23,799**	**63,350**	**29,210**	**48,090**	**15,600**	**–24.2**	**–21.7**	**1.6**
Massachusetts	–	–	–	–	32,800	–	–	–100.0	–
Michigan	–	–	57,000	–	–	–	–	–	–
New Hampshire	–	–	–	–	–	15,600	–	–	–100.0
Washington	18,030	23,799	6,350	29,210	15,290	–	–24.2	4.2	–
Colombia Total	**2,079,945**	**2,040,055**	**2,971,798**	**3,585,126**	**1,504,138**	**568,116**	**1.9**	**8.4**	**15.5**
Delaware	–	7,143	22,031	–	–	–	–100.0	–	–
Florida	1,417,220	1,340,640	2,348,550	2,999,303	1,418,580	426,846	5.7	*	14.3
Georgia	–	–	11,902	–	–	–	–	–	–
Maryland	–	–	88,000	224,000	–	–	–	–	–
Massachusetts	630,400	557,900	135,500	187,200	–	29,000	13.0	–	40.8
Mississippi	–	–	–	–	–	65,870	–	–	–100.0
New Hampshire	32,325	134,372	163,311	52,143	48,400	9,200	–75.9	–9.6	15.0
New Jersey	–	–	22,500	–	–	–	–	–	–
North Carolina	–	–	26,600	–	–	–	–	–	–
Texas	–	–	153,404	122,480	37,158	37,200	–	–100.0	–100.0
Indonesia Total	**833,706**	**428,554**	**437,292**	**115,846**	**13,100**	**–**	**94.5**	**182.4**	**–**
Florida	807,803	348,854	147,215	–	–	–	131.5	–	–
Indiana	–	–	–	11,100	–	–	–	–	–
Louisiana	–	–	169,181	–	–	–	–	–	–
Massachusetts	–	–	7,938	–	–	–	–	–	–
Mississippi	–	–	–	67,547	–	–	–	–	–
New Hampshire	25,903	79,700	112,958	37,199	–	–	–67.5	–	–
Ohio	–	–	–	–	13,100	–	–	–100.0	–
South Africa Total	**–**	**–**	**127,300**	**–**	**–**	**79,300**	**–**	**–**	**–100.0**
Florida	–	–	127,300	–	–	79,300	–	–	–100.0
Venezuela Total	**1,767,640**	**1,905,714**	**1,365,209**	**897,544**	**240,584**	**19,266**	**–7.2**	**64.6**	**65.2**
Connecticut	28,000	–	–	–	–	–	–	–	–
Florida	298,200	891,400	421,674	312,193	–	19,266	–66.5	–	35.6
Georgia	209,907	–	26,835	–	–	–	–	–	–
Massachusetts	1,135,500	903,700	916,700	476,100	163,800	–	25.6	62.3	–
New Hampshire	96,033	82,425	–	109,251	34,300	–	16.5	29.3	–
New York	–	28,189	–	–	–	–	–100.0	–	–
Texas	–	–	–	–	42,484	–	–	–100.0	–
Total	**4,699,321**	**4,398,122**	**4,964,949**	**4,627,726**	**1,805,912**	**765,456**	**6.8**	**27.0**	**22.3**
Connecticut	28,000	–	–	–	–	–	–	–	–
Delaware	–	7,143	22,031	–	–	–	–100.0	–	–
Florida	2,523,223	2,580,894	3,044,739	3,311,496	1,418,580	551,486	–2.2	15.5	18.4
Georgia	209,907	–	38,737	–	–	–	–	–	–
Indiana	–	–	–	11,100	–	–	–	–	–
Louisiana	–	–	169,181	–	–	–	–	–	–
Maryland	–	–	88,000	224,000	–	–	–	–	–
Massachusetts	1,765,900	1,461,600	1,060,138	663,300	196,600	29,000	20.8	73.1	57.9
Michigan	–	–	57,000	–	–	–	–	–	–
Mississippi	–	–	–	67,547	–	65,870	–	–	–100.0
New Hampshire	154,261	296,497	276,269	198,593	82,700	24,800	–48.0	16.9	22.5
New Jersey	–	–	22,500	–	–	–	–	–	–
New York	–	28,189	–	–	–	–	–100.0	–	–
North Carolina	–	–	26,600	–	–	–	–	–	–
Ohio	–	–	–	–	13,100	–	–	–100.0	–
Texas	–	–	153,404	122,480	79,642	94,300	–	–100.0	–100.0
Washington	18,030	23,799	6,350	29,210	15,290	–	–24.2	4.2	–

* Data round to zero.

Source: Federal Energy Regulatory Commission, FERC Form 423, ''Monthly Report of Cost and Quality of Fuels for Electric Plants.''

Table 39. Imported Coal Received at Manufacturing and Coke Plants by Country of Origin and Destination State, 1994-1996

(Short Tons)

Country of Origin and Destination State	Manufacturing			Coke Plants			Total			
	1996	1995	1994	1996	1995	1994	1996	1995	1994	Percent Change 1995-1996
Australia Total	**147,204**	**211,099**	**109,737**	–	–	–	**147,204**	**211,099**	**109,737**	**–30.3**
Hawaii	147,204	211,099	109,737	–	–	–	147,204	211,099	109,737	–30.3
Canada Total	**1,454**	**1,410**	**1,635**	**1,312,759**	**1,376,751**	**1,252,944**	**1,314,213**	**1,378,161**	**1,254,579**	**–4.6**
Illinois	–	–	–	215,959	222,876	346,192	215,959	222,876	346,192	–3.1
Indiana	–	–	–	735,342	760,508	592,655	735,342	760,508	592,655	–3.3
Michigan	–	–	–	361,458	393,367	314,097	361,458	393,367	314,097	–8.1
Ohio	1,454	1,410	1,635	–	–	–	1,454	1,410	1,635	3.1
Colombia Total	**205,895**	**161,950**	**178,330**	–	–	–	**205,895**	**161,950**	**178,330**	**27.1**
Alabama	160,675	161,950	178,330	–	–	–	160,675	161,950	178,330	–.8
Maine	45,220	–	–	–	–	–	45,220	–	–	–
Indonesia Total	–	–	–	–	–	–	–	–	–	–
Maine	–	–	–	–	–	–	–	–	–	–
Mexico Total	**15,561**	–	–	–	–	–	**15,561**	–	–	–
Texas	15,561	–	–	–	–	–	15,561	–	–	–
Venezuela Total	**93,864**	**167,931**	**91,436**	–	–	–	**93,864**	**167,931**	**91,436**	**–44.1**
Alabama	–	–	–	–	–	–	–	–	–	–
Maine	13,966	81,392	91,436	–	–	–	13,966	81,392	91,436	–82.8
Pennsylvania	79,898	86,539	–	–	–	–	79,898	86,539	–	–7.7
Total	**463,978**	**542,390**	**381,138**	**1,312,759**	**1,376,751**	**1,252,944**	**1,776,737**	**1,919,141**	**1,634,082**	**–7.4**
Alabama	160,675	161,950	178,330	–	–	–	160,675	161,950	178,330	–.8
Hawaii	147,204	211,099	109,737	–	–	–	147,204	211,099	109,737	–30.3
Illinois	–	–	–	215,959	222,876	346,192	215,959	222,876	346,192	–3.1
Indiana	–	–	–	735,342	760,508	592,655	735,342	760,508	592,655	–3.3
Maine	59,186	81,392	91,436	–	–	–	59,186	81,392	91,436	–27.3
Michigan	–	–	–	361,458	393,367	314,097	361,458	393,367	314,097	–8.1
Ohio	1,454	1,410	1,635	–	–	–	1,454	1,410	1,635	3.1
Pennsylvania	79,898	86,539	–	–	–	–	79,898	86,539	–	–7.7
Texas	15,561	–	–	–	–	–	15,561	–	–	–

Sources: Energy Information Administration, Form EIA-3A, ''Annual Coal Quality Report - Manufacturing Plants''; and Form EIA-5A, ''Annual Coal Quality Report - Coke Plants.''

Employment and Productivity

Employment

In 1996, the average number of miners working daily at mines and/or preparation plants producing or processing 10,000 or more short tons of coal dropped 7.5 percent from the 1995 level, to 83,462 miners (Table 40). Of the 25 coal-producing States, 18 had a decrease in employment. Although all three regions experienced a decline in employment, the Western Region which declined 13.1 percent, accounted for the largest share of the decrease. The Appalachian Region had a 7 percent decline, while the Interior Region showed a decline of 8 percent.

The average number of miners at underground mines in 1996 totaled 53,796 miners, accounting for 64 percent of all U.S. miners (Table 41). Employment at underground mines decreased 7 percent since 1995.

In 1996, the average number of miners at surface mines dropped 8.4 percent from the 1995 level to 29,666 miners (Table 42). All three regions had decreases in surface employment in 1996, with the Interior Region showing only a slight decline of 0.2 percent.

Mines that produced 1 million short tons or more of coal in 1996, accounted for 74 percent of total production and employed 48 percent of the miners. Of this total, 32 percent worked in underground mines and 16 percent at surface mines. Over 36 thousand miners (43.8 percent) belong to a union.

The United Mine Workers of America (UMWA) represented 39 percent of the total coal mining workforce, while 4.6 percent belonged to "other unions" (Table 46).

Productivity

In 1996, coal miners working daily averaged 5.69 short tons per miner per hour, an increase of 5.8 percent from the 1995 level (Table 48). Increases occurred in all regions, with the Western Region showing the largest increase, 11 percent. Over the last decade, productivity has risen at an annual average rate of 6.3 percent, increasing both at underground and surface mines. Underground mines increased 5.5 percent over the last decade, while surface mines rose 6.9 percent during the same period.

Employment

Figure 4. Average Number of U.S. Miners by Mine Type and by Region, 1987-1996

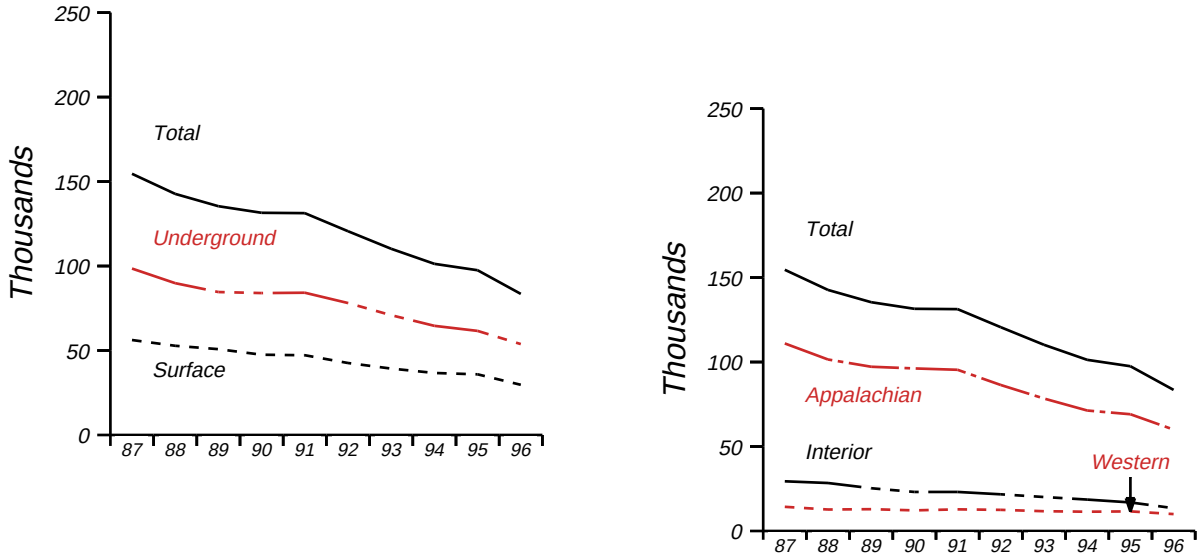
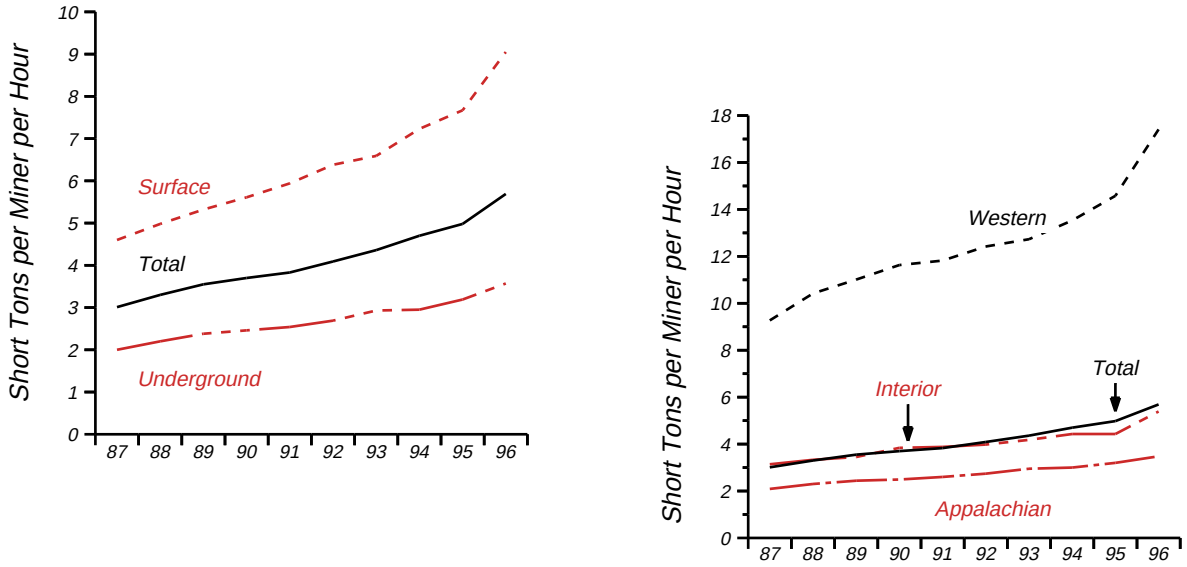


Figure 5. U.S. Coal Mining Productivity by Mine Type and by Region, 1987-1996



Note: Scale has been enlarged to show detail in the short tons per miner per hour by type of mining plot. Because vertical scales differ, graphs should not be compared. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons of coal during the year and preparation plants with less than 5,000 employee hours. Includes all employees engaged in production, preparation, processing, development, maintenance, repair, shop or yard work at mining operations. Excludes office workers. Includes mining operations management and all technical and engineering personnel. Short tons produced per miner per hour is calculated by dividing total coal production by the direct labor hours worked by all mine employees.

Sources: Energy Information Administration, Form EIA-7A, "Coal Production Report"; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report."

Table 40. Average Number of Miners by State, 1987, 1992-1996

Coal-Producing State and Region	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
Alabama	5,031	5,567	5,418	5,399	5,386	6,718	–9.6	–1.7	–3.2
Alaska	102	102	105	96	111	93	–	–2.1	1.0
Arizona	651	831	864	876	888	900	–21.7	–7.5	–3.5
Arkansas	–	4	15	5	14	19	–100.0	–	–
California	–	–	–	–	8	37	–	–	–
Colorado	1,332	1,777	1,905	1,775	1,610	1,795	–25.0	–4.6	–3.3
Illinois	5,174	5,652	6,591	7,303	8,323	12,171	–8.4	–11.2	–9.1
Indiana	2,579	2,571	3,206	3,331	3,652	3,992	.3	–8.3	–4.7
Iowa	–	–	20	90	101	166	–	–	–
Kansas	54	54	63	81	96	247	–	–13.4	–15.5
Kentucky Total	18,826	21,125	23,368	24,063	24,624	32,590	–10.9	–6.5	–5.9
Eastern	15,130	16,840	18,577	18,711	19,419	25,640	–10.1	–6.0	–5.7
Western	3,696	4,285	4,791	5,352	5,205	6,950	–13.7	–8.2	–6.8
Louisiana	111	114	111	99	77	81	–2.6	9.6	3.6
Maryland	469	458	451	441	438	555	2.4	1.7	–1.8
Missouri	80	92	116	180	323	814	–13.0	–29.4	–22.7
Montana	705	722	705	660	715	847	–2.3	–.3	–2.0
New Mexico	1,347	1,747	1,786	1,762	1,683	1,658	–22.9	–5.4	–2.3
North Dakota	640	716	645	782	744	961	–10.6	–3.7	–4.4
Ohio	3,232	3,386	3,983	3,866	4,515	7,827	–4.5	–8.0	–9.4
Oklahoma	233	241	253	273	334	653	–3.3	–8.6	–10.8
Pennsylvania Total	9,021	8,968	9,975	10,940	12,659	17,287	.6	–8.1	–7.0
Anthracite	1,171	1,069	1,183	1,124	1,217	1,602	9.5	–.9	–3.4
Bituminous	7,850	7,899	8,792	9,816	11,442	15,685	–.6	–9.0	–7.4
Tennessee	756	681	669	646	804	1,998	11.0	–1.5	–10.2
Texas	1,550	1,590	1,733	1,841	2,001	3,319	–2.5	–6.2	–8.1
Utah	1,804	1,893	1,675	1,769	1,997	2,544	–4.7	–2.5	–3.7
Virginia	6,241	6,919	8,121	8,339	9,138	12,047	–9.8	–9.1	–7.0
Washington	589	566	570	567	612	699	4.1	–.9	–1.9
West Virginia Total	20,121	21,334	21,861	22,979	26,017	29,458	–5.7	–6.2	–4.1
Northern	5,279	6,114	6,659	7,274	8,481	9,863	–13.6	–11.2	–6.7
Southern	14,842	15,220	15,202	15,705	17,536	19,595	–2.5	–4.1	–3.0
Wyoming	2,814	3,142	3,291	3,159	3,326	3,191	–10.4	–4.1	–1.4
Appalachian Total[1]	**60,001**	**64,153**	**69,055**	**71,321**	**78,376**	**101,530**	**–6.5**	**–6.5**	**–5.7**
Interior Total[1]	**13,477**	**14,603**	**16,899**	**18,555**	**20,126**	**28,412**	**–7.7**	**–9.5**	**–7.9**
Western Total[1]	**9,984**	**11,496**	**11,546**	**11,446**	**11,694**	**12,725**	**–13.1**	**–3.9**	**–2.6**
East of Miss. River	**71,450**	**76,661**	**83,643**	**87,307**	**95,556**	**124,643**	**–6.8**	**–7.0**	**–6.0**
West of Miss. River	**12,012**	**13,591**	**13,857**	**14,015**	**14,640**	**18,024**	**–11.6**	**–4.8**	**–4.4**
U.S. Total	**83,462**	**90,252**	**97,500**	**101,322**	**110,196**	**142,667**	**–7.5**	**–6.7**	**–5.8**

[1] For a definition of coal-producing regions, see Appendix C.

Notes: Includes all employees engaged in production, preparation, processing, development, maintenance, repair, shop or yard work at mining operations. Excludes office workers. Includes mining operations management and all technical and engineering personnel. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons and preparation plants with less than 5,000 employee hours, which are not required to provide these data.

Sources: Energy Information Administration, Form EIA-7A, ''Coal Production Report''; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, ''Quarterly Mine Employment and Coal Production Report.''

Table 41. Average Number of Miners at Underground Mines by State, 1987, 1992-1996

Coal-Producing State and Region	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
Alabama	4,145	4,314	3,775	3,707	3,810	4,461	–3.9	2.1	–0.8
Arkansas	–	–	10	–	–	–	–	–	–
Colorado	918	1,301	1,248	1,119	1,085	1,094	–29.4	–4.1	–1.9
Illinois	4,256	4,780	5,595	6,196	6,780	8,932	–11.0	–11.0	–7.9
Indiana	457	485	485	545	422	489	–5.8	2.0	–.7
Iowa	–	–	–	–	–	87	–	–	–
Kentucky Total	12,876	14,542	15,837	16,493	16,888	21,505	–11.4	–6.5	–5.5
Eastern	10,275	11,366	12,849	13,028	13,405	16,900	–9.6	–6.4	–5.4
Western	2,601	3,176	2,988	3,465	3,483	4,605	–18.1	–7.0	–6.1
Maryland	308	293	284	260	228	286	5.1	7.8	.8
Montana	18	–	–	7	–	–	–	–	–
New Mexico	–	132	168	246	141	192	–100.0	–	–
Ohio	1,706	1,670	1,694	1,601	1,926	3,552	2.1	–3.0	–7.8
Oklahoma	26	12	32	40	24	–	116.7	2.0	–
Pennsylvania Total	5,599	5,659	6,192	6,853	8,113	10,402	–1.1	–8.8	–6.6
Anthracite	147	152	149	194	147	254	–3.3	–	–5.9
Bituminous	5,452	5,507	6,043	6,659	7,966	10,148	–1.0	–9.0	–6.7
Tennessee	467	473	511	375	599	1,552	–1.3	–6.0	–12.5
Utah	1,803	1,893	1,675	1,769	1,997	2,544	–4.8	–2.5	–3.8
Virginia	5,098	5,776	6,844	7,092	7,888	10,228	–11.7	–10.3	–7.4
West Virginia Total	16,003	16,347	16,956	18,040	20,738	24,513	–2.1	–6.3	–4.6
Northern	4,764	5,561	5,997	6,414	7,513	8,534	–14.3	–10.8	–6.3
Southern	11,239	10,786	10,959	11,626	13,225	15,979	4.2	–4.0	–3.8
Wyoming	116	202	256	261	268	20	–42.6	–18.9	21.6
Appalachian Total[1]	**43,601**	**45,898**	**49,105**	**50,956**	**56,707**	**71,894**	**–5.0**	**–6.3**	**–5.4**
Interior Total[1]	**7,340**	**8,453**	**9,110**	**10,246**	**10,709**	**14,113**	**–13.2**	**–9.0**	**–7.0**
Western Total[1]	**2,855**	**3,528**	**3,347**	**3,402**	**3,491**	**3,850**	**–19.1**	**–4.9**	**–3.3**
East of Miss. River	**50,915**	**54,339**	**58,173**	**61,162**	**67,392**	**85,920**	**–6.3**	**–6.8**	**–5.6**
West of Miss. River	**2,881**	**3,540**	**3,389**	**3,442**	**3,515**	**3,937**	**–18.6**	**–4.8**	**–3.4**
U.S. Total	**53,796**	**57,879**	**61,562**	**64,604**	**70,907**	**89,857**	**–7.0**	**–6.7**	**–5.5**

[1] For a definition of coal-producing regions, see Appendix C.

Notes: Includes all employees engaged in production, preparation, processing, development, maintenance, repair, shop or yard work at mining operations. Excludes office workers. Includes mining operations management and all technical and engineering personnel. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons and preparation plants with less than 5,000 employee hours, which are not required to provide these data.

Sources: Energy Information Administration, Form EIA-7A, ''Coal Production Report''; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, ''Quarterly Mine Employment and Coal Production Report.''

Table 42. Average Number of Miners at Surface Mines by State, 1987, 1992-1996

Coal-Producing State and Region	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
Alabama	886	1,253	1,643	1,692	1,576	2,257	–29.3	–13.4	–9.9
Alaska	102	102	105	96	111	93	–	–2.1	1.0
Arizona	651	831	864	876	888	900	–21.7	–7.5	–3.5
Arkansas	–	4	5	5	14	19	–100.0	–	–
California	–	–	–	–	8	37	–	–	–
Colorado	414	476	657	656	525	701	–13.0	–5.8	–5.7
Illinois	918	872	996	1,107	1,543	3,239	5.3	–12.2	–13.1
Indiana	2,122	2,086	2,721	2,786	3,230	3,503	1.7	–10.0	–5.4
Iowa	–	–	20	90	101	79	–	–	–
Kansas	54	54	63	81	96	247	–	–13.4	–15.5
Kentucky Total	5,950	6,583	7,531	7,570	7,736	11,085	–9.6	–6.3	–6.7
Eastern	4,855	5,474	5,728	5,683	6,014	8,740	–11.3	–5.2	–6.3
Western	1,095	1,109	1,803	1,887	1,722	2,345	–1.3	–10.7	–8.1
Louisiana	111	114	111	99	77	81	–2.6	9.6	3.6
Maryland	161	165	167	181	210	269	–2.4	–6.4	–5.5
Missouri	80	92	116	180	323	814	–13.0	–29.4	–22.7
Montana	687	722	705	653	715	847	–4.8	–1.0	–2.3
New Mexico	1,347	1,615	1,618	1,516	1,542	1,466	–16.6	–3.3	–.9
North Dakota	640	716	645	782	744	961	–10.6	–3.7	–4.4
Ohio	1,526	1,716	2,289	2,265	2,589	4,275	–11.1	–12.4	–10.8
Oklahoma	207	229	221	233	310	653	–9.6	–9.6	–12.0
Pennsylvania Total	3,422	3,309	3,783	4,087	4,546	6,885	3.4	–6.8	–7.5
Anthracite	1,024	917	1,034	930	1,070	1,348	11.7	–1.1	–3.0
Bituminous	2,398	2,392	2,749	3,157	3,476	5,537	.3	–8.9	–8.9
Tennessee	289	208	158	271	205	446	38.9	9.0	–4.7
Texas	1,550	1,590	1,733	1,841	2,001	3,319	–2.5	–6.2	–8.1
Utah	1	–	–	–	–	–	–	–	–
Virginia	1,143	1,143	1,277	1,247	1,250	1,819	–	–2.2	–5.0
Washington	589	566	570	567	612	699	4.1	–.9	–1.9
West Virginia Total	4,118	4,987	4,905	4,939	5,279	4,945	–17.4	–6.0	–2.0
Northern	515	553	662	860	968	1,329	–6.9	–14.6	–10.0
Southern	3,603	4,434	4,243	4,079	4,311	3,616	–18.7	–4.4	*
Wyoming	2,698	2,940	3,035	2,898	3,058	3,171	–8.2	–3.1	–1.8
Appalachian Total[1]	**16,400**	**18,255**	**19,950**	**20,365**	**21,669**	**29,636**	**–10.2**	**–6.7**	**–6.4**
Interior Total[1]	**6,137**	**6,150**	**7,789**	**8,309**	**9,417**	**14,299**	**–.2**	**–10.1**	**–9.0**
Western Total[1]	**7,129**	**7,968**	**8,199**	**8,044**	**8,203**	**8,875**	**–10.5**	**–3.4**	**–2.4**
East of Miss. River	**20,535**	**22,322**	**25,470**	**26,145**	**28,164**	**38,723**	**–8.0**	**–7.6**	**–6.8**
West of Miss. River	**9,131**	**10,051**	**10,468**	**10,573**	**11,125**	**14,087**	**–9.1**	**–4.8**	**–4.7**
U.S. Total	**29,666**	**32,373**	**35,938**	**36,718**	**39,289**	**52,810**	**–8.4**	**–6.8**	**–6.2**

[1] For a definition of coal-producing regions, see Appendix C.

* Data round to zero.

Notes: Includes all employees engaged in production, preparation, processing, development, maintenance, repair, shop or yard work at mining operations. Excludes office workers. Includes mining operations management and all technical and engineering personnel. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons and preparation plants with less than 5,000 employee hours, which are not required to provide these data.

Sources: Energy Information Administration, Form EIA-7A, ''Coal Production Report''; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, ''Quarterly Mine Employment and Coal Production Report.''

Table 43. Average Number of Miners by State and Mine Production Range, 1996

Coal-Producing State and Region	Mine Production Range (thousand short tons)							Total
	1,000 and over	500 to 1,000	200 to 500	100 to 200	50 to 100	10 to 50	Zero[1]	
Alabama	3,624	765	148	133	142	115	104	5,031
Alaska	102	–	–	–	–	–	–	102
Arizona	630	–	–	–	–	–	21	651
Colorado	858	198	123	104	–	–	49	1,332
Illinois	4,330	378	176	19	7	92	172	5,174
Indiana	1,463	662	280	78	42	13	41	2,579
Kansas	–	–	54	–	–	–	–	54
Kentucky Total	4,217	3,655	3,705	2,233	1,588	1,498	1,930	18,826
Eastern	2,429	2,672	3,391	2,138	1,438	1,392	1,670	15,130
Western	1,788	983	314	95	150	106	260	3,696
Louisiana	78	33	–	–	–	–	–	111
Maryland	237	–	86	15	44	54	33	469
Missouri	–	–	27	14	30	9	–	80
Montana	637	39	11	18	–	–	–	705
New Mexico	1,347	–	–	–	–	–	–	1,347
North Dakota	636	–	–	–	–	–	4	640
Ohio	1,855	280	282	330	143	210	132	3,232
Oklahoma	–	–	114	106	–	13	–	233
Pennsylvania Total	3,704	1,041	1,384	656	506	765	965	9,021
Anthracite	–	27	246	67	154	294	383	1,171
Bituminous	3,704	1,014	1,138	589	352	471	582	7,850
Tennessee	–	54	368	154	12	58	110	756
Texas	1,378	96	76	–	–	–	–	1,550
Utah	1,587	179	–	–	–	–	38	1,804
Virginia	1,087	505	1,501	940	746	616	846	6,241
Washington	489	–	–	100	–	–	–	589
West Virginia Total	8,861	2,593	2,800	1,061	1,113	994	2,699	20,121
Northern	3,630	327	445	164	160	201	352	5,279
Southern	5,231	2,266	2,355	897	953	793	2,347	14,842
Wyoming	2,658	106	13	24	–	13	–	2,814
Appalachian Total[2]	**21,797**	**7,910**	**9,960**	**5,427**	**4,144**	**4,204**	**6,559**	**60,001**
Interior Total[2]	**9,037**	**2,152**	**1,041**	**312**	**229**	**233**	**473**	**13,477**
Western Total[2]	**8,944**	**522**	**147**	**246**	**–**	**13**	**112**	**9,984**
East of Miss. River	**29,378**	**9,933**	**10,730**	**5,619**	**4,343**	**4,415**	**7,032**	**71,450**
West of Miss. River	**10,400**	**651**	**418**	**366**	**30**	**35**	**112**	**12,012**
U.S. Total	**39,778**	**10,584**	**11,148**	**5,985**	**4,373**	**4,450**	**7,144**	**83,462**

1 Includes all employees at preparation plants and tipples not co-located with a mine.
2 For a definition of coal-producing regions, see Appendix C.

Notes: Includes all employees engaged in production, preparation, processing, development, maintenance, repair, shop or yard work at mining operations. Excludes office workers. Includes mining operations management and all technical and engineering personnel. Excludes silt, culm refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons and preparation plants with less than 5,000 employee hours, which are not required to provide these data.

Sources: Energy Information Administration, Form EIA-7A, ''Coal Production Report''; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, ''Quarterly Mine Employment and Coal Production Report.''

Table 44. Average Number of Miners at Underground Mines by State and Mine Production Range, 1996

Coal-Producing State and Region	Mine Production Range (thousand short tons)							Total
	1,000 and over	500 to 1,000	200 to 500	100 to 200	50 to 100	10 to 50	Zero[1]	
Alabama	3,471	567	–	–	32	–	75	4,145
Colorado	468	198	99	104	–	–	49	918
Illinois	3,829	78	105	19	–	81	144	4,256
Indiana	174	267	–	–	–	–	16	457
Kentucky Total	3,318	2,040	2,334	1,674	1,138	964	1,408	12,876
Eastern	1,596	1,597	2,218	1,674	1,063	950	1,177	10,275
Western	1,722	443	116	–	75	14	231	2,601
Maryland	237	–	26	–	–	12	33	308
Montana	–	–	–	18	–	–	–	18
Ohio	1,551	–	40	92	–	–	23	1,706
Oklahoma	–	–	–	26	–	–	–	26
Pennsylvania Total	3,593	705	581	119	71	141	389	5,599
Anthracite	–	–	–	33	–	63	51	147
Bituminous	3,593	705	581	86	71	78	338	5,452
Tennessee	–	–	248	100	12	34	73	467
Utah	1,587	179	–	–	–	–	37	1,803
Virginia	1,087	183	1,141	752	647	574	714	5,098
West Virginia Total	7,144	1,941	2,209	800	946	756	2,207	16,003
Northern	3,535	267	350	99	113	132	268	4,764
Southern	3,609	1,674	1,859	701	833	624	1,939	11,239
Wyoming	116	–	–	–	–	–	–	116
Appalachian Total[2]	**18,679**	**4,993**	**6,463**	**3,537**	**2,771**	**2,467**	**4,691**	**43,601**
Interior Total[2]	**5,725**	**788**	**221**	**45**	**75**	**95**	**391**	**7,340**
Western Total[2]	**2,171**	**377**	**99**	**122**	**–**	**–**	**86**	**2,855**
East of Miss. River	**24,404**	**5,781**	**6,684**	**3,556**	**2,846**	**2,562**	**5,082**	**50,915**
West of Miss. River	**2,171**	**377**	**99**	**148**	**–**	**–**	**86**	**2,881**
U.S. Total	**26,575**	**6,158**	**6,783**	**3,704**	**2,846**	**2,562**	**5,168**	**53,796**

1 Includes all employees at preparation plants and tipples not co-located with a mine.
2 For a definition of coal-producing regions, see Appendix C.

Notes: Includes all employees engaged in production, preparation, processing, development, maintenance, repair, shop or yard work at mining operations. Excludes office workers. Includes mining operations management and all technical and engineering personnel. Excludes silt, culm refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons and preparation plants with less than 5,000 employee hours, which are not required to provide these data.

Sources: Energy Information Administration, Form EIA-7A, ''Coal Production Report''; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, ''Quarterly Mine Employment and Coal Production Report.''

Table 45. Average Number of Miners at Surface Mines by State and Mine Production Range, 1996

Coal-Producing State and Region	Mine Production Range (thousand short tons)							Total
	1,000 and over	500 to 1,000	200 to 500	100 to 200	50 to 100	10 to 50	Zero[1]	
Alabama	153	198	148	133	110	115	29	886
Alaska	102	–	–	–	–	–	–	102
Arizona	630	–	–	–	–	–	21	651
Colorado	390	–	24	–	–	–	–	414
Illinois	501	300	71	–	7	11	28	918
Indiana	1,289	395	280	78	42	13	25	2,122
Kansas	–	–	54	–	–	–	–	54
Kentucky Total	899	1,615	1,371	559	450	534	522	5,950
Eastern	833	1,075	1,173	464	375	442	493	4,855
Western	66	540	198	95	75	92	29	1,095
Louisiana	78	33	–	–	–	–	–	111
Maryland	–	–	60	15	44	42	–	161
Missouri	–	–	27	14	30	9	–	80
Montana	637	39	11	–	–	–	–	687
New Mexico	1,347	–	–	–	–	–	–	1,347
North Dakota	636	–	–	–	–	–	4	640
Ohio	304	280	242	238	143	210	109	1,526
Oklahoma	–	–	114	80	–	13	–	207
Pennsylvania Total	111	336	803	537	435	624	576	3,422
Anthracite	–	27	246	34	154	231	332	1,024
Bituminous	111	309	557	503	281	393	244	2,398
Tennessee	–	54	120	54	–	24	37	289
Texas	1,378	96	76	–	–	–	–	1,550
Utah	–	–	–	–	–	–	1	1
Virginia	–	322	360	188	99	42	132	1,143
Washington	489	–	–	100	–	–	–	589
West Virginia Total	1,717	652	591	261	167	238	492	4,118
Northern	95	60	95	65	47	69	84	515
Southern	1,622	592	496	196	120	169	408	3,603
Wyoming	2,542	106	13	24	–	13	–	2,698
Appalachian Total[2]	**3,118**	**2,917**	**3,497**	**1,890**	**1,373**	**1,737**	**1,868**	**16,400**
Interior Total[2]	**3,312**	**1,364**	**820**	**267**	**154**	**138**	**82**	**6,137**
Western Total[2]	**6,773**	**145**	**48**	**124**	**–**	**13**	**26**	**7,129**
East of Miss. River	**4,974**	**4,152**	**4,046**	**2,063**	**1,497**	**1,853**	**1,950**	**20,535**
West of Miss. River	**8,229**	**274**	**319**	**218**	**30**	**35**	**26**	**9,131**
U.S. Total	**13,203**	**4,426**	**4,365**	**2,281**	**1,527**	**1,888**	**1,976**	**29,666**

1 Includes all employees at preparation plants and tipples not co-located with a mine.
2 For a definition of coal-producing regions, see Appendix C.

Notes: Includes all employees engaged in production, preparation, processing, development, maintenance, repair, shop or yard work at mining operations. Excludes office workers. Includes mining operations management and all technical and engineering personnel. Excludes silt, culm refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons and preparation plants with less than 5,000 employee hours, which are not required to provide these data.

Sources: Energy Information Administration, Form EIA-7A, ''Coal Production Report''; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, ''Quarterly Mine Employment and Coal Production Report.''

Table 46. Average Number of Miners by State, Mine Type, and Union Type, 1996

Coal-Producing State and Region	UMWA	Other Unions	Union Total	Nonunion	Total
Alabama	**3,743**	–	**3,743**	**1,288**	**5,031**
Underground	3,423	–	3,423	722	4,145
Surface	320	–	320	566	886
Alaska	–	**102**	**102**	–	**102**
Surface	–	102	102	–	102
Arizona	**651**	–	**651**	–	**651**
Surface	651	–	651	–	651
Colorado	**350**	**129**	**479**	**853**	**1,332**
Underground	245	–	245	673	918
Surface	105	129	234	180	414
Illinois	**3,831**	**391**	**4,222**	**952**	**5,174**
Underground	3,024	331	3,355	901	4,256
Surface	807	60	867	51	918
Indiana	**1,317**	–	**1,317**	**1,262**	**2,579**
Underground	162	–	162	295	457
Surface	1,155	–	1,155	967	2,122
Kansas	**54**	–	**54**	–	**54**
Surface	54	–	54	–	54
Kentucky Total	**2,096**	**106**	**2,202**	**16,624**	**18,826**
Underground	1,777	50	1,827	11,049	12,876
Surface	319	56	375	5,575	5,950
Eastern	**978**	**106**	**1,084**	**14,046**	**15,130**
Underground	772	50	822	9,453	10,275
Surface	206	56	262	4,593	4,855
Western	**1,118**	–	**1,118**	**2,578**	**3,696**
Underground	1,005	–	1,005	1,596	2,601
Surface	113	–	113	982	1,095
Louisiana	–	–	–	**111**	**111**
Surface	–	–	–	111	111
Maryland	–	–	–	**469**	**469**
Underground	–	–	–	308	308
Surface	–	–	–	161	161
Missouri	–	–	–	**80**	**80**
Surface	–	–	–	80	80
Montana	**383**	**226**	**609**	**96**	**705**
Underground	–	–	–	18	18
Surface	383	226	609	78	687
New Mexico	**405**	**750**	**1,155**	**192**	**1,347**
Surface	405	750	1,155	192	1,347
North Dakota	**108**	**102**	**210**	**430**	**640**
Surface	108	102	210	430	640
Ohio	**1,700**	–	**1,700**	**1,532**	**3,232**
Underground	1,440	–	1,440	266	1,706
Surface	260	–	260	1,266	1,526
Oklahoma	–	–	–	**233**	**233**
Underground	–	–	–	26	26
Surface	–	–	–	207	207
Pennsylvania Total	**4,119**	**25**	**4,144**	**4,877**	**9,021**
Underground	3,475	7	3,482	2,117	5,599
Surface	644	18	662	2,760	3,422
Anthracite	**502**	**19**	**521**	**650**	**1,171**
Underground	–	4	4	143	147
Surface	502	15	517	507	1,024
Bituminous	**3,617**	**6**	**3,623**	**4,227**	**7,850**
Underground	3,475	3	3,478	1,974	5,452
Surface	142	3	145	2,253	2,398
Tennessee	–	–	–	**756**	**756**
Underground	–	–	–	467	467
Surface	–	–	–	289	289
Texas	–	**920**	**920**	**630**	**1,550**
Surface	–	920	920	630	1,550
Utah	**722**	–	**722**	**1,082**	**1,804**
Underground	722	–	722	1,081	1,803
Surface	–	–	–	1	1
Virginia	**1,167**	**56**	**1,223**	**5,018**	**6,241**
Underground	1,089	–	1,089	4,009	5,098
Surface	78	56	134	1,009	1,143
Washington	–	**489**	**489**	**100**	**589**
Surface	–	489	489	100	589
West Virginia Total	**11,671**	**42**	**11,713**	**8,408**	**20,121**
Underground	9,894	2	9,896	6,107	16,003
Surface	1,777	40	1,817	2,301	4,118

See footnotes at end of table.

Table 46. Average Number of Miners by State, Mine Type, and Union Type, 1996 (Continued)

Coal-Producing State and Region	UMWA	Other Unions	Union Total	Nonunion	Total
Northern	**3,537**	–	**3,537**	**1,742**	**5,279**
Underground	3,525	–	3,525	1,239	4,764
Surface	12	–	12	503	515
Southern	**8,134**	**42**	**8,176**	**6,666**	**14,842**
Underground	6,369	2	6,371	4,868	11,239
Surface	1,765	40	1,805	1,798	3,603
Wyoming	**352**	**540**	**892**	**1,922**	**2,814**
Underground	–	–	–	116	116
Surface	352	540	892	1,806	2,698
Appalachian Total[1]	**23,378**	**229**	**23,607**	**36,394**	**60,001**
Underground	20,093	59	20,152	23,449	43,601
Surface	3,285	170	3,455	12,945	16,400
Interior Total[1]	**6,320**	**1,311**	**7,631**	**5,846**	**13,477**
Underground	4,191	331	4,522	2,818	7,340
Surface	2,129	980	3,109	3,028	6,137
Western Total[1]	**2,971**	**2,338**	**5,309**	**4,675**	**9,984**
Underground	967	–	967	1,888	2,855
Surface	2,004	2,338	4,342	2,787	7,129
East of Miss. River	**29,644**	**620**	**30,264**	**41,186**	**71,450**
Underground	24,284	390	24,674	26,241	50,915
Surface	5,360	230	5,590	14,945	20,535
West of Miss. River	**3,025**	**3,258**	**6,283**	**5,729**	**12,012**
Underground	967	–	967	1,914	2,881
Surface	2,058	3,258	5,316	3,815	9,131
U.S. Total	**32,669**	**3,878**	**36,547**	**46,915**	**83,462**
Underground	25,251	390	25,641	28,155	53,796
Surface	7,418	3,488	10,906	18,760	29,666

[1] For a definition of coal-producing regions, see Appendix C.

Notes: Includes all employees engaged in production, preparation, processing, development, maintenance, repair, shop or yard work at mining operations. Excludes office workers. Includes mining operations management and all technical and engineering personnel. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons and preparation plants with less than 5,000 employee hours, which are not required to provide these data. See Glossary for listing of other unions.

Sources: Energy Information Administration, Form EIA-7A, ''Coal Production Report''; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, ''Quarterly Mine Employment and Coal Production Report.''

Table 47. U.S. Coal Mine Injuries, 1987, 1992-1996

Injury Type	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
Injuries Total[1]	**5,896**	R **7,386**	R **8,765**	**8,446**	**10,110**	**12,417**	**–20.2**	**–12.6**	**–7.9**
Fatal	38	47	45	47	55	63	–19.1	–8.8	–5.5
Nonfatal[2]	5,858	R 7,339	R 8,720	8,399	10,055	12,354	–20.2	–12.6	–8.0
Injuries per 200,000 Employee-Hours Total	**5.96**	R **6.26**	R **6.89**	**6.86**	**7.33**	**7.88**	**–4.8**	**–5.0**	**–3.1**
Fatal	.04	.04	.03	.04	.04	.04	.0	.0	.0
Nonfatal[2]	5.92	R 6.22	R 6.86	6.82	7.29	7.84	–4.8	–5.1	–3.1

[1] Includes contractors and office workers.
[2] Includes only non-fatal injuries that resulted in absence from work.
R Revised.

Note: Calculations of growth rate are based using unrounded values.

Source: U.S. Department of Labor, Mine Safety and Health Administration, *Mine Injuries and Worktime, Quarterly*, various issues.

Figure 6. U.S. Coal Mine Injuries, 1987-1996

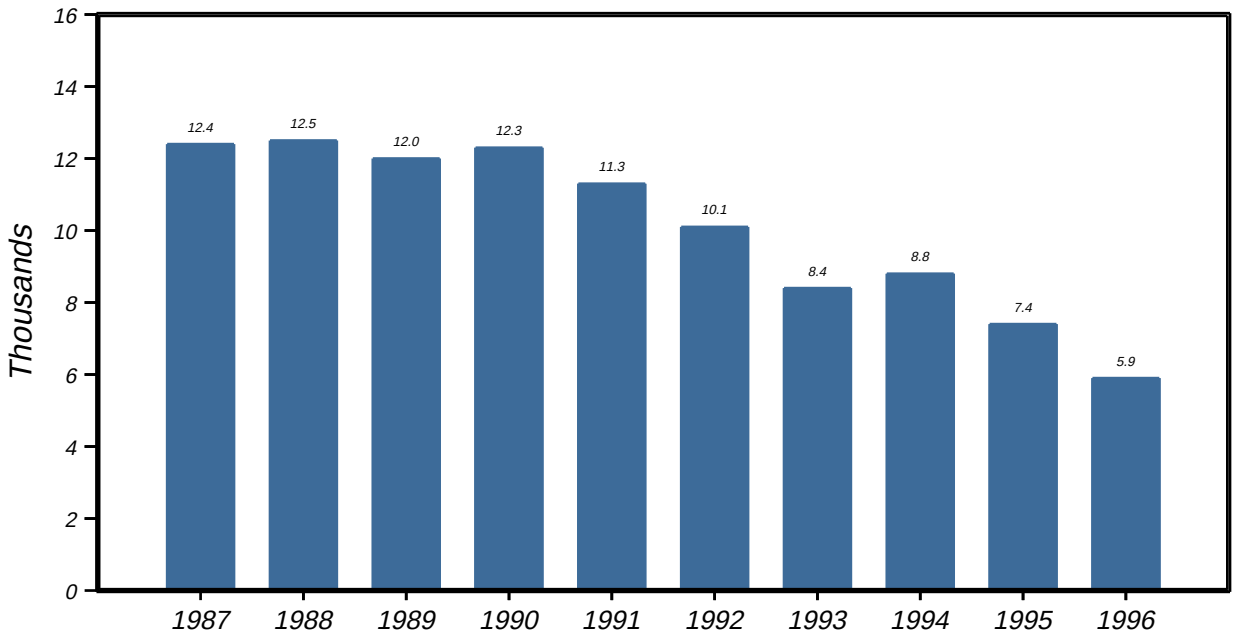
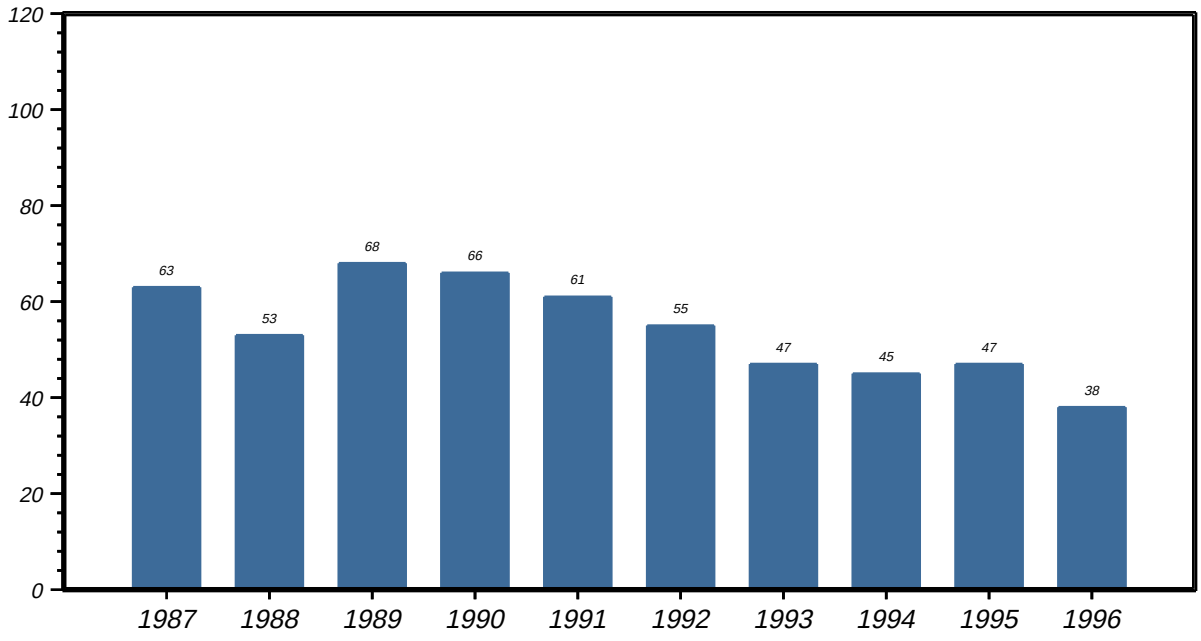


Figure 7. U.S. Coal Mine Fatalities, 1987-1996



Sources: U.S. Department of Labor, Mine Safety and Health Administration, *Mine Injuries and Worktime, Quarterly*, various issues.

Productivity

Table 48. Coal Mining Productivity by State, 1987, 1992-1996
(Short Tons of Coal Produced per Miner per Hour)

Coal-Producing State and Region	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
Alabama	2.20	2.24	2.25	2.35	2.49	1.97	–1.6	–3.0	1.3
Alaska	6.81	7.46	6.94	7.40	6.93	6.84	–8.8	–.4	*
Arizona	6.30	6.34	6.71	6.21	6.29	6.76	–.6	*	–.8
Arkansas	–	1.47	1.52	1.39	1.68	1.80	–100.0	–	–
California	–	–	–	–	11.12	5.19	–	–	–
Colorado	7.32	6.14	6.20	5.85	5.27	4.22	19.2	8.5	6.3
Illinois	4.18	3.87	3.59	3.23	3.42	2.52	8.2	5.2	5.8
Indiana	4.98	4.68	4.28	4.46	4.09	3.57	6.4	5.0	3.8
Iowa	–	–	1.52	.72	1.14	1.39	–	–	–
Kansas	2.17	2.22	1.93	2.30	2.21	3.75	–2.4	–.5	–5.9
Kentucky Total	3.80	3.57	3.25	3.25	3.20	2.69	6.6	4.4	3.9
Eastern	3.68	3.47	3.24	3.18	3.10	2.59	6.1	4.3	4.0
Western	4.29	3.97	3.28	3.49	3.49	2.98	7.9	5.3	4.1
Louisiana	10.86	13.25	13.00	12.14	12.43	15.26	–18.0	–3.3	–3.7
Maryland	4.13	3.82	3.68	3.41	2.91	3.38	8.2	9.1	2.2
Missouri	3.49	2.55	3.59	1.84	3.10	2.28	36.9	3.0	4.8
Montana	21.88	21.06	21.92	19.49	20.16	18.70	3.9	2.1	1.8
New Mexico	8.45	6.92	6.77	6.68	6.68	5.74	22.1	6.0	4.4
North Dakota	17.20	16.80	18.84	17.66	18.12	13.46	2.4	–1.3	2.8
Ohio	3.95	3.62	3.42	3.46	3.04	2.28	9.1	6.8	6.3
Oklahoma	2.61	2.97	2.68	2.80	2.17	1.90	–12.1	4.7	3.6
Pennsylvania Total	3.36	3.23	2.98	2.80	2.67	1.97	4.1	5.9	6.1
Anthracite	1.92	2.08	1.93	1.85	1.33	1.13	–8.0	9.5	6.0
Bituminous	3.56	3.37	3.11	2.91	2.81	2.04	5.4	6.0	6.3
Tennessee	2.20	2.36	2.23	2.47	2.19	1.67	–6.8	.1	3.1
Texas	10.13	9.10	8.82	8.42	7.34	6.45	11.3	8.4	5.1
Utah	7.23	7.02	6.59	5.96	5.46	3.86	3.0	7.2	7.2
Virginia	2.72	2.50	2.51	2.41	2.37	2.08	8.4	3.5	3.0
Washington	3.97	4.04	4.11	4.00	4.51	3.06	–1.8	–3.1	2.9
West Virginia Total	3.91	3.74	3.69	3.27	3.27	2.47	4.4	4.5	5.3
Northern	4.05	3.72	3.63	2.98	3.17	2.61	8.9	6.3	5.0
Southern	3.86	3.75	3.72	3.39	3.32	2.38	2.8	3.8	5.5
Wyoming	32.06	30.06	26.05	24.46	21.50	17.91	6.6	10.5	6.7
Appalachian Total[1]	**3.48**	**3.32**	**3.20**	**3.00**	**2.95**	**2.30**	**4.8**	**4.3**	**4.7**
Interior Total[1]	**5.39**	**4.97**	**4.43**	**4.43**	**4.18**	**3.33**	**8.4**	**6.6**	**5.5**
Western Total[1]	**17.41**	**15.68**	**14.58**	**13.53**	**12.73**	**10.42**	**11.0**	**8.1**	**5.9**
East of Miss. River	**3.63**	**3.45**	**3.28**	**3.11**	**3.07**	**2.42**	**5.3**	**4.3**	**4.6**
West of Miss. River	**15.66**	**14.18**	**13.22**	**12.14**	**11.03**	**8.73**	**10.4**	**9.2**	**6.7**
U.S. Total	**5.69**	**5.38**	**4.98**	**4.70**	**4.36**	**3.30**	**5.8**	**6.9**	**6.3**

[1] For a definition of coal-producing regions, see Appendix C.

* Data round to zero.

Notes: Productivity is calculated by dividing total coal production by the total direct labor hours worked by all employees engaged in production, preparation, processing, development, maintenance, repair, shop or yard work at mining operations, but excludes office workers. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons, which are not required to provide these data.

Sources: Energy Information Administration, Form EIA-7A, ''Coal Production Report''; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, ''Quarterly Mine Employment and Coal Production Report.''

Table 49. Underground Coal Mining Productivity by State, 1987, 1992-1996
(Short Tons of Coal Produced per Miner per Hour)

Coal-Producing State and Region	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
Alabama	1.95	2.02	1.94	2.09	2.17	1.68	–3.6	–2.6	1.7
Arkansas	–	–	1.62	–	–	–	–	–	–
Colorado	6.67	5.86	5.81	5.21	4.52	2.75	13.7	10.2	10.3
Illinois	4.10	3.86	3.49	3.11	3.21	2.20	6.1	6.3	7.1
Indiana	3.09	3.22	2.82	2.49	2.80	2.05	–4.1	2.5	4.6
Iowa	–	–	–	–	–	1.22	–	–	–
Kentucky Total	3.53	3.25	2.89	2.93	2.91	2.40	8.6	5.0	4.4
Eastern	3.37	3.12	2.87	2.89	2.86	2.28	8.2	4.2	4.4
Western	4.05	3.70	2.96	3.10	3.05	2.74	9.4	7.3	4.4
Maryland	4.82	4.77	4.52	4.34	3.50	4.10	1.0	8.3	1.8
Montana	3.50	–	–	1.06	–	–	–	–	–
New Mexico	–	2.68	2.57	1.63	.40	1.74	–100.0	–	–
Ohio	4.19	3.81	3.51	3.27	3.01	1.80	9.9	8.6	9.8
Oklahoma	1.75	.74	1.70	1.03	1.04	–	138.0	13.9	–
Pennsylvania Total	3.74	3.49	3.18	2.91	2.81	1.81	7.1	7.4	8.4
Anthracite	.94	.86	.64	.74	.84	.84	8.7	2.9	1.2
Bituminous	3.81	3.56	3.25	2.98	2.84	1.83	6.9	7.6	8.5
Tennessee	1.76	2.02	1.90	2.34	1.81	1.58	–13.0	–.8	1.2
Utah	7.24	7.02	6.59	5.96	5.46	3.86	3.1	7.3	7.2
Virginia	2.44	2.25	2.27	2.19	2.20	2.01	8.6	2.7	2.2
West Virginia Total	3.50	3.40	3.38	2.92	2.99	2.31	2.9	4.0	4.7
Northern	3.98	3.66	3.61	2.84	3.12	2.54	8.7	6.2	5.1
Southern	3.29	3.27	3.25	2.96	2.92	2.17	.7	3.0	4.7
Wyoming	9.18	5.97	5.07	3.56	4.19	2.71	53.6	21.7	14.5
Appalachian Total[1]	**3.24**	**3.08**	**2.96**	**2.75**	**2.76**	**2.11**	**5.3**	**4.2**	**4.9**
Interior Total[1]	**4.01**	**3.76**	**3.26**	**3.06**	**3.14**	**2.38**	**6.7**	**6.3**	**6.0**
Western Total[1]	**7.09**	**6.35**	**5.98**	**5.23**	**4.88**	**3.40**	**11.8**	**9.8**	**8.5**
East of Miss. River	**3.36**	**3.19**	**3.02**	**2.81**	**2.82**	**2.16**	**5.3**	**4.5**	**5.1**
West of Miss. River	**7.03**	**6.32**	**5.93**	**5.18**	**4.85**	**3.39**	**11.2**	**9.7**	**8.4**
U.S. Total	**3.57**	**3.39**	**3.19**	**2.95**	**2.93**	**2.20**	**5.6**	**5.1**	**5.5**

[1] For a definition of coal-producing regions, see Appendix C.

Notes: Productivity is calculated by dividing total coal production by the total direct labor hours worked by all mine employees engaged in production, preparation, processing, development, maintenance, repair, shop or yard work at mining operations, but excludes office workers. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons, which are not required to provide these data.

Sources: Energy Information Administration, Form EIA-7A, ''Coal Production Report''; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, ''Quarterly Mine Employment and Coal Production Report.''

Table 50. Surface Coal Mining Productivity by State, 1987, 1992-1996
(Short Tons of Coal Produced per Miner per Hour)

Coal-Producing State and Region	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
Alabama	3.50	3.07	3.07	3.01	3.28	2.53	14.2	1.6	3.7
Alaska	6.81	7.46	6.94	7.40	6.93	6.84	–8.8	–.4	*
Arizona	6.30	6.34	6.71	6.21	6.29	6.76	–.6	*	–.8
Arkansas	–	1.47	1.46	1.39	1.68	1.80	–100.0	–	–
California	–	–	–	–	11.12	5.19	–	–	–
Colorado	8.76	6.79	7.06	7.07	6.52	6.44	29.0	7.7	3.5
Illinois	4.67	3.89	4.12	3.86	4.47	3.37	19.9	1.1	3.7
Indiana	5.34	5.04	4.56	4.82	4.28	3.79	6.0	5.7	3.9
Iowa	–	–	1.52	.72	1.14	1.43	–	–	–
Kansas	2.17	2.22	1.93	2.30	2.21	3.75	–2.4	–.5	–5.9
Kentucky Total	4.35	4.23	3.96	3.84	3.75	3.18	2.9	3.8	3.5
Eastern	4.23	4.13	3.97	3.74	3.57	3.12	2.6	4.3	3.5
Western	5.02	4.77	3.93	4.14	4.31	3.37	5.1	3.9	4.5
Louisiana	10.86	13.25	13.00	12.14	12.43	15.26	–18.0	–3.3	–3.7
Maryland	2.56	2.16	2.18	2.07	2.13	2.66	18.5	4.7	–.4
Missouri	3.49	2.55	3.59	1.84	3.10	2.28	36.9	3.0	4.8
Montana	22.34	21.06	21.92	19.59	20.16	18.70	6.1	2.6	2.0
New Mexico	8.45	7.19	7.18	7.26	7.11	6.23	17.4	4.4	3.4
North Dakota	17.20	16.80	18.84	17.66	18.12	13.46	2.4	–1.3	2.8
Ohio	3.69	3.46	3.34	3.58	3.06	2.67	6.9	4.8	3.7
Oklahoma	2.73	3.10	2.80	3.12	2.26	1.90	–12.0	4.8	4.1
Pennsylvania Total	2.72	2.79	2.67	2.63	2.45	2.23	–2.4	2.6	2.3
Anthracite	2.06	2.30	2.13	2.09	1.39	1.19	–10.3	10.3	6.3
Bituminous	2.97	2.95	2.84	2.78	2.74	2.43	.6	2.0	2.3
Tennessee	2.91	3.20	3.19	2.71	3.06	2.04	–9.1	–1.3	4.0
Texas	10.13	9.10	8.82	8.42	7.34	6.45	11.3	8.4	5.1
Virginia	3.79	3.73	3.73	3.55	3.50	2.52	1.7	2.0	4.6
Washington	3.97	4.04	4.11	4.00	4.51	3.06	–1.8	–3.1	2.9
West Virginia Total	5.18	4.74	4.62	4.35	4.27	3.29	9.4	5.0	5.2
Northern	4.72	4.31	3.78	3.70	3.52	3.16	9.5	7.6	4.5
Southern	5.24	4.79	4.75	4.49	4.43	3.33	9.4	4.3	5.2
Wyoming	32.84	31.02	27.37	26.03	22.76	17.98	5.9	9.6	6.9
Appalachian Total[1]	**4.05**	**3.88**	**3.72**	**3.55**	**3.40**	**2.76**	**4.3**	**4.5**	**4.3**
Interior Total[1]	**6.89**	**6.39**	**5.71**	**5.71**	**5.21**	**4.14**	**7.8**	**7.2**	**5.8**
Western Total[1]	**20.96**	**18.93**	**17.68**	**16.49**	**15.46**	**12.82**	**10.7**	**7.9**	**5.6**
East of Miss. River	**4.25**	**4.03**	**3.85**	**3.74**	**3.61**	**2.97**	**5.4**	**4.2**	**4.1**
West of Miss. River	**17.89**	**16.23**	**15.19**	**13.94**	**12.49**	**9.86**	**10.2**	**9.4**	**6.8**
U.S. Total	**9.05**	**8.48**	**7.67**	**7.23**	**6.59**	**4.98**	**6.7**	**8.3**	**6.9**

[1] For a definition of coal-producing regions, see Appendix C.

* Data round to zero.

Notes: Productivity is calculated by dividing total coal production by the total direct labor hours worked by all mine employees engaged in production, preparation, processing, development, maintenance, repair, shop or yard work at mining operations, but excludes office workers. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons, which are not required to provide these data.

Sources: Energy Information Administration, Form EIA-7A, ''Coal Production Report''; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, ''Quarterly Mine Employment and Coal Production Report.''

Table 51. Coal Mining Productivity by State and Mine Type, 1996

Coal-Producing State and Region	Number of Mining Operations[1]	Average Number of Miners Working Daily[2]	Average Production per Miner per Hour (short tons)[3]	Average Production per Miner per Shift (short tons)[4]
Alabama	**58**	**5,031**	**2.20**	**18.77**
Underground	16	4,145	1.95	16.39
Surface	42	886	3.50	30.02
Alaska	**1**	**102**	**6.81**	**61.29**
Surface	1	102	6.81	61.29
Arizona	**3**	**651**	**6.30**	**55.27**
Surface	3	651	6.30	55.27
Colorado	**18**	**1,332**	**7.32**	**66.07**
Underground	14	918	6.67	60.39
Surface	4	414	8.76	78.07
Illinois	**36**	**5,174**	**4.18**	**36.10**
Underground	24	4,256	4.10	34.91
Surface	12	918	4.67	41.37
Indiana	**40**	**2,579**	**4.98**	**47.11**
Underground	5	457	3.09	26.24
Surface	35	2,122	5.34	51.28
Kansas	**1**	**54**	**2.17**	**17.33**
Surface	1	54	2.17	17.33
Kentucky Total	**631**	**18,826**	**3.80**	**34.78**
Underground	365	12,876	3.53	31.04
Surface	266	5,950	4.35	41.87
Eastern	**560**	**15,130**	**3.68**	**33.73**
Underground	334	10,275	3.37	29.71
Surface	226	4,855	4.23	41.08
Western	**71**	**3,696**	**4.29**	**38.22**
Underground	31	2,601	4.05	34.95
Surface	40	1,095	5.02	45.79
Louisiana	**2**	**111**	**10.86**	**92.35**
Surface	2	111	10.86	92.35
Maryland	**15**	**469**	**4.13**	**35.39**
Underground	4	308	4.82	39.15
Surface	11	161	2.56	22.36
Missouri	**5**	**80**	**3.49**	**33.38**
Surface	5	80	3.49	33.38
Montana	**8**	**705**	**21.88**	**186.71**
Underground	1	18	3.50	35.04
Surface	7	687	22.34	185.93
New Mexico	**6**	**1,347**	**8.45**	**65.71**
Surface	6	1,347	8.45	65.71
North Dakota	**6**	**640**	**17.20**	**144.58**
Surface	6	640	17.20	144.58
Ohio	**104**	**3,232**	**3.95**	**36.99**
Underground	15	1,706	4.19	36.70
Surface	89	1,526	3.69	34.93
Oklahoma	**10**	**233**	**2.61**	**24.48**
Underground	1	26	1.75	16.20
Surface	9	207	2.73	25.63
Pennsylvania Total	**359**	**9,021**	**3.36**	**28.96**
Underground	91	5,599	3.74	31.24
Surface	268	3,422	2.72	23.68
Anthracite	**95**	**1,171**	**1.92**	**15.49**
Underground	19	147	.94	7.31
Surface	76	1,024	2.06	16.79
Bituminous	**264**	**7,850**	**3.56**	**31.31**
Underground	72	5,452	3.81	32.36
Surface	192	2,398	2.97	26.53
Tennessee	**33**	**756**	**2.20**	**20.50**
Underground	18	467	1.76	15.51
Surface	15	289	2.91	28.88
Texas	**13**	**1,550**	**10.13**	**103.71**
Surface	13	1,550	10.13	103.71
Utah	**15**	**1,804**	**7.23**	**63.84**
Underground	14	1,803	7.24	63.80
Surface	1	1	.00	.00
Virginia	**225**	**6,241**	**2.72**	**24.35**
Underground	163	5,098	2.44	21.57
Surface	62	1,143	3.79	35.42
Washington	**3**	**589**	**3.97**	**33.75**
Surface	3	589	3.97	33.75
West Virginia Total	**479**	**20,121**	**3.91**	**34.22**
Underground	323	16,003	3.50	29.87
Surface	156	4,118	5.18	47.77

See footnotes at end of table.

Table 51. Coal Mining Productivity by State and Mine Type, 1996 (Continued)

Coal-Producing State and Region	Number of Mining Operations[1]	Average Number of Miners Working Daily[2]	Average Production per Miner per Hour (short tons)[3]	Average Production per Miner per Shift (short tons)[4]
Northern	**102**	**5,279**	**4.05**	**34.70**
Underground	59	4,764	3.98	33.14
Surface	43	515	4.72	41.82
Southern	**377**	**14,842**	**3.86**	**33.98**
Underground	264	11,239	3.29	28.21
Surface	113	3,603	5.24	49.01
Wyoming	**27**	**2,814**	**32.06**	**332.43**
Underground	1	116	9.18	91.80
Surface	26	2,698	32.84	341.03
Appalachian Total[5]	**1,833**	**60,001**	**3.48**	**31.04**
Underground	964	43,601	3.24	28.12
Surface	869	16,400	4.05	37.25
Interior Total[5]	**178**	**13,477**	**5.39**	**49.08**
Underground	61	7,340	4.01	34.44
Surface	117	6,137	6.89	64.65
Western Total[5]	**87**	**9,984**	**17.41**	**160.26**
Underground	30	2,855	7.09	63.89
Surface	57	7,129	20.96	195.20
East of Miss. River	**1,980**	**71,450**	**3.63**	**32.41**
Underground	1,024	50,915	3.36	29.14
Surface	956	20,535	4.25	39.14
West of Miss. River	**118**	**12,012**	**15.66**	**146.13**
Underground	31	2,881	7.03	63.37
Surface	87	9,131	17.89	168.90
U.S. Total	**2,098**	**83,462**	**5.69**	**50.90**
Underground	1,055	53,796	3.57	30.99
Surface	1,043	29,666	9.05	83.46

1 Mining operations that consist of a mine and preparation plant, or a preparation plant only processing both underground and surface coal will be counted as two operations.

2 Includes all employees engaged in production, preparation, processing, development, maintenance, repair, shop or yard work at mining operations. Excludes office workers. Includes mining operations management and all technical and engineering employees.

3 Calculated by dividing total coal production by the total direct labor hours worked by all employees engaged in production, preparation, processing, development, maintenance, repair, shop or yard work at mining operations, but excludes office workers.

4 Calculated by multiplying average production per miner per hour by the average length of a miner shift.

5 For a definition of coal-producing regions, see Appendix C.

Notes: Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons of coal during the year, and preparation plants with less than 5,000 employee hours, which are not required to provide these data.

Sources: Energy Information Administration, Form EIA-7A, ''Coal Production Report''; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, ''Quarterly Mine Employment and Coal Production Report.''

Table 52. Weighted Average Number of Days Worked by State and Mine Type, 1987, 1992-1996

Coal-Producing State and Region	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
Alabama	**267**	**260**	**240**	**250**	**245**	**250**	**2.8**	**2.3**	**0.7**
Underground	268	259	246	249	236	237	3.4	3.2	1.4
Surface	265	262	231	253	258	267	1.1	.6	–.1
Alaska	**239**	**251**	**246**	**250**	**224**	**250**	**–4.8**	**1.6**	**–.5**
Surface	239	251	246	250	224	250	–4.8	1.6	–.5
Arizona	**281**	**211**	**217**	**211**	**225**	**196**	**32.9**	**5.7**	**4.1**
Surface	281	211	217	211	225	196	32.9	5.7	4.1
Arkansas	**–**	**240**	**176**	**240**	**228**	**206**	**–100.0**	**–**	**–**
Underground	–	–	85	–	–	–	–	–	–
Surface	–	240	240	240	228	206	–100.0	–	–
California	**–**	**–**	**–**	**–**	**116**	**30**	**–**	**–**	**–**
Surface	–	–	–	–	116	30	–	–	–
Colorado	**316**	**287**	**258**	**243**	**278**	**266**	**10.2**	**3.3**	**1.9**
Underground	325	287	288	282	268	249	13.2	5.0	3.0
Surface	301	286	204	188	290	277	5.1	.9	.9
Illinois	**276**	**260**	**253**	**220**	**253**	**246**	**6.1**	**2.2**	**1.3**
Underground	277	264	257	222	258	240	4.7	1.7	1.6
Surface	270	233	231	212	233	256	15.7	3.8	.6
Indiana	**276**	**266**	**274**	**254**	**250**	**242**	**3.9**	**2.4**	**1.5**
Underground	279	277	285	246	263	241	.6	1.4	1.6
Surface	276	264	272	255	249	242	4.5	2.5	1.4
Iowa	**–**	**–**	**150**	**260**	**259**	**250**	**–**	**–**	**–**
Underground	–	–	–	–	–	142	–	–	–
Surface	–	–	150	260	259	267	–	–	–
Kansas	**246**	**265**	**269**	**259**	**242**	**256**	**–7.2**	**.4**	**–.4**
Surface	246	265	269	259	242	256	–7.2	.4	–.4
Kentucky Total	**261**	**254**	**261**	**255**	**259**	**239**	**2.5**	**.1**	**.9**
Underground	257	252	257	247	254	236	2.1	.3	.9
Surface	266	258	268	267	267	243	3.3	*	1.0
Eastern	**258**	**250**	**257**	**253**	**250**	**231**	**3.3**	**.8**	**1.2**
Underground	249	246	249	244	246	223	.9	.2	1.2
Surface	271	254	268	266	255	240	6.6	1.5	1.3
Western	**270**	**269**	**276**	**263**	**286**	**262**	**.2**	**–1.4**	**.3**
Underground	279	267	283	256	278	270	4.8	.1	.4
Surface	247	276	266	270	296	251	–10.4	–4.4	–.2
Louisiana	**305**	**299**	**290**	**293**	**335**	**286**	**2.1**	**–2.3**	**.7**
Surface	305	299	290	293	335	286	2.1	–2.3	.7
Maryland	**261**	**237**	**237**	**249**	**311**	**239**	**10.1**	**–4.3**	**1.0**
Underground	271	241	236	249	339	240	12.5	–5.4	1.3
Surface	219	223	243	250	251	236	–1.5	–3.3	–.8
Missouri	**290**	**278**	**263**	**181**	**345**	**248**	**4.1**	**–4.3**	**1.8**
Surface	290	278	263	181	345	248	4.1	–4.3	1.8
Montana	**322**	**341**	**341**	**341**	**344**	**301**	**–5.4**	**–1.6**	**.8**
Underground	223	–	–	158	–	–	–	–	–
Surface	323	341	341	341	344	301	–5.2	–1.6	.8
New Mexico	**275**	**282**	**283**	**297**	**284**	**242**	**–2.7**	**–.8**	**1.4**
Underground	–	241	241	241	241	217	–100.0	–	–
Surface	275	283	284	299	284	243	–3.0	–.8	1.4
North Dakota	**314**	**289**	**303**	**307**	**287**	**248**	**8.5**	**2.2**	**2.6**
Surface	314	289	303	307	287	248	8.5	2.2	2.6
Ohio	**264**	**242**	**257**	**266**	**268**	**240**	**9.0**	**–.4**	**1.0**
Underground	271	239	265	266	268	238	13.4	.3	1.4
Surface	254	245	251	266	267	242	3.8	–1.2	.6
Oklahoma	**296**	**296**	**305**	**294**	**282**	**260**	**–.1**	**1.2**	**1.4**
Underground	308	309	310	300	260	–	–.3	4.3	–
Surface	295	296	305	293	283	260	–.4	1.0	1.4
Pennsylvania Total	**268**	**262**	**257**	**246**	**249**	**245**	**2.4**	**1.9**	**1.0**
Underground	272	266	256	238	245	236	2.2	2.6	1.6
Surface	259	253	259	258	257	255	2.4	.2	.2
Anthracite	**269**	**253**	**264**	**247**	**246**	**237**	**6.3**	**2.2**	**1.4**
Underground	266	256	264	263	227	226	4.2	4.1	1.8
Surface	269	252	264	246	247	239	6.4	2.1	1.3
Bituminous	**268**	**263**	**256**	**246**	**249**	**245**	**2.1**	**1.8**	**1.0**
Underground	272	266	256	238	245	236	2.2	2.6	1.6
Surface	257	253	258	261	258	256	1.3	–.1	*
Tennessee	**243**	**236**	**230**	**223**	**243**	**238**	**2.8**	*****	**.2**
Underground	254	245	233	254	241	241	3.7	1.4	.6
Surface	231	221	223	173	246	229	4.5	–1.5	.1

See footnotes at end of table.

Table 52. Weighted Average Number of Days Worked by State and Mine Type, 1987, 1992-1996 (Continued)

Coal-Producing State and Region	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
Texas	**349**	**345**	**346**	**350**	**348**	**268**	**1.3**	*****	**3.0**
Surface	349	345	346	350	348	268	1.3	*	3.0
Utah	**251**	**241**	**257**	**249**	**246**	**239**	**4.1**	**0.5**	**.5**
Underground	251	241	257	249	246	239	4.1	.5	.5
Virginia	**260**	**254**	**245**	**246**	**253**	**227**	**2.3**	**.7**	**1.5**
Underground	258	254	243	245	256	228	1.5	.2	1.4
Surface	266	255	251	247	241	220	4.2	2.5	2.1
Washington	**231**	**262**	**263**	**252**	**231**	**255**	**–11.7**	*****	**–1.1**
Surface	231	262	263	252	231	255	–11.7	*	–1.1
West Virginia Total	**272**	**255**	**252**	**227**	**246**	**235**	**6.9**	**2.6**	**1.6**
Underground	257	244	244	217	243	235	5.3	1.4	1.0
Surface	306	278	270	248	255	234	10.0	4.7	3.0
Northern	**263**	**242**	**246**	**194**	**235**	**243**	**8.7**	**2.9**	**.9**
Underground	261	237	242	175	235	246	9.9	2.6	.6
Surface	284	283	278	271	236	226	.6	4.7	2.6
Southern	**276**	**260**	**255**	**238**	**251**	**230**	**6.1**	**2.3**	**2.0**
Underground	255	248	246	235	248	228	2.8	.7	1.2
Surface	308	277	268	243	258	236	11.1	4.6	3.0
Wyoming	**351**	**352**	**341**	**345**	**339**	**316**	**–.2**	**.9**	**1.2**
Underground	248	245	243	258	238	208	1.2	1.0	2.0
Surface	352	353	342	346	341	316	–.1	.8	1.2
Appalachian Total[1]	**266**	**254**	**253**	**243**	**250**	**236**	**4.8**	**1.5**	**1.3**
Underground	259	249	248	235	247	232	3.9	1.2	1.2
Surface	279	261	262	257	256	243	6.7	2.2	1.5
Interior Total[1]	**299**	**291**	**290**	**280**	**289**	**255**	**2.8**	**.8**	**1.8**
Underground	278	266	267	236	265	252	4.5	1.2	1.1
Surface	312	308	304	302	304	257	1.4	.6	2.2
Western Total[1]	**330**	**326**	**319**	**320**	**316**	**289**	**1.3**	**1.1**	**1.5**
Underground	276	259	267	261	252	241	6.6	2.3	1.5
Surface	337	334	325	327	323	293	.8	1.1	1.5
East of Miss. River	**267**	**256**	**256**	**243**	**253**	**239**	**4.6**	**1.4**	**1.2**
Underground	262	253	252	235	250	236	3.9	1.2	1.2
Surface	277	261	262	256	257	245	5.8	1.8	1.4
West of Miss. River	**332**	**328**	**321**	**323**	**320**	**285**	**1.3**	**.9**	**1.7**
Underground	276	259	267	261	252	240	6.6	2.3	1.5
Surface	338	335	327	329	326	288	.8	.9	1.8
U.S. Total	**298**	**290**	**285**	**280**	**280**	**256**	**2.7**	**1.5**	**1.7**
Underground	264	253	253	238	251	236	4.2	1.3	1.2
Surface	319	313	305	304	301	270	2.0	1.4	1.9

[1] For a definition of coal-producing regions, see Appendix C.

* Data round to zero.

Notes: Weighted average number of days worked is calculated by multiplying average days worked for each mine times its production and then summing these products over all mines in the region/State and then dividing the sum by the total production for the region/State. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons, which are not required to provide these data.

Sources: Energy Information Administration, Form EIA-7A, ''Coal Production Report''; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, ''Quarterly Mine Employment and Coal Production Report.''

Table 53. Weighted Average Number of Days Worked by Mine Production Range, 1996

Coal-Producing State and Region	Mine Production Range (thousand short tons)						Total[1]
	1,000 and over	500 to 1,000	200 to 500	100 to 200	50 to 100	10 to 50	
Alabama	268	278	280	261	237	176	267
Alaska	239	–	–	–	–	–	239
Arizona	281	–	–	–	–	–	281
Colorado	326	225	271	218	–	–	316
Illinois	278	263	207	277	211	196	276
Indiana	292	256	253	175	64	119	276
Kansas	–	–	246	–	–	–	246
Kentucky Total	286	278	246	203	166	125	261
Eastern	290	276	249	204	172	127	258
Western	280	283	217	201	78	102	270
Louisiana	323	250	–	–	–	–	305
Maryland	273	–	213	291	208	258	261
Missouri	–	–	300	304	229	204	290
Montana	325	230	245	223	–	–	322
New Mexico	275	–	–	–	–	–	275
North Dakota	314	–	–	–	–	–	314
Ohio	271	283	269	225	231	172	264
Oklahoma	–	–	306	288	–	214	296
Pennsylvania Total	275	265	270	261	243	221	268
Anthracite	–	261	296	278	259	220	269
Bituminous	275	265	264	259	239	221	268
Tennessee	–	247	254	192	325	211	243
Texas	353	55	301	–	–	–	349
Utah	253	212	–	–	–	–	251
Virginia	246	306	273	234	219	173	260
Washington	235	–	–	141	–	–	231
West Virginia Total	289	276	238	209	192	141	272
Northern	268	264	251	248	237	167	263
Southern	301	278	236	198	178	131	276
Wyoming	352	280	189	88	–	239	351
Appalachian Total[2]	**282**	**278**	**253**	**223**	**204**	**170**	**266**
Interior Total[2]	**310**	**264**	**245**	**241**	**110**	**139**	**299**
Western Total[2]	**332**	**239**	**255**	**181**	**–**	**239**	**330**
East of Miss. River	**282**	**277**	**251**	**222**	**201**	**169**	**267**
West of Miss. River	**334**	**224**	**278**	**237**	**229**	**216**	**332**
U.S. Total	**314**	**274**	**252**	**223**	**201**	**169**	**298**

1 Includes stand alone preparation plants.
2 For a definition of coal-producing regions, see Appendix C.

Notes: Weighted average number of days worked is calculated by multiplying average days worked for each mine times its production and then summing these products over all mines in the region/State and then dividing the sum by the total production for the region/State. Excludes silt, culm refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons and preparation plants with less than 5,000 employee hours, which are not required to provide these data.

Sources: Energy Information Administration, Form EIA-7A, ''Coal Production Report''; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, ''Quarterly Mine Employment and Coal Production Report.''

Table 54. Underground Coal Mining Productivity by State and Mining Method, 1996
(Short Tons of Coal Produced per Miner per Hour)

Coal-Producing State and Region	Continuous[1]	Conventional[2]	Longwall[3]	Other[4]	Total
Alabama	1.83	1.24	1.96	–	1.95
Colorado	3.93	4.30	8.13	–	6.67
Illinois	3.77	2.89	4.62	–	4.10
Indiana	3.09	–	–	–	3.09
Kentucky Total	3.58	2.60	4.44	1.66	3.53
Eastern	3.44	2.55	4.98	1.66	3.37
Western	4.02	3.42	4.18	–	4.05
Maryland	4.35	–	4.88	–	4.82
Montana	3.50	–	–	–	3.50
Ohio	4.01	–	4.21	–	4.19
Oklahoma	1.75	–	–	–	1.75
Pennsylvania Total	2.50	2.39	4.74	.87	3.74
Anthracite	1.03	.85	–	.87	.94
Bituminous	2.54	2.59	4.74	–	3.81
Tennessee	1.76	2.50	–	–	1.76
Utah	4.58	2.82	7.91	–	7.24
Virginia	2.22	2.19	3.19	–	2.44
West Virginia Total	3.28	3.02	3.99	3.36	3.50
Northern	3.41	2.70	4.23	3.36	3.98
Southern	3.25	3.06	3.58	–	3.29
Wyoming	–	–	9.18	–	9.18
Appalachian Total[5]	**3.08**	**2.66**	**3.64**	**1.80**	**3.24**
Interior Total[5]	**3.80**	**3.27**	**4.48**	**–**	**4.01**
Western Total[5]	**4.14**	**3.00**	**8.05**	**–**	**7.09**
East of Miss. River	**3.23**	**2.68**	**3.75**	**1.80**	**3.36**
West of Miss. River	**4.00**	**3.00**	**8.06**	**–**	**7.03**
U.S. Total	**3.26**	**2.70**	**4.18**	**2.30**	**3.57**

1 Mines that produce greater than 50 percent of coal by continuous mining method.
2 Mines that produce greater than 50 percent of coal by conventional mining method.
3 Mines that have any production from longwall mining method. A typical longwall mining operation uses 80 percent longwall mining and 20 percent continuous mining.
4 Mines that produce coal using shortwall, scoop loading, hand loading, or other mining methods or a 50/50 percent continuous/conventional split in mining method.
5 For a definition of coal-producing regions, see Appendix C.

Notes: For each State, stand alone preparation plant hours are distributed across the mining methods by the proportion of production for all stand alone mines. Productivity is calculated by dividing total coal production by the total direct labor hours worked by all employees engaged in production, preparation, processing, development, maintenance, repair, shop or yard work at mining operations, but excludes office workers. Excludes mines producing less than 10,000 short tons of coal during the year, and preparation plants with less than 5,000 employee hours, which are not required to provide these data.

Sources: Energy Information Administration, Form EIA-7A, ''Coal Production Report''; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, ''Quarterly Mine Employment and Coal Production Report.''

Table 55. U.S. Coal Mining Productivity by Coalbed Thickness and Mining Method, 1996
(Short Tons of Coal Produced per Miner per Hour)

Coalbed Thickness (inches)	Underground				Surface	Total
	Continuous[1]	Conventional[2]	Longwall[3]	Other[4]		
< 7	–	–	–	–	3.85	3.85
7-12	–	–	–	–	4.69	4.69
13-18	–	–	–	–	5.06	5.06
19-24	–	1.53	–	1.82	5.03	4.97
25-30	2.55	2.35	–	–	4.48	4.19
31-36	3.11	3.16	–	1.69	4.99	4.23
37-42	3.32	2.59	–	–	5.13	4.24
43-48	3.31	3.01	2.99	–	5.78	4.49
49-54	4.02	3.20	2.77	–	6.23	4.71
55-60	4.14	3.60	3.53	–	5.71	4.63
61-66	3.43	2.95	5.73	–	6.00	5.11
67-72	3.96	2.82	3.11	4.08	5.98	4.48
73-78	4.23	–	3.89	–	7.07	4.76
79-84	5.09	4.44	4.38	–	6.85	5.37
85-90	7.77	–	6.23	–	6.22	6.27
91-96	4.83	2.41	4.19	1.22	5.25	4.58
97-102	3.64	–	5.76	–	7.14	6.32
103-108	4.36	–	6.80	–	12.10	8.19
109-114	–	–	7.61	–	4.82	6.10
115-120	6.29	–	6.63	–	5.59	6.10
> 120	4.46	2.15	9.77	–	19.16	17.89
U.S. Total[5]	**3.26**	**2.70**	**4.18**	**2.30**	**9.05**	**5.69**

1 Mines that produce greater than 50 percent of coal by continuous mining method.
2 Mines that produce greater than 50 percent of coal by conventional mining method.
3 Mines that have any production from longwall mining method. A typical longwall mining operation uses 80 percent longwall mining and 20 percent continuous mining.
4 Mines that produce coal using shortwall, scoop loading, hand loading, or other mining methods or a 50/50 percent continuous/conventional split in mining method.
5 Includes stand alone preparation plants.

Notes: Productivity is calculated by dividing total coal production by the total direct labor hours worked by all employees engaged in production, preparation, processing, development, maintenance, repair, shop or yard work at mining operations, but excludes office workers. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons and preparation plants with less than 5,000 employee hours, which are not required to provide these data.

Sources: Energy Information Administration, Form EIA-7A, ''Coal Production Report''; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, ''Quarterly Mine Employment and Coal Production Report.''

Table 56. Coal Mining Productivity by State, Mine Type, and Mine Production Range, 1996

(Short Tons of Coal Produced per Miner per Hour)

Coal-Producing State and Region	Mine Production Range (thousand short tons)						Total[1]
	1,000 and over	500 to 1,000	200 to 500	100 to 200	50 to 100	10 to 50	
Alabama	**2.20**	**2.01**	**2.72**	**3.40**	**3.41**	**2.94**	**2.20**
Underground	2.13	1.31	–	–	1.30	–	1.95
Surface	3.72	4.35	2.72	3.40	3.95	2.94	3.50
Alaska	**6.81**	–	–	–	–	–	**6.81**
Surface	6.81	–	–	–	–	–	6.81
Arizona	**6.56**	–	–	–	–	–	**6.30**
Surface	6.56	–	–	–	–	–	6.30
Colorado	**8.88**	**2.84**	**4.60**	**2.61**	–	–	**7.32**
Underground	8.99	2.84	3.84	2.61	–	–	6.67
Surface	8.73	–	9.61	–	–	–	8.76
Illinois	**4.43**	**3.51**	**3.98**	**2.89**	**7.18**	**1.11**	**4.18**
Underground	4.31	3.19	3.76	2.89	–	.27	4.10
Surface	5.67	3.63	4.18	–	7.18	2.60	4.67
Indiana	**5.32**	**4.67**	**4.82**	**3.42**	**4.85**	**5.14**	**4.98**
Underground	3.52	2.90	–	–	–	–	3.09
Surface	5.56	5.53	4.82	3.42	4.85	5.14	5.34
Kansas	–	–	**2.17**	–	–	–	**2.17**
Surface	–	–	2.17	–	–	–	2.17
Kentucky Total	**4.97**	**4.67**	**4.14**	**3.13**	**2.73**	**2.58**	**3.80**
Underground	4.75	4.40	3.87	2.90	2.39	2.24	3.53
Surface	5.61	4.97	4.59	3.78	3.77	3.14	4.35
Eastern	**5.20**	**4.76**	**4.00**	**3.06**	**2.66**	**2.55**	**3.68**
Underground	5.04	4.47	3.81	2.90	2.39	2.28	3.37
Surface	5.45	5.12	4.35	3.66	3.53	3.03	4.23
Western	**4.62**	**4.39**	**6.12**	**4.26**	**4.43**	**3.08**	**4.29**
Underground	4.49	4.17	5.25	–	2.32	.92	4.05
Surface	8.05	4.60	6.71	4.26	5.84	3.99	5.02
Louisiana	**10.72**	**11.35**	–	–	–	–	**10.86**
Surface	10.72	11.35	–	–	–	–	10.86
Maryland	**5.48**	–	**4.34**	**3.22**	**2.98**	**1.56**	**4.13**
Underground	5.48	–	6.34	–	–	1.89	4.82
Surface	–	–	3.04	3.22	2.98	1.47	2.56
Missouri	–	–	**3.40**	**7.17**	**1.51**	**1.42**	**3.49**
Surface	–	–	3.40	7.17	1.51	1.42	3.49
Montana	**23.01**	**8.74**	**14.37**	**3.50**	–	–	**21.88**
Underground	–	–	–	3.50	–	–	3.50
Surface	23.01	8.74	14.37	–	–	–	22.34
New Mexico	**8.45**	–	–	–	–	–	**8.45**
Surface	8.45	–	–	–	–	–	8.45
North Dakota	**17.26**	–	–	–	–	–	**17.20**
Surface	17.26	–	–	–	–	–	17.20
Ohio	**4.26**	**4.41**	**4.41**	**3.94**	**2.86**	**2.66**	**3.95**
Underground	4.30	–	3.65	3.34	–	–	4.19
Surface	4.06	4.41	4.50	4.11	2.86	2.66	3.69
Oklahoma	–	–	**2.75**	**2.46**	–	**2.60**	**2.61**
Underground	–	–	–	1.75	–	–	1.75
Surface	–	–	2.75	2.70	–	2.60	2.73
Pennsylvania Total	**4.57**	**2.48**	**3.30**	**3.82**	**2.55**	**2.48**	**3.36**
Underground	4.57	2.18	3.37	2.53	2.41	1.26	3.74
Surface	4.59	3.03	3.25	4.10	2.57	2.76	2.72
Anthracite	–	**9.14**	**3.58**	**3.49**	**1.74**	**1.99**	**1.92**
Underground	–	–	–	1.59	–	1.21	.94
Surface	–	9.14	3.58	5.66	1.74	2.24	2.06
Bituminous	**4.57**	**2.31**	**3.24**	**3.86**	**2.90**	**2.77**	**3.56**
Underground	4.57	2.18	3.37	3.00	2.41	1.32	3.81
Surface	4.59	2.56	3.12	4.00	3.02	3.02	2.97
Tennessee	–	**4.15**	**2.64**	**2.48**	**1.58**	**1.53**	**2.20**
Underground	–	–	2.25	2.25	1.58	1.27	1.76
Surface	–	4.15	3.32	3.41	–	1.83	2.91
Texas	**10.42**	**11.11**	**3.23**	–	–	–	**10.13**
Surface	10.42	11.11	3.23	–	–	–	10.13
Utah	**7.76**	**4.03**	–	–	–	–	**7.23**
Underground	7.76	4.03	–	–	–	–	7.24
Surface	–	–	–	–	–	–	.00
Virginia	**3.55**	**4.46**	**3.09**	**2.68**	**2.18**	**2.04**	**2.72**
Underground	3.55	3.71	2.76	2.59	2.07	1.90	2.44
Surface	–	4.99	4.06	3.04	3.36	3.44	3.79

See footnotes at end of table.

Table 56. Coal Mining Productivity by State, Mine Type, and Mine Production Range, 1996 (Continued)

(Short Tons of Coal Produced per Miner per Hour)

Coal-Producing State and Region	Mine Production Range (thousand short tons)						Total[1]
	1,000 and over	500 to 1,000	200 to 500	100 to 200	50 to 100	10 to 50	
Washington	**4.21**	–	–	**1.63**	–	–	**3.97**
Surface	4.21	–	–	1.63	–	–	3.97
West Virginia Total	**4.82**	**5.21**	**4.17**	**3.19**	**2.55**	**2.34**	**3.91**
Underground	4.17	4.86	4.04	3.19	2.64	2.48	3.50
Surface	6.88	6.12	4.57	3.16	2.22	2.10	5.18
Northern	**4.47**	**5.51**	**3.48**	**3.69**	**2.88**	**2.69**	**4.05**
Underground	4.28	5.12	3.60	4.06	2.29	2.39	3.98
Surface	9.70	7.28	3.10	3.16	4.15	3.11	4.72
Southern	**5.04**	**5.17**	**4.31**	**3.07**	**2.47**	**2.23**	**3.86**
Underground	4.08	4.83	4.13	3.04	2.71	2.50	3.29
Surface	6.71	6.03	4.85	3.16	1.43	1.72	5.24
Wyoming	**33.26**	**5.34**	**10.52**	**9.52**	–	**.50**	**32.06**
Underground	9.18	–	–	–	–	–	9.18
Surface	34.13	5.34	10.52	9.52	–	.50	32.84
Appalachian Total[2]	**4.32**	**4.33**	**3.73**	**3.18**	**2.56**	**2.39**	**3.48**
Underground	3.96	3.90	3.58	2.86	2.35	2.10	3.24
Surface	6.06	4.98	3.99	3.71	2.91	2.65	4.05
Interior Total[2]	**6.01**	**4.53**	**4.37**	**3.44**	**3.71**	**2.27**	**5.39**
Underground	4.34	3.72	4.68	2.17	2.32	.47	4.01
Surface	8.37	5.06	4.32	3.71	4.04	3.28	6.89
Western Total[2]	**18.63**	**4.24**	**5.59**	**2.82**	–	**.50**	**17.41**
Underground	8.19	3.43	3.84	2.77	–	–	7.09
Surface	21.56	5.98	10.94	2.92	–	.50	20.96
East of Miss. River	**4.41**	**4.34**	**3.82**	**3.20**	**2.60**	**2.38**	**3.63**
Underground	4.05	3.87	3.60	2.86	2.35	2.05	3.36
Surface	5.94	4.93	4.15	3.73	3.00	2.69	4.25
West of Miss. River	**17.08**	**4.90**	**3.72**	**2.93**	**1.51**	**1.26**	**15.66**
Underground	8.19	3.43	3.84	2.51	–	–	7.03
Surface	19.00	7.28	3.68	3.26	1.51	1.26	17.89
U.S. Total	**8.13**	**4.36**	**3.82**	**3.18**	**2.59**	**2.37**	**5.69**
Underground	4.40	3.85	3.61	2.85	2.35	2.05	3.57
Surface	14.34	5.04	4.11	3.69	2.97	2.65	9.05

1 Includes stand alone preparation plants.
2 For a definition of coal-producing regions, see Appendix C.

Notes: Productivity is calculated by dividing total coal production by the total direct labor hours worked by all employees engaged in production, preparation, processing, development, maintenance, repair, shop or yard work at mining operations, but excludes office workers. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons and preparation plants with less than 5,000 employee hours, which are not required to provide these data.

Sources: Energy Information Administration, Form EIA-7A, ''Coal Production Report''; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, ''Quarterly Mine Employment and Coal Production Report.''

Table 57. Coal Mining Productivity by State, Mine Type, and Union Type,1996
(Short Tons of Coal Produced per Miner per Hour)

Coal-Producing State and Region	UMWA	Other Unions	Union Total	Nonunion	Total
Alabama	**2.03**	–	**2.03**	**2.71**	**2.20**
Underground	1.89	–	1.89	2.21	1.95
Surface	3.55	–	3.55	3.48	3.50
Alaska	–	**6.81**	**6.81**	–	**6.81**
Surface	–	6.81	6.81	–	6.81
Arizona	**6.30**	–	**6.30**	–	**6.30**
Surface	6.30	–	6.30	–	6.30
Colorado	**4.78**	**7.92**	**5.78**	**7.79**	**7.32**
Underground	2.77	–	2.77	7.39	6.67
Surface	8.90	7.92	8.32	9.05	8.76
Illinois	**4.05**	**4.33**	**4.08**	**4.56**	**4.18**
Underground	3.91	4.28	3.95	4.57	4.10
Surface	4.71	4.55	4.70	4.36	4.67
Indiana	**5.18**	–	**5.18**	**4.79**	**4.98**
Underground	2.80	–	2.80	3.23	3.09
Surface	5.48	–	5.48	5.20	5.34
Kansas	**2.17**	–	**2.17**	–	**2.17**
Surface	2.17	–	2.17	–	2.17
Kentucky Total	**4.25**	**3.74**	**4.23**	**3.74**	**3.80**
Underground	4.00	2.67	3.97	3.45	3.53
Surface	5.44	4.58	5.33	4.28	4.35
Eastern	**4.66**	**3.74**	**4.59**	**3.60**	**3.68**
Underground	4.28	2.67	4.20	3.30	3.37
Surface	5.79	4.58	5.58	4.15	4.23
Western	**3.89**	–	**3.89**	**4.47**	**4.29**
Underground	3.80	–	3.80	4.20	4.05
Surface	4.68	–	4.68	5.07	5.02
Louisiana	–	–	–	**10.86**	**10.86**
Surface	–	–	–	10.86	10.86
Maryland	–	–	–	**4.13**	**4.13**
Underground	–	–	–	4.82	4.82
Surface	–	–	–	2.56	2.56
Missouri	–	–	–	**3.49**	**3.49**
Surface	–	–	–	3.49	3.49
Montana	**19.79**	**20.38**	**20.04**	**30.70**	**21.88**
Underground	–	–	–	3.50	3.50
Surface	19.79	20.38	20.04	35.16	22.34
New Mexico	**8.91**	**7.68**	**8.05**	**11.00**	**8.45**
Surface	8.91	7.68	8.05	11.00	8.45
North Dakota	**13.42**	**17.14**	**15.55**	**17.81**	**17.20**
Surface	13.42	17.14	15.55	17.81	17.20
Ohio	**4.14**	–	**4.14**	**3.75**	**3.95**
Underground	4.25	–	4.25	3.73	4.19
Surface	3.32	–	3.32	3.76	3.69
Oklahoma	–	–	–	**2.61**	**2.61**
Underground	–	–	–	1.75	1.75
Surface	–	–	–	2.73	2.73
Pennsylvania Total	**2.76**	**1.38**	**2.76**	**3.90**	**3.36**
Underground	2.98	–	2.97	5.11	3.74
Surface	1.45	2.06	1.47	3.00	2.72
Anthracite	**.98**	**2.07**	**1.01**	**2.62**	**1.92**
Underground	–	–	–	.95	.94
Surface	.98	2.57	1.02	3.09	2.06
Bituminous	**2.98**	–	**2.97**	**4.08**	**3.56**
Underground	2.98	–	2.97	5.40	3.81
Surface	2.98	–	2.92	2.98	2.97
Tennessee	–	–	–	**2.20**	**2.20**
Underground	–	–	–	1.76	1.76
Surface	–	–	–	2.91	2.91
Texas	–	**9.71**	**9.71**	**11.03**	**10.13**
Surface	–	9.71	9.71	11.03	10.13
Utah	**7.05**	–	**7.05**	**7.32**	**7.23**
Underground	7.05	–	7.05	7.33	7.24
Surface	–	–	–	–	–
Virginia	**2.90**	**4.76**	**3.00**	**2.64**	**2.72**
Underground	2.97	–	2.97	2.29	2.44
Surface	1.93	4.76	3.29	3.86	3.79
Washington	–	**4.21**	**4.21**	**1.63**	**3.97**
Surface	–	4.21	4.21	1.63	3.97
West Virginia Total	**3.54**	–	**3.52**	**4.44**	**3.91**
Underground	3.13	–	3.13	4.13	3.50
Surface	5.43	–	5.33	5.07	5.18

See footnotes at end of table.

Table 57. Coal Mining Productivity by State, Mine Type, and Union Type,1996 (Continued)

(Short Tons of Coal Produced per Miner per Hour)

Coal-Producing State and Region	UMWA	Other Unions	Union Total	Nonunion	Total
Northern	**4.20**	–	**4.20**	**3.77**	**4.05**
Underground	4.20	–	4.20	3.33	3.98
Surface	–	–	–	4.74	4.72
Southern	**3.26**	–	**3.24**	**4.61**	**3.86**
Underground	2.53	–	2.52	4.34	3.29
Surface	5.44	–	5.34	5.15	5.24
Wyoming	**5.98**	**10.17**	**8.38**	**37.97**	**32.06**
Underground	–	–	–	9.18	9.18
Surface	5.98	10.17	8.38	39.22	32.84
Appalachian Total[1]	**3.21**	**3.15**	**3.21**	**3.66**	**3.48**
Underground	3.01	2.21	3.00	3.47	3.24
Surface	4.40	3.42	4.35	3.97	4.05
Interior Total[1]	**4.25**	**8.76**	**5.38**	**5.39**	**5.39**
Underground	3.85	4.28	3.87	4.20	4.01
Surface	5.11	9.51	7.19	6.55	6.89
Western Total[1]	**8.69**	**9.44**	**9.03**	**24.01**	**17.41**
Underground	6.12	–	6.12	7.43	7.09
Surface	9.68	9.44	9.55	32.54	20.96
East of Miss. River	**3.43**	**3.88**	**3.44**	**3.78**	**3.63**
Underground	3.15	3.97	3.16	3.56	3.36
Surface	4.67	3.73	4.63	4.12	4.25
West of Miss. River	**8.57**	**9.55**	**9.15**	**21.40**	**15.66**
Underground	6.12	–	6.12	7.34	7.03
Surface	9.50	9.55	9.54	27.05	17.89
U.S. Total	**3.87**	**8.83**	**4.49**	**6.61**	**5.69**
Underground	3.24	3.97	3.25	3.88	3.57
Surface	5.99	9.22	7.17	10.09	9.05

[1] For a definition of coal-producing regions, see Appendix C.

Notes: Productivity is calculated by dividing total coal production by the total direct labor hours worked by all employees engaged in production, preparation, processing, development, maintenance, repair, shop or yard work at mining operations, but excludes office workers. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons and preparation plants with less than 5,000 employee hours, which are not required to provide these data. See Glossary for listing of other unions.

Sources: Energy Information Administration, Form EIA-7A, ''Coal Production Report''; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, ''Quarterly Mine Employment and Coal Production Report.''

Distribution

The amount of U.S. coal distributed during 1996 reached a record 1,059.9 million short tons, 2.9 percent more than the 1,030.3 million short tons distributed during 1995. Compared with 1995, distribution of U.S. coal to domestic consumers rose 2.9 percent to 968 million short tons, while foreign distribution rose 2.5 to 92.2 million short tons.

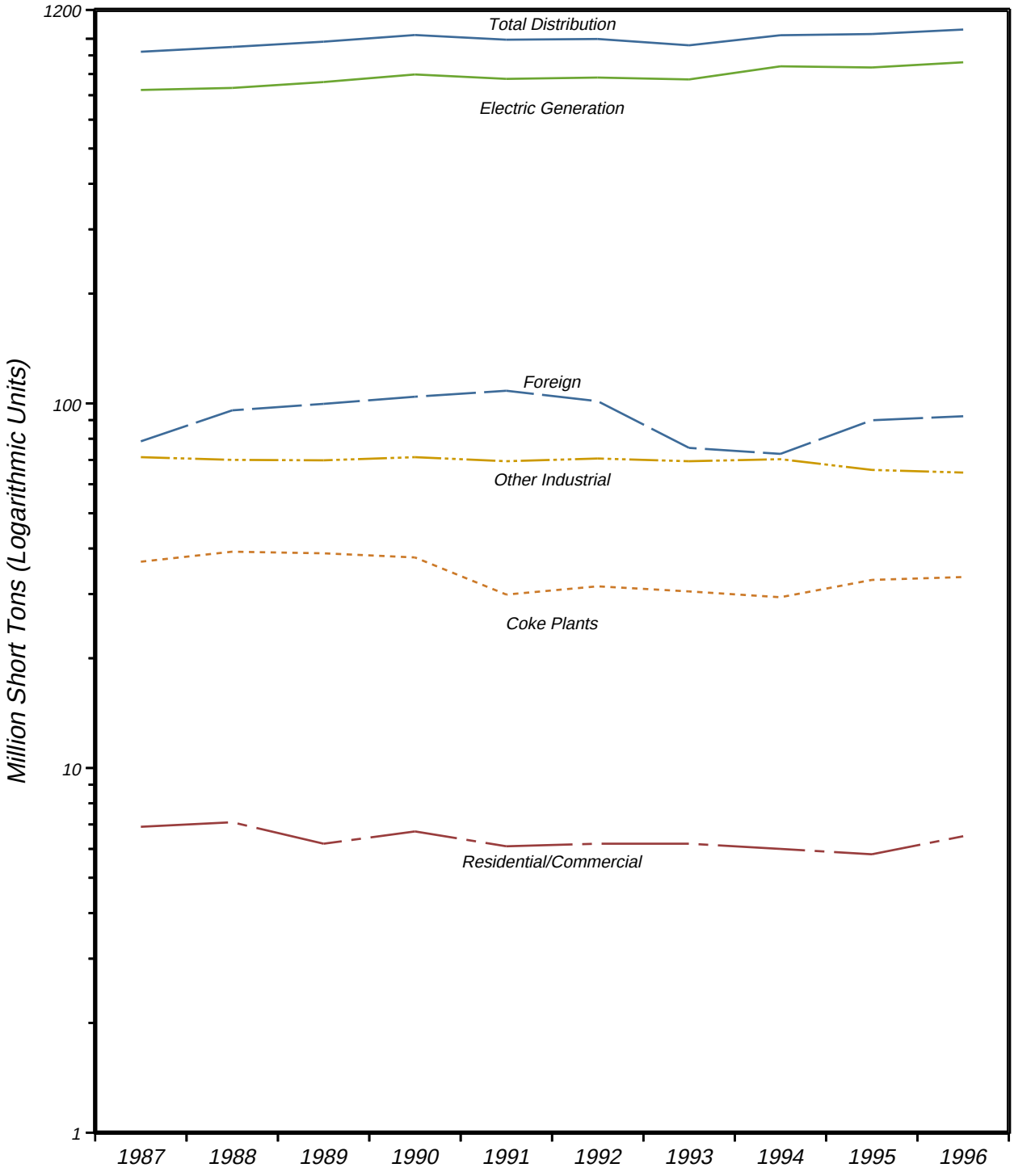
Texas was the leading destination for U.S. coal distributed domestically during 1996 with shipments totaling 95.4 million short tons, representing 9.9 percent of the total domestic distributions. Fifty-two percent of the U.S. coal distributed in Texas during 1996 was indigenous, with virtually all of the remainder arriving from Wyoming and Colorado.

Other major destination States included Indiana, Ohio, and Pennsylvania, which collectively received 183.6 million short tons, or 19 percent of total 1996 domestic distributions. As with distributions in Texas, a substantial portion of the coal distributed in these three States was indigenous.

West Virginia was the leading source of U.S. coal distributed abroad during 1996, with foreign shipments totaling 42 million short tons, representing 45.6 percent of total foreign distributions. Other leading sources of U.S. coal distributed abroad during 1996 were Virginia, Pennsylvania, and Kentucky. Collectively, foreign distributions of coal mined in these three States totaled 31.8 million short tons, accounting for 34.5 percent of the U.S. coal shipped abroad during 1996.

Rail continued to be the primary method of transporting the U.S. coal distributed domestically during 1996, accounting for 611.7 million short tons or 63 percent of domestic coal shipments. Coal transported by water (including shipment by river, shipments on the Great Lakes, and shipments through tidewater ports) accounted for 247.9 million short tons or 23.4 percent of the U.S. coal distributed. Distributions of coal by truck totaled 99.9 million short tons while distributions by tramway and conveyor totaled 98.9 million short tons.

Figure 8. Coal Distribution, 1987-1996



Source: Energy Information Administration, Form EIA-6, "Coal Distribution Report."

Table 58. Distribution of U.S. Coal by State of Origin, 1992-1996
(Thousand Short Tons)

Coal-Producing State and Region	1996	1995	1994	1993	1992	Percent Change 1995-1996	Average Annual Percent Change 1992-1996
Alabama	24,636	25,159	23,750	25,556	25,491	–2.1	–0.8
Alaska	1,473	1,670	1,505	1,598	1,531	–11.8	–1.0
Arizona	10,970	11,783	12,011	12,138	12,418	–6.9	–3.0
Arkansas	7	11	28	25	32	–39.2	–32.0
California	–	–	–	–	142	–	–
Colorado	25,405	25,635	24,810	21,465	18,864	–.9	7.7
Illinois	47,076	47,869	51,973	42,000	58,913	–1.7	–5.4
Indiana	29,674	25,695	30,684	29,664	31,393	15.5	–1.4
Iowa	–	–	46	175	287	–	–
Kansas	245	291	282	345	354	–15.9	–8.8
Kentucky Total	152,891	151,466	159,130	160,395	161,860	.9	–1.4
Eastern	117,404	117,831	124,257	125,041	120,186	–.4	–.6
Western	35,487	33,635	34,873	35,354	41,674	5.5	–3.9
Louisiana	3,222	3,426	3,463	3,103	3,208	–6.0	.1
Maryland	4,199	3,570	3,460	3,572	3,480	17.6	4.8
Missouri	846	464	679	638	2,795	82.3	–25.8
Montana	38,288	39,620	41,916	35,916	38,866	–3.4	–.4
New Mexico	25,043	26,154	28,570	27,942	24,827	–4.3	.2
North Dakota	30,025	30,118	32,056	32,372	31,702	–.3	–1.3
Ohio	28,881	24,345	28,749	28,315	29,550	18.6	–.6
Oklahoma	2,216	2,158	1,925	2,309	1,954	2.7	3.2
Pennsylvania Total	69,128	62,240	61,508	58,990	67,649	11.1	.5
Anthracite	4,836	3,994	4,700	3,331	3,554	21.1	8.0
Bituminous	64,291	58,246	56,808	55,659	64,095	10.4	.1
Tennessee	3,052	2,627	2,547	2,577	2,837	16.2	1.8
Texas	49,655	52,832	52,256	54,224	54,447	–6.0	–2.3
Utah	23,868	25,521	23,225	22,243	21,052	–6.5	3.2
Virginia	36,208	34,024	38,548	41,639	45,728	6.4	–5.7
Washington	4,569	4,863	4,877	4,714	5,283	–6.1	–3.6
West Virginia Total	169,200	165,187	158,985	135,818	163,723	2.4	.8
Northern	46,436	42,615	45,535	37,100	50,646	9.0	–2.1
Southern	122,764	122,572	113,449	98,718	113,077	.2	2.1
Wyoming	279,117	263,601	235,540	211,713	190,260	5.9	10.0
Appalachian Total[1]	**452,707**	**434,984**	**441,805**	**421,508**	**458,645**	**4.1**	**–.3**
Interior Total[1]	**168,427**	**166,380**	**176,208**	**167,836**	**195,057**	**1.2**	**–3.6**
Western Total[1]	**438,758**	**428,966**	**404,510**	**370,102**	**344,945**	**2.3**	**6.2**
East of Miss. River	**564,944**	**542,182**	**559,334**	**528,525**	**590,624**	**4.2**	**–1.1**
West of Miss. River	**494,948**	**488,148**	**463,190**	**430,920**	**408,023**	**1.4**	**4.9**
U.S. Total	**1,059,892**	**1,030,330**	**1,022,523**	**959,445**	**998,647**	**2.9**	**1.5**

[1] For a definition of coal-producing regions, see Appendix C.

Notes: See Technical Note 1 for the difference between production and distribution. Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration, Form EIA-6, ''Coal Distribution Report.''

Table 59. Domestic and Foreign Distribution of U.S. Coal by State of Origin, 1992-1996
(Thousand Short Tons)

Coal-Producing State and Region	1996	1995	1994	1993	1992	Percent Change 1995-1996	Average Annual Percent Change 1992-1996
				Domestic			
Alabama	19,772	19,127	19,220	19,668	19,560	3.4	0.3
Alaska	697	815	789	855	797	–14.5	–3.3
Arizona	10,970	11,783	12,011	12,138	12,418	–6.9	–3.0
Arkansas	7	11	28	25	29	–39.2	–30.4
California	–	–	–	–	142	–	–
Colorado	23,990	24,734	24,059	20,338	18,195	–3.0	7.2
Illinois	45,190	45,170	51,737	41,330	57,670	*	–5.9
Indiana	29,664	25,625	30,477	29,475	31,216	15.8	–1.3
Iowa	–	–	46	175	287	–	–
Kansas	245	291	282	345	354	–15.9	–8.8
Kentucky Total	143,748	141,771	151,963	150,874	147,825	1.4	–.7
Eastern	108,927	108,781	117,234	115,723	106,372	.1	.6
Western	34,821	32,990	34,729	35,151	41,453	5.5	–4.3
Louisiana	3,222	3,426	3,463	3,103	3,208	–6.0	.1
Maryland	3,555	3,382	3,277	3,278	3,246	5.1	2.3
Missouri	846	464	679	638	2,795	82.3	–25.8
Montana	37,770	39,362	41,672	35,795	38,804	–4.0	–.7
New Mexico	25,035	25,640	28,540	27,942	24,823	–2.4	.2
North Dakota	30,025	30,118	32,056	32,372	31,702	–.3	–1.3
Ohio	28,609	24,318	28,688	28,315	29,549	17.6	–.8
Oklahoma	2,136	2,158	1,925	2,297	1,940	–1.0	2.4
Pennsylvania Total	59,882	53,961	55,207	53,482	61,208	11.0	–.5
Anthracite	4,330	3,497	4,346	3,015	3,230	23.8	7.6
Bituminous	55,552	50,464	50,861	50,467	57,979	10.1	–1.1
Tennessee	3,052	2,627	2,547	2,577	2,835	16.2	1.9
Texas	49,538	52,812	52,256	54,224	54,447	–6.2	–2.3
Utah	18,563	21,591	20,527	19,283	18,792	–14.0	–.3
Virginia	22,776	24,283	26,866	27,388	28,504	–6.2	–5.4
Washington	4,526	4,756	4,731	4,621	5,020	–4.8	–2.6
West Virginia Total	127,156	120,866	122,779	102,659	112,917	5.2	3.0
Northern	40,398	36,073	39,985	34,573	44,093	12.0	–2.2
Southern	86,757	84,793	82,794	68,086	68,824	2.3	6.0
Wyoming	276,723	261,333	234,016	210,739	188,983	5.9	10.0
Appalachian Total[1]	**373,728**	**357,344**	**375,819**	**353,089**	**364,191**	**4.6**	**.6**
Interior Total[1]	**165,668**	**162,947**	**175,622**	**166,763**	**193,400**	**1.7**	**–3.8**
Western Total[1]	**428,297**	**420,132**	**398,402**	**364,083**	**339,676**	**1.9**	**6.0**
East of Miss. River	**483,402**	**461,128**	**492,762**	**459,045**	**494,530**	**4.8**	**–.6**
West of Miss. River	**484,291**	**479,294**	**457,081**	**424,890**	**402,737**	**1.0**	**4.7**
U.S. Total	**967,693**	**940,423**	**949,843**	**883,934**	**897,267**	**2.9**	**1.9**
				Foreign			
Alabama	4,864	6,032	4,529	5,888	5,931	–19.4	–4.8
Alaska	776	855	716	743	734	–9.2	1.4
Arkansas	–	–	–	–	3	–	–
Colorado	1,415	900	752	1,128	669	57.2	20.6
Illinois	1,886	2,699	236	670	1,242	–30.1	11.0
Indiana	11	70	206	188	177	–84.7	–50.4
Kentucky Total	9,143	9,695	7,167	9,521	14,036	–5.7	–10.2
Eastern	8,477	9,051	7,023	9,318	13,815	–6.3	–11.5
Western	666	645	144	204	221	3.3	31.8
Maryland	645	188	184	295	234	242.0	28.8
Montana	518	259	243	121	62	100.2	70.2
New Mexico	9	514	30	–	5	–98.3	16.5
Ohio	271	28	61	–	2	NM	257.2
Oklahoma	80	–	–	11	14	–	54.5
Pennsylvania Total	9,246	8,279	6,301	5,508	6,440	11.7	9.5
Anthracite	506	497	354	316	324	1.9	11.8
Bituminous	8,740	7,782	5,947	5,192	6,116	12.3	9.3
Tennessee	–	–	–	–	2	–	–
Texas	117	20	–	–	–	494.0	–
Utah	5,305	3,930	2,698	2,959	2,260	35.0	23.8
Virginia	13,432	9,742	11,683	14,251	17,224	37.9	–6.0
Washington	43	107	146	94	264	–59.8	–36.4
West Virginia Total	42,044	44,321	36,205	33,159	50,806	–5.1	–4.6
Northern	6,038	6,542	5,550	2,527	6,553	–7.7	–2.0
Southern	36,006	37,779	30,655	30,632	44,254	–4.7	–5.0
Wyoming	2,395	2,269	1,524	974	1,277	5.5	17.0

See footnotes at end of table.

Table 59. Domestic and Foreign Distribution of U.S. Coal by State of Origin, 1992-1996 (Continued)
(Thousand Short Tons)

Coal-Producing State and Region	1996	1995	1994	1993	1992	Percent Change 1995-1996	Average Annual Percent Change 1992-1996
	Foreign						
Appalachian Total[1]	**78,979**	**77,640**	**65,986**	**68,419**	**94,454**	**1.7**	**–4.4**
Interior Total[1]	**2,759**	**3,433**	**586**	**1,073**	**1,657**	**–19.6**	**13.6**
Western Total[1]	**10,460**	**8,834**	**6,108**	**6,018**	**5,269**	**18.4**	**18.7**
East of Miss. River	**81,542**	**81,054**	**66,572**	**69,481**	**96,094**	**.6**	**–4.0**
West of Miss. River	**10,657**	**8,854**	**6,108**	**6,030**	**5,286**	**20.4**	**19.2**
U.S. Total	**92,199**	**89,907**	**72,680**	**75,510**	**101,380**	**2.5**	**–2.3**

1 For a definition of coal-producing regions, see Appendix C.
* Data round to zero.
NM Not meaningful as value is greater than 500 percent.
Note: Totals may not equal sum of components due to independent rounding.
Source: Energy Information Administration, Form EIA-6, ''Coal Distribution Report.''

Table 60. Major U.S. Coal Distributors, 1996

Company Name	
Top Ten Distributors	
Atlantic Richfield Co.	Kerr-McGee Coal Corp.
A.T. Massey Coal Co., Inc.	Kiewit Coal Properties
Consol Energy Inc.	North American Coal Corp.
Cyprus AMAX Minerals Co.	Peabody Holding Co.
Kennecott Energy Co.	Zeigler Coal Holding Co.
Other Major Distributors	
Addington Enterprises Inc.	Knife River Coal Mining
AEP Service Corp.	Mapco Coal Co.
Aluminum Co. of America	Marigold Land Corp.
American Coal Sales, Inc.	Montana Power Co.
American Metals & Coal	Monterey Coal Co.
AMVEST Minerals	Mincorp, Inc.
Andalex Resources Inc.	Minnesota Power & Light
Anker Energy Corp.	Orion Resources Inc.
Arch Mineral Corp.	Pacificorp Electric
Ashland Coal Inc.	Pardee Coal Co., Inc.
BHP Minerals Int 'l	Pen Holdings
Black Beauty Coal Co.	Phibro Energy Inc.
Blue Diamond Coal Co.	Quaker Coal Co.
Central Coal Co.	Rochester & Pittsburgh Co.
Chevron Corp.	San Miguel Electric CoOp.
Coal Arbed Int 'l Trading Co.	Smoky Mountain Coal
Costain America Inc.	Sun Coal Co.
Dolet Hills Mining Venture	Teco Coal Corp.
Drummond Co.	Texas Utilities Co.
Electric Fuels Corp.	The Coastal Corp.
General Dynamics Corp.	The Pittston Co.
Golden Oak Mining Co.	United Coal Co.
James River Coal Co.	USX Corp.
Jim Walter Resources, Inc.	Westmoreland Coal Co.
Kindill Mining	Wyodak Resources Dev 't.

Notes: The top 10 distribution companies accounted for 51 percent of the total distribution. Companies are listed in alphabetical order to ensure nondisclosure of company data.
Source: Energy Information Administration, Form EIA-6A, ''Coal Distribution Report.''

Table 61. Domestic Distribution of U.S. Coal by Coal-Producing Region and State, and Destination Census Division and State, 1992-1996
(Thousand Short Tons)

Coal-Producing Region and State, and Destination Census Division and State	1996	1995	1994	1993	1992	Percent Change 1995-1996	Average Annual Percent Change 1992-1996
Appalachian Total	**373,728**	**357,344**	**375,819**	**353,089**	**364,191**	**4.6**	**0.6**
Alabama	**19,772**	**19,127**	**19,220**	**19,668**	**19,560**	**3.4**	**.3**
Middle Atlantic	579	616	496	492	228	–6.0	26.3
Pennsylvania	579	616	496	492	228	–6.0	26.3
East North Central	108	–	–	–	–	–	–
Indiana	57	–	–	–	–	–	–
Ohio	51	–	–	–	–	–	–
West North Central	*	–	–	–	1	–	–17.9
Minnesota	*	–	–	–	–	–	–
Missouri	*	–	–	–	–	–	–
South Dakota	–	–	–	–	1	–	–
South Atlantic	385	253	89	207	287	52.1	7.7
Florida	8	115	85	202	185	–92.7	–53.8
Georgia	373	134	*	1	102	178.4	38.3
North Carolina	4	–	–	–	–	–	–
South Carolina	–	4	3	4	–	–100.0	–
East South Central	18,628	18,182	18,484	18,851	18,918	2.4	–.4
Alabama	18,503	18,024	18,351	18,716	18,849	2.7	–.5
Kentucky	15	–	–	–	–	–	–
Mississippi	110	156	129	132	68	–29.5	12.7
Tennessee	1	2	4	3	*	–65.5	21.3
West South Central	39	24	63	18	33	57.8	3.9
Arkansas	39	24	60	9	12	57.8	33.2
Texas	–	–	3	8	21	–	–
Kentucky, Eastern	**108,927**	**108,781**	**117,234**	**115,723**	**106,372**	**.1**	**.6**
New England	1,337	1,764	1,447	1,106	2,337	–24.2	–13.0
Connecticut	659	811	787	576	837	–18.7	–5.8
Maine	271	258	433	380	771	5.3	–23.0
Massachusetts	407	695	227	71	729	–41.5	–13.6
New Hampshire	–	–	–	79	–	–	–
Middle Atlantic	3,977	4,145	4,522	3,679	3,901	–4.0	.5
New Jersey	29	381	63	61	204	–92.3	–38.5
New York	1,227	996	1,288	1,188	1,288	23.2	–1.2
Pennsylvania	2,721	2,767	3,171	2,429	2,409	–1.7	3.1
East North Central	20,340	22,832	24,669	25,309	21,902	–10.9	–1.8
Illinois	1,478	1,442	1,555	2,333	1,575	2.5	–1.6
Indiana	1,962	2,397	2,109	2,074	2,645	–18.1	–7.2
Michigan	6,671	6,977	9,524	8,857	8,083	–4.4	–4.7
Ohio	9,490	11,200	10,532	11,294	8,648	–15.3	2.3
Wisconsin	738	816	949	751	951	–9.5	–6.1
West North Central	889	611	564	482	444	45.4	19.0
Iowa	439	160	40	25	65	174.5	61.4
Kansas	–	–	–	–	5	–	–
Minnesota	135	211	172	124	125	–36.1	2.0
Missouri	315	238	351	334	249	32.5	6.0
Nebraska	–	3	–	–	–	–100.0	–
South Dakota	–	–	1	–	–	–	–
South Atlantic	63,554	57,820	60,914	57,532	52,997	9.9	4.6
Delaware	–	–	37	27	–	–	–
District of Columbia	–	–	13	16	18	–	–
Florida	14,015	12,121	12,069	11,311	12,584	15.6	2.7
Georgia	14,689	15,803	15,649	14,163	11,770	–7.0	5.7
Maryland	105	29	423	958	296	265.6	–22.8
North Carolina	17,240	12,902	13,590	13,491	12,517	33.6	8.3
South Carolina	11,417	10,007	11,443	9,962	9,847	14.1	3.8
Virginia	5,662	6,129	6,539	6,672	5,246	–7.6	1.9
West Virginia	426	829	1,151	932	721	–48.6	–12.3
East South Central	18,182	20,332	22,813	26,008	22,917	–10.6	–5.6
Alabama	727	1,434	2,402	2,320	2,703	–49.3	–28.0
Kentucky	9,326	9,653	10,317	10,145	10,486	–3.4	–2.9
Mississippi	928	815	1,006	1,731	1,616	13.8	–12.9
Tennessee	7,202	8,430	9,088	11,811	8,112	–14.6	–2.9
West South Central	71	513	802	104	95	–86.1	–7.1
Arkansas	–	–	*	–	–	–	–
Louisiana	44	500	791	104	95	–91.2	–17.6
Oklahoma	2	4	–	–	–	–62.3	–
Texas	26	8	10	–	–	201.0	–
Mountain	–	2	10	–	2	–100.0	–

See footnotes at end of table.

Table 61. Domestic Distribution of U.S. Coal by Coal-Producing Region and State, and Destination Census Division and State, 1992-1996 (Continued)

(Thousand Short Tons)

Coal-Producing Region and State, and Destination Census Division and State	1996	1995	1994	1993	1992	Percent Change 1995-1996	Average Annual Percent Change 1992-1996
Kentucky, Eastern (Continued)							
Idaho	–	2	–	–	2	–100.0	–
Wyoming	–	–	10	–	–	–	–
Pacific	24	15	15	4	–	58.9	–
Oregon	24	15	15	4	–	58.9	–
Maryland	**3,555**	**3,382**	**3,277**	**3,278**	**3,246**	**5.1**	**2.3**
New England	3	32	–	11	–	–90.2	–
Connecticut	3	32	–	–	–	–90.9	–
Massachusetts	*	–	–	11	–	–	–
Middle Atlantic	4	45	–	19	6	–91.9	–11.7
New York	–	–	–	–	4	–	–
Pennsylvania	4	45	–	19	2	–91.9	11.4
East North Central	19	–	–	–	–	–	–
Michigan	15	–	–	–	–	–	–
Wisconsin	3	–	–	–	–	–	–
South Atlantic	3,518	3,297	3,277	3,230	3,166	6.7	2.7
Delaware	130	97	125	37	–	33.9	–
Maryland	1,147	1,216	1,034	820	1,159	–5.7	–.2
Virginia	27	12	1	–	1	119.9	111.4
West Virginia	2,213	1,971	2,116	2,373	2,006	12.3	2.5
Ohio	**28,609**	**24,318**	**28,688**	**28,315**	**29,549**	**17.6**	**–.8**
New England	–	–	*	17	4	–	–
Connecticut	–	–	*	*	1	–	–
Massachusetts	–	–	–	17	4	–	–
Middle Atlantic	1,168	1,568	2,443	1,388	556	–25.5	20.4
New York	125	25	124	52	47	400.3	27.5
Pennsylvania	1,043	1,543	2,318	1,336	508	–32.4	19.7
East North Central	25,201	20,912	24,810	25,119	27,497	20.5	–2.2
Illinois	5	–	17	*	2	–	20.2
Indiana	464	243	345	274	134	91.1	36.3
Michigan	246	431	522	474	419	–43.0	–12.5
Ohio	24,478	20,228	23,907	24,370	26,941	21.0	–2.4
Wisconsin	9	10	18	–	–	–9.1	–
West North Central	–	10	33	83	–	–100.0	–
Iowa	–	–	15	67	–	–	–
Missouri	–	10	18	16	–	–100.0	–
South Atlantic	2,036	1,620	971	1,041	1,385	25.7	10.1
Delaware	–	–	29	48	–	–	–
West Virginia	2,036	1,620	942	993	1,385	25.7	10.1
East South Central	137	53	130	261	–	160.5	–
Alabama	103	18	37	151	–	468.5	–
Kentucky	30	14	93	29	–	118.8	–
Tennessee	4	21	–	81	–	–82.9	–
West South Central	–	–	–	–	*	–	–
Louisiana	–	–	–	–	*	–	–
Pennsylvania, Anthracite	**4,330**	**3,497**	**4,346**	**3,015**	**3,230**	**23.8**	**7.6**
New England	31	37	54	64	73	–15.6	–19.0
Connecticut	5	8	11	13	14	–34.1	–20.9
Maine	4	3	6	8	12	22.9	–25.0
Massachusetts	14	16	20	24	22	–12.7	–11.3
New Hampshire	4	5	8	10	14	–24.7	–28.6
Rhode Island	3	3	3	3	5	21.2	–9.6
Vermont	2	3	5	6	7	–39.0	–28.9
Middle Atlantic	3,985	2,922	3,227	2,618	2,916	36.4	8.1
New Jersey	14	15	17	20	17	–7.1	–5.4
New York	151	140	121	179	215	7.8	–8.5
Pennsylvania	3,821	2,768	3,089	2,420	2,685	38.0	9.2
East North Central	41	37	36	39	40	9.3	.2
Illinois	7	9	8	14	8	–21.7	–3.4
Indiana	6	6	4	5	5	9.6	6.2
Michigan	3	9	2	*	1	–67.3	21.0
Ohio	19	8	21	19	26	137.7	–6.8
Wisconsin	5	6	2	1	*	–11.2	215.3
West North Central	64	46	31	34	35	38.5	15.8

See footnotes at end of table.

Table 61. Domestic Distribution of U.S. Coal by Coal-Producing Region and State, and Destination Census Division and State, 1992-1996 (Continued)

(Thousand Short Tons)

Coal-Producing Region and State, and Destination Census Division and State	1996	1995	1994	1993	1992	Percent Change 1995-1996	Average Annual Percent Change 1992-1996
Pennsylvania, Anthracite (Continued)							
Iowa	54	39	26	28	27	39.3	18.5
Kansas	*	–	–	*	6	–	–63.6
Minnesota	7	7	3	3	*	–5.3	270.6
Missouri	*	*	2	2	*	–88.1	38.4
Nebraska	1	*	*	2	2	NM	–21.2
North Dakota	2	*	*	*	*	NM	260.2
South Dakota	–	–	*	–	*	–	–
South Atlantic	56	91	79	64	51	–38.7	2.3
Delaware	10	11	11	11	7	–6.1	10.0
District of Columbia	*	*	*	*	*	–62.0	3.1
Florida	6	9	8	6	7	–37.4	–4.1
Georgia	*	*	*	*	1	–25.4	–23.9
Maryland	1	27	6	4	3	–95.8	–22.4
North Carolina	*	*	*	*	*	–41.4	–6.2
South Carolina	*	3	8	11	*	–91.4	14.0
Virginia	6	9	11	14	13	–35.2	–17.9
West Virginia	32	31	35	18	20	2.2	12.9
East South Central	50	44	28	34	42	14.3	4.8
Alabama	2	1	1	3	6	58.3	–23.2
Kentucky	22	21	12	18	24	5.2	–1.9
Mississippi	*	*	*	*	*	17.9	–6.4
Tennessee	26	22	15	14	12	20.2	22.1
West South Central	8	12	8	11	10	–34.7	–4.9
Arkansas	*	*	1	*	4	14.3	–53.3
Louisiana	6	10	3	8	*	–38.8	132.1
Oklahoma	*	*	*	*	1	20.7	–14.9
Texas	1	2	3	3	5	–21.1	–30.2
Mountain	21	13	18	3	*	60.9	162.1
Arizona	1	*	*	*	*	NM	105.3
Colorado	16	12	15	3	*	32.1	165.8
Idaho	*	*	3	*	–	–94.8	–
Montana	2	–	*	*	–	–	–
Nevada	*	–	–	–	–	–	–
New Mexico	*	*	*	*	*	–71.7	5.0
Utah	*	*	*	*	–	–93.1	–
Wyoming	1	–	*	*	*	–	172.1
Pacific	12	12	7	10	*	2.1	246.9
Alaska	–	–	*	–	–	–	–
California	*	*	*	*	*	NM	53.5
Oregon	12	12	7	9	–	–1.4	–
Washington	–	*	–	–	*	–100.0	–
Pennsylvania, Bituminous	**55,552**	**50,464**	**50,861**	**50,467**	**57,979**	**10.1**	**–1.1**
New England	1,021	1,009	1,025	989	1,124	1.1	–2.4
Connecticut	227	516	12	*	131	–56.0	14.8
Maine	–	32	24	2	19	–100.0	–
Massachusetts	202	4	292	330	294	NM	–8.9
New Hampshire	592	458	698	656	681	29.3	–3.5
Vermont	*	–	–	*	–	–	–
Middle Atlantic	40,063	37,612	38,188	37,417	43,559	6.5	–2.1
New Jersey	538	558	537	153	15	–3.6	143.8
New York	4,125	3,675	5,551	6,228	8,532	12.3	–16.6
Pennsylvania	35,400	33,379	32,100	31,036	35,012	6.0	.3
East North Central	8,460	6,682	6,288	6,502	7,466	26.6	3.2
Illinois	–	–	206	43	69	–	–
Indiana	559	222	629	505	380	152.1	10.2
Michigan	2,075	2,650	1,756	1,607	1,862	–21.7	2.7
Ohio	4,463	2,707	2,769	3,848	3,567	64.9	5.8
Wisconsin	1,362	1,103	928	500	1,589	23.5	–3.8
West North Central	248	228	46	205	191	8.7	6.8
Iowa	225	227	46	103	162	–.9	8.5
Minnesota	23	–	–	–	28	–	–4.9
Missouri	–	1	–	102	1	–100.0	–
North Dakota	–	–	–	*	–	–	–
South Atlantic	3,968	3,377	3,783	3,955	4,090	17.5	–.8

See footnotes at end of table.

Table 61. Domestic Distribution of U.S. Coal by Coal-Producing Region and State, and Destination Census Division and State, 1992-1996 (Continued)

(Thousand Short Tons)

Coal-Producing Region and State, and Destination Census Division and State	1996	1995	1994	1993	1992	Percent Change 1995-1996	Average Annual Percent Change 1992-1996
Pennsylvania, Bituminous (Continued)							
Delaware	528	452	314	252	226	16.7	23.6
Florida	–	–	135	–	–	–	–
Maryland	1,602	1,741	2,278	2,372	2,437	–8.0	–9.9
South Carolina	–	6	–	–	1	–100.0	–
Virginia	5	20	55	29	5	–74.2	–1.3
West Virginia	1,833	1,157	1,002	1,302	1,421	58.5	6.6
East South Central	1,144	1,078	993	772	83	6.1	92.5
Alabama	6	39	34	46	1	–85.3	83.1
Kentucky	500	363	460	225	31	37.5	99.7
Mississippi	–	–	–	3	6	–	–
Tennessee	639	675	500	498	46	–5.4	93.5
West South Central	195	6	–	*	*	NM	NM
Louisiana	195	–	–	–	–	–	–
Texas	*	6	–	*	*	–94.2	65.8
Mountain	230	215	183	240	290	7.3	–5.6
Utah	230	215	183	240	290	7.3	–5.6
Tennessee	**3,052**	**2,627**	**2,547**	**2,577**	**2,835**	**16.2**	**1.9**
East North Central	*	*	1	*	24	–33.5	–72.3
Illinois	–	–	1	–	–	–	–
Indiana	–	–	–	*	3	–	–
Michigan	–	*	–	–	21	–100.0	–
Ohio	*	*	–	–	–	–5.4	–
South Atlantic	141	251	301	303	387	–43.5	–22.2
Florida	–	39	40	–	–	–100.0	–
Georgia	141	189	202	204	259	–25.4	–14.1
North Carolina	1	23	58	96	114	–97.2	–72.8
South Carolina	–	–	–	3	13	–	–
Virginia	–	–	–	*	1	–	–
East South Central	2,902	2,363	2,223	2,215	2,376	22.8	5.1
Alabama	331	936	710	592	734	–64.6	–18.0
Kentucky	23	5	135	122	39	367.4	–12.9
Tennessee	2,548	1,422	1,378	1,501	1,603	79.2	12.3
Virginia	**22,776**	**24,283**	**26,866**	**27,388**	**28,504**	**–6.2**	**–5.4**
New England	18	19	–	–	281	–6.4	–49.8
Maine	–	–	–	–	44	–	–
Massachusetts	8	–	–	–	237	–	–57.4
New Hampshire	10	19	–	–	–	–47.4	–
Middle Atlantic	2,045	2,311	1,490	2,073	2,957	–11.5	–8.8
New Jersey	601	635	190	359	734	–5.4	–4.9
New York	146	362	156	108	96	–59.8	10.9
Pennsylvania	1,299	1,314	1,143	1,607	2,127	–1.2	–11.6
East North Central	3,237	3,557	2,455	3,475	3,794	–9.0	–3.9
Illinois	583	578	302	260	478	.8	5.1
Indiana	2,290	2,395	1,202	2,045	2,240	–4.4	.5
Michigan	25	83	376	188	68	–69.9	–22.3
Ohio	331	493	488	875	940	–32.8	–23.0
Wisconsin	9	9	86	108	68	1.0	–39.4
West North Central	–	8	–	–	*	–100.0	–
Missouri	–	8	–	–	–	–100.0	–
North Dakota	–	–	–	–	*	–	–
South Atlantic	13,507	14,600	18,898	18,553	16,839	–7.5	–5.4
Delaware	166	152	203	155	208	9.3	–5.5
Florida	549	377	531	457	451	45.4	5.0
Georgia	1,785	2,064	3,038	3,496	2,779	–13.5	–10.5
Maryland	1	392	90	8	79	–99.8	–70.3
North Carolina	1,883	4,056	5,634	5,867	5,207	–53.6	–22.4
South Carolina	1,605	1,468	1,604	1,663	1,356	9.4	4.3
Virginia	7,231	5,657	6,867	6,076	6,082	27.8	4.4
West Virginia	287	433	930	832	677	–33.8	–19.3
East South Central	3,581	3,413	3,658	3,026	3,432	4.9	1.1
Alabama	1,036	1,083	1,156	887	1,017	–4.3	.5
Kentucky	3	142	41	1	*	–98.2	266.9
Mississippi	13	–	–	–	–	–	–
Tennessee	2,529	2,187	2,462	2,138	2,415	15.6	1.2

See footnotes at end of table.

Table 61. Domestic Distribution of U.S. Coal by Coal-Producing Region and State, and Destination Census Division and State, 1992-1996 (Continued)

(Thousand Short Tons)

Coal-Producing Region and State, and Destination Census Division and State	1996	1995	1994	1993	1992	Percent Change 1995-1996	Average Annual Percent Change 1992-1996
Virginia (Continued)							
West South Central	13	21	–	2	2	–38.9	55.8
Louisiana	–	21	–	–	–	–100.0	–
Texas	13	–	–	2	2	–	55.8
Mountain	332	313	320	103	192	6.3	14.7
Colorado	–	–	–	*	–	–	–
Utah	332	313	320	103	192	6.3	14.7
West Virginia, Northern	**40,398**	**36,073**	**39,985**	**34,573**	**44,093**	**12.0**	**–2.2**
New England	1,070	918	1,086	1,002	2,776	16.6	–21.2
Connecticut	683	572	166	–	*	19.3	NM
Maine	13	9	–	–	–	41.7	–
Massachusetts	53	113	648	613	2,379	–53.0	–61.4
New Hampshire	322	225	272	389	397	43.4	–5.1
Middle Atlantic	14,276	13,740	12,566	9,769	13,804	3.9	.8
New Jersey	1,530	1,182	1,096	1,234	1,213	29.4	6.0
New York	4,140	4,040	3,079	1,336	2,530	2.5	13.1
Pennsylvania	8,606	8,518	8,391	7,200	10,061	1.0	–3.8
East North Central	5,410	2,887	5,924	4,220	5,803	87.4	–1.7
Illinois	9	51	23	44	–	–82.4	–
Indiana	479	38	1,060	216	70	NM	61.6
Michigan	640	437	392	113	114	46.4	54.0
Ohio	3,966	1,977	4,098	3,659	5,365	100.6	–7.3
Wisconsin	317	384	350	188	254	–17.6	5.7
West North Central	*	3	12	54	9	–99.3	–77.6
Iowa	–	–	2	–	–	–	–
Minnesota	–	3	10	–	9	–100.0	–
Missouri	–	–	–	54	–	–	–
North Dakota	*	–	–	–	–	–	–
South Atlantic	17,820	17,213	19,270	17,772	20,988	3.5	–4.0
Delaware	449	737	969	1,096	1,111	–39.0	–20.3
District of Columbia	6	5	10	12	6	12.9	2.1
Florida	551	259	449	580	452	112.5	5.1
Maryland	4,773	3,341	3,443	4,314	3,466	42.9	8.3
North Carolina	13	–	7	–	*	–	143.0
South Carolina	3	–	1	–	–	–	–
Virginia	66	30	75	306	243	121.3	–27.8
West Virginia	11,959	12,841	14,316	11,464	15,710	–6.9	–6.6
East South Central	1,522	1,178	492	749	167	29.2	73.9
Alabama	419	604	34	27	–	–30.7	–
Kentucky	1,026	527	160	130	4	94.4	293.8
Mississippi	–	–	5	5	4	–	–
Tennessee	78	46	293	589	159	67.9	–16.3
West South Central	203	–	368	154	–	–	–
Louisiana	203	–	368	154	–	–	–
Mountain	–	*	–	–	–	–100.0	–
Nevada	–	*	–	–	–	–100.0	–
Pacific	–	–	–	*	*	–	–
California	–	–	–	*	*	–	–
West Virginia, Southern	**86,757**	**84,793**	**82,794**	**68,086**	**68,824**	**2.3**	**6.0**
New England	1,853	1,404	1,351	917	1,109	32.0	13.7
Connecticut	24	–	–	106	21	–	4.1
Maine	13	–	*	14	20	–	–10.5
Massachusetts	1,792	1,330	1,351	739	971	34.8	16.5
New Hampshire	24	74	–	58	97	–67.7	–29.5
Rhode Island	–	–	–	*	–	–	–
Vermont	–	–	*	–	–	–	–
Middle Atlantic	7,391	7,170	6,738	6,965	5,160	3.1	9.4
New Jersey	216	165	260	343	250	30.7	–3.6
New York	1,545	1,466	1,345	1,860	1,265	5.4	5.1
Pennsylvania	5,630	5,538	5,133	4,763	3,644	1.6	11.5
East North Central	30,404	28,905	27,503	22,906	25,560	5.2	4.4
Illinois	1,841	1,400	1,403	1,971	1,472	31.5	5.8
Indiana	4,809	5,142	4,918	3,401	4,920	–6.5	–.6
Michigan	4,869	4,416	5,903	4,048	6,120	10.3	–5.6
Ohio	18,770	17,566	14,802	12,485	12,457	6.8	10.8

See footnotes at end of table.

Table 61. Domestic Distribution of U.S. Coal by Coal-Producing Region and State, and Destination Census Division and State, 1992-1996 (Continued)

(Thousand Short Tons)

Coal-Producing Region and State, and Destination Census Division and State	1996	1995	1994	1993	1992	Percent Change 1995-1996	Average Annual Percent Change 1992-1996
West Virginia, Southern (Continued)							
Wisconsin	115	381	478	1,002	592	–69.7	–33.5
West North Central	113	313	237	223	364	–64.0	–25.4
Iowa	44	119	70	69	77	–63.1	–13.0
Kansas	–	–	–	–	34	–	–
Minnesota	32	107	92	11	24	–70.0	7.3
Missouri	36	85	70	142	228	–58.3	–37.2
North Dakota	–	*	*	–	–	–100.0	–
South Dakota	1	2	6	–	–	–37.7	–
South Atlantic	37,986	36,164	36,045	26,459	28,512	5.0	7.4
Delaware	551	485	621	617	361	13.7	11.1
District of Columbia	17	–	24	23	27	–	–10.8
Florida	1,123	1,341	1,372	817	1,010	–16.3	2.7
Georgia	4,064	4,159	4,106	2,958	2,477	–2.3	13.2
Maryland	3,132	3,209	2,855	1,376	2,296	–2.4	8.1
North Carolina	8,274	7,169	6,910	6,167	7,963	15.4	1.0
South Carolina	347	257	394	107	121	34.9	30.0
Virginia	3,217	3,367	3,188	2,971	3,323	–4.4	–.8
West Virginia	17,261	16,177	16,575	11,423	10,934	6.7	12.1
East South Central	8,677	10,433	10,551	10,095	7,054	–16.8	5.3
Alabama	2,922	3,487	4,392	3,736	2,362	–16.2	5.5
Kentucky	4,250	5,330	4,744	4,704	3,755	–20.3	3.1
Mississippi	24	44	93	87	34	–45.9	–8.3
Tennessee	1,482	1,571	1,322	1,569	904	–5.7	13.1
West South Central	81	48	60	49	22	67.7	37.8
Louisiana	–	–	4	2	–	–	–
Oklahoma	77	48	56	48	22	58.4	35.9
Texas	4	–	1	–	–	–	–
Mountain	18	206	212	135	–	–91.0	–
Idaho	–	–	*	–	–	–	–
Utah	18	206	211	135	–	–91.0	–
Pacific	28	2	1	*	–	NM	–
California	–	–	–	*	–	–	–
Oregon	2	2	1	–	–	–17.2	–
Washington	26	–	–	–	–	–	–
Interior Total	**165,668**	**162,947**	**175,622**	**166,763**	**193,400**	**1.7**	**–3.8**
Arkansas	**7**	**11**	**28**	**25**	**29**	**–39.2**	**–30.4**
New England	–	–	–	–	13	–	–
Vermont	–	–	–	–	13	–	–
West North Central	–	–	4	8	11	–	–
Missouri	–	–	4	8	11	–	–
West South Central	7	11	24	17	5	–39.2	7.1
Arkansas	7	11	13	12	–	–39.2	–
Oklahoma	–	–	*	5	5	–	–
Texas	–	–	12	–	–	–	–
Illinois	**45,190**	**45,170**	**51,737**	**41,330**	**57,670**	*****	**–5.9**
New England	–	*	–	–	–	–100.0	–
Connecticut	–	*	–	–	–	–100.0	–
Middle Atlantic	*	*	*	*	*	–80.0	–9.9
New Jersey	*	*	–	–	*	–63.6	–35.4
New York	*	*	*	*	*	–91.5	–29.5
Pennsylvania	*	*	*	–	–	–50.0	–
East North Central	25,316	25,629	28,299	20,483	28,821	–1.2	–3.2
Illinois	16,052	15,587	17,517	15,206	18,167	3.0	–3.0
Indiana	8,178	8,559	9,574	4,541	9,595	–4.4	–3.9
Michigan	59	70	51	–	6	–15.0	76.9
Ohio	18	1	18	–	–	NM	–
Wisconsin	1,008	1,412	1,139	736	1,053	–28.6	–1.1
West North Central	5,347	6,270	9,448	7,783	13,499	–14.7	–20.7
Iowa	694	1,216	1,535	1,534	1,175	–42.9	–12.3
Kansas	149	128	193	179	640	16.3	–30.5
Minnesota	100	111	179	43	58	–9.8	14.4
Missouri	4,403	4,815	7,541	6,027	11,625	–8.5	–21.5
North Dakota	–	–	–	*	–	–	–
South Atlantic	7,255	6,651	8,403	8,137	10,485	9.1	–8.8

See footnotes at end of table.

Table 61. Domestic Distribution of U.S. Coal by Coal-Producing Region and State, and Destination Census Division and State, 1992-1996 (Continued)

(Thousand Short Tons)

Coal-Producing Region and State, and Destination Census Division and State	1996	1995	1994	1993	1992	Percent Change 1995-1996	Average Annual Percent Change 1992-1996
Illinois (Continued)							
Florida	6,052	6,056	5,846	4,782	5,529	–0.1	2.3
Georgia	1,204	584	2,557	3,355	4,955	106.0	–29.8
Maryland	–	5	–	–	–	–100.0	–
North Carolina	–	*	–	–	–	–100.0	–
South Carolina	–	–	–	–	1	–	–
Virginia	*	*	–	*	–	–81.8	–
West Virginia	–	6	*	–	–	–100.0	–
East South Central	7,130	6,510	5,453	4,823	4,780	9.5	10.5
Alabama	2,155	1,146	750	401	632	88.1	35.9
Kentucky	1	274	343	535	7	–99.7	–39.8
Mississippi	1,749	1,304	1,164	1,106	1,879	34.1	–1.8
Tennessee	3,225	3,787	3,195	2,780	2,261	–14.8	9.3
West South Central	86	86	46	58	81	.5	1.4
Arkansas	76	76	30	37	81	.1	–1.7
Louisiana	–	–	–	21	–	–	–
Oklahoma	10	10	16	–	–	3.1	–
Mountain	40	–	–	–	–	–	–
Colorado	40	–	–	–	–	–	–
Indiana	**29,664**	**25,625**	**30,477**	**29,475**	**31,216**	**15.8**	**–1.3**
New England	*	–	*	21	–	–	–
Connecticut	*	–	*	–	–	–	–
Massachusetts	–	–	–	21	–	–	–
East North Central	26,318	22,461	27,088	26,347	27,677	17.2	–1.3
Illinois	1,444	963	1,597	1,562	1,021	50.0	9.1
Indiana	24,309	21,185	24,733	23,913	24,655	14.8	–.3
Michigan	181	180	135	184	338	.3	–14.5
Ohio	34	26	36	60	135	30.3	–29.0
Wisconsin	350	106	587	628	1,528	228.4	–30.8
West North Central	655	454	973	1,249	756	44.1	–3.5
Iowa	638	435	426	646	746	46.8	–3.8
Kansas	–	–	–	18	–	–	–
Minnesota	–	–	43	–	–	–	–
Missouri	17	19	504	585	11	–14.7	11.7
South Atlantic	–	–	19	264	548	–	–
Florida	–	–	–	96	–	–	–
Georgia	–	–	19	153	548	–	–
Virginia	–	–	–	15	–	–	–
East South Central	2,677	2,586	2,313	1,506	2,071	3.5	6.6
Alabama	26	1	56	60	127	NM	–32.5
Kentucky	2,610	2,466	2,219	1,313	1,694	5.8	11.4
Mississippi	–	–	–	–	3	–	–
Tennessee	41	119	38	132	247	–65.6	–36.2
West South Central	6	1	4	1	–	NM	–
Oklahoma	4	–	3	1	–	–	–
Texas	2	1	*	–	–	140.9	–
Iowa	–	–	**46**	**175**	**287**	–	–
West North Central	–	–	46	175	287	–	–
Iowa	–	–	46	175	287	–	–
Kansas	**245**	**291**	**282**	**345**	**354**	**–15.9**	**–8.8**
West North Central	233	291	282	345	345	–19.9	–9.3
Kansas	164	160	165	167	165	2.3	–.1
Missouri	69	131	117	178	181	–47.1	–21.3
West South Central	12	–	–	–	–	–	–
Oklahoma	12	–	–	–	–	–	–
Kentucky, Western	**34,821**	**32,990**	**34,729**	**35,151**	**41,453**	**5.5**	**–4.3**
Middle Atlantic	–	–	*	*	*	–	–
Pennsylvania	–	–	*	*	*	–	–
East North Central	1,016	542	2,762	4,169	4,346	87.7	–30.5
Illinois	119	–	192	659	214	–	–13.7
Indiana	680	243	2,214	3,229	3,275	180.3	–32.5
Michigan	–	–	12	28	8	–	–
Ohio	31	103	180	146	514	–70.3	–50.6
Wisconsin	187	196	165	108	336	–4.7	–13.7

See footnotes at end of table.

Table 61. Domestic Distribution of U.S. Coal by Coal-Producing Region and State, and Destination Census Division and State, 1992-1996 (Continued)

(Thousand Short Tons)

Coal-Producing Region and State, and Destination Census Division and State	1996	1995	1994	1993	1992	Percent Change 1995-1996	Average Annual Percent Change 1992-1996
Kentucky, Western (Continued)							
West North Central	237	101	1,170	352	896	136.0	–28.3
Iowa	211	75	377	217	271	180.3	–6.1
Minnesota	22	19	26	32	27	13.0	–5.7
Missouri	5	6	766	102	598	–16.6	–69.4
South Atlantic	3,254	2,375	2,709	3,040	5,260	37.0	–11.3
Florida	3,254	2,375	2,706	3,039	3,910	37.0	–4.5
Georgia	–	–	–	–	1,350	–	–
North Carolina	–	–	*	–	–	–	–
South Carolina	–	–	*	–	–	–	–
Virginia	*	–	–	–	*	–	–40.8
West Virginia	–	–	3	1	*	–	–
East South Central	29,605	29,927	28,048	27,512	30,682	–1.1	–.9
Alabama	3,142	1,717	2,038	1,761	2,310	83.0	8.0
Kentucky	16,375	17,488	16,401	17,990	17,455	–6.4	–1.6
Mississippi	107	–	–	10	190	–	–13.4
Tennessee	9,981	10,723	9,609	7,751	10,727	–6.9	–1.8
West South Central	657	13	8	12	204	NM	34.0
Arkansas	11	13	8	12	8	–14.9	8.2
Louisiana	646	–	–	–	196	–	34.8
Louisiana	**3,222**	**3,426**	**3,463**	**3,103**	**3,208**	**–6.0**	**.1**
West North Central	–	–	–	*	–	–	–
Missouri	–	–	–	*	–	–	–
West South Central	3,222	3,426	3,463	3,103	3,208	–6.0	.1
Louisiana	3,222	3,426	3,463	3,103	3,208	–6.0	.1
Missouri	**846**	**464**	**679**	**638**	**2,795**	**82.3**	**–25.8**
West North Central	846	464	679	614	2,783	82.3	–25.8
Kansas	345	91	77	23	54	278.3	59.0
Missouri	501	373	602	592	2,729	34.3	–34.6
West South Central	–	–	–	2	–	–	–
Oklahoma	–	–	–	2	–	–	–
Oklahoma	**2,136**	**2,158**	**1,925**	**2,297**	**1,940**	**–1.0**	**2.4**
West North Central	63	31	27	57	83	98.6	–6.8
Kansas	63	31	22	41	73	100.1	–3.7
Missouri	–	*	5	16	10	–100.0	–
East South Central	–	2	–	–	–	–100.0	–
Kentucky	–	2	–	–	–	–100.0	–
West South Central	2,066	2,121	1,896	2,240	1,857	–2.6	2.7
Arkansas	170	159	205	196	130	7.1	6.9
Oklahoma	1,712	1,790	1,532	1,869	1,601	–4.4	1.7
Texas	184	171	159	175	126	7.5	10.0
Pacific	–	–	*	*	–	–	–
California	–	–	*	*	–	–	–
Texas	**49,538**	**52,812**	**52,256**	**54,224**	**54,447**	**–6.2**	**–2.3**
West South Central	49,538	52,812	52,256	54,224	54,447	–6.2	–2.3
Texas	49,538	52,812	52,256	54,224	54,447	–6.2	–2.3
Western Total	**428,297**	**420,132**	**398,402**	**364,083**	**339,676**	**1.9**	**6.0**
Alaska	**697**	**815**	**789**	**855**	**797**	**–14.5**	**–3.3**
Pacific	697	815	789	855	797	–14.5	–3.3
Alaska	697	815	789	855	797	–14.5	–3.3
Arizona	**10,970**	**11,783**	**12,011**	**12,138**	**12,418**	**–6.9**	**–3.0**
Mountain	10,970	11,783	12,011	12,138	12,418	–6.9	–3.0
Arizona	6,499	6,956	7,580	7,566	7,441	–6.6	–3.3
Nevada	4,470	4,827	4,431	4,572	4,977	–7.4	–2.6
California	–	–	–	–	**142**	–	–
Pacific	–	–	–	–	142	–	–
California	–	–	–	–	142	–	–
Colorado	**23,990**	**24,734**	**24,059**	**20,338**	**18,195**	**–3.0**	**7.2**
East North Central	1,366	2,333	2,357	2,471	1,322	–41.4	.8
Illinois	640	1,628	1,439	1,246	518	–60.7	5.4

See footnotes at end of table.

Table 61. Domestic Distribution of U.S. Coal by Coal-Producing Region and State, and Destination Census Division and State, 1992-1996 (Continued)

(Thousand Short Tons)

Coal-Producing Region and State, and Destination Census Division and State	1996	1995	1994	1993	1992	Percent Change 1995-1996	Average Annual Percent Change 1992-1996
Colorado (Continued)							
Indiana	–	20	457	978	794	–100.0	–
Michigan	–	44	–	–	–	–100.0	–
Wisconsin	726	641	462	246	10	13.3	189.8
West North Central	3,218	3,109	2,194	871	1,013	3.5	33.5
Iowa	591	550	171	135	122	7.6	48.3
Kansas	1,493	1,436	1,148	90	298	3.9	49.6
Minnesota	–	13	23	8	–	–100.0	–
Missouri	1,077	1,005	775	566	526	7.2	19.6
Nebraska	56	104	77	72	67	–46.6	–4.3
South Atlantic	136	811	435	44	181	–83.2	–6.9
Florida	136	811	423	–	181	–83.2	–6.9
Georgia	–	–	11	44	–	–	–
West Virginia	–	–	2	–	–	–	–
East South Central	3,817	2,797	2,038	711	–	36.5	–
Kentucky	260	1,098	710	–	–	–76.3	–
Mississippi	519	963	735	170	–	–46.1	–
Tennessee	3,038	736	593	541	–	312.6	–
West South Central	2,443	2,258	2,563	2,628	2,250	8.2	2.1
Oklahoma	–	31	26	121	–	–100.0	–
Texas	2,443	2,228	2,537	2,507	2,250	9.6	2.1
Mountain	12,861	13,353	14,362	13,497	13,369	–3.7	–1.0
Arizona	355	105	219	117	226	237.0	12.0
Colorado	10,704	11,820	12,035	11,181	11,241	–9.4	–1.2
Idaho	–	3	–	–	–	–100.0	–
Nevada	132	161	306	514	169	–18.0	–5.9
New Mexico	88	97	84	84	69	–9.9	6.0
Utah	1,204	1,113	1,714	1,598	1,604	8.1	–6.9
Wyoming	378	53	4	3	60	NM	58.2
Pacific	131	37	73	80	60	251.8	21.4
California	–	1	22	33	24	–100.0	–
Oregon	94	–	–	–	–	–	–
Washington	37	36	52	47	37	2.3	.4
Montana	**37,770**	**39,362**	**41,672**	**35,795**	**38,804**	**–4.0**	**–.7**
East North Central	15,814	16,582	17,875	15,841	15,717	–4.6	.1
Illinois	2,162	2,713	4,338	3,295	3,013	–20.3	–8.0
Indiana	869	720	749	433	451	20.6	17.8
Michigan	9,806	11,014	10,481	10,055	10,376	–11.0	–1.4
Ohio	26	–	–	–	–	–	–
Wisconsin	2,950	2,135	2,307	2,057	1,878	38.2	12.0
West North Central	11,622	11,338	10,668	9,411	9,152	2.5	6.1
Iowa	–	2	*	1	–	–100.0	–
Minnesota	9,791	10,199	10,038	8,852	8,566	–4.0	3.4
Missouri	–	6	–	–	–	–100.0	–
Nebraska	113	205	71	136	142	–44.9	–5.5
North Dakota	417	469	559	422	444	–11.0	–1.6
South Dakota	1,301	457	–	–	–	184.6	–
East South Central	2,226	1,234	1,314	178	84	80.4	127.0
Mississippi	2,226	1,234	1,314	178	82	80.4	128.1
Tennessee	–	–	–	–	2	–	–
Mountain	7,995	9,611	10,718	9,233	11,276	–16.8	–8.2
Colorado	26	63	89	86	106	–59.1	–29.8
Montana	7,844	9,477	10,581	9,115	11,159	–17.2	–8.4
Wyoming	125	71	49	31	11	75.0	82.5
Pacific	113	583	1,097	1,108	2,549	–80.7	–54.2
Oregon	–	–	–	355	1,835	–	–
Washington	113	583	1,097	753	715	–80.7	–37.0
New Mexico	**25,035**	**25,640**	**28,540**	**27,942**	**24,823**	**–2.4**	**.2**
East North Central	732	1,591	1,495	1,392	590	–54.0	5.5
Wisconsin	732	1,591	1,495	1,392	590	–54.0	5.5
West North Central	92	–	–	–	–	–	–
Nebraska	92	–	–	–	–	–	–
West South Central	334	160	296	350	216	109.1	11.5
Arkansas	1	–	–	–	–	–	–
Oklahoma	17	–	–	5	–	–	–
Texas	316	160	296	345	216	97.7	10.0

See footnotes at end of table.

Table 61. Domestic Distribution of U.S. Coal by Coal-Producing Region and State, and Destination Census Division and State, 1992-1996 (Continued)

(Thousand Short Tons)

Coal-Producing Region and State, and Destination Census Division and State	1996	1995	1994	1993	1992	Percent Change 1995-1996	Average Annual Percent Change 1992-1996
New Mexico (Continued)							
Mountain	23,877	23,889	26,749	26,201	24,005	*	–0.1
Arizona	8,860	9,259	11,284	11,263	9,175	–4.3	–.9
Colorado	9	–	–	–	–	–	–
New Mexico	15,009	14,630	15,464	14,938	14,829	2.6	.3
Pacific	–	–	–	–	12	–	–
California	–	–	–	–	12	–	–
North Dakota	**30,025**	**30,118**	**32,056**	**32,372**	**31,702**	**–.3**	**–1.3**
East North Central	–	–	*	*	–	–	–
Wisconsin	–	–	*	*	–	–	–
West North Central	30,025	30,113	32,055	32,367	31,702	–.3	–1.3
North Dakota	30,025	28,838	29,731	30,215	29,573	4.1	.4
South Dakota	–	1,276	2,325	2,153	2,129	–100.0	–
Mountain	–	–	–	*	–	–	–
Montana	–	–	–	*	–	–	–
Utah	**18,563**	**21,591**	**20,527**	**19,283**	**18,792**	**–14.0**	**–.3**
New England	–	17	–	–	–	–100.0	–
Connecticut	–	17	–	–	–	–100.0	–
Middle Atlantic	–	20	68	–	–	–100.0	–
Pennsylvania	–	20	68	–	–	–100.0	–
East North Central	2,650	1,932	656	421	233	37.1	83.6
Illinois	2,473	1,776	369	207	233	39.2	80.4
Indiana	–	–	178	204	–	–	–
Michigan	44	76	66	–	–	–41.8	–
Ohio	–	–	–	*	–	–	–
Wisconsin	133	81	43	10	–	65.0	–
West North Central	330	395	414	382	80	–16.4	42.7
Kansas	–	*	2	–	–	–100.0	–
Minnesota	–	1	–	–	–	–100.0	–
Missouri	330	393	412	382	79	–16.2	42.7
Nebraska	–	–	–	*	*	–	–
South Atlantic	–	–	–	159	32	–	–
Florida	–	–	–	155	32	–	–
West Virginia	–	–	–	4	–	–	–
East South Central	1,421	1,095	218	–	–	29.7	–
Tennessee	1,421	1,095	218	–	–	29.7	–
West South Central	–	4	33	–	–	–100.0	–
Texas	–	4	33	–	–	–100.0	–
Mountain	11,791	15,163	15,793	15,456	15,289	–22.2	–6.3
Arizona	69	80	86	89	101	–13.6	–9.2
Colorado	2	6	4	14	34	–61.6	–50.0
Idaho	65	141	59	95	61	–54.1	1.8
Montana	–	9	29	42	42	–100.0	–
Nevada	2,265	2,150	2,027	1,781	1,979	5.4	3.4
Utah	9,389	12,755	13,586	13,418	13,035	–26.4	–7.9
Wyoming	*	22	2	18	37	–98.5	–69.3
Pacific	2,366	2,965	3,317	2,843	3,143	–20.2	–6.8
California	2,240	2,838	3,074	2,575	2,777	–21.1	–5.2
Oregon	*	2	127	123	113	–71.9	–75.2
Washington	125	126	115	145	253	–.4	–16.1
Washington	**4,526**	**4,756**	**4,731**	**4,621**	**5,020**	**–4.8**	**–2.6**
Pacific	4,526	4,756	4,731	4,621	5,020	–4.8	–2.6
Oregon	3	2	–	–	–	19.1	–
Washington	4,523	4,754	4,731	4,621	5,020	–4.9	–2.6
Wyoming	**276,723**	**261,333**	**234,016**	**210,739**	**188,983**	**5.9**	**10.0**
New England	–	–	*	14	–	–	–
Connecticut	–	–	*	–	–	–	–
Massachusetts	–	–	–	14	–	–	–
Middle Atlantic	–	–	–	–	*	–	–
Pennsylvania	–	–	–	–	*	–	–
East North Central	62,041	55,223	42,685	37,648	30,920	12.3	19.0
Illinois	17,734	15,480	9,779	7,593	4,417	14.6	41.5
Indiana	18,079	18,306	15,417	12,635	11,804	–1.2	11.3
Michigan	8,551	7,543	4,267	4,487	2,948	13.4	30.5

See footnotes at end of table.

Table 61. Domestic Distribution of U.S. Coal by Coal-Producing Region and State, and Destination Census Division and State, 1992-1996 (Continued)

(Thousand Short Tons)

Coal-Producing Region and State, and Destination Census Division and State	1996	1995	1994	1993	1992	Percent Change 1995-1996	Average Annual Percent Change 1992-1996
Wyoming (Continued)							
Ohio	37	–	–	–	124	–	–26.2
Wisconsin	17,640	13,895	13,221	12,934	11,627	27.0	11.0
West North Central	82,593	77,051	67,523	61,641	52,269	7.2	12.1
Iowa	18,121	16,955	15,505	15,950	14,056	6.9	6.6
Kansas	11,772	14,243	16,490	16,484	13,526	–17.3	–3.4
Minnesota	8,569	8,816	9,911	9,093	8,385	–2.8	.5
Missouri	33,312	25,731	16,112	10,815	7,958	29.5	43.0
Nebraska	10,464	10,065	8,908	8,801	7,882	4.0	7.3
North Dakota	*	*	–	5	5	–61.7	–68.5
South Dakota	355	1,241	597	493	456	–71.4	–6.1
South Atlantic	7,409	7,432	5,836	938	12	–.3	395.6
Florida	591	–	93	–	12	–	163.3
Georgia	6,818	6,796	4,914	726	–	.3	–
Maryland	–	636	829	213	–	–100.0	–
East South Central	4,010	2,970	594	317	156	35.0	125.3
Alabama	3,686	2,950	251	–	–	25.0	–
Kentucky	–	–	–	248	1	–	–
Mississippi	26	–	–	–	83	–	–25.0
Tennessee	298	20	342	68	72	NM	42.8
West South Central	86,413	82,918	80,246	76,692	72,339	4.2	4.5
Arkansas	14,614	14,033	12,184	10,826	11,571	4.1	6.0
Louisiana	9,209	10,309	11,215	11,133	10,039	–10.7	–2.1
Oklahoma	19,751	20,326	17,577	16,726	16,733	–2.8	4.2
Texas	42,839	38,250	39,270	38,007	33,995	12.0	5.9
Mountain	33,363	32,950	34,935	32,195	33,165	1.3	.1
Arizona	–	–	–	5	–	–	–
Colorado	6,124	5,602	5,132	5,538	4,952	9.3	5.4
Idaho	268	293	337	343	393	–8.4	–9.1
Montana	513	193	119	37	44	165.6	84.6
Nevada	204	342	1,014	753	802	–40.3	–29.0
Utah	1	*	–	–	586	NM	–78.9
Wyoming	26,253	26,521	28,334	25,519	26,388	–1.0	–.1
Pacific	894	2,775	2,198	1,271	120	–67.8	65.3
Oregon	894	1,485	2,197	1,270	114	–39.8	67.2
Washington	1	1,290	1	1	6	–99.9	–39.4
U.S. Total	**967,693**	**940,423**	**949,843**	**883,934**	**897,267**	**2.9**	**1.9**
New England	5,334	5,199	4,963	4,141	7,717	2.6	–8.8
Connecticut	1,602	1,955	976	695	1,003	–18.1	12.4
Maine	301	302	463	405	866	–.4	–23.2
Massachusetts	2,475	2,157	2,538	1,840	4,634	14.8	–14.5
New Hampshire	951	780	978	1,192	1,189	21.9	–5.4
Rhode Island	3	3	3	3	5	21.2	–9.6
Vermont	2	3	5	6	20	–38.2	–45.8
Middle Atlantic	73,489	70,149	69,737	64,421	73,087	4.8	.1
New Jersey	2,927	2,936	2,163	2,169	2,433	–.3	4.7
New York	11,459	10,705	11,664	10,950	13,977	7.0	–4.8
Pennsylvania	59,103	56,509	55,910	51,302	56,677	4.6	1.0
East North Central	228,473	212,105	214,903	196,343	201,713	7.7	3.2
Illinois	44,547	41,626	38,745	34,433	31,186	7.0	9.3
Indiana	62,741	59,476	63,589	54,452	60,970	5.5	.7
Michigan	33,186	33,928	33,487	30,041	30,363	–2.2	2.3
Ohio	61,713	54,310	56,850	56,755	58,716	13.6	1.3
Wisconsin	26,285	22,766	22,231	20,662	20,477	15.5	6.4
West North Central	136,573	130,836	126,407	116,337	113,921	4.4	4.6
Iowa	21,017	19,777	18,259	18,950	16,988	6.3	5.5
Kansas	13,987	16,091	18,097	17,002	14,801	–13.1	–1.4
Minnesota	18,679	19,488	20,498	18,166	17,224	–4.1	2.0
Missouri	40,064	32,821	27,278	19,921	24,207	22.1	13.4
Nebraska	10,726	10,377	9,055	9,011	8,093	3.4	7.3
North Dakota	30,444	29,307	30,290	30,642	30,022	3.9	.3
South Dakota	1,657	2,976	2,929	2,646	2,586	–44.3	–10.5
South Atlantic	161,026	151,954	161,029	141,701	145,219	6.0	2.6
Delaware	1,834	1,933	2,309	2,242	1,913	–5.1	–1.0
District of Columbia	23	6	47	51	50	309.2	–17.5
Florida	26,285	23,505	23,757	21,446	24,351	11.8	1.9
Georgia	29,074	29,730	30,497	25,101	24,242	–2.2	4.6

See footnotes at end of table.

Table 61. Domestic Distribution of U.S. Coal by Coal-Producing Region and State, and Destination Census Division and State, 1992-1996 (Continued)

(Thousand Short Tons)

Coal-Producing Region and State, and Destination Census Division and State	1996	1995	1994	1993	1992	Percent Change 1995-1996	Average Annual Percent Change 1992-1996
U.S. Total (Continued)							
Maryland	10,762	10,596	10,959	10,063	9,735	1.6	2.5
North Carolina	27,414	24,149	26,199	25,621	25,801	13.5	1.5
South Carolina	13,373	11,745	13,454	11,749	11,338	13.9	4.2
Virginia	16,214	15,225	16,735	16,084	14,915	6.5	2.1
West Virginia	36,047	35,065	37,071	29,343	32,874	2.8	2.3
East South Central	105,708	104,194	99,350	97,057	92,761	1.4	3.3
Alabama	33,057	31,440	30,210	28,698	28,741	5.1	3.6
Kentucky	34,438	37,382	35,636	35,461	33,497	–7.9	.7
Mississippi	5,702	4,516	4,446	3,421	3,965	26.3	9.5
Tennessee	32,510	30,856	29,057	29,477	26,559	5.4	5.2
West South Central	145,394	144,435	142,136	139,664	134,770	.7	1.9
Arkansas	14,918	14,317	12,501	11,094	11,807	4.2	6.0
Louisiana	13,526	14,267	15,844	14,524	13,539	–5.2	*
Oklahoma	21,584	22,210	19,210	18,777	18,362	–2.8	4.1
Texas	95,367	93,642	94,581	95,269	91,062	1.8	1.2
Mountain	101,497	107,497	115,311	109,200	110,007	–5.6	–2.0
Arizona	15,785	16,401	19,169	19,039	16,944	–3.8	–1.8
Colorado	16,920	17,502	17,274	16,821	16,333	–3.3	.9
Idaho	333	440	400	438	456	–24.2	–7.5
Montana	8,359	9,678	10,729	9,194	11,245	–13.6	–7.1
Nevada	7,072	7,479	7,777	7,621	7,926	–5.4	–2.8
New Mexico	15,097	14,727	15,549	15,022	14,899	2.5	.3
Utah	11,175	14,602	16,015	15,493	15,707	–23.5	–8.2
Wyoming	26,757	26,668	28,399	25,571	26,497	.3	.2
Pacific	8,790	11,962	12,228	10,791	11,844	–26.5	–7.2
Alaska	697	815	789	855	797	–14.5	–3.3
California	2,240	2,839	3,096	2,608	2,955	–21.1	–6.7
Oregon	1,028	1,518	2,347	1,761	2,062	–32.3	–16.0
Washington	4,825	6,790	5,996	5,567	6,030	–28.9	–5.4

* Data round to zero.
NM Not meaningful as value is greater than 500 percent.
Note: Totals may not equal sum of components due to independent rounding.
Source: Energy Information Administration, Form EIA-6, ''Coal Distribution Report.''

Table 62. Foreign Distribution of U.S. Coal by Major Coal-Exporting States and Destination, 1992-1996
(Thousand Short Tons)

Coal-Exporting State and Destination	1996	1995	1994	1993	1992	Percent Change 1995-1996	Average Annual Percent Change 1992-1996
Alabama	**4,864**	**6,032**	**4,529**	**5,888**	**5,931**	**–19.4**	**–4.8**
Albania	–	–	–	–	21	–	–
Argentina	216	306	268	319	157	–29.5	8.3
Belgium & Luxembourg	703	574	627	866	861	22.3	–5.0
Brazil	566	564	42	193	–	.3	–
Bulgaria	208	128	35	109	–	63.2	–
China (Taiwan)	–	–	–	42	45	–	–
Denmark	–	26	–	–	–	–100.0	–
Egypt	–	111	–	–	–	–100.0	–
France	–	–	*	–	–	–	–
Germany, FR	184	201	–	–	–	–8.0	–
Italy	659	930	565	429	506	–29.2	6.8
Japan	861	1,358	1,266	2,202	2,343	–36.6	–22.1
Morocco	–	–	–	39	–	–	–
Netherlands	73	276	88	–	–	–73.4	–
Romania	170	492	602	171	183	–65.5	–2.0
South Africa, Rep of	57	–	–	–	212	–	–28.0
Spain	52	48	27	–	–	8.4	–
Turkey	326	302	137	253	424	8.0	–6.4
United Kingdom	789	717	872	1,266	1,179	10.1	–9.6
Alaska	**776**	**855**	**716**	**743**	**734**	**–9.2**	**1.4**
Korea, Republic of	776	855	716	743	734	–9.2	1.4
Colorado	**1,415**	**900**	**752**	**1,128**	**669**	**57.2**	**20.6**
China (Taiwan)	219	235	134	–	–	–6.5	–
Hong Kong	–	–	46	–	–	–	–
Israel	30	–	–	–	–	–	–
Japan	343	651	395	918	669	–47.3	–15.3
Korea, Republic of	65	–	177	209	–	–	–
Mexico	758	–	–	–	–	–	–
Turkey	–	14	–	–	–	–100.0	–
Illinois	**1,886**	**2,699**	**236**	**670**	**1,242**	**–30.1**	**11.0**
Belgium & Luxembourg	76	–	–	–	58	–	6.9
Brazil	1	–	–	–	298	–	–74.2
Denmark	364	516	–	–	45	–29.4	68.2
France	–	57	–	–	–	–100.0	–
Germany, FR	325	722	–	–	–	–54.9	–
Ireland	–	–	–	108	213	–	–
Italy	–	42	–	–	–	–100.0	–
Japan	66	49	236	109	53	35.0	5.8
Korea, Republic of	–	–	–	–	50	–	–
Morocco	103	775	–	452	350	–86.7	–26.3
Netherlands	120	–	–	–	–	–	–
Sweden	25	–	–	–	–	–	–
United Kingdom	805	538	–	–	175	49.7	46.4
Kentucky	**9,143**	**9,695**	**7,167**	**9,521**	**14,036**	**–5.7**	**–10.2**
Belgium & Luxembourg	67	366	472	493	1,242	–81.7	–51.8
Brazil	–	52	23	392	98	–100.0	–
Canada	1,178	777	1,099	1,416	2,078	51.5	–13.2
China (Taiwan)	1,978	2,397	2,643	3,625	3,333	–17.5	–12.2
Denmark	–	–	–	33	172	–	–
Finland	4	–	–	2	–	–	–
France	548	262	146	665	1,812	108.6	–25.9
Germany, FR	–	187	–	–	–	–100.0	–
Iceland	119	76	7	–	31	56.3	40.0
Ireland	–	58	–	16	336	–100.0	–
Israel	–	217	–	–	–	–100.0	–
Italy	1,745	1,714	805	719	805	1.8	21.3
Jamaica	17	62	26	39	35	–73.0	–16.4
Japan	93	53	100	269	303	74.0	–25.6
Korea, Republic of	1,876	1,523	1,163	1,256	1,191	23.2	12.0
Netherlands	581	621	268	241	1,312	–6.5	–18.4
Norway	140	142	74	91	98	–1.4	9.3
Portugal	229	–	24	–	–	–	–
Saudi Arabia	22	–	–	–	–	–	–
Spain	–	231	–	–	98	–100.0	–

See footnotes at end of table.

Table 62. Foreign Distribution of U.S. Coal by Major Coal-Exporting States and Destination, 1992-1996 (Continued)

(Thousand Short Tons)

Coal-Exporting State and Destination	1996	1995	1994	1993	1992	Percent Change 1995-1996	Average Annual Percent Change 1992-1996
Kentucky (Continued)							
Sweden	–	–	16	195	456	–	–
Turkey	–	197	–	–	151	–100.0	–
United Kingdom	548	758	301	70	447	–27.7	5.2
Yugoslavia, FR	–	–	–	–	38	–	–
Pennsylvania	**9,246**	**8,279**	**6,301**	**5,508**	**6,440**	**11.7**	**9.5**
Argentina	–	–	–	46	–	–	–
Belgium & Luxembourg	–	–	29	–	90	–	–
Brazil	261	380	338	156	148	–31.3	15.1
Bulgaria	–	–	–	71	73	–	–
Canada	1,050	713	844	597	1,599	47.4	–10.0
Chile	–	–	–	–	37	–	–
Costa Rica	–	–	–	–	*	–	–
Croatia	–	–	–	159	–	–	–
Denmark	801	1,589	508	187	1,441	–49.6	–13.7
Dominican Republic	50	18	65	59	157	172.7	–24.8
Finland	283	544	71	56	–	–48.1	–
France	89	9	–	188	184	NM	–16.7
Germany, FR	256	383	197	102	151	–33.3	14.0
Greece	491	–	–	–	–	–	–
Indonesia	–	–	–	–	*	–	–
Ireland	1,067	1,161	1,015	911	–	–8.0	–
Israel	1,068	995	922	940	1,090	7.4	–.5
Italy	89	–	601	50	–	–	–
Japan	1,057	916	834	1,384	921	15.3	3.5
Korea, Republic of	195	109	214	91	–	78.4	–
Malaysia	–	–	–	–	*	–	–
Mexico	–	–	–	–	18	–	–
Morocco	173	–	–	–	–	–	–
Netherlands	732	593	261	–	2	23.5	349.7
Norway	30	28	14	30	48	5.1	–11.5
Panama	–	–	–	–	*	–	–
Paraguay	–	–	–	–	3	–	–
Portugal	592	472	378	467	302	25.5	18.3
Qatar	–	–	–	–	*	–	–
Saudi Arabia	–	–	–	*	–	–	–
South Africa, Rep of	112	–	–	–	–	–	–
Spain	–	18	–	–	–	–100.0	–
Surinam	–	–	–	*	*	–	–
Sweden	–	–	–	–	1	–	–
Trinidad & Tobago	–	–	–	1	2	–	–
Turkey	–	43	–	–	–	–100.0	–
United Arab Emirates	–	–	–	*	–	–	–
United Kingdom	851	299	–	*	–	184.9	–
Venezuela	1	9	11	15	39	–88.6	–59.5
Yugoslavia, FR	–	–	–	–	132	–	–
Utah	**5,305**	**3,930**	**2,698**	**2,959**	**2,260**	**35.0**	**23.8**
Canada	–	–	–	346	–	–	–
Chile	445	170	–	–	–	162.1	–
China (Taiwan)	648	323	321	849	721	100.4	–2.6
Hong Kong	–	–	–	–	359	–	–
Japan	4,058	3,000	2,377	1,764	1,180	35.3	36.2
Korea, Republic of	154	438	–	–	–	–64.7	–
Mexico	–	–	–	*	–	–	–
Virginia	**13,432**	**9,742**	**11,683**	**14,251**	**17,224**	**37.9**	**–6.0**
Algeria	206	166	269	344	534	24.1	–21.2
Argentina	–	–	53	52	–	–	–
Belgium & Luxembourg	1,078	764	884	1,147	2,284	41.2	–17.1
Brazil	1,228	1,091	1,218	1,741	2,252	12.5	–14.1
Bulgaria	–	–	–	242	172	–	–
Canada	387	445	786	1,229	1,331	–13.0	–26.5
China (Taiwan)	–	–	15	*	–	–	–
Croatia	–	–	–	251	–	–	–
Denmark	–	–	–	–	60	–	–
Egypt	835	333	436	234	239	150.7	36.8

See footnotes at end of table.

Table 62. Foreign Distribution of U.S. Coal by Major Coal-Exporting States and Destination, 1992-1996 (Continued)

(Thousand Short Tons)

Coal-Exporting State and Destination	1996	1995	1994	1993	1992	Percent Change 1995-1996	Average Annual Percent Change 1992-1996
Virginia (Continued)							
France	910	625	563	737	915	45.7	–0.1
Germany, FR	–	68	9	50	37	–100.0	–
Italy	2,198	1,474	1,804	1,364	1,345	49.1	13.1
Japan	2,300	1,796	2,114	2,410	2,754	28.0	–4.4
Korea, Republic of	466	589	539	853	1,244	–20.9	–21.8
Netherlands	1,193	793	766	1,009	1,192	50.4	*
Portugal	145	105	91	–	284	38.0	–15.5
Romania	32	–	223	–	145	–	–31.3
South Africa, Rep of	76	–	–	–	–	–	–
Spain	1,370	847	1,297	1,682	1,339	61.7	.6
Sweden	185	115	37	–	–	60.9	–
Turkey	24	–	–	–	–	–	–
United Kingdom	798	531	579	905	1,054	50.3	–6.7
Yugoslavia, FR	–	–	–	–	44	–	–
West Virginia	**42,044**	**44,321**	**36,205**	**33,159**	**50,806**	**–5.1**	**–4.6**
Algeria	–	–	*	–	–	–	–
Argentina	–	–	35	132	169	–	–
Belgium & Luxembourg	2,182	2,020	2,312	2,209	1,785	8.0	5.1
Brazil	4,256	4,329	4,109	2,496	2,907	–1.7	10.0
Bulgaria	1,214	1,360	1,571	644	619	–10.8	18.3
Canada	7,222	5,784	5,644	4,108	8,911	24.9	–5.1
Chile	195	118	–	–	–	66.0	–
China (Taiwan)	353	355	284	141	283	–.7	5.7
Croatia	–	72	–	63	245	–100.0	–
Denmark	–	189	–	168	2,397	–100.0	–
Egypt	303	714	593	601	557	–57.5	–14.1
Finland	507	792	375	212	207	–36.0	25.0
France	3,676	4,408	3,514	3,400	6,311	–16.6	–12.6
Germany, FR	943	1,107	382	635	959	–14.9	–.4
Iceland	–	–	–	–	8	–	–
India	11	–	–	–	–	–	–
Ireland	–	–	–	117	822	–	–
Israel	375	–	–	–	210	–	15.6
Italy	4,965	5,138	3,634	3,815	6,299	–3.4	–5.8
Jamaica	36	–	–	–	–	–	–
Japan	2,062	3,431	2,595	2,691	3,313	–39.9	–11.2
Korea, Republic of	1,050	1,013	523	318	–	3.7	–
Morocco	1,111	275	101	79	170	304.0	59.9
Netherlands	1,636	3,628	3,340	3,205	3,804	–54.9	–19.0
Nigeria	–	–	–	43	–	–	–
Norway	–	–	–	–	15	–	–
Portugal	1,128	1,390	674	1,144	962	–18.9	4.0
Romania	1,315	1,623	925	820	376	–19.0	36.7
Slovenia	–	–	–	–	69	–	–
South Africa, Rep of	947	946	771	577	408	.1	23.4
Spain	887	1,084	1,255	1,211	1,501	–18.1	–12.3
Sweden	882	1,352	886	603	819	–34.8	1.9
Turkey	1,655	1,560	1,468	1,370	1,429	6.1	3.7
United Kingdom	3,133	1,633	1,212	2,359	4,816	91.9	–10.2
Yugoslavia, FR	–	–	–	–	436	–	–
Wyoming	**2,395**	**2,269**	**1,524**	**974**	**1,277**	**5.5**	**17.0**
Canada	443	32	–	–	–	NM	–
Japan	–	–	–	*	–	–	–
Netherlands	63	–	–	–	–	–	–
Spain	1,889	2,237	1,524	974	1,277	–15.6	10.3
Major States Total	**90,506**	**88,722**	**71,811**	**74,801**	**100,619**	**2.0**	**–2.6**
Albania	–	–	–	–	21	–	–
Algeria	206	166	269	344	534	24.1	–21.2
Argentina	216	306	356	548	326	–29.5	–9.8
Belgium & Luxembourg	4,106	3,724	4,324	4,715	6,320	10.2	–10.2
Brazil	6,312	6,416	5,730	4,977	5,704	–1.6	2.6
Bulgaria	1,422	1,488	1,607	1,065	863	–4.4	13.3
Canada	10,280	7,750	8,373	7,696	13,919	32.6	–7.3
Chile	640	287	–	–	37	122.8	103.4

See footnotes at end of table.

Table 62. Foreign Distribution of U.S. Coal by Major Coal-Exporting States and Destination, 1992-1996 (Continued)

(Thousand Short Tons)

Coal-Exporting State and Destination	1996	1995	1994	1993	1992	Percent Change 1995-1996	Average Annual Percent Change 1992-1996
Major States Total (Continued)							
China (Taiwan)	3,197	3,310	3,397	4,656	4,382	–3.4	–7.6
Costa Rica	–	–	–	–	*	–	–
Croatia	–	72	–	473	245	–100.0	–
Denmark	1,165	2,320	508	388	4,116	–49.8	–27.1
Dominican Republic	50	18	65	59	157	172.7	–24.8
Egypt	1,138	1,158	1,029	834	796	–1.7	9.4
Finland	794	1,337	446	269	207	–40.6	39.9
France	5,223	5,362	4,223	4,990	9,222	–2.6	–13.3
Germany, FR	1,708	2,668	588	787	1,147	–36.0	10.5
Greece	491	–	–	–	–	–	–
Hong Kong	–	–	46	–	359	–	–
Iceland	119	76	7	–	39	56.3	32.3
India	11	–	–	–	–	–	–
Indonesia	–	–	–	–	*	–	–
Ireland	1,067	1,219	1,015	1,152	1,371	–12.4	–6.1
Israel	1,473	1,212	922	940	1,300	21.5	3.2
Italy	9,656	9,298	7,409	6,377	8,955	3.8	1.9
Jamaica	53	62	26	39	35	–15.6	11.1
Japan	10,840	11,254	9,918	11,747	11,537	–3.7	–1.5
Korea, Republic of	4,582	4,526	3,332	3,470	3,219	1.2	9.2
Malaysia	–	–	–	–	*	–	–
Mexico	758	–	–	*	18	–	156.3
Morocco	1,388	1,050	101	571	520	32.2	27.8
Netherlands	4,398	5,911	4,723	4,455	6,310	–25.6	–8.6
Nigeria	–	–	–	43	–	–	–
Norway	169	170	88	121	161	–.3	1.2
Panama	–	–	–	–	*	–	–
Paraguay	–	–	–	–	3	–	–
Portugal	2,094	1,967	1,167	1,611	1,548	6.4	7.8
Qatar	–	–	–	–	*	–	–
Romania	1,517	2,115	1,750	991	705	–28.3	21.1
Saudi Arabia	22	–	–	*	–	–	–
Slovenia	–	–	–	–	69	–	–
South Africa, Rep of	1,192	946	771	577	620	26.0	17.8
Spain	4,197	4,465	4,103	3,867	4,215	–6.0	–.1
Surinam	–	–	–	*	*	–	–
Sweden	1,091	1,466	939	798	1,276	–25.6	–3.8
Trinidad & Tobago	–	–	–	1	2	–	–
Turkey	2,005	2,116	1,606	1,623	2,003	–5.2	*
United Arab Emirates	–	–	–	*	–	–	–
United Kingdom	6,925	4,476	2,963	4,600	7,672	54.7	–2.5
Venezuela	1	9	11	15	39	–88.6	–59.5
Yugoslavia, FR	–	–	–	–	650	–	–
Other States Total	**1,693**	**1,185**	**870**	**709**	**761**	**42.8**	**22.1**
Brazil	–	188	184	295	–	–100.0	–
Canada	319	273	93	55	*	16.9	426.7
France	–	–	–	–	9	–	–
Ireland	80	–	–	–	10	–	68.5
Mexico	–	498	–	11	–	–100.0	–
Spain	–	–	153	–	53	–	–
United Kingdom	–	–	–	–	4	–	–
Unknown	1,294	226	439	348	685	471.6	17.3
U.S. Total	**92,199**	**89,907**	**72,680**	**75,510**	**101,380**	**2.5**	**–2.3**
Albania	–	–	–	–	21	–	–
Algeria	206	166	269	344	534	24.1	–21.2
Argentina	216	306	356	548	326	–29.5	–9.8
Belgium & Luxembourg	4,106	3,724	4,324	4,715	6,320	10.2	–10.2
Brazil	6,312	6,605	5,914	5,271	5,704	–4.4	2.6
Bulgaria	1,422	1,488	1,607	1,065	863	–4.4	13.3
Canada	10,599	8,023	8,467	7,751	13,919	32.1	–6.6
Chile	640	287	–	–	37	122.8	103.4
China (Taiwan)	3,197	3,310	3,397	4,656	4,382	–3.4	–7.6
Costa Rica	–	–	–	–	*	–	–
Croatia	–	72	–	473	245	–100.0	–
Denmark	1,165	2,320	508	388	4,116	–49.8	–27.1

See footnotes at end of table.

Table 62. Foreign Distribution of U.S. Coal by Major Coal-Exporting States and Destination, 1992-1996 (Continued)

(Thousand Short Tons)

Coal-Exporting State and Destination	1996	1995	1994	1993	1992	Percent Change 1995-1996	Average Annual Percent Change 1992-1996
U.S. Total (Continued)							
Dominican Republic	50	18	65	59	157	172.7	–24.8
Egypt	1,138	1,158	1,029	834	796	–1.7	9.4
Finland	794	1,337	446	269	207	–40.6	39.9
France	5,223	5,362	4,223	4,990	9,230	–2.6	–13.3
Germany, FR	1,708	2,668	588	787	1,147	–36.0	10.5
Greece	491	–	–	–	–	–	–
Hong Kong	–	–	46	–	359	–	–
Iceland	119	76	7	–	39	56.3	32.3
India	11	–	–	–	–	–	–
Indonesia	–	–	–	–	*	–	–
Ireland	1,147	1,219	1,015	1,152	1,381	–5.8	–4.5
Israel	1,473	1,212	922	940	1,300	21.5	3.2
Italy	9,656	9,298	7,409	6,377	8,955	3.8	1.9
Jamaica	53	62	26	39	35	–15.6	11.1
Japan	10,840	11,254	9,918	11,747	11,537	–3.7	–1.5
Korea, Republic of	4,582	4,526	3,332	3,470	3,219	1.2	9.2
Malaysia	–	–	–	–	*	–	–
Mexico	758	498	–	11	18	52.2	156.3
Morocco	1,388	1,050	101	571	520	32.2	27.8
Netherlands	4,398	5,911	4,723	4,455	6,310	–25.6	–8.6
Nigeria	–	–	–	43	–	–	–
Norway	169	170	88	121	161	–.3	1.2
Panama	–	–	–	–	*	–	–
Paraguay	–	–	–	–	3	–	–
Portugal	2,094	1,967	1,167	1,611	1,548	6.4	7.8
Qatar	–	–	–	–	*	–	–
Romania	1,517	2,115	1,750	991	705	–28.3	21.1
Saudi Arabia	22	–	–	*	–	–	–
Slovenia	–	–	–	–	69	–	–
South Africa, Rep of	1,192	946	771	577	620	26.0	17.8
Spain	4,197	4,465	4,256	3,867	4,268	–6.0	–.4
Surinam	–	–	–	*	*	–	–
Sweden	1,091	1,466	939	798	1,276	–25.6	–3.8
Trinidad & Tobago	–	–	–	1	2	–	–
Turkey	2,005	2,116	1,606	1,623	2,003	–5.2	*
United Arab Emirates	–	–	–	*	–	–	–
United Kingdom	6,925	4,476	2,963	4,600	7,676	54.7	–2.5
Venezuela	1	9	11	15	39	–88.6	–59.5
Yugoslavia, FR	–	–	–	–	650	–	–
Unknown	1,294	226	439	348	685	471.6	17.3

* Data round to zero.

NM Not meaningful as value is greater than 500 percent.

Notes: Major coal-exporting States are those with total coal exports of over 600,000 short tons in 1996. Totals may not equal sum of components due to independent rounding. Foreign distribution to some countries for 1992 through 1995 have been revised.

Sources: Values shown for destinations other than Canada and Mexico are estimates based upon information reported on Energy Information Administration Form EIA-6, ''Coal Distribution Report,'' and coal export data presented in King's COALBASE (King Publishing Corporation, Knoxville, Tennessee). See the Explanatory Notes for a complete description of the methodology used to develop these estimates. Values shown for Canada and Mexico are based upon Form EIA-6.

Table 63. Foreign Distribution of U.S. Metallurgical Coal by Major Coal-Exporting States and Destination, 1992-1996

(Thousand Short Tons)

Coal-Exporting State and Destination	1996	1995	1994	1993	1992	Percent Change 1995-1996	Average Annual Percent Change 1992-1996
Alabama	**4,523**	**5,330**	**4,359**	**5,846**	**5,800**	**–15.1**	**–6.0**
Albania	–	–	–	–	21	–	–
Argentina	216	306	268	319	157	–29.5	8.3
Belgium & Luxembourg	703	574	627	866	861	22.3	–5.0
Brazil	566	564	42	193	–	.3	–
Bulgaria	208	128	35	109	–	63.2	–
China (Taiwan)	–	–	–	42	45	–	–
Egypt	–	111	–	–	–	–100.0	–
France	–	–	*	–	–	–	–
Germany, FR	184	201	–	–	–	–8.0	–
Italy	318	314	421	429	378	1.5	–4.2
Japan	861	1,358	1,266	2,199	2,340	–36.6	–22.1
Netherlands	73	217	88	–	–	–66.1	–
Romania	170	492	602	171	183	–65.5	–2.0
South Africa, Rep of	57	–	–	–	212	–	–28.0
Spain	52	48	–	–	–	8.4	–
Turkey	326	302	137	253	424	8.0	–6.4
United Kingdom	789	717	872	1,266	1,179	10.1	–9.6
Colorado	**30**	–	–	–	–	–	–
Japan	30	–	–	–	–	–	–
Illinois	**–**	**49**	**236**	**109**	**614**	**–100.0**	**–100.0**
Belgium & Luxembourg	–	–	–	–	58	–	–
Brazil	–	–	–	–	298	–	–
Japan	–	49	236	109	32	–100.0	–
Korea, Republic of	–	–	–	–	50	–	–
United Kingdom	–	–	–	–	175	–	–
Kentucky	**5,303**	**3,640**	**3,120**	**4,415**	**5,916**	**45.7**	**–2.7**
Belgium & Luxembourg	67	–	66	56	665	–	–43.7
Brazil	–	52	23	392	98	–100.0	–
Canada	1,178	777	1,073	1,356	1,373	51.5	–3.8
China (Taiwan)	–	76	98	140	123	–100.0	–
France	548	262	146	400	427	108.6	6.4
Germany, FR	–	93	–	–	–	–100.0	–
Iceland	119	76	7	–	31	56.3	40.0
Italy	132	–	42	–	–	–	–
Japan	93	53	67	219	303	74.0	–25.6
Korea, Republic of	1,876	1,523	1,163	1,256	1,191	23.2	12.0
Netherlands	581	102	45	241	766	468.8	–6.7
Norway	140	142	74	91	98	–1.4	9.3
Saudi Arabia	22	–	–	–	–	–	–
Sweden	–	–	16	195	456	–	–
Turkey	–	–	–	–	151	–	–
United Kingdom	548	483	301	70	197	13.5	29.1
Yugoslavia, FR	–	–	–	–	38	–	–
Pennsylvania	**1,642**	**1,467**	**1,624**	**1,919**	**1,301**	**11.9**	**6.0**
Argentina	–	–	–	46	–	–	–
Belgium & Luxembourg	–	–	29	–	–	–	–
Brazil	258	371	333	148	137	–30.4	17.2
Bulgaria	–	–	–	71	73	–	–
Canada	–	4	–	10	–	–100.0	–
Chile	–	–	–	–	37	–	–
Croatia	–	–	–	114	–	–	–
Dominican Republic	–	–	23	–	–	–	–
Finland	–	–	–	56	–	–	–
France	89	–	–	–	–	–	–
Germany, FR	–	66	174	–	–	–100.0	–
Japan	920	916	834	1,384	921	.4	*
Korea, Republic of	101	109	214	91	–	–7.8	–
Netherlands	162	–	17	–	–	–	–
South Africa, Rep of	112	–	–	–	–	–	–
Yugoslavia, FR	–	–	–	–	132	–	–
Utah	**187**	–	–	–	–	–	–
Japan	187	–	–	–	–	–	–

See footnotes at end of table.

Table 63. Foreign Distribution of U.S. Metallurgical Coal by Major Coal-Exporting States and Destination, 1992-1996 (Continued)

(Thousand Short Tons)

Coal-Exporting State and Destination	1996	1995	1994	1993	1992	Percent Change 1995-1996	Average Annual Percent Change 1992-1996
Virginia	**12,760**	**8,921**	**11,155**	**13,747**	**14,389**	**43.0**	**–3.0**
Algeria	206	166	269	344	534	24.1	–21.2
Argentina	–	–	53	52	–	–	–
Belgium & Luxembourg	1,078	764	884	1,147	1,972	41.2	–14.0
Brazil	1,228	1,091	1,218	1,741	2,252	12.5	–14.1
Bulgaria	–	–	–	242	172	–	–
Canada	387	445	786	1,229	–	–13.0	–
China (Taiwan)	–	–	15	*	–	–	–
Croatia	–	–	–	251	–	–	–
Egypt	835	333	436	234	239	150.7	36.8
France	910	625	563	737	846	45.7	1.8
Germany, FR	–	68	9	50	37	–100.0	–
Italy	1,696	758	1,445	951	622	123.8	28.5
Japan	2,300	1,796	2,037	2,355	2,689	28.0	–3.8
Korea, Republic of	466	589	539	853	1,244	–20.9	–21.8
Netherlands	1,193	793	766	973	1,192	50.4	*
Portugal	–	–	–	–	73	–	–
Romania	32	–	223	–	145	–	–31.3
South Africa, Rep of	76	–	–	–	–	–	–
Spain	1,370	847	1,297	1,682	1,274	61.7	1.8
Sweden	185	115	37	–	–	60.9	–
United Kingdom	798	531	579	905	1,054	50.3	–6.7
Yugoslavia, FR	–	–	–	–	44	–	–
West Virginia	**31,717**	**34,633**	**31,603**	**26,504**	**33,413**	**–8.4**	**–1.3**
Algeria	–	–	*	–	–	–	–
Argentina	–	–	35	132	169	–	–
Belgium & Luxembourg	1,261	1,175	1,302	1,396	538	7.3	23.7
Brazil	4,247	4,329	4,109	2,496	2,907	–1.9	9.9
Bulgaria	1,152	1,360	1,571	644	619	–15.3	16.8
Canada	6,907	5,759	5,605	4,071	8,021	19.9	–3.7
Chile	43	–	–	–	–	–	–
China (Taiwan)	353	355	284	141	283	–.7	5.7
Croatia	–	–	–	63	245	–	–
Egypt	303	714	593	601	557	–57.5	–14.1
Finland	507	683	375	212	207	–25.8	25.0
France	2,859	3,594	3,514	2,864	3,216	–20.4	–2.9
Germany, FR	584	254	382	286	314	130.4	16.8
Iceland	–	–	–	–	8	–	–
India	11	–	–	–	–	–	–
Italy	2,361	2,873	2,927	3,111	4,899	–17.8	–16.7
Japan	2,062	3,222	2,148	2,260	2,895	–36.0	–8.1
Korea, Republic of	1,050	1,013	523	318	–	3.7	–
Netherlands	1,223	1,523	1,717	2,014	2,486	–19.7	–16.3
Nigeria	–	–	–	43	–	–	–
Norway	–	–	–	–	15	–	–
Portugal	164	33	–	151	108	389.9	10.9
Romania	1,315	1,623	925	820	376	–19.0	36.7
South Africa, Rep of	947	946	771	577	408	.1	23.4
Spain	818	1,084	1,255	1,071	1,232	–24.5	–9.7
Sweden	882	1,352	886	603	819	–34.8	1.9
Turkey	1,643	1,560	1,468	1,370	1,429	5.3	3.5
United Kingdom	1,024	1,182	1,212	1,261	1,225	–13.3	–4.4
Yugoslavia, FR	–	–	–	–	436	–	–
Major States Total	**56,162**	**54,039**	**52,098**	**52,541**	**61,432**	**3.9**	**–2.2**
Albania	–	–	–	–	21	–	–
Algeria	206	166	269	344	534	24.1	–21.2
Argentina	216	306	356	548	326	–29.5	–9.8
Belgium & Luxembourg	3,109	2,513	2,908	3,465	4,094	23.7	–6.6
Brazil	6,298	6,407	5,725	4,969	5,692	–1.7	2.6
Bulgaria	1,361	1,488	1,607	1,065	863	–8.6	12.0
Canada	8,472	6,986	7,464	6,666	9,394	21.3	–2.5
Chile	43	–	–	–	37	–	3.4
China (Taiwan)	353	431	397	323	451	–18.2	–6.0
Croatia	–	–	–	428	245	–	–
Dominican Republic	–	–	23	–	–	–	–
Egypt	1,138	1,158	1,029	834	796	–1.7	9.4

See footnotes at end of table.

Table 63. Foreign Distribution of U.S. Metallurgical Coal by Major Coal-Exporting States and Destination, 1992-1996 (Continued)

(Thousand Short Tons)

Coal-Exporting State and Destination	1996	1995	1994	1993	1992	Percent Change 1995-1996	Average Annual Percent Change 1992-1996
Major States Total (Continued)							
Finland	507	683	375	267	207	–25.8	25.0
France	4,406	4,481	4,223	4,001	4,489	–1.7	–.5
Germany, FR	769	681	565	336	352	12.9	21.6
Iceland	119	76	7	–	39	56.3	32.3
India	11	–	–	–	–	–	–
Italy	4,507	3,944	4,836	4,491	5,899	14.3	–6.5
Japan	6,453	7,395	6,588	8,525	9,181	–12.7	–8.4
Korea, Republic of	3,493	3,234	2,438	2,517	2,485	8.0	8.9
Netherlands	3,233	2,635	2,633	3,228	4,444	22.7	–7.6
Nigeria	–	–	–	43	–	–	–
Norway	140	142	74	91	113	–1.4	5.4
Portugal	164	33	–	151	181	389.9	–2.5
Romania	1,517	2,115	1,750	991	705	–28.3	21.1
Saudi Arabia	22	–	–	–	–	–	–
South Africa, Rep of	1,192	946	771	577	620	26.0	17.8
Spain	2,240	1,979	2,552	2,754	2,505	13.2	–2.8
Sweden	1,066	1,466	939	798	1,276	–27.3	–4.4
Turkey	1,969	1,862	1,606	1,623	2,003	5.7	–.4
United Kingdom	3,160	2,913	2,963	3,503	3,831	8.5	–4.7
Yugoslavia, FR	–	–	–	–	650	–	–
Other States Total	**–**	**188**	**184**	**295**	**–**	**–100.0**	**–**
Brazil	–	188	184	295	–	–100.0	–
U.S. Total	**56,162**	**54,228**	**52,282**	**52,835**	**61,432**	**3.6**	**–2.2**
Albania	–	–	–	–	21	–	–
Algeria	206	166	269	344	534	24.1	–21.2
Argentina	216	306	356	548	326	–29.5	–9.8
Belgium & Luxembourg	3,109	2,513	2,908	3,465	4,094	23.7	–6.6
Brazil	6,298	6,596	5,909	5,264	5,692	–4.5	2.6
Bulgaria	1,361	1,488	1,607	1,065	863	–8.6	12.0
Canada	8,472	6,986	7,464	6,666	9,394	21.3	–2.5
Chile	43	–	–	–	37	–	3.4
China (Taiwan)	353	431	397	323	451	–18.2	–6.0
Croatia	–	–	–	428	245	–	–
Dominican Republic	–	–	23	–	–	–	–
Egypt	1,138	1,158	1,029	834	796	–1.7	9.4
Finland	507	683	375	267	207	–25.8	25.0
France	4,406	4,481	4,223	4,001	4,489	–1.7	–.5
Germany, FR	769	681	565	336	352	12.9	21.6
Iceland	119	76	7	–	39	56.3	32.3
India	11	–	–	–	–	–	–
Italy	4,507	3,944	4,836	4,491	5,899	14.3	–6.5
Japan	6,453	7,395	6,588	8,525	9,181	–12.7	–8.4
Korea, Republic of	3,493	3,234	2,438	2,517	2,485	8.0	8.9
Netherlands	3,233	2,635	2,633	3,228	4,444	22.7	–7.6
Nigeria	–	–	–	43	–	–	–
Norway	140	142	74	91	113	–1.4	5.4
Portugal	164	33	–	151	181	389.9	–2.5
Romania	1,517	2,115	1,750	991	705	–28.3	21.1
Saudi Arabia	22	–	–	–	–	–	–
South Africa, Rep of	1,192	946	771	577	620	26.0	17.8
Spain	2,240	1,979	2,552	2,754	2,505	13.2	–2.8
Sweden	1,066	1,466	939	798	1,276	–27.3	–4.4
Turkey	1,969	1,862	1,606	1,623	2,003	5.7	–.4
United Kingdom	3,160	2,913	2,963	3,503	3,831	8.5	–4.7
Yugoslavia, FR	–	–	–	–	650	–	–

* Data round to zero.

Notes: Major coal-exporting States are those with total coal exports of over 600,000 short tons in 1996. Totals may not equal sum of components due to independent rounding. Foreign distribution to some countries for 1992 through 1995 have been revised.

Sources: Values shown for destinations other than Canada and Mexico are estimates based upon information reported on Energy Information Administration Form EIA-6, ''Coal Distribution Report,'' and coal export data presented in King's COALBASE (King Publishing Corporation, Knoxville, Tennessee). See the Explanatory Notes for a complete description of the methodology used to develop these estimates. Values shown for Canada and Mexico are based upon Form EIA-6.

Table 64. Foreign Distribution of U.S. Steam Coal by Major Coal-Exporting States and Destination, 1992-1996
(Thousand Short Tons)

Coal-Exporting State and Destination	1996	1995	1994	1993	1992	Percent Change 1995-1996	Average Annual Percent Change 1992-1996
Alabama	**341**	**702**	**170**	**43**	**131**	**–51.5**	**27.0**
Denmark	–	26	–	–	–	–100.0	–
Italy	341	617	144	–	128	–44.8	27.8
Japan	–	–	–	3	3	–	–
Morocco	–	–	–	39	–	–	–
Netherlands	–	59	–	–	–	–100.0	–
Spain	–	–	27	–	–	–	–
Alaska	**776**	**855**	**716**	**743**	**734**	**–9.2**	**1.4**
Korea, Republic of	776	855	716	743	734	–9.2	1.4
Colorado	**1,385**	**900**	**752**	**1,128**	**669**	**53.9**	**20.0**
China (Taiwan)	219	235	134	–	–	–6.5	–
Hong Kong	–	–	46	–	–	–	–
Israel	30	–	–	–	–	–	–
Japan	314	651	395	918	669	–51.9	–17.3
Korea, Republic of	65	–	177	209	–	–	–
Mexico	758	–	–	–	–	–	–
Turkey	–	14	–	–	–	–100.0	–
Illinois	**1,886**	**2,650**	**–**	**561**	**629**	**–28.8**	**31.6**
Belgium & Luxembourg	76	–	–	–	–	–	–
Brazil	1	–	–	–	–	–	–
Denmark	364	516	–	–	45	–29.4	68.2
France	–	57	–	–	–	–100.0	–
Germany, FR	325	722	–	–	–	–54.9	–
Ireland	–	–	–	108	213	–	–
Italy	–	42	–	–	–	–100.0	–
Japan	66	–	–	–	21	–	33.8
Morocco	103	775	–	452	350	–86.7	–26.3
Netherlands	120	–	–	–	–	–	–
Sweden	25	–	–	–	–	–	–
United Kingdom	805	538	–	–	–	49.7	–
Kentucky	**3,841**	**6,055**	**4,047**	**5,106**	**8,120**	**–36.6**	**–17.1**
Belgium & Luxembourg	–	366	406	437	577	–100.0	–
Canada	–	–	26	60	705	–	–
China (Taiwan)	1,978	2,321	2,545	3,485	3,211	–14.8	–11.4
Denmark	–	–	–	33	172	–	–
Finland	4	–	–	2	–	–	–
France	–	–	–	266	1,385	–	–
Germany, FR	–	95	–	–	–	–100.0	–
Ireland	–	58	–	16	336	–100.0	–
Israel	–	217	–	–	–	–100.0	–
Italy	1,613	1,714	763	719	805	–5.9	19.0
Jamaica	17	62	26	39	35	–73.0	–16.4
Japan	–	–	33	50	–	–	–
Netherlands	–	519	223	–	546	–100.0	–
Portugal	229	–	24	–	–	–	–
Spain	–	231	–	–	98	–100.0	–
Turkey	–	197	–	–	–	–100.0	–
United Kingdom	–	275	–	–	250	–100.0	–
Pennsylvania	**7,604**	**6,812**	**4,677**	**3,589**	**5,139**	**11.6**	**10.3**
Belgium & Luxembourg	–	–	–	–	90	–	–
Brazil	3	9	5	7	12	–71.1	–31.2
Canada	1,050	708	844	587	1,599	48.2	–10.0
Costa Rica	–	–	–	–	*	–	–
Croatia	–	–	–	45	–	–	–
Denmark	801	1,589	508	187	1,441	–49.6	–13.7
Dominican Republic	50	18	42	59	157	172.7	–24.8
Finland	283	544	71	–	–	–48.1	–
France	–	9	–	188	184	–100.0	–
Germany, FR	256	317	23	102	151	–19.3	14.0
Greece	491	–	–	–	–	–	–
Indonesia	–	–	–	–	*	–	–
Ireland	1,067	1,161	1,015	911	–	–8.0	–
Israel	1,068	995	922	940	1,090	7.4	–.5
Italy	89	–	601	50	–	–	–

See footnotes at end of table.

Table 64. Foreign Distribution of U.S. Steam Coal by Major Coal-Exporting States and Destination, 1992-1996 (Continued)

(Thousand Short Tons)

Coal-Exporting State and Destination	1996	1995	1994	1993	1992	Percent Change 1995-1996	Average Annual Percent Change 1992-1996
Pennsylvania (Continued)							
Japan	136	–	–	–	–	–	–
Korea, Republic of	94	–	–	–	–	–	–
Malaysia	–	–	–	–	*	–	–
Mexico	–	–	–	–	18	–	–
Morocco	173	–	–	–	–	–	–
Netherlands	570	593	244	–	2	–3.8	322.5
Norway	30	28	14	30	48	5.1	–11.5
Panama	–	–	–	–	*	–	–
Paraguay	–	–	–	–	3	–	–
Portugal	592	472	378	467	302	25.5	18.3
Qatar	–	–	–	–	*	–	–
Saudi Arabia	–	–	–	*	–	–	–
Spain	–	18	–	–	–	–100.0	–
Surinam	–	–	–	*	*	–	–
Sweden	–	–	–	–	1	–	–
Trinidad & Tobago	–	–	–	1	2	–	–
Turkey	–	43	–	–	–	–100.0	–
United Arab Emirates	–	–	–	*	–	–	–
United Kingdom	851	299	–	*	–	184.9	–
Venezuela	1	9	11	15	39	–88.6	–59.5
Utah	**5,118**	**3,930**	**2,698**	**2,959**	**2,260**	**30.2**	**22.7**
Canada	–	–	–	346	–	–	–
Chile	445	170	–	–	–	162.1	–
China (Taiwan)	648	323	321	849	721	100.4	–2.6
Hong Kong	–	–	–	–	359	–	–
Japan	3,871	3,000	2,377	1,764	1,180	29.1	34.6
Korea, Republic of	154	438	–	–	–	–64.7	–
Mexico	–	–	–	*	–	–	–
Virginia	**671**	**821**	**527**	**503**	**2,835**	**–18.2**	**–30.2**
Belgium & Luxembourg	–	–	–	–	312	–	–
Canada	–	–	–	–	1,331	–	–
Denmark	–	–	–	–	60	–	–
France	–	–	–	–	68	–	–
Italy	502	716	359	413	723	–29.9	–8.7
Japan	–	–	77	55	65	–	–
Netherlands	–	–	–	36	–	–	–
Portugal	145	105	91	–	210	38.0	–8.9
Spain	–	–	–	–	66	–	–
Turkey	24	–	–	–	–	–	–
West Virginia	**10,327**	**9,688**	**4,602**	**6,655**	**17,393**	**6.6**	**–12.2**
Belgium & Luxembourg	921	845	1,010	813	1,247	8.9	–7.3
Brazil	10	*	–	–	–	NM	–
Bulgaria	62	–	–	–	–	–	–
Canada	315	25	40	37	890	NM	–22.8
Chile	152	118	–	–	–	29.7	–
Croatia	–	72	–	–	–	–100.0	–
Denmark	–	189	–	168	2,397	–100.0	–
Finland	–	109	–	–	–	–100.0	–
France	817	815	–	536	3,095	.3	–28.3
Germany, FR	358	854	–	349	644	–58.0	–13.6
Ireland	–	–	–	117	822	–	–
Israel	375	–	–	–	210	–	15.6
Italy	2,604	2,266	707	705	1,400	14.9	16.8
Jamaica	36	–	–	–	–	–	–
Japan	–	209	448	431	418	–100.0	–
Morocco	1,111	275	101	79	170	304.0	59.9
Netherlands	413	2,105	1,623	1,191	1,318	–80.4	–25.2
Portugal	964	1,357	674	993	854	–29.0	3.1
Slovenia	–	–	–	–	69	–	–
Spain	69	–	–	140	269	–	–28.9
Turkey	12	–	–	–	–	–	–
United Kingdom	2,109	451	–	1,097	3,590	367.9	–12.5

See footnotes at end of table.

Table 64. Foreign Distribution of U.S. Steam Coal by Major Coal-Exporting States and Destination, 1992-1996 (Continued)

(Thousand Short Tons)

Coal-Exporting State and Destination	1996	1995	1994	1993	1992	Percent Change 1995-1996	Average Annual Percent Change 1992-1996
Wyoming	**2,395**	**2,269**	**1,524**	**974**	**1,277**	**5.5**	**17.0**
Canada	443	32	–	–	–	NM	–
Japan	–	–	–	*	–	–	–
Netherlands	63	–	–	–	–	–	–
Spain	1,889	2,237	1,524	974	1,277	–15.6	10.3
Major States Total	**34,344**	**34,683**	**19,713**	**22,261**	**39,187**	**–1.0**	**–3.2**
Belgium & Luxembourg	997	1,211	1,416	1,250	2,226	–17.7	–18.2
Brazil	14	9	5	7	12	51.8	4.2
Bulgaria	62	–	–	–	–	–	–
Canada	1,808	765	910	1,030	4,525	136.4	–20.5
Chile	597	287	–	–	–	107.9	–
China (Taiwan)	2,845	2,879	3,000	4,334	3,931	–1.2	–7.8
Costa Rica	–	–	–	–	*	–	–
Croatia	–	72	–	45	–	–100.0	–
Denmark	1,165	2,320	508	388	4,116	–49.8	–27.1
Dominican Republic	50	18	42	59	157	172.7	–24.8
Finland	287	654	71	2	–	–56.1	–
France	817	882	–	989	4,732	–7.3	–35.5
Germany, FR	939	1,987	23	451	796	–52.7	4.2
Greece	491	–	–	–	–	–	–
Hong Kong	–	–	46	–	359	–	–
Indonesia	–	–	–	–	*	–	–
Ireland	1,067	1,219	1,015	1,152	1,371	–12.4	–6.1
Israel	1,473	1,212	922	940	1,300	21.5	3.2
Italy	5,149	5,354	2,573	1,886	3,056	–3.8	13.9
Jamaica	53	62	26	39	35	–15.6	11.1
Japan	4,387	3,860	3,330	3,222	2,356	13.7	16.8
Korea, Republic of	1,089	1,292	894	952	734	–15.7	10.4
Malaysia	–	–	–	–	*	–	–
Mexico	758	–	–	*	18	–	156.3
Morocco	1,388	1,050	101	571	520	32.2	27.8
Netherlands	1,165	3,276	2,090	1,227	1,866	–64.4	–11.1
Norway	30	28	14	30	48	5.1	–11.5
Panama	–	–	–	–	*	–	–
Paraguay	–	–	–	–	3	–	–
Portugal	1,930	1,933	1,167	1,460	1,366	–.2	9.0
Qatar	–	–	–	–	*	–	–
Saudi Arabia	–	–	–	*	–	–	–
Slovenia	–	–	–	–	69	–	–
Spain	1,957	2,486	1,550	1,113	1,710	–21.3	3.4
Surinam	–	–	–	*	*	–	–
Sweden	25	–	–	–	1	–	129.1
Trinidad & Tobago	–	–	–	1	2	–	–
Turkey	37	254	–	–	–	–85.6	–
United Arab Emirates	–	–	–	*	–	–	–
United Kingdom	3,765	1,563	–	1,098	3,840	140.9	–.5
Venezuela	1	9	11	15	39	–88.6	–59.5
Other States Total	**1,693**	**997**	**686**	**414**	**761**	**69.9**	**22.1**
Canada	319	273	93	55	*	16.9	426.7
France	–	–	–	–	9	–	–
Ireland	80	–	–	–	10	–	68.5
Mexico	–	498	–	11	–	–100.0	–
Spain	–	–	153	–	53	–	–
United Kingdom	–	–	–	–	4	–	–
Unknown	1,294	226	439	348	685	471.6	17.3
U.S. Total	**36,037**	**35,680**	**20,399**	**22,675**	**39,948**	**1.0**	**–2.5**
Belgium & Luxembourg	997	1,211	1,416	1,250	2,226	–17.7	–18.2
Brazil	14	9	5	7	12	51.8	4.2
Bulgaria	62	–	–	–	–	–	–
Canada	2,127	1,037	1,003	1,085	4,525	105.0	–17.2
Chile	597	287	–	–	–	107.9	–
China (Taiwan)	2,845	2,879	3,000	4,334	3,931	–1.2	–7.8
Costa Rica	–	–	–	–	*	–	–
Croatia	–	72	–	45	–	–100.0	–
Denmark	1,165	2,320	508	388	4,116	–49.8	–27.1

See footnotes at end of table.

Table 64. Foreign Distribution of U.S. Steam Coal by Major Coal-Exporting States and Destination, 1992-1996 (Continued)

(Thousand Short Tons)

Coal-Exporting State and Destination	1996	1995	1994	1993	1992	Percent Change 1995-1996	Average Annual Percent Change 1992-1996
U.S. Total (Continued)							
Dominican Republic	50	18	42	59	157	172.7	–24.8
Finland	287	654	71	2	–	–56.1	–
France	817	882	–	989	4,741	–7.3	–35.6
Germany, FR	939	1,987	23	451	796	–52.7	4.2
Greece	491	–	–	–	–	–	–
Hong Kong	–	–	46	–	359	–	–
Indonesia	–	–	–	–	*	–	–
Ireland	1,147	1,219	1,015	1,152	1,381	–5.8	–4.5
Israel	1,473	1,212	922	940	1,300	21.5	3.2
Italy	5,149	5,354	2,573	1,886	3,056	–3.8	13.9
Jamaica	53	62	26	39	35	–15.6	11.1
Japan	4,387	3,860	3,330	3,222	2,356	13.7	16.8
Korea, Republic of	1,089	1,292	894	952	734	–15.7	10.4
Malaysia	–	–	–	–	*	–	–
Mexico	758	498	–	11	18	52.2	156.3
Morocco	1,388	1,050	101	571	520	32.2	27.8
Netherlands	1,165	3,276	2,090	1,227	1,866	–64.4	–11.1
Norway	30	28	14	30	48	5.1	–11.5
Panama	–	–	–	–	*	–	–
Paraguay	–	–	–	–	3	–	–
Portugal	1,930	1,933	1,167	1,460	1,366	–.2	9.0
Qatar	–	–	–	–	*	–	–
Saudi Arabia	–	–	–	*	–	–	–
Slovenia	–	–	–	–	69	–	–
Spain	1,957	2,486	1,704	1,113	1,763	–21.3	2.6
Surinam	–	–	–	*	*	–	–
Sweden	25	–	–	–	1	–	129.1
Trinidad & Tobago	–	–	–	1	2	–	–
Turkey	37	254	–	–	–	–85.6	–
United Arab Emirates	–	–	–	*	–	–	–
United Kingdom	3,765	1,563	–	1,098	3,844	140.9	–.5
Venezuela	1	9	11	15	39	–88.6	–59.5
Unknown	1,294	226	439	348	685	471.6	17.3

* Data round to zero.

NM Not meaningful as value is greater than 500 percent.

Notes: Major coal-exporting States are those with total coal exports of over 600,000 short tons in 1996. Totals may not equal sum of components due to independent rounding. Foreign distribution to some countries for 1992 through 1995 have been revised.

Sources: Values shown for destinations other than Canada and Mexico are estimates based upon information reported on Energy Information Administration Form EIA-6, ''Coal Distribution Report,'' and coal export data presented in King's COALBASE (King Publishing Corporation, Knoxville, Tennessee). See the Explanatory Notes for a complete description of the methodology used to develop these estimates. Values shown for Canada and Mexico are based upon Form EIA-6.

Table 65. Distribution of U.S. Coal by Origin, Destination, and Method of Transportation, 1996

(Thousand Short Tons)

Origin State and Destination State	Railroad	Water				Truck	Tramway, Conveyor, and Slurry Pipeline	Unknown	Total
		River	Great Lakes	Tidewater	Total				
Alabama	**7,875**	**4,613**	**–**	**4,864**	**9,477**	**6,143**	**1,108**	**32**	**24,636**
Alabama	7,323	4,012	–	–	4,012	6,059	1,108	–	18,503
Arkansas	29	–	–	–	–	9	–	–	39
Florida	–	–	–	–	–	8	–	–	8
Georgia	373	–	–	–	–	–	–	–	373
Indiana	57	–	–	–	–	–	–	–	57
Kentucky	9	–	–	–	–	5	–	–	15
Minnesota	–	–	–	–	–	*	–	–	*
Mississippi	80	22	–	–	22	9	–	–	110
Missouri	–	–	–	–	–	*	–	–	*
North Carolina	4	–	–	–	–	–	–	–	4
Ohio	–	–	–	–	–	51	–	–	51
Pennsylvania	–	579	–	–	579	–	–	–	579
Tennessee	–	–	–	–	–	1	–	–	1
Unknown State	–	–	–	–	–	–	–	32	32
Foreign	–	–	–	4,864	4,864	–	–	–	4,864
Alaska	**519**	**–**	**–**	**776**	**776**	**177**	**–**	**–**	**1,473**
Alaska	519	–	–	–	–	177	–	–	697
Foreign	–	–	–	776	776	–	–	–	776
Arizona	**6,499**	**–**	**–**	**–**	**–**	**–**	**4,470**	**–**	**10,970**
Arizona	6,499	–	–	–	–	–	–	–	6,499
Nevada	–	–	–	–	–	–	4,470	–	4,470
Arkansas	**–**	**–**	**–**	**–**	**–**	**7**	**–**	**–**	**7**
Arkansas	–	–	–	–	–	7	–	–	7
Colorado	**18,817**	**1,030**	**73**	**793**	**1,896**	**4,673**	**–**	**18**	**25,405**
Arizona	355	–	–	–	–	*	–	–	355
Colorado	6,566	–	–	–	–	4,138	–	–	10,704
Florida	–	–	–	136	136	–	–	–	136
Illinois	221	349	–	–	349	69	–	–	640
Iowa	587	5	–	–	5	–	–	–	591
Kansas	1,493	–	–	–	–	–	–	–	1,493
Kentucky	260	–	–	–	–	–	–	–	260
Mississippi	519	–	–	–	–	–	–	–	519
Missouri	1,055	22	–	–	22	–	–	–	1,077
Nebraska	56	–	–	–	–	–	–	–	56
Nevada	132	–	–	–	–	–	–	–	132
New Mexico	–	–	–	–	–	88	–	–	88
Oregon	94	–	–	–	–	–	–	–	94
Tennessee	3,038	–	–	–	–	–	–	–	3,038
Texas	2,443	–	–	–	–	–	–	–	2,443
Utah	1,204	–	–	–	–	–	–	–	1,204
Washington	37	–	–	–	–	–	–	–	37
Wisconsin	–	653	73	–	726	–	–	–	726
Wyoming	–	–	–	–	–	378	–	–	378
Unknown State	–	–	–	–	–	–	–	18	18
Foreign	758	–	–	657	657	–	–	–	1,415
Illinois	**26,181**	**12,736**	**47**	**1,886**	**14,668**	**6,187**	**23**	**16**	**47,076**
Alabama	–	2,155	–	–	2,155	–	–	–	2,155
Arkansas	76	–	–	–	–	–	–	–	76
Colorado	40	–	–	–	–	–	–	–	40
Florida	1,790	4,262	–	–	4,262	–	–	–	6,052
Georgia	1,204	–	–	–	–	–	–	–	1,204
Illinois	10,145	878	–	–	878	5,006	23	–	16,052
Indiana	7,806	109	–	–	109	263	–	–	8,178
Iowa	29	524	–	–	524	141	–	–	694
Kansas	149	–	–	–	–	–	–	–	149
Kentucky	–	–	–	–	–	1	–	–	1
Michigan	40	–	19	–	19	–	–	–	59
Minnesota	100	–	–	–	–	–	–	–	100
Mississippi	1,262	469	–	–	469	17	–	–	1,749
Missouri	3,038	660	–	–	660	705	–	–	4,403
New Jersey	–	–	–	–	–	*	–	–	*
New York	–	–	–	–	–	*	–	–	*
Ohio	17	–	–	–	–	1	–	–	18

See footnotes at end of table.

Table 65. Distribution of U.S. Coal by Origin, Destination, and Method of Transportation, 1996 (Continued)

(Thousand Short Tons)

Origin State and Destination State	Railroad	Water				Truck	Tramway, Conveyor, and Slurry Pipeline	Unknown	Total
		River	Great Lakes	Tidewater	Total				
Illinois (Continued)									
Oklahoma	–	10	–	–	10	–	–	–	10
Pennsylvania	–	–	–	–	–	*	–	–	*
Tennessee	203	3,021	–	–	3,021	–	–	–	3,225
Virginia	–	–	–	–	–	*	–	–	*
Wisconsin	282	647	28	–	675	52	–	–	1,008
Unknown State	–	–	–	–	–	–	–	16	16
Foreign	–	–	–	1,886	1,886	–	–	–	1,886
Indiana	**16,570**	**2,756**	**447**	**11**	**3,214**	**9,378**	**505**	**8**	**29,674**
Alabama	–	26	–	–	26	–	–	–	26
Connecticut	–	–	–	–	–	*	–	–	*
Illinois	662	206	–	–	206	575	–	–	1,444
Indiana	15,161	–	199	–	199	8,445	505	–	24,309
Iowa	504	134	–	–	134	–	–	–	638
Kentucky	–	2,297	–	–	2,297	312	–	–	2,610
Michigan	–	–	175	–	175	6	–	–	181
Missouri	–	12	–	–	12	4	–	–	17
Ohio	–	34	–	–	34	–	–	–	34
Oklahoma	–	4	–	–	4	–	–	–	4
Tennessee	–	41	–	–	41	–	–	–	41
Texas	–	–	–	–	–	2	–	–	2
Wisconsin	243	–	73	–	73	34	–	–	349
Unknown State	–	–	–	–	–	–	–	8	8
Foreign	–	–	–	11	11	–	–	–	11
Kansas	–	–	–	–	–	**245**	–	–	**245**
Kansas	–	–	–	–	–	164	–	–	164
Missouri	–	–	–	–	–	69	–	–	69
Oklahoma	–	–	–	–	–	12	–	–	12
Kentucky	**95,648**	**32,375**	**2,043**	**10,061**	**44,479**	**12,161**	**–**	**603**	**152,891**
Alabama	1,472	2,374	–	–	2,374	23	–	–	3,869
Arkansas	–	–	–	–	–	11	–	–	11
Connecticut	–	–	–	659	659	–	–	–	659
Florida	12,949	3,372	–	949	4,321	–	–	–	17,270
Georgia	14,569	–	–	–	–	120	–	–	14,689
Illinois	1,205	274	–	–	274	118	–	–	1,597
Indiana	2,113	430	–	–	430	99	–	–	2,642
Iowa	63	586	–	–	586	–	–	–	650
Kentucky	8,208	8,280	–	–	8,280	9,213	–	–	25,700
Louisiana	–	690	–	–	690	–	–	–	690
Maine	–	–	–	271	271	–	–	–	271
Maryland	97	8	–	–	8	–	–	–	105
Massachusetts	255	–	–	151	151	–	–	–	407
Michigan	5,717	310	537	–	846	108	–	–	6,671
Minnesota	–	113	43	–	156	*	–	–	156
Mississippi	928	107	–	–	107	–	–	–	1,035
Missouri	101	220	–	–	220	–	–	–	320
New Jersey	–	–	–	29	29	–	–	–	29
New York	1,184	8	–	36	43	–	–	–	1,227
North Carolina	16,885	52	–	–	52	302	–	–	17,240
Ohio	3,885	4,528	38	–	4,566	1,070	–	–	9,520
Oklahoma	–	2	–	–	2	–	–	–	2
Oregon	24	–	–	–	–	–	–	–	24
Pennsylvania	1,079	1,622	–	–	1,622	20	–	–	2,721
South Carolina	11,385	–	–	–	–	33	–	–	11,417
Tennessee	7,376	8,972	–	–	8,972	834	–	–	17,183
Texas	2	23	–	–	23	–	–	–	26
Virginia	5,535	–	–	–	–	126	–	–	5,662
West Virginia	189	187	–	–	187	50	–	–	426
Wisconsin	273	218	403	–	621	31	–	–	925
Unknown State	–	–	–	–	–	–	–	603	603
Foreign	154	–	1,022	7,966	8,987	2	–	–	9,143
Kentucky, Eastern	**87,381**	**11,122**	**2,043**	**9,395**	**22,560**	**6,911**	**–**	**553**	**117,404**

See footnotes at end of table.

Table 65. Distribution of U.S. Coal by Origin, Destination, and Method of Transportation, 1996 (Continued)

(Thousand Short Tons)

Origin State and Destination State	Railroad	Water				Truck	Tramway, Conveyor, and Slurry Pipeline	Unknown	Total
		River	Great Lakes	Tidewater	Total				
Kentucky, Eastern (Continued)									
Alabama	522	182	–	–	182	23	–	–	727
Connecticut	–	–	–	659	659	–	–	–	659
Florida	12,848	218	–	949	1,167	–	–	–	14,015
Georgia	14,569	–	–	–	–	120	–	–	14,689
Illinois	1,205	207	–	–	207	66	–	–	1,478
Indiana	1,737	126	–	–	126	99	–	–	1,962
Iowa	63	376	–	–	376	–	–	–	439
Kentucky	3,270	1,642	–	–	1,642	4,414	–	–	9,326
Louisiana	–	44	–	–	44	–	–	–	44
Maine	–	–	–	271	271	–	–	–	271
Maryland	97	8	–	–	8	–	–	–	105
Massachusetts	255	–	–	151	151	–	–	–	407
Michigan	5,717	310	537	–	846	108	–	–	6,671
Minnesota	–	91	43	–	134	*	–	–	135
Mississippi	928	–	–	–	–	–	–	–	928
Missouri	101	214	–	–	214	–	–	–	315
New Jersey	–	–	–	29	29	–	–	–	29
New York	1,184	8	–	36	43	–	–	–	1,227
North Carolina	16,885	52	–	–	52	302	–	–	17,240
Ohio	3,885	4,497	38	–	4,535	1,070	–	–	9,490
Oklahoma	–	2	–	–	2	–	–	–	2
Oregon	24	–	–	–	–	–	–	–	24
Pennsylvania	1,079	1,622	–	–	1,622	20	–	–	2,721
South Carolina	11,385	–	–	–	–	33	–	–	11,417
Tennessee	5,649	1,107	–	–	1,107	445	–	–	7,202
Texas	2	23	–	–	23	–	–	–	26
Virginia	5,535	–	–	–	–	126	–	–	5,662
West Virginia	189	187	–	–	187	50	–	–	426
Wisconsin	97	207	403	–	610	31	–	–	738
Unknown State	–	–	–	–	–	–	–	553	553
Foreign	154	–	1,022	7,299	8,321	2	–	–	8,477
Kentucky, Western	**8,267**	**21,253**	**–**	**666**	**21,919**	**5,250**	**–**	**51**	**35,487**
Alabama	950	2,192	–	–	2,192	–	–	–	3,142
Arkansas	–	–	–	–	–	11	–	–	11
Florida	101	3,154	–	–	3,154	–	–	–	3,254
Illinois	–	68	–	–	68	51	–	–	119
Indiana	376	304	–	–	304	–	–	–	680
Iowa	–	211	–	–	211	–	–	–	211
Kentucky	4,938	6,638	–	–	6,638	4,799	–	–	16,375
Louisiana	–	646	–	–	646	–	–	–	646
Minnesota	–	22	–	–	22	–	–	–	22
Mississippi	–	107	–	–	107	–	–	–	107
Missouri	–	5	–	–	5	–	–	–	5
Ohio	–	31	–	–	31	–	–	–	31
Tennessee	1,727	7,865	–	–	7,865	389	–	–	9,981
Virginia	–	–	–	–	–	*	–	–	*
Wisconsin	175	11	–	–	11	–	–	–	187
Unknown State	–	–	–	–	–	–	–	51	51
Foreign	–	–	–	666	666	–	–	–	666
Louisiana	**–**	**–**	**–**	**–**	**–**	**787**	**2,435**	**–**	**3,222**
Louisiana	–	–	–	–	–	787	2,435	–	3,222
Maryland	**2,728**	**143**	**–**	**645**	**787**	**672**	**–**	**12**	**4,199**
Connecticut	3	–	–	–	–	–	–	–	3
Delaware	130	–	–	–	–	–	–	–	130
Maryland	739	–	–	–	–	409	–	–	1,147
Massachusetts	–	–	–	–	–	*	–	–	*
Michigan	15	–	–	–	–	–	–	–	15
Pennsylvania	–	–	–	–	–	4	–	–	4
Virginia	–	–	–	–	–	27	–	–	27
West Virginia	1,838	143	–	–	143	232	–	–	2,213
Wisconsin	3	–	–	–	–	–	–	–	3
Unknown State	–	–	–	–	–	–	–	12	12

See footnotes at end of table.

Table 65. Distribution of U.S. Coal by Origin, Destination, and Method of Transportation, 1996 (Continued)

(Thousand Short Tons)

Origin State and Destination State	Railroad	Water				Truck	Tramway, Conveyor, and Slurry Pipeline	Unknown	Total
		River	Great Lakes	Tidewater	Total				
Maryland (Continued)									
Foreign	–	–	–	645	645	–	–	–	645
Missouri	**184**	–	–	–	–	**662**	–	–	**846**
Kansas	–	–	–	–	–	345	–	–	345
Missouri	184	–	–	–	–	316	–	–	501
Montana	**23,181**	–	**6,948**	**243**	**7,192**	**611**	**7,303**	*	**38,288**
Colorado	26	–	–	–	–	–	–	–	26
Illinois	2,162	–	–	–	–	–	–	–	2,162
Indiana	869	–	–	–	–	–	–	–	869
Michigan	3,361	–	6,445	–	6,445	–	–	–	9,806
Minnesota	9,688	–	49	–	49	54	–	–	9,791
Mississippi	2,226	–	–	–	–	–	–	–	2,226
Montana	125	–	–	–	–	416	7,303	–	7,844
Nebraska	113	–	–	–	–	–	–	–	113
North Dakota	417	–	–	–	–	–	–	–	417
Ohio	–	–	26	–	26	–	–	–	26
South Dakota	1,301	–	–	–	–	–	–	–	1,301
Washington	113	–	–	–	–	–	–	–	113
Wisconsin	2,758	–	165	–	165	27	–	–	2,950
Wyoming	10	–	–	–	–	115	–	–	125
Unknown State	–	–	–	–	–	–	–	*	*
Foreign	11	–	264	243	507	–	–	–	518
New Mexico	**18,448**	–	–	**9**	**9**	**7**	**6,580**	–	**25,043**
Arizona	8,859	–	–	–	–	*	–	–	8,860
Arkansas	1	–	–	–	–	–	–	–	1
Colorado	9	–	–	–	–	–	–	–	9
Nebraska	92	–	–	–	–	–	–	–	92
New Mexico	8,422	–	–	–	–	7	6,580	–	15,009
Oklahoma	17	–	–	–	–	–	–	–	17
Texas	316	–	–	–	–	–	–	–	316
Wisconsin	732	–	–	–	–	–	–	–	732
Foreign	–	–	–	9	9	–	–	–	9
North Dakota	**336**	–	–	–	–	**4,581**	**25,107**	–	**30,025**
North Dakota	336	–	–	–	–	4,581	25,107	–	30,025
Ohio	**1,759**	**9,370**	**97**	**269**	**9,736**	**8,890**	**8,429**	**67**	**28,881**
Alabama	–	103	–	–	103	–	–	–	103
Illinois	–	–	–	–	–	5	–	–	5
Indiana	23	338	–	–	338	102	–	–	464
Kentucky	–	22	–	–	22	9	–	–	30
Michigan	5	–	7	–	7	234	–	–	246
New York	123	–	–	–	–	2	–	–	125
Ohio	1,607	6,302	87	–	6,390	8,057	8,424	–	24,478
Pennsylvania	1	598	–	–	598	444	–	–	1,043
Tennessee	–	4	–	–	4	–	–	–	4
West Virginia	–	2,004	–	–	2,004	28	4	–	2,036
Wisconsin	–	–	–	–	–	9	–	–	9
Unknown State	–	–	–	–	–	–	–	67	67
Foreign	–	–	3	269	271	–	–	–	271
Oklahoma	–	–	–	**80**	**80**	**2,129**	–	**7**	**2,216**
Arkansas	–	–	–	–	–	170	–	–	170
Kansas	–	–	–	–	–	63	–	–	63
Oklahoma	–	–	–	–	–	1,712	–	–	1,712
Texas	–	–	–	–	–	184	–	–	184
Unknown State	–	–	–	–	–	–	–	7	7
Foreign	–	–	–	80	80	–	–	–	80
Pennsylvania	**24,146**	**11,285**	**2,648**	**8,581**	**22,514**	**17,008**	**5,175**	**284**	**69,128**
Alabama	1	6	–	–	6	1	–	–	8
Arizona	1	–	–	–	–	*	–	–	1
Arkansas	*	–	–	–	–	*	–	–	*
California	*	–	–	–	–	*	–	–	*
Colorado	16	–	–	–	–	–	–	–	16

See footnotes at end of table.

Table 65. Distribution of U.S. Coal by Origin, Destination, and Method of Transportation, 1996 (Continued)

(Thousand Short Tons)

Origin State and Destination State	Railroad	Water				Truck	Tramway, Conveyor, and Slurry Pipeline	Unknown	Total
		River	Great Lakes	Tidewater	Total				
Pennsylvania (Continued)									
Connecticut	217	9	–	–	9	6	–	–	232
Delaware	470	53	–	–	53	15	–	–	538
District of Columbia	–	–	–	–	–	*	–	–	*
Florida	5	–	–	–	–	*	–	–	6
Georgia	*	–	–	–	–	*	–	–	*
Idaho	*	–	–	–	–	–	–	–	*
Illinois	6	–	–	–	–	2	–	–	7
Indiana	*	559	–	–	559	6	–	–	565
Iowa	53	225	–	–	225	1	–	–	279
Kansas	*	–	–	–	–	–	–	–	*
Kentucky	488	25	–	–	25	9	–	–	522
Louisiana	6	195	–	–	195	–	–	–	201
Maine	1	–	–	–	–	3	–	–	4
Maryland	1,415	–	–	–	–	189	–	–	1,604
Massachusetts	197	–	–	–	–	19	–	–	216
Michigan	1,945	–	128	–	128	5	–	–	2,078
Minnesota	6	23	–	–	23	1	–	–	30
Mississippi	*	–	–	–	–	–	–	–	*
Missouri	–	–	–	–	–	*	–	–	*
Montana	2	–	–	–	–	*	–	–	2
Nebraska	*	–	–	–	–	1	–	–	1
Nevada	–	–	–	–	–	*	–	–	*
New Hampshire	527	–	–	60	60	8	–	–	595
New Jersey	538	–	–	–	–	14	–	–	551
New Mexico	–	–	–	–	–	*	–	–	*
New York	3,066	36	538	–	574	635	–	–	4,276
North Carolina	*	–	–	–	–	*	–	–	*
North Dakota	*	–	–	–	–	2	–	–	2
Ohio	1,499	2,259	608	–	2,867	117	–	–	4,483
Oklahoma	*	–	–	–	–	*	–	–	*
Oregon	12	–	–	–	–	*	–	–	12
Pennsylvania	12,727	5,537	–	–	5,537	15,783	5,175	–	39,222
Rhode Island	–	–	–	–	–	3	–	–	3
South Carolina	*	–	–	–	–	*	–	–	*
Tennessee	11	639	–	–	639	16	–	–	665
Texas	1	–	–	–	–	*	–	–	2
Utah	230	–	–	–	–	–	–	–	230
Vermont	*	–	–	–	–	2	–	–	2
Virginia	*	–	–	–	–	11	–	–	11
West Virginia	6	1,719	–	–	1,719	140	–	–	1,865
Wisconsin	546	–	812	–	812	9	–	–	1,367
Wyoming	1	–	–	–	–	–	–	–	1
Unknown State	–	–	–	–	–	–	–	284	284
Foreign	152	–	562	8,521	9,083	11	–	–	9,246
Pennsylvania Anthracite	**1,313**	–	–	**343**	**343**	**3,119**	–	**62**	**4,836**
Alabama	1	–	–	–	–	1	–	–	2
Arizona	1	–	–	–	–	*	–	–	1
Arkansas	*	–	–	–	–	*	–	–	*
California	*	–	–	–	–	*	–	–	*
Colorado	16	–	–	–	–	–	–	–	16
Connecticut	*	–	–	–	–	5	–	–	5
Delaware	*	–	–	–	–	10	–	–	10
District of Columbia	–	–	–	–	–	*	–	–	*
Florida	5	–	–	–	–	*	–	–	6
Georgia	*	–	–	–	–	*	–	–	*
Idaho	*	–	–	–	–	–	–	–	*
Illinois	6	–	–	–	–	2	–	–	7
Indiana	*	–	–	–	–	6	–	–	6
Iowa	53	–	–	–	–	1	–	–	54
Kansas	*	–	–	–	–	–	–	–	*
Kentucky	13	–	–	–	–	9	–	–	22
Louisiana	6	–	–	–	–	–	–	–	6
Maine	1	–	–	–	–	3	–	–	4
Maryland	*	–	–	–	–	1	–	–	1
Massachusetts	*	–	–	–	–	13	–	–	14
Michigan	*	–	–	–	–	3	–	–	3

See footnotes at end of table.

Table 65. Distribution of U.S. Coal by Origin, Destination, and Method of Transportation, 1996 (Continued)

(Thousand Short Tons)

Origin State and Destination State	Railroad	Water				Truck	Tramway, Conveyor, and Slurry Pipeline	Unknown	Total
		River	Great Lakes	Tidewater	Total				
Pennsylvania Anthracite (Continued)									
Minnesota	6	–	–	–	–	1	–	–	7
Mississippi	*	–	–	–	–	–	–	–	*
Missouri	–	–	–	–	–	*	–	–	*
Montana	2	–	–	–	–	*	–	–	2
Nebraska	*	–	–	–	–	1	–	–	1
Nevada	–	–	–	–	–	*	–	–	*
New Hampshire	*	–	–	–	–	3	–	–	4
New Jersey	*	–	–	–	–	13	–	–	14
New Mexico	–	–	–	–	–	*	–	–	*
New York	18	–	–	–	–	133	–	–	151
North Carolina	*	–	–	–	–	*	–	–	*
North Dakota	*	–	–	–	–	2	–	–	2
Ohio	–	–	–	–	–	19	–	–	19
Oklahoma	*	–	–	–	–	*	–	–	*
Oregon	12	–	–	–	–	*	–	–	12
Pennsylvania	1,006	–	–	–	–	2,815	–	–	3,821
Rhode Island	–	–	–	–	–	3	–	–	3
South Carolina	*	–	–	–	–	*	–	–	*
Tennessee	11	–	–	–	–	16	–	–	26
Texas	1	–	–	–	–	*	–	–	1
Utah	*	–	–	–	–	–	–	–	*
Vermont	*	–	–	–	–	2	–	–	2
Virginia	*	–	–	–	–	6	–	–	6
West Virginia	–	–	–	–	–	32	–	–	32
Wisconsin	*	–	–	–	–	5	–	–	5
Wyoming	1	–	–	–	–	–	–	–	1
Unknown State	–	–	–	–	–	–	–	62	62
Foreign	152	–	–	343	343	11	–	–	506
Pennsylvania Bituminous	**22,834**	**11,285**	**2,648**	**8,238**	**22,171**	**13,889**	**5,175**	**222**	**64,291**
Alabama	–	6	–	–	6	–	–	–	6
Connecticut	217	9	–	–	9	*	–	–	227
Delaware	470	53	–	–	53	5	–	–	528
Indiana	–	559	–	–	559	–	–	–	559
Iowa	–	225	–	–	225	–	–	–	225
Kentucky	475	25	–	–	25	–	–	–	500
Louisiana	–	195	–	–	195	–	–	–	195
Maryland	1,415	–	–	–	–	188	–	–	1,602
Massachusetts	196	–	–	–	–	6	–	–	202
Michigan	1,945	–	128	–	128	2	–	–	2,075
Minnesota	–	23	–	–	23	–	–	–	23
New Hampshire	527	–	–	60	60	4	–	–	592
New Jersey	538	–	–	–	–	*	–	–	538
New York	3,049	36	538	–	574	502	–	–	4,125
Ohio	1,499	2,259	608	–	2,867	97	–	–	4,463
Pennsylvania	11,721	5,537	–	–	5,537	12,968	5,175	–	35,400
Tennessee	–	639	–	–	639	–	–	–	639
Texas	*	–	–	–	–	*	–	–	*
Utah	230	–	–	–	–	–	–	–	230
Vermont	–	–	–	–	–	*	–	–	*
Virginia	–	–	–	–	–	5	–	–	5
West Virginia	6	1,719	–	–	1,719	108	–	–	1,833
Wisconsin	546	–	812	–	812	4	–	–	1,362
Unknown State	–	–	–	–	–	–	–	222	222
Foreign	–	–	562	8,177	8,740	–	–	–	8,740
Tennessee	**1,605**	**458**	**–**	**–**	**458**	**980**	**–**	**9**	**3,052**
Alabama	–	331	–	–	331	–	–	–	331
Georgia	140	–	–	–	–	1	–	–	141
Kentucky	–	–	–	–	–	23	–	–	23
North Carolina	–	–	–	–	–	1	–	–	1
Ohio	–	–	–	–	–	*	–	–	*
Tennessee	1,466	127	–	–	127	956	–	–	2,548
Unknown State	–	–	–	–	–	–	–	9	9
Texas	**24,044**	**–**	**–**	**117**	**117**	**9,854**	**15,641**	**–**	**49,655**

See footnotes at end of table.

Table 65. Distribution of U.S. Coal by Origin, Destination, and Method of Transportation, 1996 (Continued)

(Thousand Short Tons)

Origin State and Destination State	Railroad	Water				Truck	Tramway, Conveyor, and Slurry Pipeline	Unknown	Total
		River	Great Lakes	Tidewater	Total				
Texas (Continued)									
Texas	24,044	–	–	–	–	9,854	15,641	–	49,538
Foreign	–	–	–	117	117	–	–	–	117
Utah	**13,409**	**–**	**44**	**5,305**	**5,349**	**5,104**	**–**	**6**	**23,868**
Arizona	69	–	–	–	–	–	–	–	69
California	2,240	–	–	–	–	*	–	–	2,240
Colorado	1	–	–	–	–	1	–	–	2
Idaho	33	–	–	–	–	32	–	–	65
Illinois	2,473	–	–	–	–	–	–	–	2,473
Michigan	–	–	44	–	44	–	–	–	44
Missouri	330	–	–	–	–	–	–	–	330
Nevada	2,185	–	–	–	–	81	–	–	2,265
Oregon	–	–	–	–	–	*	–	–	*
Tennessee	1,421	–	–	–	–	–	–	–	1,421
Utah	4,402	–	–	–	–	4,988	–	–	9,389
Washington	124	–	–	–	–	1	–	–	125
Wisconsin	133	–	–	–	–	–	–	–	133
Wyoming	–	–	–	–	–	*	–	–	*
Unknown State	–	–	–	–	–	–	–	6	6
Foreign	–	–	–	5,305	5,305	–	–	–	5,305
Virginia	**17,635**	**2,517**	**–**	**13,645**	**16,162**	**1,361**	**1,007**	**43**	**36,208**
Alabama	1,022	5	–	–	5	9	–	–	1,036
Delaware	166	–	–	–	–	–	–	–	166
Florida	549	–	–	–	–	–	–	–	549
Georgia	1,785	–	–	–	–	*	–	–	1,785
Illinois	–	547	–	–	547	35	–	–	583
Indiana	1,338	951	–	–	951	–	–	–	2,290
Kentucky	*	2	–	–	2	–	–	–	3
Maryland	*	–	–	–	–	*	–	–	1
Massachusetts	8	–	–	–	–	–	–	–	8
Michigan	25	–	–	–	–	*	–	–	25
Mississippi	13	–	–	–	–	–	–	–	13
New Hampshire	10	–	–	–	–	–	–	–	10
New Jersey	–	–	–	601	601	–	–	–	601
New York	146	–	–	–	–	–	–	–	146
North Carolina	1,816	–	–	–	–	68	–	–	1,883
Ohio	228	103	–	–	103	*	–	–	331
Pennsylvania	403	896	–	–	896	*	–	–	1,299
South Carolina	1,591	–	–	–	–	14	–	–	1,605
Tennessee	2,525	–	–	–	–	4	–	–	2,529
Texas	13	–	–	–	–	–	–	–	13
Utah	332	–	–	–	–	–	–	–	332
Virginia	5,357	–	–	–	–	866	1,007	–	7,231
West Virginia	275	8	–	–	8	4	–	–	287
Wisconsin	5	4	–	–	4	–	–	–	9
Unknown State	–	–	–	–	–	–	–	43	43
Foreign	27	–	–	13,044	13,044	360	–	–	13,432
Washington	**2**	**–**	**–**	**43**	**43**	**132**	**4,393**	**–**	**4,569**
Oregon	2	–	–	–	–	1	–	–	3
Washington	–	–	–	–	–	131	4,393	–	4,523
Foreign	–	–	–	43	43	*	–	–	43
West Virginia	**64,267**	**44,560**	**8,137**	**41,487**	**94,185**	**5,335**	**5,110**	**302**	**169,200**
Alabama	1,986	1,348	–	–	1,348	6	–	–	3,340
Connecticut	17	–	–	690	690	–	–	–	707
Delaware	996	–	–	–	–	5	–	–	1,000
District of Columbia	3	14	–	–	14	6	–	–	23
Florida	658	25	–	992	1,016	–	–	–	1,674
Georgia	4,050	–	–	–	–	14	–	–	4,064
Illinois	973	773	105	–	877	–	–	–	1,850
Indiana	4,358	930	–	–	930	–	–	–	5,287
Iowa	27	17	–	–	17	–	–	–	44
Kentucky	1,956	3,146	–	–	3,146	174	–	–	5,276
Louisiana	–	203	–	–	203	–	–	–	203
Maine	26	–	–	–	–	–	–	–	26

See footnotes at end of table.

Table 65. Distribution of U.S. Coal by Origin, Destination, and Method of Transportation, 1996 (Continued)

(Thousand Short Tons)

Origin State and Destination State	Railroad	Water				Truck	Tramway, Conveyor, and Slurry Pipeline	Unknown	Total
		River	Great Lakes	Tidewater	Total				
West Virginia (Continued)									
Maryland	4,611	–	–	2,719	2,719	574	–	–	7,905
Massachusetts	443	–	–	1,401	1,401	–	–	–	1,845
Michigan	4,887	282	294	–	575	47	–	–	5,509
Minnesota	–	22	10	–	32	*	–	–	32
Mississippi	19	4	–	–	4	1	–	–	24
Missouri	–	36	–	–	36	–	–	–	36
New Hampshire	269	–	–	77	77	–	–	–	346
New Jersey	1,108	156	–	482	638	–	–	–	1,746
New York	5,433	253	–	–	253	–	–	–	5,685
North Carolina	8,287	–	–	–	–	–	–	–	8,287
North Dakota	–	–	–	–	–	*	–	–	*
Ohio	5,792	15,200	1,426	–	16,626	317	–	–	22,735
Oklahoma	2	25	–	50	75	–	–	–	77
Oregon	2	–	–	–	–	–	–	–	2
Pennsylvania	3,204	10,781	–	–	10,781	251	–	–	14,236
South Carolina	350	–	–	–	–	–	–	–	350
South Dakota	–	1	–	–	1	–	–	–	1
Tennessee	98	1,461	–	–	1,461	*	–	–	1,560
Texas	–	–	–	4	4	–	–	–	4
Utah	18	–	–	–	–	–	–	–	18
Virginia	3,040	46	–	–	46	197	–	–	3,283
Washington	26	–	–	–	–	–	–	–	26
West Virginia	10,647	9,726	–	–	9,726	3,737	5,110	–	29,220
Wisconsin	67	10	351	–	360	5	–	–	432
Unknown State	–	–	–	–	–	–	–	302	302
Foreign	916	105	5,953	35,071	41,128	–	–	–	42,044
West Virginia, Northern	**15,640**	**14,521**	**2,103**	**6,572**	**23,196**	**2,898**	**4,606**	**96**	**46,436**
Alabama	–	419	–	–	419	–	–	–	419
Connecticut	8	–	–	674	674	–	–	–	683
Delaware	445	–	–	–	–	5	–	–	449
District of Columbia	–	–	–	–	–	6	–	–	6
Florida	551	–	–	–	–	–	–	–	551
Illinois	9	–	–	–	–	–	–	–	9
Indiana	469	10	–	–	10	–	–	–	479
Kentucky	87	938	–	–	938	*	–	–	1,026
Louisiana	–	203	–	–	203	–	–	–	203
Maine	13	–	–	–	–	–	–	–	13
Maryland	3,972	–	–	622	622	178	–	–	4,773
Massachusetts	53	–	–	–	–	–	–	–	53
Michigan	622	–	18	–	18	–	–	–	640
New Hampshire	269	–	–	53	53	–	–	–	322
New Jersey	893	156	–	482	638	–	–	–	1,530
New York	4,140	–	–	–	–	–	–	–	4,140
North Carolina	13	–	–	–	–	–	–	–	13
North Dakota	–	–	–	–	–	*	–	–	*
Ohio	1,073	2,130	759	–	2,889	4	–	–	3,966
Pennsylvania	1,702	6,824	–	–	6,824	81	–	–	8,606
South Carolina	3	–	–	–	–	–	–	–	3
Tennessee	–	78	–	–	78	*	–	–	78
Virginia	66	–	–	–	–	*	–	–	66
West Virginia	965	3,764	–	–	3,764	2,624	4,606	–	11,959
Wisconsin	2	–	315	–	315	–	–	–	317
Unknown State	–	–	–	–	–	–	–	96	96
Foreign	286	–	1,011	4,740	5,751	–	–	–	6,038
West Virginia, Southern	**48,627**	**30,040**	**6,034**	**34,916**	**70,989**	**2,437**	**504**	**206**	**122,764**
Alabama	1,986	929	–	–	929	6	–	–	2,922
Connecticut	8	–	–	16	16	–	–	–	24
Delaware	551	–	–	–	–	–	–	–	551
District of Columbia	3	14	–	–	14	–	–	–	17
Florida	107	25	–	992	1,016	–	–	–	1,123
Georgia	4,050	–	–	–	–	14	–	–	4,064
Illinois	964	773	105	–	877	–	–	–	1,841
Indiana	3,889	920	–	–	920	–	–	–	4,809
Iowa	27	17	–	–	17	–	–	–	44
Kentucky	1,868	2,208	–	–	2,208	174	–	–	4,250

See footnotes at end of table.

Table 65. Distribution of U.S. Coal by Origin, Destination, and Method of Transportation, 1996 (Continued)

(Thousand Short Tons)

Origin State and Destination State	Railroad	Water				Truck	Tramway, Conveyor, and Slurry Pipeline	Unknown	Total
		River	Great Lakes	Tidewater	Total				
West Virginia, Southern (Continued)									
Maine	13	–	–	–	–	–	–	–	13
Maryland	639	–	–	2,097	2,097	396	–	–	3,132
Massachusetts	391	–	–	1,401	1,401	–	–	–	1,792
Michigan	4,265	282	275	–	557	47	–	–	4,869
Minnesota	–	22	10	–	32	*	–	–	32
Mississippi	19	4	–	–	4	1	–	–	24
Missouri	–	36	–	–	36	–	–	–	36
New Hampshire	–	–	–	24	24	–	–	–	24
New Jersey	216	–	–	–	–	–	–	–	216
New York	1,293	253	–	–	253	–	–	–	1,545
North Carolina	8,274	–	–	–	–	–	–	–	8,274
Ohio	4,720	13,070	667	–	13,736	314	–	–	18,770
Oklahoma	2	25	–	50	75	–	–	–	77
Oregon	2	–	–	–	–	–	–	–	2
Pennsylvania	1,502	3,958	–	–	3,958	170	–	–	5,629
South Carolina	347	–	–	–	–	–	–	–	347
South Dakota	–	1	–	–	1	–	–	–	1
Tennessee	98	1,383	–	–	1,383	*	–	–	1,482
Texas	–	–	–	4	4	–	–	–	4
Utah	18	–	–	–	–	–	–	–	18
Virginia	2,974	46	–	–	46	197	–	–	3,217
Washington	26	–	–	–	–	–	–	–	26
West Virginia	9,682	5,962	–	–	5,962	1,113	504	–	17,261
Wisconsin	65	10	36	–	45	5	–	–	115
Unknown State	–	–	–	–	–	–	–	206	206
Foreign	629	105	4,941	30,331	35,377	–	–	–	36,006
Wyoming	**247,820**	**13,918**	**924**	**1,952**	**16,793**	**2,857**	**11,647**	*****	**279,117**
Alabama	3,686	–	–	–	–	–	–	–	3,686
Arkansas	14,614	–	–	–	–	–	–	–	14,614
Colorado	6,124	–	–	–	–	–	–	–	6,124
Florida	591	–	–	–	–	–	–	–	591
Georgia	6,818	–	–	–	–	–	–	–	6,818
Idaho	237	–	–	–	–	31	–	–	268
Illinois	17,734	–	–	–	–	–	–	–	17,734
Indiana	18,079	–	–	–	–	–	–	–	18,079
Iowa	17,580	541	–	–	541	–	–	–	18,121
Kansas	11,772	–	–	–	–	–	–	–	11,772
Louisiana	4,173	5,036	–	–	5,036	–	–	–	9,209
Michigan	8,551	–	–	–	–	–	–	–	8,551
Minnesota	8,115	–	444	–	444	10	–	–	8,569
Mississippi	26	–	–	–	–	–	–	–	26
Missouri	24,971	8,341	–	–	8,341	–	–	–	33,312
Montana	513	–	–	–	–	–	–	–	513
Nebraska	10,464	–	–	–	–	*	–	–	10,464
Nevada	204	–	–	–	–	–	–	–	204
North Dakota	–	–	–	–	–	*	–	–	*
Ohio	–	–	37	–	37	–	–	–	37
Oklahoma	19,751	–	–	–	–	–	–	–	19,751
Oregon	894	–	–	–	–	–	–	–	894
South Dakota	–	–	–	–	–	355	–	–	355
Tennessee	298	–	–	–	–	–	–	–	298
Texas	42,839	–	–	–	–	–	–	–	42,839
Utah	1	–	–	–	–	–	–	–	1
Washington	1	–	–	–	–	–	–	–	1
Wisconsin	17,640	–	–	–	–	–	–	–	17,640
Wyoming	12,145	–	–	–	–	2,461	11,647	–	26,253
Unknown State	–	–	–	–	–	–	–	*	*
Foreign	–	–	443	1,952	2,395	–	–	–	2,395
U.S. Total	**611,674**	**135,760**	**21,408**	**90,767**	**247,935**	**99,941**	**98,934**	**1,408**	**1,059,892**
Alabama	15,491	10,360	–	–	10,360	6,099	1,108	–	33,057
Alaska	519	–	–	–	–	177	–	–	697
Arizona	15,784	–	–	–	–	*	–	–	15,785
Arkansas	14,720	–	–	–	–	198	–	–	14,918
California	2,240	–	–	–	–	1	–	–	2,240
Colorado	12,781	–	–	–	–	4,140	–	–	16,920

See footnotes at end of table.

Table 65. Distribution of U.S. Coal by Origin, Destination, and Method of Transportation, 1996 (Continued)

(Thousand Short Tons)

Origin State and Destination State	Railroad	Water				Truck	Tramway, Conveyor, and Slurry Pipeline	Unknown	Total
		River	Great Lakes	Tidewater	Total				
U.S. Total (Continued)									
Connecticut	237	9	–	1,350	1,359	6	–	–	1,602
Delaware	1,762	53	–	–	53	20	–	–	1,834
District of Columbia	3	14	–	–	14	6	–	–	23
Florida	16,541	7,659	–	2,076	9,735	9	–	–	26,285
Georgia	28,938	–	–	–	–	135	–	–	29,074
Idaho	270	–	–	–	–	63	–	–	333
Illinois	35,581	3,028	105	–	3,133	5,810	23	–	44,547
Indiana	49,804	3,317	199	–	3,516	8,916	505	–	62,741
Iowa	18,843	2,032	–	–	2,032	142	–	–	21,017
Kansas	13,415	–	–	–	–	572	–	–	13,987
Kentucky	10,921	13,771	–	–	13,771	9,746	–	–	34,438
Louisiana	4,179	6,124	–	–	6,124	787	2,435	–	13,526
Maine	26	–	–	271	271	3	–	–	301
Maryland	6,863	8	–	2,719	2,727	1,172	–	–	10,762
Massachusetts	903	–	–	1,553	1,553	19	–	–	2,475
Michigan	24,546	591	7,648	–	8,240	401	–	–	33,186
Minnesota	17,909	158	546	–	705	65	–	–	18,679
Mississippi	5,073	602	–	–	602	27	–	–	5,702
Missouri	29,678	9,291	–	–	9,291	1,095	–	–	40,064
Montana	640	–	–	–	–	416	7,303	–	8,359
Nebraska	10,725	–	–	–	–	1	–	–	10,726
Nevada	2,520	–	–	–	–	81	4,470	–	7,072
New Hampshire	806	–	–	137	137	8	–	–	951
New Jersey	1,646	156	–	1,112	1,268	14	–	–	2,927
New Mexico	8,422	–	–	–	–	95	6,580	–	15,097
New York	9,951	297	538	36	870	637	–	–	11,459
North Carolina	26,992	52	–	–	52	370	–	–	27,414
North Dakota	753	–	–	–	–	4,583	25,107	–	30,444
Ohio	13,028	28,426	2,221	–	30,648	9,613	8,424	–	61,713
Oklahoma	19,769	40	–	50	91	1,724	–	–	21,584
Oregon	1,027	–	–	–	–	1	–	–	1,028
Pennsylvania	17,414	20,013	–	–	20,013	16,501	5,175	–	59,103
Rhode Island	–	–	–	–	–	3	–	–	3
South Carolina	13,326	–	–	–	–	47	–	–	13,373
South Dakota	1,301	1	–	–	1	355	–	–	1,657
Tennessee	16,436	14,264	–	–	14,264	1,810	–	–	32,510
Texas	69,657	23	–	4	28	10,041	15,641	–	95,367
Utah	6,188	–	–	–	–	4,988	–	–	11,175
Vermont	*	–	–	–	–	2	–	–	2
Virginia	13,933	46	–	–	46	1,228	1,007	–	16,214
Washington	301	–	–	–	–	132	4,393	–	4,825
West Virginia	12,955	13,787	–	–	13,787	4,191	5,115	–	36,047
Wisconsin	22,683	1,532	1,904	–	3,436	167	–	–	26,285
Wyoming	12,156	–	–	–	–	2,954	11,647	–	26,757
Unknown State	–	–	–	–	–	–	–	1,408	1,408
Foreign	2,017	105	8,246	81,457	89,808	374	–	–	92,199

* Data round to zero.

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration, Form EIA-6, ''Coal Distribution Report.''

Demand

Domestic Markets

U.S. coal consumption during 1996 reached a record 983.3 million short tons, surpassing by 5.0 percent the previous record of 940.8 million short tons consumed during 1995. Compared with 1995, the amount of coal consumed by U.S. electric utilities during 1996 increased 5.5 percent to a record 874.7 million short tons, accounting for 89 percent of total domestic coal consumption.

In contrast, compared with 1995, coal consumption at U.S. coke plants declined 3.9 percent to 31.7 million short tons, while coal consumption at other industrial plants declined 2.9 percent to 70.9 million short tons.

Electric Utility Use

Nearly one-half of the 1996 growth in total electric utility coal consumption was attributable to increases in the amount of coal consumed by electric utility generators located in the East North Central and South Atlantic Census Divisions. Collectively, electric utilities in these two Divisions accounted for 39.8 percent of the coal consumed by electric utilities during 1996.

In the East North Central Division, electric utiltiy coal consumption rose 6.1 percent to 198.9 million short tons as utilities in Illinois and Ohio relied upon coal-fired generating units to compensate for reduced generation by nuclear and gas-fired units. Similarly, in the South Atlantic Division, electric utility coal consumption rose 8.1 percent to 149.4 million short tons as coal-fired generating units accounted for increased shares of the electricity produced in the Carolinas and Virginia.

Coal consumption by electric utilities in the West South Central Division increased by 5.9 percent to 140.5 million short tons in response to increased electricity demand coupled with a decline in the share of generation supplied by natural gas.

Coal consumption in the West North Central Division increased 4.9 percent to 122.4 million short tons as coal-fired generation rose in response to increased electricity demand. In the East South Central Division, the amount of coal consumed by electric utilities increased 4.9 percent to 96.8 million short tons as increased demand for electricity offset a decline in the coal-fired share of the Divison's total generation.

Coke Plant Use

The decrease in the total amount of coal consumed by U.S. coke plants during 1996 was attributable primarily to coke plants in Ohio, where consumption of coking coal declined 33.7 percent to 1.8 million short tons. During 1996, coke plants in Pennsylvania and Indiana remained the Nation's leading consumers of coking coke as they collectively consumed 16.5 million short tons, accounting for 52.1 percent of total domestic coal consumption at coke plants.

Other Uses

Compared with 1995, coal consumption in the other industrial sector declined 2.9 percent to 70.9 million short tons, reflecting decreased coal consumption by this sector in all Census Divisions except the Middle Atlantic and East North Central Divisions. Coal consumption in the residential and commercial sectors in 1996 totaled 6.0 million short tons, an increase of 3.4 percent compared with 1995.

Coal Stocks

Stocks of coal held by domestic consumers at the close of 1996 totaled 123.0 million short tons, a decline of 8.6 percent compared with the 134.6 million short tons held in stock at the end of 1995. Compared with 1995, coal stocks at electric utility plants declined 9.2 percent to 114.7 million short tons, while stocks held at coke plants increased slightly to 2.7 million short tons. Coal stocks at other industrial plants remained relatively constant at 5.7 million short tons.

Foreign Markets

U.S. coal exports during 1996 totaled 90.5 million short tons, 2.2 percent more than the 88.5 million short tons exported during 1995. Compared with 1995, exports of metallurgical coal during 1996 increased 1.6 percent to 52.9 million short tons, accounting for 58.5 percent of total 1996 coal exports. Exports of steam coal during 1996 totaled 37.5 million short tons, an increase of 2.9 percent compared with 1995.

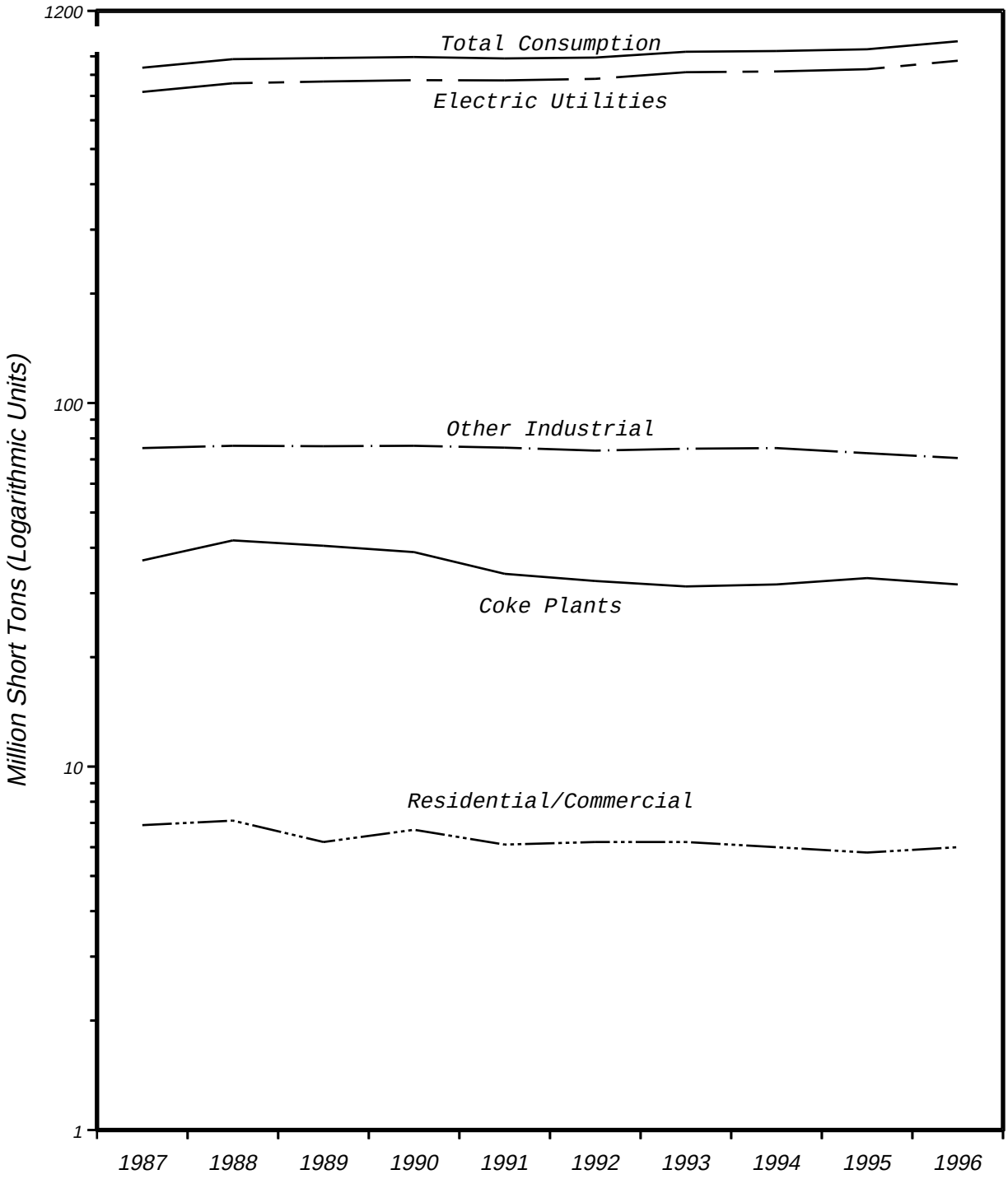
During 1996, Brazil replaced Japan as the leading destination for U.S. metallurgical coal exports. Compared with 1995, metallurgical coal shipments to Brazil increased 1.7 percent to 6.4 million short tons, while shipments of metallurgical coal to Japan declined 30.0 percent to 5.6 million short tons.

Exports of metallurgical coal to Europe during 1996 totaled 28.3 million short tons, an increase of 3.5 percent compared with 1995. Shipments to Italy, the leading European consumer of U.S. metallurgical coal, increased 17.5 percent to 5.3 million short tons. In North America, shipments of U.S. metallurgical coal to Canada increased 35.4 percent to 6.0 million short tons.

Compared with 1995, U.S. steam coal exports to Europe during 1996 declined 11.2 percent to 18.9 million short tons as significant increases in shipments to France and the United Kingdom were offset by decreases in shipments to other European destinations. In North America, the amount of steam coal exported to Canada increased 20.6 percent to 6.0 million short tons and steam coal exports to Mexico increased 90 percent to over 1 million short tons. Exports of steam coal to Asia increased 13.4 percent to 9.2 million short tons as increases in exports to Japan and Israel offset decreased shipments to Taiwan and Korea.

Domestic Markets

Figure 9. U.S. Coal Consumption, 1987-1996



Note: Total consumption does not include coal consumed by independent power producers.
Sources: Energy Information Administration, Electric Utilities: Form EIA-759, "Monthly Power Plant Report." Coke Plants: Form EIA-5, "Coke Plant Report - Quarterly." Other Industrial: Form EIA-3, "Quarterly Coal Consumption Report - Manufacturing Plants" and Form EIA-6, "Coal Distribution Report." Residential and Commercial: Form EIA-6, "Coal Distribution Report."

Table 66. Major U.S. Coal Consumers, 1996

Rank	Company Name	Plant Locations
	Electric Utilities	
1	Tennessee Valley Auth	(AL) (KY) (TN)
2	Texas Utilities Elec Co	(TX)
3	Pacificorp	(UT) (WA) (WY)
4	Georgia Power Co	(GA)
5	Alabama Power Co	(AL)
6	Detroit Edison Co (The)	(MI)
7	Houston Lighting & Pwr Co	(TX)
8	GPU Service Corp	(PA)
9	Ohio Power Co	(OH) (WV)
10	Duke Power Co	(NC) (SC)
11	Basin Elec Power Coop	(ND) (WY)
12	Commonwealth Edison Co	(IL)
13	Union Electric Co	(MO)
14	PSI Energy, Inc	(IN)
15	Northern States Power Co	(MN) (WI)
16	Arkansas Power & Light Co	(AR)
17	Virginia Elec & Power Co	(VA) (WV)
18	Indiana Michigan Power Co	(IN)
19	Appalachian Power Co	(VA) (WV)
20	Southwestern Elec Pwr Co	(AR) (TX)
21	Monongahela Power Co	(WV)
22	Kansas City Pwr & Lgt Co	(KS) (MO)
23	Midamerican Energy	(IA)
24	Cincinnati Gas Elec Co	(KY) (OH)
25	Wisconsin Electric Pwr Co	(MI) (WI)
26	Carolina Power & Light Co	(NC) (SC)
27	Arizona Public Service Co	(AZ) (NM)
28	KPL - Western Resources	(KS)
29	Oklahoma Gas & Elec Co	(OK)
30	Public Service Co of Colo	(CO)
31	Salt River Project	(AZ)
32	Associated Elec Coop	(MO)
33	Southwestern Pub Serv Co	(TX)
34	Wisconsin Pwr & Lgt Co	(WI)
35	Pennsylvania Pwr & Lgt Co	(PA)
36	Northern Ind Pub Serv Co	(IN)
37	Tampa Electric Co	(FL)
38	Dayton Pwr & Lgt Co (The)	(OH)
39	Montana Power Co (The)	(MT)
40	Consumers Power Co	(MI)
41	Illinois Power Co	(IL)
42	Ohio Edison Co	(OH)
43	Cooperative Power Asso	(ND)
44	Kentucky Utilities Co	(KY)
45	Indianapolis Pwr & Lgt Co	(IN)
46	Louisville Gas & Elec Co	(KY)
47	Pub Serv Co of New Mexico	(NM)
48	Pennsylvania Power Co	(PA)
49	Lower Colorado River Auth	(TX)
50	Central Ill Public Ser Co	(IL)
51	Potomac Electric Pwr Co	(MD) (VA)
52	Florida Power Corporation	(FL)
53	So Carolina Pub Serv Auth	(SC)
54	San Antonio Pub Serv Brd	(TX)
55	Cajun Elec Power Coop Inc	(LA)
56	Baltimore Gas & Elec Co	(MD)
57	Scana Corporation	(SC)
58	Nebraska Pub Power Dist	(NE)
59	Central Louisiana Elec Co	(LA)
60	Big Rivers Electric Corp	(KY)
61	Cleveland Elec Illum Co	(OH)
62	Indiana-Kentucky El Corp	(IN)
63	Electric Energy Inc	(IL)
64	Tri-State G & T Assn Inc	(CO)
65	Mississippi Power Co	(MS)
66	West Penn Power Co	(PA)
67	Southern Calif Edison Co	(NV)
68	Minnkota Power Coop Inc	(ND)
69	Los Angeles (City of)	(UT)
70	Minnesota Power & Lgt Co	(MN)
71	I E S Utilities Co	(IA)
72	Public Service Co of Okla	(OK)
73	Omaha Public Power Dist	(NE)

See footnotes at end of table.

Table 66. Major U.S. Coal Consumers, 1996 (Continued)

Company Name	Plant Location
Top Ten Manufacturers	
Aluminum Company of America	(IN) (OH) (TN) (TX)
Archer Daniels Midland Co	(IA) (IL) (MN)
Basin Electric Power Coop	(ND)
Champion International Corp	(AL) (FL) (ME) (MI) (MN) (NC) (NY) (OH)
E I Du Pont De Nemours & Co	(DE) (MS) (NC) (SC) (TN) (VA) (WV)
Eastman Chemical Company	(AR) (NY) (SC) (TN) (TX)
Hoechst AG	(SC) (TX) (VA)
Holnam Inc	(AL) (CO) (IA) (MI) (MO) (MS) (SC) (UT) (WA)
Inland Steel Industries Inc	(IN)
Westvaco Corporation	(MD) (PA) (SD) (VA)
Other Major Manufacturers	
A E Staley Manufacturing Co	(IL) (IN) (TN)
American Crystal Sugar Co	(MN) (ND)
Applied Energy Services Inc	(PA)
Ash Grove Cement Company	(AR) (KS) (MT) (NE) (OR) (TX) (UT)
Blue Circle Inc	(AL) (GA) (NY) (OK) (SC)
Cargill Incorporated	(GA) (IA) (MN) (NC) (OH) (TN) (VA)
CarMeuse/Marblehead Lime Co.	(IL) (IN) (MI)
Dravo Corporation	(AL) (KY)
Elkem A/S	(OH) (WV)
Florida Crushed Stone	(FL)
Fort Howard Corporation	(GA) (OK) (WI)
FMC Corporation	(NC) (WV) (WY)
G E Company	(IN) (KY) (PA)
General Chemical Corporation	(WY)
General Motors Corporation	(AL) (IL) (IN) (MI) (MO) (OH) (WI)
Georgia-Pacific Corp	(AR) (GA) (MI) (VA)
Heidelberger Zement Ag-Heidelb	(AL) (IA) (IN) (MD)
International Paper Company	(AL) (LA) (PA) (SC) (WI)
Jefferson Smurfit Corp	(AL) (FL) (IL) (IN) (OH) (PA)
Kerr-McGee Corporation	(CA)
Kimberly Clark Corporation	(AL) (MI) (PA) (WI)
Lafarge Corporation	(IA) (IL) (KS) (MI) (MO) (PA)
Lone Star Industries, Inc.	(FL) (IL) (IN) (MO) (OK) (TX)
Mead Corporation The	(MI) (OH) (TN)
Monsanto Company	(AL) (IA) (ID) (IL) (MA) (WV)
P H Glatfelter Co	(NC) (PA)
PPG Industries Inc	(WV)
Southdown Inc	(CA) (CO) (FL) (OH) (TN)
Stone Container Corporation	(AZ) (FL) (MI) (SC) (VA)
Union Camp Corporation	(AL) (GA) (OH) (SC) (VA)
Top Ten Coke Producers	
AK Steel Corp	(KY) (OH)
Bethlehem Steel Corp	(IN) (MD) (NY) (PA)
Citizens Gas & Coke Utility	(IN)
Drummond Company Inc	(AL)
Geneva Steel Company	(UT)
LTV Steel Company Inc	(IL) (IN) (OH) (PA)
National Steel Corp	(IL) (MI)
Sun Coal Co	(VA)
U S Steel Mining Company LLC	(PA)
USX Corporation	(IN)

Note: Major electric utility coal consumers are companies that consumed more than 3.6 million short tons of coal in 1996. Major manufacturers are the top 40 coal consumers in the manufacturing sector. Major coke producers are the top 10 coal consumers in the coke plant sector. Electric utilities are ranked by consumption and manufacturers and coke producers are listed in alphabetical order.

Sources: Energy Information Administration, • Electric Utilities: Form EIA-759, ''Monthly Power Plant Report.'' • Manufacturers: Form EIA-3, ''Quarterly Coal Consumption Report - Manufacturing Plants.'' • Coke Plants: Form EIA-5, ''Coke Plant Report - Quarterly.''

Table 67. Coal Consumption by Census Division and State, 1987, 1992-1996
(Thousand Short Tons)

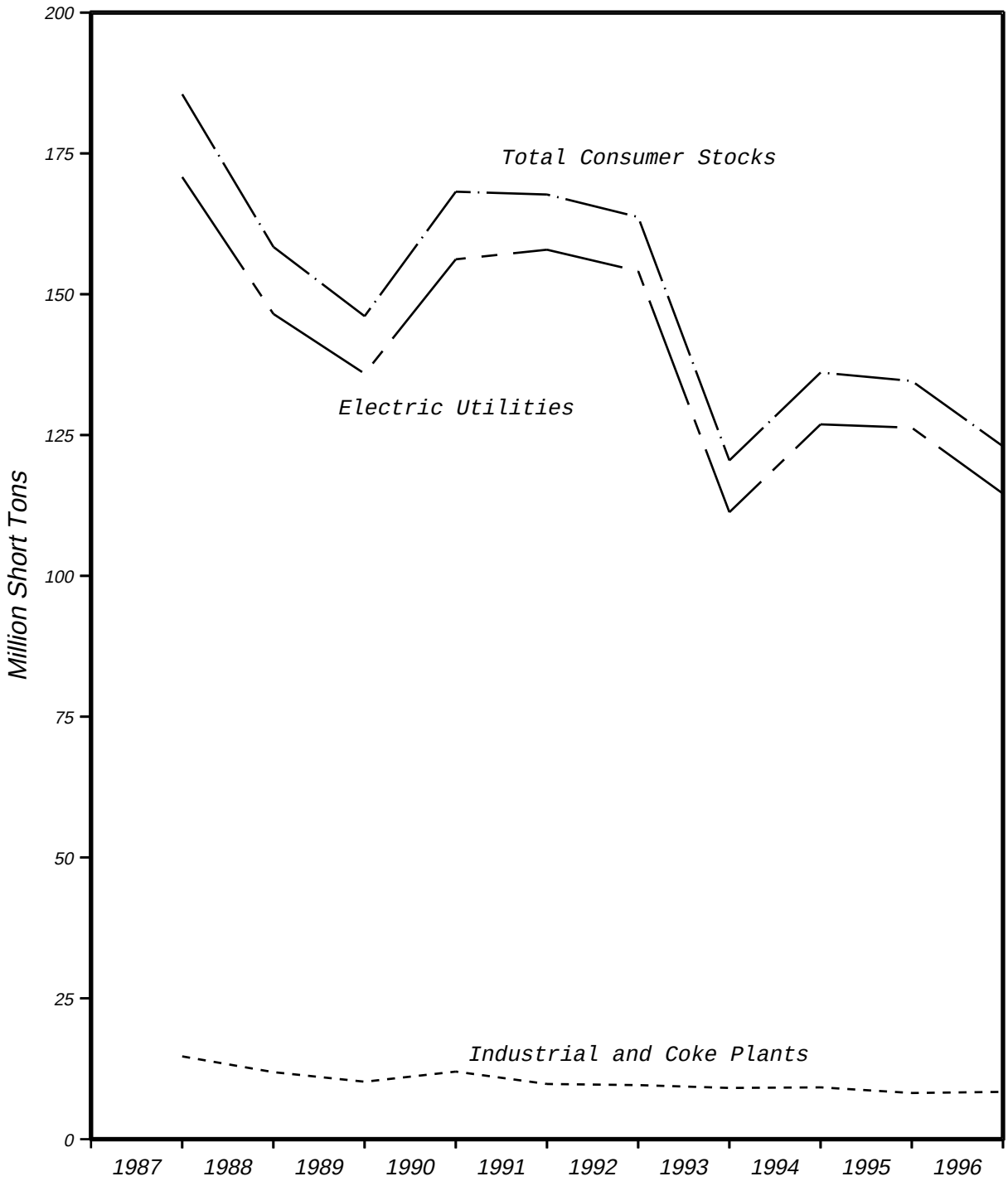
Census Division and State	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
New England Total	**7,024**	**6,662**	**6,553**	**6,485**	**7,298**	**6,767**	**5.4**	**–0.9**	**0.4**
Connecticut	931	906	862	788	849	815	2.7	2.3	1.5
Maine	234	282	464	449	856	273	–17.0	–27.7	–1.7
Massachusetts	4,477	4,113	3,932	3,811	4,257	4,487	8.8	1.3	*
New Hampshire	1,377	1,355	1,287	1,428	1,311	1,176	1.6	1.2	1.8
Rhode Island	3	3	3	3	5	5	21.1	–9.6	–3.9
Vermont	2	3	5	6	20	12	–38.2	–45.8	–19.8
Middle Atlantic Total	**70,965**	**68,462**	**67,536**	**70,389**	**71,418**	**70,211**	**3.6**	**–.1**	**.1**
New Jersey	2,402	2,074	1,969	2,353	2,348	3,434	15.8	.6	–3.9
New York	11,337	11,062	11,474	11,878	12,996	11,471	2.5	–3.3	–.1
Pennsylvania	57,226	55,326	54,094	56,158	56,074	55,305	3.4	.5	.4
East North Central Total	**229,000**	**217,702**	**213,188**	**210,632**	**200,660**	**201,833**	**5.2**	**3.3**	**1.4**
Illinois	44,431	39,623	39,077	38,135	31,599	35,581	12.1	8.9	2.5
Indiana	64,021	62,631	59,996	60,353	58,765	51,385	2.2	2.2	2.5
Michigan	36,694	35,802	35,674	32,217	31,554	35,865	2.5	3.8	.3
Ohio	59,835	56,580	56,711	59,031	58,671	59,350	5.8	.5	.1
Wisconsin	24,019	23,066	21,731	20,897	20,071	19,652	4.1	4.6	2.3
West North Central Total	**136,643**	**131,028**	**125,591**	**120,940**	**115,505**	**101,599**	**4.3**	**4.3**	**3.3**
Iowa	21,171	20,636	19,341	19,188	17,992	15,191	2.6	4.1	3.8
Kansas	19,084	16,521	17,158	17,386	14,227	15,194	15.5	7.6	2.6
Minnesota	19,264	18,947	18,729	18,321	16,924	14,504	1.7	3.3	3.2
Missouri	34,382	31,753	27,663	23,381	25,180	24,764	8.3	8.1	3.7
Nebraska	10,379	10,396	9,300	9,666	8,212	6,744	–.2	6.0	4.9
North Dakota	30,511	30,237	30,363	30,302	30,301	24,101	.9	.2	2.6
South Dakota	1,852	2,537	3,036	2,696	2,670	1,101	–27.0	–8.7	5.9
South Atlantic Total	**165,545**	**155,259**	**151,935**	**150,580**	**144,178**	**146,569**	**6.6**	**3.5**	**1.4**
Delaware	1,956	2,011	2,226	2,446	1,770	2,710	–2.7	2.5	–3.5
District of Columbia	23	6	47	51	50	70	309.0	–17.6	–11.5
Florida	28,443	26,526	26,082	26,430	26,368	23,644	7.2	1.9	2.1
Georgia	31,158	31,288	29,254	27,081	25,481	29,126	–.4	5.1	.8
Maryland	11,366	11,198	10,491	10,268	9,713	11,311	1.5	4.0	*
North Carolina	27,624	24,084	23,282	25,760	24,075	19,965	14.7	3.5	3.7
South Carolina	13,852	12,279	12,993	12,914	11,285	11,701	12.8	5.3	1.9
Virginia	14,983	13,378	12,792	13,584	13,418	13,227	12.0	2.8	1.4
West Virginia	36,139	34,489	34,767	32,046	32,019	34,815	4.8	3.1	.4
East South Central Total	**110,450**	**105,830**	**99,289**	**104,027**	**93,804**	**88,203**	**4.4**	**4.2**	**2.5**
Alabama	37,052	34,309	31,473	33,047	31,510	26,632	8.0	4.1	3.7
Kentucky	40,863	39,516	38,090	39,095	34,704	32,023	3.4	4.2	2.7
Mississippi	5,791	4,606	4,285	4,030	3,485	4,846	25.7	13.5	2.0
Tennessee	26,744	27,399	25,440	27,854	24,106	24,702	–2.4	2.6	.9
West South Central Total	**146,472**	**139,106**	**138,251**	**140,797**	**135,210**	**118,847**	**5.3**	**2.0**	**2.3**
Arkansas	14,816	13,540	12,596	11,447	12,538	12,066	9.4	4.3	2.3
Louisiana	12,534	13,357	14,100	13,676	13,674	10,391	–6.2	–2.1	2.1
Oklahoma	20,125	19,596	17,726	18,866	17,430	13,476	2.7	3.7	4.5
Texas	98,997	92,612	93,829	96,809	91,568	82,915	6.9	2.0	2.0
Mountain Total	**107,226**	**107,923**	**115,695**	**110,673**	**112,163**	**94,126**	**–.6**	**–1.1**	**1.4**
Arizona	16,792	16,682	19,580	18,991	17,915	13,375	.6	–1.6	2.6
Colorado	17,222	16,971	17,475	17,070	16,696	15,007	1.5	.8	1.5
Idaho	397	465	534	528	535	494	–14.5	–7.2	–2.4
Montana	8,032	10,005	11,089	9,247	11,040	7,730	–19.7	–7.6	.4
Nevada	7,604	7,340	7,968	7,806	8,088	6,920	3.6	–1.5	1.0
New Mexico	15,297	15,221	15,374	15,012	14,832	14,395	.5	.8	.7
Utah	15,237	15,307	16,216	15,848	15,719	11,807	–.4	–.8	2.9
Wyoming	26,646	25,933	27,459	26,171	27,339	24,399	2.8	–.6	1.0
Pacific Total	**10,008**	**8,908**	**12,162**	**11,422**	**12,186**	**8,294**	**12.3**	**–4.8**	**2.1**
Alaska	706	815	796	863	792	274	–13.4	–2.8	11.1
California	2,317	2,618	2,498	2,453	2,821	1,934	–11.5	–4.8	2.0
Hawaii	169	192	86	73	47	63	–11.6	37.9	11.6
Oregon	1,134	1,125	2,479	2,099	2,124	205	.8	–14.5	20.9
Washington	5,682	4,158	6,303	5,934	6,402	5,819	36.6	–2.9	–.3
U.S. Total	**983,334**	**940,880**	**930,201**	**925,944**	**892,421**	**836,860**	**4.5**	**2.4**	**1.8**

* Data round to zero.

Notes: U.S. Total does not include coal consumed by independent power producers. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-759, ''Monthly Power Plant Report''; Form EIA-3, ''Quarterly Coal Consumption Report - Manufacturing Plants''; Form EIA-5, ''Coke Plant Report - Quarterly''; and Form EIA-6, ''Coal Distribution Report.''

Figure 10. U.S. Consumer Coal Stocks, 1987-1996



Note: Each increment represents end-of-year data. Industrial stocks reflect manufacturing plants and coke plants.
Sources: Energy Information Administration, Electric Utilities: Form EIA-759, "Monthly Power Plant Report."
Industrial: Form EIA-5, "Coke Plant Report - Quarterly" and Form EIA-3, "Quarterly Coal Consumption Report - Manufacturing Plants."

Table 68. Year-End Consumer Coal Stocks by Census Division and State, 1987, 1992-1996
(Thousand Short Tons)

Census Division and State	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
New England Total	**1,297**	**969**	**1,117**	**989**	**1,253**	**1,056**	**33.9**	**0.9**	**2.3**
Connecticut	w	w	w	w	w	w	w	w	w
Maine	w	w	w	w	w	w	w	w	w
Massachusetts	w	w	w	w	w	w	w	w	w
New Hampshire	w	w	w	w	w	w	w	w	w
Rhode Island	–	–	–	–	–	w	–	–	–
Vermont	–	–	–	–	–	w	–	–	–
Middle Atlantic Total	**10,899**	**12,404**	**14,068**	**14,060**	**19,486**	**19,598**	**–12.1**	**–13.5**	**–6.3**
New Jersey	w	w	w	w	w	w	w	w	w
New York	w	w	w	w	w	w	w	w	w
Pennsylvania	8,860	10,303	12,060	12,265	15,976	16,121	–14.0	–13.7	–6.4
East North Central Total	**30,823**	**33,818**	**35,833**	**30,162**	**43,661**	**51,835**	**–8.8**	**–8.3**	**–5.6**
Illinois	w	w	w	w	w	w	w	w	w
Indiana	7,958	9,298	11,707	7,798	12,507	14,998	–14.4	–10.7	–6.8
Michigan	w	w	w	w	w	w	w	w	w
Ohio	5,431	5,936	7,815	7,630	10,804	11,164	–8.5	–15.8	–7.7
Wisconsin	4,458	3,656	w	w	w	w	21.9	w	w
West North Central Total	**18,335**	**18,713**	**w**	**w**	**w**	**w**	**–2.0**	**w**	**w**
Iowa	4,614	4,447	4,178	3,819	4,857	5,094	3.8	–1.3	–1.1
Kansas	2,986	3,860	2,623	2,024	2,759	3,327	–22.6	2.0	–1.2
Minnesota	1,739	1,985	2,234	1,250	2,252	3,427	–12.4	–6.3	–7.3
Missouri	5,320	4,779	w	w	w	w	11.3	w	w
Nebraska	w	w	w	w	w	w	w	w	w
North Dakota	w	w	w	w	w	w	w	w	w
South Dakota	w	w	w	w	w	w	w	w	w
South Atlantic Total	**19,584**	**19,707**	**24,427**	**19,092**	**29,282**	**32,040**	**–.6**	**–9.6**	**–5.3**
Delaware	w	w	w	w	w	w	w	w	w
Florida	3,440	3,268	3,914	3,541	4,121	3,298	5.3	–4.4	.5
Georgia	3,848	3,786	4,843	2,926	4,836	6,712	1.6	–5.5	–6.0
Maryland	w	w	w	w	w	w	w	w	w
North Carolina	2,672	2,855	4,318	3,059	4,715	4,794	–6.4	–13.2	–6.3
South Carolina	2,178	2,194	2,533	1,893	2,451	2,376	–.7	–2.9	–1.0
Virginia	w	w	w	w	w	w	w	w	w
West Virginia	w	w	w	w	w	w	w	w	w
East South Central Total	**9,311**	**10,940**	**11,267**	**9,277**	**14,400**	**19,574**	**–14.9**	**–10.3**	**–7.9**
Alabama	2,860	3,648	4,132	2,797	4,529	5,012	–21.6	–10.8	–6.0
Kentucky	w	w	w	w	w	w	w	w	w
Mississippi	w	w	w	w	w	w	w	w	w
Tennessee	1,501	1,884	w	w	w	w	–20.3	w	w
West South Central Total	**19,894**	**20,564**	**15,959**	**15,105**	**w**	**w**	**–3.3**	**w**	**w**
Arkansas	2,720	2,820	1,777	1,881	1,591	2,359	–3.5	14.3	1.6
Louisiana	2,481	2,669	1,922	2,000	1,755	2,820	–7.0	9.0	–1.4
Oklahoma	4,212	4,246	2,467	2,052	3,161	3,787	–.8	7.4	1.2
Texas	10,481	10,829	9,793	9,172	w	w	–3.2	w	w
Mountain Total	**w**	**w**	**w**	**w**	**w**	**w**	**w**	**w**	**w**
Arizona	2,025	3,032	3,242	3,717	3,596	3,840	–33.2	–13.4	–6.9
Colorado	3,057	3,682	3,145	3,454	3,439	w	–17.0	–2.9	w
Idaho	77	118	78	86	101	116	–34.4	–6.5	–4.4
Montana	w	w	w	w	w	w	w	w	w
Nevada	w	w	w	w	w	w	w	w	w
New Mexico	w	w	w	w	w	w	w	w	w
Utah	w	w	w	w	w	w	w	w	w
Wyoming	2,269	2,936	2,553	1,841	2,242	2,867	–22.7	.3	–2.6
Pacific Total	**1,275**	**2,586**	**877**	**918**	**1,529**	**1,470**	**–50.7**	**–4.4**	**–1.6**
Alaska	1	1	2	5	w	w	–	w	w
California	150	133	126	93	109	174	12.4	8.3	–1.6
Hawaii	w	w	w	w	w	w	w	w	w
Oregon	w	w	w	w	w	w	w	w	w
Washington	857	1,969	569	459	736	681	–56.4	3.9	2.6
U.S. Total	**123,024**	**134,639**	**136,139**	**120,458**	**163,692**	**185,459**	**–8.6**	**–6.9**	**–4.4**

[w] Withheld to avoid disclosure of individual company data.

Notes: Stocks for the residential and commercial sector are not included. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-759, ''Monthly Power Plant Report''; Form EIA-5, ''Coke Plant Report - Quarterly''; and Form EIA-3, ''Quarterly Coal Consumption Report - Manufacturing Plants.''

Table 69. Coal Consumption at Electric Utility Plants by Census Division and State, 1987, 1992-1996

(Thousand Short Tons)

Census Division and State	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
New England Total	**6,701**	**6,272**	**5,945**	**5,736**	**6,112**	**6,217**	**6.8**	**2.3**	**0.8**
Connecticut	925	881	821	745	817	787	5.0	3.1	1.8
Massachusetts	4,406	4,044	3,845	3,652	4,044	4,267	8.9	2.2	.3
New Hampshire	1,369	1,346	1,279	1,339	1,251	1,163	1.7	2.3	1.8
Middle Atlantic Total	**51,718**	**49,357**	**48,326**	**51,079**	**52,488**	**52,172**	**4.8**	**–.4**	**–.1**
New Jersey	2,387	2,054	1,887	2,123	2,118	3,081	16.2	3.0	–2.8
New York	8,254	8,051	8,395	8,699	9,963	7,828	2.5	–4.6	.6
Pennsylvania	41,076	39,252	38,044	40,257	40,407	41,263	4.6	.4	*
East North Central Total	**198,900**	**187,490**	**183,282**	**179,833**	**169,029**	**161,833**	**6.1**	**4.1**	**2.3**
Illinois	38,090	33,463	32,599	31,744	25,264	28,894	13.8	10.8	3.1
Indiana	52,855	52,089	50,554	48,836	46,937	36,987	1.5	3.0	4.0
Michigan	32,175	31,165	31,106	28,749	28,238	30,854	3.2	3.3	.5
Ohio	53,543	49,785	49,326	51,456	50,358	47,520	7.5	1.5	1.3
Wisconsin	22,236	20,987	19,696	19,049	18,231	17,579	5.9	5.1	2.6
West North Central Total	**122,419**	**116,720**	**111,672**	**107,584**	**102,557**	**89,174**	**4.9**	**4.5**	**3.6**
Iowa	17,864	17,785	16,565	16,623	15,357	12,997	.4	3.8	3.6
Kansas	18,853	16,345	16,989	17,226	14,068	14,942	15.3	7.6	2.6
Minnesota	17,459	17,282	17,046	16,844	15,841	13,495	1.0	2.5	2.9
Missouri	33,059	30,440	26,375	21,945	23,815	23,012	8.6	8.5	4.1
Nebraska	10,091	10,048	8,879	9,297	7,881	6,428	.4	6.4	5.1
North Dakota	23,640	22,680	23,248	23,290	23,192	17,434	4.2	.5	3.4
South Dakota	1,453	2,137	2,570	2,360	2,402	865	–32.0	–11.8	5.9
South Atlantic Total	**149,354**	**138,134**	**133,984**	**132,885**	**126,093**	**125,582**	**8.1**	**4.3**	**1.9**
Delaware	1,787	1,816	2,007	2,223	1,628	2,449	–1.6	2.4	–3.4
Florida	27,172	25,200	24,758	25,108	25,016	22,598	7.8	2.1	2.1
Georgia	29,171	29,280	27,293	25,339	23,656	27,130	–.4	5.4	.8
Maryland	10,540	10,141	9,717	9,521	8,993	8,228	3.9	4.0	2.8
North Carolina	25,083	21,424	20,624	23,055	21,011	17,255	17.1	4.5	4.2
South Carolina	11,833	10,074	10,597	10,410	9,078	9,019	17.5	6.8	3.1
Virginia	10,994	9,543	8,670	9,447	8,661	8,297	15.2	6.1	3.2
West Virginia	32,775	30,657	30,318	27,782	28,050	30,605	6.9	4.0	.8
East South Central Total	**96,809**	**92,262**	**85,622**	**90,365**	**80,203**	**74,573**	**4.9**	**4.8**	**2.9**
Alabama	31,216	28,759	25,817	27,533	24,988	20,746	8.5	5.7	4.6
Kentucky	37,072	35,707	34,564	35,264	31,715	28,569	3.8	4.0	2.9
Mississippi	5,558	4,319	3,989	3,767	3,237	4,562	28.7	14.5	2.2
Tennessee	22,964	23,477	21,253	23,801	20,263	20,697	–2.2	3.2	1.2
West South Central Total	**140,493**	**132,633**	**131,168**	**134,009**	**129,351**	**113,455**	**5.9**	**2.1**	**2.4**
Arkansas	14,467	13,216	12,250	11,116	12,241	11,764	9.5	4.3	2.3
Louisiana	12,450	12,930	13,479	13,089	13,077	10,029	–3.7	–1.2	2.4
Oklahoma	19,386	18,130	16,961	17,668	16,699	12,861	6.9	3.8	4.7
Texas	94,189	88,358	88,479	92,135	87,333	78,802	6.6	1.9	2.0
Mountain Total	**101,507**	**101,013**	**108,651**	**104,093**	**105,609**	**89,145**	**.5**	**–1.0**	**1.4**
Arizona	16,117	16,021	18,853	18,316	17,280	12,706	.6	–1.7	2.7
Colorado	16,841	16,222	16,596	16,252	15,902	14,178	3.8	1.4	1.9
Montana	7,897	9,373	10,513	8,869	10,768	7,530	–15.8	–7.4	.5
Nevada	7,424	7,084	7,772	7,608	7,914	6,807	4.8	–1.6	1.0
New Mexico	15,215	15,137	15,297	14,942	14,775	14,340	.5	.7	.6
Utah	13,584	13,325	14,269	13,995	13,857	11,175	1.9	–.5	2.2
Wyoming	24,430	23,850	25,350	24,111	25,114	22,408	2.4	–.7	1.0
Pacific Total	**6,780**	**5,127**	**8,621**	**7,924**	**8,419**	**5,742**	**32.2**	**–5.3**	**1.9**
Alaska	229	293	271	298	277	274	–21.6	–4.6	–2.0
Oregon	1,044	977	2,333	1,981	1,994	–	6.8	–14.9	–
Washington	5,507	3,857	6,016	5,646	6,148	5,468	42.8	–2.7	.1
U.S. Total	**874,681**	**829,007**	**817,270**	**813,508**	**779,860**	**717,894**	**5.5**	**2.9**	**2.2**

* Data round to zero.

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration, Form EIA-759, ''Monthly Power Plant Report.''

Table 70. Year-End Coal Stocks at Electric Utility Plants by Census Division and State, 1987, 1992-1996

(Thousand Short Tons)

Census Division and State	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
New England Total	**1,237**	**908**	**1,079**	**967**	**1,237**	**1,012**	**36.2**	*****	**2.3**
Connecticut	173	164	202	160	150	–	5.5	3.7	–
Massachusetts	704	425	629	449	727	677	65.7	–.8	.4
New Hampshire	360	319	248	358	361	307	12.6	–.1	1.8
Rhode Island	–	–	–	–	–	28	–	–	–
Middle Atlantic Total	**9,609**	**11,064**	**12,687**	**12,564**	**17,743**	**17,764**	**–13.1**	**–14.2**	**–6.6**
New Jersey	824	804	688	501	771	842	2.4	1.7	–.2
New York	905	1,015	999	953	2,106	1,889	–10.8	–19.0	–7.8
Pennsylvania	7,880	9,244	11,000	11,110	14,866	15,034	–14.8	–14.7	–6.9
East North Central Total	**27,626**	**30,505**	**32,088**	**27,296**	**40,250**	**45,855**	**–9.4**	**–9.0**	**–5.5**
Illinois	4,581	5,331	4,526	4,019	7,399	8,861	–14.1	–11.3	–7.1
Indiana	7,105	8,435	10,449	6,935	11,294	13,185	–15.8	–10.9	–6.6
Michigan	6,531	7,708	6,505	6,206	7,402	9,751	–15.3	–3.1	–4.3
Ohio	5,232	5,661	7,499	7,249	10,395	9,959	–7.6	–15.8	–6.9
Wisconsin	4,177	3,371	3,109	2,887	3,760	4,099	23.9	2.7	.2
West North Central Total	**17,115**	**17,732**	**16,739**	**14,123**	**19,712**	**21,904**	**–3.5**	**–3.5**	**–2.7**
Iowa	4,044	3,923	3,642	3,401	4,301	4,507	3.1	–1.5	–1.2
Kansas	2,970	3,850	2,610	2,008	2,747	3,286	–22.9	2.0	–1.1
Minnesota	1,462	1,898	2,134	1,182	2,175	3,346	–23.0	–9.5	–8.8
Missouri	5,162	4,641	4,410	3,555	6,211	4,958	11.2	–4.5	.4
Nebraska	1,692	1,409	1,276	1,272	1,798	1,880	20.1	–1.5	–1.2
North Dakota	1,642	1,858	2,406	2,417	2,194	3,586	–11.6	–7.0	–8.3
South Dakota	143	153	259	287	285	341	–6.5	–15.8	–9.2
South Atlantic Total	**18,669**	**18,851**	**23,226**	**17,877**	**27,977**	**29,878**	**–1.0**	**–9.6**	**–5.1**
Delaware	322	363	470	192	361	438	–11.3	–2.8	–3.3
Florida	3,350	3,204	3,813	3,451	4,021	3,196	4.5	–4.5	.5
Georgia	3,727	3,657	4,699	2,825	4,692	6,505	1.9	–5.6	–6.0
Maryland	1,347	1,038	1,306	1,455	2,400	1,604	29.8	–13.4	–1.9
North Carolina	2,560	2,715	4,139	2,887	4,512	4,465	–5.7	–13.2	–6.0
South Carolina	1,980	2,033	2,255	1,648	2,206	1,968	–2.6	–2.6	.1
Virginia	1,010	1,098	2,064	1,418	1,922	2,300	–7.9	–14.8	–8.7
West Virginia	4,372	4,744	4,479	4,001	7,863	9,401	–7.8	–13.6	–8.1
East South Central Total	**8,518**	**10,148**	**10,317**	**8,370**	**13,401**	**18,183**	**–16.0**	**–10.7**	**–8.1**
Alabama	2,528	3,282	3,652	2,331	4,071	4,450	–23.0	–11.2	–6.1
Kentucky	4,121	4,472	4,466	3,990	5,415	7,679	–7.8	–6.6	–6.7
Mississippi	603	724	690	417	899	837	–16.8	–9.5	–3.6
Tennessee	1,267	1,670	1,509	1,632	3,016	5,217	–24.1	–19.5	–14.5
West South Central Total	**19,533**	**20,195**	**15,520**	**13,867**	**16,483**	**17,757**	**–3.3**	**4.3**	**1.1**
Arkansas	2,702	2,790	1,751	1,866	1,572	2,329	–3.2	14.5	1.7
Louisiana	2,472	2,659	1,872	1,932	1,701	2,803	–7.0	9.8	–1.4
Oklahoma	4,069	4,118	2,319	1,944	3,066	3,634	–1.2	7.3	1.3
Texas	10,290	10,628	9,578	8,125	10,143	8,992	–3.2	.4	1.5
Mountain Total	**11,309**	**14,562**	**14,559**	**15,529**	**16,009**	**17,265**	**–22.3**	**–8.3**	**–4.6**
Arizona	1,993	2,998	3,197	3,687	3,543	3,813	–33.5	–13.4	–6.9
Colorado	3,030	3,622	3,118	3,428	3,410	3,635	–16.3	–2.9	–2.0
Montana	509	511	517	721	735	851	–.5	–8.8	–5.6
Nevada	1,240	1,356	1,034	1,195	1,447	1,782	–8.6	–3.8	–3.9
New Mexico	814	967	1,462	1,506	1,570	1,246	–15.8	–15.1	–4.6
Utah	1,526	2,250	2,753	3,264	3,153	3,133	–32.2	–16.6	–7.7
Wyoming	2,198	2,857	2,476	1,728	2,153	2,805	–23.1	.5	–2.7
Pacific Total	**1,052**	**2,341**	**683**	**748**	**1,317**	**1,180**	**–55.0**	**–5.4**	**–1.3**
Alaska	1	1	2	5	6	4	–	–38.3	–15.1
Oregon	203	399	150	312	615	561	–49.2	–24.2	–10.7
Washington	849	1,941	531	431	697	615	–56.3	5.0	3.6
U.S. Total	**114,669**	**126,304**	**126,897**	**111,341**	**154,130**	**170,797**	**–9.2**	**–7.1**	**–4.3**

* Data round to zero.

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration, Form EIA-759, ''Monthly Power Plant Report.''

Table 71. Coal Consumption at Other Industrial Plants by Census Division and State, 1987, 1992-1996

(Thousand Short Tons)

Census Division and State	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
New England Total	**268**	**321**	**553**	**647**	**1,045**	**398**	**–16.4**	**–28.8**	**–4.3**
Connecticut	–	w	w	w	w	w	w	w	w
Maine	w	w	w	w	w	w	w	w	w
Massachusetts	w	w	w	w	w	w	w	w	w
New Hampshire	–	w	–	w	w	w	w	w	w
Rhode Island	–	–	–	w	–	w	w	w	w
Vermont	–	–	–	w	w	w	w	w	w
Middle Atlantic Total	**w**	**w**	**w**	**w**	**w**	**w**	**w**	**w**	**w**
New Jersey	w	w	w	w	w	w	w	w	w
New York	1,449	1,408	1,559	1,704	1,610	1,823	2.9	–2.6	–2.5
Pennsylvania	4,466	4,027	4,044	4,311	4,173	4,112	10.9	1.7	.9
East North Central Total	**17,113**	**16,566**	**17,098**	**17,699**	**16,931**	**20,380**	**3.3**	**.3**	**–1.9**
Illinois	3,740	3,653	4,187	3,970	3,736	3,900	2.4	*	–.5
Indiana	4,987	4,373	4,244	4,587	4,263	5,016	14.0	4.0	–.1
Michigan	2,914	2,983	2,890	3,230	3,127	3,826	–2.3	–1.7	–3.0
Ohio	3,794	3,609	3,794	4,100	3,970	5,657	5.1	–1.1	–4.3
Wisconsin	1,678	1,949	1,984	1,811	1,835	1,980	–13.9	–2.2	–1.8
West North Central Total	**13,415**	**13,581**	**13,238**	**12,753**	**12,505**	**11,479**	**–1.2**	**1.8**	**1.7**
Iowa	3,085	2,761	2,735	2,494	2,571	1,857	11.7	4.7	5.8
Kansas	154	138	137	137	158	252	11.6	–.7	–5.3
Minnesota	1,649	1,401	1,455	1,370	1,059	838	17.7	11.7	7.8
Missouri	1,118	1,102	1,070	1,177	1,137	1,427	1.5	–.4	–2.7
Nebraska	w	w	w	w	w	w	w	w	w
North Dakota	w	w	w	w	w	w	w	w	w
South Dakota	w	w	w	w	w	w	w	w	w
South Atlantic Total	**w**	**w**	**w**	**w**	**w**	**w**	**w**	**w**	**w**
Delaware	w	w	w	w	w	w	w	w	w
Florida	1,270	1,325	1,303	1,307	1,335	993	–4.1	–1.2	2.8
Georgia	1,985	1,949	1,933	1,720	1,787	1,960	1.8	2.7	.1
Maryland	785	760	738	731	706	972	3.2	2.7	–2.3
North Carolina	2,336	2,437	2,396	2,476	2,860	2,548	–4.1	–4.9	–1.0
South Carolina	2,000	2,188	2,334	2,395	2,177	2,562	–8.6	–2.1	–2.7
Virginia	2,613	2,585	2,838	2,863	3,592	3,662	1.1	–7.6	–3.7
West Virginia	1,630	1,984	2,637	2,406	2,266	2,326	–17.8	–7.9	–3.9
East South Central Total	**w**	**w**	**w**	**w**	**w**	**w**	**w**	**w**	**w**
Alabama	2,545	2,286	2,394	2,268	3,136	2,614	11.3	–5.1	–.3
Kentucky	2,322	2,250	1,994	2,392	1,648	1,869	3.2	8.9	2.4
Mississippi	w	w	w	w	w	w	w	w	w
Tennessee	3,670	3,777	4,097	3,942	3,686	3,842	–2.8	–.1	–.5
West South Central Total	**5,978**	**6,456**	**7,082**	**6,780**	**5,846**	**w**	**–7.4**	**.5**	**w**
Arkansas	348	325	346	330	295	302	7.2	4.3	1.6
Louisiana	w	w	w	w	w	w	w	w	w
Oklahoma	w	w	w	w	w	613	w	w	w
Texas	4,808	4,255	5,350	4,667	4,225	4,083	13.0	3.3	1.8
Mountain Total	**4,141**	**5,615**	**5,614**	**5,163**	**4,973**	**4,634**	**–26.3**	**–4.5**	**–1.2**
Arizona	675	657	727	674	632	669	2.8	1.7	.1
Colorado	367	729	857	780	735	748	–49.6	–15.9	–7.6
Idaho	369	426	494	486	484	470	–13.3	–6.5	–2.7
Montana	w	w	w	w	w	w	w	w	w
Nevada	w	w	w	w	w	w	w	w	w
New Mexico	w	w	w	w	w	w	w	w	w
Utah	512	915	835	727	525	507	–44.1	–.6	.1
Wyoming	1,835	1,937	1,867	1,873	2,126	1,887	–5.3	–3.6	–.3
Pacific Total	**2,553**	**3,047**	**2,769**	**2,677**	**3,161**	**2,496**	**–16.2**	**–5.2**	**.3**
Alaska	w	–	5	2	–	–	w	w	w
California	2,140	2,485	2,332	2,311	2,821	1,933	–13.9	–6.7	1.1
Hawaii	w	w	w	w	w	w	w	w	w
Oregon	w	w	w	w	w	w	w	w	w
Washington	152	223	201	174	163	298	–31.9	–1.8	–7.2
U.S. Total	**70,941**	**73,055**	**75,179**	**74,892**	**74,042**	**75,175**	**–2.9**	**–1.1**	**–.6**

* Data round to zero.

w Withheld to avoid disclosure of individual company data.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-3, ''Quarterly Coal Consumption Report - Manufacturing Plants''; and Form EIA-6, ''Coal Distribution Report.''

Table 72. Year-End Coal Stocks at Other Industrial Plants by Census Division and State, 1987, 1992-1996

(Thousand Short Tons)

Census Division and State	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
New England Total	**60**	**60**	**38**	**21**	**16**	**44**	*****	**39.7**	**3.5**
Connecticut	–	–	–	–	–	w	w	w	w
Maine	w	w	w	w	w	w	w	w	w
Massachusetts	w	w	w	w	w	w	w	w	w
New Hampshire	–	–	–	–	–	w	w	w	w
Vermont	–	–	–	–	–	w	w	w	w
Middle Atlantic Total	**w**	**w**	**w**	**w**	**w**	**w**	**w**	**w**	**w**
New Jersey	w	w	w	w	w	w	w	w	w
New York	192	203	250	321	402	452	–5.4	–16.8	–9.1
Pennsylvania	231	218	298	287	306	465	6.2	–6.7	–7.4
East North Central Total	**1,862**	**2,031**	**2,462**	**2,044**	**2,505**	**3,884**	**–8.3**	**–7.1**	**–7.8**
Illinois	252	333	426	368	389	598	–24.2	–10.2	–9.1
Indiana	384	451	690	470	732	902	–14.9	–14.9	–9.0
Michigan	827	822	865	702	882	1,387	.5	–1.6	–5.6
Ohio	118	138	153	198	228	445	–14.9	–15.2	–13.7
Wisconsin	281	286	328	306	274	553	–1.8	.6	–7.3
West North Central Total	**1,220**	**981**	**978**	**775**	**1,020**	**1,196**	**24.3**	**4.6**	**.2**
Iowa	570	524	535	418	556	587	8.7	.6	–.3
Kansas	16	10	13	16	11	41	64.6	8.6	–9.9
Minnesota	277	87	99	68	77	81	218.1	37.9	14.7
Missouri	158	138	159	148	227	293	14.5	–8.7	–6.6
Nebraska	w	w	w	w	w	w	w	w	w
North Dakota	w	w	w	w	w	w	w	w	w
South Dakota	w	w	w	w	w	w	w	w	w
South Atlantic Total	**w**	**w**	**w**	**w**	**w**	**w**	**w**	**w**	**w**
Delaware	w	w	w	w	w	w	w	w	w
Florida	89	64	101	90	100	102	40.2	–2.7	–1.4
Georgia	121	129	144	101	144	207	–6.3	–4.3	–5.8
Maryland	30	24	36	41	35	49	27.1	–3.7	–5.1
North Carolina	112	140	179	172	203	329	–19.8	–13.7	–11.3
South Carolina	198	160	278	245	245	409	23.5	–5.2	–7.7
Virginia	133	177	217	216	275	440	–25.0	–16.6	–12.4
West Virginia	136	105	130	167	156	268	30.0	–3.3	–7.3
East South Central Total	**w**	**w**	**w**	**w**	**w**	**w**	**w**	**w**	**w**
Alabama	135	133	183	132	127	183	1.2	1.6	–3.3
Kentucky	83	120	112	73	127	178	–30.3	–10.0	–8.1
Mississippi	w	w	w	w	w	w	w	w	w
Tennessee	234	215	256	246	270	434	9.0	–3.5	–6.6
West South Central Total	**361**	**370**	**439**	**1,218**	**395**	**1,419**	**–2.3**	**–2.2**	**–14.1**
Arkansas	18	29	26	15	19	30	–37.9	–1.2	–5.5
Louisiana	w	w	w	w	w	18	w	w	w
Oklahoma	w	w	w	w	w	154	w	w	w
Texas	190	201	215	1,026	228	1,218	–5.6	–4.4	–18.6
Mountain Total	**231**	**313**	**267**	**332**	**360**	**324**	**–26.2**	**–10.4**	**–3.7**
Arizona	32	34	45	30	53	26	–5.8	–11.7	2.3
Colorado	27	59	26	25	29	56	–54.2	–1.6	–7.7
Idaho	w	118	78	86	101	116	w	w	w
Montana	w	w	w	w	w	w	w	w	w
Nevada	w	w	w	w	w	w	w	w	w
New Mexico	w	w	w	w	w	w	w	w	w
Utah	5	7	13	20	26	39	–19.6	–32.3	–19.8
Wyoming	71	79	77	113	89	62	–10.7	–5.6	1.5
Pacific Total	**222**	**245**	**194**	**170**	**211**	**290**	**–9.2**	**1.3**	**–2.9**
California	150	133	126	93	109	174	12.4	8.3	–1.6
Hawaii	w	w	w	w	w	w	w	w	w
Oregon	w	w	w	w	w	w	w	w	w
Washington	8	28	38	27	39	66	–69.2	–31.5	–20.4
U.S. Total	**5,688**	**5,702**	**6,585**	**6,716**	**6,965**	**10,777**	**–.2**	**–4.9**	**–6.8**

* Data round to zero.

w Withheld to avoid disclosure of individual company data.

Notes: Other industrial plants include manufacturing plants only. Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration, Form EIA-3, ''Quarterly Coal Consumption Report - Manufacturing Plants.''

Table 73. Coal Carbonized at Coke Plants by Census Division and State, 1987, 1992-1996

(Thousand Short Tons)

Census Division and State	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
Middle Atlantic Total	**w**	**w**	**w**	**w**	**w**	**w**	**w**	**w**	**w**
New York	w	w	w	w	w	w	w	w	w
Pennsylvania	10,689	10,858	10,849	10,333	9,868	8,395	–1.5	2.0	2.7
East North Central Total	**11,414**	**12,345**	**11,356**	**11,643**	**13,224**	**17,782**	**–7.5**	**–3.6**	**–4.8**
Illinois	w	w	w	w	w	w	w	w	w
Indiana	5,823	5,883	4,841	6,591	7,153	8,841	–1.0	–5.0	–4.5
Michigan	w	w	w	–	–	w	w	w	w
Ohio	1,842	2,777	3,092	2,892	3,755	5,361	–33.7	–16.3	–11.2
West North Central Total	–	–	–	–	–	**w**	–	**w**	**w**
Missouri	–	–	–	–	–	w	–	w	w
South Atlantic Total	**w**	**w**	**w**	**w**	**w**	**w**	**w**	**w**	**w**
Maryland	–	–	–	–	–	w	w	w	w
Virginia	w	w	w	w	w	w	w	w	w
West Virginia	w	w	w	w	w	w	w	w	w
East South Central Total	**w**	**w**	**w**	**w**	**w**	**w**	**w**	**w**	**w**
Alabama	3,247	3,257	3,253	3,206	3,297	3,150	–.3	–.4	.3
Kentucky	w	w	w	w	w	w	w	w	w
Tennessee	–	–	–	–	–	w	–	w	w
Mountain Total	**w**	**w**	**w**	**w**	**w**	–	**w**	**w**	**w**
Utah	w	w	w	w	w	–	w	w	w
U.S. Total	**31,706**	**33,011**	**31,740**	**31,323**	**32,366**	**36,877**	**–3.9**	**–.5**	**–1.7**

w Withheld to avoid disclosure of individual company data.
Note: Totals may not equal sum of components due to independent rounding.
Source: Energy Information Administration, Form EIA-5, ''Coke Plant Report - Quarterly.''

Table 74. Year-End Coal Stocks at Coke Plants by Census Division and State, 1987, 1992-1996

(Thousand Short Tons)

Census Division and State	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
Middle Atlantic Total	**w**	**w**	**w**	**w**	**w**	**w**	**w**	**w**	**w**
New York	w	w	w	w	w	w	w	w	w
Pennsylvania	748	841	762	868	804	622	–11.0	–1.8	2.1
East North Central Total	**1,335**	**1,282**	**1,282**	**822**	**906**	**2,095**	**4.1**	**10.2**	**–4.9**
Illinois	w	w	w	w	w	w	w	w	w
Indiana	469	412	567	394	481	912	13.7	–.6	–7.1
Michigan	w	w	w	–	–	w	w	w	w
Ohio	81	136	163	183	180	760	–40.5	–18.1	–22.0
South Atlantic Total	**w**	**w**	**w**	**w**	**w**	**w**	**w**	**w**	**w**
Maryland	–	–	–	–	–	w	w	w	w
Virginia	–	–	–	–	w	–	w	w	w
West Virginia	w	w	w	w	w	w	w	w	w
East South Central Total	**w**	**w**	**w**	**w**	**w**	**w**	**w**	**w**	**w**
Alabama	197	233	297	333	332	379	–15.4	–12.2	–7.0
Kentucky	w	w	w	w	w	w	w	w	w
Tennessee	–	–	–	–	–	w	w	w	w
West South Central Total	–	–	–	**21**	**w**	**w**	–	**w**	**w**
Texas	–	–	–	21	w	w	–	w	w
Mountain Total	**w**	**w**	**w**	**w**	**w**	–	**w**	**w**	**w**
Utah	w	w	w	w	w	–	w	w	w
U.S. Total	**2,667**	**2,632**	**2,657**	**2,401**	**2,597**	**3,884**	**1.3**	**.6**	**–4.1**

w Withheld to avoid disclosure of individual company data.
Note: Totals may not equal sum of components due to independent rounding.
Source: Energy Information Administration, Form EIA-5, ''Coke Plant Report - Quarterly.''

Table 75. Coal Consumption by Residential and Commercial Sector, by Census Division and State, 1987, 1992-1996

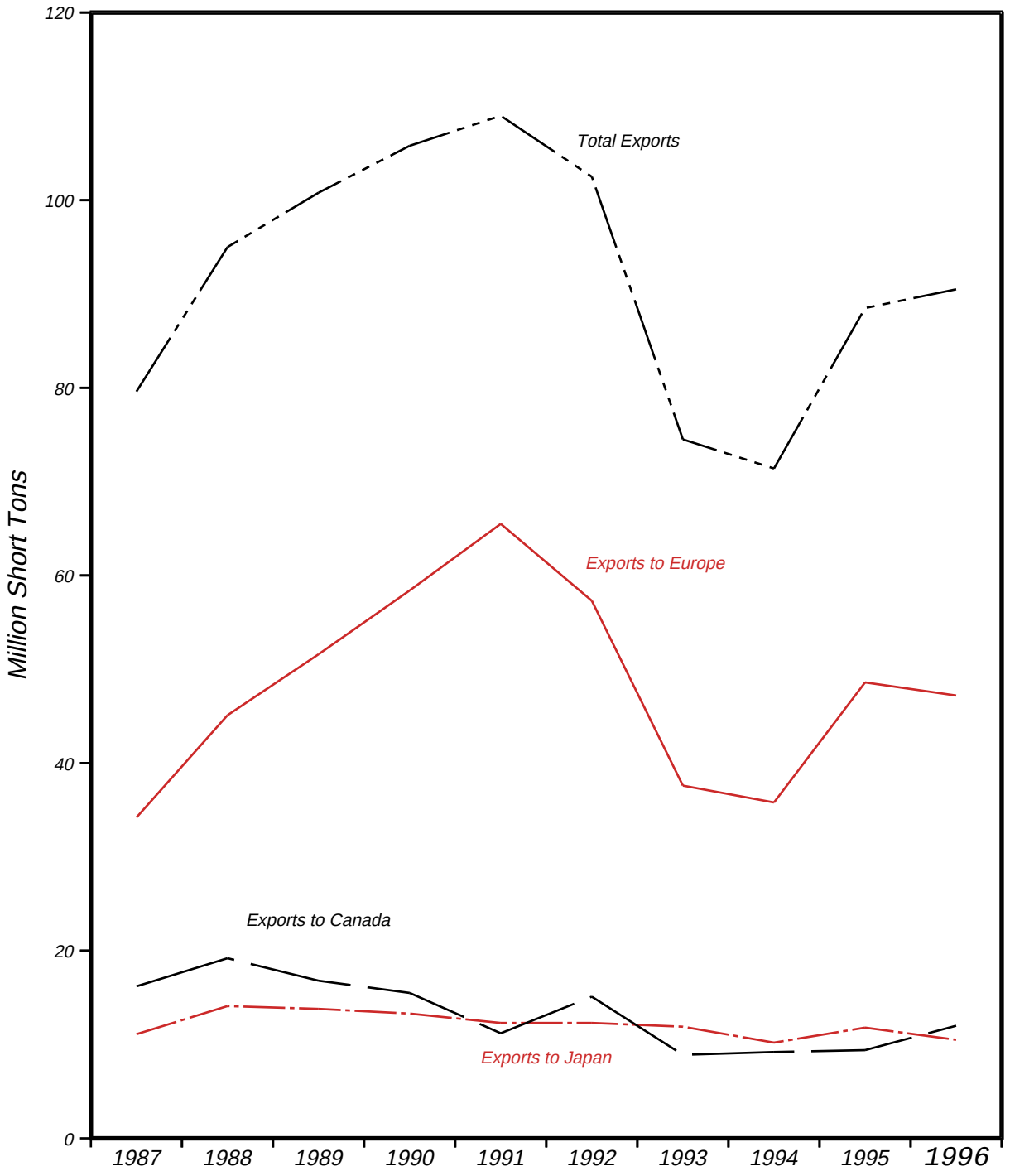
(Thousand Short Tons)

Census Division and State	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
New England Total	**55**	**69**	**56**	**102**	**141**	**152**	**–20.3**	**–20.8**	**–10.6**
Connecticut	w	w	w	w	w	w	w	w	w
Maine	w	w	w	w	w	w	w	w	w
Massachusetts	w	w	w	w	w	w	w	w	w
New Hampshire	w	w	w	w	w	w	w	w	w
Rhode Island	w	w	w	w	w	w	w	w	w
Vermont	w	w	w	w	w	w	w	w	w
Middle Atlantic Total	**1,285**	**1,416**	**1,351**	**1,498**	**1,916**	**1,935**	**–9.2**	**–9.5**	**–4.4**
New Jersey	w	w	w	w	w	w	w	w	w
New York	w	w	w	w	w	w	w	w	w
Pennsylvania	995	1,188	1,156	1,257	1,626	1,535	–16.3	–11.6	–4.7
East North Central Total	**1,574**	**1,301**	**1,452**	**1,458**	**1,476**	**1,838**	**21.0**	**1.6**	**–1.7**
Illinois	w	w	w	w	w	w	w	w	w
Indiana	356	287	356	339	411	541	24.3	–3.5	–4.5
Michigan	w	w	w	w	w	w	w	w	w
Ohio	656	409	498	584	588	812	60.4	2.8	–2.3
Wisconsin	w	w	w	w	w	w	w	w	w
West North Central Total	**w**	**w**	**w**	**w**	**w**	**w**	**w**	**w**	**w**
Iowa	222	90	40	70	64	337	147.0	36.5	–4.5
Kansas	78	38	32	23	*	1	107.2	359.7	66.2
Minnesota	156	264	229	107	25	171	–40.9	58.4	–1.0
Missouri	w	w	w	w	w	w	w	w	w
Nebraska	w	w	w	w	w	w	w	w	w
North Dakota	w	w	w	w	w	w	w	w	w
South Dakota	w	w	w	w	w	w	w	w	w
South Atlantic Total	**803**	**954**	**887**	**904**	**632**	**1,107**	**–15.9**	**6.2**	**–3.5**
Delaware	w	w	w	w	w	w	NM	w	w
District of Columbia	23	6	47	51	50	70	309.0	–17.6	–11.5
Florida	1	1	20	16	16	53	–24.2	–50.5	–35.8
Georgia	3	59	28	22	38	37	–94.8	–46.9	–24.2
Maryland	w	w	w	w	w	w	w	w	w
North Carolina	206	224	263	229	204	162	–8.1	.2	2.7
South Carolina	19	17	61	109	31	120	12.2	–11.3	–18.6
Virginia	w	w	w	w	w	w	w	w	w
West Virginia	w	w	w	w	w	w	w	w	w
East South Central Total	**272**	**283**	**386**	**417**	**458**	**488**	**–3.8**	**–12.2**	**–6.3**
Alabama	44	7	11	40	89	121	NM	–16.0	–10.7
Kentucky	w	w	w	w	w	w	w	w	w
Mississippi	–	–	–	w	w	w	w	w	w
Tennessee	w	w	w	w	w	w	w	w	w
West South Central Total	**w**	**17**	**1**	**8**	**13**	**32**	**w**	**w**	**w**
Arkansas	–	–	*	1	2	*	–	–	–
Louisiana	–	w	–	w	–	–	w	w	w
Oklahoma	w	w	w	w	1	2	w	w	w
Texas	–	–	*	6	w	w	–	w	w
Mountain Total	**w**	**w**	**w**	**w**	**w**	**w**	**w**	**w**	**w**
Arizona	*	5	*	1	w	w	–96.3	w	w
Colorado	13	20	23	38	w	w	–32.2	w	w
Idaho	28	39	40	43	51	24	–27.5	–13.8	2.0
Montana	w	w	w	w	w	w	w	w	w
Nevada	w	w	w	w	w	w	w	w	w
New Mexico	w	w	w	w	w	w	w	w	w
Utah	w	w	w	w	w	w	w	w	w
Wyoming	382	146	242	187	w	w	162.0	w	w
Pacific Total	**675**	**734**	**773**	**821**	**w**	**w**	**–8.0**	**w**	**w**
Alaska	474	523	520	563	w	w	–9.3	w	w
California	177	133	166	142	w	w	33.2	w	w
Hawaii	w	w	w	w	w	w	w	w	w
Oregon	w	w	w	w	w	w	w	w	w
Washington	23	78	86	114	91	52	–70.0	–28.8	–8.5
U.S. Total	**6,006**	**5,807**	**6,013**	**6,221**	**6,153**	**6,914**	**3.4**	**–.6**	**–1.5**

* Data round to zero.
w Withheld to avoid disclosure of individual company data.
NM Not meaningful as value is greater than 500 percent.
Note: Totals may not equal sum of components due to independent rounding.
Source: Energy Information Administration, Form EIA-6, ''Coal Distribution Report.''

Foreign Markets

Figure 11. U.S. Coal Exports, 1987-1996



Source: U.S. Department of Commerce, Bureau of the Census, "Monthly Report EM 545."

Table 76. U.S. Coal Exports by Destination, 1987, 1992-1996
(Thousand Short Tons)

Continent and Country of Destination	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
North America Total	**13,609**	**10,411**	**9,505**	**9,219**	**15,331**	**16,464**	**30.7**	**–2.9**	**–2.1**
Canada[1]	12,029	9,427	9,193	8,889	15,140	16,227	27.6	–5.6	–3.3
Jamaica	24	83	26	29	27	–	–71.1	–2.9	–
Mexico	1,509	871	241	250	77	106	73.3	110.6	34.3
Other[2]	48	30	46	52	88	132	62.5	–13.8	–10.5
South America Total	**7,505**	**6,968**	**5,946**	**5,750**	**6,769**	**6,720**	**7.7**	**2.6**	**1.2**
Argentina	304	342	453	524	335	748	–11.1	–2.4	–9.5
Brazil	6,540	6,351	5,482	5,197	6,370	5,830	3.0	.7	1.3
Chile	574	227	*	*	27	93	152.9	114.5	22.4
Other[2]	87	49	12	28	37	48	78.2	23.7	6.8
Europe Total	**47,193**	**48,620**	**35,825**	**37,575**	**57,255**	**34,159**	**–2.9**	**–4.7**	**3.6**
Belgium & Luxembourg	4,569	4,501	4,911	5,229	7,196	4,578	1.5	–10.7	*
Bulgaria	1,387	1,339	1,238	906	602	–	3.6	23.2	–
Denmark	1,316	2,100	477	336	3,832	934	–37.3	–23.4	3.9
Finland	704	1,308	377	252	205	172	–46.2	36.1	17.0
France	3,852	3,659	2,875	3,972	8,060	2,886	5.3	–16.8	3.3
Germany, FR	1,055	1,953	323	508	1,003	477	–46.0	1.3	9.2
Ireland	765	914	974	985	1,449	1,410	–16.3	–14.8	–6.6
Italy	9,204	9,063	7,543	6,918	9,344	9,537	1.6	–.4	–.4
Netherlands	7,058	7,301	4,874	5,562	9,148	4,093	–3.3	–6.3	6.2
Norway	85	120	87	101	118	173	–29.2	–7.9	–7.6
Portugal	1,803	1,752	1,057	1,491	1,479	1,287	2.8	5.1	3.8
Romania	1,512	1,984	1,553	720	753	1,098	–23.8	19.0	3.6
Spain	4,093	4,653	4,132	4,064	4,535	2,454	–12.0	–2.5	5.8
Sweden	1,070	1,117	702	736	1,165	668	–4.3	–2.1	5.4
Turkey	2,167	2,011	1,335	1,605	1,990	772	7.7	2.1	12.1
United Kingdom	6,196	4,726	3,363	4,111	5,595	2,589	31.1	2.6	10.2
Yugoslavia, FR	–	65	–	78	726	889	–100.0	–100.0	–100.0
Other[2]	357	52	8	*	54	142	NM	60.1	10.8
Asia Total	**17,980**	**19,095**	**17,957**	**19,500**	**20,540**	**20,206**	**–5.8**	**–3.3**	**–1.3**
China (Taiwan)	2,441	2,533	3,374	3,435	3,560	4,769	–3.6	–9.0	–7.2
Israel	1,202	760	864	849	824	243	58.0	9.9	19.4
Japan	10,529	11,787	10,158	11,878	12,304	11,082	–10.7	–3.8	–.6
Korea, Republic of	3,773	4,012	3,558	3,316	3,352	4,025	–6.0	3.0	–.7
Other[2]	36	2	3	22	500	87	NM	–48.3	–9.3
Oceania & Australia Total	**1**	*****	**1**	**1**	*****	**2**	**322.7**	**31.5**	**–5.9**
Other[2]	1	*	1	1	*	2	322.7	31.5	–5.9
Africa Total	**4,184**	**3,453**	**2,124**	**2,474**	**2,621**	**2,056**	**21.2**	**12.4**	**8.2**
Algeria	177	220	355	409	611	910	–19.8	–26.7	–16.6
Egypt	1,038	1,235	1,048	868	848	467	–16.0	5.2	9.3
Morocco	1,650	1,212	83	587	737	504	36.2	22.3	14.1
South Africa, Rep of	1,320	786	638	567	425	62	67.9	32.8	40.5
Other[2]	–	–	–	42	–	114	–	–	–100.0
Total	**90,473**	**88,547**	**71,359**	**74,519**	**102,516**	**79,607**	**2.2**	**–3.1**	**1.4**

1 Based on the U.S. - Canada Free Trade Agreement, as of January 1990, the U.S. Department of Commerce began reporting statistics on U.S. exports to Canada based on information on imports provided monthly by the Canadian government.
2 Includes countries with exports less than or equal to 50,000 short tons in 1995.
* Data round to zero.
NM Not meaningful as value is greater than 500 percent.
Note: Totals may not equal sum of components due to independent rounding.
Source: U.S. Department of Commerce, Bureau of the Census, ''Monthly Report EM 545.''

Table 77. U.S. Metallurgical Coal Exports by Destination, 1987, 1992-1996
(Thousand Short Tons)

Continent and Country of Destination	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
North America Total	**6,500**	**4,776**	**4,246**	**4,853**	**4,957**	**6,553**	**36.1**	**7.0**	**–0.1**
Canada[1]	6,030	4,452	4,032	4,663	4,920	6,413	35.4	5.2	–.7
Mexico	470	324	214	190	36	9	45.0	89.7	55.5
Other[2]	–	–	–	*	*	131	–	–100.0	–100.0
South America Total	**6,814**	**6,778**	**5,926**	**5,514**	**6,524**	**6,521**	**.5**	**1.1**	**.5**
Argentina	291	336	449	487	332	747	–13.4	–3.3	–9.9
Brazil	6,445	6,336	5,477	5,027	6,165	5,681	1.7	1.1	1.4
Chile	78	106	–	–	27	93	–27.0	30.2	–2.0
Other[2]	*	–	–	–	–	–	–	–	–
Europe Total	**28,253**	**27,282**	**25,245**	**26,791**	**33,365**	**23,895**	**3.5**	**–4.1**	**1.9**
Belgium & Luxembourg	3,445	3,468	3,706	4,030	5,165	3,937	–.7	–9.6	–1.5
Bulgaria	1,214	1,339	1,184	849	602	–	–9.3	19.2	–
Denmark	–	–	–	106	–	–	–	–	–
Finland	540	724	311	252	205	172	–25.5	27.3	13.6
France	3,084	3,155	2,816	3,101	4,314	2,768	–2.3	–8.0	1.2
Germany, FR	538	231	288	203	247	324	133.1	21.4	5.8
Ireland	–	–	–	–	–	90	–	–	–100.0
Italy	5,293	4,504	5,045	4,965	6,180	5,265	17.5	–3.8	*
Netherlands	4,142	3,978	3,231	3,743	4,836	2,601	4.1	–3.8	5.3
Norway	61	92	73	70	91	135	–33.6	–9.5	–8.5
Portugal	174	30	–	149	135	197	476.1	6.6	–1.3
Romania	1,512	1,685	663	373	753	1,098	–10.2	19.0	3.6
Spain	2,103	2,178	2,656	2,994	2,795	2,354	–3.5	–6.9	–1.2
Sweden	987	1,109	702	736	1,165	668	–11.0	–4.1	4.4
Turkey	2,027	1,806	1,335	1,604	1,989	772	12.3	.5	11.3
United Kingdom	3,081	2,932	3,228	3,573	4,175	2,586	5.1	–7.3	2.0
Yugoslavia, FR	–	–	–	43	658	828	–	–100.0	–100.0
Other[2]	54	52	7	–	54	100	4.4	*	–6.6
Asia Total	**8,814**	**11,014**	**9,877**	**10,608**	**12,655**	**13,158**	**–20.0**	**–8.6**	**–4.3**
China (Taiwan)	376	370	296	285	424	483	1.4	–3.0	–2.8
Israel	265	141	–	–	143	–	88.9	16.7	–
Japan	5,552	7,929	7,195	8,028	9,480	10,110	–30.0	–12.5	–6.4
Korea, Republic of	2,597	2,574	2,386	2,276	2,608	2,479	.9	–.1	.5
Other[2]	24	–	–	19	–	86	–	–	–13.4
Africa Total	**2,570**	**2,239**	**2,040**	**1,886**	**1,925**	**1,553**	**14.8**	**7.5**	**5.8**
Algeria	177	220	355	409	611	910	–19.8	–26.7	–16.6
Egypt	1,037	1,233	1,047	868	848	467	–15.9	5.2	9.3
Morocco	37	–	–	–	41	–	–	–2.8	–
South Africa, Rep of	1,320	786	638	567	425	62	68.0	32.8	40.5
Other[2]	–	–	–	42	–	114	–	–	–100.0
Total	**52,950**	**52,089**	**47,334**	**49,652**	**59,426**	**51,679**	**1.6**	**–2.8**	**.3**

1 Based on the U.S. - Canada Free Trade Agreement, as of January 1990, the U.S. Department of Commerce began reporting statistics on U.S. exports to Canada based on information on imports provided monthly by the Canadian government.
2 Includes countries with exports less than or equal to 50,000 short tons in 1995.
* Data round to zero.
Note: Totals may not equal sum of components due to independent rounding.
Source: U.S. Department of Commerce, Bureau of the Census, ''Monthly Report EM 545.''

Table 78. U.S. Steam Coal Exports by Destination, 1987, 1992-1996
(Thousand Short Tons)

Continent and Country of Destination	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
North America Total	**7,110**	**5,635**	**5,259**	**4,366**	**10,374**	**9,912**	**26.2**	**–9.0**	**–3.6**
Canada[1]	5,999	4,975	5,161	4,225	10,219	9,814	20.6	–12.5	–5.3
Jamaica	24	83	26	29	27	–	–71.1	–2.9	–
Mexico	1,039	547	26	60	40	97	90.0	125.2	30.1
Other[2]	48	30	46	52	88	1	62.5	–13.8	53.1
South America Total	**691**	**190**	**20**	**236**	**245**	**199**	**263.3**	**29.6**	**14.8**
Argentina	13	6	4	38	3	2	114.1	47.2	24.6
Brazil	95	15	5	170	205	149	NM	–17.5	–4.9
Chile	496	121	*	*	*	*	311.6	NM	211.4
Other[2]	87	49	12	28	37	48	77.8	23.6	6.7
Europe Total	**18,940**	**21,338**	**10,580**	**10,784**	**23,891**	**10,264**	**–11.2**	**–5.6**	**7.0**
Belgium & Luxembourg	1,125	1,033	1,205	1,199	2,031	641	8.8	–13.7	6.4
Bulgaria	173	–	54	57	–	–	–	–	–
Denmark	1,316	2,100	477	230	3,832	934	–37.3	–23.4	3.9
Finland	164	584	66	1	–	–	–71.9	–	–
France	769	503	58	870	3,745	118	52.7	–32.7	23.1
Germany, FR	517	1,722	35	305	756	153	–70.0	–9.1	14.5
Ireland	765	914	974	985	1,449	1,319	–16.3	–14.8	–5.9
Italy	3,911	4,559	2,498	1,954	3,164	4,272	–14.2	5.4	–1.0
Netherlands	2,917	3,323	1,643	1,819	4,312	1,492	–12.2	–9.3	7.7
Norway	24	28	13	31	27	37	–14.7	–3.4	–4.9
Portugal	1,628	1,722	1,057	1,342	1,344	1,090	–5.4	4.9	4.6
Romania	–	299	890	347	–	–	–100.0	–	–
Spain	1,990	2,475	1,476	1,070	1,740	101	–19.6	3.4	39.3
Sweden	83	9	–	–	*	–	NM	327.7	–
Turkey	140	206	–	*	*	–	–31.8	359.0	–
United Kingdom	3,115	1,795	135	538	1,421	3	73.6	21.7	115.3
Yugoslavia, FR	–	65	–	35	68	61	–100.0	–100.0	–100.0
Other[2]	303	*	*	*	*	42	NM	NM	24.5
Asia Total	**9,166**	**8,081**	**8,080**	**8,892**	**7,885**	**7,048**	**13.4**	**3.8**	**3.0**
China (Taiwan)	2,066	2,163	3,078	3,150	3,136	4,286	–4.5	–9.9	–7.8
Israel	936	620	864	849	681	243	51.0	8.3	16.2
Japan	4,976	3,858	2,963	3,850	2,823	972	29.0	15.2	19.9
Korea, Republic of	1,175	1,438	1,172	1,040	744	1,546	–18.3	12.1	–3.0
Other[2]	12	2	3	3	500	1	431.2	–60.4	32.2
Oceania & Australia Total	**1**	*****	**1**	**1**	*****	**2**	**322.7**	**31.5**	**–5.9**
Other[2]	1	*	1	1	*	2	322.7	31.5	–5.9
Africa Total	**1,615**	**1,214**	**85**	**588**	**696**	**504**	**33.0**	**23.4**	**13.8**
Egypt	1	2	1	1	1	*	–41.1	5.4	48.4
Morocco	1,614	1,212	83	587	695	504	33.2	23.4	13.8
South Africa, Rep of	–	*	–	–	–	–	–100.0	–	–
Other[2]	–	–	–	–	–	*	–	–	–100.0
Total	**37,522**	**36,458**	**24,025**	**24,867**	**43,090**	**27,928**	**2.9**	**–3.4**	**3.3**

[1] Based on the U.S. - Canada Free Trade Agreement, as of January 1990, the U.S. Department of Commerce began reporting statistics on U.S. exports to Canada based on information on imports provided monthly by the Canadian government.
[2] Includes countries with exports less than or equal to 50,000 short tons in 1995.
* Data round to zero.
NM Not meaningful as value is greater than 500 percent.
Note: Totals may not equal sum of components due to independent rounding.
Source: U.S. Department of Commerce, Bureau of the Census, ''Monthly Report EM 545.''

Table 79. Coal Exports by Customs District, 1987, 1992-1996
(Thousand Short Tons)

Customs District	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
Eastern Total	**58,161**	**55,374**	**43,474**	**45,138**	**64,826**	**46,077**	**5.0**	**–2.7**	**2.6**
Boston, MA	–	33	–	33	–	*	–100.0	–	–100.0
Baltimore, MD	11,221	11,313	7,912	7,354	9,450	6,500	–.8	4.4	6.3
Portland, ME	*	57	1	1	*	1	–99.8	–5.7	–18.4
Buffalo, NY	2,263	1,574	166	67	1,971	41	43.7	3.5	56.2
New York City, NY	6	87	1	1	4	249	–92.6	12.5	–33.4
Ogdensburg, NY	116	163	337	44	66	9	–28.8	15.3	33.4
Philadelphia, PA	406	339	213	190	252	1,975	19.9	12.6	–16.1
Norfolk, VA	44,148	41,808	34,845	37,448	53,083	37,303	5.6	–4.5	1.9
St. Albans, VT	1	*	*	*	*	–	NM	30.5	–
Southern Total	**16,077**	**19,936**	**15,607**	**16,658**	**21,343**	**15,706**	**–19.3**	**–6.8**	**.3**
Mobile, AL	5,897	8,283	4,997	6,262	6,853	7,085	–28.8	–3.7	–2.0
Savannah, GA	–	4	1	–	37	*	–100.0	–100.0	–100.0
Miami, FL	2	2	3	2	2	*	15.0	5.4	32.3
Tampa, FL	–	1	*	*	–	*	–100.0	–	–100.0
New Orleans, LA	8,669	10,522	9,475	9,705	13,480	7,733	–17.6	–10.4	1.3
Wilmington, NC	*	–	–	–	–	121	–	–	–60.5
San Juan, PR	*	*	26	*	–	*	420.0	–	39.6
Charleston, SC	154	401	957	475	791	566	–61.6	–33.6	–13.5
El Paso, TX	–	*	–	*	1	*	–100.0	–100.0	–100.0
Houston-Galveston, TX	297	179	121	155	145	106	65.4	19.7	12.1
Laredo, TX	1,057	542	26	59	36	62	94.9	133.3	36.9
Port Arthur, TX	–	–	–	–	–	32	–	–	–100.0
Virgin Islands	–	–	–	–	*	–	–	–100.0	–
Western Total	**6,832**	**5,527**	**3,813**	**4,201**	**3,651**	**2,105**	**23.6**	**16.9**	**14.0**
Anchorage, AK	784	919	719	733	728	839	–14.7	1.9	–.7
Nogales, AZ	*	–	*	*	*	–	–	–42.3	–
Los Angeles, CA	5,899	4,475	2,963	3,358	2,721	1,233	31.8	21.3	19.0
San Diego, CA	–	*	1	1	4	1	–100.0	–100.0	–100.0
San Francisco, CA	1	*	1	–	60	1	72.2	–67.8	–2.6
Great Falls, MT	*	*	1	*	–	1	79.0	–	–4.3
Portland, OR	–	–	–	2	–	–	–	–	–
Seattle, WA	147	132	128	106	137	30	11.4	1.8	19.1
Northern Total	**9,358**	**7,688**	**8,437**	**8,495**	**12,557**	**15,720**	**21.7**	**–7.1**	**–5.6**
Chicago, IL	–	–	24	–	*	–	–	–100.0	–
Detroit, MI	3,804	1,845	2,600	609	2,181	49	106.2	14.9	62.3
Duluth, MN	247	210	161	134	119	*	17.6	20.1	149.9
Pembina, ND	1	19	10	1	*	6	–95.7	58.2	–19.5
Cleveland, OH	5,306	5,614	5,642	7,751	10,258	15,665	–5.5	–15.2	–11.3
Other Ports	**45**	**22**	**28**	**26**	**138**	**–**	**100.0**	**–24.5**	**–**
Total	**90,473**	**88,547**	**71,359**	**74,519**	**102,516**	**79,607**	**2.2**	**–3.1**	**1.4**

* Data round to zero.
NM Not meaningful as value is greater than 500 percent.
Note: Totals may not equal sum of components due to independent rounding.
Source: U.S. Department of Commerce, Bureau of the Census, ''Monthly Report EM 545.''

Coal Prices

Mine Prices

The average mine price of U.S. coal in 1996 was $18.50 per short ton, a drop of 2 percent from 1995 and the 14th straight year of decline (Table 80). Since 1987 the average mine price of U.S. coal has declined at an average annual rate of 2.4 percent. During this period, the average mine price of coal east of the Mississippi River decreased at an annual average rate of 1.2 percent, whereas west of the Mississippi River the decline was 2.9 percent. In real dollars, the decline over this period for the United States was 5.4 percent (Table 81).

Compared with 1995, the average mine price of coal in all regions decreased. The decline in Appalachia was 2.4 percent; in the Interior, 2.1 percent; and in the West, 1.1 percent. In the three largest coal-producing States, prices fell more than the decline of the U.S. price. Kentucky's coal price dropped 3.6 percent, Wyoming's price fell 2.6 percent, and West Virginia's price declined 2.2 percent.

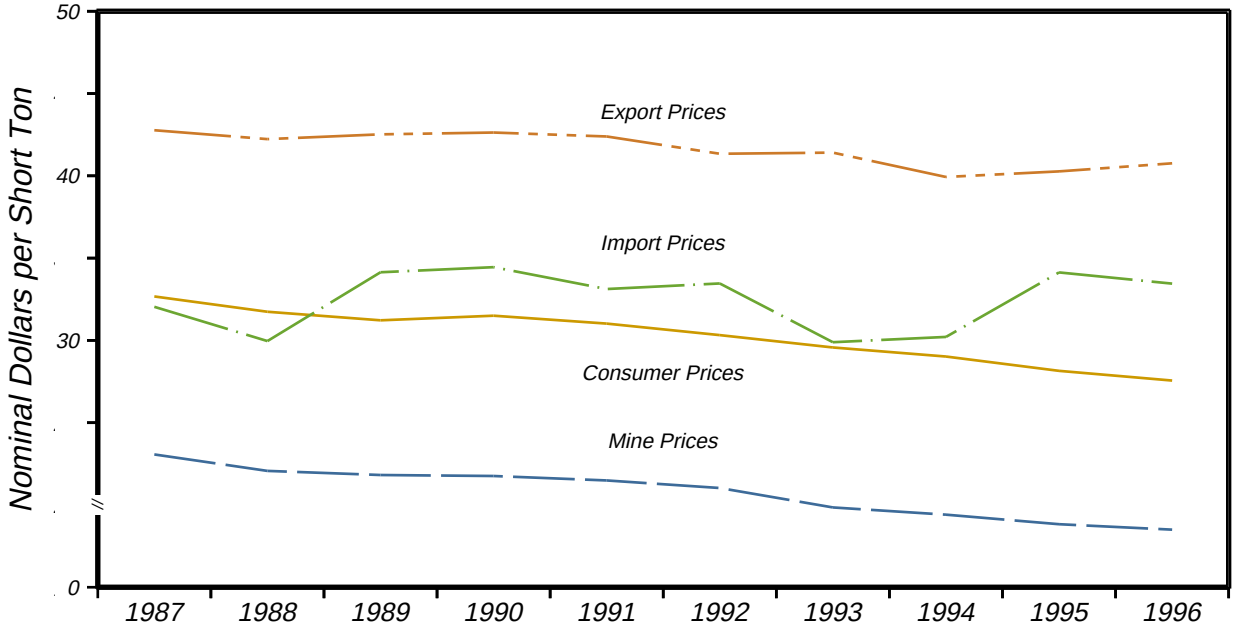
Consumer Prices

The average price of coal delivered to electric utilities during 1996 was $26.45 per short ton, 2.1 percent less than the average price of $27.01 per short ton reported for 1995 (Table 92). Similarly, compared with 1995, the average price of coal delivered to industrial consumers other than coke plants declined slightly to $32.32 per short ton, while the average price of coal delivered to coke plants remained essentially unchanged at $47.33 per short ton (Tables 94 and 96).

The average price of U.S. coal imports in 1996 was $33.45 per short ton, a 2 percent decrease compared with the 1995 average of $34.13 per short ton.

The average price of U.S. coal exported during 1996 was $40.76 per short ton, 1.2 percent above the average of $40.27 per short ton reported for 1995 (Table 99). Compared with 1995, the average price of metallurgical coal exported during 1996 increased 2.7 percent to $45.49 per short ton, while the average price of steam coal dropped 1.2 percent to $34.09 per short ton (Tables 101 and 103).

Figure 12. Coal Prices, 1987-1996



Note: Average mine prices exclude mines producing less than 10,000 short tons of coal during the year. Mine Price is calculated by dividing the total free on board (f.o.b.) mine value of the coal produced by the total production. Consumer Price is based on the cost including insurance and freight (c.i.f. cost) for electric utilities, and insurance, freight and taxes for manufacturing and coke plants, and does not include the residential and commercial sector. Export Price is based on the free alongside ship (f.a.s.) value. Import Price is based on the customs import value.

Sources: Mine Prices: Energy Information Administration (EIA), Form EIA-7A, "Coal Production Report"; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production Report." Consumer Prices: Federal Regulatory Commission (FERC), FERC Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants"; EIA, Form EIA-5, "Coke Plant Report - Quarterly" and Form EIA-3, "Quarterly Coal Consumption Report - Manufacturing Plants." Export Prices: U.S. Department of Commerce, Bureau of the Census, "Monthly Report EM 545." Import Prices: U.S. Department of Commerce, Bureau of the Census, "Monthly Report IM 145."

Mine Prices

Table 80. Average Mine Price of Coal by State, 1987, 1992-1996
(Nominal Dollars per Short Ton)

Coal-Producing State and Region	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
Alabama	$39.48	$38.44	$40.12	$42.34	$40.82	$41.42	2.7	–0.8	–0.5
Alaska	w	w	w	w	w	w	w	w	w
Arizona	w	w	w	w	w	w	w	w	w
Arkansas	–	w	w	w	w	w	w	w	w
California	–	–	–	–	w	w	w	w	w
Colorado	$17.94	$19.26	$19.76	$20.35	$21.33	$23.58	–6.9	–4.2	–3.0
Illinois	22.74	23.05	23.14	25.27	27.66	29.56	–1.3	–4.8	–2.9
Indiana	20.24	21.71	22.28	22.89	23.41	24.57	–6.8	–3.6	–2.1
Iowa	–	–	w	w	w	25.89	w	w	w
Kansas	w	w	w	w	w	24.54	w	w	w
Kentucky Total	$23.91	$24.79	$24.88	$24.77	$24.50	26.15	–3.6	–.6	–1.0
Eastern	24.98	26.00	25.25	25.50	25.00	26.71	–3.9	*	–.7
Western	20.38	20.75	23.63	22.36	23.10	24.68	–1.8	–3.1	–2.1
Louisiana	w	w	w	w	w	w	w	w	w
Maryland	$24.40	$24.69	$26.34	$25.21	$25.39	$24.31	–1.2	–1.0	*
Missouri	23.31	18.91	21.78	w	w	28.92	23.3	w	–2.4
Montana	9.96	9.62	10.39	$11.05	$10.20	12.43	3.5	–.6	–2.4
New Mexico	24.66	23.80	23.29	22.96	23.14	21.78	3.6	1.6	1.4
North Dakota	8.01	7.99	7.62	7.63	7.48	7.91	.2	1.7	.1
Ohio	24.85	25.97	29.13	28.04	26.93	30.80	–4.3	–2.0	–2.3
Oklahoma	26.54	24.13	25.57	24.91	25.76	31.83	9.9	.7	–2.0
Pennsylvania Total	25.78	26.78	26.18	26.50	28.61	29.81	–3.7	–2.6	–1.6
Anthracite	36.78	39.78	36.07	32.94	34.24	43.65	–7.5	1.8	–1.9
Bituminous	24.98	25.77	25.45	26.03	28.34	29.16	–3.0	–3.1	–1.7
Tennessee	27.79	26.94	27.17	27.23	27.11	27.65	3.1	.6	*
Texas	12.17	12.16	12.38	12.87	12.42	12.10	*	–.5	.1
Utah	21.63	19.10	19.27	20.81	21.11	25.70	13.3	.6	–1.9
Virginia	28.45	28.47	26.84	26.80	27.55	27.42	–.1	.8	.4
Washington	w	w	w	w	w	w	w	w	w
West Virginia Total	$26.58	$27.18	$27.42	$27.58	$28.15	$29.15	–2.2	–1.4	–1.0
Northern	24.86	24.91	26.77	28.09	29.03	28.67	–.2	–3.8	–1.6
Southern	27.21	28.07	27.71	27.40	27.76	29.44	–3.1	–.5	–.9
Wyoming	6.41	6.58	6.83	7.32	8.14	9.80	–2.6	–5.8	–4.6
Appalachian Total[1]	**26.78**	**27.45**	**27.36**	**27.64**	**27.95**	**29.20**	**–2.4**	**–1.1**	**–.9**
Interior Total[1]	**18.41**	**18.81**	**19.87**	**20.03**	**21.61**	**23.02**	**–2.1**	**–3.9**	**–2.4**
Western Total[1]	**10.03**	**10.15**	**10.57**	**11.14**	**11.60**	**13.25**	**–1.1**	**–3.5**	**–3.0**
East of Miss. River	**25.70**	**26.35**	**26.44**	**26.81**	**27.34**	**28.61**	**–2.5**	**–1.5**	**–1.2**
West of Miss. River	**10.40**	**10.48**	**10.91**	**11.50**	**11.98**	**13.55**	**–.8**	**–3.5**	**–2.9**
U.S. Total	**18.50**	**18.83**	**19.41**	**19.85**	**21.03**	**23.07**	**–1.8**	**–3.1**	**–2.4**

[1] For a definition of coal-producing regions, see Appendix C.

* Data round to zero.

Notes: Average mine price is calculated by dividing the total free on board (f.o.b.) mine value of the coal produced by the total production. A measure of dispersion of these average prices at the State level (interquartile range) is given in Appendix D, Table D2. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons, which are not required to provide these data.

Sources: Energy Information Administration, Form EIA-7A, ''Coal Production Report''; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, ''Quarterly Mine Employment and Coal Production Report.''

Table 81. Average Real Mine Price of Coal by State, 1987, 1992-1996
(Real Dollars per Short Ton)

Coal-Producing State and Region	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
Alabama	$35.99	$35.73	$38.24	$41.27	$40.82	$49.85	0.7	–3.1	–3.5
Alaska	w	w	w	w	w	w	w	w	w
Arizona	w	w	w	w	w	w	w	w	w
Arkansas	–	w	w	w	w	w	w	w	w
California	–	–	–	–	w	w	w	w	w
Colorado	$16.35	$17.90	$18.84	$19.84	$21.33	$28.37	–8.6	–6.4	–5.9
Illinois	20.73	21.43	22.05	24.63	27.66	35.57	–3.2	–6.9	–5.8
Indiana	18.45	20.18	21.24	22.31	23.41	29.57	–8.5	–5.8	–5.1
Iowa	–	–	w	w	w	31.15	w	w	w
Kansas	w	w	w	w	w	29.53	w	w	w
Kentucky Total	$21.80	$23.04	$23.72	$24.15	$24.50	31.47	–5.4	–2.9	–4.0
Eastern	22.77	24.16	24.07	24.86	25.00	32.15	–5.7	–2.3	–3.8
Western	18.58	19.29	22.53	21.79	23.10	29.70	–3.6	–5.3	–5.1
Louisiana	w	w	w	w	w	w	w	w	w
Maryland	$22.24	$22.95	$25.11	$24.57	$25.39	$29.25	–3.1	–3.3	–3.0
Missouri	21.25	17.57	20.76	w	w	34.80	20.9	w	–5.3
Montana	9.08	8.94	9.91	$10.77	$10.20	14.96	1.5	–2.8	–5.4
New Mexico	22.48	22.12	22.20	22.38	23.14	26.21	1.6	–.7	–1.7
North Dakota	7.30	7.43	7.26	7.44	7.48	9.52	–1.7	–.6	–2.9
Ohio	22.65	24.13	27.77	27.33	26.93	37.07	–6.1	–4.2	–5.3
Oklahoma	24.19	22.43	24.37	24.28	25.76	38.30	7.8	–1.6	–5.0
Pennsylvania Total	23.50	24.89	24.96	25.83	28.61	35.87	–5.6	–4.8	–4.6
Anthracite	33.53	36.97	34.38	32.11	34.24	52.52	–9.3	–.5	–4.9
Bituminous	22.78	23.95	24.26	25.37	28.34	35.09	–4.9	–5.3	–4.7
Tennessee	25.33	25.04	25.90	26.54	27.11	33.27	1.2	–1.7	–3.0
Texas	11.09	11.30	11.81	12.54	12.42	14.56	–1.9	–2.8	–3.0
Utah	19.72	17.75	18.37	20.28	21.11	30.93	11.1	–1.7	–4.9
Virginia	25.93	26.46	25.59	26.13	27.55	33.00	–2.0	–1.5	–2.6
Washington	w	w	w	w	w	w	w	w	w
West Virginia Total	$24.23	$25.26	$26.14	$26.88	$28.15	$35.08	–4.1	–3.7	–4.0
Northern	22.66	23.16	25.52	27.38	29.03	34.50	–2.1	–6.0	–4.6
Southern	24.81	26.09	26.41	26.70	27.76	35.43	–4.9	–2.8	–3.9
Wyoming	5.84	6.11	6.51	7.13	8.14	11.80	–4.5	–8.0	–7.5
Appalachian Total[1]	**24.41**	**25.51**	**26.08**	**26.94**	**27.95**	**35.14**	**–4.3**	**–3.3**	**–4.0**
Interior Total[1]	**16.78**	**17.48**	**18.94**	**19.52**	**21.61**	**27.71**	**–4.0**	**–6.1**	**–5.4**
Western Total[1]	**9.14**	**9.43**	**10.08**	**10.86**	**11.60**	**15.94**	**–3.0**	**–5.8**	**–6.0**
East of Miss. River	**23.42**	**24.49**	**25.21**	**26.13**	**27.34**	**34.43**	**–4.3**	**–3.8**	**–4.2**
West of Miss. River	**9.48**	**9.74**	**10.40**	**11.21**	**11.98**	**16.30**	**–2.7**	**–5.7**	**–5.8**
U.S. Total	**16.86**	**17.50**	**18.50**	**19.35**	**21.03**	**27.76**	**–3.6**	**–5.4**	**–5.4**

[1] For a definition of coal-producing regions, see Appendix C.

Notes: Real prices are in 1992 dollars, calculated using implicit Gross Domestic Product price deflators. See Appendix D, Table D3. Average mine price is calculated by dividing the total free on board (f.o.b.) mine value of the coal produced by the total production. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons, which are not required to provide these data.

Sources: Energy Information Administration, Form EIA-7A, ''Coal Production Report''; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, ''Quarterly Mine Employment and Coal Production Report.''

Table 82. Average Mine Price of Coal by State and Mine Type, 1996
(Dollars per Short Ton)

Coal-Producing State and Region	Underground		Surface		Total	
	Nominal	Real[1]	Nominal	Real[1]	Nominal	Real[1]
Alabama	$40.75	$37.15	$35.87	$32.69	$39.48	$35.99
Alaska	–	–	w	w	w	w
Arizona	–	–	w	w	w	w
Colorado	17.73	16.16	$18.28	$16.66	$17.94	$16.35
Illinois	23.12	21.07	20.86	19.02	22.74	20.73
Indiana	w	w	w	w	20.24	18.45
Kansas	–	–	w	w	w	w
Kentucky Total	$24.66	$22.48	$22.68	$20.68	$23.91	$21.80
Eastern	25.98	23.69	23.53	21.45	24.98	22.77
Western	21.04	19.18	18.79	17.12	20.38	18.58
Louisiana	–	–	w	w	w	w
Maryland	w	w	w	w	$24.40	$22.24
Missouri	–	–	$23.31	$21.25	23.31	21.25
Montana	w	w	w	w	9.96	9.08
New Mexico	–	–	24.66	22.94	24.66	22.48
North Dakota	–	–	$8.01	$7.30	8.01	7.30
Ohio	$25.98	$23.68	23.43	21.35	24.85	22.65
Oklahoma	w	w	w	w	26.54	24.19
Pennsylvania Total	$25.79	$23.51	$25.76	$23.49	25.78	23.50
Anthracite	27.99	25.52	37.37	34.06	36.78	33.53
Bituminous	25.77	23.49	22.68	20.67	24.98	22.78
Tennessee	w	w	w	w	27.79	25.33
Texas	–	–	$12.17	$11.09	12.17	11.09
Utah	$21.63	$19.72	–	–	21.63	19.72
Virginia	29.46	26.85	25.88	23.59	28.45	25.93
Washington	–	–	w	w	w	w
West Virginia Total	27.31	24.90	$25.04	$22.82	$26.58	$24.23
Northern	25.21	22.98	22.37	20.39	24.86	22.66
Southern	28.44	25.92	25.34	23.10	27.21	24.81
Wyoming	w	w	w	w	6.41	5.84
Appalachian Total[2]	**27.67**	**25.22**	**25.07**	**22.85**	**26.78**	**24.41**
Interior Total[2]	**22.43**	**20.45**	**15.85**	**14.45**	**18.41**	**16.78**
Western Total[2]	**20.04**	**18.27**	**8.86**	**8.08**	**10.03**	**9.14**
East of Miss. River	**26.70**	**24.34**	**23.86**	**21.75**	**25.70**	**23.42**
West of Miss. River	**20.07**	**18.30**	**9.42**	**8.59**	**10.40**	**9.48**
U.S. Total	**25.96**	**23.66**	**13.82**	**12.60**	**18.50**	**16.86**

1 Real prices are in 1992 dollars, calculated using implicit Gross Domestic Product price deflators. See Appendix D, Table D3.
2 For a definition of coal-producing regions, see Appendix C.

Notes: Average mine price is calculated by dividing the total free on board (f.o.b.) mine value of the coal produced by the total production. A measure of dispersion of these average nominal prices at the State level (interquartile range) is given in Appendix D, Table D2. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons, which are not required to provide these data.

Sources: Energy Information Administration, Form EIA-7A, ''Coal Production Report''; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, ''Quarterly Mine Employment and Coal Production Report.''

Table 83. Average Mine Price of Coal by State and Underground Mining Method, 1996
(Nominal Dollars per Short Ton)

Coal-Producing State and Region	Continuous[1]	Conventional[2]	Longwall[3]	Other[4]	Total
Alabama	w	w	$40.84	–	$40.75
Colorado	w	w	17.76	–	17.73
Illinois	$23.34	w	w	–	23.12
Indiana	w	–	–	–	w
Kentucky Total	$24.88	$24.73	$23.46	w	$24.66
Eastern	26.36	w	w	w	25.98
Western	20.53	w	w	–	21.04
Maryland	w	–	w	–	w
Montana	w	–	–	–	w
Ohio	$21.22	–	$26.60	–	$25.98
Oklahoma	w	–	–	–	w
Pennsylvania Total	w	$24.06	w	w	$25.79
Anthracite	w	34.80	–	w	27.99
Bituminous	w	23.31	w	–	25.77
Tennessee	w	w	–	–	w
Utah	w	w	$21.69	–	$21.63
Virginia	$27.32	w	32.90	w	29.46
West Virginia Total	27.56	$27.70	27.04	$16.50	27.31
Northern	21.69	25.65	26.09	16.50	25.21
Southern	28.38	27.96	28.92	–	28.44
Wyoming	–	–	w	–	w
Appalachian Total[5]	**27.14**	**26.95**	**28.42**	**22.25**	**27.67**
Interior Total[5]	**22.30**	**w**	**w**	**–**	**22.43**
Western Total[5]	**19.24**	**w**	**w**	**–**	**20.04**
East of Miss. River	**25.98**	**w**	**w**	**22.25**	**26.70**
West of Miss. River	**19.51**	**w**	**w**	**–**	**20.07**
U.S. Total	**25.79**	**26.55**	**26.03**	**22.25**	**25.96**

1 Mines that produce greater than 50 percent of coal by continuous mining method.
2 Mines that produce greater than 50 percent of coal by conventional mining method.
3 Mines that have any production from longwall mining method. A typical longwall mining operation uses 80 percent longwall mining and 20 percent continuous mining.
4 Mines that produce coal using shortwall, scoop loading, hand loading, or other mining methods or a 50/50 percent continuous/conventional split in mining method.
5 For a definition of coal-producing regions, see Appendix C.

Notes: Average mine price is calculated by dividing the total free on board (f.o.b.) mine value of the coal produced by the total production. Excludes mines producing less than 10,000 short tons, which are not required to provide these data.

Sources: Energy Information Administration, Form EIA-7A, ''Coal Production Report''; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, ''Quarterly Mine Employment and Coal Production Report.''

Table 84. Coal Production, Number of Mines, and Average Mine Price, by State and County, 1996

(Thousand Short Tons, Nominal Dollars per Short Ton)

Coal-Producing State and County	Number of Mines	Production	Average Mine Price
Alabama	**53**	**24,637**	**39.48**
Bibb	1	33	w
Cullman	2	82	w
Fayette	1	2,066	w
Jackson	1	66	w
Jefferson	8	10,134	$42.94
Marion	4	191	27.13
Shelby	2	878	w
Tuscaloosa	7	6,066	w
Walker	25	4,921	$37.33
Winston	2	201	w
Alaska	**1**	**1,481**	**w**
Yukon River	1	1,481	w
Arizona	**2**	**10,442**	**w**
Navajo	2	10,442	w
Arkansas	**5**	**21**	–
Johnson	2	16	–
Scott	1	*	–
Sebastian	2	4	–
Colorado	**15**	**24,886**	**17.94**
Delta	1	603	w
Fremont	1	170	w
Gunnison	3	7,475	w
La Plata	1	199	w
Las Animas	1	129	w
Mesa	2	626	w
Moffat	2	7,721	w
Montrose	1	362	w
Rio Blanco	1	543	w
Routt	2	7,059	w
Illinois	**31**	**46,656**	**22.74**
Clinton	1	1,701	w
Franklin	2	3,635	w
Fulton	1	205	w
Gallatin	1	1,324	w
Jefferson	2	4,299	w
Logan	1	1,982	w
Macoupin	3	5,454	w
McDonough	1	533	w
Perry	4	7,064	w
Randolph	2	2,103	w
Saline	4	9,333	$23.54
Schuyler	1	415	w
Vermilion	1	130	w
Wabash	1	2,340	w
Washington	1	3,674	w
White	1	1,796	w
Williamson	4	668	w
Indiana	**37**	**29,670**	**20.24**
Clay	4	1,893	$20.28
Daviess	4	3,187	18.21
Dubois	1	370	w
Gibson	2	1,046	w
Greene	3	2,083	w
Knox	5	3,725	21.04
Owen	2	413	w
Pike	6	4,359	$16.34
Sullivan	2	4,772	w
Vigo	2	1,694	w
Warrick	6	6,129	w
Kansas	**1**	**232**	**w**
Crawford	1	232	w
Kentucky	**544**	**152,425**	**23.91**
Bell	25	5,044	$25.53
Breathitt	8	2,271	20.86
Butler	2	244	w
Christian	1	32	w
Clay	5	98	w
Daviess	6	894	18.60
Floyd	46	7,147	$23.14
Harlan	40	10,302	27.06

See footnotes at end of table.

Table 84. Coal Production, Number of Mines, and Average Mine Price, by State and County, 1996 (Continued)

(Thousand Short Tons, Nominal Dollars per Short Ton)

Coal-Producing State and County	Number of Mines	Production	Average Mine Price
Kentucky (Continued)			
Henderson	3	2,084	w
Hopkins	18	8,655	$19.98
Johnson	11	1,812	22.73
Knott	46	12,208	22.87
Knox	15	467	30.77
Laurel	1	52	w
Lawrence	3	69	w
Leslie	18	9,718	$22.98
Letcher	39	8,046	24.52
Magoffin	8	978	21.59
Martin	23	11,785	$28.25
McLean	3	194	w
Morgan	3	5	–
Muhlenberg	7	3,771	$15.44
Ohio	11	2,142	17.78
Owsley	4	171	21.18
Perry	27	10,368	$24.03
Pike	145	35,598	25.64
Union	3	7,361	w
Webster	6	10,097	$22.50
Whitley	17	811	26.34
Louisiana	**2**	**3,221**	**w**
De Soto	1	2,434	w
Red River	1	787	w
Maryland	**18**	**4,093**	**24.40**
Allegany	10	597	w
Garrett	8	3,496	w
Missouri	**5**	**710**	**23.31**
Barton	1	88	w
Bates	2	487	w
Randolph	1	25	w
Vernon	1	110	w
Montana	**8**	**37,891**	**9.96**
Big Horn	4	24,686	$10.64
Musselshell	1	147	w
Richland	1	256	w
Rosebud	2	12,802	w
New Mexico	**6**	**24,067**	**24.66**
Colfax	1	1,259	w
McKinley	2	9,527	w
San Juan	3	13,281	w
North Dakota	**5**	**29,861**	**8.01**
McLean	1	7,024	w
Mercer	2	16,908	w
Oliver	2	5,929	w
Ohio	**99**	**28,572**	**24.85**
Belmont	10	5,916	w
Carroll	6	329	$18.59
Columbiana	11	569	18.28
Coshocton	5	757	w
Gallia	1	268	w
Guernsey	6	302	$22.91
Harrison	9	1,411	20.72
Holmes	2	175	w
Jackson	3	1,042	w
Jefferson	11	833	$21.33
Mahoning	1	4	–
Meigs	2	5,951	w
Monroe	1	3,383	w
Morgan	1	1,543	w
Muskingum	3	176	w
Noble	2	857	w
Perry	5	1,024	$22.59
Stark	7	606	16.11
Tuscarawas	9	1,404	21.15
Vinton	4	2,020	20.61
Oklahoma	**12**	**1,701**	**26.54**
Craig	1	130	w
Latimer	1	193	w
Le Flore	7	1,184	$26.44

See footnotes at end of table.

Table 84. Coal Production, Number of Mines, and Average Mine Price, by State and County, 1996 (Continued)

(Thousand Short Tons, Nominal Dollars per Short Ton)

Coal-Producing State and County	Number of Mines	Production	Average Mine Price
Oklahoma (Continued)			
Nowata	2	187	w
Okmulgee	1	6	–
Pennsylvania	**402**	**67,942**	**25.78**
Allegheny	2	14	w
Armstrong	32	5,346	$25.92
Beaver	4	239	w
Blair	1	59	w
Butler	6	56	w
Cambria	13	1,315	$26.61
Carbon	1	318	w
Centre	3	328	w
Clarion	6	543	27.08
Clearfield	50	4,428	$25.12
Columbia	6	411	25.11
Dauphin	2	11	–
Elk	6	460	$25.01
Fayette	20	428	23.59
Greene	11	29,794	24.51
Indiana	27	5,143	30.33
Jefferson	25	1,423	25.15
Lackawanna	5	243	w
Lawrence	2	139	w
Luzerne	17	1,030	$41.09
Lycoming	1	333	w
Mercer	2	5	–
Northumberland	17	281	23.22
Schuylkill	77	2,419	$42.50
Snyder	1	1	–
Somerset	38	5,381	19.13
Sullivan	1	37	w
Venango	1	31	w
Washington	11	7,035	$26.63
Westmoreland	14	690	23.40
Tennessee	**26**	**3,651**	**27.79**
Anderson	2	479	w
Bledsoe	1	3	–
Campbell	10	1,067	$30.69
Claiborne	5	625	w
Fentress	1	256	w
Marion	2	46	w
Morgan	1	42	w
Scott	1	155	w
Sequatchie	3	978	w
Texas	**13**	**55,164**	**12.17**
Atascosa	1	3,324	w
Freestone	1	5,196	w
Grimes	1	567	w
Harrison	2	4,173	w
Hopkins	1	2,152	w
Leon	1	8,865	w
Milam	1	6,615	w
Panola	1	6,814	w
Robertson	1	1,933	w
Rusk	1	6,509	w
Titus	1	8,569	w
Webb	1	446	w
Utah	**11**	**27,507**	**21.63**
Carbon	6	12,066	$22.52
Emery	4	11,238	w
Sevier	1	4,202	w
Virginia	**191**	**35,590**	**28.45**
Buchanan	74	14,784	$29.62
Dickenson	21	2,988	28.71
Lee	10	2,036	28.23
Russell	7	1,346	29.40
Scott	1	5	–
Tazewell	17	1,840	$29.68
Wise	61	12,591	26.77

See footnotes at end of table.

Table 84. Coal Production, Number of Mines, and Average Mine Price, by State and County, 1996 (Continued)

(Thousand Short Tons, Nominal Dollars per Short Ton)

Coal-Producing State and County	Number of Mines	Production	Average Mine Price
Washington	**3**	**4,565**	**w**
King	1	173	w
Lewis	1	2,423	w
Thurston	1	1,969	w
West Virginia	**386**	**170,433**	**26.58**
Barbour	10	1,547	w
Boone	47	31,024	$28.15
Braxton	1	42	w
Brooke	2	1,448	w
Clay	5	5,507	w
Fayette	11	3,964	$28.91
Gilmer	1	30	w
Grant	4	3,039	w
Greenbrier	5	804	$29.01
Harrison	11	4,682	w
Kanawha	11	8,964	$22.88
Logan	29	18,789	24.31
Marion	4	3,135	w
Marshall	2	8,721	w
McDowell	77	6,135	$25.77
Mineral	2	134	w
Mingo	49	22,963	$28.46
Monongalia	13	12,951	23.69
Nicholas	16	2,522	$27.16
Preston	15	1,929	24.02
Raleigh	19	11,209	29.10
Randolph	5	570	27.30
Tucker	2	602	w
Upshur	12	1,734	$18.89
Wayne	6	4,131	24.14
Webster	9	5,345	$21.68
Wyoming	18	8,510	30.66
Wyoming	**27**	**278,440**	**6.41**
Campbell	17	245,534	$5.55
Carbon	3	4,473	w
Converse	2	15,839	w
Lincoln	2	4,419	w
Sheridan	1	16	w
Sweetwater	2	8,159	w
U.S. Total	**1,903**	**1,063,856**	**18.50**

* Data round to zero.

Notes: Average mine price is calculated by dividing the total free on board (f.o.b.) mine value of the coal produced by the total production and excludes mines producing less than 10,000 short tons, which are not required to provide these data. Coal production excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-7A, ''Coal Production Report''; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, ''Quarterly Mine Employment and Coal Production Report.''

Table 85. Average Mine Price by State and Coal Rank, 1996
(Nominal Dollars per Short Ton)

Coal-Producing State and Region	Bituminous	Subbituminous	Lignite	Anthracite	Total
Alabama	$39.48	–	–	–	$39.48
Alaska	–	w	–	–	w
Arizona	w	–	–	–	w
Colorado	17.72	$18.32	–	–	17.94
Illinois	22.74	–	–	–	22.74
Indiana	20.24	–	–	–	20.24
Kansas	w	–	–	–	w
Kentucky Total	23.91	–	–	–	23.91
Eastern	24.98	–	–	–	24.98
Western	20.38	–	–	–	20.38
Louisiana	–	–	w	–	w
Maryland	24.40	–	–	–	24.40
Missouri	23.31	–	–	–	23.31
Montana	–	w	w	–	9.96
New Mexico	w	w	–	–	24.66
North Dakota	–	–	$8.01	–	8.01
Ohio	$24.85	–	–	–	24.85
Oklahoma	26.54	–	–	–	26.54
Pennsylvania Total	24.98	–	–	$36.78	25.78
Anthracite	–	–	–	36.78	36.78
Bituminous	24.98	–	–	–	24.98
Tennessee	27.79	–	–	–	27.79
Texas	w	–	w	–	12.17
Utah	$21.63	–	–	–	21.63
Virginia	28.45	–	–	–	28.45
Washington	w	w	–	–	w
West Virginia Total	26.58	–	–	–	26.58
Northern	24.86	–	–	–	24.86
Southern	27.21	–	–	–	27.21
Wyoming	w	w	–	–	6.41
Appalachian Total[1]	**26.68**	–	–	**36.78**	**26.78**
Interior Total[1]	**21.43**	–	**12.42**	–	**18.41**
Western Total[1]	**21.61**	**7.87**	**8.04**	–	**10.03**
East of Miss. River	**25.61**	–	–	**36.78**	**25.70**
West of Miss. River	**21.75**	**7.87**	**10.92**	–	**10.40**
U.S. Total	**25.17**	**7.87**	**10.92**	**36.78**	**18.50**

[1] For a definition of coal-producing regions, see Appendix C.
[w] Withheld to avoid disclosure of individual company data.

Notes: Average mine price is calculated by dividing the total free on board (f.o.b.) mine value of the coal produced by the total production. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons, which are not required to provide these data.

Sources: Energy Information Administration, Form EIA-7A, ''Coal Production Report''; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, ''Quarterly Mine Employment and Coal Production Report.''

Table 86. Average Mine Price of U.S. Coal by Mine Production Range and Mine Type, 1996
(Nominal Dollars per Short Ton)

Mine Production Range (thousand short tons)	Underground	Surface	Total
Over 1,000	$25.81	$11.44	$16.30
500 to 1,000	27.74	22.77	25.25
200 to 500	25.27	24.09	24.74
100 to 200	24.73	23.40	24.12
50 to 100	25.71	25.02	25.40
10 to 50	26.14	23.44	24.54
U.S. Total	**25.96**	**13.82**	**18.50**

Notes: Average mine price is calculated by dividing the total free on board (f.o.b.) mine value of the coal produced by the total production. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons, which are not required to provide these data.

Sources: Energy Information Administration, Form EIA-7A, ''Coal Production Report''; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, ''Quarterly Mine Employment and Coal Production Report.''

Table 87. Average Mine Price of U.S. Coal by Coalbed Thickness and Mine Type, 1996
(Nominal Dollars per Short Ton)

Coalbed Thickness (inches)	Underground	Surface	Total
< 7	–	$25.61	$25.61
7-12	–	25.32	25.32
13-18	–	23.69	23.69
19-24	$33.30	20.57	20.82
25-30	25.41	24.10	24.37
31-36	27.26	23.16	25.19
37-42	26.91	23.29	25.30
43-48	27.91	23.37	25.84
49-54	26.51	23.93	25.70
55-60	27.63	22.25	26.33
61-66	26.14	21.79	25.23
67-72	28.22	18.98	25.21
73-78	26.03	22.21	25.12
79-84	24.99	22.22	24.34
85-90	23.75	20.91	22.26
91-96	25.14	26.21	25.34
97-102	21.68	17.19	18.64
103-108	27.36	12.07	18.09
109-114	15.90	23.47	17.36
115-120	25.40	26.37	25.75
> 120	19.28	8.34	8.97
U.S. Total	**25.96**	**13.82**	**18.50**

Notes: Average mine price is calculated by dividing the total free on board (f.o.b.) mine value of the coal produced by the total production. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons, which are not required to provide these data.

Sources: Energy Information Administration, Form EIA-7A, ''Coal Production Report''; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, ''Quarterly Mine Employment and Coal Production Report.''

Table 88. Average Mine Price of Coal by State and Productivity Range, 1996
(Nominal Dollars per Short Ton)

Coal-Producing State and Region	Productivity Range (short tons per miner per hour)					
	> = 16	8 to 16	4 to 8	2 to 4	0 to 2	Total
Alabama	w	w	$29.38	$40.87	$42.84	$39.48
Alaska	–	–	w	–	–	w
Arizona	–	–	w	–	–	w
Colorado	–	$17.02	$16.78	w	w	$17.94
Illinois	–	w	21.82	$26.31	w	22.74
Indiana	–	–	19.76	23.20	–	20.24
Kansas	–	–	–	w	–	w
Kentucky Total	$16.37	$22.48	23.57	$24.67	$26.84	$23.91
Eastern	w	24.77	24.66	25.45	w	24.98
Western	w	19.90	20.41	20.59	w	20.38
Louisiana	–	w	–	–	–	w
Maryland	–	–	w	19.90	w	$24.40
Missouri	–	w	w	w	w	23.31
Montana	$9.83	w	–	w	–	9.96
New Mexico	–	w	w	–	–	24.66
North Dakota	w	w	–	–	–	8.01
Ohio	–	$23.94	$24.12	$27.19	$18.65	24.85
Oklahoma	–	–	w	26.02	w	26.54
Pennsylvania Total	$21.06	24.84	$23.59	25.72	$36.80	25.78
Anthracite	21.06	38.25	23.30	26.74	54.61	36.78
Bituminous	–	23.47	23.59	25.68	32.08	24.98
Tennessee	–	–	w	25.57	w	27.79
Texas	–	12.04	w	w	–	12.17
Utah	–	w	$21.49	w	–	21.63
Virginia	–	w	w	$29.17	$29.13	28.45
Washington	–	–	w	–	w	w
West Virginia Total	w	w	$26.11	28.03	$32.72	$26.58
Northern	–	w	24.69	25.71	w	24.86
Southern	w	$25.30	26.59	29.32	w	27.21
Wyoming	w	16.25	w	–	w	6.41
Appalachian Total[1]	w	**24.83**	**25.27**	**28.26**	**w**	**26.78**
Interior Total[1]	w	**12.81**	**20.49**	**24.31**	**w**	**18.41**
Western Total[1]	**6.14**	**18.26**	**21.35**	**25.26**	**26.38**	**10.03**
East of Miss. River	**20.26**	**23.64**	**24.12**	**27.67**	**35.52**	**25.70**
West of Miss. River	**6.14**	**15.64**	**21.02**	**24.95**	**27.66**	**10.40**
U.S. Total	**6.19**	**17.80**	**23.65**	**27.60**	**35.24**	**18.50**

[1] For a definition of coal-producing regions, see Appendix C.

Notes: Average mine price is calculated by dividing the total free on board (f.o.b.) mine value of the coal produced by the total production. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons, which are not required to provide these data.

Sources: Energy Information Administration, Form EIA-7A, ''Coal Production Report''; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, ''Quarterly Mine Employment and Coal Production Report.''

Table 89. Average Mine Price of Underground Coal by State and Productivity Range, 1996
(Nominal Dollars per Short Ton)

Coal-Producing State and Region	Productivity Range (short tons per miner per hour)					
	> = 16	8 to 16	4 to 8	2 to 4	0 to 2	Total
Alabama	–	–	w	$42.30	w	$40.75
Colorado	–	w	w	28.87	w	17.73
Illinois	–	–	$21.65	w	w	23.12
Indiana	–	–	–	w	–	w
Kentucky Total	–	$27.06	23.96	$25.43	$27.42	$24.66
Eastern	–	27.06	25.60	w	w	25.98
Western	–	–	20.99	w	w	21.04
Maryland	–	–	w	–	w	w
Montana	–	–	–	w	–	w
Ohio	–	–	$23.71	$33.81	–	$25.98
Oklahoma	–	–	–	–	w	w
Pennsylvania Total	–	w	24.50	w	$37.44	$25.79
Anthracite	–	–	–	w	w	27.99
Bituminous	–	w	24.50	w	w	25.77
Tennessee	–	–	–	26.57	27.65	w
Utah	–	w	21.49	w	–	$21.63
Virginia	–	–	26.11	$29.92	$28.81	29.46
West Virginia Total	–	$27.13	26.49	28.11	34.15	27.31
Northern	–	w	24.83	25.77	w	25.21
Southern	–	w	27.52	29.42	w	28.44
Wyoming	–	w	–	–	–	w
Appalachian Total[1]	–	**w**	**w**	**28.99**	**36.31**	**27.67**
Interior Total[1]	–	–	**21.37**	**24.62**	**28.41**	**22.43**
Western Total[1]	–	**w**	**w**	**25.26**	**22.37**	**20.04**
East of Miss. River	–	**w**	**w**	**28.34**	**36.28**	**26.70**
West of Miss. River	–	**w**	**w**	**25.26**	**25.44**	**20.07**
U.S. Total	–	**22.56**	**24.08**	**28.29**	**36.07**	**25.96**

[1] For a definition of coal-producing regions, see Appendix C.

Notes: Average mine price is calculated by dividing the total free on board (f.o.b.) mine value of the coal produced by the total production. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons, which are not required to provide these data.

Sources: Energy Information Administration, Form EIA-7A, ''Coal Production Report''; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, ''Quarterly Mine Employment and Coal Production Report.''

Table 90. Average Mine Price of Surface Coal by State and Productivity Range, 1996
(Nominal Dollars per Short Ton)

Coal-Producing State and Region	Productivity Range (short tons per miner per hour)					
	> = 16	8 to 16	4 to 8	2 to 4	0 to 2	Total
Alabama	w	w	$33.12	$37.62	w	$35.87
Alaska	–	–	w	–	–	w
Arizona	–	–	w	–	–	w
Colorado	–	w	w	–	–	$18.28
Illinois	–	w	w	27.66	w	20.86
Indiana	–	–	w	w	–	w
Kansas	–	–	–	w	–	w
Kentucky Total	$16.37	$19.88	$23.05	$22.56	$23.31	$22.68
Eastern	w	19.83	23.74	w	w	23.53
Western	w	19.90	18.10	w	w	18.79
Louisiana	–	w	–	–	–	w
Maryland	–	–	w	w	w	w
Missouri	–	w	w	w	w	$23.31
Montana	w	$15.62	–	–	–	9.97
New Mexico	–	w	w	–	–	24.66
North Dakota	w	w	–	–	–	$8.01
Ohio	–	$23.94	$24.80	$20.98	$18.65	23.43
Oklahoma	–	–	w	w	w	w
Pennsylvania Total	$21.06	w	$21.20	w	$36.33	$25.76
Anthracite	21.06	$38.25	23.30	$26.66	w	37.37
Bituminous	–	21.46	21.05	23.35	w	22.68
Tennessee	–	–	w	w	w	w
Texas	–	12.04	w	w	–	$12.17
Virginia	–	w	w	$24.01	$33.38	25.88
Washington	–	–	w	–	w	w
West Virginia Total	w	w	$25.47	27.21	$22.22	$25.04
Northern	–	w	22.36	25.06	w	22.37
Southern	w	$23.94	25.59	28.26	w	25.34
Wyoming	w	w	w	–	w	w
Appalachian Total[1]	**20.80**	**23.97**	**24.72**	**25.47**	**33.17**	**25.07**
Interior Total[1]	**16.03**	**12.81**	**19.34**	**23.49**	**28.80**	**15.85**
Western Total[1]	**6.14**	**17.53**	**22.43**	**–**	**30.62**	**8.86**
East of Miss. River	**20.26**	**22.07**	**23.48**	**25.11**	**33.16**	**23.86**
West of Miss. River	**6.14**	**14.74**	**21.82**	**24.54**	**29.14**	**9.42**
U.S. Total	**6.19**	**16.22**	**23.12**	**25.08**	**32.83**	**13.82**

1 For a definition of coal-producing regions, see Appendix C.

Notes: Average mine price is calculated by dividing the total free on board (f.o.b.) mine value of the coal produced by the total production. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons, which are not required to provide these data.

Sources: Energy Information Administration, Form EIA-7A, ''Coal Production Report''; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, ''Quarterly Mine Employment and Coal Production Report.''

Table 91. Average Mine Price by State and Disposition, 1996
(Nominal Dollars per Short Ton)

Coal-Producing State and Region	Open Market[1]	Captive[2]	Total
Alabama	w	w	39.48
Alaska	w	w	w
Arizona	w	–	w
Colorado	17.94	–	17.94
Illinois	w	w	22.74
Indiana	w	w	20.24
Kansas	w	–	w
Kentucky Total	23.81	29.04	23.91
Eastern	w	w	24.98
Western	w	w	20.38
Louisiana	w	–	w
Maryland	w	w	24.40
Missouri	23.31	–	23.31
Montana	w	w	9.96
New Mexico	24.66	–	24.66
North Dakota	w	w	8.01
Ohio	20.17	37.01	24.85
Oklahoma	26.54	–	26.54
Pennsylvania Total	25.80	25.25	25.78
Anthracite	42.53	27.08	36.78
Bituminous	25.03	21.02	24.98
Tennessee	w	w	27.79
Texas	13.09	11.82	12.17
Utah	24.05	15.96	21.63
Virginia	28.54	26.97	28.45
Washington	w	w	w
West Virginia Total	26.39	39.09	26.58
Northern	24.30	48.30	24.86
Southern	27.15	32.41	27.21
Wyoming	6.03	12.48	6.41
Appalachian Total[3]	**26.48**	**33.56**	**26.78**
Interior Total[3]	**20.35**	**12.07**	**18.41**
Western Total[3]	**9.65**	**14.82**	**10.03**
East of Miss. River	**25.42**	**33.43**	**25.70**
West of Miss. River	**9.93**	**13.16**	**10.40**
U.S. Total	**18.60**	**17.42**	**18.50**

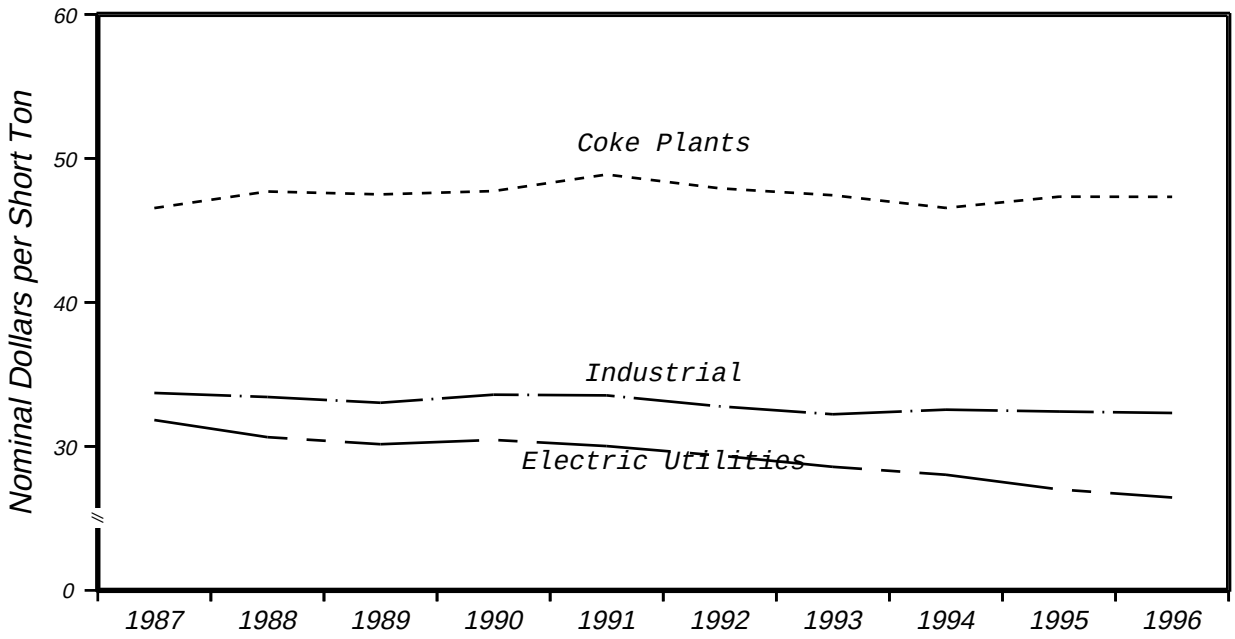
1 Open Market includes all coal sold on the open market to other coal companies or consumers.
2 Captive includes all coal used by the producing company or sold to affiliated or parent companies.
3 For a definition of coal-producing regions, see Appendix C.

Notes: Average mine price is calculated by dividing the total free on board (f.o.b.) mine value of the coal produced by the total production. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons, which are not required to provide these data.

Sources: Energy Information Administration, Form EIA-7A, ''Coal Production Report''; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, ''Quarterly Mine Employment and Coal Production Report.''

Consumer Prices

Figure 13. U.S. Coal Prices by Sector, 1987-1996



Sources: Electric Utilities: Federal Energy Regulatory Commission(FERC), FERC Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants." Coke Plants: Energy Information Administration (EIA), Form EIA-5, "Coke Plant Report - Quarterly." Industrial: EIA, Form EIA-3, "Quarterly Coal Consumption Report - Manufacturing Plants."

Table 92. Average Price of Coal Delivered to Electric Utilities by Census Division and State, 1987, 1992-1996

(Nominal Dollars per Short Ton)

Census Division and State	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
New England Total	**$43.55**	**$43.34**	**$42.81**	**$43.34**	**$45.14**	**$46.95**	**0.5**	**–0.9**	**–0.8**
Connecticut	50.05	49.33	46.45	44.80	51.30	63.56	1.5	–.6	–2.6
Massachusetts	42.64	42.63	43.00	43.39	44.11	42.37	*	–.8	.1
New Hampshire	42.23	41.67	39.66	42.39	44.69	51.47	1.3	–1.4	–2.2
Middle Atlantic Total	**35.08**	**34.63**	**36.33**	**36.66**	**37.56**	**36.60**	**1.3**	**–1.7**	**–.5**
New Jersey	45.53	47.17	48.49	47.50	46.62	46.80	–3.5	–.6	–.3
New York	37.15	36.86	37.63	38.63	38.62	39.46	.8	–1.0	–.7
Pennsylvania	34.06	33.48	35.39	35.73	36.81	35.43	1.7	–1.9	–.4
East North Central Total	**28.29**	**29.67**	**30.56**	**30.98**	**32.05**	**36.62**	**–4.6**	**–3.1**	**–2.8**
Illinois	32.14	32.58	32.69	35.30	37.06	42.80	–1.3	–3.5	–3.1
Indiana	24.67	25.94	26.79	26.73	27.89	31.93	–4.9	–3.0	–2.8
Michigan	29.34	30.95	32.90	33.17	34.23	40.55	–5.2	–3.8	–3.5
Ohio	32.31	34.44	34.70	34.05	34.40	37.15	–6.2	–1.5	–1.5
Wisconsin	19.55	21.23	23.13	22.96	25.92	28.35	–7.9	–6.8	–4.0
West North Central Total	**15.53**	**16.10**	**16.76**	**16.88**	**18.92**	**21.23**	**–3.6**	**–4.8**	**–3.4**
Iowa	16.30	17.13	17.39	17.53	19.58	22.81	–4.8	–4.5	–3.7
Kansas	17.51	17.83	17.85	17.69	20.99	22.22	–1.8	–4.4	–2.6
Minnesota	18.99	20.12	20.09	20.07	20.96	21.09	–5.6	–2.4	–1.1
Missouri	17.31	18.14	21.39	24.40	27.57	29.96	–4.6	–11.0	–5.9
Nebraska	12.37	12.86	13.11	12.92	12.77	16.26	–3.8	–.8	–3.0
North Dakota	9.72	9.65	9.28	9.38	9.45	10.46	.7	.7	–.8
South Dakota	16.94	14.35	13.10	13.30	13.68	14.95	18.0	5.5	1.4
South Atlantic Total	**36.68**	**38.25**	**39.53**	**40.80**	**41.28**	**41.51**	**–4.1**	**–2.9**	**–1.4**
Delaware	41.51	42.27	41.98	44.02	45.31	47.33	–1.8	–2.2	–1.4
Florida	42.40	43.93	43.71	43.58	45.03	44.98	–3.5	–1.5	–.6
Georgia	36.54	38.62	39.82	43.29	43.36	43.56	–5.4	–4.2	–1.9
Maryland	38.49	39.00	39.84	40.78	40.68	39.97	–1.3	–1.4	–.4
North Carolina	36.87	40.57	41.77	42.36	43.00	44.92	–9.1	–3.8	–2.2
South Carolina	37.54	38.86	39.84	40.17	39.13	44.01	–3.4	–1.0	–1.8
Virginia	35.73	36.90	37.05	37.57	37.81	40.52	–3.2	–1.4	–1.4
West Virginia	30.93	31.61	34.70	35.42	36.88	67.41	–2.1	–4.3	–101.5
East South Central Total	**29.35**	**30.08**	**32.43**	**33.30**	**33.05**	**35.95**	**–2.4**	**–2.9**	**–2.2**
Alabama	36.39	37.00	40.42	42.56	41.67	47.04	–1.6	–3.3	–2.8
Kentucky	24.43	25.71	27.16	27.29	27.01	28.94	–5.0	–2.5	–1.9
Mississippi	33.31	34.40	35.54	40.51	39.94	49.56	–3.2	–4.4	–4.3
Tennessee	27.64	27.94	30.61	30.94	31.01	32.74	–1.1	–2.8	–1.9
West South Central Total	**20.13**	**20.66**	**20.79**	**22.14**	**22.55**	**23.92**	**–2.6**	**–2.8**	**–1.9**
Arkansas	26.15	27.99	27.91	29.50	28.84	26.94	–6.5	–2.4	–.3
Louisiana	24.74	25.13	25.04	25.65	24.93	26.84	–1.5	–.2	–.9
Oklahoma	16.79	17.00	17.50	21.32	21.47	27.56	–1.2	–5.9	–5.3
Texas	19.26	19.65	19.84	20.91	21.58	22.48	–1.9	–2.8	–1.7
Mountain Total	**21.82**	**21.51**	**21.83**	**22.11**	**21.64**	**22.01**	**1.5**	**.2**	**–.1**
Arizona	29.55	28.65	28.26	27.78	28.31	27.56	3.1	1.1	.8
Colorado	20.24	20.73	21.01	21.59	21.67	22.01	–2.4	–1.7	–.9
Montana	11.90	11.47	11.79	11.78	12.14	11.12	3.8	–.5	.7
Nevada	30.44	29.02	32.37	32.34	32.32	31.28	4.9	–1.5	–.3
New Mexico	26.04	25.59	25.48	24.61	23.83	21.87	1.8	2.2	2.0
Utah	24.66	25.27	26.10	27.34	27.54	29.09	–2.4	–2.7	–1.8
Wyoming	14.30	14.29	14.09	14.03	13.42	15.27	.1	1.6	–.7
Pacific Total	**23.96**	**22.83**	**21.93**	**21.55**	**22.17**	**26.82**	**5.0**	**2.0**	**–1.2**
Oregon	18.81	18.79	19.18	19.75	21.23	23.78	.1	–3.0	–2.6
Washington	24.91	23.74	22.93	22.09	22.48	27.08	4.9	2.6	–.9
U.S. Total	**26.45**	**27.01**	**28.03**	**28.58**	**29.36**	**31.83**	**–2.1**	**–2.6**	**–2.0**

* Data round to zero.

Note: Average prices are based on the cost including insurance and freight.

Source: Federal Energy Regulatory Commission, FERC Form 423, ''Monthly Report of Cost and Quality of Fuels for Electric Plants.''

Table 93. Average Real Price of Coal Delivered to Electric Utilities by Census Division and State, 1987, 1992-1996

(Real Dollars per Short Ton)

Census Division and State	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
New England Total	**$39.70**	**$40.28**	**$40.81**	**$42.24**	**$45.14**	**$56.50**	**–1.4**	**–3.1**	**–3.8**
Connecticut	45.63	45.84	44.28	43.66	51.30	76.48	–.5	–2.9	–5.6
Massachusetts	38.87	39.62	40.99	42.29	44.11	50.99	–1.9	–3.1	–3.0
New Hampshire	38.49	38.72	37.81	41.32	44.69	61.93	–.6	–3.7	–5.1
Middle Atlantic Total	**31.98**	**32.18**	**34.63**	**35.73**	**37.56**	**44.04**	**–.6**	**–3.9**	**–3.5**
New Jersey	41.50	43.84	46.22	46.30	46.62	56.32	–5.3	–2.9	–3.3
New York	33.87	34.25	35.88	37.65	38.62	47.48	–1.1	–3.2	–3.7
Pennsylvania	31.05	31.12	33.73	34.82	36.81	42.63	–.2	–4.2	–3.5
East North Central Total	**25.79**	**27.57**	**29.13**	**30.20**	**32.05**	**44.07**	**–6.5**	**–5.3**	**–5.8**
Illinois	29.30	30.28	31.17	34.41	37.06	51.50	–3.2	–5.7	–6.1
Indiana	22.49	24.11	25.54	26.06	27.89	38.42	–6.7	–5.2	–5.8
Michigan	26.74	28.76	31.36	32.33	34.23	48.79	–7.0	–6.0	–6.5
Ohio	29.45	32.00	33.08	33.19	34.40	44.70	–8.0	–3.8	–4.5
Wisconsin	17.82	19.73	22.05	22.38	25.92	34.11	–9.7	–8.9	–7.0
West North Central Total	**14.15**	**14.97**	**15.97**	**16.45**	**18.92**	**25.55**	**–5.4**	**–7.0**	**–6.3**
Iowa	14.86	15.92	16.58	17.08	19.58	27.45	–6.7	–6.7	–6.6
Kansas	15.96	16.57	17.02	17.24	20.99	26.74	–3.7	–6.6	–5.6
Minnesota	17.32	18.70	19.15	19.56	20.96	25.37	–7.4	–4.6	–4.1
Missouri	15.78	16.86	20.39	23.78	27.57	36.05	–6.4	–13.0	–8.8
Nebraska	11.28	11.96	12.50	12.59	12.77	19.56	–5.7	–3.0	–5.9
North Dakota	8.86	8.97	8.85	9.14	9.45	12.59	–1.2	–1.6	–3.8
South Dakota	15.44	13.34	12.49	12.96	13.68	18.00	15.7	3.1	–1.7
South Atlantic Total	**33.44**	**35.55**	**37.68**	**39.77**	**41.28**	**49.95**	**–5.9**	**–5.1**	**–4.4**
Delaware	37.84	39.29	40.02	42.91	45.31	56.96	–3.7	–4.4	–4.4
Florida	38.65	40.83	41.67	42.48	45.03	54.13	–5.3	–3.7	–3.7
Georgia	33.31	35.89	37.96	42.19	43.36	52.42	–7.2	–6.4	–4.9
Maryland	35.09	36.24	37.98	39.74	40.68	48.10	–3.2	–3.6	–3.4
North Carolina	33.61	37.70	39.82	41.28	43.00	54.05	–10.8	–6.0	–5.1
South Carolina	34.22	36.11	37.98	39.15	39.13	52.96	–5.2	–3.3	–4.7
Virginia	32.57	34.29	35.32	36.62	37.81	48.76	–5.0	–3.6	–4.4
West Virginia	28.19	29.38	33.08	34.53	36.88	81.12	–4.0	–6.5	–104.5
East South Central Total	**26.75**	**27.96**	**30.92**	**32.46**	**33.05**	**43.26**	**–4.3**	**–5.1**	**–5.2**
Alabama	33.17	34.39	38.53	41.48	41.67	56.61	–3.5	–5.5	–5.8
Kentucky	22.27	23.89	25.89	26.60	27.01	34.82	–6.8	–4.7	–4.8
Mississippi	30.36	31.97	33.88	39.48	39.94	59.64	–5.0	–6.6	–7.2
Tennessee	25.19	25.97	29.18	30.16	31.01	39.40	–3.0	–5.1	–4.8
West South Central Total	**18.35**	**19.20**	**19.82**	**21.58**	**22.55**	**28.79**	**–4.4**	**–5.0**	**–4.9**
Arkansas	23.84	26.01	26.60	28.75	28.84	32.42	–8.3	–4.6	–3.3
Louisiana	22.55	23.35	23.87	25.00	24.93	32.30	–3.4	–2.5	–3.9
Oklahoma	15.31	15.80	16.68	20.78	21.47	33.16	–3.1	–8.1	–8.2
Texas	17.56	18.26	18.91	20.38	21.58	27.05	–3.8	–5.0	–4.7
Mountain Total	**19.89**	**19.99**	**20.81**	**21.55**	**21.64**	**26.48**	**–.5**	**–2.1**	**–3.1**
Arizona	26.93	26.63	26.94	27.08	28.31	33.16	1.1	–1.2	–2.3
Colorado	18.45	19.27	20.03	21.04	21.67	26.49	–4.2	–3.9	–3.9
Montana	10.85	10.66	11.24	11.48	12.14	13.39	1.8	–2.8	–2.3
Nevada	27.75	26.97	30.85	31.52	32.32	37.64	2.9	–3.7	–3.3
New Mexico	23.74	23.78	24.29	23.98	23.83	26.32	–.2	–.1	–1.1
Utah	22.48	23.48	24.88	26.64	27.54	35.01	–4.3	–4.9	–4.8
Wyoming	13.04	13.28	13.43	13.68	13.42	18.38	–1.8	–.7	–3.7
Pacific Total	**21.85**	**21.22**	**20.91**	**21.00**	**22.17**	**32.27**	**3.0**	**–.4**	**–4.2**
Oregon	17.14	17.47	18.28	19.25	21.23	28.62	–1.8	–5.2	–5.5
Washington	22.71	22.06	21.85	21.53	22.48	32.58	2.9	.2	–3.9
U.S. Total	**24.11**	**25.10**	**26.72**	**27.86**	**29.36**	**38.30**	**–3.9**	**–4.8**	**–5.0**

Notes: Real prices are in 1992 dollars, calculated using implicit Gross Domestic Product price deflators. See Appendix D, Table D3. Average prices are based on the cost including insurance and freight.

Source: Federal Energy Regulatory Commission, FERC Form 423, ''Monthly Report of Cost and Quality of Fuels for Electric Plants.''

Table 94. Average Price of Coal Delivered to Other Industrial Plants By Census Division and State, 1987, 1992-1996

(Nominal Dollars per Short Ton)

Census Division and State	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
New England Total	**$57.36**	**$56.90**	**$55.73**	**$57.83**	**$65.71**	**$59.23**	**0.8**	**–3.3**	**–0.3**
Connecticut	–	–	–	–	–	w	w	w	w
Maine	w	w	w	w	w	w	w	w	w
Massachusetts	w	w	w	w	w	w	w	w	w
New Hampshire	–	–	–	–	–	w	w	w	w
Vermont	–	–	–	–	–	w	w	w	w
Middle Atlantic Total	**w**	**w**	**w**	**w**	**w**	**w**	**w**	**w**	**w**
New Jersey	w	w	w	w	w	w	w	w	w
New York	40.11	41.91	42.20	42.15	43.95	44.14	–4.3	–2.3	–1.0
Pennsylvania	33.84	34.07	33.66	34.04	35.70	36.62	–.7	–1.3	–.9
East North Central Total	**34.44**	**34.89**	**34.72**	**34.54**	**35.05**	**35.72**	**–1.3**	**–.4**	**–.4**
Illinois	29.69	29.03	29.13	29.42	29.24	33.15	2.3	.4	–1.2
Indiana	31.76	33.14	31.35	30.91	31.58	30.94	–4.2	.1	.3
Michigan	41.28	41.18	41.20	41.46	42.17	43.09	.2	–.5	–.5
Ohio	35.28	35.18	35.75	34.82	35.24	33.98	.3	*	.4
Wisconsin	40.02	40.21	41.23	40.85	42.27	43.99	–.4	–1.3	–1.0
West North Central Total	**19.05**	**18.92**	**18.61**	**18.00**	**17.76**	**17.62**	**.6**	**1.8**	**.9**
Iowa	29.32	29.24	28.52	28.01	27.17	34.87	.3	1.9	–1.9
Kansas	32.46	32.42	32.25	33.06	31.96	34.49	.1	.4	–.7
Minnesota	28.85	34.40	35.66	35.81	35.63	37.40	–16.1	–5.1	–2.8
Missouri	31.37	32.81	32.87	32.12	31.48	29.32	–4.4	–.1	.8
Nebraska	w	w	w	w	w	w	w	w	w
North Dakota	w	w	w	w	w	w	w	w	w
South Dakota	w	w	w	w	w	w	w	w	w
South Atlantic Total	**w**	**w**	**w**	**w**	**w**	**w**	**w**	**w**	**w**
Delaware	w	w	w	w	w	w	w	w	w
Florida	45.69	46.63	46.60	48.28	48.27	46.69	–2.0	–1.4	–.2
Georgia	44.21	44.64	45.71	45.20	45.18	43.67	–1.0	–.5	.1
Maryland	32.52	31.66	32.18	32.18	32.83	32.37	2.7	–.2	*
North Carolina	43.36	43.29	43.62	43.44	43.46	43.78	.2	*	–.1
South Carolina	44.08	43.16	43.84	43.35	43.31	42.62	2.1	.4	.4
Virginia	43.51	42.50	41.56	41.27	40.97	38.92	2.4	1.5	1.2
West Virginia	33.37	33.61	32.73	32.91	31.93	31.39	–.7	1.1	.7
East South Central Total	**w**	**w**	**w**	**w**	**w**	**w**	**w**	**w**	**w**
Alabama	40.15	39.53	38.74	39.01	39.76	40.38	1.5	.2	–.1
Kentucky	44.02	44.09	43.22	42.30	43.78	43.12	–.2	.1	.2
Mississippi	w	w	w	w	w	w	w	w	w
Tennessee	35.21	35.68	35.34	35.41	35.52	35.48	–1.3	–.2	–.1
West South Central Total	**21.79**	**22.04**	**22.95**	**21.38**	**22.80**	**w**	**–1.1**	**–1.1**	**w**
Arkansas	43.24	43.52	44.28	44.06	44.61	45.19	–.6	–.8	–.5
Louisiana	w	w	w	w	w	w	w	w	w
Oklahoma	w	w	w	w	w	41.32	w	w	w
Texas	18.99	18.76	19.54	17.58	18.14	19.19	1.2	1.1	–.1
Mountain Total	**26.70**	**27.06**	**28.78**	**28.51**	**28.66**	**28.73**	**–1.3**	**–1.7**	**–.8**
Arizona	39.27	40.46	41.35	40.51	40.95	38.66	–2.9	–1.0	.2
Colorado	23.17	26.11	28.96	28.63	30.34	28.79	–11.2	–6.5	–2.4
Idaho	36.39	34.11	33.35	32.78	33.29	35.03	6.7	2.2	.4
Montana	w	w	w	w	w	w	w	w	w
Nevada	w	w	w	w	w	w	w	w	w
New Mexico	w	w	w	w	w	w	w	w	w
Utah	19.10	19.74	26.57	26.51	25.35	23.85	–3.2	–6.8	–2.4
Wyoming	22.32	22.72	22.87	23.43	23.67	23.61	–1.8	–1.4	–.6
Pacific Total	**42.45**	**43.68**	**44.92**	**43.83**	**43.37**	**47.73**	**–2.8**	**–.5**	**–1.3**
California	39.54	41.11	43.39	42.86	42.05	48.63	–3.8	–1.5	–2.3
Hawaii	w	w	w	w	w	w	w	w	w
Oregon	w	w	w	w	w	w	w	w	w
Washington	58.81	59.15	58.86	53.11	56.25	46.43	–.6	1.1	2.7
U.S. Total	**32.32**	**32.42**	**32.55**	**32.23**	**32.78**	**33.71**	**–.3**	**–.3**	**–.5**

* Data round to zero.

w Withheld to avoid disclosure of individual company data.

Notes: Price data are for manufacturing plants only. Average prices are based on the cost including insurance, freight, and taxes.

Source: Energy Information Administration, Form EIA-3, ''Quarterly Coal Consumption - Manufacturing Plants.''

Table 95. Average Real Price of Coal Delivered to Other Industrial Plants by Census Division and State, 1987, 1992-1996

(Real Dollars per Short Ton)

Census Division and State	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
New England Total	**$52.28**	**$52.88**	**$53.13**	**$56.37**	**$65.71**	**$71.27**	**–1.1**	**–5.5**	**–3.4**
Connecticut	–	–	–	–	–	w	w	w	w
Maine	w	w	w	w	w	w	w	w	w
Massachusetts	w	w	w	w	w	w	w	w	w
New Hampshire	–	–	–	–	–	w	w	w	w
Vermont	–	–	–	–	–	w	w	w	w
Middle Atlantic Total	**w**	**w**	**w**	**w**	**w**	**w**	**w**	**w**	**w**
New Jersey	w	w	w	w	w	w	w	w	w
New York	36.56	38.95	40.23	41.09	43.95	53.12	–6.1	–4.5	–4.1
Pennsylvania	30.85	31.66	32.09	33.18	35.70	44.06	–2.6	–3.6	–3.9
East North Central Total	**31.40**	**32.42**	**33.10**	**33.66**	**35.05**	**42.99**	**–3.2**	**–2.7**	**–3.4**
Illinois	27.06	26.98	27.77	28.67	29.24	39.89	.3	–1.9	–4.2
Indiana	28.95	30.80	29.89	30.13	31.58	37.24	–6.0	–2.1	–2.8
Michigan	37.63	38.27	39.28	40.41	42.17	51.85	–1.7	–2.8	–3.5
Ohio	32.16	32.70	34.08	33.94	35.24	40.89	–1.6	–2.3	–2.6
Wisconsin	36.49	37.37	39.31	39.81	42.27	52.93	–2.4	–3.6	–4.0
West North Central Total	**17.36**	**17.59**	**17.74**	**17.54**	**17.76**	**21.20**	**–1.3**	**–.6**	**–2.2**
Iowa	26.73	27.17	27.19	27.30	27.17	41.96	–1.6	–.4	–4.9
Kansas	29.59	30.13	30.74	32.22	31.96	41.50	–1.8	–1.9	–3.7
Minnesota	26.30	31.97	33.99	34.90	35.63	45.01	–17.7	–7.3	–5.8
Missouri	28.60	30.49	31.34	31.30	31.48	35.28	–6.2	–2.4	–2.3
Nebraska	w	w	w	w	w	w	w	w	w
North Dakota	w	w	w	w	w	w	w	w	w
South Dakota	w	w	w	w	w	w	w	w	w
South Atlantic Total	**w**	**w**	**w**	**w**	**w**	**w**	**w**	**w**	**w**
Delaware	w	w	w	w	w	w	w	w	w
Florida	41.65	43.34	44.43	47.06	48.27	56.19	–3.9	–3.6	–3.3
Georgia	40.30	41.49	43.58	44.05	45.18	52.55	–2.8	–2.8	–2.9
Maryland	29.65	29.42	30.67	31.36	32.83	38.95	.8	–2.5	–3.0
North Carolina	39.53	40.23	41.58	42.34	43.46	52.68	–1.8	–2.3	–3.1
South Carolina	40.18	40.11	41.79	42.25	43.31	51.29	.2	–1.8	–2.7
Virginia	39.66	39.50	39.62	40.23	40.97	46.83	.4	–.8	–1.8
West Virginia	30.42	31.24	31.20	32.08	31.93	37.77	–2.6	–1.2	–2.4
East South Central Total	**w**	**w**	**w**	**w**	**w**	**w**	**w**	**w**	**w**
Alabama	36.60	36.74	36.93	38.02	39.76	48.59	–.4	–2.0	–3.1
Kentucky	40.12	40.97	41.20	41.23	43.78	51.89	–2.1	–2.1	–2.8
Mississippi	w	w	w	w	w	w	w	w	w
Tennessee	32.10	33.16	33.69	34.52	35.52	42.69	–3.2	–2.5	–3.1
West South Central Total	**19.86**	**20.48**	**21.87**	**20.84**	**22.80**	**w**	**–3.0**	**–3.4**	**w**
Arkansas	39.42	40.44	42.21	42.95	44.61	54.38	–2.5	–3.0	–3.5
Louisiana	w	w	w	w	w	w	w	w	w
Oklahoma	w	w	w	w	w	49.72	w	w	w
Texas	17.31	17.43	18.63	17.13	18.14	23.10	–.7	–1.2	–3.1
Mountain Total	**24.34**	**25.15**	**27.44**	**27.79**	**28.66**	**34.57**	**–3.2**	**–4.0**	**–3.8**
Arizona	35.80	37.60	39.42	39.48	40.95	46.52	–4.8	–3.3	–2.9
Colorado	21.12	24.26	27.61	27.90	30.34	34.64	–12.9	–8.6	–5.3
Idaho	33.17	31.70	31.79	31.95	33.29	42.16	4.6	–.1	–2.6
Montana	w	w	w	w	w	w	w	w	w
Nevada	w	w	w	w	w	w	w	w	w
New Mexico	w	w	w	w	w	w	w	w	w
Utah	17.41	18.34	25.33	25.84	25.35	28.70	–5.1	–8.9	–5.4
Wyoming	20.35	21.12	21.81	22.84	23.67	28.41	–3.6	–3.7	–3.6
Pacific Total	**38.69**	**40.60**	**42.82**	**42.72**	**43.37**	**57.44**	**–4.7**	**–2.8**	**–4.3**
California	36.04	38.21	41.37	41.78	42.05	58.52	–5.7	–3.8	–5.2
Hawaii	w	w	w	w	w	w	w	w	w
Oregon	w	w	w	w	w	w	w	w	w
Washington	53.61	54.97	56.11	51.76	56.25	55.87	–2.5	–1.2	–.4
U.S. Total	**29.46**	**30.13**	**31.03**	**31.41**	**32.78**	**40.56**	**–2.2**	**–2.6**	**–3.5**

[w] Withheld to avoid disclosure of individual company data.

Notes: Price data are for manufacturing plants only. Real prices are in 1992 dollars, calculated using implicit Gross Domestic Product price deflators. See Appendix D, Table D3. Average prices are based on the cost including insurance, freight, and taxes.

Source: Energy Information Administration, Form EIA-3, ''Quarterly Coal Consumption - Manufacturing Plants.''

Table 96. Average Price of Coal Delivered to Coke Plants by Census Division and State, 1987, 1992-1996
(Nominal Dollars per Short Ton)

Census Division and State	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
Middle Atlantic Total	**w**	**w**	**w**	**w**	**w**	**w**	**w**	**w**	**w**
New York	w	w	w	w	w	w	w	w	w
Pennsylvania	$45.16	$46.11	$46.25	$46.41	$46.49	$42.54	–2.0	–0.7	0.7
East North Central Total	**49.54**	**49.09**	**47.23**	**49.52**	**50.37**	**49.00**	**.9**	**–.4**	**.1**
Illinois	w	w	w	w	w	w	w	w	w
Indiana	51.93	52.74	50.90	52.29	53.72	51.44	–1.5	–.8	.1
Michigan	w	w	w	–	–	w	w	w	w
Ohio	44.98	42.18	42.02	45.07	46.68	46.04	6.6	–.9	–.3
West North Central Total	–	–	–	–	–	**w**	–	**w**	**w**
Missouri	–	–	–	–	–	w	–	w	w
South Atlantic Total	**w**	**w**	**w**	**w**	**w**	**w**	**w**	**w**	**w**
Maryland	–	–	–	–	–	w	w	w	w
Virginia	w	w	w	w	w	w	w	w	w
West Virginia	w	w	w	w	w	w	w	w	w
East South Central Total	**w**	**w**	**w**	**w**	**w**	**w**	**w**	**w**	**w**
Alabama	49.37	48.42	47.45	47.50	47.80	45.89	1.9	.8	.8
Kentucky	w	w	w	w	w	w	w	w	w
Tennessee	–	–	–	–	–	w	–	w	w
Mountain Total	**w**	**w**	**w**	**w**	**w**	–	**w**	**w**	**w**
Utah	w	w	w	w	w	–	w	w	w
U.S. Total	**47.33**	**47.34**	**46.56**	**47.44**	**47.92**	**46.55**	*	**–.3**	**.2**

* Data round to zero.
w Withheld to avoid disclosure of individual company data.
Note: Average prices are based on the cost including insurance, freight, and taxes.
Source: Energy Information Administration, Form EIA-5, ''Coke Plant Report - Quarterly.''

Table 97. Average Real Price of Coal Delivered to Coke Plants by Census Division and State, 1987, 1992-1996
(Real Dollars per Short Ton)

Census Division and State	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
Middle Atlantic Total	**w**	**w**	**w**	**w**	**w**	**w**	**w**	**w**	**w**
New York	w	w	w	w	w	w	w	w	w
Pennsylvania	$41.17	$42.85	$44.09	$45.24	$46.49	$51.19	–3.9	–3.0	–2.4
East North Central Total	**45.16**	**45.63**	**45.02**	**48.26**	**50.37**	**58.96**	**–1.0**	**–2.7**	**–2.9**
Illinois	w	w	w	w	w	w	w	w	w
Indiana	47.34	49.01	48.52	50.97	53.72	61.90	–3.4	–3.1	–2.9
Michigan	w	w	w	–	–	w	w	w	w
Ohio	41.00	39.21	40.05	43.92	46.68	55.40	4.6	–3.2	–3.3
West North Central Total	–	–	–	–	–	**w**	–	**w**	**w**
Missouri	–	–	–	–	–	w	–	w	w
South Atlantic Total	**w**	**w**	**w**	**w**	**w**	**w**	**w**	**w**	**w**
Maryland	–	–	–	–	–	w	w	w	w
Virginia	w	w	w	w	w	w	w	w	w
West Virginia	w	w	w	w	w	w	w	w	w
East South Central Total	**w**	**w**	**w**	**w**	**w**	**w**	**w**	**w**	**w**
Alabama	45.00	45.00	45.23	46.30	47.80	55.23	*	–1.5	–2.2
Kentucky	w	w	w	w	w	w	w	w	w
Tennessee	–	–	–	–	–	w	–	w	w
Mountain Total	**w**	**w**	**w**	**w**	**w**	–	**w**	**w**	**w**
Utah	w	w	w	w	w	–	w	w	w
U.S. Total	**43.15**	**44.00**	**44.38**	**46.24**	**47.92**	**56.01**	**–1.9**	**–2.6**	**–2.8**

* Data round to zero.
w Withheld to avoid disclosure of individual company data.
Notes: Real prices are in 1992 dollars, calculated using implicit Gross Domestic Product price deflators. See Appendix D, Table D3. Average prices are based on the cost including insurance, freight, and taxes.
Source: Energy Information Administration, Form EIA-5, ''Coke Plant Report - Quarterly.''

Import/Export Prices

Table 98. Average Price of U.S. Coal Imports by Continent and Country of Origin, 1987, 1992-1996

(Nominal Dollars per Short Ton)

Continent and Country of Origin	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
North America Total	**$34.89**	**$35.12**	**$30.81**	**$29.60**	**$29.56**	**$32.53**	**–0.7**	**4.2**	**0.8**
Canada	34.90	35.12	30.81	29.62	29.56	33.19	–.6	4.2	.5
Mexico	33.43	–	–	21.19	–	25.57	–	–	3.0
South America Total	**31.24**	**32.76**	**29.00**	**27.64**	**33.04**	**32.96**	**–4.6**	**–1.4**	**–.6**
Colombia	31.40	31.15	27.46	27.26	32.25	32.89	.8	–.7	–.5
Venezuela	30.97	35.14	32.41	28.87	35.61	35.22	–11.9	–3.4	–1.4
Europe Total	**–**	**25.70**	**–**	**32.08**	**34.12**	**28.70**	**–100.0**	**–100.0**	**–100.0**
Denmark	–	–	–	32.08	–	–	–	–	–
Spain	–	–	–	–	–	28.70	–	–	–100.0
United Kingdom	–	25.70	–	–	34.12	–	–100.0	–100.0	–
Asia Total	**32.45**	**35.13**	**34.09**	**42.70**	**38.75**	**–**	**–7.6**	**–4.3**	**–**
India	–	–	–	–	23.65	–	–	–100.0	–
Indonesia	32.45	35.13	33.80	42.70	40.94	–	–7.6	–5.6	–
Malaysia	–	–	–	–	47.06	–	–	–100.0	–
Vietnam	–	–	48.08	–	–	–	–	–	–
Oceania & Australia Total	**33.41**	**33.57**	**31.16**	**31.56**	**36.07**	**27.17**	**–.5**	**–1.9**	**2.3**
Australia	33.41	30.99	30.02	31.56	36.07	27.17	7.8	–1.9	2.3
New Zealand	–	46.42	44.15	–	–	–	–100.0	–	–
Africa Total	**–**	**–**	**25.33**	**27.81**	**49.29**	**–**	**–**	**–100.0**	**–**
South Africa, Rep of	–	–	25.33	–	49.29	–	–	–100.0	–
Swaziland	–	–	–	27.81	–	–	–	–	–
Total[1]	**32.17**	**33.54**	**30.01**	**29.44**	**32.83**	**32.08**	**–4.1**	**–.5**	*****
U.S. Total[2]	**33.45**	**34.13**	**30.21**	**29.89**	**33.46**	**32.04**	**–2.0**	*****	**.5**

1 The average prices presented in this table, with the exception of U.S. Total, are considered to be representative prices for coal imports and fall within the range of $20 to $55 per short ton, inclusively.

2 U.S. Total is the average price of all coal imports.

* Data round to zero.

Notes: Average price is based on the customs import value. Coal imports include coal to Puerto Rico and the Virgin Islands.

Source: U.S. Department of Commerce, Bureau of the Census, ''Monthly Report IM 145.''

Table 99. Average Price of U.S. Coal Exports by Destination, 1987, 1992-1996
(Nominal Dollars per Short Ton)

Continent and Country of Destination	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
North America Total	**$33.09**	**$34.05**	**$32.42**	**$34.05**	**$33.05**	**$41.16**	**–2.8**	*****	**–2.4**
Canada[1]	32.23	33.49	32.08	33.76	32.98	41.19	–3.8	–0.6	–2.7
Jamaica	34.78	32.67	33.22	28.44	26.82	–	6.5	6.7	–
Mexico	39.70	39.96	44.28	44.04	44.69	39.20	–.6	–2.9	.1
Other[2]	39.65	39.04	36.98	36.80	36.54	38.77	1.6	2.1	.2
South America Total	**43.81**	**43.46**	**42.28**	**43.77**	**45.49**	**44.03**	**.8**	**–.9**	*****
Argentina	46.36	43.40	42.48	43.21	45.41	43.27	6.8	.5	.8
Brazil	44.67	43.88	42.26	43.84	45.57	44.06	1.8	–.5	.1
Chile	32.37	31.70	34.47	46.78	47.38	45.97	2.1	–9.1	–3.8
Other[2]	39.19	43.42	40.88	39.46	31.19	50.88	–9.8	5.9	–2.9
Europe Total	**42.10**	**40.92**	**41.86**	**43.05**	**42.40**	**42.37**	**2.9**	**–.2**	**–.1**
Belgium & Luxembourg	45.73	43.47	42.23	43.23	44.01	41.61	5.2	1.0	1.0
Bulgaria	44.26	44.04	42.09	41.96	41.70	–	.5	1.5	–
Denmark	29.30	29.37	29.23	34.95	32.69	33.01	–.2	–2.7	–1.3
Finland	42.11	39.47	41.14	39.61	40.81	41.11	6.7	.8	.3
France	44.94	43.71	44.23	42.24	39.43	43.12	2.8	3.3	.4
Germany, FR	41.08	34.99	45.33	38.98	38.27	41.76	17.4	1.8	–.2
Ireland	37.35	36.07	33.82	35.84	36.81	43.58	3.6	.4	–1.7
Italy	45.05	44.14	43.00	44.33	45.43	41.58	2.0	–.2	.9
Netherlands	41.36	41.97	41.93	44.22	43.34	43.31	–1.4	–1.2	–.5
Norway	57.05	56.42	54.57	53.48	50.12	47.26	1.1	3.3	2.1
Portugal	36.53	36.46	36.25	37.70	40.74	42.91	.2	–2.7	–1.8
Romania	46.95	42.43	38.10	38.54	42.66	42.92	10.6	2.4	1.0
Spain	37.56	34.75	40.12	42.66	41.95	43.79	8.1	–2.7	–1.7
Sweden	47.50	48.21	45.56	45.96	46.66	43.34	–1.5	.4	1.0
Turkey	44.33	42.61	41.28	42.58	45.54	44.15	4.0	–.7	*
United Kingdom	38.90	40.92	45.06	45.94	45.59	44.26	–4.9	–3.9	–1.4
Yugoslavia, FR	–	38.06	–	39.60	42.83	42.83	–100.0	–100.0	–100.0
Other[2]	38.03	55.95	38.14	40.67	41.89	42.89	–32.0	–2.4	–1.3
Asia Total	**39.57**	**39.10**	**38.63**	**40.49**	**42.65**	**43.38**	**1.2**	**–1.8**	**–1.0**
China (Taiwan)	36.86	36.95	38.65	39.49	41.23	39.94	–.2	–2.8	–.9
Israel	36.40	35.79	33.23	34.79	39.11	36.56	1.7	–1.8	*
Japan	39.41	39.14	38.52	40.72	42.91	45.61	.7	–2.1	–1.6
Korea, Republic of	42.72	40.97	40.24	42.12	44.93	41.53	4.3	–1.3	.3
Other[2]	48.89	30.41	37.24	44.23	37.06	54.29	60.8	7.2	–1.1
Oceania & Australia Total	**40.71**	**39.87**	**39.99**	**34.46**	**34.50**	**38.13**	**2.1**	**4.2**	**.7**
Other[2]	40.71	39.87	39.99	34.46	34.50	38.13	2.1	4.2	.7
Africa Total	**44.36**	**43.07**	**43.59**	**42.55**	**42.97**	**41.32**	**3.0**	**.8**	**.8**
Algeria	50.23	47.80	43.24	44.32	46.35	43.72	5.1	2.0	1.5
Egypt	53.37	49.36	43.14	44.86	46.08	42.08	8.1	3.7	2.7
Morocco	33.93	33.00	35.03	33.86	33.80	35.55	2.8	.1	–.5
South Africa, Rep of	49.55	47.38	45.67	46.87	47.79	48.25	4.6	.9	.3
Other[2]	–	–	–	40.53	–	40.82	–	–	–100.0
Total[3]	**40.53**	**40.03**	**39.90**	**41.33**	**41.29**	**42.49**	**1.2**	**–.5**	**–.5**
U.S. Total[4]	**40.76**	**40.27**	**39.93**	**41.41**	**41.34**	**42.77**	**1.2**	**–.3**	**–.5**

1 Based on the U.S. - Canada Free Trade Agreement, as of January 1990, the U.S. Department of Commerce began reporting statistics on U.S. exports to Canada based on information on imports provided monthly by the Canadian government.
2 Includes countries with exports less than or equal to 50,000 short tons in 1995.
3 The average prices presented in this table, with the exception of U.S. Total, are considered to be representative prices for coal exports and fall within the range of $20 to $60 per short ton, inclusively.
4 U.S. Total is the average price of all coal exports.
* Data round to zero.
Note: Average price is based on the free alongside ship (f.a.s.) value.
Source: U.S. Department of Commerce, Bureau of the Census, ''Monthly Report EM 545.''

Table 100. Average Real Price of U.S. Coal Exports by Destination, 1987, 1992-1996

(Real Dollars per Short Ton)

Continent and Country of Destination	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
North America Total	**$30.17**	**$31.64**	**$30.90**	**$33.19**	**$33.05**	**$49.53**	**–4.7**	**–2.3**	**–5.4**
Canada[1]	29.38	31.12	30.58	32.91	32.98	49.56	–5.6	–2.8	–5.6
Jamaica	31.71	30.36	31.67	27.72	26.82	–	4.4	4.3	–
Mexico	36.19	37.13	42.21	42.93	44.69	47.17	–2.5	–5.1	–2.9
Other[2]	36.14	36.28	35.26	35.87	36.54	46.65	–.4	–.3	–2.8
South America Total	**39.93**	**40.39**	**40.31**	**42.66**	**45.49**	**52.98**	**–1.1**	**–3.2**	**–3.1**
Argentina	42.26	40.34	40.50	42.12	45.41	52.07	4.8	–1.8	–2.3
Brazil	40.72	40.78	40.29	42.73	45.57	53.02	–.1	–2.8	–2.9
Chile	29.51	29.46	32.86	45.59	47.38	55.32	.2	–11.2	–6.7
Other[2]	35.72	40.36	38.97	38.46	31.19	61.23	–11.5	3.4	–5.8
Europe Total	**38.38**	**38.03**	**39.90**	**41.96**	**42.40**	**50.99**	**.9**	**–2.5**	**–3.1**
Belgium & Luxembourg	41.69	40.40	40.26	42.13	44.01	50.07	3.2	–1.3	–2.0
Bulgaria	40.35	40.93	40.13	40.90	41.70	–	–1.4	–.8	–
Denmark	26.71	27.29	27.86	34.07	32.69	39.72	–2.1	–4.9	–4.3
Finland	38.39	36.68	39.21	38.61	40.81	49.47	4.6	–1.5	–2.8
France	40.96	40.63	42.17	41.17	39.43	51.89	.8	.9	–2.6
Germany, FR	37.44	32.52	43.21	37.99	38.27	50.25	15.1	–.5	–3.2
Ireland	34.05	33.52	32.24	34.93	36.81	52.44	1.6	–1.9	–4.7
Italy	41.07	41.02	40.99	43.20	45.43	50.04	.1	–2.5	–2.2
Netherlands	37.70	39.00	39.97	43.10	43.34	52.12	–3.3	–3.4	–3.5
Norway	52.01	52.44	52.02	52.12	50.12	56.87	–.8	.9	–1.0
Portugal	33.30	33.88	34.56	36.74	40.74	51.64	–1.7	–4.9	–4.8
Romania	42.80	39.43	36.32	37.56	42.66	51.65	8.5	.1	–2.1
Spain	34.24	32.29	38.25	41.58	41.95	52.69	6.0	–4.9	–4.7
Sweden	43.30	44.80	43.43	44.80	46.66	52.15	–3.3	–1.8	–2.0
Turkey	40.41	39.60	39.35	41.50	45.54	53.13	2.0	–2.9	–3.0
United Kingdom	35.46	38.03	42.95	44.77	45.59	53.26	–6.8	–6.1	–4.4
Yugoslavia, FR	–	35.37	–	38.59	42.83	51.54	–100.0	–100.0	–100.0
Other[2]	34.66	51.99	36.36	39.64	41.89	51.61	–33.3	–4.6	–4.3
Asia Total	**36.07**	**36.34**	**36.83**	**39.46**	**42.65**	**52.20**	**–.7**	**–4.1**	**–4.0**
China (Taiwan)	33.60	34.34	36.84	38.49	41.23	48.07	–2.1	–5.0	–3.9
Israel	33.18	33.26	31.68	33.91	39.11	44.00	–.2	–4.0	–3.1
Japan	35.93	36.38	36.73	39.68	42.91	54.89	–1.2	–4.3	–4.6
Korea, Republic of	38.95	38.08	38.36	41.05	44.93	49.98	2.3	–3.5	–2.7
Other[2]	44.57	28.26	35.50	43.11	37.06	65.33	57.7	4.7	–4.1
Oceania & Australia Total	**37.11**	**37.05**	**38.12**	**33.59**	**34.50**	**45.89**	**.1**	**1.8**	**–2.3**
Other[2]	37.11	37.05	38.12	33.59	34.50	45.89	.1	1.8	–2.3
Africa Total	**40.44**	**40.03**	**41.56**	**41.47**	**42.97**	**49.73**	**1.0**	**–1.5**	**–2.3**
Algeria	45.79	44.42	41.22	43.20	46.35	52.61	3.1	–.3	–1.5
Egypt	48.65	45.88	41.12	43.72	46.08	50.64	6.0	1.4	–.4
Morocco	30.93	30.67	33.40	33.00	33.80	42.78	.9	–2.2	–3.5
South Africa, Rep of	45.16	44.03	43.53	45.69	47.79	58.06	2.6	–1.4	–2.8
Other[2]	–	–	–	39.51	–	49.13	–	–	–100.0
Total[3]	**36.94**	**37.20**	**38.03**	**40.28**	**41.29**	**51.13**	**–.7**	**–2.7**	**–3.5**
U.S. Total[4]	**37.16**	**37.43**	**38.07**	**40.36**	**41.34**	**51.47**	**–.7**	**–2.6**	**–3.5**

1 Based on the U.S. - Canada Free Trade Agreement, as of January 1990, the U.S. Department of Commerce began reporting statistics on U.S. exports to Canada based on information on imports provided monthly by the Canadian government.

2 Includes countries with exports less than or equal to 50,000 short tons in 1995.

3 The average prices presented in this table, with the exception of U.S. Total, are considered to be representative prices for coal exports and fall within the range of $20 to $60 (nominal) per short ton, inclusively.

4 U.S. Total is the average price of all coal exports.

Notes: Real prices are in 1992 dollars, calculated using implicit Gross Domestic Product price deflators. See Appendix D, Table D3. Average prices are based on the free alongside ship (f.a.s.) value.

Source: U.S. Department of Commerce, Bureau of the Census, ''Monthly Report EM 545.''

Table 101. Average Price of U.S. Metallurgical Coal Exports by Destination, 1987, 1992-1996

(Nominal Dollars per Short Ton)

Continent and Country of Destination	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
North America Total	**$36.79**	**$37.25**	**$35.08**	**$36.03**	**$36.39**	**$44.53**	**–1.3**	**0.3**	**–2.1**
Canada[1]	35.99	36.55	34.58	35.66	36.31	44.65	–1.5	–.2	–2.4
Mexico	47.36	46.90	44.54	45.17	47.95	–	1.0	–.3	–
Other[2]	–	–	–	–	–	38.77	–	–	–100.0
South America Total	**44.61**	**43.66**	**42.29**	**43.91**	**45.65**	**43.99**	**2.2**	**–.6**	**.1**
Argentina	46.87	43.54	42.56	43.63	45.45	43.27	7.6	.8	.9
Brazil	44.73	43.89	42.26	43.94	45.65	44.05	1.9	–.5	.2
Chile	30.26	30.26	–	–	47.40	45.97	*	–10.6	–4.5
Other[2]	50.76	–	–	–	–	–	–	–	–
Europe Total	**47.68**	**46.02**	**44.56**	**45.62**	**46.61**	**43.68**	**3.6**	**.6**	**1.0**
Belgium & Luxembourg	48.68	45.97	45.07	45.95	47.02	42.58	5.9	.9	1.5
Bulgaria	43.36	44.04	42.13	41.99	41.70	–	–1.5	1.0	–
Denmark	–	–	–	36.29	–	–	–	–	–
Finland	44.21	42.65	42.34	39.61	40.81	41.11	3.6	2.0	.8
France	47.13	45.08	44.36	45.17	44.45	43.40	4.5	1.5	.9
Germany, FR	49.87	47.52	45.88	46.17	45.79	43.50	4.9	2.1	1.5
Ireland	–	–	–	–	–	41.64	–	–	–100.0
Italy	47.90	46.61	45.32	45.93	47.54	44.37	2.8	.2	.8
Netherlands	47.29	46.56	44.96	46.17	47.00	44.04	1.6	.1	.8
Norway	57.05	56.42	54.57	53.48	50.12	46.23	1.1	3.3	2.4
Portugal	45.20	46.45	–	38.43	44.33	44.50	–2.7	.5	.2
Romania	46.95	43.02	34.71	40.64	42.66	42.92	9.1	2.4	1.0
Spain	50.92	49.02	46.36	47.47	48.58	44.28	3.9	1.2	1.6
Sweden	48.20	48.20	45.56	45.96	46.67	43.34	*	.8	1.2
Turkey	44.54	43.28	41.28	42.58	45.54	44.15	2.9	–.5	.1
United Kingdom	49.08	47.22	45.15	46.64	47.72	44.27	3.9	.7	1.1
Yugoslavia, FR	–	–	–	48.31	45.04	42.43	–	–100.0	–100.0
Other[2]	57.43	56.04	38.00	–	41.89	40.43	2.5	8.2	4.0
Asia Total	**43.45**	**42.38**	**41.45**	**43.81**	**45.39**	**46.00**	**2.5**	**–1.1**	**–.6**
China (Taiwan)	45.24	44.48	42.48	44.86	45.63	42.15	1.7	–.2	.8
Israel	40.91	40.91	–	–	40.13	–	*	.5	–
Japan	42.19	41.14	40.57	43.24	44.98	46.40	2.5	–1.6	–1.0
Korea, Republic of	46.08	45.98	44.00	45.67	47.13	44.82	.2	–.6	.3
Other[2]	59.36	–	–	45.13	–	54.43	–	–	1.0
Africa Total	**50.87**	**48.52**	**43.95**	**45.25**	**46.29**	**43.20**	**4.8**	**2.4**	**1.8**
Algeria	50.23	47.80	43.24	44.32	46.35	43.72	5.1	2.0	1.5
Egypt	53.38	49.38	43.14	44.86	46.09	42.08	8.1	3.7	2.7
Morocco	30.30	–	–	–	34.22	–	–	–3.0	–
South Africa, Rep of	49.55	47.38	45.67	46.87	47.79	48.25	4.6	.9	.3
Other[2]	–	–	–	40.53	–	40.82	–	–	–100.0
Total[3]	**45.40**	**44.24**	**42.75**	**44.09**	**45.38**	**44.40**	**2.6**	*****	**.2**
U.S. Total[4]	**45.49**	**44.30**	**42.77**	**44.11**	**45.41**	**44.49**	**2.7**	*****	**.2**

1 Based on the U.S. - Canada Free Trade Agreement, as of January 1990, the U.S. Department of Commerce began reporting statistics on U.S. exports to Canada based on information on imports provided monthly by the Canadian government.

2 Includes countries with exports less than or equal to 50,000 short tons in 1995.

3 The average prices presented in this table, with the exception of U.S. Total, are considered to be representative prices for coal exports and fall within the range of $20 to $60 per short ton, inclusively.

4 U.S. Total is the average price of all coal exports.

* Data round to zero.

Note: Average price is based on the free alongside ship (f.a.s.) value.

Source: U.S. Department of Commerce, Bureau of the Census, ''Monthly Report EM 545.''

Table 102. Average Real Price of U.S. Metallurgical Coal Exports by Destination, 1987, 1992-1996

(Real Dollars per Short Ton)

Continent and Country of Destination	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
North America Total	**$33.53**	**$34.62**	**$33.44**	**$35.12**	**$36.39**	**$53.58**	**–3.1**	**–2.0**	**–5.1**
Canada[1]	32.81	33.97	32.96	34.76	36.31	53.72	–3.4	–2.5	–5.3
Mexico	43.17	43.59	42.46	44.03	47.95	–	–1.0	–2.6	–
Other[2]	–	–	–	–	–	46.65	–	–	–100.0
South America Total	**40.67**	**40.58**	**40.31**	**42.80**	**45.65**	**52.94**	**.2**	**–2.8**	**–2.9**
Argentina	42.73	40.46	40.57	42.52	45.45	52.07	5.6	–1.5	–2.2
Brazil	40.78	40.79	40.29	42.83	45.65	53.01	*	–2.8	–2.9
Chile	27.59	28.13	–	–	47.40	55.32	–1.9	–12.6	–7.4
Other[2]	46.27	–	–	–	–	–	–	–	–
Europe Total	**43.46**	**42.77**	**42.48**	**44.47**	**46.61**	**52.56**	**1.6**	**–1.7**	**–2.1**
Belgium & Luxembourg	44.37	42.72	42.97	44.78	47.02	51.24	3.9	–1.4	–1.6
Bulgaria	39.53	40.93	40.16	40.93	41.70	–	–3.4	–1.3	–
Denmark	–	–	–	35.37	–	–	–	–	–
Finland	40.30	39.64	40.37	38.60	40.81	49.47	1.7	–.3	–2.3
France	42.96	41.90	42.29	44.02	44.45	52.23	2.5	–.8	–2.1
Germany, FR	45.46	44.16	43.74	45.00	45.79	52.35	2.9	–.2	–1.5
Ireland	–	–	–	–	–	50.11	–	–	–100.0
Italy	43.66	43.32	43.21	44.76	47.54	53.39	.8	–2.1	–2.2
Netherlands	43.11	43.27	42.86	45.00	47.00	53.00	–.4	–2.1	–2.3
Norway	52.01	52.44	52.02	52.12	50.12	55.63	–.8	.9	–.7
Portugal	41.21	43.17	–	37.46	44.33	53.55	–4.5	–1.8	–2.9
Romania	42.80	39.99	33.09	39.61	42.66	51.65	7.0	.1	–2.1
Spain	46.42	45.56	44.19	46.27	48.58	53.29	1.9	–1.1	–1.5
Sweden	43.93	44.80	43.43	44.80	46.67	52.15	–1.9	–1.5	–1.9
Turkey	40.60	40.22	39.35	41.51	45.54	53.13	.9	–2.8	–2.9
United Kingdom	44.74	43.88	43.04	45.46	47.72	53.27	2.0	–1.6	–1.9
Yugoslavia, FR	–	–	–	47.08	45.04	51.05	–	–100.0	–100.0
Other[2]	52.35	52.09	36.23	–	41.89	48.65	.5	5.7	.8
Asia Total	**39.61**	**39.39**	**39.52**	**42.70**	**45.39**	**55.35**	**.6**	**–3.3**	**–3.6**
China (Taiwan)	41.24	41.34	40.50	43.73	45.63	50.72	–.2	–2.5	–2.3
Israel	37.30	38.02	–	–	40.13	–	–1.9	–1.8	–
Japan	38.46	38.23	38.67	42.15	44.98	55.84	.6	–3.8	–4.0
Korea, Republic of	42.00	42.74	41.94	44.52	47.13	53.94	–1.7	–2.8	–2.7
Other[2]	54.11	–	–	43.99	–	65.50	–	–	–2.1
Africa Total	**46.37**	**45.09**	**41.89**	**44.11**	**46.29**	**51.98**	**2.8**	*****	**–1.3**
Algeria	45.79	44.42	41.22	43.20	46.35	52.61	3.1	–.3	–1.5
Egypt	48.66	45.89	41.12	43.73	46.09	50.64	6.0	1.4	–.4
Morocco	27.62	–	–	–	34.22	–	–	–5.2	–
South Africa, Rep of	45.16	44.04	43.53	45.69	47.79	58.06	2.5	–1.4	–2.8
Other[2]	–	–	–	39.51	–	49.13	–	–	–100.0
Total[3]	**41.39**	**41.12**	**40.75**	**42.98**	**45.38**	**53.43**	**.6**	**–2.3**	**–2.8**
U.S. Total[4]	**41.46**	**41.17**	**40.77**	**42.99**	**45.41**	**53.54**	**.7**	**–2.2**	**–2.8**

1 Based on the U.S. - Canada Free Trade Agreement, as of January 1990, the U.S. Department of Commerce began reporting statistics on U.S. exports to Canada based on information on imports provided monthly by the Canadian government.

2 Includes countries with exports less than or equal to 50,000 short tons in 1995.

3 The average prices presented in this table, with the exception of U.S. Total, are considered to be representative prices for coal exports and fall within the range of $20 to $60 (nominal) per short ton, inclusively.

4 U.S. Total is the average price of all coal exports.

* Data round to zero.

Notes: Real prices are in 1992 dollars, calculated using implicit Gross Domestic Product price deflators. See Appendix D, Table D3. Average prices are based on the free alongside ship (f.a.s.) value.

Source: U.S. Department of Commerce, Bureau of the Census, ''Monthly Report EM 545.''

Table 103. Average Price of U.S. Steam Coal Exports by Destination, 1987, 1992-1996

(Nominal Dollars per Short Ton)

Continent and Country of Destination	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
North America Total	**$29.41**	**$31.06**	**$30.09**	**$31.68**	**$31.41**	**$38.83**	**–5.3**	**–1.6**	**–3.0**
Canada[1]	28.06	30.46	29.97	31.50	31.33	38.83	–7.9	–2.7	–3.5
Jamaica	34.78	32.67	33.22	28.44	26.82	–	6.5	6.7	–
Mexico	36.21	35.60	41.42	40.40	41.59	39.20	1.7	–3.4	–.9
Other[2]	39.65	39.04	36.98	36.80	36.54	40.02	1.6	2.1	–.1
South America Total	**34.94**	**35.66**	**36.52**	**40.05**	**41.06**	**45.42**	**–2.0**	**–3.9**	**–2.9**
Argentina	40.53	36.09	33.11	37.81	30.13	39.98	12.3	7.7	.1
Brazil	40.57	34.81	–	40.61	42.95	44.22	16.5	–1.4	–.9
Chile	32.76	32.96	34.47	46.78	40.96	–	–.6	–5.4	–
Other[2]	39.16	43.42	40.88	39.46	31.19	50.88	–9.8	5.8	–2.9
Europe Total	**33.71**	**34.33**	**35.01**	**36.50**	**36.44**	**39.30**	**–1.8**	**–1.9**	**–1.7**
Belgium & Luxembourg	36.69	35.07	33.49	34.09	36.35	35.65	4.6	.2	.3
Bulgaria	50.55	–	41.40	41.51	–	–	–	–	–
Denmark	29.30	29.37	29.23	34.34	32.69	33.01	–.2	–2.7	–1.3
Finland	35.23	35.53	35.47	40.85	–	–	–.9	–	–
France	36.14	35.13	38.11	31.83	33.64	36.50	2.9	1.8	–.1
Germany, FR	31.92	33.31	40.67	34.19	35.82	38.06	–4.2	–2.8	–1.9
Ireland	37.35	36.07	33.82	35.84	36.81	43.72	3.6	.4	–1.7
Italy	41.20	41.70	38.30	40.26	41.32	38.15	–1.2	–.1	.8
Netherlands	32.94	36.45	35.95	40.21	39.24	42.04	–9.6	–4.3	–2.7
Norway	–	–	–	–	–	57.76	–	–	–100.0
Portugal	35.60	36.28	36.25	37.62	40.38	42.62	–1.9	–3.1	–2.0
Romania	–	39.08	40.63	36.29	–	–	–100.0	–	–
Spain	22.14	21.37	21.19	25.21	28.38	30.45	3.6	–6.0	–3.5
Sweden	39.21	48.54	–	–	34.53	–	–19.2	3.2	–
Turkey	41.28	30.98	–	40.84	40.72	–	33.2	.3	–
United Kingdom	28.82	30.63	42.71	41.26	39.34	35.22	–5.9	–7.5	–2.2
Yugoslavia, FR	–	38.06	–	29.03	22.35	50.42	–100.0	–100.0	–100.0
Other[2]	34.56	40.69	40.92	40.67	42.07	50.08	–15.1	–4.8	–4.0
Asia Total	**35.84**	**34.63**	**35.18**	**36.52**	**38.27**	**38.53**	**3.5**	**–1.6**	**–.8**
China (Taiwan)	35.33	35.66	38.28	39.01	40.63	39.70	–.9	–3.4	–1.3
Israel	35.12	34.63	33.23	34.79	38.89	36.56	1.4	–2.5	–.4
Japan	36.31	35.03	33.57	35.45	35.98	37.48	3.6	.2	–.3
Korea, Republic of	35.32	32.01	32.56	34.34	37.24	36.26	10.3	–1.3	–.3
Other[2]	38.26	30.41	37.24	37.31	37.06	39.11	25.8	.8	–.2
Oceania & Australia Total	**40.71**	**39.87**	**39.99**	**34.46**	**34.50**	**38.13**	**2.1**	**4.2**	**.7**
Other[2]	40.71	39.87	39.99	34.46	34.50	38.13	2.1	4.2	.7
Africa Total	**34.02**	**33.01**	**35.12**	**33.86**	**33.78**	**35.55**	**3.1**	**.2**	**–.5**
Egypt	40.78	40.81	40.89	40.88	39.92	58.65	–.1	.5	–3.9
Morocco	34.01	33.00	35.03	33.86	33.77	35.55	3.1	.2	–.5
South Africa, Rep of	–	39.80	–	–	–	–	–100.0	–	–
Total[3]	**33.51**	**33.89**	**34.03**	**35.67**	**35.57**	**38.91**	**–1.1**	**–1.5**	**–1.6**
U.S. Total[4]	**34.09**	**34.51**	**34.34**	**36.03**	**35.73**	**39.60**	**–1.2**	**–1.2**	**–1.6**

1 Based on the U.S. - Canada Free Trade Agreement, as of January 1990, the U.S. Department of Commerce began reporting statistics on U.S. exports to Canada based on information on imports provided monthly by the Canadian government.

2 Includes countries with exports less than or equal to 50,000 short tons in 1995.

3 The average prices presented in this table, with the exception of U.S. Total, are considered to be representative prices for coal exports and fall within the range of $20 to $60 per short ton, inclusively.

4 U.S. Total is the average price of all coal exports.

Notes: Average price is based on the free alongside ship (f.a.s.) value. Steam coal includes bituminous, subbituminous, lignite, and anthracite.

Source: U.S. Department of Commerce, Bureau of the Census, ''Monthly Report EM 545.''

Table 104. Average Real Price of U.S. Steam Coal Exports by Destination, 1987, 1992-1996

(Real Dollars per Short Ton)

Continent and Country of Destination	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
North America Total	**$26.81**	**$28.87**	**$28.69**	**$30.87**	**$31.41**	**$46.73**	**–7.1**	**–3.9**	**–6.0**
Canada[1]	25.58	28.31	28.57	30.70	31.33	46.73	–9.7	–4.9	–6.5
Jamaica	31.71	30.36	31.67	27.72	26.82	–	4.4	4.3	–
Mexico	33.00	33.09	39.48	39.37	41.59	47.17	–.3	–5.6	–3.9
Other[2]	36.14	36.28	35.26	35.87	36.54	48.16	–.4	–.3	–3.1
South America Total	**31.85**	**33.14**	**34.81**	**39.04**	**41.06**	**54.65**	**–3.9**	**–6.1**	**–5.8**
Argentina	36.95	33.54	31.56	36.85	30.13	48.11	10.1	5.2	–2.9
Brazil	36.99	32.36	–	39.58	42.95	53.21	14.3	–3.7	–3.9
Chile	29.86	30.63	32.86	45.59	40.96	–	–2.5	–7.6	–
Other[2]	35.69	40.36	38.97	38.46	31.19	61.23	–11.5	3.4	–5.8
Europe Total	**30.73**	**31.90**	**33.38**	**35.57**	**36.44**	**47.29**	**–3.7**	**–4.2**	**–4.7**
Belgium & Luxembourg	33.45	32.59	31.92	33.23	36.35	42.90	2.6	–2.0	–2.7
Bulgaria	46.08	–	39.46	40.46	–	–	–	–	–
Denmark	26.71	27.29	27.86	33.47	32.69	39.72	–2.1	–4.9	–4.3
Finland	32.11	33.02	33.81	39.81	–	–	–2.8	–	–
France	32.94	32.65	36.33	31.02	33.64	43.92	.9	–.5	–3.1
Germany, FR	29.10	30.96	38.77	33.33	35.82	45.81	–6.0	–5.0	–4.9
Ireland	34.05	33.52	32.24	34.93	36.81	52.61	1.6	–1.9	–4.7
Italy	37.55	38.76	36.51	39.24	41.32	45.91	–3.1	–2.4	–2.2
Netherlands	30.03	33.88	34.27	39.19	39.24	50.59	–11.4	–6.5	–5.6
Norway	–	–	–	–	–	69.51	–	–	–100.0
Portugal	32.45	33.72	34.56	36.67	40.38	51.29	–3.8	–5.3	–4.9
Romania	–	36.32	38.74	35.37	–	–	–100.0	–	–
Spain	20.19	19.86	20.20	24.57	28.38	36.64	1.6	–8.2	–6.4
Sweden	35.74	45.11	–	–	34.53	–	–20.8	.9	–
Turkey	37.63	28.80	–	39.80	40.72	–	30.7	–1.9	–
United Kingdom	26.27	28.47	40.71	40.22	39.34	42.38	–7.7	–9.6	–5.2
Yugoslavia, FR	–	35.37	–	28.29	22.35	60.67	–100.0	–100.0	–100.0
Other[2]	31.51	37.82	39.01	39.64	42.07	60.27	–16.7	–7.0	–6.9
Asia Total	**32.67**	**32.18**	**33.54**	**35.59**	**38.27**	**46.36**	**1.5**	**–3.9**	**–3.8**
China (Taiwan)	32.21	33.14	36.49	38.02	40.63	47.77	–2.8	–5.6	–4.3
Israel	32.01	32.18	31.68	33.91	38.89	44.00	–.5	–4.8	–3.5
Japan	33.10	32.55	32.00	34.55	35.98	45.10	1.7	–2.1	–3.4
Korea, Republic of	32.20	29.75	31.04	33.47	37.24	43.63	8.2	–3.6	–3.3
Other[2]	34.87	28.26	35.50	36.37	37.06	47.06	23.4	–1.5	–3.3
Oceania & Australia Total	**37.11**	**37.05**	**38.12**	**33.59**	**34.50**	**45.89**	**.1**	**1.8**	**–2.3**
Other[2]	37.11	37.05	38.12	33.59	34.50	45.89	.1	1.8	–2.3
Africa Total	**31.01**	**30.68**	**33.48**	**33.01**	**33.78**	**42.78**	**1.1**	**–2.1**	**–3.5**
Egypt	37.17	37.93	38.98	39.85	39.92	70.58	–2.0	–1.8	–6.9
Morocco	31.01	30.67	33.40	33.00	33.77	42.78	1.1	–2.1	–3.5
South Africa, Rep of	–	36.99	–	–	–	–	–100.0	–	–
Total[3]	**30.55**	**31.49**	**32.44**	**34.76**	**35.57**	**46.82**	**–3.0**	**–3.7**	**–4.6**
U.S. Total[4]	**31.08**	**32.08**	**32.74**	**35.12**	**35.73**	**47.65**	**–3.1**	**–3.4**	**–4.6**

1 Based on the U.S. - Canada Free Trade Agreement, as of January 1990, the U.S. Department of Commerce began reporting statistics on U.S. exports to Canada based on information on imports provided monthly by the Canadian government.

2 Includes countries with exports less than or equal to 50,000 short tons in 1995.

3 The average prices presented in this table, with the exception of U.S. Total, are considered to be representative prices for coal exports and fall within the range of $20 to $60 (nominal) per short ton, inclusively.

4 U.S. Total is the average price of all coal exports.

Notes: Real prices are in 1992 dollars, calculated using implicit Gross Domestic Product price deflators. See Appendix D, Table D3. Average prices are based on the free alongside ship (f.a.s.) value. Steam coal includes bituminous, subbituminous, lignite, and anthracite.

Source: U.S. Department of Commerce, Bureau of the Census, ''Monthly Report EM 545.''

Coal Quality and Emissions

As of January 1, 1995, recoverable U.S. coal reserves were estimated to total 274 billion short tons (Table 105). Reserves of low sulfur coal (defined as coal containing from 0 to 0.60 pounds of sulfur per million Btu) are estimated to represent 37 percent of all reserves, with medium sulfur coal (containing 0.61 to 1.67 pounds sulfur per million Btu) and high sulfur coal (containing more than 1.67 pounds sulfur per million Btu) each accounting for 32 percent of total reserves.

Compared with 1995, the average sulfur content of coal delivered to the Nation's electric utilities during 1996 increased 1.6 percent to 1.10 percent sulfur by weight, while the average ash content remained about the same at 9.22 percent by weight (Table 106). The average heat content of electric utility coal totaled 10,263 Btu per pound.

By comparison, the average heat content of coal delivered to manufacturing and coke plants during 1996 increased slightly (0.3 percent) to 11,405 Btu per pound, while the average ash content and average sulfur content of industrial coal was 7.58 percent and 1.17 percent, respectively.

Table 105. Estimate of Recoverable Reserves of Coal by Sulfur Range, State, and Mine Type

(Million Short Tons Remaining as of January 1, 1995)

State and Type of Mining	Sulfur Content (pounds of sulfur per million Btu)						Total
	< = 0.40	0.41 - 0.60	0.61 - 0.83	0.84 - 1.67	1.68 - 2.50	> 2.50	
Alabama	–	**413**	**374**	**2,036**	**194**	–	**3,018**
Surface	–	255	269	1,670	137	–	2,332
Underground	–	158	105	366	57	–	686
Alaska, Southern	**2,453**	**94**	–	–	–	–	**2,548**
Surface	386	41	–	–	–	–	427
Underground	2,067	53	–	–	–	–	2,120
Alaska, Northern	–	–	–	–	–	–	–
Surface	–	–	–	–	–	–	–
Underground	–	–	–	–	–	–	–
Arizona	–	**121**	–	–	–	–	**121**
Surface	–	69	–	–	–	–	69
Underground	–	51	–	–	–	–	51
Arkansas[1]	–	**8**	**163**	**44**	**6**	**7**	**228**
Surface	–	2	73	24	1	1	101
Underground	–	7	90	20	5	6	127
Colorado[1]	**3,674**	**2,316**	**3,684**	**326**	**96**	–	**10,096**
Surface	273	120	3,325	41	14	–	3,772
Underground	3,400	2,196	359	285	82	–	6,323
Georgia	**1**	**1**	*	*	*	*	**2**
Surface	*	*	*	*	*	*	1
Underground	*	*	*	*	*	*	1
Idaho	*	**1**	**1**	**1**	–	–	**2**
Surface	–	–	–	–	–	–	–
Underground	*	1	1	1	–	–	2
Illinois	**5**	**113**	**350**	**1,456**	**1,567**	**30,477**	**33,969**
Surface	–	–	1	43	291	9,031	9,366
Underground	5	113	349	1,413	1,276	21,445	24,603
Indiana	–	**312**	**185**	**674**	**1,125**	**2,033**	**4,329**
Surface	–	63	27	107	149	307	654
Underground	–	248	158	567	976	1,727	3,675
Iowa	–	–	–	–	**407**	**720**	**1,127**
Surface	–	–	–	–	320	–	320
Underground	–	–	–	–	87	720	807
Kansas	–	–	–	–	**226**	**457**	**683**
Surface	–	–	–	–	226	457	683
Underground	–	–	–	–	–	–	–
Kentucky, Eastern	**175**	**2,077**	**1,434**	**1,769**	**860**	**657**	**6,973**
Surface	140	1,657	1,144	1,412	686	525	5,563
Underground	35	420	290	358	174	133	1,410
Kentucky, Western	–	–	–	**156**	**2,723**	**6,406**	**9,285**
Surface	–	–	–	125	926	1,276	2,327
Underground	–	–	–	32	1,798	5,130	6,959
Louisiana	–	–	–	**349**	–	–	**349**
Surface	–	–	–	349	–	–	349
Underground	–	–	–	–	–	–	–
Maryland	–	**31**	**58**	**118**	**205**	–	**412**
Surface	–	3	8	13	32	–	56
Underground	–	28	50	105	173	–	356
Michigan	–	–	**8**	**23**	**16**	**11**	**59**
Surface	–	–	1	2	1	*	3
Underground	–	–	8	21	16	11	55
Missouri	–	–	–	–	**170**	**3,681**	**3,851**
Surface	–	–	–	–	150	3,012	3,162
Underground	–	–	–	–	20	670	689
Montana	**33,577**	**16,828**	**16,776**	**4,815**	**2,022**	**1,371**	**75,389**
Surface	18,014	6,995	9,499	2,444	1,610	906	39,466
Underground	15,563	9,833	7,277	2,371	413	466	35,923
New Mexico[1]	**62**	**2,638**	**1,890**	**3,625**	–	–	**8,215**
Surface	37	1,229	1,348	2,587	–	–	5,202
Underground	25	1,409	542	1,038	–	–	3,013
North Carolina	–	–	*	**2**	**2**	**1**	**5**
Surface	–	–	–	–	–	–	–
Underground	–	–	*	2	2	1	5
North Dakota	**436**	**750**	**1,375**	**3,438**	**857**	**369**	**7,224**
Surface	436	750	1,375	3,438	857	369	7,224
Underground	–	–	–	–	–	–	–
Ohio	**82**	**169**	**335**	**1,049**	**2,636**	**7,447**	**11,718**
Surface	20	96	168	416	863	2,304	3,867
Underground	62	73	168	634	1,773	5,143	7,852

See footnotes at end of table.

Table 105. Estimate of Recoverable Reserves of Coal by Sulfur Range, State, and Mine Type (Continued)

(Million Short Tons Remaining as of January 1, 1995)

State and Type of Mining	Sulfur Content (pounds of sulfur per million Btu)						Total
	< = 0.40	0.41 - 0.60	0.61 - 0.83	0.84 - 1.67	1.68 - 2.50	> 2.50	
Oklahoma	–	**220**	**123**	**178**	**114**	**181**	**816**
Surface	–	66	25	34	33	82	240
Underground	–	154	98	145	80	100	577
Oregon	**4**	**1**	**3**	–	**1**	**1**	**9**
Surface	1	*	1	–	*	*	2
Underground	3	1	2	–	1	1	7
Pennsylvania, Anthracite	**180**	**468**	**96**	**17**	**2**	*****	**763**
Surface	85	263	62	11	1	*	422
Underground	95	205	35	6	1	–	341
Pennsylvania, Bituminous	–	**283**	**807**	**5,001**	**4,151**	**1,517**	**11,757**
Surface	–	22	64	307	227	135	756
Underground	–	260	742	4,694	3,923	1,381	11,001
South Dakota	–	–	**104**	**1**	**172**	–	**277**
Surface	–	–	104	1	172	–	277
Underground	–	–	–	–	–	–	–
Tennessee	–	**106**	**62**	**224**	**99**	–	**491**
Surface	–	39	23	93	40	–	195
Underground	–	67	38	131	59	–	295
Texas	–	–	**590**	**5,681**	**3,409**	**376**	**10,057**
Surface	–	–	590	5,681	3,409	376	10,057
Underground	–	–	–	–	–	–	–
Utah	**378**	**678**	**554**	**864**	**225**	**301**	**3,001**
Surface	8	32	19	85	35	34	212
Underground	370	646	535	780	190	267	2,788
Virginia[1]	**195**	**632**	**403**	**133**	–	–	**1,362**
Surface	43	197	161	46	–	–	447
Underground	152	435	241	87	–	–	915
Washington	**63**	**92**	**86**	**489**	–	–	**729**
Surface	–	–	–	54	–	–	54
Underground	63	92	86	434	–	–	675
West Virginia	**653**	**6,497**	**2,736**	**4,036**	**2,516**	**3,211**	**19,649**
Surface	116	1,464	568	447	180	107	2,881
Underground	537	5,034	2,168	3,589	2,337	3,104	16,769
Wyoming	**6,786**	**17,586**	**10,186**	**7,438**	**1,168**	**2,241**	**45,403**
Surface	4,434	8,822	4,134	2,314	527	2,208	22,439
Underground	2,352	8,764	6,052	5,123	641	33	22,964
U.S. Total	**48,723**	**52,434**	**42,380**	**43,943**	**24,968**	**61,466**	**273,913**
Surface	23,993	22,185	22,987	21,742	10,888	21,130	122,925
Underground	24,730	30,249	19,393	22,201	14,080	40,336	150,988

[1] Data include minor amounts of anthracite (all occurring in heat content categories greater than 23.00 million short tons) as follows: Arkansas 52.2, Colorado 13.4, New Mexico 1.2, and Virginia 70.5, expressed in million short tons.

* Data round to zero.

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration, *U.S. Coal Reserves: A Review and Update* (DOE/EIA-0529(95)), August, 1996.

Table 106. Average Quality of Coal Received at Electric Utilities by Census Division and State, 1987, 1992-1996

Census Division and State and Quality[1]	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
New England									
Btu	12,793	12,848	12,897	13,033	13,120	13,185	*	–1	*
Sulfur	.85	.84	.98	1.11	1.18	1.29	0.9	–7.8	–4.5
Ash	7.75	7.48	7.49	7.62	7.66	7.77	3.6	.3	*
Connecticut									
Btu	13,100	13,110	13,094	13,144	13,167	13,134	*	*	*
Sulfur	.54	.56	.54	.55	.55	.49	–3.4	–.5	1.3
Ash	7.14	7.05	7.38	6.95	6.25	6.74	1.3	3.4	.6
Massachusetts									
Btu	12,633	12,698	12,814	12,951	13,070	13,128	–1	–1	*
Sulfur	.71	.71	.91	1.03	1.17	1.18	–.3	–11.7	–5.5
Ash	8.07	7.83	7.85	8.10	8.26	8.07	3.1	–.5	*
New Hampshire									
Btu	13,146	13,111	13,032	13,179	13,260	13,416	*	*	*
Sulfur	1.56	1.38	1.52	1.62	1.61	2.20	13.2	–.7	–3.7
Ash	7.02	6.74	6.40	6.75	6.52	7.44	4.1	1.9	–.6
Middle Atlantic									
Btu	12,460	12,474	12,509	12,556	12,555	12,401	*	*	*
Sulfur	2.01	2.03	2.01	1.96	1.99	2.00	–.8	.2	.1
Ash	11.80	11.93	11.52	11.29	11.45	12.64	–1.1	.8	–.8
New Jersey									
Btu	12,993	13,282	13,341	13,397	13,465	13,236	–2	–1	*
Sulfur	1.36	1.21	1.29	1.29	1.29	1.32	12.2	1.3	.3
Ash	9.02	7.51	7.44	7.21	6.84	8.05	20.1	7.2	1.3
New York									
Btu	13,013	13,051	12,959	12,914	12,978	12,787	*	*	*
Sulfur	1.80	1.79	1.71	1.55	1.65	1.84	.3	2.1	–.3
Ash	7.91	7.90	7.98	8.15	8.02	9.69	.2	–.3	–2.2
Pennsylvania									
Btu	12,321	12,315	12,368	12,443	12,399	12,276	*	*	*
Sulfur	2.09	2.12	2.11	2.07	2.12	2.07	–1.4	–.3	.1
Ash	12.72	12.97	12.49	12.11	12.56	13.48	–2.0	.3	–.6
East North Central									
Btu	10,611	10,676	10,837	10,885	11,005	11,151	–1	–1	–1
Sulfur	1.36	1.28	1.55	1.61	1.77	1.86	5.8	–6.4	–3.4
Ash	8.07	8.00	8.34	8.41	8.72	9.04	.8	–1.9	–1.3
Illinois									
Btu	9,878	9,970	10,181	10,362	10,666	10,698	–1	–2	–1
Sulfur	1.16	1.14	1.46	1.63	1.91	1.93	2.5	–11.6	–5.4
Ash	6.98	7.01	7.44	7.51	8.19	8.56	–.5	–3.9	–2.2
Indiana									
Btu	10,357	10,338	10,535	10,539	10,628	10,878	*	–1	–1
Sulfur	1.59	1.57	1.76	1.78	1.88	2.39	1.7	–4.0	–4.4
Ash	7.76	7.65	8.09	8.23	8.43	9.14	1.5	–2.0	–1.8
Michigan									
Btu	10,504	10,677	10,925	10,853	10,995	11,564	–2	–1	–1
Sulfur	.63	.63	.68	.68	.69	.76	*	–2.1	–2.0
Ash	6.59	6.66	6.97	6.61	6.76	6.97	–1.0	–.6	–.6
Ohio									
Btu	12,056	12,122	12,052	12,049	11,983	11,904	–1	*	*
Sulfur	2.08	1.89	2.34	2.39	2.57	2.44	9.9	–5.1	–1.8
Ash	11.01	10.84	10.91	11.01	11.24	11.39	1.5	–.5	–.4
Wisconsin									
Btu	9,222	9,351	9,565	9,490	9,725	9,630	–1	–1	*
Sulfur	.46	.46	.51	.49	.71	.85	–.7	–10.5	–6.6
Ash	5.74	6.03	6.27	6.11	6.18	6.47	–4.8	–1.8	–1.3
West North Central									
Btu	8,430	8,418	8,480	8,366	8,602	8,810	*	–1	*
Sulfur	.53	.54	.68	.63	.91	1.14	–1.0	–12.5	–8.1
Ash	6.38	6.41	6.82	6.74	7.18	7.84	–.4	–2.9	–2.2
Iowa									
Btu	8,658	8,678	8,783	8,660	8,867	9,152	*	–1	–1
Sulfur	.45	.49	.57	.52	.67	.86	–9.0	–9.8	–7.0
Ash	5.61	5.60	5.59	5.47	5.78	6.24	.2	–.7	–1.2

See footnotes at end of table.

Table 106. Average Quality of Coal Received at Electric Utilities by Census Division and State, 1987, 1992-1996 (Continued)

Census Division and State and Quality[1]	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
Kansas									
Btu	8,827	8,730	8,708	8,654	8,900	8,764	1	*	*
Sulfur	.49	.43	.49	.43	.49	.96	14.3	0.1	–7.2
Ash	5.52	5.46	5.63	5.19	5.74	7.52	1.1	–1.0	–3.4
Minnesota									
Btu	8,914	8,828	8,821	8,844	8,838	8,742	1	*	*
Sulfur	.45	.47	.46	.44	.45	.53	–3.9	*	–1.9
Ash	6.32	6.71	6.64	6.40	6.57	7.10	–5.8	–1.0	–1.3
Missouri									
Btu	9,063	9,216	9,718	9,860	10,321	10,598	–2	–3	–2
Sulfur	.58	.57	1.03	1.02	1.80	2.36	.3	–24.8	–14.5
Ash	5.62	5.69	6.65	6.54	7.71	9.37	–1.2	–7.6	–5.5
Nebraska									
Btu	8,599	8,594	8,571	8,561	8,553	8,601	*	*	*
Sulfur	.34	.33	.35	.35	.37	.35	2.1	–1.9	–.4
Ash	5.11	5.16	5.17	5.11	5.00	5.13	–1.1	.5	*
North Dakota									
Btu	6,597	6,585	6,593	6,570	6,558	6,601	*	*	*
Sulfur	.72	.74	.75	.74	.87	.71	–2.7	–4.6	.1
Ash	9.32	9.29	9.39	9.47	9.29	8.83	.3	.1	.6
South Dakota									
Btu	9,034	6,972	6,049	6,057	6,034	6,062	30	11	5
Sulfur	.52	.87	.91	.90	.92	.87	–40.7	–13.4	–5.6
Ash	6.66	4.96	8.81	8.82	9.34	8.22	34.3	–8.1	–2.3
South Atlantic									
Btu	12,285	12,324	12,362	12,465	12,461	12,461	*	*	*
Sulfur	1.27	1.27	1.33	1.39	1.52	1.53	.2	–4.4	–2.0
Ash	9.75	9.71	9.72	9.81	9.95	10.10	.4	–.5	–.4
Delaware									
Btu	13,020	13,085	12,954	13,027	13,064	13,065	*	*	*
Sulfur	1.01	1.00	.92	.94	1.03	1.01	1.2	–.5	*
Ash	8.72	8.56	9.09	9.08	8.83	8.72	1.9	–.3	*
Florida									
Btu	12,193	12,296	12,293	12,332	12,370	12,399	–1	*	*
Sulfur	1.55	1.47	1.60	1.57	1.68	1.85	5.5	–2.0	–1.9
Ash	7.96	8.09	8.19	8.04	8.33	8.74	–1.7	–1.1	–1.0
Georgia									
Btu	11,581	11,576	11,774	12,148	12,039	12,175	*	–1	–1
Sulfur	.83	.81	1.05	1.37	1.68	1.73	1.8	–16.2	–7.8
Ash	8.84	8.87	8.99	9.94	10.29	9.92	–.3	–3.7	–1.3
Maryland									
Btu	12,879	12,965	12,824	12,752	12,753	12,676	–1	*	*
Sulfur	1.11	1.06	1.16	1.31	1.36	1.47	5.0	–4.9	–3.1
Ash	9.49	9.32	9.91	10.02	10.47	10.99	1.8	–2.4	–1.6
North Carolina									
Btu	12,422	12,461	12,416	12,465	12,456	12,550	*	*	*
Sulfur	.89	.86	.95	.96	.92	.92	3.7	–.8	–.4
Ash	10.16	10.20	10.27	10.12	10.17	9.71	–.4	*	.5
South Carolina									
Btu	12,757	12,852	12,771	12,802	12,817	12,649	–1	*	*
Sulfur	1.21	1.19	1.21	1.17	1.14	1.22	1.9	1.4	–.1
Ash	8.90	8.53	8.87	8.92	8.77	9.50	4.3	.3	–.7
Virginia									
Btu	12,597	12,743	12,778	12,817	12,830	12,814	–1	*	*
Sulfur	.99	1.03	.99	1.00	1.03	.91	–3.6	–.9	.9
Ash	11.02	10.21	9.91	9.60	9.48	9.33	8.0	3.8	1.9
West Virginia									
Btu	12,378	12,418	12,468	12,489	12,524	24,792	*	*	–100
Sulfur	1.93	1.98	1.87	1.94	2.05	4.12	–2.5	–1.5	–99.1
Ash	11.78	11.88	11.50	11.61	11.32	23.77	–.8	1.0	–99.8
East South Central									
Btu	11,714	11,808	11,909	11,988	11,933	11,886	–1	*	*
Sulfur	1.86	1.87	1.88	1.91	1.99	2.09	–.6	–1.7	–1.3
Ash	10.60	10.58	10.66	10.92	10.70	11.16	.2	–.2	–.6
Alabama									
Btu	11,794	11,861	12,088	12,092	12,061	12,223	–1	–1	*
Sulfur	1.24	1.20	1.30	1.33	1.43	1.52	3.3	–3.6	–2.3
Ash	10.71	10.74	11.54	11.79	11.80	11.75	–.3	–2.4	–1.0

See footnotes at end of table.

Table 106. Average Quality of Coal Received at Electric Utilities by Census Division and State, 1987, 1992-1996 (Continued)

Census Division and State and Quality[1]	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
Kentucky									
Btu	11,536	11,625	11,683	11,697	11,620	11,496	–1	*	*
Sulfur	2.47	2.42	2.34	2.39	2.44	2.59	2.1	0.3	–0.5
Ash	12.15	11.91	11.35	11.64	11.60	12.26	2.0	1.2	–.1
Mississippi									
Btu	11,023	11,221	11,312	12,338	12,507	12,674	–2	–3	–2
Sulfur	.93	1.04	1.02	1.41	1.69	1.36	–10.5	–13.9	–4.1
Ash	6.44	7.81	7.88	8.52	8.31	7.74	–17.5	–6.2	–2.0
Tennessee									
Btu	12,062	12,130	12,186	12,268	12,182	11,979	–1	*	*
Sulfur	1.87	1.97	2.00	1.92	2.02	2.05	–5.3	–1.9	–1.0
Ash	8.89	8.83	8.94	9.14	8.31	9.63	.7	1.7	–.9
West South Central									
Btu	7,798	7,733	7,709	7,646	7,648	7,657	1	*	*
Sulfur	.60	.64	.62	.64	.65	.60	–6.1	–1.9	.1
Ash	9.19	9.53	9.50	10.06	10.25	10.15	–3.6	–2.7	–1.1
Arkansas									
Btu	8,703	8,687	8,707	8,665	8,724	8,682	*	*	*
Sulfur	.33	.33	.32	.32	.32	.32	.4	.3	.1
Ash	5.20	5.10	4.92	5.06	5.12	5.47	1.9	.3	–.6
Louisiana									
Btu	8,171	8,110	8,136	8,092	8,122	8,160	1	*	*
Sulfur	.57	.58	.51	.52	.50	.49	–2.6	3.3	1.7
Ash	7.13	7.42	7.16	7.13	7.20	7.59	–4.0	–.3	–.7
Oklahoma									
Btu	8,600	8,557	8,573	8,621	8,700	8,851	1	*	*
Sulfur	.33	.36	.35	.37	.42	.44	–9.3	–6.0	–3.1
Ash	4.93	5.20	5.07	5.21	5.24	5.46	–5.3	–1.5	–1.1
Texas									
Btu	7,440	7,346	7,346	7,284	7,234	7,242	1	1	*
Sulfur	.71	.77	.73	.75	.76	.68	–7.2	–1.8	.4
Ash	10.98	11.50	11.31	11.95	12.33	11.97	–4.5	–2.9	–.9
Mountain									
Btu	9,741	9,736	9,755	9,751	9,722	9,820	*	*	*
Sulfur	.55	.54	.55	.54	.55	.54	1.4	.2	.1
Ash	11.37	11.16	11.11	11.19	11.15	10.93	1.9	.5	.4
Arizona									
Btu	10,232	10,274	10,281	10,271	10,303	10,608	*	*	*
Sulfur	.55	.53	.51	.49	.51	.51	4.7	2.0	.8
Ash	12.41	12.13	11.97	12.08	12.19	11.29	2.3	.5	1.1
Colorado									
Btu	9,858	9,895	9,946	9,888	9,920	9,842	*	*	*
Sulfur	.39	.39	.40	.38	.38	.37	–.7	.4	.6
Ash	6.94	7.16	7.12	6.97	7.01	6.94	–3.0	–.2	*
Montana									
Btu	8,439	8,520	8,500	8,496	8,576	8,590	–1	*	*
Sulfur	.68	.68	.66	.65	.66	.62	.2	.8	1.1
Ash	9.00	9.15	9.05	8.99	8.92	8.82	–1.6	.2	.2
Nevada									
Btu	11,140	11,075	11,291	11,012	11,051	11,182	1	*	*
Sulfur	.49	.48	.49	.49	.49	.51	1.1	–.3	–.5
Ash	9.71	9.70	9.57	9.73	9.67	9.51	.1	.1	.2
New Mexico									
Btu	9,116	9,033	9,043	8,992	9,013	9,049	1	*	*
Sulfur	.80	.80	.82	.81	.81	.78	–.3	–.4	.3
Ash	22.78	22.51	22.44	22.77	22.49	21.64	1.2	.3	.6
Utah									
Btu	11,513	11,550	11,491	11,489	11,384	11,618	*	*	*
Sulfur	.47	.47	.47	.48	.47	.51	–1.3	*	–.9
Ash	10.90	10.27	10.25	10.47	11.24	9.91	6.0	–.8	1.0
Wyoming									
Btu	8,716	8,738	8,766	8,779	8,840	8,778	*	*	*
Sulfur	.52	.50	.52	.51	.52	.52	5.0	.2	*
Ash	8.12	8.06	8.00	7.78	7.54	7.63	.7	1.8	.7

See footnotes at end of table.

Table 106. Average Quality of Coal Received at Electric Utilities by Census Division and State, 1987, 1992-1996 (Continued)

Census Division and State and Quality[1]	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
Pacific									
Btu	8,066	8,380	8,543	8,283	8,550	8,134	–4	–1	*
Sulfur	.64	.62	.57	.63	.59	.66	3.4	1.8	–0.3
Ash	13.62	11.79	11.14	12.58	11.39	13.67	15.6	4.6	*
Oregon									
Btu	8,782	8,882	8,937	8,801	9,642	8,484	–1	–2	*
Sulfur	.26	.30	.37	.38	.40	.32	–13.6	–10.0	–2.2
Ash	4.79	5.52	5.89	4.98	4.42	4.68	–13.2	2.0	.2
Washington									
Btu	7,936	8,267	8,400	8,125	8,189	8,104	–4	–1	*
Sulfur	.71	.69	.65	.71	.66	.69	2.7	1.8	.3
Ash	15.24	13.20	13.04	14.90	13.69	14.43	15.4	2.7	.6
U.S. Total									
Btu	10,263	10,248	10,338	10,315	10,395	10,569	*	*	*
Sulfur	1.10	1.08	1.17	1.18	1.29	1.38	1.6	–4.0	–2.5
Ash	9.22	9.23	9.36	9.55	9.71	10.00	–.2	–1.3	–.9

1 Quality units are: Btu (per pound); sulfur (percent by weight); and ash (percent by weight).
* Data round to zero.
Source: Federal Energy Regulatory Commission, FERC Form 423, ''Monthly Report of Cost and Quality of Fuels for Electric Plants.''

Table 107. Average Quality of Coal Received at Manufacturing and Coke Plants by Census Division and State, 1993-1996

Census Division and State and Quality[1]	1996	1995	1994	1993	Percent Change 1995-1996
New England					
Btu	13,028	13,410	13,383	13,232	–2.8
Sulfur	1.03	1.32	.72	1.20	–21.8
Ash	7.35	6.99	5.86	6.87	5.1
Maine					
Btu	12,935	13,392	13,162	13,062	–3.4
Sulfur	1.08	1.39	.71	1.29	–22.8
Ash	7.31	6.93	5.30	7.18	5.6
Massachusetts					
Btu	13,697	13,556	13,939	13,992	1.0
Sulfur	.74	.75	.73	.78	–1.3
Ash	7.65	7.55	7.26	5.48	1.3
Middle Atlantic					
Btu	12,780	12,559	12,549	12,367	1.8
Sulfur	1.20	1.15	1.14	1.06	4.3
Ash	7.12	7.11	6.95	7.37	.1
New Jersey					
Btu	12,474	12,575	12,515	11,685	–.8
Sulfur	1.36	.96	.93	.83	41.9
Ash	10.98	11.34	12.40	10.71	–3.2
New York[2]					
Btu	13,168	13,122	13,203	13,044	.3
Sulfur	1.41	1.29	1.34	1.69	9.6
Ash	6.84	7.20	6.69	7.73	–5.1
Pennsylvania[2]					
Btu	12,658	12,366	12,326	12,117	2.4
Sulfur	1.16	1.12	1.10	.99	3.3
Ash	7.17	7.09	7.00	7.30	1.1
East North Central					
Btu	11,990	12,022	11,947	11,956	–.3
Sulfur	1.52	1.46	1.52	2.40	4.2
Ash	7.34	7.59	7.61	6.98	–3.3
Illinois[2]					
Btu	11,332	11,290	11,387	11,372	.4
Sulfur	1.89	1.82	1.94	4.83	4.1
Ash	7.41	7.49	7.66	7.03	–1.1
Indiana[2]					
Btu	11,826	11,894	11,641	11,591	–.6
Sulfur	1.32	1.20	1.45	1.28	10.2
Ash	7.02	7.38	7.50	6.77	–4.8
Michigan[2]					
Btu	12,440	12,386	12,470	12,547	.4
Sulfur	.96	.96	1.02	1.05	–.7
Ash	6.80	7.60	7.82	6.98	–10.5
Ohio[2]					
Btu	12,415	12,424	12,429	12,476	–.1
Sulfur	1.82	1.69	1.60	1.40	7.9
Ash	8.27	7.79	7.66	7.10	6.2
Wisconsin					
Btu	12,330	12,450	11,873	11,745	–1.0
Sulfur	2.05	2.14	1.52	1.83	–4.3
Ash	7.72	8.40	7.30	7.25	–8.0
West North Central					
Btu	8,703	8,669	8,710	8,589	.4
Sulfur	.87	.89	.88	.90	–2.1
Ash	6.40	6.54	6.56	6.46	–2.2
Iowa					
Btu	10,373	10,332	10,480	10,344	.4
Sulfur	1.04	.96	.98	1.13	8.8
Ash	6.40	6.44	6.38	6.41	–.7
Kansas					
Btu	12,243	12,197	12,249	12,479	.4
Sulfur	3.07	3.41	3.11	3.14	–10.2
Ash	10.36	11.48	11.04	11.78	–9.8

See footnotes at end of table.

Table 107. Average Quality of Coal Received at Manufacturing and Coke Plants by Census Division and State, 1993-1996 (Continued)

Census Division and State and Quality[1]	1996	1995	1994	1993	Percent Change 1995-1996
Minnesota					
Btu	10,051	10,280	10,112	10,003	–2.2
Sulfur	.61	.56	.54	.51	9.6
Ash	5.08	4.95	5.15	4.56	2.6
Missouri[2]					
Btu	11,539	11,644	11,510	11,527	–.9
Sulfur	2.03	1.91	1.92	2.01	6.3
Ash	8.31	9.92	10.10	10.11	–16.2
Nebraska					
Btu	10,622	10,096	9,931	9,979	5.2
Sulfur	.36	.42	.40	.37	–14.6
Ash	8.92	5.73	5.95	5.20	55.6
North Dakota					
Btu	7,136	7,171	7,142	7,172	–.5
Sulfur	.61	.71	.71	.70	–14.1
Ash	5.97	6.08	6.14	6.16	–1.8
South Dakota					
Btu	9,849	9,504	9,418	8,159	3.6
Sulfur	.83	.86	.77	.39	–3.8
Ash	7.55	7.72	7.15	5.42	–2.1
South Atlantic					
Btu	12,972	12,992	13,043	12,973	–.1
Sulfur	1.09	1.10	1.15	1.12	–1.7
Ash	8.11	8.07	7.96	7.62	.4
Delaware					
Btu	13,381	13,483	13,300	13,087	–.8
Sulfur	1.75	1.87	1.89	2.00	–6.3
Ash	7.01	7.01	7.73	9.26	.1
Florida					
Btu	12,903	12,865	12,933	12,742	.3
Sulfur	.87	.91	.93	.97	–3.8
Ash	8.07	8.14	8.93	9.46	–.9
Georgia					
Btu	12,873	12,895	13,267	12,870	–.2
Sulfur	1.11	1.23	1.29	1.30	–9.3
Ash	8.79	8.78	8.90	7.73	.1
Maryland[2]					
Btu	12,411	12,598	12,330	12,422	–1.5
Sulfur	1.92	1.92	1.89	1.93	.1
Ash	14.19	14.52	10.90	13.32	–2.3
North Carolina					
Btu	13,243	13,250	13,188	13,321	*
Sulfur	.93	.97	.91	.92	–3.9
Ash	7.10	6.99	7.20	6.89	1.7
South Carolina					
Btu	13,076	13,051	12,994	12,955	.2
Sulfur	1.02	1.08	1.12	1.22	–5.6
Ash	8.09	8.24	7.95	8.67	–1.8
Virginia[2]					
Btu	12,982	13,067	13,215	13,193	–.6
Sulfur	1.04	1.05	1.05	.99	–1.2
Ash	7.97	7.75	7.44	7.20	2.9
West Virginia[2]					
Btu	12,809	12,765	12,780	12,721	.3
Sulfur	1.14	1.06	1.24	1.06	7.6
Ash	7.24	7.28	7.54	6.32	–.5
East South Central					
Btu	12,916	12,941	12,869	12,838	–.2
Sulfur	1.06	1.09	1.09	.74	–3.2
Ash	7.20	7.32	7.51	4.54	–1.6
Alabama[2]					
Btu	12,632	12,612	12,694	12,628	.2
Sulfur	.98	.94	.98	.71	4.8
Ash	6.90	7.07	7.27	4.25	–2.4
Kentucky[2]					
Btu	13,072	13,086	13,150	12,686	–.1
Sulfur	1.05	1.03	.99	.90	2.5
Ash	6.59	6.61	6.59	6.04	–.4

See footnotes at end of table.

Table 107. Average Quality of Coal Received at Manufacturing and Coke Plants by Census Division and State, 1993-1996 (Continued)

Census Division and State and Quality[1]	1996	1995	1994	1993	Percent Change 1995-1996
Mississippi					
Btu	11,911	11,897	11,786	12,013	0.1
Sulfur	1.41	1.41	1.44	2.52	.2
Ash	9.73	10.66	9.98	10.33	–8.7
Tennessee[2]					
Btu	13,103	13,160	12,958	13,059	–.4
Sulfur	1.14	1.35	1.32	1.08	–15.5
Ash	7.94	8.04	8.47	8.38	–1.1
West South Central					
Btu	9,176	9,116	8,925	9,143	.7
Sulfur	1.06	1.00	1.00	1.05	6.3
Ash	11.36	10.78	11.18	11.55	5.4
Arkansas					
Btu	12,474	12,573	12,646	12,850	–.8
Sulfur	2.03	2.02	2.10	1.97	.7
Ash	10.27	9.96	10.11	9.78	3.1
Louisiana					
Btu	12,627	9,292	9,051	9,255	35.9
Sulfur	1.27	.39	.35	.39	221.7
Ash	10.23	5.29	5.09	5.83	93.4
Oklahoma					
Btu	9,835	9,995	10,118	11,263	–1.6
Sulfur	.89	.72	.73	.89	24.7
Ash	5.97	5.60	6.18	6.86	6.6
Texas[2]					
Btu	8,757	8,690	8,447	8,585	.8
Sulfur	1.01	1.02	1.04	1.09	–1.0
Ash	12.37	12.20	12.72	12.98	1.3
Mountain					
Btu	10,699	10,698	10,601	10,443	*
Sulfur	.67	.71	.68	.56	–4.8
Ash	7.79	7.28	7.05	6.75	6.9
Arizona					
Btu	10,603	10,969	11,072	10,690	–3.3
Sulfur	.53	.54	.48	.46	–2.1
Ash	13.15	12.23	11.09	11.17	7.6
Colorado					
Btu	11,308	11,262	10,785	10,564	.4
Sulfur	.54	.61	.58	.54	–12.6
Ash	7.79	7.24	7.00	6.52	7.6
Idaho					
Btu	10,148	10,232	9,988	10,089	–.8
Sulfur	.72	.78	.79	.71	–7.3
Ash	6.40	6.22	5.72	6.03	2.8
Montana					
Btu	8,695	8,368	8,496	8,065	3.9
Sulfur	.44	.59	.57	.46	–25.1
Ash	5.31	7.93	7.65	9.31	–33.0
Nevada					
Btu	11,533	11,698	11,907	12,042	–1.4
Sulfur	.51	.48	.26	.28	4.8
Ash	8.80	7.13	4.01	4.63	23.4
New Mexico					
Btu	12,302	12,518	12,688	12,776	–1.7
Sulfur	.82	.79	.94	.74	3.8
Ash	11.67	10.26	9.87	9.95	13.7
Utah[2]					
Btu	11,589	11,671	11,679	11,530	–.7
Sulfur	.82	.84	.82	.44	–2.6
Ash	8.01	8.08	7.68	7.12	–.9
Wyoming					
Btu	10,365	10,170	10,098	10,074	1.9
Sulfur	.70	.71	.70	.72	–1.6
Ash	4.68	4.84	5.27	5.12	–3.3

See footnotes at end of table.

Table 107. Average Quality of Coal Received at Manufacturing and Coke Plants by Census Division and State, 1993-1996 (Continued)

Census Division and State and Quality[1]	1996	1995	1994	1993	Percent Change 1995-1996
Pacific					
Btu	11,677	11,551	11,749	12,218	1.1
Sulfur	.56	.53	.52	.49	6.8
Ash	9.15	9.17	8.98	8.65	–.2
California					
Btu	11,899	11,912	11,950	12,441	–.1
Sulfur	.55	.52	.52	.49	6.4
Ash	8.72	8.62	8.93	8.35	1.2
Hawaii					
Btu	9,157	9,275	9,576	9,776	–1.3
Sulfur	.53	.53	.51	.52	–.7
Ash	14.99	15.37	16.72	15.96	–2.5
Oregon					
Btu	11,159	10,188	10,704	10,216	9.5
Sulfur	.65	.54	.53	.51	19.8
Ash	7.03	5.98	6.48	5.94	17.7
Washington					
Btu	11,622	11,846	11,818	12,151	–1.9
Sulfur	.65	.57	.58	.56	13.3
Ash	10.00	9.62	5.63	9.47	4.0
U.S. Total					
Btu	11,405	11,367	11,316	11,303	.3
Sulfur	1.17	1.15	1.16	1.23	1.8
Ash	7.58	7.61	7.63	6.34	–.4

1 Quality units are: Btu (per pound); sulfur (percent by weight); and ash (percent by weight).
2 Includes sulfur and ash data for coke plants.
* Data round to zero.

Notes: Btu data are for manufacturing plants only. The national average of coke plant data ranges from .51 to 1.70 for sulfur and 2.6 to 10.1 for ash.

Sources: Energy Information Administration, Form EIA-3A, ''Annual Coal Quality Report - Manufacturing Plants''; and Form EIA-5A, ''Annual Coal Quality Report - Coke Plants.''

Appendix A

Major Coal Producing States

Table A1. Alabama Coal Statistics, 1987, 1992-1996

Category	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
Supply (thousand short tons)									
Recoverable Reserves	451,760	510,406	457,144	426,635	467,741	537,592	–11.5	–0.9	–1.9
Productive Capacity[1]	32,159	32,546	33,049	27,916	29,815	29,189	–1.2	1.9	1.1
Production Total	24,637	24,640	23,266	24,768	25,796	25,540	*	–1.1	–.4
Underground	18,217	17,605	14,471	15,557	15,944	14,342	3.5	3.4	2.7
Surface	6,420	7,036	8,795	9,211	9,852	11,198	–8.7	–10.1	–6.0
Capacity Utilization[2]	76.57	75.52	70.19	88.46	86.26	87.23	1.4	–2.9	–1.4
Ratio of Recoverable Reserves to Production	18.3	20.7	19.6	17.2	18.1	21.0	–11.5	.3	–1.5
Number of Miners	5,031	5,567	5,418	5,399	5,386	6,718	–9.6	–1.7	–3.2
Productivity Total[2]	2.20	2.24	2.25	2.35	2.49	1.97	–1.6	–3.0	1.3
Underground	1.95	2.02	1.94	2.09	2.17	1.68	–3.6	–2.6	1.7
Surface	3.50	3.07	3.07	3.01	3.28	2.53	14.2	1.6	3.7
Producer/Distributor Stocks	1,031	1,358	1,204	1,698	2,185	–	–24.1	–17.1	–
Imports[3]	161	162	178	88	–	–	–.8	–	–
Distribution (thousand short tons)									
Distribution Total	24,636	25,159	23,750	25,556	25,491	NA	–2.1	–.8	NA
Domestic Distribution Total	19,772	19,127	19,220	19,668	19,560	NA	3.4	.3	NA
Within State	18,503	18,024	18,351	18,716	18,849	NA	2.7	–.5	NA
To Other States	1,269	1,103	870	952	711	NA	15.1	15.6	NA
Foreign Distribution Total	4,864	6,032	4,529	5,888	5,931	NA	–19.4	–4.8	NA
Metallurgical	4,523	5,330	4,359	5,846	5,800	NA	–15.1	–6.0	NA
Steam	341	702	170	43	131	NA	–51.5	27.0	NA
Overseas Total[4]	4,864	6,032	4,529	5,888	5,931	NA	–19.4	–4.8	NA
Metallurgical	4,523	5,330	4,359	5,846	5,800	NA	–15.1	–6.0	NA
Steam	341	702	170	43	131	NA	–51.5	27.0	NA
Demand (thousand short tons)									
Consumption Total	37,052	34,309	31,473	33,047	31,510	26,632	8.0	4.1	3.7
Electric Utility	31,216	28,759	25,817	27,533	24,988	20,746	8.5	5.7	4.6
Industrial	2,545	2,286	2,394	2,268	3,136	2,614	11.3	–5.1	–.3
Coke	3,247	3,257	3,253	3,206	3,297	3,150	–.3	–.4	.3
Residential/Commercial	44	7	11	40	89	121	NM	–16.0	–10.7
Consumer Stocks Total	2,860	3,648	4,132	2,797	4,529	5,012	–21.6	–10.8	–6.0
Electric Utility	2,528	3,282	3,652	2,331	4,071	4,450	–23.0	–11.2	–6.1
All Other	332	366	480	466	458	562	–9.4	–7.7	–5.7
Coal Prices (nominal dollars per short ton)									
Mine Total	$39.48	$38.44	$40.12	$42.34	$40.82	$41.42	2.7	–.8	–.5
Underground	40.75	39.26	39.92	42.00	40.70	39.82	3.8	*	.3
Surface	35.87	36.38	40.45	42.91	41.02	43.49	–1.4	–3.3	–2.1
Consumer									
Electric Utility	36.39	37.00	40.42	42.56	41.67	47.04	–1.6	–3.3	–2.8
Industrial	40.15	39.53	38.74	39.01	39.76	40.38	1.5	.2	–.1
Coke	49.37	48.42	47.45	47.50	47.80	45.89	1.9	.8	.8

1 For 1987, the Form EIA-7A solicited data on ''Daily Productive Capacity.'' To obtain annual productive capacity for a mine in 1987, each mine's daily productive capacity was multiplied by the number of days worked during the year.

2 Capacity utilization (percent) is the ratio of total production to annual productive capacity as reported by mining companies on Form EIA-7A. Productivity (short tons per miner per hour) is calculated by dividing total coal production by the total direct labor hours worked by all employees engaged in production, preparation, processing, development, maintenance, repair, and shop or yard work at mining operations.

3 Imports for 1992 through 1996 include imports to electric utilities, manufacturing plants and coke plants. Imports for 1987 include only imports to electric utilities.

4 Includes Mexico.

* Data round to zero.

NM Not meaningful as value is greater than 500 percent.

NA Not available.

Notes: Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Consumption Total does not include coal consumed by independent power producers. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-3, ''Quarterly Coal Consumption Report - Manufacturing Plants''; Form EIA-5, ''Coke Plant Report - Quarterly''; Form EIA-6, ''Coal Distribution Report''; Form EIA-7A, ''Coal Production Report''; Form EIA-759, ''Monthly Power Plant Report''; and U.S. Department of Commerce, Bureau of the Census, ''Monthly Report EM 545'' and ''Monthly Report IM 145.''

Table A2. Arizona Coal Statistics, 1987, 1992-1996

Category	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
Supply (thousand short tons)									
Recoverable Reserves	w	w	w	w	w	w	w	w	w
Productive Capacity[1]	w	w	w	13,800	13,800	w	–4.3	–1.1	w
Production Total	10,442	11,947	13,056	12,173	12,512	11,379	–12.6	–4.4	–0.9
Surface	10,442	11,947	13,056	12,173	12,512	11,379	–12.6	–4.4	–.9
Capacity Utilization[2]	w	w	w	88.21	90.67	w	–8.6	–3.3	w
Ratio of Recoverable Reserves to Production	w	w	w	w	w	w	w	w	w
Number of Miners	651	831	864	876	888	900	–21.7	–7.5	–3.5
Productivity Total[2]	6.30	6.34	6.71	6.21	6.29	6.76	–.6	*	–.8
Surface	6.30	6.34	6.71	6.21	6.29	6.76	–.6	*	–.8
Producer/Distributor Stocks	2,232	2,760	2,634	1,590	1,555	–	–19.1	9.4	–
Distribution (thousand short tons)									
Distribution Total	10,970	11,783	12,011	12,138	12,418	NA	–6.9	–3.0	NA
Domestic Distribution Total	10,970	11,783	12,011	12,138	12,418	NA	–6.9	–3.0	NA
Within State	6,499	6,956	7,580	7,566	7,441	NA	–6.6	–3.3	NA
To Other States	4,470	4,827	4,431	4,572	4,977	NA	–7.4	–2.6	NA
Demand (thousand short tons)									
Consumption Total	16,792	16,682	19,580	18,991	17,915	13,375	.6	–1.6	2.6
Electric Utility	16,117	16,021	18,853	18,316	17,280	12,706	.6	–1.7	2.7
Industrial	675	657	727	674	632	w	2.8	1.7	w
Residential/Commercial	*	5	*	1	w	w	–96.3	w	w
Consumer Stocks Total	2,025	3,032	3,242	3,717	3,596	w	–33.2	–13.4	w
Electric Utility	1,993	2,998	3,197	3,687	3,543	3,813	–33.5	–13.4	–6.9
All Other	32	34	45	30	53	w	–5.8	–11.7	w
Coal Prices (nominal dollars per short ton)									
Mine Total	w	w	w	w	w	w	w	w	w
Surface	w	w	w	w	w	w	w	w	w
Consumer									
Electric Utility	$29.55	$28.65	$28.26	$27.78	$28.31	$27.56	3.1	1.1	.8
Industrial	39.27	40.46	41.35	40.51	40.95	w	–2.9	–1.0	w

1 For 1987, the Form EIA-7A solicited data on ''Daily Productive Capacity.'' To obtain annual productive capacity for a mine in 1987, each mine's daily productive capacity was multiplied by the number of days worked during the year.

2 Capacity utilization (percent) is the ratio of total production to annual productive capacity as reported by mining companies on Form EIA-7A. Productivity (short tons per miner per hour) is calculated by dividing total coal production by the total direct labor hours worked by all employees engaged in production, preparation, processing, development, maintenance, repair, and shop or yard work at mining operations.

* Data round to zero.

w Withheld to avoid disclosure of individual company data.

NA Not available.

Notes: Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Consumption Total does not include coal consumed by independent power producers. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-3, ''Quarterly Coal Consumption Report - Manufacturing Plants''; Form EIA-5, ''Coke Plant Report - Quarterly''; Form EIA-6, ''Coal Distribution Report''; Form EIA-7A, ''Coal Production Report''; Form EIA-759, ''Monthly Power Plant Report''; and U.S. Department of Commerce, Bureau of the Census, ''Monthly Report EM 545'' and ''Monthly Report IM 145.''

Table A3. Colorado Coal Statistics, 1987, 1992-1996

Category	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
Supply (thousand short tons)									
Recoverable Reserves	641,615	692,030	676,272	608,815	608,067	668,353	–7.3	1.3	–0.4
Productive Capacity[1]	29,330	32,435	31,075	30,040	25,848	21,321	–9.6	3.2	3.6
Production Total	24,886	25,710	25,304	21,886	19,226	14,420	–3.2	6.7	6.3
Underground	15,581	17,187	16,332	12,843	10,246	5,645	–9.3	11.0	11.9
Surface	9,305	8,523	8,972	9,043	8,981	8,775	9.2	.9	.6
Capacity Utilization[2]	84.85	79.27	81.41	72.84	74.35	67.59	7.0	3.3	2.5
Ratio of Recoverable Reserves to Production	25.8	26.9	26.7	27.8	31.6	46.3	–4.2	–5.0	–6.3
Number of Miners	1,332	1,777	1,905	1,775	1,610	1,795	–25.0	–4.6	–3.3
Productivity Total[2]	7.32	6.14	6.20	5.85	5.27	4.22	19.2	8.5	6.3
Underground	6.67	5.86	5.81	5.21	4.52	2.75	13.7	10.2	10.3
Surface	8.76	6.79	7.06	7.07	6.52	6.44	29.0	7.7	3.5
Producer/Distributor Stocks	494	1,063	1,575	1,155	955	–	–53.5	–15.2	–
Distribution (thousand short tons)									
Distribution Total	25,405	25,635	24,810	21,465	18,864	NA	–.9	7.7	NA
Domestic Distribution Total	23,990	24,734	24,059	20,338	18,195	NA	–3.0	7.2	NA
Within State	10,704	11,820	12,035	11,181	11,241	NA	–9.4	–1.2	NA
To Other States	13,286	12,915	12,024	9,157	6,954	NA	2.9	17.6	NA
Foreign Distribution Total	1,415	900	752	1,128	669	NA	57.2	20.6	NA
Metallurgical	30	–	–	–	–	NA	–	–	NA
Steam	1,385	900	752	1,128	669	NA	53.9	20.0	NA
Overseas Total[3]	1,415	900	752	1,128	669	NA	57.2	20.6	NA
Metallurgical	30	–	–	–	–	NA	–	–	NA
Steam	1,385	900	752	1,128	669	NA	53.9	20.0	NA
Demand (thousand short tons)									
Consumption Total	17,222	16,971	17,475	17,070	16,696	15,007	1.5	.8	1.5
Electric Utility	16,841	16,222	16,596	16,252	15,902	14,178	3.8	1.4	1.9
Industrial	367	729	857	780	735	748	–49.6	–15.9	–7.6
Residential/Commercial	13	20	23	38	w	w	–32.2	w	w
Consumer Stocks Total	3,057	3,682	3,145	3,454	3,439	w	–17.0	–2.9	w
Electric Utility	3,030	3,622	3,118	3,428	3,410	3,635	–16.3	–2.9	–2.0
All Other	27	59	26	25	29	w	–54.2	–1.6	w
Coal Prices (nominal dollars per short ton)									
Mine Total	$17.94	$19.26	$19.76	$20.35	$21.33	$23.58	–6.9	–4.2	–3.0
Underground	17.73	18.58	19.05	20.53	21.80	28.16	–4.5	–5.0	–5.0
Surface	18.28	20.63	21.05	20.10	20.80	20.63	–11.4	–3.2	–1.3
Consumer									
Electric Utility	20.24	20.73	21.01	21.59	21.67	22.01	–2.4	–1.7	–.9
Industrial	23.17	26.11	28.96	28.63	30.34	28.79	–11.2	–6.5	–2.4

1 For 1987, the Form EIA-7A solicited data on ''Daily Productive Capacity.'' To obtain annual productive capacity for a mine in 1987, each mine's daily productive capacity was multiplied by the number of days worked during the year.

2 Capacity utilization (percent) is the ratio of total production to annual productive capacity as reported by mining companies on Form EIA-7A. Productivity (short tons per miner per hour) is calculated by dividing total coal production by the total direct labor hours worked by all employees engaged in production, preparation, processing, development, maintenance, repair, and shop or yard work at mining operations.

3 Includes Mexico.

w Withheld to avoid disclosure of individual company data.

NA Not available.

Notes: Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Consumption Total does not include coal consumed by independent power producers. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-3, ''Quarterly Coal Consumption Report - Manufacturing Plants''; Form EIA-5, ''Coke Plant Report - Quarterly''; Form EIA-6, ''Coal Distribution Report''; Form EIA-7A, ''Coal Production Report''; Form EIA-759, ''Monthly Power Plant Report''; and U.S. Department of Commerce, Bureau of the Census, ''Monthly Report EM 545'' and ''Monthly Report IM 145.''

Table A4. Illinois Coal Statistics, 1987, 1992-1996

Category	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
Supply (thousand short tons)									
Recoverable Reserves	891,109	882,323	963,470	1,063,832	1,199,313	1,431,240	1.0	–7.1	–5.1
Productive Capacity[1]	61,727	56,627	69,414	69,320	75,787	75,852	9.0	–5.0	–2.3
Production Total	46,656	48,180	52,797	41,098	59,857	59,155	–3.2	–6.0	–2.6
Underground	38,948	41,118	43,281	33,096	46,965	37,521	–5.3	–4.6	.4
Surface	7,707	7,062	9,516	8,002	12,892	21,634	9.1	–12.1	–10.8
Capacity Utilization[2]	75.58	85.08	76.06	59.28	78.98	77.98	–11.2	–1.1	–.3
Ratio of Recoverable Reserves to Production	19.1	18.3	18.3	25.9	20.0	24.2	4.3	–1.2	–2.6
Number of Miners	5,174	5,652	6,591	7,303	8,323	12,171	–8.4	–11.2	–9.1
Productivity Total[2]	4.18	3.87	3.59	3.23	3.42	2.52	8.2	5.2	5.8
Underground	4.10	3.86	3.49	3.11	3.21	2.20	6.1	6.3	7.1
Surface	4.67	3.89	4.12	3.86	4.47	3.37	19.9	1.1	3.7
Producer/Distributor Stocks	1,190	2,069	1,651	713	1,969	–	–42.5	–11.8	–
Imports[3]	216	223	346	51	–	–	–3.1	–	–
Distribution (thousand short tons)									
Distribution Total	47,076	47,869	51,973	42,000	58,913	NA	–1.7	–5.4	NA
Domestic Distribution Total	45,190	45,170	51,737	41,330	57,670	NA	*	–5.9	NA
Within State	16,052	15,587	17,517	15,206	18,167	NA	3.0	–3.0	NA
To Other States	29,137	29,582	34,220	26,124	39,503	NA	–1.5	–7.3	NA
Foreign Distribution Total	1,886	2,699	236	670	1,242	NA	–30.1	11.0	NA
Metallurgical	–	49	236	109	614	NA	–100.0	–100.0	NA
Steam	1,886	2,650	–	561	629	NA	–28.8	31.6	NA
Overseas Total[4]	1,886	2,699	236	670	1,242	NA	–30.1	11.0	NA
Metallurgical	–	49	236	109	614	NA	–100.0	–	NA
Steam	1,886	2,650	–	561	629	NA	–28.8	31.6	NA
Demand (thousand short tons)									
Consumption Total	44,431	39,623	39,077	38,135	31,599	35,581	12.1	8.9	2.5
Electric Utility	38,090	33,463	32,599	31,744	25,264	28,894	13.8	10.8	3.1
Industrial	3,740	3,653	4,187	3,970	3,736	3,900	2.4	*	–.5
Coke	w	w	w	w	w	2,515	w	w	w
Residential/Commercial	w	w	w	w	w	273	w	w	w
Consumer Stocks Total	w	w	w	w	w	9,676	w	w	w
Electric Utility	4,581	5,331	4,526	4,019	7,399	8,861	–14.1	–11.3	–7.1
All Other	w	w	w	w	w	815	w	w	w
Coal Prices (nominal dollars per short ton)									
Mine Total	$22.74	$23.05	$23.14	$25.27	$27.66	$29.56	–1.3	–4.8	–2.9
Underground	23.12	22.88	23.18	25.54	27.93	30.39	1.0	–4.6	–3.0
Surface	20.86	24.04	22.92	24.18	26.69	28.12	–13.2	–6.0	–3.3
Consumer									
Electric Utility	32.14	32.58	32.69	35.30	37.06	42.80	–1.3	–3.5	–3.1
Industrial	29.69	29.03	29.13	29.42	29.24	33.15	2.3	.4	–1.2
Coke	w	w	w	w	w	44.19	w	w	w

1 For 1987, the Form EIA-7A solicited data on ''Daily Productive Capacity.'' To obtain annual productive capacity for a mine in 1987, each mine's daily productive capacity was multiplied by the number of days worked during the year.

2 Capacity utilization (percent) is the ratio of total production to annual productive capacity as reported by mining companies on Form EIA-7A. Productivity (short tons per miner per hour) is calculated by dividing total coal production by the total direct labor hours worked by all employees engaged in production, preparation, processing, development, maintenance, repair, and shop or yard work at mining operations.

3 Imports for 1992 through 1996 include imports to electric utilities, manufacturing plants and coke plants. Imports for 1987 include only imports to electric utilities.

4 Includes Mexico.

* Data round to zero.

w Withheld to avoid disclosure of individual company data.

NA Not available.

Notes: Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Consumption Total does not include coal consumed by independent power producers. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-3, ''Quarterly Coal Consumption Report - Manufacturing Plants''; Form EIA-5, ''Coke Plant Report - Quarterly''; Form EIA-6, ''Coal Distribution Report''; Form EIA-7A, ''Coal Production Report''; Form EIA-759, ''Monthly Power Plant Report''; and U.S. Department of Commerce, Bureau of the Census, ''Monthly Report EM 545'' and ''Monthly Report IM 145.''

Table A5. Indiana Coal Statistics, 1987, 1992-1996

Category	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
Supply (thousand short tons)									
Recoverable Reserves	386,063	323,667	304,225	379,294	404,549	514,341	19.3	–1.2	–3.1
Productive Capacity[1]	35,564	35,256	38,931	43,955	42,990	45,344	.9	–4.6	–2.7
Production Total	29,670	26,007	30,927	29,295	30,466	34,208	14.1	–.6	–1.6
Underground	2,963	3,540	3,324	2,583	2,641	2,447	–16.3	2.9	2.1
Surface	26,707	22,467	27,603	26,713	27,825	31,761	18.9	–1.0	–1.9
Capacity Utilization[2]	83.42	73.70	79.37	66.60	70.86	75.36	13.2	4.2	1.1
Ratio of Recoverable Reserves to Production	13.0	12.4	9.8	12.9	13.3	15.0	4.5	–.5	–1.6
Number of Miners	2,579	2,571	3,206	3,331	3,652	3,992	.3	–8.3	–4.7
Productivity Total[2]	4.98	4.68	4.28	4.46	4.09	3.57	6.4	5.0	3.8
Underground	3.09	3.22	2.82	2.49	2.80	2.05	–4.1	2.5	4.6
Surface	5.34	5.04	4.56	4.82	4.28	3.79	6.0	5.7	3.9
Producer/Distributor Stocks	574	611	803	527	1,016	–	–6.1	–13.3	–
Imports[3]	735	761	593	594	–	–	–3.3	–	–
Distribution (thousand short tons)									
Distribution Total	29,674	25,695	30,684	29,664	31,393	NA	15.5	–1.4	NA
Domestic Distribution Total	29,664	25,625	30,477	29,475	31,216	NA	15.8	–1.3	NA
Within State	24,309	21,185	24,733	23,913	24,655	NA	14.8	–.3	NA
To Other States	5,354	4,439	5,744	5,562	6,561	NA	20.6	–4.9	NA
Foreign Distribution Total	11	70	206	188	177	NA	–84.7	–50.4	NA
Steam	11	70	206	188	177	NA	–84.7	–50.4	NA
Canada Total	–	*	–	–	–	NA	–100.0	–	NA
Steam	–	*	–	–	–	NA	–100.0	–	NA
Overseas Total[4]	11	69	206	188	177	NA	–84.6	–50.4	NA
Steam	11	69	206	188	177	NA	–84.6	–50.4	NA
Demand (thousand short tons)									
Consumption Total	64,021	62,631	59,996	60,353	58,765	51,385	2.2	2.2	2.5
Electric Utility	52,855	52,089	50,554	48,836	46,937	36,987	1.5	3.0	4.0
Industrial	4,987	4,373	4,244	4,587	4,263	5,016	14.0	4.0	–.1
Coke	5,823	5,883	4,841	6,591	7,153	8,841	–1.0	–5.0	–4.5
Residential/Commercial	356	287	356	339	411	541	24.3	–3.5	–4.5
Consumer Stocks Total	7,958	9,298	11,707	7,798	12,507	14,998	–14.4	–10.7	–6.8
Electric Utility	7,105	8,435	10,449	6,935	11,294	13,185	–15.8	–10.9	–6.6
All Other	853	863	1,258	863	1,214	1,813	–1.2	–8.4	–8.0
Coal Prices (nominal dollars per short ton)									
Mine Total	$20.24	$21.71	$22.28	$22.89	$23.41	$24.57	–6.8	–3.6	–2.1
Underground	w	w	w	w	w	w	w	w	w
Surface	w	w	w	w	w	w	w	w	w
Consumer									
Electric Utility	$24.67	$25.94	$26.79	$26.73	$27.89	$31.93	–4.9	–3.0	–2.8
Industrial	31.76	33.14	31.35	30.91	31.58	30.94	–4.2	.1	.3
Coke	51.93	52.74	50.90	52.29	53.72	51.44	–1.5	–.8	.1

1 For 1987, the Form EIA-7A solicited data on ''Daily Productive Capacity.'' To obtain annual productive capacity for a mine in 1987, each mine's daily productive capacity was multiplied by the number of days worked during the year.

2 Capacity utilization (percent) is the ratio of total production to annual productive capacity as reported by mining companies on Form EIA-7A. Productivity (short tons per miner per hour) is calculated by dividing total coal production by the total direct labor hours worked by all employees engaged in production, preparation, processing, development, maintenance, repair, and shop or yard work at mining operations.

3 Imports for 1992 through 1996 include imports to electric utilities, manufacturing plants and coke plants. Imports for 1987 include only imports to electric utilities.

4 Includes Mexico.

* Data round to zero.

W Withheld to avoid disclosure of individual company data.

NA Not available.

Notes: Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Consumption Total does not include coal consumed by independent power producers. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-3, ''Quarterly Coal Consumption Report - Manufacturing Plants''; Form EIA-5, ''Coke Plant Report - Quarterly''; Form EIA-6, ''Coal Distribution Report''; Form EIA-7A, ''Coal Production Report''; Form EIA-759, ''Monthly Power Plant Report''; and U.S. Department of Commerce, Bureau of the Census, ''Monthly Report EM 545'' and ''Monthly Report IM 145.''

Table A6. Kentucky Coal Statistics, 1987, 1992-1996

Category	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
Supply (thousand short tons)									
Recoverable Reserves	1,255,351	1,279,011	1,365,188	1,828,072	1,452,789	1,739,114	–1.8	–3.6	–3.5
Productive Capacity[1]	189,225	203,173	213,427	204,805	195,352	185,985	–6.9	–.8	.2
Production Total	152,425	153,739	161,642	156,299	161,068	165,192	–.8	–1.4	–.9
Underground	94,306	94,207	95,414	92,207	96,053	92,882	.1	–.4	.2
Surface	58,119	59,532	66,227	64,092	65,016	72,310	–2.4	–2.8	–2.4
Capacity Utilization[2]	80.38	75.49	75.54	76.11	82.15	88.03	6.5	–.5	–1.0
Ratio of Recoverable Reserves to Production	8.2	8.3	8.4	11.7	9.0	10.5	–1.0	–2.2	–2.7
Number of Miners	18,826	21,125	23,368	24,063	24,624	32,590	–10.9	–6.5	–5.9
Productivity Total[2]	3.80	3.57	3.25	3.25	3.20	2.69	6.6	4.4	3.9
Underground	3.53	3.25	2.89	2.93	2.91	2.40	8.6	5.0	4.4
Surface	4.35	4.23	3.96	3.84	3.75	3.18	2.9	3.8	3.5
Producer/Distributor Stocks	4,460	4,777	5,025	3,216	3,796	–	–6.6	4.1	–
Distribution (thousand short tons)									
Distribution Total	152,891	151,466	159,130	160,395	161,860	NA	.9	–1.4	NA
Domestic Distribution Total	143,748	141,771	151,963	150,874	147,825	NA	1.4	–.7	NA
Within State	25,700	27,140	26,719	28,136	27,941	NA	–5.3	–2.1	NA
To Other States	118,047	114,631	125,244	122,738	119,883	NA	3.0	–.4	NA
Foreign Distribution Total	9,143	9,695	7,167	9,521	14,036	NA	–5.7	–10.2	NA
Metallurgical	5,303	R 3,640	R 3,120	R 4,415	R 5,916	NA	45.7	–2.7	NA
Steam	3,841	R 6,055	R 4,047	R 5,106	R 8,120	NA	–36.6	–17.1	NA
Canada Total	1,178	777	1,099	1,416	2,078	NA	51.5	–13.2	NA
Metallurgical	1,178	777	1,073	1,356	1,373	NA	51.5	–3.8	NA
Steam	–	–	26	60	705	NA	–	–	NA
Overseas Total[3]	7,966	8,918	6,067	8,106	11,958	NA	–10.7	–9.7	NA
Metallurgical	4,125	R 2,863	R 2,047	R 3,059	R 4,544	NA	44.1	–2.4	NA
Steam	3,841	R 6,055	R 4,021	R 5,047	R 7,414	NA	–36.6	–15.2	NA
Demand (thousand short tons)									
Consumption Total	40,863	39,516	38,090	39,095	34,704	32,023	3.4	4.2	2.7
Electric Utility	37,072	35,707	34,564	35,264	31,715	28,569	3.8	4.0	2.9
Industrial	2,322	2,250	1,994	2,392	1,648	1,869	3.2	8.9	2.4
Coke	w	w	w	w	w	w	w	w	w
Residential/Commercial	w	w	w	w	w	w	w	w	w
Consumer Stocks Total	w	w	w	w	w	w	w	w	w
Electric Utility	4,121	4,472	4,466	3,990	5,415	7,679	–7.8	–6.6	–6.7
All Other	w	w	w	w	w	w	w	w	w
Coal Prices (nominal dollars per short ton)									
Mine Total	$23.91	$24.79	$24.88	$24.77	$24.50	$26.15	–3.6	–.6	–1.0
Underground	24.66	25.18	26.14	25.07	25.18	26.80	–2.0	–.5	–.9
Surface	22.68	24.19	23.07	24.35	23.50	25.32	–6.2	–.9	–1.2
Consumer									
Electric Utility	24.43	25.71	27.16	27.29	27.01	28.94	–5.0	–2.5	–1.9
Industrial	44.02	44.09	43.22	42.30	43.78	43.12	–.2	.1	.2
Coke	w	w	w	w	w	w	w	w	w

1 For 1987, the Form EIA-7A solicited data on ''Daily Productive Capacity.'' To obtain annual productive capacity for a mine in 1987, each mine's daily productive capacity was multiplied by the number of days worked during the year.

2 Capacity utilization (percent) is the ratio of total production to annual productive capacity as reported by mining companies on Form EIA-7A. Productivity (short tons per miner per hour) is calculated by dividing total coal production by the total direct labor hours worked by all employees engaged in production, preparation, processing, development, maintenance, repair, and shop or yard work at mining operations.

3 Includes Mexico.

w Withheld to avoid disclosure of individual company data.

NA Not available.

R Revised Data.

Notes: Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Consumption Total does not include coal consumed by independent power producers. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-3, ''Quarterly Coal Consumption Report - Manufacturing Plants''; Form EIA-5, ''Coke Plant Report - Quarterly''; Form EIA-6, ''Coal Distribution Report''; Form EIA-7A, ''Coal Production Report''; Form EIA-759, ''Monthly Power Plant Report''; and U.S. Department of Commerce, Bureau of the Census, ''Monthly Report EM 545'' and ''Monthly Report IM 145.''

Table A7. Montana Coal Statistics, 1987, 1992-1996

Category	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
Supply (thousand short tons)									
Recoverable Reserves	1,308,793	1,250,866	1,282,525	1,284,806	1,351,609	1,610,532	4.6	–0.8	–2.3
Productive Capacity[1]	56,175	51,597	51,104	50,849	48,582	42,848	8.9	3.7	3.0
Production Total	37,891	39,451	41,640	35,917	38,889	34,399	–3.9	–.6	1.1
Underground	147	10	3	10	10	–	NM	97.7	–
Surface	37,744	39,441	41,636	35,907	38,879	34,399	–4.3	–.7	1.0
Capacity Utilization[2]	67.45	76.44	81.47	70.64	80.03	80.28	–11.8	–4.2	–1.9
Ratio of Recoverable Reserves to Production	34.5	31.7	30.8	35.8	34.8	46.8	8.9	–.1	–3.3
Number of Miners	705	722	705	660	715	847	–2.3	–.3	–2.0
Productivity Total[2]	21.88	21.06	21.92	19.49	20.16	18.70	3.9	2.1	1.8
Underground	3.50	–	–	1.06	–	–	–	–	–
Surface	22.34	21.06	21.92	19.59	20.16	18.70	6.1	2.6	2.0
Producer/Distributor Stocks	580	718	635	876	694	–	–19.3	–4.4	–
Distribution (thousand short tons)									
Distribution Total	38,288	39,620	41,916	35,916	38,866	NA	–3.4	–.4	NA
Domestic Distribution Total	37,770	39,362	41,672	35,795	38,804	NA	–4.0	–.7	NA
Within State	7,844	9,477	10,581	9,115	11,159	NA	–17.2	–8.4	NA
To Other States	29,926	29,885	31,092	26,680	27,645	NA	.1	2.0	NA
Foreign Distribution Total	518	259	243	121	62	NA	100.2	70.2	NA
Steam	518	259	243	121	62	NA	100.2	70.2	NA
Canada Total	316	259	90	54	–	NA	22.1	–	NA
Steam	316	259	90	54	–	NA	22.1	–	NA
Overseas Total[3]	202	–	153	67	62	NA	–	34.6	NA
Steam	202	–	153	67	62	NA	–	34.6	NA
Demand (thousand short tons)									
Consumption Total	8,032	10,005	11,089	9,247	11,040	7,730	–19.7	–7.6	.4
Electric Utility	7,897	9,373	10,513	8,869	10,768	7,530	–15.8	–7.4	.5
Industrial	w	w	w	w	w	w	w	w	w
Residential/Commercial	w	w	w	w	w	w	w	w	w
Consumer Stocks Total	w	w	w	w	w	w	w	w	w
Electric Utility	509	511	517	721	735	851	–.5	–8.8	–5.6
All Other	w	w	w	w	w	w	w	w	w
Coal Prices (nominal dollars per short ton)									
Mine Total	$9.96	$9.62	$10.39	$11.05	$10.20	$12.43	3.5	–.6	–2.4
Underground	w	w	–	w	–	–	–	–	–
Surface	w	w	10.39	w	10.20	12.43	w	w	w
Consumer									
Electric Utility	$11.90	$11.47	11.79	$11.78	12.14	11.12	3.8	–.5	.7
Industrial	w	w	w	w	w	w	w	w	w

1 For 1987, the Form EIA-7A solicited data on ''Daily Productive Capacity.'' To obtain annual productive capacity for a mine in 1987, each mine's daily productive capacity was multiplied by the number of days worked during the year.

2 Capacity utilization (percent) is the ratio of total production to annual productive capacity as reported by mining companies on Form EIA-7A. Productivity (short tons per miner per hour) is calculated by dividing total coal production by the total direct labor hours worked by all employees engaged in production, preparation, processing, development, maintenance, repair, and shop or yard work at mining operations.

3 Includes Mexico.

w Withheld to avoid disclosure of individual company data.

NM Not meaningful as value is greater than 500 percent.

NA Not available.

Notes: Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Consumption Total does not include coal consumed by independent power producers. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-3, ''Quarterly Coal Consumption Report - Manufacturing Plants''; Form EIA-5, ''Coke Plant Report - Quarterly''; Form EIA-6, ''Coal Distribution Report''; Form EIA-7A, ''Coal Production Report''; Form EIA-759, ''Monthly Power Plant Report''; and U.S. Department of Commerce, Bureau of the Census, ''Monthly Report EM 545'' and ''Monthly Report IM 145.''

Table A8. New Mexico Coal Statistics, 1987, 1992-1996

Category	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
Supply (thousand short tons)									
Recoverable Reserves	1,436,359	1,479,956	1,457,523	1,472,927	1,494,541	1,557,487	–2.9	–1.0	–0.9
Productive Capacity[1]	32,695	32,760	32,807	33,360	29,512	33,295	–.2	2.6	–.2
Production Total	24,067	26,813	28,041	28,268	24,549	19,131	–10.2	–.5	2.6
Underground	–	640	950	719	93	620	–100.0	–	–
Surface	24,067	26,173	27,091	27,549	24,456	18,512	–8.0	–.4	2.9
Capacity Utilization[2]	73.61	81.85	85.47	84.74	83.18	57.46	–10.1	–3.0	2.8
Ratio of Recoverable Reserves to Production	59.7	55.2	52.0	52.1	60.9	81.4	8.1	–.5	–3.4
Number of Miners	1,347	1,747	1,786	1,762	1,683	1,658	–22.9	–5.4	–2.3
Productivity Total[2]	8.45	6.92	6.77	6.68	6.68	5.74	22.1	6.0	4.4
Underground	–	2.68	2.57	1.63	.40	1.74	–100.0	–	–
Surface	8.45	7.19	7.18	7.26	7.11	6.23	17.4	4.4	3.4
Producer/Distributor Stocks	1,890	2,015	1,467	2,343	1,648	–	–6.2	3.5	–
Distribution (thousand short tons)									
Distribution Total	25,043	26,154	28,570	27,942	24,827	NA	–4.3	.2	NA
Domestic Distribution Total	25,035	25,640	28,540	27,942	24,823	NA	–2.4	.2	NA
Within State	15,009	14,630	15,464	14,938	14,829	NA	2.6	.3	NA
To Other States	10,026	11,010	13,076	13,004	9,993	NA	–8.9	.1	NA
Foreign Distribution Total	9	514	30	–	5	NA	–98.3	16.5	NA
Steam	9	514	30	–	5	NA	–98.3	16.5	NA
Overseas Total[3]	9	514	30	–	5	NA	–98.3	16.5	NA
Steam	9	514	30	–	5	NA	–98.3	16.5	NA
Demand (thousand short tons)									
Consumption Total	15,297	15,221	15,374	15,012	14,832	14,395	.5	.8	.7
Electric Utility	15,215	15,137	15,297	14,942	14,775	14,340	.5	.7	.6
Industrial	w	w	w	w	w	w	w	w	w
Residential/Commercial	w	w	w	w	w	w	w	w	w
Consumer Stocks Total	w	w	w	w	w	w	w	w	w
Electric Utility	814	967	1,462	1,506	1,570	1,246	–15.8	–15.1	–4.6
All Other	w	w	w	w	w	w	w	w	w
Coal Prices (nominal dollars per short ton)									
Mine Total	$24.66	$23.80	$23.29	$22.96	$23.14	$21.78	3.6	1.6	1.4
Underground	–	w	w	w	w	w	w	w	w
Surface	24.66	w	w	w	w	w	w	w	w
Consumer									
Electric Utility	26.04	$25.59	$25.48	$24.61	$23.83	$21.87	1.8	2.2	2.0
Industrial	w	w	w	w	w	w	w	w	w

1 For 1987, the Form EIA-7A solicited data on ''Daily Productive Capacity.'' To obtain annual productive capacity for a mine in 1987, each mine's daily productive capacity was multiplied by the number of days worked during the year.

2 Capacity utilization (percent) is the ratio of total production to annual productive capacity as reported by mining companies on Form EIA-7A. Productivity (short tons per miner per hour) is calculated by dividing total coal production by the total direct labor hours worked by all employees engaged in production, preparation, processing, development, maintenance, repair, and shop or yard work at mining operations.

3 Includes Mexico.

w Withheld to avoid disclosure of individual company data.

NA Not available.

Notes: Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Consumption Total does not include coal consumed by independent power producers. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-3, ''Quarterly Coal Consumption Report - Manufacturing Plants''; Form EIA-5, ''Coke Plant Report - Quarterly''; Form EIA-6, ''Coal Distribution Report''; Form EIA-7A, ''Coal Production Report''; Form EIA-759, ''Monthly Power Plant Report''; and U.S. Department of Commerce, Bureau of the Census, ''Monthly Report EM 545'' and ''Monthly Report IM 145.''

Table A9. North Dakota Coal Statistics, 1987, 1992-1996

Category	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
Supply (thousand short tons)									
Recoverable Reserves	1,301,400	1,667,596	1,694,548	1,411,026	1,335,164	1,384,343	–21.9	–0.6	–0.7
Productive Capacity[1]	32,184	34,464	35,920	36,371	36,986	39,166	–6.6	–3.4	–2.1
Production Total	29,861	30,112	32,286	31,973	31,744	25,142	–.8	–1.5	1.9
Surface	29,861	30,112	32,286	31,973	31,744	25,142	–.8	–1.5	1.9
Capacity Utilization[2]	92.78	87.37	89.88	87.89	85.83	64.19	6.2	2.0	4.2
Ratio of Recoverable Reserves to Production	43.6	55.4	52.5	44.1	42.1	55.1	–21.3	.9	–2.6
Number of Miners	640	716	645	782	744	961	–10.6	–3.7	–4.4
Productivity Total[2]	17.20	16.80	18.84	17.66	18.12	13.46	2.4	–1.3	2.8
Surface	17.20	16.80	18.84	17.66	18.12	13.46	2.4	–1.3	2.8
Producer/Distributor Stocks	1,574	1,797	1,812	1,607	1,614	–	–12.4	–.6	–
Distribution (thousand short tons)									
Distribution Total	30,025	30,118	32,056	32,372	31,702	NA	–.3	–1.3	NA
Domestic Distribution Total	30,025	30,118	32,056	32,372	31,702	NA	–.3	–1.3	NA
Within State	30,025	28,838	29,731	30,215	29,573	NA	4.1	.4	NA
To Other States	–	1,281	2,325	2,157	2,129	NA	–100.0	–	NA
Demand (thousand short tons)									
Consumption Total	30,511	30,237	30,363	30,302	30,301	24,101	.9	.2	2.6
Electric Utility	23,640	22,680	23,248	23,290	23,192	17,434	4.2	.5	3.4
Industrial	w	w	w	w	w	w	w	w	w
Residential/Commercial	w	w	w	w	w	w	w	w	w
Consumer Stocks Total	w	w	w	w	w	w	w	w	w
Electric Utility	1,642	1,858	2,406	2,417	2,194	3,586	–11.6	–7.0	–8.3
All Other	w	w	w	w	w	w	w	w	w
Coal Prices (nominal dollars per short ton)									
Mine Total	$8.01	$7.99	$7.62	$7.63	$7.48	$7.91	.2	1.7	.1
Surface	8.01	7.99	7.62	7.63	7.48	7.91	.2	1.7	.1
Consumer									
Electric Utility	9.72	9.65	9.28	9.38	9.45	10.46	.7	.7	–.8
Industrial	w	w	w	w	w	w	w	w	w

1 For 1987, the Form EIA-7A solicited data on ''Daily Productive Capacity.'' To obtain annual productive capacity for a mine in 1987, each mine's daily productive capacity was multiplied by the number of days worked during the year.

2 Capacity utilization (percent) is the ratio of total production to annual productive capacity as reported by mining companies on Form EIA-7A. Productivity (short tons per miner per hour) is calculated by dividing total coal production by the total direct labor hours worked by all employees engaged in production, preparation, processing, development, maintenance, repair, and shop or yard work at mining operations.

w Withheld to avoid disclosure of individual company data.

NA Not available.

Notes: Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Consumption Total does not include coal consumed by independent power producers. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-3, ''Quarterly Coal Consumption Report - Manufacturing Plants''; Form EIA-5, ''Coke Plant Report - Quarterly''; Form EIA-6, ''Coal Distribution Report''; Form EIA-7A, ''Coal Production Report''; Form EIA-759, ''Monthly Power Plant Report''; and U.S. Department of Commerce, Bureau of the Census, ''Monthly Report EM 545'' and ''Monthly Report IM 145.''

Table A10. Ohio Coal Statistics, 1987, 1992-1996

Category	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
Supply (thousand short tons)									
Recoverable Reserves	414,759	467,984	479,235	519,768	575,973	754,690	–11.4	–7.9	–6.4
Productive Capacity[1]	37,584	34,011	43,925	42,236	41,329	46,337	10.5	–2.3	–2.3
Production Total	28,572	26,118	29,897	28,816	30,403	35,788	9.4	–1.5	–2.5
Underground	15,912	13,077	13,607	10,437	12,031	12,617	21.7	7.2	2.6
Surface	12,660	13,041	16,290	18,379	18,371	23,171	–2.9	–8.9	–6.5
Capacity Utilization[2]	75.88	76.55	67.87	67.94	73.19	76.72	–.9	.9	–.1
Ratio of Recoverable Reserves to Production	14.5	17.9	16.0	18.0	18.9	21.1	–19.0	–6.4	–4.1
Number of Miners	3,232	3,386	3,983	3,866	4,515	7,827	–4.5	–8.0	–9.4
Productivity Total[2]	3.95	3.62	3.42	3.46	3.04	2.28	9.1	6.8	6.3
Underground	4.19	3.81	3.51	3.27	3.01	1.80	9.9	8.6	9.8
Surface	3.69	3.46	3.34	3.58	3.06	2.67	6.9	4.8	3.7
Producer/Distributor Stocks	532	1,374	833	550	1,087	–	–61.3	–16.4	–
Imports[3]	1	1	2	2	13	–	3.1	–42.3	–
Distribution (thousand short tons)									
Distribution Total	28,881	24,345	28,749	28,315	29,550	NA	18.6	–.6	NA
Domestic Distribution Total	28,609	24,318	28,688	28,315	29,549	NA	17.6	–.8	NA
Within State	24,478	20,228	23,907	24,370	26,941	NA	21.0	–2.4	NA
To Other States	4,131	4,090	4,782	3,944	2,608	NA	1.0	12.2	NA
Foreign Distribution Total	271	28	61	–	2	NA	NM	257.2	NA
Steam	271	28	61	–	2	NA	NM	257.2	NA
Canada Total	3	13	–	–	*	NA	–78.7	60.2	NA
Steam	3	13	–	–	*	NA	–78.7	60.2	NA
Overseas Total[4]	269	15	61	–	1	NA	NM	282.7	NA
Steam	269	15	61	–	1	NA	NM	282.7	NA
Demand (thousand short tons)									
Consumption Total	59,835	56,580	56,711	59,031	58,671	59,350	5.8	.5	.1
Electric Utility	53,543	49,785	49,326	51,456	50,358	47,520	7.5	1.5	1.3
Industrial	3,794	3,609	3,794	4,100	3,970	5,657	5.1	–1.1	–4.3
Coke	1,842	2,777	3,092	2,892	3,755	5,361	–33.7	–16.3	–11.2
Residential/Commercial	656	409	498	584	588	812	60.4	2.8	–2.3
Consumer Stocks Total	5,431	5,936	7,815	7,630	10,804	11,164	–8.5	–15.8	–7.7
Electric Utility	5,232	5,661	7,499	7,249	10,395	9,959	–7.6	–15.8	–6.9
All Other	199	275	316	381	408	1,205	–27.6	–16.4	–18.1
Coal Prices (nominal dollars per short ton)									
Mine Total	$24.85	$25.97	$29.13	$28.04	$26.93	$30.80	–4.3	–2.0	–2.3
Underground	25.98	28.98	31.61	30.73	30.11	37.20	–10.4	–3.6	–3.9
Surface	23.43	22.92	27.04	26.51	24.84	27.28	2.2	–1.4	–1.7
Consumer									
Electric Utility	32.31	34.44	34.70	34.05	34.40	37.15	–6.2	–1.5	–1.5
Industrial	35.28	35.18	35.75	34.82	35.24	33.98	.3	*	.4
Coke	44.98	42.18	42.02	45.07	46.68	46.04	6.6	–.9	–.3

1 For 1987, the Form EIA-7A solicited data on ''Daily Productive Capacity.'' To obtain annual productive capacity for a mine in 1987, each mine's daily productive capacity was multiplied by the number of days worked during the year.

2 Capacity utilization (percent) is the ratio of total production to annual productive capacity as reported by mining companies on Form EIA-7A. Productivity (short tons per miner per hour) is calculated by dividing total coal production by the total direct labor hours worked by all employees engaged in production, preparation, processing, development, maintenance, repair, and shop or yard work at mining operations.

3 Imports for 1992 through 1996 include imports to electric utilities, manufacturing plants and coke plants. Imports for 1987 include only imports to electric utilities.

4 Includes Mexico.

* Data round to zero.

NM Not meaningful as value is greater than 500 percent.

NA Not available.

Notes: Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-3, ''Quarterly Coal Consumption Report - Manufacturing Plants''; Form EIA-5, ''Coke Plant Report - Quarterly''; Form EIA-6, ''Coal Distribution Report''; Form EIA-7A, ''Coal Production Report''; Form EIA-759, ''Monthly Power Plant Report''; and U.S. Department of Commerce, Bureau of the Census, ''Monthly Report EM 545'' and ''Monthly Report IM 145.''

Table A11. Pennsylvania Coal Statistics, 1987, 1992-1996

Category	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
Supply (thousand short tons)									
Recoverable Reserves	796,035	736,601	912,870	939,706	937,427	1,368,540	8.1	–4.0	–5.8
Productive Capacity[1]	81,684	77,187	80,975	82,148	82,968	86,765	5.8	–.4	–.7
Production Total	67,942	61,576	62,237	59,700	68,981	70,423	10.3	–.4	–.4
Underground	47,247	41,409	39,974	36,934	45,112	38,450	14.1	1.2	2.3
Surface	20,694	20,167	22,263	22,766	23,868	31,974	2.6	–3.5	–4.7
Capacity Utilization[2]	82.53	78.81	75.89	71.79	82.20	80.04	4.7	.1	.3
Ratio of Recoverable Reserves to Production	11.7	12.0	14.7	15.7	13.6	19.4	–2.0	–3.6	–5.5
Number of Miners	9,021	8,968	9,975	10,940	12,659	17,287	.6	–8.1	–7.0
Productivity Total[2]	3.36	3.23	2.98	2.80	2.67	1.97	4.1	5.9	6.1
Underground	3.74	3.49	3.18	2.91	2.81	1.81	7.1	7.4	8.4
Surface	2.72	2.79	2.67	2.63	2.45	2.23	–2.4	2.6	2.3
Producer/Distributor Stocks	3,113	2,487	2,787	1,826	2,903	–	25.2	1.8	–
Imports[3]	80	87	–	–	–	–	–7.7	–	–
Distribution (thousand short tons)									
Distribution Total	69,128	62,240	61,508	58,990	67,649	NA	11.1	.5	NA
Domestic Distribution Total	59,882	53,961	55,207	53,482	61,208	NA	11.0	–.5	NA
Within State	39,222	36,147	35,189	33,456	37,696	NA	8.5	1.0	NA
To Other States	20,660	17,814	20,018	20,026	23,512	NA	16.0	–3.2	NA
Foreign Distribution Total	9,246	8,279	6,301	5,508	6,440	NA	11.7	9.5	NA
Metallurgical	1,642	1,467	1,624	1,919	1,301	NA	11.9	6.0	NA
Steam	7,604	6,812	4,677	3,589	5,139	NA	11.6	10.3	NA
Canada Total	1,050	713	844	597	1,599	NA	47.4	–10.0	NA
Metallurgical	–	4	–	10	–	NA	–100.0	–	NA
Steam	1,050	708	844	587	1,599	NA	48.2	–10.0	NA
Overseas Total[4]	8,196	7,566	5,457	4,911	4,841	NA	8.3	14.1	NA
Metallurgical	1,642	1,463	1,624	1,909	1,301	NA	12.2	6.0	NA
Steam	6,554	6,103	3,833	3,002	3,540	NA	7.4	16.6	NA
Demand (thousand short tons)									
Consumption Total	57,226	55,326	54,094	56,158	56,074	55,305	3.4	.5	.4
Electric Utility	41,076	39,252	38,044	40,257	40,407	41,263	4.6	.4	*
Industrial	4,466	4,027	4,044	4,311	4,173	4,112	10.9	1.7	.9
Coke	10,689	10,858	10,849	10,333	9,868	8,395	–1.5	2.0	2.7
Residential/Commercial	995	1,188	1,156	1,257	1,626	1,535	–16.3	–11.6	–4.7
Consumer Stocks Total	8,860	10,303	12,060	12,265	15,976	16,121	–14.0	–13.7	–6.4
Electric Utility	7,880	9,244	11,000	11,110	14,866	15,034	–14.8	–14.7	–6.9
All Other	980	1,059	1,060	1,155	1,110	1,087	–7.5	–3.1	–1.1
Coal Prices (nominal dollars per short ton)									
Mine Total	$25.78	$26.78	$26.18	$26.50	$28.61	$29.81	–3.7	–2.6	–1.6
Underground	25.79	27.09	26.59	27.35	30.23	32.70	–4.8	–3.9	–2.6
Surface	25.76	26.14	25.43	25.09	25.48	26.27	–1.4	.3	–.2
Consumer									
Electric Utility	34.06	33.48	35.39	35.73	36.81	35.43	1.7	–1.9	–.4
Industrial	33.84	34.07	33.66	34.04	35.70	36.62	–.7	–1.3	–.9
Coke	45.16	46.11	46.25	46.41	46.49	42.54	–2.0	–.7	.7

1 For 1987, the Form EIA-7A solicited data on ''Daily Productive Capacity.'' To obtain annual productive capacity for a mine in 1987, each mine's daily productive capacity was multiplied by the number of days worked during the year.

2 Capacity utilization (percent) is the ratio of total production to annual productive capacity as reported by mining companies on Form EIA-7A. Productivity (short tons per miner per hour) is calculated by dividing total coal production by the total direct labor hours worked by all employees engaged in production, preparation, processing, development, maintenance, repair, and shop or yard work at mining operations.

3 Imports for 1992 through 1996 include imports to electric utilities, manufacturing plants and coke plants. Imports for 1987 include only imports to electric utilities.

4 Includes Mexico.

* Data round to zero.

NA Not available.

Notes: Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-3, ''Quarterly Coal Consumption Report - Manufacturing Plants''; Form EIA-5, ''Coke Plant Report - Quarterly''; Form EIA-6, ''Coal Distribution Report''; Form EIA-7A, ''Coal Production Report''; Form EIA-759, ''Monthly Power Plant Report''; and U.S. Department of Commerce, Bureau of the Census, ''Monthly Report EM 545'' and ''Monthly Report IM 145.''

Table A12. Texas Coal Statistics, 1987, 1992-1996

Category	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
Supply (thousand short tons)									
Recoverable Reserves	878,486	939,901	1,026,309	1,104,864	1,188,240	1,214,513	–6.5	–7.3	–3.5
Productive Capacity[1]	59,604	54,758	55,856	57,115	58,541	51,636	8.8	.4	1.6
Production Total	55,164	52,684	52,346	54,567	55,071	50,529	4.7	*	1.0
Surface	55,164	52,684	52,346	54,567	55,071	50,529	4.7	*	1.0
Capacity Utilization[2]	92.55	96.21	93.72	95.54	94.07	97.86	–3.8	–.4	–.6
Ratio of Recoverable Reserves to Production	15.9	17.8	19.6	20.3	21.6	24.0	–10.7	–7.3	–4.5
Number of Miners	1,550	1,590	1,733	1,841	2,001	3,319	–2.5	–6.2	–8.1
Productivity Total[2]	10.13	9.10	8.82	8.42	7.34	6.45	11.3	8.4	5.1
Surface	10.13	9.10	8.82	8.42	7.34	6.45	11.3	8.4	5.1
Producer/Distributor Stocks	1,254	864	1,430	1,237	543	–	45.1	23.3	–
Imports[3]	16	–	153	156	80	94	–	–33.5	–18.1
Distribution (thousand short tons)									
Distribution Total	49,655	52,832	52,256	54,224	54,447	NA	–6.0	–2.3	NA
Domestic Distribution Total	49,538	52,812	52,256	54,224	54,447	NA	–6.2	–2.3	NA
Within State	49,538	52,812	52,256	54,224	54,447	NA	–6.2	–2.3	NA
Foreign Distribution Total	117	20	–	–	–	NA	494.0	–	NA
Steam	117	20	–	–	–	NA	494.0	–	NA
Overseas Total[4]	117	20	–	–	–	NA	494.0	–	NA
Steam	117	20	–	–	–	NA	494.0	–	NA
Demand (thousand short tons)									
Consumption Total	98,997	92,612	93,829	96,809	91,568	82,915	6.9	2.0	2.0
Electric Utility	94,189	88,358	88,479	92,135	87,333	78,802	6.6	1.9	2.0
Industrial	4,808	4,255	5,350	4,667	4,225	4,083	13.0	3.3	1.8
Residential/Commercial	–	–	*	6	w	w	–	w	w
Consumer Stocks Total	10,481	10,829	9,793	9,172	w	w	–3.2	w	w
Electric Utility	10,290	10,628	9,578	8,125	10,143	8,992	–3.2	.4	1.5
All Other	190	201	215	1,047	w	w	–5.6	w	w
Coal Prices (nominal dollars per short ton)									
Mine Total	$12.17	$12.16	$12.38	$12.87	$12.42	$12.10	*	–.5	.1
Surface	12.17	12.16	12.38	12.87	12.42	12.10	*	–.5	.1
Consumer									
Electric Utility	19.26	19.65	19.84	20.91	21.58	22.48	–1.9	–2.8	–1.7
Industrial	18.99	18.76	19.54	17.58	18.14	19.19	1.2	1.1	–.1

1 For 1987, the Form EIA-7A solicited data on ''Daily Productive Capacity.'' To obtain annual productive capacity for a mine in 1987, each mine's daily productive capacity was multiplied by the number of days worked during the year.

2 Capacity utilization (percent) is the ratio of total production to annual productive capacity as reported by mining companies on Form EIA-7A. Productivity (short tons per miner per hour) is calculated by dividing total coal production by the total direct labor hours worked by all employees engaged in production, preparation, processing, development, maintenance, repair, and shop or yard work at mining operations.

3 Imports for 1992 through 1996 include imports to electric utilities, manufacturing plants and coke plants. Imports for 1987 include only imports to electric utilities.

4 Includes Mexico.

* Data round to zero.

w Withheld to avoid disclosure of individual company data.

NA Not available.

Notes: Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-3, ''Quarterly Coal Consumption Report - Manufacturing Plants''; Form EIA-5, ''Coke Plant Report - Quarterly''; Form EIA-6, ''Coal Distribution Report''; Form EIA-7A, ''Coal Production Report''; Form EIA-759, ''Monthly Power Plant Report''; and U.S. Department of Commerce, Bureau of the Census, ''Monthly Report EM 545'' and ''Monthly Report IM 145.''

Table A13. Utah Coal Statistics, 1987, 1992-1996

Category	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
Supply (thousand short tons)									
Recoverable Reserves	284,433	374,750	423,349	446,729	488,109	489,634	–24.1	–12.6	–5.8
Productive Capacity[1]	30,230	30,888	27,640	25,933	25,534	22,976	–2.1	4.3	3.1
Production Total	27,507	25,167	24,399	21,847	21,339	16,508	9.3	6.5	5.8
Underground	27,507	25,167	24,399	21,847	21,339	16,508	9.3	6.5	5.8
Capacity Utilization[2]	90.97	81.48	88.27	84.22	83.57	71.85	11.6	2.1	2.6
Ratio of Recoverable Reserves to Production	10.3	14.9	17.3	20.4	22.9	29.7	–30.5	–18.0	–11.0
Number of Miners	1,804	1,893	1,675	1,769	1,997	2,544	–4.7	–2.5	–3.7
Productivity Total[2]	7.23	7.02	6.59	5.96	5.46	3.86	3.0	7.2	7.2
Underground	7.24	7.02	6.59	5.96	5.46	3.86	3.1	7.3	7.2
Producer/Distributor Stocks	1,337	1,946	1,301	1,203	1,827	–	–31.3	–7.5	–
Distribution (thousand short tons)									
Distribution Total	23,868	25,521	23,225	22,243	21,052	NA	–6.5	3.2	NA
Domestic Distribution Total	18,563	21,591	20,527	19,283	18,792	NA	–14.0	–.3	NA
Within State	9,389	12,755	13,586	13,418	13,035	NA	–26.4	–7.9	NA
To Other States	9,174	8,836	6,941	5,866	5,758	NA	3.8	12.3	NA
Foreign Distribution Total	5,305	3,930	2,698	2,959	2,260	NA	35.0	23.8	NA
Metallurgical	187	–	–	–	–	NA	–	–	NA
Steam	5,118	3,930	2,698	2,959	2,260	NA	30.2	22.7	NA
Canada Total	–	–	–	346	–	NA	–	–	NA
Steam	–	–	–	346	–	NA	–	–	NA
Overseas Total[3]	5,305	3,930	2,698	2,613	2,260	NA	35.0	23.8	NA
Metallurgical	187	–	–	–	–	NA	–	–	NA
Steam	5,118	3,930	2,698	2,613	2,260	NA	30.2	22.7	NA
Demand (thousand short tons)									
Consumption Total	15,237	15,307	16,216	15,848	15,719	11,807	–.4	–.8	2.9
Electric Utility	13,584	13,325	14,269	13,995	13,857	11,175	1.9	–.5	2.2
Industrial	512	915	835	727	525	507	–44.1	–.6	.1
Coke	w	w	w	w	w	w	w	w	w
Residential/Commercial	w	w	w	w	w	w	w	w	w
Consumer Stocks Total	w	w	w	w	w	w	w	w	w
Electric Utility	1,526	2,250	2,753	3,264	3,153	3,133	–32.2	–16.6	–7.7
All Other	w	w	w	w	w	w	w	w	w
Coal Prices (nominal dollars per short ton)									
Mine Total	$21.63	$19.10	$19.27	$20.81	$21.11	$25.70	13.3	.6	–1.9
Underground	21.63	19.10	19.27	20.81	21.11	25.70	13.3	.6	–1.9
Consumer									
Electric Utility	24.66	25.27	26.10	27.34	27.54	29.09	–2.4	–2.7	–1.8
Industrial	19.10	19.74	26.57	26.51	25.35	23.85	–3.2	–6.8	–2.4
Coke	w	w	w	w	w	w	w	w	w

1 For 1987, the Form EIA-7A solicited data on ''Daily Productive Capacity.'' To obtain annual productive capacity for a mine in 1987, each mine's daily productive capacity was multiplied by the number of days worked during the year.

2 Capacity utilization (percent) is the ratio of total production to annual productive capacity as reported by mining companies on Form EIA-7A. Productivity (short tons per miner per hour) is calculated by dividing total coal production by the total direct labor hours worked by all employees engaged in production, preparation, processing, development, maintenance, repair, and shop or yard work at mining operations.

3 Includes Mexico.

w Withheld to avoid disclosure of individual company data.

NA Not available.

Notes: Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-3, ''Quarterly Coal Consumption Report - Manufacturing Plants''; Form EIA-5, ''Coke Plant Report - Quarterly''; Form EIA-6, ''Coal Distribution Report''; Form EIA-7A, ''Coal Production Report''; Form EIA-759, ''Monthly Power Plant Report''; and U.S. Department of Commerce, Bureau of the Census, ''Monthly Report EM 545'' and ''Monthly Report IM 145.''

Table A14. Virginia Coal Statistics, 1987, 1992-1996

Category	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
Supply (thousand short tons)									
Recoverable Reserves	188,344	203,159	236,773	335,883	365,823	507,545	–7.3	–15.3	–10.4
Productive Capacity[1]	41,593	43,037	46,462	50,879	54,471	49,676	–3.3	–6.5	–1.9
Production Total	35,590	34,099	37,129	39,317	43,024	44,543	4.4	–4.6	–2.5
Underground	25,568	25,372	28,054	30,166	34,715	36,943	.8	–7.4	–4.0
Surface	10,022	8,727	9,075	9,151	8,308	7,599	14.8	4.8	3.1
Capacity Utilization[2]	85.34	79.07	79.61	77.07	78.70	88.93	7.9	2.0	–.4
Ratio of Recoverable Reserves to Production	5.3	6.0	6.4	8.5	8.5	11.4	–11.2	–11.2	–8.2
Number of Miners	6,241	6,919	8,121	8,339	9,138	12,047	–9.8	–9.1	–7.0
Productivity Total[2]	2.72	2.50	2.51	2.41	2.37	2.08	8.4	3.5	3.0
Underground	2.44	2.25	2.27	2.19	2.20	2.01	8.6	2.7	2.2
Surface	3.79	3.73	3.73	3.55	3.50	2.52	1.7	2.0	4.6
Producer/Distributor Stocks	1,644	1,649	1,180	1,389	1,714	–	–.3	–1.0	–
Distribution (thousand short tons)									
Distribution Total	36,208	34,024	38,548	41,639	45,728	NA	6.4	–5.7	NA
Domestic Distribution Total	22,776	24,283	26,866	27,388	28,504	NA	–6.2	–5.4	NA
Within State	7,231	5,657	6,867	6,076	6,082	NA	27.8	4.4	NA
To Other States	15,545	18,625	19,999	21,312	22,422	NA	–16.5	–8.8	NA
Foreign Distribution Total	13,432	9,742	11,683	14,251	17,224	NA	37.9	–6.0	NA
Metallurgical	12,760	8,921	11,155	13,747	14,389	NA	43.0	–3.0	NA
Steam	671	821	527	503	2,835	NA	–18.2	–30.2	NA
Canada Total	387	445	786	1,229	1,331	NA	–13.0	–26.5	NA
Metallurgical	387	445	786	1,229	–	NA	–13.0	–	NA
Steam	–	–	–	–	1,331	NA	–	–	NA
Overseas Total[3]	13,044	9,297	10,897	13,021	15,893	NA	40.3	–4.8	NA
Metallurgical	12,373	R 8,475	R 10,370	R 12,518	R 14,389	NA	46.0	–3.7	NA
Steam	671	R 821	R 527	R 503	R 1,505	NA	–18.2	–18.3	NA
Demand (thousand short tons)									
Consumption Total	14,983	13,378	12,792	13,584	13,418	13,227	12.0	2.8	1.4
Electric Utility	10,994	9,543	8,670	9,447	8,661	8,297	15.2	6.1	3.2
Industrial	2,613	2,585	2,838	2,863	3,592	3,662	1.1	–7.6	–3.7
Coke	w	w	w	w	w	w	w	w	w
Residential/Commercial	w	w	w	w	w	w	w	w	w
Consumer Stocks Total	w	w	w	w	w	w	w	w	w
Electric Utility	1,010	1,098	2,064	1,418	1,922	2,300	–7.9	–14.8	–8.7
All Other	w	w	w	w	w	w	w	w	w
Coal Prices (nominal dollars per short ton)									
Mine Total	$28.45	$28.47	$26.84	$26.80	$27.55	$27.42	–.1	.8	.4
Underground	29.46	29.20	27.33	27.26	27.88	27.94	.9	1.4	.6
Surface	25.88	26.34	25.33	25.29	26.17	24.90	–1.8	–.3	.4
Consumer									
Electric Utility	35.73	36.90	37.05	37.57	37.81	40.52	–3.2	–1.4	–1.4
Industrial	43.51	42.50	41.56	41.27	40.97	38.92	2.4	1.5	1.2
Coke	w	w	w	w	w	w	w	w	w

1 For 1987, the Form EIA-7A solicited data on ''Daily Productive Capacity.'' To obtain annual productive capacity for a mine in 1987, each mine's daily productive capacity was multiplied by the number of days worked during the year.

2 Capacity utilization (percent) is the ratio of total production to annual productive capacity as reported by mining companies on Form EIA-7A. Productivity (short tons per miner per hour) is calculated by dividing total coal production by the total direct labor hours worked by all employees engaged in production, preparation, processing, development, maintenance, repair, and shop or yard work at mining operations.

3 Includes Mexico.

w Withheld to avoid disclosure of individual company data.

NA Not available.

R Revised Data.

Notes: Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-3, ''Quarterly Coal Consumption Report - Manufacturing Plants''; Form EIA-5, ''Coke Plant Report - Quarterly''; Form EIA-6, ''Coal Distribution Report''; Form EIA-7A, ''Coal Production Report''; Form EIA-759, ''Monthly Power Plant Report''; and U.S. Department of Commerce, Bureau of the Census, ''Monthly Report EM 545'' and ''Monthly Report IM 145.''

Table A15. West Virginia Coal Statistics, 1987, 1992-1996

Category	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
Supply (thousand short tons)									
Recoverable Reserves	1,731,154	1,731,400	1,829,630	1,930,903	2,043,062	2,547,607	*	–4.0	–4.2
Productive Capacity[1]	217,409	204,837	201,684	191,706	198,083	158,356	6.1	2.3	3.6
Production Total	170,433	162,997	161,776	130,525	162,164	136,676	4.6	1.3	2.5
Underground	115,585	110,029	111,679	87,997	115,212	107,463	5.0	.1	.8
Surface	54,848	52,968	50,097	42,528	46,952	29,213	3.5	4.0	7.3
Capacity Utilization[2]	78.32	79.50	80.07	67.91	81.70	85.84	–1.5	–1.0	–1.0
Ratio of Recoverable Reserves to Production	10.2	10.6	11.3	14.8	12.6	18.6	–4.4	–5.2	–6.5
Number of Miners	20,121	21,334	21,861	22,979	26,017	29,458	–5.7	–6.2	–4.1
Productivity Total[2]	3.91	3.74	3.69	3.27	3.27	2.47	4.4	4.5	5.3
Underground	3.50	3.40	3.38	2.92	2.99	2.31	2.9	4.0	4.7
Surface	5.18	4.74	4.62	4.35	4.27	3.29	9.4	5.0	5.2
Producer/Distributor Stocks	4,947	6,176	6,692	4,059	7,405	–	–19.9	–9.6	–
Distribution (thousand short tons)									
Distribution Total	169,200	165,187	158,985	135,818	163,723	NA	2.4	.8	NA
Domestic Distribution Total	127,156	120,866	122,779	102,659	112,917	NA	5.2	3.0	NA
Within State	29,220	29,018	30,891	22,887	26,644	NA	.7	2.3	NA
To Other States	97,936	91,848	91,888	79,772	86,273	NA	6.6	3.2	NA
Foreign Distribution Total	42,044	44,321	36,205	33,159	50,806	NA	–5.1	–4.6	NA
Metallurgical	31,717	34,633	31,603	26,504	33,413	NA	–8.4	–1.3	NA
Steam	10,327	9,688	4,602	6,655	17,393	NA	6.6	–12.2	NA
Canada Total	7,222	5,784	5,644	4,108	8,911	NA	24.9	–5.1	NA
Metallurgical	6,907	5,759	5,605	4,071	8,021	NA	19.9	–3.7	NA
Steam	315	25	40	37	890	NA	NM	–22.8	NA
Overseas Total[3]	34,822	38,537	30,561	29,052	41,895	NA	–9.6	–4.5	NA
Metallurgical	24,810	28,874	25,998	22,433	25,392	NA	–14.1	–.6	NA
Steam	10,012	9,663	4,563	6,618	16,504	NA	3.6	–11.8	NA
Demand (thousand short tons)									
Consumption Total	36,139	34,489	34,767	32,046	32,019	34,815	4.8	3.1	.4
Electric Utility	32,775	30,657	30,318	27,782	28,050	30,605	6.9	4.0	.8
Industrial	1,630	1,984	2,637	2,406	2,266	2,326	–17.8	–7.9	–3.9
Coke	w	w	w	w	w	w	w	w	w
Residential/Commercial	w	w	w	w	w	w	w	w	w
Consumer Stocks Total	w	w	w	w	w	w	w	w	w
Electric Utility	4,372	4,744	4,479	4,001	7,863	9,401	–7.8	–13.6	–8.1
All Other	w	w	w	w	w	w	w	w	w
Coal Prices (nominal dollars per short ton)									
Mine Total	$26.58	$27.18	$27.42	$27.58	$28.15	$29.15	–2.2	–1.4	–1.0
Underground	27.31	27.77	27.93	28.54	29.14	29.86	–1.6	–1.6	–1.0
Surface	25.04	25.95	26.29	25.57	25.72	26.51	–3.5	–.7	–.6
Consumer									
Electric Utility	30.93	31.61	34.70	35.42	36.88	67.41	–2.1	–4.3	–101.5
Industrial	33.37	33.61	32.73	32.91	31.93	31.39	–.7	1.1	.7
Coke	w	w	w	w	w	w	w	w	w

1 For 1987, the Form EIA-7A solicited data on ''Daily Productive Capacity.'' To obtain annual productive capacity for a mine in 1987, each mine's daily productive capacity was multiplied by the number of days worked during the year.

2 Capacity utilization (percent) is the ratio of total production to annual productive capacity as reported by mining companies on Form EIA-7A. Productivity (short tons per miner per hour) is calculated by dividing total coal production by the total direct labor hours worked by all employees engaged in production, preparation, processing, development, maintenance, repair, and shop or yard work at mining operations.

3 Includes Mexico.

* Data round to zero.

w Withheld to avoid disclosure of individual company data.

NM Not meaningful as value is greater than 500 percent.

NA Not available.

Notes: Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-3, ''Quarterly Coal Consumption Report - Manufacturing Plants''; Form EIA-5, ''Coke Plant Report - Quarterly''; Form EIA-6, ''Coal Distribution Report''; Form EIA-7A, ''Coal Production Report''; Form EIA-759, ''Monthly Power Plant Report''; and U.S. Department of Commerce, Bureau of the Census, ''Monthly Report EM 545'' and ''Monthly Report IM 145.''

Table A16. Wyoming Coal Statistics, 1987, 1992-1996

Category	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
Supply (thousand short tons)									
Recoverable Reserves	6,591,293	6,723,963	6,999,460	6,830,720	6,750,718	6,596,139	–2.0	–0.6	*
Productive Capacity[1]	350,908	337,184	321,046	277,875	253,312	247,476	4.1	8.5	3.9
Production Total	278,440	263,822	237,092	210,129	190,172	146,850	5.5	10.0	7.4
Underground	2,641	2,008	2,735	2,136	2,511	107	31.5	1.3	42.8
Surface	275,799	261,814	234,357	207,993	187,661	146,743	5.3	10.1	7.3
Capacity Utilization[2]	79.35	78.24	73.85	75.62	75.07	59.34	1.4	1.4	3.3
Ratio of Recoverable Reserves to Production	23.7	25.5	29.5	32.5	35.5	44.9	–7.1	–9.6	–6.9
Number of Miners	2,814	3,142	3,291	3,159	3,326	3,191	–10.4	–4.1	–1.4
Productivity Total[2]	32.06	30.06	26.05	24.46	21.50	17.91	6.6	10.5	6.7
Underground	9.18	5.97	5.07	3.56	4.19	2.71	53.6	21.7	14.5
Surface	32.84	31.02	27.37	26.03	22.76	17.98	5.9	9.6	6.9
Producer/Distributor Stocks	1,504	1,997	1,592	998	2,794	–	–24.7	–14.3	–
Distribution (thousand short tons)									
Distribution Total	279,117	263,601	235,540	211,713	190,260	NA	5.9	10.0	NA
Domestic Distribution Total	276,723	261,333	234,016	210,739	188,983	NA	5.9	10.0	NA
Within State	26,253	26,521	28,334	25,519	26,388	NA	–1.0	–.1	NA
To Other States	250,470	234,812	205,682	185,220	162,595	NA	6.7	11.4	NA
Foreign Distribution Total	2,395	2,269	1,524	974	1,277	NA	5.5	17.0	NA
Steam	2,395	2,269	1,524	974	1,277	NA	5.5	17.0	NA
Canada Total	443	32	–	–	–	NA	NM	–	NA
Steam	443	32	–	–	–	NA	NM	–	NA
Overseas Total[3]	1,952	2,237	1,524	974	1,277	NA	–12.8	11.2	NA
Steam	1,952	2,237	1,524	974	1,277	NA	–12.8	11.2	NA
Demand (thousand short tons)									
Consumption Total	26,646	25,933	27,459	26,171	27,339	24,399	2.8	–.6	1.0
Electric Utility	24,430	23,850	25,350	24,111	25,114	22,408	2.4	–.7	1.0
Industrial	1,835	1,937	1,867	1,873	2,126	w	–5.3	–3.6	w
Residential/Commercial	382	146	242	187	w	w	162.0	w	w
Consumer Stocks Total	2,269	2,936	2,553	1,841	2,242	w	–22.7	.3	w
Electric Utility	2,198	2,857	2,476	1,728	2,153	2,805	–23.1	.5	–2.7
All Other	71	79	77	113	89	w	–10.7	–5.6	w
Coal Prices (nominal dollars per short ton)									
Mine Total	$6.41	$6.58	$6.83	$7.32	$8.14	$9.80	–2.6	–5.8	–4.6
Underground	w	w	w	w	w	w	w	w	w
Surface	w	w	w	w	w	w	w	w	w
Consumer									
Electric Utility	$14.30	$14.29	$14.09	$14.03	$13.42	$15.27	.1	1.6	–.7
Industrial	22.32	22.72	22.87	23.43	23.67	w	–1.8	–1.4	w

1 For 1987, the Form EIA-7A solicited data on ''Daily Productive Capacity.'' To obtain annual productive capacity for a mine in 1987, each mine's daily productive capacity was multiplied by the number of days worked during the year.

2 Capacity utilization (percent) is the ratio of total production to annual productive capacity as reported by mining companies on Form EIA-7A. Productivity (short tons per miner per hour) is calculated by dividing total coal production by the total direct labor hours worked by all employees engaged in production, preparation, processing, development, maintenance, repair, and shop or yard work at mining operations.

3 Includes Mexico.

* Data round to zero.

w Withheld to avoid disclosure of individual company data.

NM Not meaningful as value is greater than 500 percent.

NA Not available.

Notes: Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-3, ''Quarterly Coal Consumption Report - Manufacturing Plants''; Form EIA-5, ''Coke Plant Report - Quarterly''; Form EIA-6, ''Coal Distribution Report''; Form EIA-7A, ''Coal Production Report''; Form EIA-759, ''Monthly Power Plant Report''; and U.S. Department of Commerce, Bureau of the Census, ''Monthly Report EM 545'' and ''Monthly Report IM 145.''

Table A17. All Other States Coal Statistics, 1987, 1992-1996

Category	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
Supply (thousand short tons)									
Recoverable Reserves	427,163	420,998	476,538	506,419	514,739	803,845	1.5	–4.5	–6.8
Productive Capacity[1]	23,441	24,495	23,451	23,567	28,144	35,803	–4.3	–4.5	–4.6
Production Total	19,674	19,911	19,672	18,848	22,284	28,878	–1.2	–3.1	–4.2
Underground	5,227	4,880	4,880	4,523	4,367	7,329	7.1	4.6	–3.7
Surface	14,447	15,031	14,792	14,325	17,917	21,549	–3.9	–5.2	–4.3
Capacity Utilization[2]	83.55	81.02	83.52	79.48	78.65	80.17	3.1	1.5	.4
Ratio of Recoverable Reserves to Production	21.7	21.1	24.2	26.9	23.1	27.8	2.7	–1.5	–2.7
Number of Miners	2,394	2,312	2,373	2,478	2,918	5,362	3.5	–4.8	–8.6
Productivity Total[2]	3.73	3.96	3.82	3.59	3.40	2.58	–6.0	2.3	4.1
Underground	2.94	3.03	2.86	3.05	2.40	1.98	–3.1	5.2	4.5
Surface	4.13	4.41	4.30	3.80	3.78	2.88	–6.2	2.3	4.1
Producer/Distributor Stocks	292	784	598	297	289	–	–62.8	.3	–
Imports[3]	5,267	5,084	5,327	4,605	1,713	671	3.6	32.4	25.7
Distribution (thousand short tons)									
Distribution Total	19,828	R 19,080	R 18,813	R 19,056	R 21,904	NA	3.9	–2.5	NA
Domestic Distribution Total	18,285	17,930	17,767	17,914	20,654	NA	2.0	–3.0	NA
Within State	28	26	25	100	143	NA	5.2	–33.6	NA
To Other States	18,257	17,904	17,743	17,814	20,511	NA	2.0	–2.9	NA
Foreign Distribution Total	1,544	1,150	1,046	1,142	1,250	NA	34.2	5.4	NA
Metallurgical	–	38	109	51	–	NA	–100.0	–	NA
Steam	1,544	1,112	937	1,092	1,250	NA	38.8	5.4	NA
Canada Total	*	1	3	1	–	NA	–82.9	–	NA
Steam	*	1	3	1	–	NA	–82.9	–	NA
Overseas Total[4]	1,544	1,149	1,042	1,142	1,250	NA	34.3	5.4	NA
Metallurgical	–	38	109	51	–	NA	–100.0	–	NA
Steam	1,544	1,112	934	1,091	1,250	NA	38.9	5.4	NA
Demand (thousand short tons)									
Consumption Total	400,049	382,060	371,817	365,045	350,253	334,403	4.7	3.4	2.0
Electric Utility	365,146	344,785	334,773	329,279	315,259	296,439	5.9	3.7	2.3
Industrial	29,720	31,653	31,795	31,970	31,728	30,998	–6.1	–1.6	–.5
Coke	2,686	2,784	2,723	1,243	1,148	4,603	–3.5	23.7	–5.8
Residential/Commercial	2,497	2,838	2,526	2,552	2,119	2,363	–12.0	4.2	.6
Consumer Stocks Total	60,142	62,368	57,506	48,850	68,257	78,115	–3.6	–3.1	–2.9
Electric Utility	55,838	58,348	53,253	45,411	64,006	71,867	–4.3	–3.3	–2.8
All Other	4,304	4,021	4,252	3,439	4,251	6,247	7.0	.3	–4.0
Coal Prices (nominal dollars per short ton)									
Mine Total	$24.06	$22.80	$23.19	$23.14	$24.39	$25.88	5.5	–.3	–.8
Underground	25.78	26.25	26.97	26.72	27.26	27.79	–1.8	–1.4	–.8
Surface	23.44	21.67	21.94	22.02	23.69	25.23	8.1	–.3	–.8
Consumer									
Electric Utility	27.46	28.22	29.70	30.68	31.79	34.55	–2.7	–3.6	–2.5
Industrial	38.22	38.51	38.72	38.95	39.35	40.68	–.8	–.7	–.7
Coke	51.21	51.67	50.89	58.19	53.10	51.49	–.9	–.9	*

1 For 1987, the Form EIA-7A solicited data on ''Daily Productive Capacity.'' To obtain annual productive capacity for a mine in 1987, each mine's daily productive capacity was multiplied by the number of days worked during the year.

2 Capacity utilization (percent) is the ratio of total production to annual productive capacity as reported by mining companies on Form EIA-7A. Productivity (short tons per miner per hour) is calculated by dividing total coal production by the total direct labor hours worked by all employees engaged in production, preparation, processing, development, maintenance, repair, and shop or yard work at mining operations.

3 Imports for 1992 through 1996 include imports to electric utilities, manufacturing plants and coke plants. Imports for 1987 include only imports to electric utilities.

4 Includes Mexico.

* Data round to zero.

W Withheld to avoid disclosure of individual company data.

NA Not available.

R Revised Data.

Notes: Other States include Alaska, Arkansas, California, Iowa, Kansas, Louisiana, Maryland, Missouri, Oklahoma, Tennessee, and Washington. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-3, ''Quarterly Coal Consumption Report - Manufacturing Plants''; Form EIA-5, ''Coke Plant Report - Quarterly''; Form EIA-6, ''Coal Distribution Report''; Form EIA-7A, ''Coal Production Report''; Form EIA-759, ''Monthly Power Plant Report''; and U.S. Department of Commerce, Bureau of the Census, ''Monthly Report EM 545'' and ''Monthly Report IM 145.''

Table A18. Total U.S. Coal Statistics, 1987, 1992-1996

Category	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
Supply (thousand short tons)									
Recoverable Reserves	19,427,980	20,105,197	21,016,526	21,535,283	21,626,971	24,241,218	–3.4	–2.6	–2.4
Productive Capacity[1]	1,324,712	1,299,054	1,320,656	1,261,873	1,241,054	1,183,404	2.0	1.6	1.3
Production Total	1,063,856	1,032,974	1,033,504	945,424	997,545	918,762	3.0	1.6	1.6
Underground	409,849	396,249	399,103	351,053	407,239	372,874	3.4	.1	1.0
Surface	654,007	636,725	634,401	594,371	590,306	545,888	2.7	2.6	2.0
Capacity Utilization[2]	80.21	79.40	78.11	74.77	80.20	77.29	1.0	*	.4
Ratio of Recoverable Reserves to Production	18.3	19.5	20.3	22.8	21.7	26.4	–6.2	–4.2	–4.0
Number of Miners	83,462	90,252	97,500	101,322	110,196	142,667	–7.5	–6.7	–5.8
Productivity Total[2]	5.69	5.38	4.98	4.70	4.36	3.30	5.8	6.9	6.3
Underground	3.57	3.39	3.19	2.95	2.93	2.20	5.6	5.1	5.5
Surface	9.05	8.48	7.67	7.23	6.59	4.98	6.7	8.3	6.9
Producer/Distributor Stocks	28,648	34,444	33,219	25,284	33,993	34,090	–16.8	–4.2	–1.9
Imports[3]	6,476	6,317	6,599	5,496	1,806	765	2.5	37.6	26.8
Distribution (thousand short tons)									
Distribution Total	1,059,892	1,030,330	1,022,523	959,445	998,647	NA	2.9	1.5	NA
Domestic Distribution Total	967,693	940,423	949,843	883,934	897,267	NA	2.9	1.9	NA
Within State	340,005	336,821	353,765	339,034	355,232	NA	.9	–1.1	NA
To Other States	627,688	603,602	596,078	544,900	542,035	NA	4.0	3.7	NA
Foreign Distribution Total	92,199	89,907	72,680	75,510	101,380	NA	2.5	–2.3	NA
Metallurgical	56,162	54,077	52,206	52,591	61,432	NA	3.9	–2.2	NA
Steam	36,037	35,830	20,474	22,919	39,948	NA	.6	–2.5	NA
Canada Total	10,599	8,023	8,467	7,751	13,919	NA	32.1	–6.6	NA
Metallurgical	8,472	6,986	7,464	6,666	9,394	NA	21.3	–2.5	NA
Steam	2,127	1,037	1,003	1,085	4,525	NA	105.0	–17.2	NA
Overseas Total[4]	81,600	81,884	64,214	67,759	87,461	NA	–.3	–1.7	NA
Metallurgical	47,690	47,091	44,743	45,925	52,038	NA	1.3	–2.2	NA
Steam	33,910	34,793	19,471	21,834	35,423	NA	–2.5	–1.1	NA
Demand (thousand short tons)									
Consumption Total	983,334	940,880	930,201	925,944	892,421	836,860	4.5	2.4	1.8
Electric Utility	874,681	829,007	817,270	813,508	779,860	717,894	5.5	2.9	2.2
Industrial	70,941	73,055	75,179	74,892	74,042	75,175	–2.9	–1.1	–.6
Coke	31,706	33,011	31,740	31,323	32,366	36,877	–3.9	–.5	–1.7
Residential/Commercial	6,006	5,807	6,013	6,221	6,153	6,914	3.4	–.6	–1.5
Consumer Stocks Total	123,024	134,639	136,139	120,458	163,692	185,459	–8.6	–6.9	–4.4
Electric Utility	114,669	126,304	126,897	111,341	154,130	170,797	–9.2	–7.1	–4.3
All Other	8,355	8,334	9,243	9,117	9,562	14,662	.3	–3.3	–6.0
Coal Prices (nominal dollars per short ton)									
Mine Total	$18.50	$18.83	$19.41	$19.85	$21.03	$23.07	–1.8	–3.1	–2.4
Underground	25.96	26.18	26.39	26.92	27.83	29.63	–.9	–1.7	–1.5
Surface	13.82	14.25	15.02	15.67	16.34	18.58	–3.0	–4.1	–3.2
Consumer									
Electric Utility	26.45	27.01	28.03	28.58	29.36	31.83	–2.1	–2.6	–2.0
Industrial	32.32	32.42	32.55	32.23	32.78	33.71	–.3	–.3	–.5
Coke	47.33	47.34	46.56	47.44	47.92	46.55	*	–.3	.2

1 For 1987, the Form EIA-7A solicited data on ''Daily Productive Capacity.'' To obtain annual productive capacity for a mine in 1987, each mine's daily productive capacity was multiplied by the number of days worked during the year.

2 Capacity utilization (percent) is the ratio of total production to annual productive capacity as reported by mining companies on Form EIA-7A. Productivity (short tons per miner per hour) is calculated by dividing total coal production by the total direct labor hours worked by all employees engaged in production, preparation, processing, development, maintenance, repair, and shop or yard work at mining operations.

3 Imports for 1992 through 1996 include imports to electric utilities, manufacturing plants and coke plants. Imports for 1987 include only imports to electric utilities.

4 Includes Mexico.

* Data round to zero.

NA Not available.

Notes: Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Consumption Total does not include coal consumed by independent power producers. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-3, ''Quarterly Coal Consumption Report - Manufacturing Plants''; Form EIA-5, ''Coke Plant Report - Quarterly''; Form EIA-6, ''Coal Distribution Report''; Form EIA-7A, ''Coal Production Report''; Form EIA-759, ''Monthly Power Plant Report''; and U.S. Department of Commerce, Bureau of the Census, ''Monthly Report EM 545'' and ''Monthly Report IM 145.''

Appendix B

Metric Tables

In response to requests from international users of U.S. coal statistics, certain summary data have been converted from the customary short tons to metric. This enables U.S. statistics to be compared with data published by countries using the metric system. The conversion to metric tons is made by multiplying short tons by 0.907185.

The data converted to metric tons are from Tables ES3, 1, 16, 25, 35, 48, 67, 68, 76, 80, 92, 94, 96, 98, and 99.

Table B1. Trends in U.S. Coal Production, Imports, Consumption, Exports, and Stocks, 1987, 1992-1996
(Million Metric Tons)

Activity	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
Production	965	937	938	858	905	833	3.0	1.6	1.6
Imports	6	7	7	7	3	2	–1.0	17.0	16.9
Producer and Distributor Stocks[1]	26	31	30	23	31	31	–16.8	–4.2	–1.9
Consumption	892	854	844	840	810	759	4.5	2.4	1.8
Exports	82	80	65	68	93	72	2.2	–3.1	1.4
Consumer Stocks[1]	112	122	124	109	148	168	–8.6	–6.9	–4.4

[1] Reported as of the last day of the quarter.

Note: Consumption does not include coal consumed by independent power producers.

Sources: • Production: Energy Information Administration (EIA), Form EIA-7A, ''Coal Production Report''; U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, ''Quarterly Mine Employment and Coal Production Report''; and State Mining Agency Coal Production Reports. • Imports: U.S. Department of Commerce, Bureau of the Census, ''Monthly Report IM 145.'' • Producer and Distributor Stocks: EIA, Form EIA-6, ''Coal Distribution Report.'' • Exports: U.S. Department of Commerce, Bureau of the Census, ''Monthly Report EM 545.''
• Consumption and Consumer Stocks: EIA, Form EIA-759, ''Monthly Power Plant Report''; Form EIA-3, Quarterly Coal Consumption Report - Manufacturing Plants''; Form EIA-5, ''Coke Plant Report - Quarterly''; and Form EIA-6, ''Coal Distribution Report.''

Table B2. Coal Production by State, 1987, 1992-1996
(Thousand Metric Tons)

Coal-Producing State and Region	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
Alabama	22,351	22,353	21,106	22,469	23,401	23,169	*	–1.1	–0.4
Alaska	1,343	1,540	1,422	1,452	1,392	1,354	–12.8	–.9	–.1
Arizona	9,473	10,838	11,844	11,043	11,351	10,323	–12.6	–4.4	–.9
Arkansas	19	26	46	40	53	76	–28.0	–22.6	–14.3
California	–	–	–	–	94	42	–	–	–
Colorado	22,576	23,324	22,955	19,854	17,442	13,082	–3.2	6.7	6.3
Illinois	42,325	43,708	47,896	37,283	54,301	53,665	–3.2	–6.0	–2.6
Indiana	26,916	23,593	28,057	26,576	27,639	31,033	14.1	–.6	–1.6
Iowa	–	–	42	159	262	425	–	–	–
Kansas	211	258	258	310	329	1,834	–18.4	–10.5	–21.4
Kentucky Total	138,278	139,470	146,639	141,792	146,119	149,859	–.8	–1.4	–.9
Eastern	106,096	107,539	112,897	109,036	108,302	108,777	–1.3	–.5	–.3
Western	32,182	31,931	33,742	32,756	37,817	41,082	.8	–3.9	–2.7
Louisiana	2,922	3,374	3,141	2,843	2,939	2,495	–13.4	–.1	1.8
Maryland	3,713	3,327	3,295	3,044	3,031	3,595	11.6	5.2	.3
Missouri	644	497	761	592	2,618	3,894	29.6	–29.6	–18.1
Montana	34,374	35,789	37,775	32,583	35,280	31,207	–3.9	–.6	1.1
New Mexico	21,834	24,324	25,438	25,644	22,270	17,356	–10.2	–.5	2.6
North Dakota	27,089	27,317	29,289	29,005	28,797	22,809	–.8	–1.5	1.9
Ohio	25,920	23,694	27,122	26,141	27,581	32,466	9.4	–1.5	–2.5
Oklahoma	1,543	1,702	1,733	1,595	1,580	2,603	–9.3	–.6	–5.6
Pennsylvania Total	61,636	55,860	56,460	54,159	62,578	63,887	10.3	–.4	–.4
Anthracite	4,310	4,248	4,192	3,906	3,160	3,230	1.5	8.1	3.3
Bituminous	57,325	51,613	52,268	50,253	59,419	60,657	11.1	–.9	–.6
Tennessee	3,312	2,922	2,709	2,764	3,154	5,844	13.3	1.2	–6.1
Texas	50,044	47,794	47,488	49,502	49,960	45,839	4.7	*	1.0
Utah	24,954	22,831	22,135	19,819	19,359	14,976	9.3	6.5	5.8
Virginia	32,286	30,934	33,683	35,668	39,030	40,409	4.4	–4.6	–2.5
Washington	4,142	4,416	4,439	4,300	4,764	4,036	–6.2	–3.4	.3
West Virginia Total	154,614	147,869	146,760	118,411	147,112	123,991	4.6	1.3	2.5
Northern	41,649	41,834	44,739	30,665	45,379	47,176	–.4	–2.1	–1.4
Southern	112,965	106,034	102,022	87,746	101,734	76,814	6.5	2.6	4.4
Wyoming	252,597	239,336	215,086	190,626	172,522	133,220	5.5	10.0	7.4
Appalachian Total[1]	**409,928**	**394,499**	**404,033**	**371,690**	**414,189**	**402,138**	**3.9**	**–.3**	**.2**
Interior Total[1]	**156,805**	**152,884**	**163,164**	**151,658**	**177,499**	**182,946**	**2.6**	**–3.0**	**–1.7**
Western Total[1]	**398,381**	**389,715**	**370,382**	**334,327**	**313,270**	**248,404**	**2.2**	**6.2**	**5.4**
East of Miss. River	**511,351**	**493,732**	**513,729**	**468,306**	**533,946**	**527,917**	**3.6**	**–1.1**	**–.3**
West of Miss. River	**453,763**	**443,367**	**423,851**	**389,369**	**371,012**	**305,570**	**2.3**	**5.2**	**4.5**
U.S. Total	**965,114**	**937,098**	**937,580**	**857,675**	**904,958**	**833,487**	**3.0**	**1.6**	**1.6**

[1] For a definition of coal-producing regions, see Appendix C.

* Data round to zero.

Notes: Coal production excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-7A, ''Coal Production Report''; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, ''Quarterly Mine Employment and Coal Production Report.''

Table B3. Productive Capacity of Coal Mines by State, 1987, 1992-1996
(Thousand Metric Tons)

Coal-Producing State and Region	1996	1995	1994	1993	1992	1987[1]	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
Alabama	29,174	29,526	29,982	25,325	27,048	26,480	–1.2	1.9	1.1
Alaska	w	w	w	w	w	w	w	w	w
Arizona	w	w	w	w	w	w	w	w	w
Arkansas	–	w	w	w	w	w	w	w	w
California	–	–	–	–	w	w	w	w	w
Colorado	26,608	29,425	28,191	27,252	23,449	19,342	–9.6	3.2	3.6
Illinois	55,998	51,371	62,971	62,886	68,753	68,812	9.0	–5.0	–2.3
Indiana	32,263	31,984	35,318	39,875	39,000	41,135	.9	–4.6	–2.7
Iowa	–	–	w	w	w	w	w	w	w
Kansas	w	w	w	w	w	w	w	w	w
Kentucky Total	171,662	184,316	193,618	185,796	177,220	168,722	–6.9	–.8	.2
Eastern	132,169	137,993	146,720	142,717	135,212	116,913	–4.2	–.6	1.4
Western	39,493	46,323	46,897	43,079	42,008	51,810	–14.7	–1.5	–3.0
Louisiana	w	w	w	w	w	w	w	w	w
Maryland	4,477	3,999	3,930	3,563	3,539	4,216	11.9	6.0	.7
Missouri	949	980	1,097	w	w	w	–3.2	w	–16.6
Montana	50,961	46,808	46,361	46,129	44,073	38,871	8.9	3.7	3.0
New Mexico	29,660	29,719	29,762	30,264	26,773	30,205	–.2	2.6	–.2
North Dakota	29,197	31,265	32,586	32,995	33,553	35,531	–6.6	–3.4	–2.1
Ohio	34,096	30,854	39,848	38,315	37,493	42,036	10.5	–2.3	–2.3
Oklahoma	1,797	2,320	2,042	2,197	2,256	3,464	–22.5	–5.5	–7.0
Pennsylvania Total	74,102	70,023	73,460	74,524	75,267	78,712	5.8	–.4	–.7
Anthracite	4,993	5,939	5,240	5,267	3,758	3,512	–15.9	7.4	4.0
Bituminous	69,109	64,083	68,220	69,256	71,509	75,201	7.8	–.8	–.9
Tennessee	3,637	3,402	3,092	3,414	3,567	6,627	6.9	.5	–6.4
Texas	54,072	49,676	50,672	51,814	53,108	46,843	8.8	.4	1.6
Utah	27,424	28,021	25,075	23,526	23,164	20,843	–2.1	4.3	3.1
Virginia	37,733	39,042	42,150	46,156	49,415	45,065	–3.3	–6.5	–1.9
Washington	w	w	w	w	w	w	w	w	w
West Virginia Total	197,230	185,825	182,964	173,913	179,697	143,658	6.1	2.3	3.6
Northern	49,534	51,124	53,792	54,445	56,981	54,095	–3.1	–3.4	–1.0
Southern	147,696	134,701	129,172	119,468	122,716	89,563	9.6	4.7	5.7
Wyoming	318,338	305,888	291,248	252,084	229,801	224,506	4.1	8.5	3.9
Appalachian Total[2]	**512,618**	**500,664**	**522,147**	**507,927**	**511,239**	**463,708**	**2.4**	**.1**	**1.1**
Interior Total[2]	**188,385**	**186,329**	**203,116**	**204,968**	**213,225**	**222,826**	**1.1**	**–3.0**	**–1.8**
Western Total[2]	**500,757**	**491,489**	**472,817**	**431,858**	**401,401**	**387,033**	**1.9**	**5.7**	**2.9**
East of Miss. River	**640,372**	**630,341**	**667,333**	**653,767**	**661,000**	**625,465**	**1.6**	**–.8**	**.3**
West of Miss. River	**561,387**	**548,141**	**530,746**	**490,986**	**464,865**	**448,102**	**2.4**	**4.8**	**2.5**
U.S. Total	**1,201,759**	**1,178,482**	**1,198,079**	**1,144,753**	**1,125,866**	**1,073,567**	**2.0**	**1.6**	**1.3**

1 For 1987, Form EIA-7A solicited data on ''Daily Productive Capacity.'' To obtain annual productive capacity for a mine in 1987, each mine's daily productive capacity was multiplied by the number of days worked during the year.

2 For a definition of coal-producing regions, see Appendix C.

Notes: Productive capacity is the maximum amount of coal that can be produced as reported by mining companies on Form EIA-7A. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons, which are not required to provide these data.

Source: Energy Information Administration, Form EIA-7A, ''Coal Production Report.''

Table B4. Recoverable Coal Reserves at Producing Mines by State, 1987, 1992-1996
(Million Metric Tons)

Coal-Producing State and Region	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
Alabama	410	463	415	387	424	488	–11.5	–0.9	–1.9
Alaska	w	w	w	w	w	w	w	w	w
Arizona	w	w	w	w	w	w	w	w	w
Arkansas	–	w	w	w	w	w	w	w	w
California	–	–	–	–	w	w	w	w	w
Colorado	582	628	614	552	552	606	–7.3	1.3	–.4
Illinois	808	800	874	965	1,088	1,298	1.0	–7.1	–5.1
Indiana	350	294	276	344	367	467	19.3	–1.2	–3.1
Iowa	–	–	w	w	w	33	w	w	w
Kansas	w	w	w	w	w	w	w	w	w
Kentucky Total	1,139	1,160	1,238	1,658	1,318	1,578	–1.8	–3.6	–3.5
Eastern	742	692	734	1,222	866	1,011	7.3	–3.8	–3.4
Western	396	468	505	436	452	566	–15.3	–3.2	–3.9
Louisiana	w	w	w	w	w	w	w	w	w
Maryland	64	52	80	60	53	68	23.1	4.7	–.7
Missouri	2	2	11	w	w	140	13.1	w	–36.4
Montana	1,187	1,135	1,163	1,166	1,226	1,461	4.6	–.8	–2.3
New Mexico	1,303	1,343	1,322	1,336	1,356	1,413	–2.9	–1.0	–.9
North Dakota	1,181	1,513	1,537	1,280	1,211	1,256	–21.9	–.6	–.7
Ohio	376	425	435	472	523	685	–11.4	–7.9	–6.4
Oklahoma	17	17	39	42	44	45	–1.3	–21.1	–10.2
Pennsylvania Total	722	668	828	852	850	1,242	8.1	–4.0	–5.8
Anthracite	81	45	34	59	64	55	81.4	6.3	4.5
Bituminous	641	623	794	793	787	1,187	2.8	–5.0	–6.6
Tennessee	54	62	38	27	39	93	–12.9	8.3	–6.0
Texas	797	853	931	1,002	1,078	1,102	–6.5	–7.3	–3.5
Utah	258	340	384	405	443	444	–24.1	–12.6	–5.8
Virginia	171	184	215	305	332	460	–7.3	–15.3	–10.4
Washington	w	w	w	w	w	w	w	w	w
West Virginia Total	1,570	1,571	1,660	1,752	1,853	2,311	*	–4.0	–4.2
Northern	673	709	781	747	871	1,153	–5.2	–6.3	–5.8
Southern	898	861	879	1,005	982	1,158	4.3	–2.2	–2.8
Wyoming	5,980	6,100	6,350	6,197	6,124	5,984	–2.0	–.6	*
Appalachian Total[1]	**4,110**	**4,117**	**4,404**	**5,076**	**4,941**	**6,358**	**–.2**	**–4.5**	**–4.7**
Interior Total[1]	**2,501**	**2,572**	**2,784**	**2,994**	**3,228**	**3,815**	**–2.8**	**–6.2**	**–4.6**
Western Total[1]	**11,014**	**11,550**	**11,878**	**11,466**	**11,450**	**11,818**	**–4.6**	**–1.0**	**–.8**
East of Miss. River	**5,665**	**5,679**	**6,059**	**6,822**	**6,848**	**8,690**	**–.2**	**–4.6**	**–4.6**
West of Miss. River	**11,960**	**12,560**	**13,007**	**12,715**	**12,772**	**13,302**	**–4.8**	**–1.6**	**–1.2**
U.S. Total	**17,625**	**18,239**	**19,066**	**19,536**	**19,620**	**21,991**	**–3.4**	**–2.6**	**–2.4**

[1] For a definition of coal-producing regions, see Appendix C.

* Data round to zero.

Notes: Recoverable reserves represent the quantity of coal that can be recovered (i.e., mined) from existing coal reserves at reporting mines. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons, which are not required to provide these data. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-7A, ''Coal Production Report''; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, ''Quarterly Mine Employment and Coal Production Report.''

Table B5. U.S. Coal Imports by Continent and Country of Origin, 1987, 1992-1996
(Metric Tons)

Continent and Country of Origin	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
North America Total	**1,300,730**	**1,219,813**	**1,137,082**	**955,786**	**926,102**	**498,312**	**6.6**	**8.9**	**11.2**
Canada	1,294,100	1,197,249	1,136,881	953,696	926,102	459,727	8.1	8.7	12.2
Guatemala	–	–	–	4	–	–	–	–	–
Mexico	6,630	196	201	2,086	–	38,585	NM	–	–17.8
Netherlands Antilles	–	22,368	–	–	–	–	–100.0	–	–
South America Total	**3,619,341**	**4,157,892**	**4,463,532**	**4,912,696**	**2,088,277**	**895,361**	**–12.9**	**14.7**	**16.8**
Colombia	2,292,279	2,482,908	3,075,043	3,734,915	1,599,502	868,084	–7.7	9.4	11.4
Venezuela	1,327,062	1,674,984	1,388,489	1,177,781	488,775	27,277	–20.8	28.4	54.0
Europe Total	**2,369**	**474**	**36**	**56**	**81**	**218**	**399.8**	**132.5**	**30.3**
Belgium & Luxembourg	2,243	–	–	–	–	–	–	–	–
Denmark	–	214	–	54	–	–	–100.0	–	–
Poland	–	–	36	2	–	–	–	–	–
Spain	90	–	–	–	–	40	–	–	9.4
Turkey	36	–	–	–	–	–	–	–	–
United Kingdom	–	260	–	–	81	178	–100.0	–100.0	–100.0
Asia Total	**1,392,520**	**923,980**	**1,046,493**	**642,359**	**338,513**	**–**	**50.7**	**42.4**	**–**
China (Mainland)	–	48	101	–	258	–	–100.0	–100.0	–
Hong Kong	1	–	–	–	1	–	–	–	–
India	–	–	–	–	60,014	–	–	–100.0	–
Indonesia	1,392,517	923,908	1,025,543	642,359	229,779	–	50.7	56.9	–
Japan	2	24	1	–	–	–	–91.7	–	–
Malaysia	–	–	–	–	48,461	–	–	–100.0	–
Vietnam	–	–	20,848	–	–	–	–	–	–
Oceania & Australia Total	**149,498**	**230,554**	**91,002**	**95,664**	**91,613**	**191,088**	**–35.1**	**13.0**	**–2.7**
Australia	149,498	192,054	83,646	90,787	91,613	191,088	–22.1	13.0	–2.7
New Zealand	–	38,500	7,356	4,877	–	–	–100.0	–	–
Africa Total	**–**	**–**	**141,931**	**23,967**	**5,227**	**–**	**–**	**–100.0**	**–**
South Africa, Rep of	–	–	135,849	18,433	5,227	–	–	–100.0	–
Swaziland	–	–	6,082	5,534	–	–	–	–	–
Total	**6,464,458**	**6,532,713**	**6,880,076**	**6,630,528**	**3,449,813**	**1,584,979**	**–1.0**	**17.0**	**16.9**

NM Not meaningful as value is greater than 500 percent.
Note: Coal imports include coal to Puerto Rico and the Virgin Islands.
Source: U.S. Department of Commerce, Bureau of the Census, ''Monthly Report IM 145.''

Table B6. Coal Mining Productivity by State, 1987, 1992-1996

(Metric Tons of Coal Produced per Miner per Hour)

Coal-Producing State and Region	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
Alabama	2.00	2.03	2.04	2.14	2.26	1.79	–1.6	–3.0	1.3
Alaska	6.18	6.77	6.30	6.71	6.29	6.21	–8.8	–.4	*
Arizona	5.72	5.75	6.08	5.63	5.71	6.13	–.6	*	–.8
Arkansas	–	1.33	1.38	1.26	1.52	1.64	–100.0	–	–
California	–	–	–	–	10.09	4.71	–	–	–
Colorado	6.64	5.57	5.62	5.30	4.78	3.83	19.2	8.5	6.3
Illinois	3.79	3.51	3.26	2.93	3.10	2.29	8.2	5.2	5.8
Indiana	4.52	4.24	3.88	4.04	3.71	3.24	6.4	5.0	3.8
Iowa	–	–	1.38	.65	1.03	1.27	–	–	–
Kansas	1.97	2.01	1.75	2.09	2.00	3.40	–2.4	–.5	–5.9
Kentucky Total	3.45	3.24	2.95	2.94	2.90	2.44	6.6	4.4	3.9
Eastern	3.34	3.14	2.94	2.88	2.82	2.35	6.1	4.3	4.0
Western	3.89	3.60	2.97	3.16	3.17	2.70	7.9	5.3	4.1
Louisiana	9.86	12.02	11.79	11.02	11.27	13.84	–18.0	–3.3	–3.7
Maryland	3.74	3.46	3.34	3.10	2.64	3.07	8.2	9.1	2.2
Missouri	3.16	2.31	3.26	1.67	2.81	2.07	36.9	3.0	4.8
Montana	19.85	19.10	19.89	17.68	18.29	16.96	3.9	2.1	1.8
New Mexico	7.66	6.27	6.14	6.06	6.06	5.21	22.1	6.0	4.4
North Dakota	15.61	15.24	17.09	16.02	16.43	12.21	2.4	–1.3	2.8
Ohio	3.59	3.29	3.10	3.14	2.76	2.07	9.1	6.8	6.3
Oklahoma	2.37	2.69	2.43	2.54	1.97	1.72	–12.1	4.7	3.6
Pennsylvania Total	3.05	2.93	2.71	2.54	2.43	1.79	4.1	5.9	6.1
Anthracite	1.74	1.89	1.75	1.68	1.21	1.03	–8.0	9.5	6.0
Bituminous	3.23	3.06	2.82	2.64	2.55	1.85	5.4	6.0	6.3
Tennessee	1.99	2.14	2.03	2.24	1.98	1.52	–6.8	.1	3.1
Texas	9.19	8.25	8.00	7.63	6.66	5.85	11.3	8.4	5.1
Utah	6.56	6.37	5.98	5.41	4.96	3.50	3.0	7.2	7.2
Virginia	2.46	2.27	2.28	2.18	2.15	1.89	8.4	3.5	3.0
Washington	3.60	3.67	3.73	3.62	4.09	2.78	–1.8	–3.1	2.9
West Virginia Total	3.55	3.40	3.35	2.97	2.97	2.24	4.4	4.5	5.3
Northern	3.68	3.38	3.29	2.70	2.88	2.37	8.9	6.3	5.0
Southern	3.50	3.40	3.37	3.07	3.01	2.16	2.8	3.8	5.5
Wyoming	29.08	27.27	23.63	22.19	19.50	16.25	6.6	10.5	6.7
Appalachian Total[1]	**3.16**	**3.01**	**2.90**	**2.73**	**2.67**	**2.09**	**4.8**	**4.3**	**4.7**
Interior Total[1]	**4.89**	**4.51**	**4.02**	**4.01**	**3.79**	**3.02**	**8.4**	**6.6**	**5.5**
Western Total[1]	**15.79**	**14.22**	**13.23**	**12.27**	**11.55**	**9.45**	**11.0**	**8.1**	**5.9**
East of Miss. River	**3.30**	**3.13**	**2.98**	**2.82**	**2.78**	**2.19**	**5.3**	**4.3**	**4.6**
West of Miss. River	**14.21**	**12.87**	**11.99**	**11.01**	**10.01**	**7.92**	**10.4**	**9.2**	**6.7**
U.S. Total	**5.16**	**4.88**	**4.51**	**4.26**	**3.96**	**2.99**	**5.8**	**6.9**	**6.3**

[1] For a definition of coal-producing regions, see Appendix C.

* Data round to zero.

Notes: Productivity is calculated by dividing total coal production by the total direct labor hours worked by all mine employees. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons, which are not required to provide these data.

Sources: Energy Information Administration, Form EIA-7A, ''Coal Production Report''; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, ''Quarterly Mine Employment and Coal Production Report.''

Table B7. Coal Consumption by Census Division and State, 1987, 1992-1996
(Thousand Metric Tons)

Census Division and State	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
New England Total	**6,372**	**6,043**	**5,945**	**5,883**	**6,620**	**6,139**	**5.4**	**–0.9**	**0.4**
Connecticut	845	822	782	715	770	739	2.7	2.3	1.5
Maine	212	256	421	407	777	247	–17.0	–27.7	–1.7
Massachusetts	4,062	3,732	3,567	3,457	3,862	4,071	8.8	1.3	*
New Hampshire	1,249	1,229	1,167	1,295	1,189	1,067	1.6	1.2	1.8
Rhode Island	3	2	3	3	4	4	21.1	–9.6	–3.9
Vermont	2	3	4	5	18	11	–38.2	–45.8	–19.8
Middle Atlantic Total	**64,379**	**62,108**	**61,268**	**63,856**	**64,790**	**63,695**	**3.6**	**–.1**	**.1**
New Jersey	2,179	1,881	1,786	2,135	2,130	3,116	15.8	.6	–3.9
New York	10,284	10,036	10,409	10,776	11,790	10,407	2.5	–3.3	–.1
Pennsylvania	51,915	50,191	49,073	50,945	50,870	50,172	3.4	.5	.4
East North Central Total	**207,746**	**197,496**	**193,401**	**191,082**	**182,035**	**183,100**	**5.2**	**3.3**	**1.4**
Illinois	40,307	35,946	35,450	34,595	28,667	32,279	12.1	8.9	2.5
Indiana	58,079	56,818	54,427	54,751	53,310	46,616	2.2	2.2	2.5
Michigan	33,288	32,479	32,363	29,226	28,626	32,536	2.5	3.8	.3
Ohio	54,282	51,328	51,447	53,552	53,225	53,841	5.8	.5	.1
Wisconsin	21,790	20,925	19,714	18,957	18,208	17,828	4.1	4.6	2.3
West North Central Total	**123,961**	**118,867**	**113,935**	**109,715**	**104,785**	**92,169**	**4.3**	**4.3**	**3.3**
Iowa	19,206	18,721	17,546	17,407	16,322	13,781	2.6	4.1	3.8
Kansas	17,313	14,987	15,566	15,772	12,906	13,784	15.5	7.6	2.6
Minnesota	17,476	17,189	16,991	16,620	15,354	13,158	1.7	3.3	3.2
Missouri	31,191	28,806	25,096	21,211	22,843	22,465	8.3	8.1	3.7
Nebraska	9,415	9,431	8,437	8,769	7,450	6,118	–.2	6.0	4.9
North Dakota	27,679	27,431	27,545	27,490	27,488	21,864	.9	.2	2.6
South Dakota	1,680	2,302	2,754	2,445	2,422	998	–27.0	–8.7	5.9
South Atlantic Total	**150,180**	**140,849**	**137,833**	**136,604**	**130,796**	**132,965**	**6.6**	**3.5**	**1.4**
Delaware	1,775	1,825	2,020	2,219	1,605	2,458	–2.7	2.5	–3.5
District of Columbia	21	5	43	46	46	63	309.0	–17.6	–11.5
Florida	25,803	24,064	23,661	23,977	23,921	21,450	7.2	1.9	2.1
Georgia	28,266	28,384	26,539	24,567	23,116	26,423	–.4	5.1	.8
Maryland	10,311	10,159	9,518	9,315	8,811	10,261	1.5	4.0	*
North Carolina	25,060	21,849	21,121	23,369	21,840	18,112	14.7	3.5	3.7
South Carolina	12,566	11,139	11,787	11,715	10,238	10,615	12.8	5.3	1.9
Virginia	13,592	12,136	11,605	12,323	12,173	11,999	12.0	2.8	1.4
West Virginia	32,785	31,288	31,540	29,072	29,047	31,584	4.8	3.1	.4
East South Central Total	**100,199**	**96,008**	**90,074**	**94,371**	**85,097**	**80,016**	**4.4**	**4.2**	**2.5**
Alabama	33,613	31,124	28,552	29,980	28,585	24,160	8.0	4.1	3.7
Kentucky	37,070	35,849	34,555	35,467	31,483	29,050	3.4	4.2	2.7
Mississippi	5,254	4,178	3,887	3,656	3,161	4,396	25.7	13.5	2.0
Tennessee	24,262	24,856	23,079	25,268	21,868	22,409	–2.4	2.6	.9
West South Central Total	**132,877**	**126,195**	**125,419**	**127,729**	**122,660**	**107,816**	**5.3**	**2.0**	**2.3**
Arkansas	13,441	12,284	11,427	10,384	11,374	10,946	9.4	4.3	2.3
Louisiana	11,371	12,118	12,791	12,407	12,405	9,426	–6.2	–2.1	2.1
Oklahoma	18,257	17,777	16,080	17,115	15,812	12,225	2.7	3.7	4.5
Texas	89,809	84,017	85,121	87,823	83,069	75,219	6.9	2.0	2.0
Mountain Total	**97,274**	**97,906**	**104,957**	**100,401**	**101,752**	**85,390**	**–.6**	**–1.1**	**1.4**
Arizona	15,234	15,134	17,763	17,228	16,252	12,134	.6	–1.6	2.6
Colorado	15,623	15,395	15,853	15,485	15,146	13,614	1.5	.8	1.5
Idaho	360	421	484	479	485	448	–14.5	–7.2	–2.4
Montana	7,286	9,076	10,060	8,389	10,015	7,012	–19.7	–7.6	.4
Nevada	6,898	6,659	7,229	7,081	7,338	6,278	3.6	–1.5	1.0
New Mexico	13,877	13,809	13,947	13,619	13,455	13,059	.5	.8	.7
Utah	13,823	13,886	14,711	14,377	14,260	10,711	–.4	–.8	2.9
Wyoming	24,173	23,526	24,910	23,742	24,801	22,134	2.8	–.6	1.0
Pacific Total	**9,079**	**8,081**	**11,034**	**10,362**	**11,055**	**7,524**	**12.3**	**–4.8**	**2.1**
Alaska	640	740	722	783	718	249	–13.4	–2.8	11.1
California	2,102	2,375	2,266	2,226	2,559	1,754	–11.5	–4.8	2.0
Hawaii	154	174	78	66	42	57	–11.6	37.9	11.6
Oregon	1,029	1,020	2,249	1,904	1,927	186	.8	–14.5	20.9
Washington	5,155	3,772	5,718	5,383	5,808	5,279	36.6	–2.9	–.3
U.S. Total	**892,066**	**853,552**	**843,865**	**840,003**	**809,591**	**759,187**	**4.5**	**2.4**	**1.8**

* Data round to zero.

Note: U.S. Total does not include coal consumed by independent power producers. Totals may not equal sum of components due to independent rounding.

Sources: Energy Information Administration, Form EIA-759, ''Monthly Power Plant Report''; Form EIA-3, ''Quarterly Coal Consumption Report - Manufacturing Plants''; Form EIA-5, ''Coke Plant Report - Quarterly''; and Form EIA-6, ''Coal Distribution Report.''

Table B8. Year-End Consumer Coal Stocks by Census Division and State, 1987, 1992-1996
(Thousand Metric Tons)

Census Division and State	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
New England Total	**1,177**	**879**	**1,013**	**897**	**1,137**	**958**	**33.9**	**0.9**	**2.3**
Connecticut	w	w	w	w	w	w	w	w	w
Maine	w	w	w	w	w	w	w	w	w
Massachusetts	w	w	w	w	w	w	w	w	w
New Hampshire	w	w	w	w	w	w	w	w	w
Rhode Island	–	–	–	–	–	w	–	–	–
Vermont	–	–	–	–	–	w	–	–	–
Middle Atlantic Total	**9,887**	**11,253**	**12,762**	**12,755**	**17,678**	**17,779**	**–12.1**	**–13.5**	**–6.3**
New Jersey	w	w	w	w	w	w	w	w	w
New York	w	w	w	w	w	w	w	w	w
Pennsylvania	8,037	9,346	10,940	11,127	14,493	14,624	–14.0	–13.7	–6.4
East North Central Total	**27,962**	**30,679**	**32,507**	**27,363**	**39,609**	**47,024**	**–8.8**	**–8.3**	**–5.6**
Illinois	w	w	w	w	w	w	w	w	w
Indiana	7,219	8,435	10,620	7,074	11,347	13,606	–14.4	–10.7	–6.8
Michigan	w	w	w	w	w	w	w	w	w
Ohio	4,927	5,385	7,090	6,922	9,801	10,128	–8.5	–15.8	–7.7
Wisconsin	4,044	3,317	w	w	w	w	21.9	w	w
West North Central Total	**16,634**	**16,976**	**w**	**w**	**w**	**w**	**–2.0**	**w**	**w**
Iowa	4,186	4,034	3,790	3,465	4,406	4,621	3.8	–1.3	–1.1
Kansas	2,709	3,501	2,380	1,836	2,503	3,018	–22.6	2.0	–1.2
Minnesota	1,577	1,800	2,026	1,134	2,043	3,109	–12.4	–6.3	–7.3
Missouri	4,826	4,335	w	w	w	w	11.3	w	w
Nebraska	w	w	w	w	w	w	w	w	w
North Dakota	w	w	w	w	w	w	w	w	w
South Dakota	w	w	w	w	w	w	w	w	w
South Atlantic Total	**17,766**	**17,878**	**22,160**	**17,320**	**26,565**	**29,066**	**–.6**	**–9.6**	**–5.3**
Delaware	w	w	w	w	w	w	w	w	w
Florida	3,120	2,965	3,550	3,212	3,739	2,992	5.3	–4.4	.5
Georgia	3,491	3,435	4,394	2,655	4,387	6,089	1.6	–5.5	–6.0
Maryland	w	w	w	w	w	w	w	w	w
North Carolina	2,424	2,590	3,917	2,776	4,277	4,349	–6.4	–13.2	–6.3
South Carolina	1,976	1,990	2,298	1,717	2,223	2,156	–.7	–2.9	–1.0
Virginia	w	w	w	w	w	w	w	w	w
West Virginia	w	w	w	w	w	w	w	w	w
East South Central Total	**8,447**	**9,925**	**10,221**	**8,416**	**13,063**	**17,757**	**–14.9**	**–10.3**	**–7.9**
Alabama	2,594	3,310	3,748	2,538	4,109	4,547	–21.6	–10.8	–6.0
Kentucky	w	w	w	w	w	w	w	w	w
Mississippi	w	w	w	w	w	w	w	w	w
Tennessee	1,362	1,709	w	w	w	w	–20.3	w	w
West South Central Total	**18,048**	**18,656**	**14,478**	**13,703**	**w**	**w**	**–3.3**	**w**	**w**
Arkansas	2,468	2,558	1,612	1,706	1,444	2,140	–3.5	14.3	1.6
Louisiana	2,251	2,422	1,744	1,814	1,592	2,559	–7.0	9.0	–1.4
Oklahoma	3,821	3,852	2,238	1,862	2,867	3,436	–.8	7.4	1.2
Texas	9,508	9,824	8,884	8,320	w	w	–3.2	w	w
Mountain Total	**w**	**w**	**w**	**w**	**w**	**w**	**w**	**w**	**w**
Arizona	1,837	2,751	2,941	3,372	3,263	3,483	–33.2	–13.4	–6.9
Colorado	2,773	3,340	2,853	3,133	3,120	w	–17.0	–2.9	w
Idaho	70	107	71	78	92	105	–34.4	–6.5	–4.4
Montana	w	w	w	w	w	w	w	w	w
Nevada	w	w	w	w	w	w	w	w	w
New Mexico	w	w	w	w	w	w	w	w	w
Utah	w	w	w	w	w	w	w	w	w
Wyoming	2,058	2,664	2,316	1,670	2,034	2,601	–22.7	.3	–2.6
Pacific Total	**1,156**	**2,346**	**796**	**833**	**1,387**	**1,334**	**–50.7**	**–4.4**	**–1.6**
Alaska	1	1	2	4	w	w	–	w	w
California	136	121	114	84	99	157	12.4	8.3	–1.6
Hawaii	w	w	w	w	w	w	w	w	w
Oregon	w	w	w	w	w	w	w	w	w
Washington	778	1,786	516	416	667	618	–56.4	3.9	2.6
U.S. Total	**111,606**	**122,142**	**123,504**	**109,278**	**148,499**	**168,246**	**–8.6**	**–6.9**	**–4.4**

[w] Withheld to avoid disclosure of individual company data.

Notes: Totals may not equal sum of components due to independent rounding. Stocks for Residential and Commercial Sector are not included.

Sources: Energy Information Administration, Form EIA-759, ''Monthly Power Plant Report''; Form EIA-5, ''Coke Plant Report - Quarterly''; and Form EIA-3, ''Quarterly Coal Consumption Report - Manufacturing Plants.''

Table B9. U.S. Coal Exports by Destination, 1987, 1992-1996
(Thousand Metric Tons)

Continent and Country of Destination	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
North America Total	**12,346**	**9,444**	**8,623**	**8,363**	**13,908**	**14,936**	**30.7**	**–2.9**	**–2.1**
Canada[1]	10,912	8,552	8,340	8,064	13,734	14,721	27.6	–5.6	–3.3
Jamaica	22	75	23	26	24	–	–71.1	–2.9	–
Mexico	1,369	790	218	226	70	96	73.3	110.6	34.3
Other[2]	44	27	41	47	80	120	62.5	–13.8	–10.5
South America Total	**6,808**	**6,321**	**5,394**	**5,216**	**6,141**	**6,096**	**7.7**	**2.6**	**1.2**
Argentina	276	310	411	476	304	679	–11.1	–2.4	–9.5
Brazil	5,933	5,761	4,973	4,715	5,778	5,289	3.0	.7	1.3
Chile	521	206	*	*	25	85	152.9	114.5	22.4
Other[2]	79	44	11	25	34	44	78.2	23.7	6.8
Europe Total	**42,813**	**44,107**	**32,500**	**34,088**	**51,941**	**30,989**	**–2.9**	**–4.7**	**3.6**
Belgium & Luxembourg	4,145	4,084	4,455	4,744	6,528	4,153	1.5	–10.7	*
Bulgaria	1,258	1,214	1,123	822	546	–	3.6	23.2	–
Denmark	1,194	1,905	432	305	3,477	847	–37.3	–23.4	3.9
Finland	638	1,187	342	229	186	156	–46.2	36.1	17.0
France	3,495	3,319	2,608	3,603	7,312	2,618	5.3	–16.8	3.3
Germany, FR	957	1,772	293	461	910	433	–46.0	1.3	9.2
Ireland	694	829	883	894	1,314	1,279	–16.3	–14.8	–6.6
Italy	8,350	8,222	6,843	6,276	8,476	8,652	1.6	–.4	–.4
Netherlands	6,403	6,624	4,421	5,046	8,299	3,713	–3.3	–6.3	6.2
Norway	77	109	79	92	107	157	–29.2	–7.9	–7.6
Portugal	1,635	1,590	958	1,353	1,342	1,167	2.8	5.1	3.8
Romania	1,372	1,800	1,409	653	683	996	–23.8	19.0	3.6
Spain	3,713	4,221	3,748	3,687	4,114	2,227	–12.0	–2.5	5.8
Sweden	970	1,014	636	668	1,057	606	–4.3	–2.1	5.4
Turkey	1,966	1,825	1,211	1,456	1,805	700	7.7	2.1	12.1
United Kingdom	5,621	4,288	3,051	3,730	5,076	2,348	31.1	2.6	10.2
Yugoslavia, FR	–	59	–	71	659	807	–100.0	–100.0	–100.0
Other[2]	324	47	7	*	49	129	NM	60.1	10.8
Asia Total	**16,311**	**17,323**	**16,290**	**17,690**	**18,633**	**18,330**	**–5.8**	**–3.3**	**–1.3**
China (Taiwan)	2,215	2,298	3,061	3,117	3,230	4,326	–3.6	–9.0	–7.2
Israel	1,090	690	784	770	748	220	58.0	9.9	19.4
Japan	9,551	10,693	9,215	10,776	11,162	10,054	–10.7	–3.8	–.6
Korea, Republic of	3,423	3,640	3,228	3,008	3,041	3,651	–6.0	3.0	–.7
Other[2]	32	2	3	20	454	79	NM	–48.3	–9.3
Oceania & Australia Total	**1**	*****	*****	**1**	*****	**1**	**322.4**	**31.6**	**–6.0**
Other[2]	1	*	*	1	*	1	322.4	31.6	–6.0
Africa Total	**3,796**	**3,133**	**1,927**	**2,245**	**2,378**	**1,865**	**21.2**	**12.4**	**8.2**
Algeria	160	200	322	371	555	826	–19.8	–26.7	–16.6
Egypt	941	1,120	951	788	770	424	–16.0	5.2	9.3
Morocco	1,497	1,099	76	533	668	457	36.2	22.3	14.1
South Africa, Rep of	1,197	713	578	515	385	56	67.9	32.8	40.5
Other[2]	–	–	–	38	–	103	–	–	–100.0
Total	**82,075**	**80,329**	**64,735**	**67,603**	**93,001**	**72,219**	**2.2**	**–3.1**	**1.4**

[1] Based on the U.S. - Canada Free Trade Agreement, as of January 1990, the U.S. Department of Commerce began reporting statistics on U.S. exports to Canada based on information on imports provided monthly by the Canadian government.
[2] Includes countries with exports less than or equal to 50,000 short tons (45,359 metric tons) in 1995.
* Data round to zero.
NM Not meaningful as value is greater than 500 percent.
Note: Total may not equal sum of components due to independent rounding.
Source: U.S. Department of Commerce, Bureau of the Census, ''Monthly Report EM 545.''

Table B10. Average Mine Price of Coal by State, 1987, 1992-1996
(Nominal Dollars per Metric Ton)

Coal-Producing State and Region	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
Alabama	$43.52	$42.38	$44.22	$46.67	$45.00	$45.66	2.7	–0.8	–0.5
Alaska	w	w	w	w	w	w	w	w	w
Arizona	w	w	w	w	w	w	w	w	w
Arkansas	–	w	w	w	w	w	w	w	w
California	–	–	–	–	w	w	w	w	w
Colorado	$19.77	$21.23	$21.78	$22.44	$23.51	$25.99	–6.9	–4.2	–3.0
Illinois	25.07	25.41	25.50	27.86	30.49	32.59	–1.3	–4.8	–2.9
Indiana	22.31	23.93	24.56	25.23	25.81	27.09	–6.8	–3.6	–2.1
Iowa	–	–	w	w	w	28.54	w	w	w
Kansas	w	w	w	w	w	27.05	w	w	w
Kentucky Total	$26.36	$27.33	$27.42	$27.31	$27.01	28.83	–3.6	–.6	–1.0
Eastern	27.54	28.66	27.83	28.11	27.55	29.45	–3.9	*	–.7
Western	22.47	22.88	26.05	24.64	25.46	27.20	–1.8	–3.1	–2.1
Louisiana	w	w	w	w	w	w	w	w	w
Maryland	$26.90	$27.22	$29.04	$27.79	$27.99	$26.79	–1.2	–1.0	*
Missouri	25.70	20.84	24.01	w	w	31.87	23.3	w	–2.4
Montana	10.98	10.61	11.46	$12.18	$11.24	13.70	3.5	–.6	–2.4
New Mexico	27.18	26.24	25.68	25.31	25.51	24.01	3.6	1.6	1.4
North Dakota	8.83	8.81	8.40	8.41	8.25	8.72	.2	1.7	.1
Ohio	27.39	28.62	32.11	30.91	29.69	33.95	–4.3	–2.0	–2.3
Oklahoma	29.25	26.60	28.18	27.46	28.40	35.08	9.9	.7	–2.0
Pennsylvania Total	28.42	29.52	28.86	29.21	31.53	32.85	–3.7	–2.6	–1.6
Anthracite	40.54	43.85	39.76	36.31	37.74	48.11	–7.5	1.8	–1.9
Bituminous	27.54	28.41	28.05	28.70	31.24	32.14	–3.0	–3.1	–1.7
Tennessee	30.63	29.70	29.95	30.01	29.88	30.48	3.1	.6	*
Texas	13.41	13.41	13.65	14.19	13.69	13.33	*	–.5	.1
Utah	23.85	21.06	21.24	22.94	23.27	28.33	13.3	.6	–1.9
Virginia	31.36	31.38	29.59	29.55	30.37	30.23	–.1	.8	.4
Washington	w	w	w	w	w	w	w	w	w
West Virginia Total	$29.30	$29.96	$30.23	$30.40	$31.03	$32.13	–2.2	–1.4	–1.0
Northern	27.41	27.46	29.51	30.96	32.00	31.60	–.2	–3.8	–1.6
Southern	30.00	30.94	30.54	30.20	30.60	32.45	–3.1	–.5	–.9
Wyoming	7.06	7.25	7.53	8.06	8.97	10.80	–2.6	–5.8	–4.6
Appalachian Total[1]	**29.52**	**30.25**	**30.16**	**30.47**	**30.81**	**32.19**	**–2.4**	**–1.1**	**–.9**
Interior Total[1]	**20.29**	**20.73**	**21.90**	**22.08**	**23.82**	**25.38**	**–2.1**	**–3.9**	**–2.4**
Western Total[1]	**11.06**	**11.19**	**11.65**	**12.28**	**12.78**	**14.60**	**–1.1**	**–3.5**	**–3.0**
East of Miss. River	**28.33**	**29.04**	**29.15**	**29.56**	**30.13**	**31.54**	**–2.5**	**–1.5**	**–1.2**
West of Miss. River	**11.46**	**11.56**	**12.03**	**12.68**	**13.21**	**14.93**	**–.8**	**–3.5**	**–2.9**
U.S. Total	**20.39**	**20.76**	**21.40**	**21.88**	**23.18**	**25.43**	**–1.8**	**–3.1**	**–2.4**

[1] For a definition of coal-producing regions, see Appendix C.

* Data round to zero.

Notes: Average mine price is calculated by dividing the total free on board (f.o.b.) mine value of the coal produced by the total production. A measure of dispersion of these average prices at the State level (interquartile range) is given in Appendix D, Table D2. Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons, which are not required to provide these data.

Sources: Energy Information Administration, Form EIA-7A, ''Coal Production Report''; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, ''Quarterly Mine Employment and Coal Production Report.''

Table B11. Average Price of Coal Delivered to Electric Utilities by Census Division and State, 1987, 1992-1996

(Nominal Dollars per Metric Ton)

Census Division and State	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
New England Total	**$48.01**	**$47.78**	**$47.19**	**$47.78**	**$49.76**	**$51.76**	**0.5**	**–0.9**	**–0.8**
Connecticut	55.17	54.37	51.20	49.38	56.55	70.06	1.5	–.6	–2.6
Massachusetts	47.00	47.00	47.40	47.83	48.62	46.71	*	–.8	.1
New Hampshire	46.55	45.93	43.72	46.73	49.26	56.73	1.3	–1.4	–2.2
Middle Atlantic Total	**38.67**	**38.17**	**40.04**	**40.41**	**41.41**	**40.34**	**1.3**	**–1.7**	**–.5**
New Jersey	50.18	52.00	53.45	52.36	51.39	51.59	–3.5	–.6	–.3
New York	40.95	40.63	41.49	42.58	42.57	43.49	.8	–1.0	–.7
Pennsylvania	37.55	36.91	39.01	39.39	40.58	39.05	1.7	–1.9	–.4
East North Central Total	**31.18**	**32.70**	**33.69**	**34.15**	**35.33**	**40.37**	**–4.6**	**–3.1**	**–2.8**
Illinois	35.43	35.91	36.04	38.92	40.85	47.18	–1.3	–3.5	–3.1
Indiana	27.20	28.59	29.54	29.47	30.75	35.19	–4.9	–3.0	–2.8
Michigan	32.34	34.12	36.26	36.57	37.73	44.70	–5.2	–3.8	–3.5
Ohio	35.61	37.96	38.25	37.54	37.92	40.95	–6.2	–1.5	–1.5
Wisconsin	21.55	23.40	25.50	25.31	28.57	31.25	–7.9	–6.8	–4.0
West North Central Total	**17.12**	**17.75**	**18.47**	**18.60**	**20.86**	**23.40**	**–3.6**	**–4.8**	**–3.4**
Iowa	17.96	18.88	19.17	19.32	21.58	25.15	–4.8	–4.5	–3.7
Kansas	19.30	19.66	19.68	19.49	23.14	24.49	–1.8	–4.4	–2.6
Minnesota	20.94	22.18	22.14	22.12	23.10	23.24	–5.6	–2.4	–1.1
Missouri	19.08	20.00	23.58	26.90	30.39	33.02	–4.6	–11.0	–5.9
Nebraska	13.64	14.18	14.45	14.24	14.07	17.92	–3.8	–.8	–3.0
North Dakota	10.71	10.64	10.23	10.34	10.42	11.53	.7	.7	–.8
South Dakota	18.67	15.82	14.44	14.66	15.07	16.48	18.0	5.5	1.4
South Atlantic Total	**40.43**	**42.17**	**43.57**	**44.98**	**45.50**	**45.75**	**–4.1**	**–2.9**	**–1.4**
Delaware	45.76	46.60	46.28	48.53	49.95	52.18	–1.8	–2.2	–1.4
Florida	46.74	48.42	48.18	48.04	49.63	49.58	–3.5	–1.5	–.6
Georgia	40.28	42.57	43.89	47.72	47.80	48.02	–5.4	–4.2	–1.9
Maryland	42.43	42.99	43.92	44.95	44.84	44.06	–1.3	–1.4	–.4
North Carolina	40.65	44.72	46.04	46.69	47.40	49.51	–9.1	–3.8	–2.2
South Carolina	41.38	42.83	43.92	44.28	43.14	48.51	–3.4	–1.0	–1.8
Virginia	39.38	40.68	40.84	41.41	41.67	44.66	–3.2	–1.4	–1.4
West Virginia	34.09	34.84	38.25	39.05	40.65	74.31	–2.1	–4.3	–101.5
East South Central Total	**32.35**	**33.16**	**35.75**	**36.71**	**36.43**	**39.62**	**–2.4**	**–2.9**	**–2.2**
Alabama	40.11	40.78	44.55	46.91	45.93	51.86	–1.6	–3.3	–2.8
Kentucky	26.93	28.34	29.94	30.08	29.77	31.90	–5.0	–2.5	–1.9
Mississippi	36.71	37.92	39.18	44.66	44.02	54.63	–3.2	–4.4	–4.3
Tennessee	30.46	30.80	33.75	34.11	34.18	36.09	–1.1	–2.8	–1.9
West South Central Total	**22.19**	**22.78**	**22.91**	**24.40**	**24.86**	**26.37**	**–2.6**	**–2.8**	**–1.9**
Arkansas	28.83	30.85	30.76	32.52	31.79	29.70	–6.5	–2.4	–.3
Louisiana	27.27	27.70	27.61	28.27	27.48	29.58	–1.5	–.2	–.9
Oklahoma	18.51	18.74	19.29	23.50	23.66	30.38	–1.2	–5.9	–5.3
Texas	21.24	21.66	21.86	23.05	23.79	24.78	–1.9	–2.8	–1.7
Mountain Total	**24.05**	**23.71**	**24.07**	**24.37**	**23.85**	**24.26**	**1.5**	**.2**	**–.1**
Arizona	32.57	31.59	31.15	30.63	31.20	30.38	3.1	1.1	.8
Colorado	22.31	22.85	23.16	23.80	23.88	24.26	–2.4	–1.7	–.9
Montana	13.12	12.64	12.99	12.98	13.38	12.26	3.8	–.5	.7
Nevada	33.55	31.99	35.68	35.64	35.63	34.48	4.9	–1.5	–.3
New Mexico	28.71	28.21	28.08	27.12	26.27	24.11	1.8	2.2	2.0
Utah	27.18	27.85	28.77	30.13	30.35	32.07	–2.4	–2.7	–1.8
Wyoming	15.76	15.75	15.53	15.47	14.79	16.83	.1	1.6	–.7
Pacific Total	**26.42**	**25.16**	**24.18**	**23.75**	**24.44**	**29.56**	**5.0**	**2.0**	**–1.2**
Oregon	20.73	20.72	21.14	21.77	23.40	26.22	.1	–3.0	–2.6
Washington	27.46	26.17	25.27	24.35	24.78	29.85	4.9	2.6	–.9
U.S. Total	**29.16**	**29.77**	**30.89**	**31.51**	**32.36**	**35.09**	**–2.1**	**–2.6**	**–2.0**

* Data round to zero.

Note: Average prices are based on the cost including insurance and freight.

Source: Federal Energy Regulatory Commission, FERC Form 423, ''Monthly Report of Cost and Quality of Fuels for Electric Plants.''

Table B12. Average Price of Coal Delivered to Other Industrial Plants by Census Division and State, 1987, 1992-1996

(Nominal Dollars per Metric Ton)

Census Division and State	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
New England Total	**$63.22**	**$62.72**	**$61.44**	**$63.75**	**$72.43**	**$65.29**	**0.8**	**–3.3**	**–0.3**
Connecticut	–	–	–	–	–	w	w	w	w
Maine	w	w	w	w	w	w	w	w	w
Massachusetts	w	w	w	w	w	w	w	w	w
New Hampshire	–	–	–	–	–	w	w	w	w
Vermont	–	–	–	–	–	w	w	w	w
Middle Atlantic Total	**w**	**w**	**w**	**w**	**w**	**w**	**w**	**w**	**w**
New Jersey	w	w	w	w	w	w	w	w	w
New York	44.21	46.19	46.52	46.47	48.44	48.66	–4.3	–2.3	–1.0
Pennsylvania	37.30	37.56	37.10	37.53	39.35	40.36	–.7	–1.3	–.9
East North Central Total	**37.96**	**38.45**	**38.27**	**38.07**	**38.64**	**39.38**	**–1.3**	**–.4**	**–.4**
Illinois	32.72	32.00	32.11	32.43	32.23	36.54	2.3	.4	–1.2
Indiana	35.01	36.53	34.56	34.07	34.81	34.11	–4.2	.1	.3
Michigan	45.50	45.39	45.42	45.70	46.49	47.49	.2	–.5	–.5
Ohio	38.89	38.78	39.40	38.38	38.84	37.46	.3	*	.4
Wisconsin	44.12	44.32	45.45	45.02	46.60	48.49	–.4	–1.3	–1.0
West North Central Total	**21.00**	**20.86**	**20.52**	**19.84**	**19.57**	**19.42**	**.6**	**1.8**	**.9**
Iowa	32.32	32.23	31.44	30.87	29.94	38.44	.3	1.9	–1.9
Kansas	35.78	35.74	35.55	36.44	35.23	38.01	.1	.4	–.7
Minnesota	31.80	37.92	39.31	39.47	39.27	41.23	–16.1	–5.1	–2.8
Missouri	34.58	36.17	36.24	35.40	34.70	32.32	–4.4	–.1	.8
Nebraska	w	w	w	w	w	w	w	w	w
North Dakota	w	w	w	w	w	w	w	w	w
South Dakota	w	w	w	w	w	w	w	w	w
South Atlantic Total	**w**	**w**	**w**	**w**	**w**	**w**	**w**	**w**	**w**
Delaware	w	w	w	w	w	w	w	w	w
Florida	50.36	51.41	51.37	53.22	53.20	51.47	–2.0	–1.4	–.2
Georgia	48.73	49.21	50.39	49.82	49.80	48.14	–1.0	–.5	.1
Maryland	35.85	34.90	35.47	35.47	36.18	35.68	2.7	–.2	*
North Carolina	47.80	47.72	48.08	47.89	47.91	48.26	.2	*	–.1
South Carolina	48.59	47.58	48.32	47.78	47.74	46.99	2.1	.4	.4
Virginia	47.96	46.85	45.82	45.49	45.16	42.90	2.4	1.5	1.2
West Virginia	36.78	37.05	36.07	36.28	35.20	34.60	–.7	1.1	.7
East South Central Total	**w**	**w**	**w**	**w**	**w**	**w**	**w**	**w**	**w**
Alabama	44.26	43.58	42.70	43.00	43.83	44.51	1.5	.2	–.1
Kentucky	48.52	48.60	47.64	46.63	48.26	47.53	–.2	.1	.2
Mississippi	w	w	w	w	w	w	w	w	w
Tennessee	38.82	39.33	38.96	39.04	39.16	39.11	–1.3	–.2	–.1
West South Central Total	**24.02**	**24.29**	**25.29**	**23.57**	**25.13**	**w**	**–1.1**	**–1.1**	**w**
Arkansas	47.67	47.97	48.81	48.57	49.18	49.81	–.6	–.8	–.5
Louisiana	w	w	w	w	w	w	w	w	w
Oklahoma	w	w	w	w	w	45.54	w	w	w
Texas	20.93	20.68	21.54	19.38	19.99	21.16	1.2	1.1	–.1
Mountain Total	**29.44**	**29.83**	**31.73**	**31.43**	**31.59**	**31.67**	**–1.3**	**–1.7**	**–.8**
Arizona	43.29	44.60	45.58	44.65	45.14	42.62	–2.9	–1.0	.2
Colorado	25.54	28.78	31.92	31.56	33.44	31.73	–11.2	–6.5	–2.4
Idaho	40.11	37.60	36.76	36.13	36.70	38.62	6.7	2.2	.4
Montana	w	w	w	w	w	w	w	w	w
Nevada	w	w	w	w	w	w	w	w	w
New Mexico	w	w	w	w	w	w	w	w	w
Utah	21.06	21.76	29.29	29.23	27.94	26.29	–3.2	–6.8	–2.4
Wyoming	24.61	25.05	25.21	25.83	26.09	26.02	–1.8	–1.4	–.6
Pacific Total	**46.79**	**48.15**	**49.51**	**48.31**	**47.80**	**52.61**	**–2.8**	**–.5**	**–1.3**
California	43.58	45.32	47.83	47.25	46.35	53.61	–3.8	–1.5	–2.3
Hawaii	w	w	w	w	w	w	w	w	w
Oregon	w	w	w	w	w	w	w	w	w
Washington	64.83	65.20	64.89	58.54	62.00	51.18	–.6	1.1	2.7
U.S. Total	**35.63**	**35.74**	**35.88**	**35.53**	**36.14**	**37.15**	**–.3**	**–.3**	**–.5**

* Data round to zero.

w Withheld to avoid disclosure of individual company data.

Notes: Price data are for manufacturing plants only. Average prices are based on the cost including insurance, freight, and taxes.

Source: Energy Information Administration, Form EIA-3, ''Quarterly Coal Consumption - Manufacturing Plants.''

Table B13. Average Price of Coal Delivered to Coke Plants by Census Division and State, 1987, 1992-1996

(Nominal Dollars per Metric Ton)

Census Division and State	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
Middle Atlantic Total	**w**	**w**	**w**	**w**	**w**	**w**	**w**	**w**	**w**
New York	w	w	w	w	w	w	w	w	w
Pennsylvania	$49.79	$50.83	$50.98	$51.16	$51.25	$46.89	–2.0	–0.7	0.7
East North Central Total	**54.61**	**54.12**	**52.06**	**54.58**	**55.53**	**54.01**	**.9**	**–.4**	**.1**
Illinois	w	w	w	w	w	w	w	w	w
Indiana	57.25	58.13	56.11	57.64	59.21	56.70	–1.5	–.8	.1
Michigan	w	w	w	–	–	w	w	w	w
Ohio	49.58	46.50	46.32	49.68	51.45	50.75	6.6	–.9	–.3
West North Central Total	–	–	–	–	–	**w**	–	**w**	**w**
Missouri	–	–	–	–	–	w	–	w	w
South Atlantic Total	**w**	**w**	**w**	**w**	**w**	**w**	**w**	**w**	**w**
Maryland	–	–	–	–	–	w	w	w	w
Virginia	w	w	w	w	w	w	w	w	w
West Virginia	w	w	w	w	w	w	w	w	w
East South Central Total	**w**	**w**	**w**	**w**	**w**	**w**	**w**	**w**	**w**
Alabama	54.42	53.38	52.31	52.36	52.70	50.59	1.9	.8	.8
Kentucky	w	w	w	w	w	w	w	w	w
Tennessee	–	–	–	–	–	w	–	w	w
Mountain Total	**w**	**w**	**w**	**w**	**w**	–	**w**	**w**	**w**
Utah	w	w	w	w	w	–	w	w	w
U.S. Total	**52.17**	**52.18**	**51.32**	**52.30**	**52.82**	**51.31**	*	**–.3**	**.2**

* Data round to zero.

w Withheld to avoid disclosure of individual company data.

Note: Average prices are based on the cost including insurance, freight, and taxes.

Source: Energy Information Administration, Form EIA-5, ''Coke Plant Report - Quarterly.''

Table B14. Average Price of U.S. Coal Imports by Continent and Country of Origin, 1987, 1992-1996

(Nominal Dollars per Metric Ton)

Continent and Country of Origin	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
North America Total	**$38.46**	**$38.72**	**$33.96**	**$32.63**	**$32.58**	**$35.86**	**–0.7**	**4.2**	**0.8**
Canada	38.47	38.72	33.96	32.65	32.58	36.59	–.6	4.2	.5
Mexico	36.85	–	–	23.35	–	28.18	–	–	3.0
South America Total	**34.44**	**36.11**	**31.97**	**30.46**	**36.42**	**36.33**	**–4.6**	**–1.4**	**–.6**
Colombia	34.61	34.33	30.27	30.04	35.55	36.25	.8	–.7	–.5
Venezuela	34.14	38.74	35.73	31.82	39.25	38.82	–11.9	–3.4	–1.4
Europe Total	**–**	**28.27**	**–**	**35.65**	**37.49**	**31.57**	**–100.0**	**–100.0**	**–100.0**
Denmark	–	–	–	35.65	–	–	–	–	–
Spain	–	–	–	–	–	31.57	–	–	–100.0
United Kingdom	–	28.27	–	–	37.49	–	–100.0	–100.0	–
Asia Total	**35.77**	**38.73**	**37.58**	**47.07**	**42.71**	**–**	**–7.6**	**–4.3**	**–**
India	–	–	–	–	26.07	–	–	–100.0	–
Indonesia	35.77	38.73	37.26	47.07	45.13	–	–7.6	–5.6	–
Malaysia	–	–	–	–	51.87	–	–	–100.0	–
Vietnam	–	–	53.00	–	–	–	–	–	–
Oceania & Australia Total	**36.83**	**37.00**	**34.35**	**34.79**	**39.76**	**29.94**	**–.5**	**–1.9**	**2.3**
Australia	36.83	34.16	33.09	34.79	39.76	29.94	7.8	–1.9	2.3
New Zealand	–	51.17	48.67	–	–	–	–100.0	–	–
Africa Total	**–**	**–**	**27.92**	**30.66**	**54.33**	**–**	**–**	**–100.0**	**–**
South Africa, Rep of	–	–	27.92	–	54.33	–	–	–100.0	–
Swaziland	–	–	–	30.66	–	–	–	–	–
Total[1]	**35.46**	**36.97**	**33.08**	**32.46**	**36.19**	**35.37**	**–4.1**	**–.5**	*****
U.S. Total[2]	**36.87**	**37.62**	**33.30**	**32.94**	**36.88**	**35.32**	**–2.0**	*****	**.5**

1 The average prices presented in this table, with the exception of U.S. Total, are considered to be representative prices for coal imports and fall within the range of $20 to $55 per short ton ($18.14 to $49.90 per metric ton), inclusively.

2 U.S. Total is the average price of all coal imports.

* Data round to zero.

Notes: Average price is based on the customs import value. Coal imports include coal to Puerto Rico and the Virgin Islands.

Source: U.S. Department of Commerce, Bureau of the Census, ''Monthly Report IM 145.''

Table B15. Average Price of U.S. Coal Exports by Destination, 1987, 1992-1996
(Nominal Dollars per Metric Ton)

Continent and Country of Destination	1996	1995	1994	1993	1992	1987	Percent Change 1995-1996	Average Annual Percent Change	
								1992-1996	1987-1996
North America Total	**$36.48**	**$37.53**	**$35.73**	**$37.53**	**$36.43**	**$45.37**	**–2.8**	*****	**–2.4**
Canada[1]	35.53	36.92	35.36	37.22	36.36	45.40	–3.8	–0.6	–2.7
Jamaica	38.34	36.01	36.62	31.35	29.56	–	6.5	6.7	–
Mexico	43.77	44.05	48.81	48.55	49.26	43.21	–.6	–2.9	.1
Other[2]	43.71	43.03	40.77	40.57	40.27	42.74	1.6	2.1	.2
South America Total	**48.29**	**47.90**	**46.61**	**48.25**	**50.15**	**48.53**	**.8**	**–.9**	*****
Argentina	51.11	47.84	46.83	47.63	50.06	47.70	6.8	.5	.8
Brazil	49.25	48.37	46.59	48.32	50.23	48.57	1.8	–.5	.1
Chile	35.69	34.94	38.12	51.59	52.23	50.67	2.1	–9.1	–3.8
Other[2]	43.19	47.87	45.04	43.50	34.38	56.09	–9.8	5.9	–2.9
Europe Total	**46.41**	**45.10**	**46.14**	**47.45**	**46.74**	**46.70**	**2.9**	**–.2**	**–.1**
Belgium & Luxembourg	50.41	47.92	46.55	47.65	48.51	45.87	5.2	1.0	1.0
Bulgaria	48.79	48.54	46.40	46.25	45.97	–	.5	1.5	–
Denmark	32.29	32.37	32.22	38.53	36.03	36.39	–.2	–2.7	–1.3
Finland	46.42	43.51	45.34	43.66	44.99	45.32	6.7	.8	.3
France	49.53	48.19	48.76	46.56	43.46	47.53	2.8	3.3	.4
Germany, FR	45.28	38.57	49.97	42.97	42.19	46.03	17.4	1.8	–.2
Ireland	41.17	39.76	37.28	39.51	40.57	48.04	3.6	.4	–1.7
Italy	49.66	48.66	47.40	48.86	50.08	45.84	2.0	–.2	.9
Netherlands	45.59	46.26	46.22	48.75	47.78	47.74	–1.4	–1.2	–.5
Norway	62.89	62.19	60.16	58.95	55.25	52.10	1.1	3.3	2.1
Portugal	40.26	40.18	39.96	41.56	44.91	47.30	.2	–2.7	–1.8
Romania	51.76	46.77	42.00	42.48	47.02	47.31	10.6	2.4	1.0
Spain	41.41	38.30	44.23	47.02	46.24	48.27	8.1	–2.7	–1.7
Sweden	52.36	53.14	50.22	50.66	51.44	47.77	–1.5	.4	1.0
Turkey	48.86	46.97	45.51	46.94	50.20	48.67	4.0	–.7	*
United Kingdom	42.88	45.11	49.67	50.64	50.26	48.78	–4.9	–3.9	–1.4
Yugoslavia, FR	–	41.95	–	43.65	47.21	47.21	–100.0	–100.0	–100.0
Other[2]	41.92	61.67	42.04	44.91	46.17	47.28	–32.0	–2.4	–1.3
Asia Total	**43.62**	**43.10**	**42.58**	**44.63**	**47.02**	**47.81**	**1.2**	**–1.8**	**–1.0**
China (Taiwan)	40.63	40.73	42.60	43.53	45.45	44.03	–.2	–2.8	–.9
Israel	40.12	39.45	36.63	38.35	43.11	40.30	1.7	–1.8	*
Japan	43.44	43.14	42.47	44.88	47.30	50.28	.7	–2.1	–1.6
Korea, Republic of	47.10	45.17	44.35	46.43	49.53	45.78	4.3	–1.3	.3
Other[2]	53.89	33.52	41.05	48.75	40.85	59.84	60.8	7.2	–1.1
Oceania & Australia Total	**44.89**	**43.82**	**44.04**	**37.99**	**38.08**	**42.00**	**2.4**	**4.2**	**.7**
Other[2]	44.89	43.82	44.04	37.99	38.08	42.00	2.4	4.2	.7
Africa Total	**48.90**	**47.47**	**48.05**	**46.90**	**47.37**	**45.55**	**3.0**	**.8**	**.8**
Algeria	55.37	52.69	47.66	48.85	51.10	48.20	5.1	2.0	1.5
Egypt	58.83	54.42	47.55	49.45	50.80	46.39	8.1	3.7	2.7
Morocco	37.40	36.37	38.62	37.32	37.26	39.19	2.8	.1	–.5
South Africa, Rep of	54.61	52.23	50.34	51.67	52.68	53.18	4.6	.9	.3
Other[2]	–	–	–	44.68	–	45.00	–	–	–100.0
Total[3]	**44.67**	**44.13**	**43.98**	**45.55**	**45.51**	**46.84**	**1.2**	**–.5**	**–.5**
U.S. Total[4]	**44.93**	**44.39**	**44.02**	**45.65**	**45.57**	**47.15**	**1.2**	**–.3**	**–.5**

1 Based on the U.S. - Canada Free Trade Agreement, as of January 1990, the U.S. Department of Commerce began reporting statistics on U.S. exports to Canada based on information on imports provided monthly by the Canadian government.
2 Includes countries with exports less than or equal to 50,000 short tons in 1995.
3 The average prices presented in this table, with the exception of U.S. Total, are considered to be representative prices for coal exports and fall within the range of $20 to $60 per short ton ($18.14 to $54.43 per metric ton), inclusively.
4 U.S. Total is the average price of all coal exports.
* Data round to zero.
Note: Average price is based on the free alongside ship (f.a.s.) value.
Source: U.S. Department of Commerce, Bureau of the Census, ''Monthly Report EM 545.''

Appendix C

References

Figure C1. Coal-Bearing Areas of the United States

Coal-Producing Regions

Appalachian

Alabama, Georgia, Eastern Kentucky, Maryland, Ohio, Pennsylvania, Tennessee, Virginia, West Virginia.

Interior

Arkansas, Illinois, Indiana, Iowa, Kansas, Western Kentucky, Louisiana, Missouri, Oklahoma, Texas.

Western

Alaska, Arizona, California, Colorado, Montana, New Mexico, North Dakota, Utah, Washington, Wyoming.

Table C1. Classification of Coals by Rank

Coal Reports and Feature Articles

Coal Reports

- *Weekly Coal Production*, DOE/EIA-0218 (97-35).
- *Coal Data: A Reference*, DOE/EIA-0064 (93), February 1995.
- *State Coal Profiles*, DOE/EIA-0576, January 1994.
- *Quarterly Coal Report*, DOE/EIA-0121(97/1Q).
- *The Changing Structure of the U.S. Coal Industry: An Update*, DOE/EIA-0513(93), July 1993.
- *U.S. Coal Reserves: A Review and Update* DOE/EIA-0529(95), August 1996.
- *The U.S. Coal Industry, 1970-1990: Two Decades of Change*, DOA/EIA-0559, November 1992.
- *Trends in Contract Coal Transportation*, 1979-1987, DOE/EIA-0549, September 1991.
- *Electric Power Monthly*, DOE/EIA-0226(97/09), September 1997.
- *Electric Power Annual*, DOE/EIA-0348(96), Vol. 1, September 1997.
- *Longwall Mining*, DOE/EIA-TR-0588 March 1995.
- *Monthly Energy Review*, DOE/EIA-0035(97/07) July 1997.
- *Electric Utility Phase I Acid Rain Compliance Strategies for the Clean Air Act Amendments of 1990*, DOE/EIA-0582, March 1994.
- *Cost and Quality of Fuels for Electric Utility Plants 1994*, DOE/EIA-0191(94), July 1995.

Feature Articles

- "U.S. Coal Supply and Demand: 1996 Review," *Mining Engineering*, May 1997, Vol.49,No.5, May 1997, pp.43-50.
- "Carbon Dioxide Emission Factors for Coal," *Quarterly Coal Report*, DOE/EIA-0121 (94/1Q), August 1994.
- "Federal and Indian Coal Lands: A Growing Source of Energy and Revenue," *Coal Production 1992*, DOE/EIA-0118(92), October 1993.
- "Coal Supply and Demand in 1993: A Review, 1993," *Mining Engineering, May 1994, pp.433-436.*
- "Wyoming Coal: An Overview," *Coal Production 1991*, DOE/EIA-0118(91), October 1992.
- "Profile of New Coal Mines in the 1980's," *Coal Production 1990*, DOE/EIA-0118), September 1991.
- "The Comparability of Resource and Reserve Data for Crude Oil, Natural Gas, Coal, and Uranium," *Quarterly Coal Report October-December 1994*, DOE/EIA-0121 (94/4Q) May 1995.
- "Annual Review 1995: Coal Overview," *Mining Engineering*, Vol. 48, No. 5, May 1996, pp. 41-46.
- "Coal Geology, Reserves and Production in Northern and Central Appalachia," *Mining Engineering*, Special Edition, December 1995.

Table C2. Approximate Heat Content of Coal
(Million Btu per Short Ton)

Coal Rank Sector	1983	1984	1985	1986	1987	1988	1989
Anthracite							
Production	22.734	23.107	22.428	23.084	23.108	23.266	23.385
Consumption	21.583	22.322	20.817	21.512	22.435	22.423	22.623
Non-electric utility users	24.536	25.128	23.031	24.399	26.293	26.021	27.196
Electric utilities	16.516	17.018	16.784	15.578	15.962	17.312	16.310
Imports and exports	25.400	25.400	25.400	25.400	25.400	25.400	25.400
Bituminous Coal and Lignite							
Production	22.048	22.005	21.867	21.908	21.918	21.817	21.759
Consumption	21.576	21.570	21.368	21.462	21.514	21.324	21.268
Residential and commercial	22.438	22.406	22.568	22.669	22.800	23.135	22.917
Coke plants	26.800	26.800	26.800	26.800	26.800	26.800	26.800
Other industrial and transportation	22.680	22.525	22.013	22.185	22.360	22.341	22.324
Electric utilities	21.141	21.108	20.965	21.091	21.143	20.905	20.854
Imports	25.000	25.000	25.000	25.000	25.000	25.000	25.000
Exports	26.300	26.410	26.320	26.308	26.304	26.308	26.166
Coal Coke	24.800	24.800	24.800	24.800	24.800	24.800	24.800

	1990	1991	1992	1993	1994	1995	1996
Anthracite							
Production	23.574	22.573	22.572	22.573	22.572	22.572	22.573
Consumption	21.668	21.410	21.423	21.262	20.828	20.808	20.860
Non-electric utility users	25.199	25.268	24.617	24.096	25.037	24.696	24.872
Electric utilities	16.140	15.858	16.944	16.534	14.680	14.572	14.568
Imports and exports	25.400	25.400	25.400	25.400	25.400	25.400	25.400
Bituminous Coal and Lignite							
Production	21.819	21.678	21.643	21.383	21.347	21.271	21.272
Consumption	21.330	21.146	21.142	20.983	21.011	20.845	20.852
Residential and commercial	22.678	22.635	22.768	22.749	22.683	22.767	22.785
Coke plants	26.800	26.800	26.800	26.800	26.800	26.800	26.800
Other industrial and transportation	22.444	22.448	22.242	22.111	22.046	21.931	21.887
Electric utilities	20.935	20.761	20.792	20.644	20.681	20.502	20.509
Imports	25.000	25.000	25.000	25.000	25.000	25.000	25.000
Exports	26.207	26.192	26.165	26.341	26.335	26.187	26.212
Coal Coke	24.800	24.800	24.800	24.800	24.800	24.800	24.800

Note: Values for 1996 are preliminary.
Source: Calculated by Energy Information Administration. See *Monthly Energy Review* DOE/EIA-0035 Appendix A for detailed description.

Appendix D

Explanatory Notes

Data Sources

All data in this report were collected by the Energy Information Administration (EIA), U.S. Department of Energy (DOE), except: import and export data, which were collected by the Bureau of the Census (Census Bureau), U.S. Department of Commerce; supplemental export data which were collected by King's Publishing Corporation, Knoxville, Tennessee; Federal and Indian land leasing data which were collected by the U.S. Department of the Interior (Bureau of Land Management and Minerals Management Service); and miner injury and fatality data which were collected by the U.S. Department of Labor (Mine Safety and Health Administration).

Coal Surveys

As early as the 1880's, the U.S. Geological Survey began collecting coal data under a voluntary reporting system. The responsibility for gathering this information was transferred to the Bureau of Mines in the 1920's, initially under the U.S. Department of Commerce and later under the U.S. Department of the Interior, which published the data in its *Minerals Yearbook*. Except for a brief period from 1937 to 1943, when bituminous coal data were collected under the mandatory authority of the Bituminous Coal Act, the Bureau of Mines continued to conduct voluntary coal surveys until the Department of Energy was created.

Coal Production Report (Form EIA-7A)

The Energy Information Administration (EIA) began collecting annual coal production data on October 1, 1977. The 1995 coal production and identification data in this report were collected on Form EIA-7A, "Coal Production Report," from companies that produced, processed, or prepared coal in 1995. All other data collected on Form EIA-7A are reported for only those companies that owned a mining operation that produced, processed, or prepared 10,000 short tons or more of coal in 1995 and preparation plants with 5,000 or more employee hours.

So that the EIA may fulfill its data collection functions as specified in the Federal Energy Administration Act of 1974 (Public Law 93-275), response to this survey is mandatory. EIA compares respondents to this survey with lists of mining operations maintained by various State coal mining/licensing agencies and the Mine Safety and Health Administration (MSHA), U.S. Department of Labor, to identify new respondents. No sampling procedures are used. In 1995, there were 2,278 mining operations that produced, processed, or prepared 10,000 or more short tons of coal. Of these mining operations, 77.6 percent (1,767) responded to the EIA-7A survey. In 1995, there were 1,716 mines that produced 10,000 or more short tons of coal. Of these mines, 70.2 percent (1,205) responded to the EIA-7A survey; they accounted for 987 million short tons, or 95.6 percent of the 1995 production total. All of the data were collected by mail and were edited to ensure that they were complete and accurate.

As in all surveys, data from Form EIA-7A, "Coal Production Report," are subject to various sources of error: (1) coverage (the list of respondents may not be complete or, on the other hand, there may be double counting), (2) nonresponse (all units that are surveyed may not respond or may not provide all the information requested), (3) respondents (respondents may commit errors in reporting the data), (4) processing (the data collection agency may lose or incorrectly transcribe the submissions), (5) concept (the data collection elements may not measure the items they were intended to measure), and (6) adjustment (errors may be made in estimating values for missing data).

Because the annual coal production survey (Form EIA-7A) is not a sample survey, the estimates shown

Table D1. Sources of Data for Total U.S. Coal Production and Number of Mining Operations
(Thousand Short Tons)

Coal-Producing State	Received		Generated Data Sources		Total	
	Form EIA-7A		Derived From Mine Safety and Health Administration Data		Number of Operations	Production
	Number of Operations	Production	Number of Operations	Production		
Alabama	46	23,677	16	960	62	24,637
Alaska	1	1,481	–	–	1	1,481
Arizona	3	10,442	–	–	3	10,442
Arkansas	–	–	5	21	5	21
Colorado	17	24,757	1	129	18	24,886
Illinois	32	46,419	5	237	37	46,656
Indiana	40	29,667	1	3	41	29,670
Kansas	1	232	–	–	1	232
Kentucky Total	484	139,045	223	13,379	707	152,425
Eastern	429	105,211	201	11,740	630	116,951
Western	55	33,835	22	1,639	77	35,474
Louisiana	2	3,221	–	–	2	3,221
Maryland	14	4,058	5	35	19	4,093
Missouri	3	395	2	315	5	710
Montana	8	37,891	–	–	8	37,891
New Mexico	6	24,067	–	–	6	24,067
North Dakota	6	29,861	–	–	6	29,861
Ohio	97	28,248	22	324	119	28,572
Oklahoma	10	1,687	2	14	12	1,701
Pennsylvania Total	304	64,094	205	3,847	509	67,942
Anthracite	78	3,342	91	1,409	169	4,751
Bituminous	226	60,752	114	2,438	340	63,190
Tennessee	31	3,581	7	69	38	3,651
Texas	13	55,164	–	–	13	55,164
Utah	12	26,926	4	581	16	27,507
Virginia	159	29,862	91	5,727	250	35,590
Washington	3	4,565	–	–	3	4,565
West Virginia Total	361	158,182	162	12,251	523	170,433
Northern	91	45,136	36	774	127	45,910
Southern	270	113,046	126	11,476	396	124,523
Wyoming	27	278,440	–	–	27	278,440
U.S. Total	1,680	1,025,964	751	37,892	2,431	1,063,856

Notes: Coal production excludes silt, culm, refuse bank, slurry dam, and dredge production except for Pennsylvania anthracite. Number of mining operations includes preparation plants. All available State mining agency production data were reviewed, but none were included in this report because production data reported on Form EIA-7A to the Energy Information Administration and on Form 7000-1 to the Mine Safety and Health Administration were found to be complete. Totals may not equal sum of components because of independent rounding.

Sources: Energy Information Administration, Form EIA-7A, ''Coal Production Report''; U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, ''Quarterly Mine Employment and Coal Production Report.''

in this report are not subject to sampling error. [1] It is not possible to present estimates of nonsampling error, but precautionary steps were taken at each stage of the survey design to minimize the possible occurrence of these errors. These steps are described below.

The forms are logged within 24 hours of receipt and assigned to a team of data editors consisting of Coal Data Systems Branch personnel. The editors screen the forms for legibility, completeness, and consistency. Names and address changes are updated in the files. The reported data are compared with data from previous years and with secondary sources such as Mine Safety and Health Administration and State mining agency reports. Inconsistencies are identified and the respondents contacted for clarification. Computer edits are generated to identify keypunch errors, errors made by coders, out-of-range codes, and unlikely data combinations. Errors are corrected to conform to the data on the submissions or revised after telephone conversations with company representatives. All changes to reported data are documented. EIA maintains data from the Form EIA-7A on an automated database at its computing facility in Washington, D.C. The survey forms are filed by EIA identification number organized by State and county.

The survey forms were sent via regular mail in January with a due date of March 1, 1996. Nonresponse letters were mailed March 8 to those mining operations that had not submitted their forms. Subsequent to the letter, attempts were made to contact, by telephone, those nonrespondents whose reported 1994 production was 100,000 short tons or more.

[1] Sampling error is a measure of the variation that occurs by chance because a sample rather than a complete enumeration of units is surveyed.

Some forms could not be delivered. Where possible, address corrections were obtained. Some mining operations that had reported in earlier surveys or operated only in 1995 were no longer in business. Unobtainable data were derived from a secondary source: the Form 7000-2, "Quarterly Mine Employment and Coal Production Report," collected by the Mine Safety and Health Administration. Missing production quantity data were derived from the secondary source for 585 mines, which produced 45 million short tons, or 4.4 percent of total production. The received and generated data sources for total U.S. coal production are shown in Table D1. Of the mines whose production exceeded 10,000 or more short tons, missing production quantity data were derived from the secondary source for 511 mines, representing 4.3 percent (44.4 million short tons).

Since 1992, California has not reported coal production as the courts determined that the product mined in that State did not meet the standard classification for coal.

Missing *coalbed classification, coalbed thickness,* and *coal rank/group* data were estimated using State mining agency production reports, geological data, and previous years' reports for these mines.

When a mine had a missing *production value,* its production was multiplied by the county-level average mine price to estimate the value. County-level average mine prices were calculated by dividing the total value for the appropriate disposition (open/captive) and type of mining (underground or surface) by the corresponding total production. All missing production was classified as open market unless information was available to classify it as captive. Of those mines whose production was 10,000 or more short tons, value data were estimated for 562 mines, representing 5.2 percent (53.8 million short tons) of the production total.

When an underground mine had unreported *mining method,* it was assumed that the mining method was conventional.

Employment data include *direct labor hours, number of production days worked, average length of a production shift, average number of miners per shift,* and *average number of shifts per day.* Of those mines whose production exceeded 10,000 or more short tons, one or more of these data elements were derived from secondary sources or estimated for 532 mines representing 4.4 percent (45.2 million short tons) of their production total. Of the mining operations that produced, processed, or prepared 10,000 or more short tons, one or more of these data elements were derived from secondary sources or estimated for 868 mining operations, or 38.1 percent of the total operations in this category.

Missing *direct labor hours* were estimated using county-level or State-level productivity-per-hour averages. The averages were calculated by dividing the total production at the county or State level by total direct labor hours at the same level for the appropriate type of mining (underground or surface). The quantity of production for the mine with missing data was divided by this productivity average to derive direct labor hours.

Missing *average number of production days worked* and *length of a production shift* were derived by using the corresponding county-level or State-level average for the appropriate type of mining (underground or surface).

Missing *average number of miners per shift* was estimated as the average number of miners working daily. The average number of miners working daily was calculated by multiplying the average length of a production shift by the number of production days worked, and then dividing this number into the total direct labor hours.

Missing *average number of shifts per day* was estimated as one shift per day.

Missing *recoverable coal reserves* data were estimated by using the mine's 1994 recoverable reserves minus the mine's 1995 production. If this calculation could not be made, the mine's projected production for 1996 was used. If recoverable coal reserves for 1994 and 1995 and projected production for 1996 were all missing, no estimate was made. In 1995, recoverable reserves were reported by or estimated for 1,186 mines, representing 976.9 million short tons, or 69.1 percent of the mines whose production exceeded 10,000 or more short tons.

Missing *recovery percentage* data were estimated by using 1995 recovery percentage averages at the State level for the appropriate type of mining (underground or surface).

Missing *productive capacity* data were estimated by assuming productive capacity was equal to 1995 production. If productive capacity was reported as less than annual production, productive capacity was equated to 1995 production. There were 627 in-scope mines with production of 177.8 million short tons for which 1995 production was used as a proxy for productive capacity, resulting in 100 percent capacity utilization.

These mines included the MSHA generated mines, mines with productive capacity less than 1995 production, and mines that did not report productive capacity and could not be contacted. If these mines were excluded from the calculation of percent utilization, the U.S. total becomes 76.13 versus 79.40, when those mines are included.

In 1995, there were 26 mines that produced 1.2 million short tons of refuse bituminous and subbituminous coal. Those operations are not included in this report. In 1995, there were 2.3 million short tons of anthracite refuse produced and included in this report. An additional 4 million short tons of anthracite refuse was recovered and used by nonutility power producers in Pennsylvania is not included in this report.

In order to protect the confidentiality of individual respondent's data, a policy was implemented to ensure that the reporting of survey data on mine prices and recoverable reserves in this publication would not associate those data with a particular company. The final phase in the data quality assurance and control procedures is determining which data must be suppressed (withheld) during publication to provide the necessary confidentiality for mines or companies that represent a significant portion of a reported data cell. All withholding analysis is done based upon production volumes. These procedures are performed as follows:

1. Primary Withholding Based on the Number of Respondents in a Cell -- All cells with three or fewer active coal mining operations are suppressed.
2. Residual Withholding Dominance Rule Phase 1 All cells containing between 4 and 10 active coal mining operations are examined. A cell is suppressed if any single respondent accounts for 75 percent or more of the volume for all respondents included in that cell.
3. Residual Withholding Dominance Rule Phase 2 All cells in which two active coal mining operations represent 90 percent or more of the volume for all respondents included in that cell are suppressed.
4. Complementary Suppression -- All tables are reviewed to identify cells which should have data withheld to prevent disclosure of already suppressed cells. An example of cells to be withheld during complementary suppression is underground price, if the surface price is withheld during primary or residual suppression. Because the total price is published, if the underground price is not withheld, the surface price could be calculated using the total price, the underground price, and the underground, surface, and total volumes.
5. Most complementary suppression involves type of mining considerations. Other complementary suppression is based on regional level data. A State or region must be withheld during complementary suppression because an already withheld State could be calculated using other States and the regional total. Cells are also selected for complementary suppression that represent the smallest volumes or that were withheld in prior years.
6. Inter-table effects are also examined regarding complementary suppression. For example, States that are withheld in one State table can influence the complementary suppression of an associated State table. This analysis is very similar to that done at the regional level, except that two tables are involved rather than one. Finally, similar tables are reviewed to ensure that all like suppressed cells are consistently withheld (suppressed) in all tables in which they appear.

The withholding/suppression of data is performed as an adjunct to the quality assurance (QA) procedures. The work is performed by survey editors, and the QA staff and is reviewed by the survey manager before being submitted to division-level QA review.

All sensitive cells identified in withholding analysis are denoted with the symbol/letter "w." The use of the symbol/letter applies to primary, complementary and inter-table suppressions as well as all withheld data. The symbol/letter "w" is footnoted as follows: "w Withheld to avoid disclosure of individual company data."

The interquartile range is a measure of dispersion of State-level average mine prices. Two States may have the same average mine price, but the spread about this price may be totally different. For a fixed average mine price, a larger interquartile range suggests a broader distribution of coal prices than a smaller interquartile range. The summary statistics (Table D2) given in this publication are weighted by production. The interquartile range (weighted by production) is computed in the following manner:

- Each cell is sorted according to average mine price, from the lowest to the highest.
- For each cell, the corresponding mine's production according to increasing average mine price is divided by that particular cell's total production and multiplied by 100. These percentages are then added as a cumulative percentage of production.
- The first quartile (Q1) is the associated mine price for which the cumulative percentage of production first passes 25 percent. Thus, at least 25 percent of that cell's total production is identified with prices at or lower than Q1.
- The third quartile (Q3), is the associated mine price for which the cumulative percentage of production first passes 75 percent. Thus, at least 75 percent of that cell's total production is identified with prices at or lower than Q3.

The interquartile range is Q3-Q1.

Quarterly Coal Consumption Report - Manufacturing Plants (Form EIA-3)

Form EIA-3 is used to survey U.S. manufacturers that consume 1,000 tons or more of coal per year for all uses other than coke production. These data were collected on a monthly basis until 1980, when the reporting cycle was revised to a quarterly schedule. Data on manufacturers' coal stocks, receipts, prices, and consumption are reported.

Through the end of 1988, all manufacturers that consumed coal were required to file Form EIA-3. Beginning with the first quarter of 1989, only those manufacturers that consumed 1,000 or more tons in the past year were required to report. In 1995, 730 manufacturers responded to the EIA-3 survey. The response rate for the current year was 100 percent. In order to identify undercoverage problems, the data from this survey are compared with shipments to ***manufacturers*** reported on EIA's "Coal Distribution Report," Form EIA-6. At present, the coal receipts reported by ***manufacturers*** on Form EIA-3 cover approximately 97 percent of the coal shipments to

manufacturers on Form EIA-6. Consequently, the coal consumption data gathered on the Form EIA-3 do not represent the total consumption at manufacturing plants. See Technical Note 5 for data adjustment procedures for coal consumption for the other industrial sector.

Table D2. Interquartile Range and Average Mine Price by State and Mine Type, 1996
(Dollars per Short Ton)

Coal-Producing State and Region	Underground		Surface		Total	
	Average Mine Price	Interquartile Range	Average Mine Price	Interquartile Range	Average Mine Price	Interquartile Range
Alabama	40.75	10.00	35.87	10.13	39.48	7.76
Alaska	–	–	w	w	w	w
Arizona	–	–	w	w	w	w
Arkansas	–	–	w	w	w	w
Colorado	17.73	–	18.28	1.47	17.94	1.83
Illinois	23.12	4.75	20.86	13.84	22.74	4.51
Indiana	w	w	w	w	20.24	5.30
Kansas	–	–	w	w	w	w
Kentucky Total	24.66	5.43	22.68	5.20	23.91	5.68
Eastern	25.98	3.51	23.53	4.95	24.98	4.99
Western	21.04	3.76	18.79	2.29	20.38	3.20
Louisiana	–	–	w	w	w	w
Maryland	w	w	w	w	24.40	–
Missouri	–	–	23.31	–	23.31	–
Montana	–	–	9.97	9.51	9.96	9.51
New Mexico	w	w	w	w	24.66	4.05
North Dakota	–	–	8.01	.83	8.01	.83
Ohio	25.98	16.37	23.43	5.13	24.85	17.46
Oklahoma	w	w	w	w	26.54	5.30
Pennsylvania Total	25.79	3.28	25.76	8.36	25.78	8.36
Anthracite	27.99	12.19	37.37	29.06	36.78	28.06
Bituminous	25.77	2.70	22.68	7.95	24.98	4.18
Tennessee	w	w	w	w	27.79	2.83
Texas	–	–	12.17	1.08	12.17	1.08
Utah	21.63	8.07	–	–	21.63	8.07
Virginia	29.46	5.68	25.88	3.47	28.45	9.40
Washington	–	–	w	w	w	w
West Virginia Total	27.31	8.08	25.04	4.42	26.58	6.19
Northern	25.21	6.73	22.37	5.21	24.86	6.73
Southern	28.44	7.40	25.34	4.00	27.21	6.38
Wyoming	w	w	w	w	6.41	1.81
Appalachian Total[1]	**27.67**	**6.70**	**25.07**	**6.28**	**26.78**	**7.13**
Interior Total[1]	**22.43**	**2.42**	**15.85**	**7.76**	**18.41**	**10.03**
Western Total[1]	**20.04**	**4.91**	**8.86**	**3.13**	**10.03**	**10.71**
East of Miss. River	**26.70**	**6.54**	**23.86**	**6.88**	**25.70**	**6.82**
West of Miss. River	**20.07**	**4.91**	**9.42**	**6.75**	**10.40**	**9.53**
U.S. Total	**25.96**	**8.27**	**13.82**	**16.62**	**18.50**	**18.26**

[1] For a definition of coal-producing regions, see Appendix C.
[w] Withheld to avoid disclosure of individual company data.
Note: Excludes silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons of coal during the year. Average Mine Price is calculated by dividing the total free on board (f.o.b) mine value of the coal produced by the total production.
Sources: Energy Information Administration, Form EIA-7A, ''Coal Production Report''; State Mining Agency Coal Production Reports; and/or U.S. Department of Labor, Mine Safety and Health Administration, Form 7000-2, ''Quarterly Mine Employment and Coal Production Report.''

Current year data from this survey are preliminary and unrevised in the January - March, April - June, and July - September issues of the *Quarterly Coal Report* (DOE/EIA-0121). In the October - December issue, any revisions necessary for the entire year are applied and the data are considered final.

The respondent list of manufacturers for Form EIA-3 is compared with lists of coal-consuming manufacturing plants from State Air Quality and Energy Offices. When new respondents are found, they are added to the survey mailing list.

Annual Coal Quality Report - Manufacturing Plants (Form EIA-3A)

Form EIA-3A contains questions on the origin of coal (State or Country), the quantity of coal receipts, the Btu, sulfur and ash content of the coal receipts, and the basis used to determine the coal quality data. The threshold for the annual collection will be the same as for the EIA-3: manufacturing plants that consume in excess of 1,000 short tons of coal per per year. In

1995, 730 manufacturers responded to the EIA-3A survey. The response rate for the current year was 100 percent.

Coke Plant Report (Form EIA-5)

Form EIA-5, a quarterly report of coal receipts, carbonization, and stocks, and of coke and breeze production, distribution, and stocks, is used to survey all U.S. coke plants.

Coke plants were surveyed monthly and a supplemental survey was taken annually until 1981, when the reporting cycle was revised to a quarterly schedule with an annual supplemental survey. In 1985, collection of the annual supplement was ended.

In 1995, there were 28 respondents to the EIA-5 survey, and the response rate was 100 percent. The respondent list for this survey is updated by continuous monitoring of the industry literature.

Current year data from this survey are preliminary and unrevised in the January - March, April - June, and July - September issues of the *Quarterly Coal Report* (DOE/EIA-0121). In the October - December issue, any revisions necessary for the entire year are applied and the data are considered final.

Annual Coal Quality Report - Coke Plants (Form EIA-5A)

This form contains questions on the origin of coal (State or country), the quantity of coal receipts, the volatile matter, sulfur and ash content, and the basis used to determine the coal quality data. There is no threshold for this form. In 1995, there were 28 respondents to the EIA-5A survey, and the response rate was 100 percent.

Coal Distribution Report (Form EIA-6)

Form EIA-6 is used to survey all U.S. companies (producers and/or distributors) that own or purchase and distribute more than 50,000 short tons annually.[2] Data on coal production and purchases, distribution by consumer category, and method of transportation are reported.

In 1995, there were about 1,100 respondents to the EIA-6 survey. Until the end of 1988, coal distribution companies were required to report production on a Bureau of Mines district basis. For the year 1989, respondents were required to report on a BOM district/State basis. Beginning with the first quarter of 1990, respondents were required to report on a State basis. The response rate for the current quarter was 100 percent. The annual production total reported on Form EIA-6 exceeds 99 percent of total production as reported by all mines on Form EIA-7A, "Coal Production Report," due to the difference in reporting thresholds. The data gathered on the Form EIA-6 only represent the domestic coal distributed during the quarter. Therefore, imported coal distributed during the quarter is not included.

Current year data from this survey are preliminary and unrevised in the January - March, April - June, and July - September issued of the *Quarterly Coal Report* (DOE/EIA-0121). In the October - December issue, any revisions necessary for the entire year are applied and the data are considered final.

The respondent list for this survey is updated by comparing it with lists of coal producers from the Mine Safety and Health Administration (MSHA), U.S. Department of Labor, and from similar lists maintained by various State agencies. Also, new respondents are frequently identified on Form EIA-6 itself when other companies are named as sources of coal purchases.

Electric Utility Surveys

Coal data appear in this report from three surveys of electric utilities --from all generating electric utilities and from fossil-fueled plants.

The Census Bureau collected and published the results of a census taken every 5 years from 1902 to 1937 on the electric light and power industries and some data on industrial production of electric energy. The U.S. Geological Survey collected data on capacity and generation of electric utilities from 1920 to 1936, when this activity was turned over to the Federal Power Commission (FPC).

All data are presented as reported on the surveys. No estimates or other adjustments are made for missing data. The data are maintained in a computer system and are edited to ensure that they are reasonable, consistent, and complete. For additional information from these surveys and for other electric utility data, see the EIA publication, *Electric Power Monthly* (DOE/EIA-0226).

Monthly Power Plant Report (Form EIA-759)

Form EIA-759 (which, until 1982, was called FPC Form 4) is used to survey all generating electric utilities. The Federal Power Act and FPC Order Number 141 define the legislative authority to collect power production data. Consumption and stocks of coal and other fuels at each plant are reported. The respondents to Form EIA-759, approximately 3,000 plants, account for 100 percent of total electric utility generation.

[2] For the States of Arkansas, Maryland, Oklahoma, and the anthracite portion of Pennsylvania, the threshold is 10,000 tons.

Current year data from this survey are considered final.

Monthly Report of Cost and Quality of Fuels for Electric Plants (FERC Form 423)

Federal Energy Regulatory Commission (FERC) Form 423 is used to survey all fossil-fueled plants with a total steam-generating capacity of 50 megawatts or more. It is submitted by approximately 230 electric utilities. (Before 1983, this form was called FPC Form 423, and all fossil-fueled plants with a total generating capacity of 25 megawatts or more were surveyed.) In 1972, the FPC issued Order Number 453, which included the legislative authority to create FERC Form 423. Cost, quality, and source of fuels (by State or country of origin), including coal, are reported. Current year data from this survey are considered final.

Steam-Electric Plant Operation and Design Report (Form EIA-767)

The Form EIA-767 is a mandatory restricted-universe census of all electric power plants with a total existing or planned organic- or nuclear-fueled steam-electric generator nameplate rating of 10 or more megawatts. The entire form is filed by approximately 700 power plants with a nameplate capacity of 100 or more megawatts. An additional 200 power plants with a nameplate capacity between 10 and 100 megawatts submit information only on fuel consumption/quality, boiler/generator configuration, and flue-gas desulfurization equipment, if applicable. The Form EIA-767 is used to collect data annually on plant operations and equipment design (including boiler, generator, cooling system, flue gas desulfurization, flue gas particulate collectors, and stack data). Data from Form EIA-767 are used for economic, regulatory, and environmental analyses conducted by the DOE, the FERC, the Environmental Protection Agency, and the Department of Commerce.

Form EIA-767 data for 1995 are preliminary. Data for prior years are final.

Annual Nonutility Power Producer Report (Form EIA-867)

The Form EIA-867 is a restricted-universe census used to collect annual data from all existing and planned nonutility power producers in the United States. In 1992, the reporting threshold of the Form EIA-867 was lowered to include all facilities with a combined nameplate capacity of 1 or more megawatts. Previously data were collected every 3 years from facilities with a nameplate capacity between 1 and 5 megawatts. For the purpose of this data collection, a nonutility power producer is an enterprise that has electric generating capacity and is not an electric utility. They include qualifying cogenerators, qualifying small power producers, and other nonutility generators (including independent power producers) without a designated franchised service area. The form is used to collect data on the installed capacity, energy consumption, generation, and electric energy sales to electric utilities from approximately 2,000 facilities.

Form EIA-867, coal consumption data for 1989 through 1995 are: 876, 1600, 6000, 10000, 12344, 15140 and 20800 thousand short tons.

Export and Import Data

Export and import data (except imports to electric utilities, manufacturing plants and coke plants, which are reported on the FERC Form 423, EIA-3A, and EIA-5A, respectively.) are obtained from the Census Bureau--export data from the monthly EM 545 (formerly EM 522) report, import data from the monthly IM 145 report. The Census Bureau compiles these data monthly from documents filed with the U.S. Customs Service as required by law. They include shippers' export declaration forms, import entry forms, and warehouse withdrawal forms. No sampling procedures are used. The Census Bureau publication *Guide to Foreign Trade Statistics* describes the foreign trade statistics program, including the EM 545 and IM 145 monthly reports. Data from these surveys are considered final at the time of publication.

Foreign distribution of U.S. coal, major exporting State, and destination, along with foreign distribution of metallurgical and steam coal (Tables 62, 63, and 64, respectively), was determined using EIA-6 distribution data by origin State, and coal export data from King's COALBASE (King Publishing Corporation, Knoxville, Tennessee) which gives the metallurgical and steam breakdown as well as the country destination data. The percentage of metallurgical and steam coal for each country of destination are applied to the EIA-6 export figures for each State of origin to derive coal distribution data that link State of origin to countries of destination by type of coal. The King's destination country data are considered to be more accurate than the Census country-of-destination data because it account for transhipments through intermediate countries to final destination countries, whereas the Census data would designate the destination as the intermediate country.

Copies of the survey forms and instructions used to collect data appearing in this publication can be obtained by calling EIA's National Energy Information Center at (202) 586-8800.

Technical Notes

1. Differences in Related Coal Data

Coal Production versus Coal Distribution. Coal production represents newly mined coal. Coal distribution represents shipments of newly mined coal and coal from producer/distributor stockpiles (previously mined coal).

Coal Distribution versus Coal Receipts. Differences in coal distribution data and coal receipts data are due to the time lag between distribution and receipt of coal shipments, and due to the survey threshold differences. In addition, coal distributed includes only domestic coal, whereas receipts include imported coal.

Foreign Distribution of U.S. Coal versus U.S. Coal Exports. Foreign distribution of U.S. coal does not equal U.S. coal exports because there are differences in reporting time and survey thresholds.

Receipts of Imported Coal versus U.S. Coal Imports. Receipts of imported coal at electric utilities and manufacturing and coke plants does not equal U.S. coal imports due to reporting time differences. In addition, it does not include receipts at independent power producers.

2. Other Industrial Plants and Manufacturing

The ***other industrial plants*** end-use sector includes the ***manufacturing,*** agriculture, forestry and fishing, mining, and construction industries. Manufacturing accounts for approximately 97 percent of the coal receipts and consumption and 100 percent of the coal stocks in the ***other industrial plants*** sector as reported herein. Data sources for the ***other industrial plants*** sector and the ***manufacturing*** sector are Forms EIA-6 and EIA-3, respectively. The source statement in each table identifies the survey used to collect coal data for the ***other industrial plants*** sector, and the following technical notes describe the methodology used when data were derived.

3. Residential and Commercial

To reduce the reporting burden to coal users, the EIA does not conduct any survey of coal data from residential and commercial users of coal. Shipments of coal to this sector, reported by producers and distributors of coal on Form EIA-6, are equated to coal receipts and consumption by the ***residential and commercial*** sector, assuming no stock changes.

4. Consumer Prices

Prices are derived for each end-use sector as follows:

Electric Utilities. Prices are reported for each plant in cents-per-million Btu on FERC Form 423. The price per ton of coal is calculated at each plant using cents-per-million Btu and the average Btu content per pound of coal for the appropriate rank of coal. The average prices appearing in the tables (e.g., across all States) are calculated by summing the dollar value at each plant (short tons of coal multiplied by price per short ton) and dividing by the corresponding total tons. For more information about prices of coal at ***electric utilities,*** see the EIA publication, *Electric Power Monthly* (DOE/EIA-0226).

Coke Plants. Respondents are asked to report the number of tons of coal received (or coke distributed) on Form EIA-5 and the total value of that coal (or coke) in dollars. Average prices are calculated by summing the reported values (e.g., across all States) and dividing by the corresponding total tons.

Other Industrial Plants. Respondents (manufacturing plants only) are asked to report the number of tons of coal received on Form EIA-3 and the total value of that coal in dollars. Average prices are calculated by summing the reported values across all States and dividing by the corresponding total tons.

Residential and Commercial. Data are not collected. See Technical Note 3.

5. Consumption

Annual Data

Annual coal consumption data are sums of quarterly or monthly data described below except for nonutility power producers whose coal consumption is not included in this report. These data are however, reported on Form EIA-867 and published in the *Electric Power Annual* (DOE/EIA-0348).

Electric Utilities. Consumption is reported on Form EIA-759.

Nonutility Electric Generating Facilities. Consumption is reported on Form EIA-867.

Coke Plants. Consumption is reported on Form EIA-5.

Other Industrial Plants. In deriving a quarterly estimate for coal consumption for the ***other industrial plants*** sector, the first step is to equate consumption to beginning stocks plus receipts minus ending stocks. In terms of an equation, consumption can be expressed as C = Sb + R - Se, where Sb = beginning stocks, R = receipts, and Se = ending stocks.

Therefore, consumption is C = (Sb - Se (change in stocks)) + R. Next, stock change at the State level is equated to the stock change for that State as reported on Form EIA-3, receipts at the State level are derived as described in Section 3, and a computed consumption is derived using the same equation for each State. Finally, the quarterly consumption (C) at the State level is equated to the maximum of the computed consumption at the State level, as previously described, and the quarterly consumption for that State as reported on Form EIA-3. This process ensures that State-level consumption for the ***other industrial plants*** sector is always greater than or equal to the ***manufacturing*** sector consumption for that State. Total quarterly consumption for the ***other industrial plants*** sector is computed by summing the quarterly State-level consumption figures.

Residential and Commercial. Shipments to the ***residential and commercial*** sector as reported on Form EIA-6 are defined as consumption as well as receipts for this end-use sector.

EIA publishes monthly estimates of coal consumption in the *Monthly Energy Review* (DOE/EIA-0035).

Monthly coal consumption at electric utility plants is derived directly from Form EIA-759. Prior to 1980, monthly coal consumption at coke plants was derived directly from Form EIA-5. For 1981 through 1987, it was derived from the quarterly coal consumption reported on Form EIA-5, using the ratios of monthly to quarterly consumption in 1979, the last year that coke plant data were collected monthly on Form EIA-5. These ratios by month (January - December) are 0.3377, 0.3200, 0.3423; 0.3529, 0.3462, 0.3009; 0.3364, 0.3347, 0.3289; and 0.3273, 0.3301, 0.3426.

Starting with 1988, monthly coal consumption at coke plants is derived from quarterly coal consumption reported on Form EIA-5, using ratios derived from monthly data on raw steel production published by the American Iron and Steel Institute (AISI) on Form AIS7. The ratio is the proportion of monthly raw steel production from open hearth and basic oxygen process furnaces to the quarterly raw steel production from those furnace types.

Prior to 1978, coal consumption for the ***other industrial plants*** sector (i.e., industrial users minus coke plants) was derived by using monthly data reported on Form EIA-3 to modify baseline coal consumption figures from the most recent Census of Manufactures or Annual Survey of Manufactures, Bureau of the Census, U.S. Department of Commerce. For 1978 through 1987, data from Forms EIA-3 and EIA-6 are used to compute monthly coal consumption for the ***other industrial plants*** sector.

Given the quarterly consumption for the ***other industrial plants*** sector (C), the monthly consumption for the sector (Cm) is estimated for each month in the quarter as Cm = (Cm3/C3) x C where Cm3/C3 is the ratio of monthly to quarterly coal consumption as reported on Form EIA-3. For the 1978 coal consumption figures, the ratios used are based on 1978 EIA-3 data. For 1979 through 1987, the ratios used are based on the 1979 EIA-3 data. These 1979 ratios by month (January - December) are 0.3593, 0.3264, 0.3143; 0.3485, 0.3332, 0.3183; 0.3317, 0.3407, 0.3276; and 0.3045, 0.3253, 0.3702.

Starting with 1988, monthly coal consumption for the other industrial plants sector is derived from quarterly coal consumption reported on Form EIA-3 using monthly ratios derived from the industrial production indices published by the Board of Governors of the Federal Reserve System. Six major industry groups' indices are used as the basis for calculating the monthly ratios. These groups are foods (Standard Industrial Classification (SIC) 20), paper and products (SIC 26), chemicals and products (SIC 28), petroleum products (SIC 29), clay, glass, stone products (SIC 32), and primary metals (SIC 33).

The monthly ratios are computed as the monthly sum of weighted indices as a proportion of the quarterly sum of weighted indices, using the 1985 proportion as the weight.

Prior to 1980, monthly coal consumption for the ***residential and commercial*** sector was derived by using monthly data reported on Form EIA-2, "Monthly Coal Report -- Retail Dealers and Upper Lake Docks," to modify baseline coal consumption figures developed by the Bureau of Mines, U.S. Department of the Interior.

For 1980, the quarterly coal consumption figures in the ***residential and commercial*** sector are converted to monthly coal consumption figures using the ratios of monthly to quarterly coal deliveries to this sector in 1979 as reported on Form EIA-2. These 1979 ratios by month (January-December) are 0.4002, 0.3502,

0.2496; 0.4805, 0.2901, 0.2294; 0.3126, 0.2952, 0.3922; and 0.2931, 0.3101, 0.3968. The 1981 and 1982 monthly coal consumption figures were derived using the 1979 ratios but were also modified according to heating/cooling degree-days. For 1983 through 1987, coal consumption figures are converted to monthly coal consumption figures using only the ratios of monthly to quarterly coal deliveries to this sector in 1979.

Starting with 1988, monthly coal consumption figures are derived using the monthly national average population weighted heating/cooling degree-days obtained from the National Oceanic and Atmospheric Administration. The ratio is the proportion of the monthly national sum of heating and cooling degree-days to the quarterly sum.

6. Stocks

Annual stocks are calculated at the end of the year or the end of the fourth quarter. Coal stocks are derived for each end-use sector as follows:

Electric Utilities. Stocks are reported on Form EIA-759.

Coke Plants. Stocks are reported on Form EIA-5.

Other Industrial Plants. Stocks are reported on Form EIA-3, i.e., stocks at ***manufacturing*** plants only. Technical Note 2 discusses the difference between ***other industrial plants*** and ***manufacturing plants.***

Residential and Commercial. Data are not available. See Technical Note 3.

Producer and Distributor. Stocks are reported on Form EIA-6.

7. Methods of Transportation

Rail: Shipments of coal moved to consumers by rail, either private or public/commercial. Included is coal hauled to or away from a railroad siding by truck.

Water Transportation: Shipments of coal moved by one of the three methods--river, Great Lakes, or tidewater piers and coastal ports. Included in these shipments is coal hauled to or from water loading facilities by other means of transportation.

River: Shipments of coal moved to consumers via river by barge, except shipments to Great Lakes coal loading docks or tidewater piers or coastal ports.

Great Lakes: Shipments of coal moved to consumers via the Great Lakes. These shipments are moved via the Great Lakes coal loading docks, which are identified by name and locations as follows: Superior Midwest Energy Terminal, Superior, Wisconsin; Bessemer & Lake Erie Coal Storage & Transfer Facility, Conneaut, Ohio; B&O Railroad Coal Loading Dock, Lorain, Ohio; C&O Railroad Presque Isle Docks, Toledo, Ohio; Lakefront Dock & Railroad Terminal Company Coal Loading Dock, Toledo, Ohio; N&W Sandusky Coal Pier No. 3, Sandusky, Ohio; ConRail Coal Transfer Facilities, Ashtabula, Ohio; Rail to Water Transfer Corporation Dock, Chicago, Illinois.

Tidewater Piers and Coastal Ports: Shipments of coal moved to tidewater piers and coastal ports for further shipments to consumers via coastal water or ocean. The tidewater piers are identified by name and location as follows: B&O Curtis Bay Coal Piers, Baltimore, Maryland; C&O Coal Piers Nos. 14 & 15, Newport News, Virginia; N&W Lamberts Point Coal Piers Nos. 5 & 6, Norfolk, Virginia; Alabama State Docks Bulk Handling Plant, Mobile, Alabama; Alabama State Docks/McDuffie Terminals, Mobile, Alabama; Canton Coal Piers, Baltimore Harbor on the Chesapeake Bay; Greenwich Coal Pier, Greenwich Point, Philadelphia, Pennsylvania, on Delaware River; Port Richmond Pier, Pier 18 Port Richmond, Philadelphia, Pennsylvania, on the Delaware River; Galveston Regional Coal Distribution Center, Pelican Island, Galveston, Texas; International Marine Terminals/Plaquemines Parish Terminal, Mile 57 AHP-Mississippi River, approximately 30 miles south of New Orleans; Energy Terminals of Houston, Inc., a Subsidiary of Soros Associates, Houston, Texas. Coastal Ports are those located at Charleston, South Carolina; New York, New York; San Diego, California; Los Angeles, California; and Seattle, Washington.

Truck: Shipments of coal moved to consumers by truck.

Tramway, Conveyor, or Slurry Pipeline: Shipments of coal moved to consumers by tramway, conveyor, or slurry pipeline.

8. Census Export and Import Data

Export and import data are obtained from the Bureau of the Census, U.S. Department of Commerce, where they are compiled monthly from documents filed with the U.S. Customs Service, as required by law.

Each coal shipment is reported in short tons with corresponding total dollar values. EIA converts all value data obtained from the Census Bureau to average price data by dividing the dollar value by the quantity.

Based on an analysis and sample validation of the Census Bureau import and export data conducted by the EIA, it was determined that some of the coal and coke data collected from the Census Bureau may be misleading or incorrect (particularly those data associ-

ated with very small quantities or very high prices). Because of this, a methodology was developed to edit the Census Bureau price data.

Prior to 1989, certain data cells had been suppressed for publication purposes only: (1) average import coal prices of $50.00 or more per short ton; (2) average export coal prices of $60.00 or more per short ton; (3) average coke prices of $200.00 or more per short ton; (4) all percent changes of 500 percent or more.

Beginning with 1989, coal export data were categorized as metallurgical coal and steam coal, rather than as bituminous steam coal, lignite, anthracite, and bituminous metallurgical coal.

In addition, coal export tables were revised to present those countries to which the United States exported more than 50,000 short tons in the prior calendar year. The remaining countries in each continent were aggregated in an "other" category. This reduces the number of empty cells and highlights the major importers of U.S. coal. All coke export and import, and coal import countries and quantities are displayed.

The following methodology was used to derive the typical average prices as presented in the price tables. For all coal, a price distribution was derived from the prior calendar year export price data. Since extreme price variations in the Census Bureau data are the exception rather than the rule, the price distribution was used to identify a typical price range. The price distribution, from low to high, along with the frequency of each price (quantity) was analyzed to determine the representative prices. The extreme prices at both ends of the distribution were eliminated to arrive at a price range that covered at least 90 percent of the exports. This price range was considered to include typical or representative prices. Considering the records that fell within the typical price range, the weighted average price was calculated by country of destination and type of coal.

The same procedure was used to determine the typical average prices of coal imports. In addition to the average prices based on the above methodology, a U.S. total row is presented in the price tables, which represents the average price using all the Census Bureau data.

For reporting purposes, the month of exportation reflects the month in which the shipment leaves the United States. The month of importation generally is based on the month in which the U.S. Customs Service releases the merchandise to the importer. For both sets of data, however, there can exist a small carry-over from the actual month of exportation or importation to a subsequent month, usually the succeeding month. A number of factors in processing account for this, e.g., late receipt of a document for an end-of-month shipment, or rejection of a shipment by the computer due to failure to meet established edit criteria. These limitations should be considered when making comparisons.

Based on the U.S. - Canada Free Trade Agreement, as of January 1990, the U.S. Department of Commerce began reporting statistics on U.S. exports to Canada based on information on imports provided monthly by the Canadian government.

Comparing Census reported imported coal figures in Table 34 with EIA reported imported coal receipts at electric utilities, manufacturers, and coke plants for 1994 shows a difference of about 1.8 million short tons. The main reason for this is that the EIA receipts data do not cover imported coal received by nonutility power producers who are not in the manufacturing sector.

9. Revisions

All data published in this report are considered final. The Office of Coal, Nuclear, Electric and Alternate Fuels has adopted the following policy with respect to the revision and correction of recurrent data in energy publications:

1. Annual survey data collected by this office are published either as preliminary or final when first appearing in a data report. Data initially released as preliminary will be so noted in the report. These data will be revised, if necessary, and declared final in the next publication of the data.

2. All monthly and quarterly survey data collected by this office are published as preliminary. These data are revised only after the completion of the 12-month cycle of the data. No revisions are made to the published data before this.

3. After data are published as final, corrections will be made only in the event of a greater than one percent difference at the national level. Corrections for differences that are less than the 1-percent threshold are left to the discretion of the Office Director.

10. Price Data and Taxes

F.O.B. mine coal prices and prices of coal delivered to or received by end-use consumers (electric utility plants, manufacturing plants, and coke plants) as reported in this publication include relevant local, State and Federal excise and sales taxes.

Table D3. Implicit Price Deflator, 1987-1996

Year	Implicit Price Deflator (1992 = 100)
1987	83.1
1988	86.1
1989	89.7
1990	93.6
1991	97.3
1992	100.0
1993	102.6
1994[R]	104.9
1995[R]	107.6
1996	109.7

[R] Revised data.

Source: Bureau of Economic Analysis, U.S. Department of Commerce, *Survey of Current Business.*

Glossary

Agglomerating Character: Agglomeration describes the caking properties of coal. Agglomerating character is determined by examination and testing of the residue when a small powdered sample is heated to 950 degrees centigrade under specified conditions. If the sample is "agglomerating," the residue will be coherent, show swelling or cell structure, and be capable of supporting a 500-gram weight without pulverizing.

Anthracite: A hard, black lustrous coal, often referred to as hard coal, containing a high percentage of fixed carbon and a low percentage of volatile matter. Comprises three groups classified according to the following ASTM Specification D388-91a, on a dry mineral-matter-free (mmf) basis:

	Fixed Carbon Limits		Volatile Matter	
	GE	LT	GT	LE
Meta-Anthracite	98	-	-	2
Anthracite	92	98	2	8
Semianthracite	86	92	8	14

GE = Greater than or equal to
LT = Less than
GT = Greater than
LE = Less than or equal to

Anthracite coal is non-agglomerating. If agglomerating, semianthracite is classified in the low-volatile group of the bituminous class.

Ash: Impurities consisting of silica, iron, alumina, and other incombustible matter that are contained in coal. Ash increases the weight of coal, adds to the cost of handling, and can affect the burning characteristics. Ash content is measured as a percent by weight of coal on an "as received" or a "dry" (moisture-free, usually part of a laboratory analysis) basis.

Auger Mine: A surface mine where coal is recovered through the use of a large-diameter drill driven into a coalbed in a hillside. It usually follows contour surface mining, particularly when the overburden is too costly to excavate.

Average Annual Percent Change:

$$\sqrt[n]{\frac{V_n}{V_0}} - 1 \qquad (1)$$

Where: V_0 = the value for the base period.
V_n = the value for the nth period.
n = the number of periods.

Average Daily Production: The ratio of the total production at a mining operation to the total number of production days worked at the operation.

Average Length of a Shift: The arithmetic mean number of hours worked during a production shift. Overtime is included if usually worked during the year.

Average Mine Price: The ratio of the total value of the coal produced at the mine to the total production tonnage. (See F.O.B. mine price.)

Average Number of Employees per Shift: The arithmetic mean number of employees working during a production shift. Includes all employees except office workers. (See direct labor hours.)

Average Number of Miners Working Daily: The arithmetic mean number of miners working each day at a mining operation. Includes maintenance as well as production work performed.

Average Number of Shifts per Day: The arithmetic mean number of shifts each day at a mining operation. Includes maintenance as well as production shifts.

Average Production per Miner per Day: The product of the average production per miner per hour at a mining operation and the average length of a production shift at the operation.

Average Production per Miner per Hour: The ratio of the total production at a mining operation to the total direct labor hours worked at the operation.

Average Production per Miner per Shift: Calculated by multiplying average production per miner per hour by the average length of a miner shift.

Average Quality of Coal: Refers to individual measurements such as heat value, fixed cabon, moisture, ash, sulfur, phosphorus, major, minor, and trace elements, coking properties, petrologic properties, and particular organic constituents. The individual quality elements may be aggregated in various ways to classify coal for such special purposes as metallurgical, gas, petrochemical, and blending usages.

Average Recovery Percentage: Average recovery percentage represents the percentage of coal that can be recovered from coal reserves at reporting mines, averaged for all mines in the reported geographic area.

Bituminous Coal: The most common coal. It is dense and black (often with well-defined bands of

bright and dull material). Its moisture content is usually less than 20 percent. It is used for generating electricity, making coke, and for space heating. Comprises five groups classified according to ASTM Specification D-388-91a, on a dry mineral-matter-free mmf basis for fixed-carbon and volatile matter and a moist mmf basis for calorific value. Coals having 69 percent or more fixed carbon on the dry, mineral-matter-free basis shall be classified according to fixed carbon, regardless of calorific (heating) value. High-volatile C bituminous coal is agglomerating, but other bituminous coals are commonly agglomerating. However, it is recognized that there may be nonagglomerating varieties in these groups of the bituminous class, and there are notable exceptions in the high-volatile C bituminous group. Coals with less than 69 percent fixed carbon, but with 14,000 or more Btu per pound, are classified as high-volatile A bituminous.

	Fixed Carbon Limits		Volatile Matter Limits		Calorific Value Limits Btu/lb.	
	GE	LT	GT	LT	GE	LE
lv	78	86	14	22	-	-
mv	69	78	22	31	-	-
hvA	-	69	31	-	14000	-
hvB	-	-	-	-	13000	14000
hvC	-	-	-	-	10500	13000

lv = Low-volatile bituminous coal
mv = Medium-volatile bituminous coal
hvA = High-volatile A bituminous coal
hvB = High-volatile B bituminous coal
hvC = High-volatile C bituminous coal
GE = Greater than or equal to
LT = Less than
GT = Greater than
LE = Less than or equal to

Btu (British thermal unit): The amount of heat needed to raise the temperature of 1 pound of water by 1 degree fahrenheit. The Btu is a convenient measure by which to compare the energy content of various fuels.

Cannel Coal: A variety of bituminous coal that is noncaking, contains a high percentage of volatile matter, ignites easily, and burns with a luminous smokey flame.

Capacity Utilization: Capacity utilization is computed by dividing production by productive capacity and multiplying by 100.

Captive Coal: Coal produced and consumed by the mine operator, a subsidiary, or parent company (for example, steel companies and electric utilities).

Carbon Dioxide: CO_2 A colorless, odorless, incombustible gas formed during combustion in fossil-fuel electric generation plants.

Census Divisions: The nine geographic divisions of the United States established by the Bureau of the Census, U.S. Department of Commerce for statistical analysis. The boundaries of Census divisions coincide with State boundaries. In some cases, the Pacific Division is subdivided into the Pacific Contiguous and Pacific Noncontiguous areas.

CIF: See Cost, Insurance, Freight.

Coal Carbonized: The amount of coal decomposed into solid coke and gaseous products by heating in a coke oven in a limited air supply or in the absence of air.

Coal (Coke): See Coke (coal).

Coal Mining Productivity: Coal mining productivity is calculated by dividing total coal production by the total direct labor hours worked by all mine employees.

Coal Preparation: The process of sizing and cleaning coal to meet market specifications by removing impurities such as rock, sulfur, etc. May include crushing, screening, or mechanical cleaning.

Coal-Producing Regions: A geographic classification of coal-producing States. The States in the Appalachian Region are Alabama, Georgia, eastern Kentucky, Maryland, Ohio, Pennsylvania, Tennessee, Virginia, and West Virginia. The States in the Interior Region are Arkansas, Illinois, Indiana, Iowa, Kansas, western Kentucky, Louisiana, Missouri, Oklahoma, and Texas. The States in the Western Region are Alaska, Arizona, California, Colorado, Montana, New Mexico, North Dakota, Utah, Washington, and Wyoming.

Coal-Producing States: The States where mined and/or purchased coal originates are defined as follows: Alabama, Alaska, Arizona, Arkansas, California, Colorado, Illinois, Indiana, Iowa, Kansas, Kentucky Eastern, Kentucky Western, Louisiana, Maryland, Missouri, Montana, New Mexico, North Dakota, Ohio, Oklahoma, Pennsylvania anthracite, Pennsylvania bituminous, Tennessee, Texas, Utah, Virginia, Washington, West Virginia Northern, West Virginia Southern, and Wyoming. The following Coal-Producing States are split in origin of coal, as defined below:

- ***Kentucky, Eastern*** All mines located in counties other than the Western Kentucky counties.
- ***Kentucky, Western*** All mines in the following counties in Western Kentucky: Butler, Caldwell, Christian, Crittenden, Daviess, Edmonson, Grayson, Hancock, Henderson, Hopkins, Logan, McLean, Muhlenberg, Ohio, Simpson, Todd, Union, Warren, and Webster.
- ***Pennsylvania Anthracite*** All mines in the following counties: Carbon, Columbia, Dauphin, Lackawanna, Lebanon, Luzerne, Northumberland, Schuylkill, Sullivan, and Susquehanna. All anthracite mines in Bradford County.
- ***Pennslyvania Bituminous*** All mines located in counties other than the Pennsylvania anthracite counties and all bituminous mines in Bradford County.
- ***West Virginia, Northern*** All mines in the following counties (formerly defined as Coal-

Producing Districts 1, 3, & 6): Barbour, Brooke, Braxton, Calhoun, Doddridge, Gilmer, Grant, Hancock, Harrison, Jackson, Lewis, Marion, Marshall, Mineral, Monongalia, Ohio, Pleasants, Preston, Randolph, Ritchie, Roane, Taylor, Tucker, Upshur, Webster, Wetzel, Wirt, and Wood.

- ***West Virginia, Southern*** All mines in the following counties (formerly defined as Coal-Producing Districts 7 & 8): Boone, Cabell, Clay, Fayette, Greenbrier, Kanawha, Lincoln, Logan, Mason, McDowell, Mercer, Mingo, Monroe, Nicholas, Pocahontas, Putnam, Raleigh, Summers, Wayne, and Wyoming.

Coal Rank/Group: A classification of coal based on fixed carbon, volatile matter, calorific (heating) value, and agglomerating character. Coal is ranked progressively from lignite (least carbonaceous) to anthracite (most carbonaceous). The rank of coal can also determined by measuring the reflectance of vitrinite, one of several organic components of coal. The lower rank coal can be classified based on heat content. The heat content of the higher rank coals is generally above 14 thousand Btu per pound for each coal rank group (except for meta-anthracite, which trends slightly lower), and heat content ranges vary within a relatively narrow range. Since heat content is not a dependable criterion for these higher rank coals, their rank categories are instead described by degree of metamorphism, or "coalification," a property that is measured by fixed carbon content. Finally, the agglomerating character of bituminous coals is a critical attribute for certain coal consumers, and thus agglomerating character has come to define the distinctions between certain adjacent coal groups. Some high-volatile C bituminous and subbituminous A coals can be distinguished only on the basis of agglomerating character. Percentages are based on dry mineral-matter-free coal. Volatile matter (not shown) is the complement of fixed carbon; that is, the percentages of fixed carbon and volatile matter sum to 100 percent. As fixed carbon percentage decreases, therefore, volatile matter percentage increases by the same amount.

Coal Stocks: The supply of coal at a mine, plant, or utility at the end of the reporting period.

Coalbed: A bed or stratum of coal. Also called a coal seam.

Cogenerator: A generating facility that produces electricity and another form of useful thermal energy (such as heat or steam) used for industrial, commercial, heating, and cooling purposes. To receive status as a qualifying facility (QF) under the Public Utility Regulatory Policies Act (PURPA), the facility must produce electric energy and "another form of useful thermal energy through the sequencial use of energy," and meet certain ownership, operating, and efficiency criteria established by the Federal Energy Regulatory Commission (FERC). (See the Code of Federal Regulation, Title 18, Part 292.)

Coke (coal): In general, coke is made from bituminous coal (or blends of bituminous coal) from which the volatile constituents are driven off by baking in an oven at temperatures as high as 2,000 degrees Fahrenheit, so that the fixed carbon and ash are fused together. Coke is hard and porous, has a gray, submetallic luster, and is strong enough to support a load of iron ore in a blast furnace. It is used both as a fuel and a reducing agent in smelting iron ore in a blast furnace. Coke has a heating value of 24.8 million Btu per short ton.

Coke Plants: Plants where coal is carbonized in slot or beehive ovens for the manufacture of coke.

Continuous Mining: A form of room-and-pillar mining in which a continuous mining machine extracts and removes coal from the working face in one operation; no blasting is required.

Conventional Mining: The oldest form of room-and-pillar mining which consists of a series of operations that involve cutting the coalbed so it breaks easily when blasted with explosives or high-pressure air, and then loading the broken coal.

Cost, Insurance, Freight (CIF): A type of sale in which the buyer of the product agrees to pay a unit price that includes the F.O.B. value of the product at the point of origin plus all costs of insurance and transportation. This type of transaction differs from a "delivered" purchase in that the buyer accepts the quantity as determined at the loading port (as certified by the Bill of Loading and Quality Report) rather than pay on the basis of the quantity and quality ascertained at the unloading port. It is similar to the terms of an F.O.B. sale, except that the seller, as a service for which he is compensated, arranges for transportation and insurance.

Crude Oil: A mixture of hydrocarbons that exists in liquid phase in underground reservoirs and remains liquid at amospheric pressure after passing through surface-separating facilities. Included are lease condensate and liquid hydrocarbons produced from tar sands, gilsonite and oil shale. Drip gases are also included, but topped crude (residual oil) and other unfinished oils are excluded. Liquids produced at natural gas processing plants and mixed with crude oil are likewise excluded where identifiable. Crude oil is considered as either domestic or foreign, according to the following: or from its "outer continental shelf" as defined in 43 U.S.C. 1331. States. Imported Athabasca hydrocarbons are included.

Culm: Waste from Pennsylvania anthracite preparation plants, consisting of coarse rock fragments containing as much as 30 percent small-sized coal; sometimes defined as including very fine coal particles called silt. Its heat value ranges from 8 to 17 million Btu per short ton.

Customs District: Customs districts, as defined by the Bureau of the Census, U.S. Department of Commerce, "Monthly Report EM 545," are as follows

- ***Eastern:*** Bridgeport, CT, Washington, DC, Boston, MA, Baltimore, MD, Portland, ME, Buffalo, NY, New York City, NY, Ogdensburg,

NY, Philadelphia, PA, Providence, RI, Norfolk, VA, St. Albans, VT.

- ***Southern:*** Mobile, AL, Savannah, GA, Miami, FL, Tampa, FL, New Orleans, LA, Wilmington, NC, San Juan, PR, Charleston, SC, Dallas-Fort Worth, TX, El Paso, TX, Houston-Galveston, TX, Laredo, TX, Virgin Islands.
- ***Western:*** Anchorage, AK, Nogales, AZ, Los Angeles, CA, San Diego, CA, San Fracisco, CA, Honolulu, HI, Great Falls, MT, Portland, OR, Seattle, WA.
- ***Northern:*** Chicago, IL, Detroit, MI, Duluth, MN, Minneapolis, MN, St. Louis, MO, Pembina, ND, Cleveland, OH, Milwaukee, WI.

Demonstrated Reserve Base: A collective term for the sum of coal in both measured and indicated resource categories of reliability which represents 100 percent of the coal in these categories in place as of a certain date. Includes beds of bituminous coal and anthracite 28 inches or more thick and beds of subbituminous coal 60 inches or more thick that occur at depths to 1 thousand feet. Includes beds of lignite 60 inches or more thick that can be surface mined. Includes also thinner and/or deeper beds that presently are being mined or for which there is evidence that they could be mined commercially at this time. Represents that portion of the identified coal resource from which reserves are calculated.

Depletion: The subtraction of both the tonnage produced and the tonnage lost to mining from identified resources to determine the remaining tonnage as of a certain time.

Depletion Factor: The multiplier applied to the tonnage produced to compute depletion. This multiplier takes into account both the tonnage recovered and the tonnage lost due to mining. The depletion factor is the reciprocal of the recovery factor in relation to a given quantity of production.

Direct Labor Hours: Direct labor hours worked by all mining employees at a mining operation during the year. Includes hours worked by those employees engaged in production, preparation, development, maintenance, repair, shop or yard work, management, and technical or engineering work. Excludes office workers. Excludes vacation and leave hours.

Distillate Fuel Oil: A general classification for one of the petroleum fractions produced in conventional distillation operations. Included are products known as No.1, No.2, and No.4 fuel oils and No.1, No.2, and No.4 diesel fuels. It is used primarily for space heating, on-and-off-highway diesel engine fuel (including railroad engine fuel and fuel for agricultural machinery), and electric power generation.

Dredge Mining: A method of recovering coal from rivers or streams.

Drift Mine: An underground mine that has a horizontal entry dug to a coalbed in a hillside.

Dry (Coal) Basis: Coal quality data calculated to a theoretical basis in which no moisture is associated with the sample. This basis is determined by measuring the weight loss of a sample when its inherent moisture is driven off under controlled conditions of low temperature air-drying followed by heating to just above the boiling point of water (104 to 110 degrees centigrade).

Electricity: A form of energy generated by friction, induction, or chemical change that is caused by the presence and motion of elementary charged particles of which matter consists.

Electricity Generation: The process of producing electric energy or transforming other forms of energy into electric energy. Also the amount of electric energy produced or expressed in watthours (Wh).

Electricity Generation, Gross: The total amount of electric energy produced by the generating station or stations, measured at the generator terminals.

Electricity Generation, Net: Gross generation less electricity consumed at the generating plant for station use. Electricity required for pumping at pumped-storage plants is regarded as plant use and is deducted from gross generation.

Electric Power Plant: A station containing prime movers, electric generators, and auxiliary equipment for converting mechanical, chemical, and/or fission energy into electric energy.

Electric Utility: A corporation, person, agency, authority, or other legal entity or instrumentality that owns and/or operates facilities within the United States, its territories, or Puerto Rico for the generation, transmission, distribution, or sale of electric energy primarily for use by the public and files forms listed in the Code of Federal Regulations, Title 18, Part 141. Facilities that qualify as cogenerators or small power producers under the Public Utility Regulatory Policies Act (PURPA) and exempt wholesale generators under Energy Policy Act of 1992 are not considered electric utilities. See definition of nonutility power producer.

Electric Utility Sector: The electric utility sector consists of privately and publicly owned establishments that generate, transmit, distribute, or sell electricity primarily for use by the public and that meet the definition of an electric utility. Nonutility power producers are not included in the electric utility sector.

Emissions: The pollutants dischaged into the atmosphere in exhaust gases. For coal-burning plants, these emissions are primarily Carbon Dioxide (CO_2), Nitrogen Oxide (NO_x), and Sulfur Dioxide (SO_2).

Energy: The capacity for doing work as measured by the capability of doing work (potential energy) or the conversion of this capability to motion (kinetic energy). Energy has several forms, some of which are easily convertible and can be changed to another form useful for work. Most of the world's convertible

energy comes from fossil fuels that are burned to produce heat that is then used as a transfer medium to mechanical or other means in order to accomplish tasks. Electrical energy is usually measured in kilowatthours, while heat energy is usually measured in British thermal units.

Energy Consumption: The use of energy as a source of heat or power or as an input in the manufacturing process.

Exports: Shipments of goods from the 50 States and the District of Columbia to foreign countries, Puerto Rico, the Virgin Islands, and other U.S. possessions and territories.

Fahrenheit: A temperature scale on which the boiling point of water is at 212 degrees above zero on the scale and the freezing point is at 32 degrees above zero at standard atmospheric pressure.

F.A.S. Value: Free alongside ship value. The value of a commodity at the port of exportation, generally including the purchase price plus all charges incurred in placing the commodity alongside the carrier at the port of exportation in the country of exportation.

Federal Energy Regulatory Commission (FERC): A quasi-independent regulatory agency within the Department of Energy having jurisdiction over interstate electricity sales, wholesale electric rates, hydroelectric licensing, natural gas pricing, oil pipeline rates, and gas pipeline certification.

Federal Coal Lease: A lease granted to a mining company to produce coal from land owned and administered by the Federal Government in exchange for royalties and other revenues.

Federal Power Act: Enacted in 1920, and amended in 1935, the Act consists of three parts. The first part incorporated the Federal Water Power Act administered by the former Federal Power Commission, whose activities were confined almost entirely to licensing non-Federal hydroelectric projects. Parts II and III were added with the passage of the Public Utility Act. These parts extended the Act's jurisdiction to include regulating the interstate transmission of electrical energy and rates for its sale as wholesale in interstate commerce. The Federal Energy Regulatory Commission is now charged with the administration of this law.

Federal Power Commission: The predecessor agency of the Federal Energy Regulatory Commission. The Federal Power Commission (FPC) was created by an Act of Congress under the Federal Water Power Act on June 10, 1920. It was charged originally with regulating the electric power and natural gas industries. The FPC was abolished on September 20, 1977, when the Department of Energy was created. The functions of the FPC were divided between the Department of Energy and the Federal Energy Regulatory Commission.

FERC: The Federal Energy Regulatory Commission.

Fixed Carbon: The nonvolatile matter in coal minus the ash. Fixed carbon is the solid residue other than ash obtained by prescribed methods of destructive distillation of a coal. Fixed carbon is the part of the total carbon that remains when coal is heated in a closed vessel until all volatile matter is driven off.

Flue Gas Desulfurization Unit (Scrubber): Equipment used to remove sulfur oxides from the combustion gases of a boiler plant before discharge to the atmosphere. Chemicals, such as lime, are used as the scrubbing media.

Flue Gas Particulate Collectors: Equipment used to remove fly ash from the combustion gases of a boiler plant before discharge to the atmosphere. Particulate collectors include electrostatic precipitators, mechanical collectors (cyclones), fabric filters (baghouses), and wet scrubbers.

F.O.B. Mine Price: The free on board mine price. This is the price paid for coal at the mining operation site. It excludes freight or shipping and insurance costs.

Foreign-Controlled Firms: Foreign-controlled firms are U.S. coal producers with more than 50 percent of their stock or assets owned by a foreign firm.

Fossil-Fuel Electric Generation: Electric generation in which the prime mover is a turbine rotated by high-pressure steam produced in a boiler by heat from burning fossil fuels.

Geothermal Energy: Energy from the internal heat of the earth, which may be residual heat, friction heat, or a result of radioactive decay. The heat is found in rocks and fluids at various depths and can be extracted by drilling and/or pumping.

Greenhouse Effect: The increasing mean global surface temperature of the earth caused by gases in the atmosphere (including carbon dioxide, methane, nitrous oxide, ozone, and chlorofluorocarbon). The greenhouse effect allows solar radiation to penetrate but absorbs the infrared radiation returning to space.

Gross Domestic Product (GDP): The total value of goods and services produced by labor and property in the United States. As long as the labor and property are located in the United States, the supplier (that is, the workers and, for property, the owners) may be either U.S. residents or residents of foreign countries.

Hand Loading: An underground loading method by which coal is removed from the working face by manual labor through the use of a shovel for conveyance to the surface. Though rapidly disappearing, it is still used in very small-tonnage mines.

Highwall: the unexcavated face of exposed overburden and coal in a surface mine.

High-Volatile A Bituminous Coal: See Bituminous coal.

High-Volatile B Bituminous Coal: See Bituminous coal.

High-Volatile C Bituminous Coal: See Bituminous coal.

High-Volatile (specific sub-group unknown): See Bituminous coal.

Hydroelectric Power: The harnessing of flowing water to produce mechanical or electrical energy.

Implicit Price Deflator: The implicit price deflator, published by the U.S. Department of Commerce, Bureau of Economic Analysis, is used to convert nominal figures to real figures.

Imports: Receipts of goods into the 50 States and the District of Columbia from foreign countries and from Puerto Rico, the Virgin Islands, and other U.S. possessions and territories.

Indian Coal Lease: A lease granted to a mining company to produce coal from Indian lands in exchange for royalties and other revenues; obtained by direct negotiatian with the Indians, but subject to approval and administration by the U.S. Department of the Interior.

Industrial Sector: The industrial sector comprises manufacturing industries which make up the largest part of the sector, along with mining, construction, agriculture, fisheries, and forestry. Establishments in the sector range from steel mills, to small farms, to companies assembling electronic components. The SIC codes used to classify establishments as industrial are 1 through 39.

Interquartile Range: The interquartile range is the range within which the middle 50 percent of observations are concentrated. See Appendix D, Section "Interquartile Range."

Jet Fuel: The term includes kerosene-type jet fuel and naphtha-type jet fuel. Kerosene-type jet fuel is a kerosene-quality product used primarily for commercial turbojet and turboprop aircraft engines. Naphtha-type jet fuel is a fuel in the heavy naphthas range used primarily for military turbojet and turboprop aircraft engines.

Lease Condensate: A natural gas liquid recovered from gas well gas (associated and non-associated) in lease separators or natural gas field facilities. Lease condensate consists primarily of pentanes and heavier hydrocarbons.

Lignite: A brownish-black coal of low rank with high inherent moisture and volatile matter (used almost exclusively for electric power generation). Similar coal in Europe and Australia are also referred to as brown coal. Lignite comprises two groups classified according to the following ASTM Specifiaction D-388-91a for calorific values on a moist mineral-matter-free basis:

	Limits Btu/lb.	
	GE	LT
Lignite A	6300	8300
Lignite B	-	6300

GE = Greater than or equal to
LT = Less than
Lignite is non-agglomerating.

Lignite A: See Lignite.

Lignite B: See Lignite.

Longwall Mining: A form of underground coal mining which is gaining in importance in the United States and can be used at greater depths than room-and-pillar mining. In longwall mining, a cutting machine is pulled back and forth across a panel of coal 300 to 600 feet wide and as much as a mile long, with the broken coal moved by conveyor. Longwall mining is done under movable roof supports that are advanced as the bed is cut. The roof in the mined-out area is allowed to fall as the mining advances.

Low-Volatile Bituminous Coal: See Bituminous Coal.

Major Coal-Producing States: Any State that produces more than 12 million short tons of coal during the year.

Manufacturing (except coke plants): Those industrial users/plants, not including coke plants, that are engaged in the mechanical or chemical transformation of materials or substances into new (i.e., finished or semifinished) products. Includes coal used for gasification/liquifaction.

Medium-Volatile Bituminous Coal: See Bituminous Coal.

Merchant Coke Plant: A coke plant where coke is produced primarily for sale on the commercial (open) market.

Meta-Anthracite: See Anthracite.

Metallurgical Coal: Coal that meets the requirements for making coke. It must be low in ash and sulfur and form a coke that is capable of supporting the charge of iron ore and limestone in a blast furnace. A blend of two or more bituminous coals is usually required to make coke.

Metric Ton: A unit of weight equal to 2,204.6 pounds.

Mine Type: See Surface Mine and Underground Mine.

Mineral-Matter-Free Basis: Mineral matter in coal is the parent material in coal from which ash is derived, and which comes from minerals present in the original plant materials that formed the coal, or from extraneous sources such as sediments and precipitates from mineralized water is called the mineral matter. Mineral matter in coal cannot be analytically determined and is commonly calculated using data on

ash and ash-forming constituents. Coal analyses are calculated to the mineral-matter-free basis by adjusting formulas used in calculations in order to deduct the weight of mineral matter from the total coal.

Moist (Coal) Basis: "Moist" coal contains its natural inherent or bed moisture, but does not include water adhering to the surface. Coal analyses expressed on a moist basis are performed or adjusted so as to describe the data when the coal contains only that moisture which exists in the bed in its natural state of deposition, and when the coal has not lost any moisture due to drying.

Naphtha: A genetic term applied to a petroleum fraction with an approximate boiling range between 122 and 400 degrees fahrenheit.

Natural Gas: A mixture of hydrocarbons and small quantities of various nonhydrocarbons existing in the gaseous phase or in solution with crude oil in underground reservoirs.

Natural Gas (Dry): The marketable portion of natural gas production, which is obtained by subtracting extraction losses, including natural gas liquids removed at natural gas processing plants, from total production.

Natural Gas Plant Liquids (NGPL): Natural gas liquids recovered from natural gas in processing plants and, in some situations, from natural gas field facilities, as well as those extracted by fractionators. Natural gas plant liquids are defined according to the published specifications of the Gas Processors Association and the American Society for Testing and Materials as follows: ethane, propane, normal butane, isobutane, pentanes plus, and other products from natural gas processing plants (i.e., products meeting the standards for finished petroleum products produced at natural gas processing plants, such as finished motor gasoline, finished avaiation gasoline, special naphthas, kerosene, distillate fuel oil, and miscellaneous products).

Nitrogen Oxide: NO_x. A gas formed in high-temperature environments when nitrogen and oxygen are present together. This typically occurs in a combustion chamber such as those in fossil-fuel burning electric utilities. Nitrogen oxide emissions are a contributor to acid rain.

Nominal Price: The price paid for a product or service at the time of the transaction. The nominal price, which is expressed in current dollars, is not adjusted to remove the effect of changes in the purchasing power of the dollar.

Nonutility Power Producers: A corporation, person, agency, authority, or other legal entity or instrumentality that owns electric generating capacity and is not an electric utility. Nonutility power producers include qualifying cogenerators, qualifying small- power producers, and other nonutility generators (including independent power producers) without a designated franchised service area and which do not file forms listed in the Code of Federal Regulations, Title 18, Part 141. (See Electric Utility.)

Nuclear Electric Power: Electricity generated by an electric power plant whose turbines are driven by steam generated in a reactor by heat from the fissioning of nuclear fuel.

Number of Mines: The number of mines, or mines collocated with preparation plants or tipples, located in a particular geographic area (State or region). If a mine is mining coal across two counties within a State, or across two States, then it is counted as two operations. This is done so that EIA can separate production by State and county.

Number of Mining Operations: The number of mining operations includes preparation plants with greater than 5,000 total direct labor hours. Mining operations that consist of a mine and preparation plant or a preparation plant only will be counted as two operations, if the preparation plant processes both underground and surface coal. Exluded are silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10,000 short tons of coal during the year, and preparation plants with less than 5,000 employee hours.

Open Market Coal: Coal sold in the open market, i.e., coal sold to companies other than the reporting company's parent company or an operating subsidiary of the parent company.

Operating Subsidiary: A company which is controlled through the ownership of voting stock, or a corporate joint venture in which a corporation is owned by a small group of businesses as a separate and specific business or project for the mutual benefit of the members of the group.

Other Industrial Plant: Industrial users, not including coke plants, engaged in the mechanical or chemical transformation of materials or substances into new products (manufacturing); and companies engaged in the agriculture, mining, or construction industries.

Other Unions: See Union Type.

Overburden: Any material, consolidated or unconsolidated, that overlies a coal deposit.

Parent Company: A company which solely or jointly owns the reporting company and which is not itself a subsidiary of, or owned by, another company.

Percent Utilization: The ratio of total production to productive capacity, times 100.

Petroleum: Petroleum includes residential and distillate fuel oils, crude oil, and all other petroleum fuels, excluding petroleum coke.

Petroleum Coke: A residue that is the final product of the condensation process in cracking. The product

is either marketable petroleum coke or catalyst petroleum coke.

Petroleum Products: Products obtained from the processing of crude oil (including lease condensate), natural gas, and other hydrocarbon compounds. Petroleum products include unfinished oils, liquefied petroleum gases, pentanes plus, aviation gasoline, motor gasoline, naphtha-type jet fuel, kerosene-type jet fuel, kerosene, distillate fuel oil, residual fuel oil, petrochemical feedstocks, special naphthas, lubricants, waxes, petroleum coke, asphalt, road oil, still gas, and miscellaneous products.

Photovoltiac and Solar Thermal Energy (as used at electric utilities): Energy radiated by the sun as electromagnetic waves (electromagnetic radiation) that is converted at electric utilities into electricity by means of solar (photovoltiac) cells or concentrating (focusing) collectors.

Preparation Plant: A mining facility at which coal is crushed, screened, and mechanically cleaned.

Producer and Distributor Coal Stocks: Producer and distributor coal stocks consist of coal held in stock by producers/distributors at the end of a reporting period.

Productive Capacity: The maximum amount of coal that a mining operation can produce or process during a period with the existing mining equipment and/or preparation plant in place, assuming that the labor and materials sufficient to utilize the plant and equipment are available, and that the market exists for the maximum production.

Quadrillion Btu: 10^{15} Btu.

Real Price: A price that has been adjusted to remove the effect of changes in the purchasing power of the dollar. Real prices, which are expressed in constant dollars, usually reflect buying power relative to a base year.

Recoverable Coal Reserves at Mines: The quantity of coal that can be recovered (i.e., mined) from existing coal reserves, as reported on Form EIA-7A.

Recoverable Reserves of Coal: An estimate of the amount of coal that can be recovered (mined) from the accessible reserves of the demonstrated reserve base.

Recovery Percentage: The percentage of coal that can be recovered from the coal deposits at existing mines.

Refuse Bank: A repository for waste material generated by the coal cleaning process.

Refuse Mine: A surface mine where coal is recovered from previously mined coal. It may also be known as a silt bank, culm bank, refuse bank, slurry dam, or dredge operation.

Report Year: The calendar year beginning at 12:00 a.m. January 1 and ending at 11:59 p.m. December 31.

Residential and Commercial Sector: Housing units; wholesale and retail businesses (except coal wholesale dealers); health institutions (hospitals); social and educational institutions (schools and universities); and Federal, State, and local governments (military installations, prisons, office buildings).

Residual Fuel Oil: The heavier oils that remain after the distillate fuel oils and and lighter hydrocarbons are distilled away in refinery operations and that conform to ASTM Specifications D396 and 975. Included are No. 5, a residual fuel oil of medium viscosity; Navy Special, for use in steam-powered vessels in government service and in shore power plants; and No. 6, which includes Bunker C fuel oil and is used for commercial and industrial heating, electricity generation, and to power ships. Imports of residual fuel oil include imported crude oil burned as fuel.

Room-and-Pillar Mining: The most common method of underground mining in which the mine roof is supported mainly by coal pillars left at regular intervals. Rooms are places where the coal is mined; pillars are areas of coal left between the rooms. Room-and-pillar mining is done either by conventional or continuous mining.

Royalties: Payments, in money or kind, of a stated share of production from mineral deposits, by the lessee to the lessor. Royalties may be an established minimum, a sliding-scale, or a step-scale. A step-scale royalty rate increases by steps as the average production on the lease increases. A sliding-scale royalty rate is based on average production and applies to all production from the lease.

Sales Volume: The reported output from Federal and/or Indian lands, the basis of royalties. It is approximately equivalent to production, which includes coal sold, and coal added to stockpiles.

Scoop Loading: An underground loading method by which coal is removed from the working face by a tractor unit equipped with a hydraulically operated bucket attached to the front; also called a front-end loader.

Semianthracite: See Anthracite.

Shaft Mine: An underground mine that reaches the coalbed by means of a vertical shaft. In addition to the passages providing entry to the coalbed, a network of other passages are also dug, some to provide access to various parts of the mine and some for ventilation.

Short Ton: A unit of weight equal to 2,000 pounds.

Shortwall Mining: A form of underground mining that involves the use of a continuous mining machine and movable roof supports to shear coal panels 150 to 200 feet wide and more than half a mile long. Although similar to longwall mining, shortwall mining is generally more flexible because of the smaller working area. Productivity is lower than with

longwall mining because the coal is hauled to the mine face by shuttle cars as opposed to conveyors.

SIC: See Standard Industrial Classification.

Silt: Waste from Pennsylvania anthracite preparation plants, consisting of coarse rock fragments containing as much as 30 percent small-sized coal; sometimes defined as including very fine coal particles called silt. Its heat value ranges from 8 to 17 million Btu per short ton. Synonymous with culm.

Silt, Culm Refuse Bank, or Slurry Dam Mining: A mining operation producing coal from these sources of coal. (See refuse mine.)

Slope Mine: An underground mine in which the entry is driven at an angle to reach the coal deposit.

Slurry Dam: A repository for the silt or culm from a preparation plant.

Solar Energy: The radiant energy of the sun, which can be converted into other forms of energy, such as heat or electricity.

Solar Thermal Collector: A devise designed to receive solar radiation and convert it into thermal energy. Normally, a solar thermal collector includes a frame, glazing, and an absorber, together with appropriate insulation. The heat collected by the solar thermal collector may be used immediately or stored for later use.

Standard Industrial Classification (SIC): A set of codes developed by the Office of Management and Budget which categorizes industries to groups with similar economic activities.

Steam Coal: All noncoking coal.

Stocks: The supply of coal or coke at a mine, plant, or utility at the end of the reporting period.

Strategic Petroleum Reserve (SPR): Petroleum stocks maintained by the Federal Government for use during periods of major supply interruption.

Strip (Surface) Mining: A method used on flat terrain to recover coal by mining long strips successively. The material excavated from the strip being mined is deposited in the strip previously mined.

Subbituminous Coal: A dull black coal of rank intermediate between lignite and bituminous, consisting of subbituminous A coal, subbituminous B coal, and subbituminous C coal, classified according to the following ASTM Specification D-388-91a on a moist mineral-matter-free basis:

	Calorific Value Limits Btu/lb. GE	LT
Subbituminous A Coal	10500	11500
Subbituminous B Coal	9500	10500
Subbituminous C Coal	8300	9500

GE = Greater than or equal to
LT = Less than
Subbituminous coal is non-agglomerating.

Subbituminous A Coal: See Subbituminous Coal.

Subbituminous B Coal: See Subbituminous Coal.

Subbituminous C Coal: See Subbituminous Coal.

Sulfur: One of the elements present in varying quantities in coal that contributes to environmental degradation when coal is burned. In terms of sulfur content by weight, coal is generally classified as low (less than or equal to 1 percent), medium (greater than 1 percent and less than or equal to 3 percent), and high (greater than 3 percent). Sulfur content is measured as a percent by weight of coal on an "as received" or a "dry" (moisture-free, usually part of a laboratory analysis) basis.

Sulfur Dioxide: SO_2. A caustic, corrosive gas that is a by-product of combustion and emissions from fossil-fuel burning electric utility plants. The primary agent in the production of acid rain.

Supplemental Gaseous Fuels: Any gaseous substance that, introduced into or commingled with natural gas, increases the volume available for disposition. Such substances include, but are not limited to, propane-air, refinery gas, coke oven gas, still gas, manufactured gas, biomass gas, or air or inert gases added for Btu stabilization.

Surface Mine: A coal-producing mine that is usually within a few hundred feet of the surface. Earth and rock above or around the coal (overburden) is removed to expose the coalbed, which is then mined with surface excavation equipment such as draglines, power shovels, bulldozers, loaders, and augers. It may also be known as an area, contour, open-pit, strip, or auger mine.

Tipple: A central facility used in loading coal for transportation by rail or truck.

Transportation Sector: The transportation sector consists of private and public vehicles that move people and commodities. Included are automobiles, trucks. buses, motorcycles, railroads and railways (including streetcars), aircraft, ships, barges, and natural gas pipelines.

Underground Mine: A mine where coal is produced by tunneling into the earth to the coalbed, which is then mined with underground mining equipment such as cutting machines and continuous, longwall, and shortwall mining machines. Underground mines are classified according to the type of opening used to

reach the coal, i.e., drift (level tunnel), slope (inclined tunnel), or shaft (vertical tunnel).

Unfinished Oils: All oils requiring further refinery processing, except those requiring only mechanical blending. Includes naphthas and lighter oils, kerosene and light gas oils, heavy gas oils, and residuum.

Union Type: Union type consists of United Mine Workers of America (UMWA), and the following "Other Union" types: Southern Labor Union (SLU), Appalachian Miners of America (AMA), Scotia Employees Association (SEA), International Union of Operation Engineers (IUOE), Utility Workers of America (UWA), Progressive Mine Workers Association (PMWA), International Brotherhood of Electrical Workers (IBEW), International Chemical Workers Union (ICWU), Redstone Workers Association (RWA), Chariton Valley Independent Union (CVIU), American Federation of Labor - Congress of Industrial Organization (AFL-CIO), Labors International (LABO), Crow Hollow Miners (CROW), Coal Strippers (COAL), United Steel Workers (USW), Independent Miners Association (IMA), Independent Union (INUN), Independence Miners, Brokers, and Truckers Association (IMBT), Council of Southern Mountains (CSM), International Brotherhood of Teamsters, Chauffeurs, Warehousemen and Helpers Union (TEAM), Thompson Creek Workers Association (TCWA), United Brotherhood of Clay Workers (UBCW), Wilmot Employees Independent Union (WEIU), Independent Strip Miners Union (ISMU), Independent Miners (IM), Independent Workers (IW), Coal Strippers Union (CSU), Independent Miners Union (IMU), Independent Coal Workers (ICW), Independent Strip Mining Workers (ISMW), Independent Strip Union (ISU), Association of Bituminous Contractors (ABC), Arch Minerals Employees Association (AMEA), United Paperworkers International Union (UPIU), Welch Miners Union (WMU), Falcon Coal Employees Association (FCEA), Justus Employees Association (JEA), International Construction Union (ICU), Brotherhood of Miners (BOM), Western Energy Workers (WEW), Carlin Independent Union (CIU), International Association of United Workers Union (IAWU), and Stove, Furnace and Allied Appliance Workers International Union of N. A. (SFAW).

U.S. Coal Exports: Amount of U.S. coal shipped to foreign destinations, as reported in the U.S. Department of Commerce, Bureau of Census, "Monthly Report EM 545."

U.S. Coal Imports: Amount of foreign coal shipped to the United States, as reported in the U.S. Department of Commerce, Bureau of the Census, "Monthly Report IM 145."

Wind Energy (as used at electric utilities): The kinetic energy of wind converted at electric utilities into mechanical energy by wind turbines (i.e., blades rotating from the hub) that drive generators to produce electricity for distribution.

Wood and Waste (as used at electric utilities): Wood energy, garbage, bagasse, sewerage gas, and other industrial, agricultural, and urban refuse used to generate electricity for distribution.

Volatile Matter: Those products, exclusive of moisture, given off by a material as gas or vapor. Volatile matter is determined by heating the coal to 950 degrees centigrade under carefully controlled conditions and measuring the weight loss, excluding weight of moisture driven off at 105 degrees centigrade.