Coal Industry Annual 1994

October 1995

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Preface

Coal Industry Annual 1994 is the second annual report on the coal industry replacing the publication *Coal Production* (DOE/EIA-0118), which was discontinued in 1993. This report presents additional tables and expanded versions of tables previously presented in *Coal Production*, including production, number of mines, productivity, employment, productive capacity, and recoverable reserves. This report also presents data on coal consumption, coal distribution, coal stocks, coal prices, coal quality, and emissions for a wide audience including Congress, Federal and State agencies, the coal industry, and the general public. In addition, 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 who are not in the manufacturing, agriculture, mining, construction, or commercial sectors. This consumption is estimated to be 15 million short tons in 1994.

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. The Demonstrated Reserve Base (DRB) data that were previously presented in *Coal Production* are not presented in this report as these data are now reported in *U.S. Coal Reserves: An Update by Heat and Sulfur Content* (DOE/EIA-0529). This report does however present the recoverable portion of the DRB in Table 105.

This report constitutes the 19th annual report on coal production published by EIA and continues the series formerly included as a chapter 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 1994, 70.43 quadrillion Btu, was the first increase in total U.S. energy production since 1990. Coal production rose to 22 quadrillion Btu. Gains were also seen in natural gas (dry) production and nuclear electric power, while production of crude oil, natural gas plant liquids, and hydroelectric power decreased (Table ES1).

Total U.S. energy consumption reached a record level of 88 quadrillion Btu in 1994, the third consecutive year of growth. Coal consumption reached 19.5 quadrillion Btu (930 million short tons), a 0.4-percent increase over the 1993 levels. Consumption of natural gas, nuclear electric power, and petroleum also rose.

The electric utility sector accounted for 88 percent of the total coal consumed in 1994. Coal-fired units represented 56 percent of utility generation of electricity, slightly less than in 1993. Petroleum and hydroelectric generation paralleled this decline. Electricity generated by natural gas and nuclear power both increased by 1 percent (Table ES2).

For the third consecutive year, U.S. coal exports declined, while crude oil remained the primary U.S. energy export. In 1994, U.S. coal exports dropped to 1.88 quadrillion Btu, 4 percent less than in 1993. In comparison, coal imports, accounting for 1 percent of U.S. energy imports, rose to a record level of 0.19 quadrillion Btu, nearly 6 percent more than in 1993. Tables ES3 and ES4 present data on coal trends and summary level statistics expressed in short tons.

Production

U.S. coal production reached a record 1,034 million short tons. This surpasses the previous coal production record set in 1990 by 4 million short tons.

Wyoming remained the leading coal-producing State followed by West Virginia and Kentucky.

Coal production for States east of the Mississippi River rose to 566 million short tons. The States with the greatest increase in production were West Virginia, Kentucky, and Pennsylvania, with 31 million short tons, 5 million short tons, and 3 million short tons more respectively, than in 1993. Production surged in these States when the United Mine Workers of America (UMWA) strike ended in December 1993. Only three eastern States showed production declines: Alabama, Tennessee, and Virginia. The eastern States had a combined net loss of 109 mines and 3,664 miners. Miner productivity in this region rose 5 percent in 1994 to 3.28 short tons per miner per hour, a healthy increase compared with 1993's 1-percent gain.

Coal production west of the Mississippi River reached a record 467 million short tons, despite 12 fewer mines in the region and 158 fewer miners. Wyoming's and Montana's coal output accounted for most of the gain. Miner productivity in the region increased by 9 percent to 13.22 short tons per miner per hour.

Coal Mine Prices

The average price of U.S. coal in 1994 was \$19.41 per short ton, 2 percent less than in 1993. The price of coal from mines west of the Mississippi River fell 5 percent from the 1993 level. Coal prices at mines east of the Mississippi River also dipped, but only by 1 percent.

Coal Imports

U.S. coal imports in 1994 reached 8 million short tons, 4 percent more than in 1993. Indonesia accounted for most of the increase in tonnage, with over 400 thousand short tons more coal shipped in 1994 than in 1993. Two countries traditionally ship coal to the U.S. electric utility sector; in 1994, Colombia exported 18 percent less coal to the United States than in 1993, while Venezuela exported 18 percent more.

Table ES1. U.S. Energy Overview, Selected Years, 1985, 1990-1994
(Quadrillion Btu)

Activity and Energy Source	1994 ^p	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
Production	70.43	^R 68.32	^R 69.87	^R 70.33	^R 70.68	64.87	3.1	-0.1	0.9
Fossil Fuels	57.79	^R 55.86	57.55	57.83	58.56	57.54	.3	*	-
Coal	22.00	^R 20.22	21.59	21.59	22.46	19.33	8.8	-5	1.4
Natural Gas (Dry)	19.36	^R 18.74	18.38	18.23	18.36	16.98	3.3	1.3	1.5
Crude Oil ¹	14.03	^R 14.49	15.22	15.70	15.57	18.99	-3.2	-2.6	-3.3
Natural Gas Plant Liquids	2.39	^R 2.41	2.36	2.31	2.17	2.24	-6	2.4	.7
Nuclear Electric Power	6.83	6.52	6.61	6.58	6.16	4.15	4.8	2.6	5.7
Hydroelectric Pumped Storage ²	-.04	-.04	-.04	-.05	-.04	([?])	-	-	-
Renewable Energy	5.85	5.98	5.75	5.97	5.99	3.18	-2	-1	.7
Conventional Hydroelectric Power ...	2.67	2.88	2.61	2.98	3.01	2.97	-7	-3	-1
Geothermal Energy	.27	.26	.26	.25	.25	.20	.4	.2	.3
Biofuels ⁴	2.80	2.74	2.78	2.64	2.63	.01	.2	.2	8.7
Solar Energy	.07	.07	.07	.07	.07	-	-	-	-
Wind Energy	.04	.03	.03	.03	.02	*	3.3	1.9	22.5
Imports	22.41	^R 21.53	19.65	18.58	18.99	12.10	4.1	4.2	7.1
Natural Gas	2.58	^R 2.40	2.16	1.80	1.55	.95	7.6	13.6	11.7
Crude Oil ⁵	15.26	^R 14.75	13.25	12.55	12.77	6.81	3.5	4.6	9.4
Petroleum Products ⁶	3.84	^R 3.76	3.71	3.79	4.35	3.80	2.2	-3.0	.1
Coal	.19	^R .18	.10	.08	.07	.05	5.6	.1	.1
Other ⁷	.53	^R .44	.42	.35	.25	.49	20.4	.3	.4
Exports	4.09	^R 4.35	5.02	5.22	4.91	4.23	-6.1	-4.5	-4
Coal	1.88	^R 1.96	2.68	2.85	2.77	2.44	-4.3	-9.3	-2.8
Crude Oil	1.99	^R 2.12	2.01	2.13	1.82	1.66	-6.0	2.2	2.0
Other ⁸	.22	^R .27	.33	.24	.31	.14	-19.9	-8.6	5.4
Adjustments⁹	-30	^R 1.38	.66	.28	-67	1.24	-	-	-
Consumption	88.45	^R 86.88	^R 85.16	^R 83.96	^R 84.09	73.98	1.8	1.3	2.0
Fossil Fuels	75.37	74.13	72.55	71.23	71.96	66.22	.2	.1	.1
Coal	19.54	^R 19.43	18.87	18.77	19.10	17.48	.6	.6	1.2
Coal Coke Net Imports	.02	.02	.03	.01	*	-.01	-	-	-
Natural Gas ¹⁰	21.16	^R 20.84	20.13	19.61	19.30	17.83	1.5	2.3	1.9
Petroleum ¹¹	34.65	^R 33.84	33.53	32.85	33.55	30.92	2.4	.8	1.3
Nuclear Electric Power	6.83	6.52	6.61	6.58	6.16	4.15	4.8	2.6	5.7
Hydroelectric Pumped Storage ²	-.04	-.04	-.04	-.05	-.04	([?])	-	-	-
Renewable Energy	6.28	6.28	6.04	6.20	6.01	3.61	-	.1	.6
Conventional Hydroelectric Power ¹²	3.11	3.18	2.90	3.21	3.03	3.40	*	.1	-1
Geothermal Energy	.27	.26	.26	.25	.25	.20	.4	.2	.3
Biofuels ⁴	2.80	2.74	2.78	2.64	2.63	.01	.2	.2	8.7
Solar Energy	.07	.07	.07	.07	.07	-	-	-	-
Wind Energy	.04	.03	.03	.03	.02	*	3.3	1.9	22.5

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 Strategic 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 Includes supplemental gaseous fuels.

¹¹ Petroleum products supplied, including natural gas plant liquids and crude oil burned as fuel.

¹² Includes net imports of electricity.

* 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 1994*, DOE/EIA-0384(94), Table 1.1.

Average imported coal prices in 1994 went up by 1 percent from 1993 to \$30.21 per short ton. The price of coal imports from Canada, Colombia, and

Venezuela rose in 1994, while prices from Indonesia and Australia fell. Coal imports in 1994 were valued at \$229 million.

Table ES2. Share of U.S. Electric Utility Net Generation of Electricity by Source, 1985, 1990-1994
(Percent)

Energy Source	1994	1993	1992	1991	1990	1985
Coal	56.2	56.9	56.3	54.9	55.5	56.8
Natural Gas	10.0	9.0	9.4	9.4	9.4	11.8
Petroleum ¹	3.1	3.5	3.2	3.9	4.2	4.1
Nuclear Power	22.0	21.2	22.1	21.7	20.5	15.5
Hydroelectric Power	8.4	9.2	8.6	9.8	10.0	11.4
Geothermal and Other ²	.3	.3	.4	.4	.4	.4
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."

Coal Consumption

In 1994, domestic coal consumption rose to a record of 930 million short tons, a 0.4-percent increase over 1993. Electric utility consumption rose by 0.5 percent. Three weather conditions caused electric utilities to rely more on coal: it was bitterly cold throughout the East in January and February; a strong heat wave affected most of the country during June; and little rain fell in the West, reducing hydroelectric generation.

Industrial plants consumed more coal than in 1993, slightly more than 75 million short tons. Coal carbonized at coke plants increased slightly to nearly 32 million short tons. The residential and commercial sectors consumed only 6 million short tons in 1994.

The average sulfur content (measured as percent sulfur by weight) of coal received at electric utilities in 1994 was 1.17 percent, down slightly from 1993. The quality of coal received at manufacturing and coke plants showed a sulfur content of 1.16 percent, 6 percent less than in 1993.

Table ES3. Trends in U.S. Coal Production, Imports, Consumption, Exports, and Stocks, 1985, 1990-1994
(Million Short Tons)

Activity	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
Production	1,034	945	998	996	1,029	879	9.3	0.1	1.8
Imports	8	7	4	3	3	2	3.8	29.5	16.3
Producer and Distributor Stocks ¹ ..	33	25	34	33	33	34	31.4	-.1	-.3
Consumption	930	926	892	888	895	818	.4	.9	1.4
Exports	71	75	103	109	106	93	-4.2	-9.4	-2.9
Consumer Stocks ¹	136	120	164	168	168	170	13.0	-5.1	-2.4

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, 1994, totaled 136 million short tons, 13 percent more than in 1993. This reverses a downward trend that began at the end of 1989. Most of the rebound occurred in the electric utility sector. Stock levels rose to 127 million short tons when stocks were

rebuilt at the end of the United Mine Workers of America (UMWA) strike and after the severe flooding in 1993. Year-end coal stocks at coke plants rose by 256 thousand short tons in 1994, an 11-percent increase, but declined at other industrial plants by 131 thousand short tons. Producer and distributor stocks also increased in 1994, to 33 million short tons nationally. This 8-million-short-ton rise was due to rebuilding from the depressed 1993 levels.

Delivered Coal Prices

The price of coal delivered to all consuming sectors except other industrial declined in 1994. The delivered price of coal to both electric utilities and coke plants dropped by 2 percent (4 percent in real terms) to \$28.03 per short ton, and \$46.56 per short ton, respectively. The price of coal delivered to other industrial plants rose by 1 percent (a decline of 1 percent in real terms) to \$32.55 per short ton.

Coal Exports

U.S. coal exports totaled slightly more than 71 million short tons in 1994, the lowest level since 1979. This was a 4-percent decline from 1993, continuing a trend that began in 1992. Shipments to Europe, Asia, and Africa, declined by 5 percent, 8 percent, and 14 percent, respectively.

Compared with 1993, steam coal exports decreased 3 percent in 1994 to 24 million short tons. After declining sharply in 1993, steam coal exports to Europe nearly leveled-off in 1994 at 11 million short tons, while steam coal shipments to Canada increased by 22 percent. Steam coal exports to Asia and Africa were 9 percent and 86 percent lower, respectively.

U.S. metallurgical coal exports from the United States decreased by 5 percent from the 1993 level, to 47 million short tons. The sharpest drop came from shipments to coke plants in Canada, which fell by 14 percent. U.S. metallurgical coal shipments to Europe and Asia also declined.

West Virginia exported the most coal in 1994, shipping over 36 million short tons, a 9-percent increase from 1993. Almost 90 percent, or 32 million short tons, went to the overseas metallurgical sector.

The average price of U.S. coal exports in 1994 was \$39.93 per short ton, a 4-percent decrease from the 1993 price. U.S. metallurgical coal export prices weakened by 3 percent to \$42.77 per short ton. U.S. steam coal export prices fell by 5 percent to \$34.34

per short ton. Coal exports in 1994 were valued at \$2.8 billion.

Company Mergers & Sales

The United Kingdom-based Costain Group PLC sold its 80-percent share in Dolet Hills Mining Venture, and announced, in March 1995, that it would take a write-down on its U.S. coal assets.

Kennecott Energy Company acquired Colowyo Coal Company from W.R. Grace & Company in December 1994. The mine has leased reserves of 200 million tons of compliance quality, surface-minable coal, of which 66 million tons are committed under long-term contracts through 2017.

The Westmoreland Coal Company filed under Chapter 11 of the Federal bankruptcy code, in November 1994. This was done to facilitate the completion of its sale of Kentucky Criterion Coal Company to CONSOL Inc. With the sale completed in late December, Westmoreland cleared its debts and emerged from bankruptcy in January 1995.

Peabody Holding Company purchased the assets of The Carter Mining Company in October 1994 from Exxon Coal USA, for \$360 million. The Rawhide and Caballo coal mines in Wyoming were the principal mining operations purchased. The Caballo mine was the ninth-largest mine in the United States, producing over 14 million short tons in 1994. The Rawhide mine ranked twelfth in 1994, with 12.8 million short tons produced. Other Exxon holdings transferred to Peabody include undeveloped Wyoming coal reserves and supply agreements that account for long-term sales of more than 255 million short tons.

There was also a merger of coal-carrying railroads in process. During 1994, Union Pacific and Burlington Northern were involved in a bidding competition for the Santa Fe Pacific Corporation, owner of Atchison, Topeka, and Santa Fe Railway. In February 1995, Union Pacific pulled out of the competition, and the shareholders of Burlington Northern and Santa Fe approved the merger. The merger will create the Nation's largest railroad with over 32 thousand miles of track.

Figure ES1. Trends in U.S. Coal Production, Imports, Consumption, Exports, and Stocks, 1985-1994

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, 1985, 1990-1994

Category	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
Supply (thousand short tons)									
Recoverable Reserves	21,016,526	21,535,283	21,626,971	21,998,540	22,761,328	25,145,997	-2.4	-2.0	-2.0
Productive Capacity ¹	1,320,656	1,261,873	1,241,054	1,248,479	NA	968,614	4.6	NA	3.5
Production Total	1,033,504	945,424	997,545	995,984	1,029,076	878,540	9.3	.1	1.8
Underground	399,103	351,053	407,239	407,225	424,546	348,795	13.7	-1.5	1.5
Surface	634,401	594,371	590,306	588,759	604,529	529,746	6.7	1.2	2.0
Capacity Utilization ²	78.11	74.77	80.20	79.58	NA	90.70	4.5	NA	-1.6
Ratio of Recoverable Reserves to Production	20.3	22.8	21.7	22.1	22.1	28.6	-10.7	-2.1	-3.7
Number of Miners	97,500	101,322	110,196	120,602	131,310	169,281	-3.8	-7.2	-5.9
Productivity Total ²	4.98	4.70	4.36	4.09	3.83	2.74	5.9	6.8	6.8
Underground	3.19	2.95	2.93	2.69	2.54	1.78	8.2	5.9	6.7
Surface	7.67	7.23	6.59	6.38	5.94	4.24	6.0	6.6	6.8
Producer/Distributor Stocks ..	33,219	25,284	33,993	32,971	33,418	34,090	31.4	-.1	-.3
Imports ³	6,599	5,496	1,973	1,967	1,366	1,299	20.1	48.2	19.8
Distribution (thousand short tons)									
Distribution Total	1,022,523	959,445	998,647	994,146	1,023,935	NA	6.6	*	NA
Domestic Distribution Total ..	949,843	883,934	897,267	885,882	919,589	NA	7.5	.8	NA
Within State	353,765	339,034	355,232	345,486	365,065	NA	4.3	-.8	NA
To Other States	596,078	544,900	542,035	540,395	554,524	NA	9.4	1.8	NA
Foreign Distribution Total ...	72,680	75,510	101,380	108,264	104,346	NA	-3.8	-8.6	NA
Metallurgical	51,307	52,369	62,013	63,003	62,496	NA	-2.0	-4.8	NA
Steam	21,374	23,141	39,367	45,261	41,849	NA	-7.6	-15.5	NA
Canada Total	8,467	7,751	13,919	12,828	13,189	NA	9.2	-10.5	NA
Metallurgical	7,464	6,666	9,394	8,483	6,215	NA	12.0	4.7	NA
Steam	1,003	1,085	4,525	4,345	6,975	NA	-7.6	-38.4	NA
Overseas Total ⁴	64,214	67,759	87,461	95,436	91,156	NA	-5.2	-8.4	NA
Metallurgical	43,843	45,703	52,619	54,520	56,282	NA	-4.1	-6.0	NA
Steam	20,371	22,057	34,842	40,916	34,875	NA	-7.6	-12.6	NA
Demand (thousand short tons)									
Consumption Total	930,201	925,944	892,421	887,621	895,480	818,049	.4	.9	1.4
Electric Utility	817,270	813,508	779,860	772,268	773,549	693,841	.5	1.4	1.8
Industrial	75,179	74,892	74,042	75,405	76,330	75,372	.4	-.4	*
Coke	31,740	31,323	32,366	33,854	38,877	41,056	1.3	-4.9	-2.8
Residential/Commercial	6,013	6,221	6,153	6,094	6,724	7,779	-3.3	-2.8	-2.8
Consumer Stocks Total	136,139	120,458	163,692	167,711	168,210	170,234	13.0	-5.1	-2.4
Electric Utility	126,897	111,341	154,130	157,876	156,166	156,376	14.0	-5.0	-2.3
All Other	9,243	9,117	9,562	9,835	12,044	13,857	1.4	-6.4	-4.4
Coal Prices (nominal dollars per short ton)									
Mine Total	\$19.41	\$19.85	\$21.03	\$21.49	\$21.76	\$25.20	-2.2	-2.8	-2.9
Underground	26.39	26.92	27.83	28.56	28.58	32.91	-2.0	-2.0	-2.4
Surface	15.02	15.67	16.34	16.60	16.98	20.13	-4.1	-3.0	-3.2
Consumer									
Electric Utility	28.03	28.58	29.36	30.02	30.45	34.53	-1.9	-2.0	-2.3
Industrial	32.55	32.23	32.78	33.54	33.59	37.21	1.0	-.8	-1.5
Coke	46.56	47.44	47.92	48.88	47.73	54.33	-1.9	-.6	-1.7

¹ For 1985, the Form EIA-7A solicited data on "Daily Productive Capacity." To obtain annual productive capacity for a mine in 1985, 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 1994 include imports to electric utilities, manufacturing plants and coke plants. Imports for 1985 through 1991 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."

Supply

Production

U.S. coal production during 1994 reached a record 1,034 million short tons, 9 percent more than the 945 million short tons produced during 1993, a year marked by a 7-month selective strike by the United Mine Workers of America, and 0.2 percent more than the previous U.S. annual coal production record of 1,029 million short tons set in 1990 (Table 1). A major factor in the production rise continues to be higher demand for coal by U.S. electric utilities, which accounted for 88 percent of total U.S. coal consumption in 1994.

The leading contributor to the 1994 coal production increase was West Virginia, where production rose by 31 million short tons to 162 million short tons, an increase of 24 percent compared with the 131 million short tons produced in 1993. Also contributing significantly to the increase were Wyoming and Illinois, where 1994 production rose 27 million short tons (13 percent) and 12 million short tons (28 percent), respectively. These three States accounted for 79 percent of the 88 million short ton increase in U.S. coal production during 1994.

Regionally, coal production in Appalachia during 1994 rose 36 million short tons (9 percent) to 445 million short tons compared with 1993, primarily as a result of increased production in West Virginia and Eastern Kentucky. Similarly, coal production in the Interior Region rose 13 million short tons (8 percent) to 180 million short tons, with most of the growth attributable to the sharp increase in Illinois production. In the Western Region, coal production rose 40 million short tons (11 percent) to 408 million short tons, with production increases in Wyoming (27 million short tons), Colorado (3 million short tons), and Montana (6 million short tons) accounting for 91 percent of the total increase in the region's production.

The 1994 production growth rates for the Appalachian and Interior Regions should be viewed with caution because the production increases primarily reflect a recovery from the effects of the labor disruptions in 1993. Neither region has returned to the production levels reported for the three previous years. Since 1990, coal production in the Appalachian Region has declined at an average annual rate of 2 percent, while production in the Interior Region has

declined at an average annual rate of 3 percent. Moreover, the share of total U.S. coal production attributable to these regions continues to fall, reflecting the increasing demand by U.S. electric utilities for relatively lower sulfur Western coal to meet emission limits imposed by the 1990 Clean Air Act Amendments.

U.S. coal producers operated 2,354 mines during 1994, including 1,143 underground mines and 1,211 surface mines (Table 3). Underground mines in 1994 produced 399 million short tons and represented 39 percent of total coal production. Underground mines located in the Appalachian and Interior regions contributed 355 million short tons, representing 89 percent of all underground production and 34 percent of total coal production.

By comparison, surface mines during 1994 produced 634 million short tons, representing 61 percent of total coal production. Surface mines located in the Western Region produced 364 million short tons, accounting for 57 percent of surface mine production and 35 percent of total production. The Nation's 10 largest coal mines, all of which are Western surface mines and 9 of which are located in Wyoming, produced 188 million short tons of coal during 1994, accounting for 18 percent of total coal production.

Productive Capacity

The total estimated productive capacity of U.S. coal mines in 1994 was 1,321 million short tons, an increase of 5 percent compared with total estimated productive capacity of 1,262 million short tons in 1993 (Table 15). Productive capacity in the Appalachian and Western Regions rose 3 percent and 9 percent, respectively, while productive capacity in the Interior Region declined 0.9 percent. Coal mine capacity utilization, defined as the ratio of actual production to productive capacity, rose to 78 percent in 1994 after having declined to 75 percent in 1993 as a result of the selective coal strike (Table 16). Capacity utilization at mines east of the Mississippi River, which were most heavily affected by the strike, rose to 77 percent in 1994 from 71 percent in 1993, but still below the pre-strike level of 80 percent. Capacity utilization at western mines remained relatively constant.

Recoverable Reserves

Estimated recoverable U.S. coal reserves at active mines in 1994 totaled 21.0 billion short tons, declining by 2 percent from the 1993 estimate of 21.5 billion short tons (Table 24). Recoverable reserves located at active mines in the Western Region accounted for 62 percent of total reserves, with reserves at active mines in the Appalachian and Interior Regions representing 23 percent and 15 percent, respectively.

The average recovery percentage for all U.S. mines in 1994, representing the estimated share of reserves that can actually be mined, rose slightly to 80 percent in 1994 from 79 percent in 1993 (Table 25). The estimated recovery percent for all underground mines in 1994 was 57 percent, compared with an average of 90 percent for surface mines.

Producers and Distributors Stocks

Coal stocks held by U.S. coal producers and distributors at the end of 1994 totaled 32 million short tons, an increase of 31 percent compared with stocks at year-end 1993 (Table 33).

Coal Imports

U.S. coal imports during 1994 totaled 8 million short tons, 4 percent more than the 7 million short tons imported during 1993 (Table 34). Since 1985, U.S. coal imports have increased at an average annual rate of 16 percent.

Colombia and Venezuela were the major sources of imported coal during 1994. They contributed 3 million short tons and 2 million short tons, respectively, and accounted for 65 percent of total imports. Other leading contributors were Canada and Indonesia with one million short tons each.

Production

Continuous mining is one of the most common methods of underground coal mining used in the United States. This piece of machinery removes the coal from the coal seam using a large steel drum with many huge teeth. Continuous mining accounted for 17 percent of all coal mined in 1994.

Figure 1. U.S. Coal Production by State, 1994

Notes: Other represents States which produced less than 12 million short tons of coal and includes Alaska, Arkansas, Iowa, Kansas, Louisiana, Maryland, Mississippi, Missouri, Oklahoma, Tennessee, and Washington. Coal production excludes still, 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 1. Coal Production by State, 1985, 1990-1994
(Thousand Short Tons)

Coal-Producing State and Region	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
Alabama	23,266	24,768	25,796	27,269	29,030	27,685	-6.1	-5.4	-1.9
Alaska	1,567	1,601	1,534	1,436	1,706	1,433	-2.1	-2.1	1.0
Arizona	13,056	12,173	12,512	13,203	11,304	9,625	7.3	3.7	3.4
Arkansas	51	44	58	52	59	68	14.6	-3.6	-3.2
California	-	-	103	57	61	71	-	-	-
Colorado	25,304	21,886	19,226	17,834	18,910	17,202	15.6	7.5	4.4
Illinois	52,797	41,098	59,857	60,258	60,393	59,201	28.5	-3.3	-1.3
Indiana	30,927	29,295	30,466	31,468	35,907	33,294	5.6	-3.7	-0.8
Iowa	46	175	289	344	381	591	-73.6	-41.0	-24.7
Kansas	284	341	363	416	721	994	-16.6	-20.7	-13.0
Kentucky Total	161,642	156,299	161,068	158,980	173,322	149,929	3.4	-1.7	.8
Eastern	124,447	120,191	119,982	117,220	128,396	111,010	3.5	-.8	1.3
Western	37,195	36,108	41,686	41,760	44,926	38,920	3.0	-4.6	-.5
Louisiana	3,463	3,134	3,240	3,151	3,186	207	10.5	2.1	36.8
Maryland	3,632	3,355	3,341	3,773	3,487	2,903	8.3	1.0	2.5
Missouri	838	653	2,886	2,304	2,647	5,561	28.4	-25.0	-19.0
Montana	41,640	35,917	38,889	38,237	37,616	33,286	15.9	2.6	2.5
New Mexico	28,041	28,268	24,549	21,518	24,292	22,202	-.8	3.6	2.6
North Dakota	32,286	31,973	31,744	29,530	29,213	26,871	1.0	2.5	2.1
Ohio	29,897	28,816	30,403	30,569	35,252	35,411	3.8	-4.0	-1.9
Oklahoma	1,911	1,758	1,741	1,841	1,698	3,316	8.7	3.0	-5.9
Pennsylvania Total	62,237	59,700	68,981	65,381	70,514	70,311	4.2	-3.1	-1.3
Anthracite	4,621	4,306	3,483	3,445	3,506	4,281	7.3	7.1	.8
Bituminous	57,616	55,394	65,498	61,936	67,008	66,030	4.0	-3.7	-1.5
Tennessee	2,987	3,047	3,476	4,290	6,193	7,339	-2.0	-16.7	-9.5
Texas	52,346	54,567	55,071	53,825	55,755	45,459	-4.1	-1.6	1.6
Utah	24,399	21,847	21,339	21,945	22,058	12,776	11.7	2.5	7.4
Virginia	37,129	39,317	43,024	41,954	46,917	40,531	-5.6	-5.7	-1.0
Washington	4,893	4,739	5,251	5,143	5,001	4,438	3.2	-.5	1.1
West Virginia Total	161,776	130,525	162,164	167,352	169,205	127,125	23.9	-1.1	2.7
Northern	49,316	33,802	50,022	52,155	56,641	49,820	45.9	-3.4	-.1
Southern	112,460	96,723	112,142	115,196	112,564	77,305	16.3	*	4.3
Wyoming	237,092	210,129	190,172	193,854	184,249	140,711	12.8	6.5	6.0
Appalachian Total¹	445,370	409,718	456,565	457,808	488,993	422,315	8.7	-2.3	.6
Interior Total¹	179,858	167,174	195,659	195,418	205,671	187,610	7.6	-3.3	-.5
Western Total¹	408,276	368,532	345,321	342,758	334,411	268,615	10.8	5.1	4.8
East of Miss. River	566,289	516,219	588,575	591,294	630,218	553,730	9.7	-2.6	.2
West of Miss. River	467,216	429,205	408,970	404,690	398,858	324,811	8.8	4.0	4.1
U.S. Total	1,033,504	945,424	997,545	995,984	1,029,076	878,540	9.3	.1	1.8

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, 1985, 1990-1994

Coal-Producing State and Region	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
Alabama	85	85	88	96	97	96	-	-3.2	-1.3
Alaska	1	1	2	1	1	1	-	-	-
Arizona	2	2	2	2	2	2	-	-	-
Arkansas	6	6	6	7	7	3	-	-3.8	8.0
California	-	-	1	1	1	1	-	-	-
Colorado	18	20	21	21	23	27	-10.0	-5.9	-4.4
Illinois	34	39	43	51	45	54	-12.8	-6.8	-5.0
Indiana	55	56	51	58	64	66	-1.8	-3.7	-2.0
Iowa	1	2	2	3	3	5	-50.0	-24.0	-16.4
Kansas	1	2	2	3	4	4	-50.0	-29.3	-14.3
Kentucky Total	673	696	752	838	987	1,155	-3.3	-9.1	-5.8
Eastern	607	622	684	756	902	1,060	-2.4	-9.4	-6.0
Western	66	74	68	82	85	95	-10.8	-6.1	-4.0
Louisiana	2	2	2	2	2	1	-	-	8.0
Maryland	20	21	24	26	27	27	-4.8	-7.2	-3.3
Missouri	6	7	5	5	5	13	-14.3	4.7	-8.2
Montana	8	8	8	9	9	8	-	-2.9	-
New Mexico	7	7	7	7	7	11	-	-	-4.9
North Dakota	6	8	8	8	11	13	-25.0	-14.1	-8.2
Ohio	134	135	149	159	172	165	-7	-6.0	-2.3
Oklahoma	14	17	20	22	23	23	-17.6	-11.7	-5.4
Pennsylvania Total	505	524	578	608	673	478	-3.6	-6.9	.6
Anthracite	143	148	166	176	187	79	-3.4	-6.5	6.8
Bituminous	362	376	412	432	486	399	-3.7	-7.1	-1.1
Tennessee	24	37	50	72	86	90	-35.1	-27.3	-13.6
Texas	13	14	15	15	15	14	-7.1	-3.5	-8
Utah	14	15	15	15	18	21	-6.7	-6.1	-4.4
Virginia	231	237	258	294	340	412	-2.5	-9.2	-6.2
Washington	3	3	3	3	4	3	-	-6.9	-
West Virginia Total	462	502	604	665	771	634	-8.0	-12.0	-3.4
Northern	116	137	166	174	205	200	-15.3	-13.3	-5.9
Southern	346	365	438	491	566	434	-5.2	-11.6	-2.5
Wyoming	29	29	30	31	33	28	-	-3.2	.4
Appalachian Total ¹	2,068	2,163	2,435	2,676	3,068	2,962	-4.4	-9.4	-3.9
Interior Total ¹	198	219	214	248	253	278	-9.6	-5.9	-3.7
Western Total ¹	88	93	97	98	109	115	-5.4	-5.2	-2.9
East of Miss. River	2,223	2,332	2,597	2,867	3,262	3,177	-4.7	-9.1	-3.9
West of Miss. River	131	143	149	155	168	178	-8.4	-6.0	-3.3
U.S. Total	2,354	2,475	2,746	3,022	3,430	3,355	-4.9	-9.0	-3.9

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, 1994
(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	14,471	74	8,795	85	23,266
Alaska	-	-	1	1,567	1	1,567
Arizona	-	-	2	13,056	2	13,056
Arkansas	1	12	5	38	6	51
Colorado	13	16,332	5	8,972	18	25,304
Illinois	23	43,281	11	9,516	34	52,797
Indiana	4	3,324	51	27,603	55	30,927
Iowa	-	-	1	46	1	46
Kansas	-	-	1	284	1	284
Kentucky Total	425	95,414	248	66,227	673	161,642
Eastern	401	72,969	206	51,478	607	124,447
Western	24	22,445	42	14,749	66	37,195
Louisiana	-	-	2	3,463	2	3,463
Maryland	3	2,839	17	793	20	3,632
Missouri	-	-	6	838	6	838
Montana	1	3	7	41,636	8	41,640
New Mexico	1	950	6	27,091	7	28,041
North Dakota	-	-	6	32,286	6	32,286
Ohio	10	13,607	124	16,290	134	29,897
Oklahoma	1	135	13	1,776	14	1,911
Pennsylvania Total	113	39,974	392	22,263	505	62,237
Anthracite	49	343	94	4,278	143	4,621
Bituminous	64	39,632	298	17,984	362	57,616
Tennessee	17	1,893	7	1,093	24	2,987
Texas	-	-	13	52,346	13	52,346
Utah	14	24,399	-	-	14	24,399
Virginia	180	28,054	51	9,075	231	37,129
Washington	-	-	3	4,893	3	4,893
West Virginia Total	323	111,679	139	50,097	462	161,776
Northern	65	43,702	51	5,614	116	49,316
Southern	258	67,977	88	44,483	346	112,460
Wyoming	3	2,735	26	234,357	29	237,092
Appalachian Total¹	1,058	285,487	1,010	159,884	2,068	445,370
Interior Total¹	53	69,198	145	110,660	198	179,858
Western Total¹	32	44,419	56	363,858	88	408,276
East of Miss. River	1,109	354,537	1,114	211,751	2,223	566,289
West of Miss. River	34	44,566	97	422,650	131	467,216
U.S. Total	1,143	399,103	1,211	634,401	2,354	1,033,504

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, 1994
(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	14,471	74	8,795	85	23,266
Bibb	-	-	2	137	2	137
Blount	-	-	2	6	2	6
Cullman	-	-	3	157	3	157
Fayette	1	1,491	2	29	3	1,521
Jackson	-	-	3	24	3	24
Jefferson	5	5,956	7	1,276	12	7,232
Marion	-	-	3	256	3	256
Shelby	1	418	-	-	1	418
Tuscaloosa	3	5,246	7	1,602	10	6,848
Walker	1	1,359	40	4,855	41	6,215
Winston	-	-	5	452	5	452
Alaska	-	-	1	1,567	1	1,567
Yukon River	-	-	1	1,567	1	1,567
Arizona	-	-	2	13,056	2	13,056
Navajo	-	-	2	13,056	2	13,056
Arkansas	1	12	5	38	6	51
Johnson	-	-	2	25	2	25
Scott	-	-	1	2	1	2
Sebastian	1	12	2	11	3	24
Colorado	13	16,332	5	8,972	18	25,304
Delta	1	751	-	-	1	751
Fremont	1	310	-	-	1	310
Garfield	1	5	-	-	1	5
Gunnison	3	5,710	-	-	3	5,710
La Plata	1	235	-	-	1	235
Las Animas	1	1,114	-	-	1	1,114
Mesa	2	358	-	-	2	358
Moffat	1	1,317	2	6,449	3	7,766
Montrose	-	-	1	380	1	380
Rio Blanco	1	1,527	-	-	1	1,527
Routt	1	5,005	2	2,143	3	7,148
Illinois	23	43,281	11	9,516	34	52,797
Christian	1	1,457	-	-	1	1,457
Clinton	1	3,007	-	-	1	3,007
Franklin	3	6,602	-	-	3	6,602
Fulton	-	-	1	499	1	499
Gallatin	1	1,093	1	316	2	1,409
Jefferson	2	4,138	-	-	2	4,138
Logan	1	1,673	-	-	1	1,673
Macoupin	3	4,809	-	-	3	4,809
McDonough	-	-	1	434	1	434
Perry	2	3,283	6	6,276	8	9,559
Randolph	2	3,434	-	-	2	3,434
Saline	3	6,682	1	1,388	4	8,070
Schuyler	-	-	1	603	1	603
St Clair	1	227	-	-	1	227
Wabash	1	2,676	-	-	1	2,676
Washington	1	2,225	-	-	1	2,225
White	1	1,977	-	-	1	1,977
Indiana	4	3,324	51	27,603	55	30,927
Clay	-	-	8	1,844	8	1,844
Daviess	-	-	9	4,905	9	4,905
Dubois	-	-	1	610	1	610
Gibson	1	1,318	1	501	2	1,819
Greene	-	-	8	3,051	8	3,051
Knox	2	1,349	2	604	4	1,953
Monroe	-	-	1	73	1	73
Owen	-	-	1	329	1	329
Pike	-	-	7	3,790	7	3,790
Spencer	-	-	3	799	3	799
Sullivan	1	657	2	4,141	3	4,798
Vigo	-	-	1	911	1	911
Warrick	-	-	7	6,045	7	6,045
Iowa	-	-	1	46	1	46
Marion	-	-	1	46	1	46
Kansas	-	-	1	284	1	284
Crawford	-	-	1	284	1	284
Kentucky	425	95,414	248	66,227	673	161,642
Bell	17	3,176	9	1,519	26	4,695
Breathitt	-	-	8	3,746	8	3,746

See footnotes at end of table.

Table 4. Coal Production and Number of Mines by State, County, and Mine Type, 1994 (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)						
Butler	-	-	2	26	2	26
Caldwell	-	-	1	9	1	9
Christian	-	-	2	1,534	2	1,534
Clay	2	89	6	463	8	552
Daviess	-	-	10	1,131	10	1,131
Floyd	47	3,520	14	3,773	61	7,292
Greenup	-	-	1	10	1	10
Harlan	64	11,426	9	1,098	73	12,524
Henderson	2	1,324	3	2,009	5	3,333
Hopkins	8	3,040	8	4,526	16	7,567
Jackson	-	-	3	89	3	89
Johnson	4	1,303	6	66	10	1,369
Knott	37	6,799	21	5,956	58	12,755
Knox	20	747	4	412	24	1,159
Laurel	-	-	2	70	2	70
Lawrence	-	-	3	243	3	243
Lee	-	-	1	17	1	17
Leslie	7	6,897	4	1,782	11	8,679
Letcher	20	3,227	21	4,381	41	7,608
Magoffin	1	57	3	997	4	1,054
Martin	27	8,040	9	4,441	36	12,481
McLean	-	-	2	636	2	636
Muhlenberg	2	1,785	4	1,037	6	2,822
Ohio	1	291	8	2,859	9	3,150
Owsley	-	-	3	73	3	73
Perry	17	4,991	18	10,059	35	15,050
Pike	130	22,004	51	11,144	181	33,147
Union	4	6,741	-	-	4	6,741
Webster	7	9,264	2	983	9	10,247
Whitley	8	693	9	649	17	1,342
Wolfe	-	-	1	492	1	492
Louisiana	-	-	2	3,463	2	3,463
De Soto	-	-	1	2,697	1	2,697
Red River	-	-	1	766	1	766
Maryland	3	2,839	17	793	20	3,632
Allegany	-	-	10	556	10	556
Garrett	3	2,839	7	237	10	3,076
Missouri	-	-	6	838	6	838
Barton	-	-	1	256	1	256
Bates	-	-	2	176	2	176
Rolls	-	-	2	284	2	284
Vernon	-	-	1	122	1	122
Montana	1	3	7	41,636	8	41,640
Big Horn	-	-	4	24,779	4	24,779
Musselshell	1	3	-	-	1	3
Richland	-	-	1	323	1	323
Rosebud	-	-	2	16,535	2	16,535
New Mexico	1	950	6	27,091	7	28,041
Colfax	1	950	1	1,194	2	2,144
McKinley	-	-	2	11,993	2	11,993
San Juan	-	-	3	13,903	3	13,903
North Dakota	-	-	6	32,286	6	32,286
Bowman	-	-	1	2,317	1	2,317
McLean	-	-	1	7,146	1	7,146
Mercer	-	-	2	17,273	2	17,273
Oliver	-	-	2	5,550	2	5,550
Ohio	10	13,607	124	16,290	134	29,897
Belmont	1	4,531	12	1,849	13	6,380
Carroll	-	-	3	103	3	103
Columbiana	4	304	9	662	13	966
Coshocton	-	-	6	1,188	6	1,188
Guernsey	-	-	9	374	9	374
Harrison	1	960	11	1,601	12	2,562
Hocking	-	-	1	1	1	1
Holmes	-	-	4	436	4	436
Jackson	-	-	4	1,424	4	1,424
Jefferson	1	359	17	1,163	18	1,522
Lawrence	-	-	1	19	1	19
Mahoning	-	-	2	60	2	60
Melgs	2	4,310	-	-	2	4,310

See footnotes at end of table.

Table 4. Coal Production and Number of Mines by State, County, and Mine Type, 1994 (Continued)
(Thousand Short Tons)

Coal-Producing State and County	Underground		Surface		Total	
	Number of Mines	Production	Number of Mines	Production	Number of Mines	Production
Ohio (Continued)						
Monroe	1	3,143	-	-	1	3,143
Morgan	-	-	1	875	1	875
Muskingum	-	-	4	498	4	498
Noble	-	-	3	952	3	952
Perry	-	-	6	491	6	491
Stark	-	-	8	390	8	390
Tuscarawas	-	-	16	2,174	16	2,174
Vinton	-	-	6	2,016	6	2,016
Washington	-	-	1	13	1	13
Oklahoma	1	135	13	1,776	14	1,911
Craig	-	-	1	149	1	149
Haskell	-	-	2	30	2	30
Latimer	-	-	1	311	1	311
Le Flore	-	-	5	1,118	5	1,118
Nowata	-	-	2	151	2	151
Okmulgee	1	135	1	7	2	142
Wagoner	-	-	1	10	1	10
Pennsylvania	113	39,974	392	22,263	505	62,237
Allegheny	2	36	5	23	7	60
Armstrong	13	4,428	21	923	34	5,352
Beaver	-	-	2	124	2	124
Bedford	-	-	1	2	1	2
Blair	-	-	1	70	1	70
Butler	-	-	14	465	14	465
Cambria	5	942	14	1,615	19	2,557
Carbon	-	-	1	343	1	343
Centre	-	-	4	89	4	89
Clarion	-	-	9	1,196	9	1,196
Clearfield	1	69	66	4,722	67	4,791
Clinton	-	-	1	21	1	21
Columbia	1	94	6	150	7	244
Dauphin	1	2	-	-	1	2
Elk	-	-	9	468	9	468
Fayette	-	-	29	598	29	598
Greene	13	26,551	3	91	16	26,642
Indiana	12	3,735	20	1,064	32	4,799
Jefferson	3	631	30	913	33	1,544
Lackawanna	-	-	6	274	6	274
Lawrence	-	-	6	179	6	179
Luzerne	-	-	18	825	18	825
Lycoming	-	-	1	283	1	283
Mercer	-	-	2	21	2	21
Northumberland	11	39	9	239	20	278
Schuylkill	36	208	52	2,443	88	2,652
Snyder	-	-	1	2	1	2
Somerset	9	2,227	32	3,827	41	6,054
Sullivan	-	-	1	1	1	1
Washington	6	1,012	8	702	14	1,714
Westmoreland	-	-	20	589	20	589
Tennessee	17	1,893	7	1,093	24	2,987
Campbell	6	1,086	3	304	9	1,390
Claiborne	-	-	1	207	1	207
Fentress	-	-	1	86	1	86
Marion	1	72	1	51	2	123
Morgan	3	136	-	-	3	136
Scott	1	201	-	-	1	201
Sequatchie	6	398	1	445	7	843
Texas	-	-	13	52,346	13	52,346
Atascosa	-	-	1	2,874	1	2,874
Freestone	-	-	1	5,311	1	5,311
Grimes	-	-	1	3,639	1	3,639
Harrison	-	-	2	3,670	2	3,670
Leon	-	-	1	8,544	1	8,544
Milam	-	-	1	5,889	1	5,889
Panola	-	-	1	8,157	1	8,157
Robertson	-	-	1	1,901	1	1,901
Rusk	-	-	1	5,285	1	5,285
Titus	-	-	1	6,739	1	6,739
Webb	-	-	2	337	2	337

See footnotes at end of table.

Table 4. Coal Production and Number of Mines by State, County, and Mine Type, 1994 (Continued)
(Thousand Short Tons)

Coal-Producing State and County	Underground		Surface		Total	
	Number of Mines	Production	Number of Mines	Production	Number of Mines	Production
Utah	14	24,399	-	-	14	24,399
Carbon	8	11,240	-	-	8	11,240
Emery	5	9,590	-	-	5	9,590
Sevier	1	3,569	-	-	1	3,569
Virginia	180	28,054	51	9,075	231	37,129
Buchanan	83	12,361	6	1,233	89	13,594
Dickenson	17	2,511	12	1,793	29	4,303
Lee	13	1,896	3	576	16	2,472
Russell	8	896	6	572	14	1,468
Scott	2	37	-	-	2	37
Tazewell	21	2,482	-	-	21	2,482
Wise	36	7,872	24	4,902	60	12,774
Washington	-	-	3	4,893	3	4,893
King	-	-	1	258	1	258
Lewis	-	-	1	2,084	1	2,084
Thurston	-	-	1	2,550	1	2,550
West Virginia	323	111,679	139	50,097	462	161,776
Barbour	4	1,940	7	140	11	2,080
Boone	40	17,283	8	9,017	48	26,300
Braxton	1	278	1	3	2	281
Brooke	1	1,210	1	68	2	1,278
Clay	3	101	6	3,334	9	3,435
Fayette	5	2,191	7	3,653	12	5,844
Gilmer	1	36	-	-	1	36
Grant	1	2,444	3	664	4	3,107
Greenbrier	6	77	7	81	13	159
Harrison	5	3,909	6	169	11	4,078
Kanawha	8	2,688	7	3,513	15	6,201
Lincoln	-	-	1	977	1	977
Logan	26	5,289	12	12,344	38	17,633
Marion	5	4,689	3	49	8	4,738
Marshall	3	7,695	-	-	3	7,695
Mason	-	-	1	67	1	67
McDowell	71	4,053	9	888	80	4,941
Mercer	-	-	2	37	2	37
Mineral	1	6	2	134	3	140
Mingo	44	19,497	15	6,184	59	25,681
Monongalia	11	15,198	5	864	16	16,062
Nicholas	16	2,013	9	2,836	25	4,849
Ohio	-	-	1	37	1	37
Preston	10	2,137	10	252	20	2,389
Raleigh	17	4,933	2	33	19	4,965
Randolph	7	849	1	9	8	858
Tucker	1	18	1	117	2	134
Upshur	5	1,290	7	612	12	1,901
Wayne	4	975	1	1,267	5	2,242
Webster	9	2,003	3	2,498	12	4,501
Wyoming	18	8,876	1	253	19	9,130
Wyoming	3	2,735	26	234,357	29	237,092
Campbell	-	-	17	205,573	17	205,573
Carbon	2	2,544	1	1,557	3	4,100
Converse	-	-	2	11,418	2	11,418
Hot Springs	-	-	1	6	1	6
Lincoln	-	-	2	4,612	2	4,612
Sheridan	-	-	1	94	1	94
Sweetwater	1	191	2	11,099	3	11,290
U.S. Total	1,143	399,103	1,211	634,401	2,354	1,033,504

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, 1994
(Thousand Short Tons)

Coal-Producing State and Region	Continuous ¹	Conventional ²	Longwall ³	Other ⁴	Total
Alabama	2,113	53	12,305	-	14,471
Arkansas	12	-	-	-	12
Colorado	3,092	29	13,211	-	16,332
Illinois	26,383	-	16,898	-	43,281
Indiana	3,316	8	-	-	3,324
Kentucky Total	64,043	16,332	14,391	648	95,414
Eastern	48,197	14,990	9,135	648	72,969
Western	15,846	1,342	5,257	-	22,445
Maryland	175	-	2,664	-	2,839
Montana	-	3	-	-	3
New Mexico	-	-	950	-	950
Ohio	1,624	-	11,984	-	13,607
Oklahoma	135	-	-	-	135
Pennsylvania Total	12,210	992	26,680	92	39,974
Anthracite	-	250	-	92	343
Bituminous	12,210	742	26,680	-	39,632
Tennessee	1,579	315	-	-	1,893
Utah	4,175	-	20,224	-	24,399
Virginia	14,161	4,222	9,578	93	28,054
West Virginia Total	47,727	14,138	49,789	25	111,679
Northern	6,105	3,457	34,140	-	43,702
Southern	41,622	10,681	15,649	25	67,977
Wyoming	-	191	2,543	-	2,735
Appalachian Total⁵	127,786	34,709	122,135	857	285,487
Interior Total⁵	45,692	1,351	22,155	-	69,198
Western Total⁵	7,267	224	36,928	-	44,419
East of Miss. River	173,331	36,060	144,289	857	354,537
West of Miss. River	7,414	224	36,928	-	44,566
U.S. Total	180,744	36,284	181,218	857	399,103

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, 1994
(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	7	6	7	9	42	14	12,696	4,774	2,338	1,289	2,101	68	
Underground	7	2	1	-	1	-	12,696	1,304	418	-	53	-	
Surface	-	4	6	9	41	14	-	3,470	1,920	1,289	2,048	68	
Alaska	1	-	-	-	-	-	1,567	-	-	-	-	-	
Surface	1	-	-	-	-	-	1,567	-	-	-	-	-	
Arizona	2	-	-	-	-	-	13,056	-	-	-	-	-	
Surface	2	-	-	-	-	-	13,056	-	-	-	-	-	
Arkansas	-	-	-	-	2	4	-	-	-	-	30	21	
Underground	-	-	-	-	1	-	-	-	-	-	12	-	
Surface	-	-	-	-	1	4	-	-	-	-	18	21	
Colorado	9	2	5	-	1	1	22,314	1,295	1,661	-	29	5	
Underground	6	1	4	-	1	1	14,266	751	1,280	-	29	5	
Surface	3	1	1	-	-	-	8,048	544	380	-	-	-	
Illinois	25	2	6	-	1	-	49,440	1,277	2,052	-	28	-	
Underground	22	-	1	-	-	-	43,054	-	227	-	-	-	
Surface	3	2	5	-	1	-	6,386	1,277	1,825	-	28	-	
Indiana	10	13	10	5	10	7	17,627	8,369	3,532	771	602	26	
Underground	2	1	-	-	-	1	2,658	657	-	-	-	8	
Surface	8	12	10	5	10	6	14,968	7,712	3,532	771	602	17	
Iowa	-	-	-	-	1	-	-	-	-	-	46	-	
Surface	-	-	-	-	1	-	-	-	-	-	46	-	
Kansas	-	-	1	-	-	-	-	-	284	-	-	-	
Surface	-	-	1	-	-	-	-	-	284	-	-	-	
Kentucky Total	29	59	130	107	258	90	51,790	41,585	41,209	15,459	11,175	424	
Underground	15	28	85	72	172	53	32,085	18,736	26,261	10,292	7,790	251	
Surface	14	31	45	35	86	37	19,704	22,849	14,948	5,168	3,385	174	
Eastern	18	47	115	101	241	85	30,643	32,424	36,065	14,540	10,382	394	
Underground	8	24	77	71	168	53	16,084	15,574	23,351	10,160	7,550	251	
Surface	10	23	38	30	73	32	14,559	16,850	12,714	4,380	2,832	143	
Western	11	12	15	6	17	5	21,147	9,161	5,144	919	793	30	
Underground	7	4	8	1	4	-	16,002	3,162	2,910	132	240	-	
Surface	4	8	7	5	13	5	5,145	5,999	2,234	787	553	30	
Louisiana	1	1	-	-	-	-	2,697	766	-	-	-	-	
Surface	1	1	-	-	-	-	2,697	766	-	-	-	-	
Maryland	1	-	1	4	7	7	2,664	-	202	479	253	33	
Underground	1	-	-	1	1	-	2,664	-	-	156	19	-	
Surface	-	-	1	3	6	7	-	-	202	323	234	33	
Missouri	-	-	1	4	1	-	-	-	256	567	16	-	
Surface	-	-	1	4	1	-	-	-	256	567	16	-	
Montana	6	-	1	-	-	1	41,313	-	323	-	-	3	
Underground	-	-	-	-	-	1	-	-	-	-	-	3	
Surface	6	-	1	-	-	-	41,313	-	323	-	-	-	
New Mexico	6	1	-	-	-	-	27,091	950	-	-	-	-	
Underground	-	1	-	-	-	-	-	950	-	-	-	-	
Surface	6	-	-	-	-	-	27,091	-	-	-	-	-	
North Dakota	6	-	-	-	-	-	32,286	-	-	-	-	-	
Surface	6	-	-	-	-	-	32,286	-	-	-	-	-	
Ohio	4	10	15	15	65	25	11,984	7,982	4,685	2,272	2,891	83	
Underground	4	1	1	1	3	-	11,984	960	359	191	113	-	
Surface	-	9	14	14	62	25	-	7,022	4,325	2,081	2,778	83	
Oklahoma	-	-	4	4	3	3	-	-	1,170	612	108	20	
Underground	-	-	-	1	-	-	-	-	-	135	-	-	
Surface	-	-	4	3	3	3	-	-	1,170	477	108	20	
Pennsylvania Total	9	11	35	36	216	198	29,954	7,350	11,145	4,929	8,071	788	
Underground	8	6	16	13	21	49	28,070	3,792	5,240	1,747	953	173	
Surface	1	5	19	23	195	149	1,884	3,559	5,905	3,183	7,118	615	
Anthracite	-	1	5	6	40	91	-	566	1,372	792	1,545	346	
Underground	-	-	-	-	5	44	-	-	-	-	190	153	
Surface	-	1	5	6	35	47	-	566	1,372	792	1,355	193	
Bituminous	9	10	30	30	176	107	29,954	6,784	9,773	4,137	6,525	443	
Underground	8	6	16	13	16	5	28,070	3,792	5,240	1,747	763	20	
Surface	1	4	14	17	160	102	1,884	2,992	4,533	2,391	5,762	422	
Tennessee	-	1	6	1	14	2	-	632	1,462	104	776	12	
Underground	-	1	3	1	10	2	-	632	604	104	541	12	
Surface	-	-	3	-	4	-	-	-	858	-	235	-	

See footnotes at end of table.

Table 6. Coal Production and Number of Mines by State, Mine Type, and Mine Production Range, 1994 (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
Texas	10	-	2	-	1	-	51,761	-	501	-	84	-
Surface	10	-	2	-	1	-	51,761	-	501	-	84	-
Utah	8	1	2	1	2	-	22,930	584	714	107	65	-
Underground	8	1	2	1	2	-	22,930	584	714	107	65	-
Virginia	4	12	35	40	104	36	7,401	7,681	10,556	5,880	5,471	141
Underground	4	7	23	30	88	28	7,401	4,762	6,689	4,376	4,716	110
Surface	-	5	12	10	16	8	-	2,919	3,867	1,504	755	31
Washington	2	-	1	-	-	-	4,635	-	258	-	-	-
Surface	2	-	1	-	-	-	4,635	-	258	-	-	-
West Virginia Total	42	34	96	61	163	66	88,272	24,217	31,859	9,486	7,655	286
Underground	27	18	77	45	122	34	60,541	12,886	25,183	7,138	5,772	159
Surface	15	16	19	16	41	32	27,732	11,331	6,676	2,348	1,883	128
Northern	16	2	17	16	45	20	37,806	1,436	5,890	2,266	1,843	75
Underground	14	1	15	10	19	6	35,439	692	5,245	1,479	828	19
Surface	2	1	2	6	26	14	2,367	744	645	787	1,015	56
Southern	26	32	79	45	118	46	50,466	22,781	25,969	7,220	5,813	211
Underground	13	17	62	35	103	28	25,102	12,194	19,938	5,659	4,944	139
Surface	13	15	17	10	15	18	25,365	10,587	6,031	1,561	868	72
Wyoming	21	1	2	1	2	2	235,621	671	423	191	180	6
Underground	1	-	-	1	-	1	2,543	-	-	191	-	•
Surface	20	1	2	-	2	1	233,077	671	423	-	180	6
Appalachian Total¹	85	121	310	267	852	433	183,613	85,060	98,312	38,979	37,600	1,806
Underground	59	59	198	162	414	166	139,436	39,910	61,845	23,872	19,716	705
Surface	26	62	112	105	438	267	44,174	45,150	36,467	15,107	17,883	1,102
Interior Total¹	57	28	39	19	36	19	142,672	19,573	12,940	2,870	1,707	97
Underground	31	5	9	2	5	1	61,714	3,819	3,137	267	252	8
Surface	26	23	30	17	31	18	80,958	15,753	9,803	2,603	1,455	89
Western Total¹	61	5	11	2	5	4	400,812	3,499	3,379	298	274	14
Underground	15	3	6	2	3	3	39,740	2,284	1,994	298	94	8
Surface	46	2	5	-	2	1	361,072	1,215	1,385	-	180	6
East of Miss. River	131	148	341	278	880	445	271,826	103,866	109,041	40,670	39,023	1,863
Underground	90	64	207	163	418	167	201,152	43,729	64,983	24,004	19,956	713
Surface	41	84	134	115	462	278	70,674	60,137	44,058	16,665	19,066	1,150
West of Miss. River	72	6	19	10	13	11	455,271	4,265	5,591	1,477	558	55
Underground	15	3	6	3	4	3	39,740	2,284	1,994	432	106	8
Surface	57	3	13	7	9	8	415,530	1,981	3,597	1,044	451	47
U.S. Total	203	154	360	288	893	456	727,097	108,131	114,632	42,146	39,580	1,918
Underground	105	67	213	166	422	170	240,892	46,013	66,977	24,437	20,063	721
Surface	98	87	147	122	471	286	486,205	62,118	47,655	17,710	19,518	1,197

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 7. U.S. Coal Production by Coalbed Thickness and Mine Type, 1994
(Thousand Short Tons)

Coalbed Thickness (Inches)	Underground	Surface	Total
< 7	-	257	257
7-12	-	2,281	2,281
13-18	-	7,199	7,199
19-24	1,001	24,794	25,795
25-30	6,182	27,575	33,757
31-36	33,885	38,095	71,980
37-42	28,631	22,359	50,990
43-48	36,351	19,831	56,181
49-54	32,764	22,632	55,396
55-60	45,641	21,777	67,418
61-66	48,219	16,519	64,737
67-72	33,234	26,464	59,698
73-78	33,323	9,632	42,954
79-84	27,165	3,145	30,310
85-90	3,181	9,868	13,049
91-96	15,919	15,063	30,982
97-102	12,255	4,602	16,857
103-108	5,073	22,456	27,529
109-114	5,005	1,570	6,575
115-120	7,327	3,040	10,367
> 120	23,227	334,046	357,273
Unknown ¹	721	1,197	1,918
U.S. Total	399,103	634,401	1,033,504

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, 1994

Coalbed ID Number ¹ Coalbed Name ²	Production (thousand short tons)			Thickness (inches)		
	Underground	Surface	Total	Average ³	Low	High
1699 Wyodak	-	206,923	206,923	823	108	1,320
0036 Pittsburgh	64,089	3,533	67,622	71	12	180
0484 No. 6	35,294	6,091	41,385	78	36	100
0489 No. 9	28,460	10,643	39,103	61	32	84
0111 Hazard No. 5-A	12,964	23,970	36,934	78	12	226
1569 Beulah-Zap	-	25,847	25,847	157	60	180
0135 Hazard No. 4	19,812	2,230	22,042	45	26	80
0084 Lower Kittanning	6,402	15,385	21,787	61	10	150
0168 Lower Elkhorn	17,411	1,683	19,094	56	18	128
1808 Rosebud	-	18,957	18,957	264	216	276
0071 Upper Freeport	12,339	5,048	17,386	59	6	96
0344 Pocahontas No. 3	14,627	79	14,705	71	36	98
0157 Elkhorn No. 3	12,417	2,182	14,599	62	15	120
0154 Elkhorn No. 2	12,315	2,039	14,354	53	10	72
0103 Stockton-Lewiston	3,325	10,986	14,311	62	12	102
0151 Elkhorn No. 1	9,853	3,180	13,033	45	12	96
0076 Upper Kittanning	6,294	4,807	11,100	46	14	96
0483 No. VI	-	10,155	10,155	51	22	86
Major Coalbeds Total	255,600	353,738	609,339	332	6	1,320
Other Coalbeds	142,782	279,467	422,248	128	3	972
Unknown⁴	721	1,197	1,918	NA	NA	NA
U.S. Total	399,103	634,401	1,033,504	248	3	1,320

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); Indiana (0483); 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 (Tennessee); Taggart (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 short tons of coal 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 in the Gulf Coast lignite belt. Coalbeds of these types are included in "Other Coalbeds," even though production may exceed 10 million short tons, because numerous separate coalbeds contribute to the totals. 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, 1994
(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	85	23,266	-	-	-	-	-	-	85	23,266
Alaska	-	-	1	1,567	-	-	-	-	1	1,567
Arizona	2	13,056	-	-	-	-	-	-	2	13,056
Arkansas	4	25	-	-	-	-	2	25	6	51
Colorado	15	18,104	3	7,200	-	-	-	-	18	25,304
Illinois	34	52,797	-	-	-	-	-	-	34	52,797
Indiana	55	30,927	-	-	-	-	-	-	55	30,927
Iowa	1	46	-	-	-	-	-	-	1	46
Kansas	1	284	-	-	-	-	-	-	1	284
Kentucky Total	673	161,642	-	-	-	-	-	-	673	161,642
Eastern	607	124,447	-	-	-	-	-	-	607	124,447
Western	66	37,195	-	-	-	-	-	-	66	37,195
Louisiana	-	-	-	-	2	3,463	-	-	2	3,463
Maryland	20	3,632	-	-	-	-	-	-	20	3,632
Missouri	6	838	-	-	-	-	-	-	6	838
Montana	-	-	7	41,316	1	323	-	-	8	41,640
New Mexico	5	16,599	2	11,442	-	-	-	-	7	28,041
North Dakota	-	-	-	-	6	32,286	-	-	6	32,286
Ohio	134	29,897	-	-	-	-	-	-	134	29,897
Oklahoma	14	1,911	-	-	-	-	-	-	14	1,911
Pennsylvania Total	362	57,616	-	-	-	-	143	4,621	505	62,237
Anthracite	-	-	-	-	-	-	143	4,621	143	4,621
Bituminous	362	57,616	-	-	-	-	-	-	362	57,616
Tennessee	24	2,987	-	-	-	-	-	-	24	2,987
Texas	2	337	-	-	11	52,009	-	-	13	52,346
Utah	14	24,399	-	-	-	-	-	-	14	24,399
Virginia	231	37,129	-	-	-	-	-	-	231	37,129
Washington	1	258	2	4,635	-	-	-	-	3	4,893
West Virginia Total	462	161,776	-	-	-	-	-	-	462	161,776
Northern	116	49,316	-	-	-	-	-	-	116	49,316
Southern	346	112,460	-	-	-	-	-	-	346	112,460
Wyoming	3	2,735	26	234,357	-	-	-	-	29	237,092
Appalachian Total ¹	1,925	440,750	-	-	-	-	143	4,621	2,068	445,370
Interior Total ¹	183	124,361	-	-	13	55,472	2	25	198	179,858
Western Total ¹	40	75,150	41	300,517	7	32,609	-	-	88	408,276
East of Miss. River	2,080	561,668	-	-	-	-	143	4,621	2,223	566,289
West of Miss. River	68	78,592	41	300,517	20	88,081	2	25	131	467,216
U.S. Total	2,148	640,260	41	300,517	20	88,081	145	4,646	2,354	1,033,504

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, 1994
(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	4,292	5,477	13,252	23,266	-	-	-	23,266
Alaska	-	-	-	-	1,567	-	-	1,567
Arizona	-	-	13,056	13,056	-	-	-	13,056
Arkansas	25	-	-	25	-	-	25	51
Colorado	-	1,114	16,990	18,104	7,200	-	-	25,304
Illinois	-	1,342	51,455	52,797	-	-	-	52,797
Indiana	-	-	30,927	30,927	-	-	-	30,927
Iowa	-	-	46	46	-	-	-	46
Kansas	-	-	284	284	-	-	-	284
Kentucky Total	1,162	1,973	158,506	161,642	-	-	-	161,642
Eastern	1,162	1,973	121,312	124,447	-	-	-	124,447
Western	-	-	37,195	37,195	-	-	-	37,195
Louisiana	-	-	-	-	-	3,463	-	3,463
Maryland	3,607	-	25	3,632	-	-	-	3,632
Missouri	-	-	838	838	-	-	-	838
Montana	-	-	-	-	41,316	323	-	41,640
New Mexico	-	5,389	11,209	16,599	11,442	-	-	28,041
North Dakota	-	-	-	-	-	32,286	-	32,286
Ohio	15	1,448	28,025	29,897	-	-	-	29,897
Oklahoma	830	318	763	1,911	-	-	-	1,911
Pennsylvania Total	6,242	14,289	37,086	57,616	-	-	4,621	62,237
Anthracite	-	-	-	-	-	-	4,621	4,621
Bituminous	6,242	14,289	37,086	57,616	-	-	-	57,616
Tennessee	-	531	2,456	2,987	-	-	-	2,987
Texas	-	337	-	337	-	52,009	-	52,346
Utah	-	-	24,399	24,399	-	-	-	24,399
Virginia	-	17,566	19,563	37,129	-	-	-	37,129
Washington	-	-	258	258	4,635	-	-	4,893
West Virginia Total	16,737	8,456	136,068	161,776	-	-	-	161,776
Northern	3,943	1,988	42,901	49,316	-	-	-	49,316
Southern	12,794	6,468	93,167	112,460	-	-	-	112,460
Wyoming	-	-	2,735	2,735	234,357	-	-	237,092
Appalachian Total ²	32,054	49,740	357,787	440,750	-	-	4,621	445,370
Interior Total ²	856	1,997	121,508	124,361	-	55,472	25	179,858
Western Total ²	-	6,503	68,647	75,150	300,517	32,609	-	408,276
East of Miss. River	32,054	51,082	477,364	561,668	-	-	4,621	566,289
West of Miss. River	856	7,158	70,579	78,592	300,517	88,081	25	467,216
U.S. Total	32,910	58,240	547,942	640,260	300,517	88,081	4,646	1,033,504

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, 1994
(Thousand Short Tons)

Coal-Producing State and Region	UMWA	Other Unions	Union Total	Nonunion	Total
Alabama	16,639	-	16,639	6,558	23,197
Underground	12,971	-	12,971	1,500	14,471
Surface	3,668	-	3,668	5,058	8,726
Alaska	-	1,567	1,567	-	1,567
Surface	-	1,567	1,567	-	1,567
Arizona	13,056	-	13,056	-	13,056
Surface	13,056	-	13,056	-	13,056
Arkansas	-	-	-	30	30
Underground	-	-	-	12	12
Surface	-	-	-	18	18
Colorado	6,887	2,040	8,927	16,372	25,299
Underground	4,364	-	4,364	11,963	16,327
Surface	2,523	2,040	4,563	4,409	8,972
Illinois	39,841	2,435	42,276	10,521	52,797
Underground	31,527	2,435	33,961	9,320	43,281
Surface	8,315	-	8,315	1,201	9,516
Indiana	14,456	515	14,971	15,931	30,901
Underground	1,975	-	1,975	1,340	3,316
Surface	12,481	515	12,995	14,590	27,585
Iowa	-	-	-	46	46
Surface	-	-	-	46	46
Kansas	284	-	284	-	284
Surface	284	-	284	-	284
Kentucky Total	18,648	1,229	19,878	141,340	161,218
Underground	16,738	282	17,020	78,144	95,164
Surface	1,910	947	2,858	63,196	66,054
Eastern	9,023	1,229	10,253	113,801	124,053
Underground	8,758	282	9,040	63,678	72,718
Surface	265	947	1,212	50,123	51,335
Western	9,625	-	9,625	27,539	37,164
Underground	7,980	-	7,980	14,466	22,445
Surface	1,645	-	1,645	13,073	14,719
Louisiana	-	-	-	3,463	3,463
Surface	-	-	-	3,463	3,463
Maryland	-	-	-	3,598	3,598
Underground	-	-	-	2,839	2,839
Surface	-	-	-	759	759
Missouri	-	-	-	838	838
Surface	-	-	-	838	838
Montana	13,933	17,766	31,699	9,937	41,636
Surface	13,933	17,766	31,699	9,937	41,636
New Mexico	10,411	13,903	24,314	3,726	28,041
Underground	950	-	950	-	950
Surface	9,461	13,903	23,365	3,726	27,091
North Dakota	4,903	4,412	9,315	22,971	32,286
Surface	4,903	4,412	9,315	22,971	32,286
Ohio	14,304	148	14,453	15,361	29,814
Underground	11,984	-	11,984	1,624	13,607
Surface	2,321	148	2,469	13,738	16,207
Oklahoma	-	141	141	1,750	1,891
Underground	-	-	-	135	135
Surface	-	141	141	1,615	1,756
Pennsylvania Total	20,137	62	20,199	41,249	61,449
Underground	18,606	-	18,606	21,195	39,801
Surface	1,532	62	1,594	20,054	21,648
Anthracite	1,318	62	1,380	2,895	4,275
Underground	-	-	-	190	190
Surface	1,318	62	1,380	2,705	4,085
Bituminous	18,819	-	18,819	38,354	57,173
Underground	18,606	-	18,606	21,006	39,611
Surface	214	-	214	17,348	17,562
Tennessee	-	-	-	2,975	2,975
Underground	-	-	-	1,882	1,882
Surface	-	-	-	1,093	1,093
Texas	-	31,629	31,629	20,717	52,346
Surface	-	31,629	31,629	20,717	52,346
Utah	8,779	-	8,779	15,620	24,399
Underground	8,779	-	8,779	15,620	24,399
Virginia	11,366	-	11,366	25,622	36,988
Underground	10,588	-	10,588	17,356	27,944
Surface	778	-	778	8,267	9,045

See footnotes at end of table.

Table 11. Coal Production by State, Mine Type, and Union Type, 1994 (Continued)
(Thousand Short Tons)

Coal-Producing State and Region	UMWA	Other Unions	Union Total	Nonunion	Total
Washington	-	4,635	4,635	258	4,893
Surface	-	4,635	4,635	258	4,893
West Virginia Total	81,407	-	81,407	80,082	161,489
Underground	61,974	-	61,974	49,546	111,520
Surface	19,433	-	19,433	30,536	49,969
Northern	35,109	-	35,109	14,132	49,241
Underground	35,109	-	35,109	8,574	43,683
Surface	-	-	-	5,558	5,558
Southern	46,298	-	46,298	65,950	112,248
Underground	26,865	-	26,865	40,972	67,837
Surface	19,433	-	19,433	24,978	44,411
Wyoming	4,706	3,158	7,864	229,222	237,086
Underground	-	-	-	2,735	2,735
Surface	4,706	3,158	7,864	226,488	234,351
Appalachian Total¹	152,877	1,440	154,317	289,247	443,564
Underground	124,880	282	125,163	159,620	284,782
Surface	27,997	1,158	29,154	129,628	158,782
Interior Total¹	64,207	34,719	98,926	80,835	179,761
Underground	41,482	2,435	43,916	25,273	69,189
Surface	22,725	32,285	55,010	55,562	110,571
Western Total¹	62,674	47,482	110,156	298,106	408,262
Underground	14,094	-	14,094	30,317	44,411
Surface	48,581	47,482	96,062	267,789	363,852
East of Miss. River	216,799	4,389	221,188	343,238	564,426
Underground	166,362	2,717	169,079	184,745	353,824
Surface	50,437	1,672	52,109	158,492	210,602
West of Miss. River	62,959	79,252	142,210	324,950	467,161
Underground	14,094	-	14,094	30,464	44,558
Surface	48,865	79,252	128,117	294,486	422,603
Unknown²	NA	NA	NA	NA	1,918
Underground	NA	NA	NA	NA	721
Surface	NA	NA	NA	NA	1,197
U.S. Total	279,758	83,641	363,399	668,188	1,033,504
Underground	180,456	2,717	183,173	215,209	399,103
Surface	99,302	80,924	180,226	452,979	634,401

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 Mining Acreage, Production and Royalties from Federal and Indian Leases by State, 1994

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	3,456	7	18	-	-	-
Arizona	-	-	-	64,858	12,264	32,839
Colorado	36,583	15,474	30,731	-	-	-
Kentucky	3,211	101	177	-	-	-
Montana	39,141	30,615	41,959	14,746	4,134	1,979
New Mexico	14,142	6,466	22,910	36,026	12,524	34,086
North Dakota	6,632	1,696	761	-	-	-
Oklahoma	10,004	1,051	1,011	-	-	-
Utah	50,767	22,139	33,993	-	-	-
Washington	241	280	502	-	-	-
Wyoming	126,134	214,692	159,209	-	-	-
Appalachian Total¹	3,456	7	18	-	-	-
Interior Total¹	13,215	1,151	1,188	-	-	-
Western Total¹	273,640	291,361	290,065	115,630	28,921	68,904
East of Miss. River	6,667	108	194	-	-	-
West of Miss. River	283,644	292,412	291,076	115,630	28,921	68,904
U.S. Total	290,311	292,520	291,271	115,630	28,921	68,904

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

Note: 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, 1994, Report on Receipts from Federal and Indian Leases*.

Table 13. Major U.S. Coal Mines, 1994

Rank	Mine Name/Company	Mine Type	State	Production (short tons)
1	Black Thunder/ARCO	Surface	Wyoming	31,651,762
2	Rochelle/Rochelle Coal	Surface	Wyoming	22,677,045
3	Jacobs Ranch/Kerr McGee	Surface	Wyoming	20,550,847
4	Belle Ayr/Amox Coal	Surface	Wyoming	18,361,868
5	Eagle Butte/Amox Coal	Surface	Wyoming	17,166,698
6	Caballo Rojo/Caballo Rojo	Surface	Wyoming	16,611,486
7	Cordero/Cordero Mining	Surface	Wyoming	16,388,909
8	Freedom-Coteau/Coteau Properties	Surface	North Dakota	15,824,803
9	Caballo/Peabody	Surface	Wyoming	14,442,646
10	North Antelope/North Antelope Coal Co.	Surface	Wyoming	14,147,809
11	Rosebud/Western Energy	Surface	Montana	13,440,088
12	Rawhide/Peabody	Surface	Wyoming	12,858,787
13	Buckskin/Triton Coal	Surface	Wyoming	11,019,922
14	Spring Creek/Spring Creek Coal	Surface	Montana	9,937,474
15	Jewett/Northwestern Resources	Surface	Texas	8,544,478
16	Keyenta/Peabody Coal	Surface	Arizona	8,389,220
17	McKinley/Pittsburg & Midway	Surface	New Mexico	8,267,002
18	Antelope/Antelope Coal	Surface	Wyoming	8,259,637
19	Martin Lake/Texas Utilities	Surface	Texas	8,156,676
20	Enlow Fork/CONSOL	Underground	Pennsylvania	8,106,209
21	West Decker/Decker Coal	Surface	Montana	7,726,969
22	Navajo/BHP Minerals	Surface	New Mexico	7,716,000
23	Falkirk/Falkirk Mining	Surface	North Dakota	7,146,014
24	Jim Bridger/Bridger Coal	Surface	Wyoming	7,068,873
25	Monticello-Winfield/Texas Utilities	Surface	Texas	6,739,434
26	Bailey No. 1/CONSOL	Underground	Pennsylvania	6,585,774
27	Sandow-Rockdale/ALCOA	Surface	Texas	5,889,299
28	Big Brown/Texas Utilities Mining	Surface	Texas	5,311,414
29	Martin Lake/Texas Utilities Mining	Surface	Texas	5,284,549
30	Foidel Creek/Cyprus Western	Underground	Colorado	5,004,889
31	Skyline/Coastal States Energy	Underground	Colorado	4,981,647
32	Black Mesa/Peabody Coal	Surface	Arizona	4,666,320
33	Mountaineer/Ashland Coal	Underground	West Virginia	4,580,943
34	Powhatan No. 6/Ohio Valley Coal	Underground	Ohio	4,531,094
35	San Juan/BHP Minerals	Surface	New Mexico	4,439,471
36	U.S. Steel No. 50/USX	Underground	West Virginia	4,420,926
37	Center/BNI Coal	Surface	North Dakota	4,412,374
38	Colowyo/Colowyo Coal	Surface	Colorado	4,409,290
39	Absaloka/Westmoreland Resources	Surface	Montana	4,326,340
40	Mount Gunnison/ARCO	Underground	Colorado	4,248,072
41	McElroy/CONSOL	Underground	West Virginia	4,084,048
42	Federal No. 2/Eastern Associated	Underground	West Virginia	4,067,376
43	Black Butte/Black Butte Coal	Surface	Wyoming	4,029,770
44	Deer Creek/Pacificorp	Underground	Utah	4,022,409
45	Galatia No. 56/Kerr-McGee	Underground	Illinois	4,017,007
46	Cumberland/Cyprus Cumberland	Underground	Pennsylvania	3,990,437
47	Kemmerer/Pittsburg & Midway	Surface	Wyoming	3,940,631
48	No. 37/Arch of Kentucky	Underground	Kentucky	3,934,000
49	Dry Fork/Western Energy	Surface	Wyoming	3,842,740
50	Blacksville No. 2/CONSOL	Underground	West Virginia	3,733,393
51	Lee Ranch/Santa Fe Pacific Coal	Surface	New Mexico	3,726,186
52	Gibbons Creek/Navasota Mining	Surface	Texas	3,638,809
53	Southern Utah Fuel/Coastal States Energy	Underground	Utah	3,569,462
54	Lynnville/Peabody Coal	Surface	Indiana	3,506,394
55	Peats Branch No. 3/Old Hickory Coal	Surface	West Virginia	3,480,190
56	Cottonwood-Wilberg/Pacificorp	Underground	Utah	3,476,145
57	Emerald No. 1/Cyprus Emerald Resources	Underground	Pennsylvania	3,427,067
58	South Hallsville No. 1/Sabine Mining	Surface	Texas	3,421,751
59	Robinson Run/CONSOL	Underground	West Virginia	3,327,789
60	Shamrock No. 18/Elk River Resources	Underground	Kentucky	3,277,646
61	Humphrey No. 7/CONSOL	Underground	West Virginia	3,255,877
62	Dave Johnston/Pacificorp	Surface	Wyoming	3,157,922
63	Powhatan No. 4/CONSOL	Underground	Ohio	3,142,743
64	Big Sky/Peabody Coal	Surface	Montana	3,094,439
65	Loveridge No. 22/CONSOL	Underground	West Virginia	3,066,527
66	Camp No. 1/Peabody Coal	Underground	Kentucky	3,052,354
67	Old Ben No. 26/Old Ben Coal	Underground	Illinois	3,050,000
68	Buchanan No. 1/CONSOL	Underground	Virginia	3,007,986
69	Monterey No. 2/Monterey Coal	Underground	Illinois	3,006,741
Subtotal				496,640,897
All Other Mines				536,863,396
U.S. Total				1,033,504,293

Notes: Major mines are mines that produced more than 3 million short tons in 1994. 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."

Table 14. Major U.S. Coal Producers, 1994

Rank	Company Name	Production (thousand short tons)	Percent of Total Production
1	Peabody Holding Co., Inc.	119,309	11.5
2	Cyprus AMAX Minerals Co.	76,185	7.4
3	Consol Energy Inc.	70,547	6.8
4	Kennecott Energy Co.	44,813	4.3
5	Zeigler Coal Holding Co.	40,683	3.9
6	ARCO Coal Co.	38,447	3.7
7	Montana Power Co.	30,177	2.9
8	North American Coal Corp.	27,158	2.6
9	Texas Utilities Co.	25,492	2.5
10	Kerr-McGee Coal Corp.	24,770	2.4
11	Arch Mineral Corp.	22,918	2.2
12	A.T. Massey Coal Co.	17,303	1.7
13	Pittsburg & Midway Coal Co.	16,771	1.6
14	Marigold Land Co.	16,697	1.6
15	Kiewit Coal Properties	16,540	1.6
16	Ashland Coal Inc.	14,887	1.4
17	BHP Utah Minerals	13,903	1.3
18	Pittston Coal Group	12,672	1.2
19	Mapco Coal Inc.	11,834	1.1
20	Costain Coal Inc.	11,298	1.1
21	Westmoreland Resources	10,701	1.0
22	Addington Inc.	10,185	1.0
23	Coastal Corp.	10,074	1.0
24	U.S. Steel Mining Co.	7,806	.8
25	Black Beauty Coal Co.	7,647	.7
26	PacifiCorp	7,520	.7
27	Drummond Co.	6,979	.7
28	Jim Walters Resources Inc.	6,882	.7
29	Sun Coal Co.	6,566	.6
30	Transco Coal Co.	6,543	.6
31	Golden Oak Mining Co.	5,959	.6
32	ALCOA	5,889	.6
33	Rochester & Pittsburgh Coal	5,236	.5
34	MDU Resources Group Inc.	5,226	.5
35	Exxon Coal USA Inc.	5,148	.5
36	General Dynamics Corp.	5,021	.5
37	Dal-Tex Coal Corp.	4,773	.5
38	Washington Water Power	4,635	.4
39	Ohio Valley Resources	4,531	.4
40	Andalex Resources	4,450	.4
41	Minnesota Power & Light	4,412	.4
42	W R Grace & Co.	4,409	.4
43	Southern Ohio Coal Co.	4,310	.4
44	Teco Coal Corp.	4,025	.4
45	Santa Fe Southern Pacific	3,726	.4
46	Texas Municipal Power	3,639	.4
47	Great Western Resources	3,480	.3
48	James River Coal Co.	3,475	.3
49	Mincorp Inc.	3,171	.3
50	San Miguel Electric CoOp	2,874	.3
51	Dolet Hills Mining	2,853	.3
52	Black Hills Corp.	2,796	.3
53	BethEnergy Mines Inc.	2,617	.3
54	Central Ohio Coal Co.	2,500	.2
55	Solar Sources	2,367	.2
56	A N R Coal Co.	2,360	.2
57	Dorchester Coal Co.	2,227	.2
58	Pyramid Mining	2,091	.2
59	Williams Fork Co.	2,040	.2
Subtotal		843,547	81.6
All other coal producers		189,957	18.4
U.S. Total		1,033,504	100.0

Notes: Major coal producers are companies that produced more than 2 million short tons in 1994. 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."

Figure 2. Production by Foreign - Controlled Firms as a Percentage of Total U.S. Coal Production, 1976, 1986, 1991, 1994

Note: Foreign-controlled firms are U.S. coal producers with more than 50 percent of their stock or assets owned by a foreign firm.
Sources: Energy Information Administration, • 1976, 1986, 1991: "The Changing Structure of the U.S. Coal Industry: An Update." • 1994: Form EIA-7A, "Coal Production Report."

Productive Capacity

This dragline bucket is used to remove overburden at a Texas lignite mine. The bucket, which is suspended from cables, is able to scoop up great amounts of overburden as it is dragged across the excavation area.

Table 15. Productive Capacity of Coal Mines by State, 1985, 1990-1994
(Thousand Short Tons)

Coal-Producing State and Region	1994	1993	1992	1991	1990	1985 ¹	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
Alabama	33,049	27,916	29,815	30,195	NA	31,899	18.4	NA	0.4
Alaska	w	w	w	w	NA	w	w	NA	w
Arizona	w	w	w	w	NA	w	w	NA	w
Arkansas	w	w	w	w	NA	w	w	NA	w
California	-	-	w	w	NA	w	w	NA	-
Colorado	31,075	30,040	25,848	23,593	NA	18,998	3.4	NA	5.6
Illinois	69,414	69,320	75,787	75,710	NA	66,919	.1	NA	.4
Indiana	38,931	43,955	42,990	45,155	NA	36,107	-11.4	NA	.8
Iowa	w	w	w	w	NA	693	w	NA	w
Kansas	w	w	w	w	NA	1,387	w	NA	w
Kentucky Total	213,427	204,805	195,352	199,282	NA	166,298	4.2	NA	2.8
Eastern	161,731	157,318	149,046	145,549	NA	121,436	2.8	NA	3.2
Western	51,696	47,486	46,306	53,734	NA	44,862	8.9	NA	1.6
Louisiana	w	w	w	w	NA	w	w	NA	w
Maryland	4,332	3,927	3,902	4,248	NA	3,324	10.3	NA	3.0
Missouri	1,209	w	w	w	NA	5,883	w	NA	-16.1
Montana	51,104	50,849	48,582	48,604	NA	34,752	.5	NA	4.4
New Mexico	32,807	33,360	29,512	28,187	NA	24,258	-1.6	NA	3.4
North Dakota	35,920	36,371	36,986	35,976	NA	29,287	-1.2	NA	2.3
Ohio	43,925	42,236	41,329	47,397	NA	41,819	4.0	NA	.5
Oklahoma	2,251	2,422	2,486	2,328	NA	3,789	-7.0	NA	-5.6
Pennsylvania Total	80,975	82,148	82,968	80,418	NA	81,082	-1.4	NA	*
Anthracite	5,776	5,806	4,143	4,043	NA	4,708	-5	NA	2.3
Bituminous	75,200	76,342	78,825	76,375	NA	76,374	-1.5	NA	-2
Tennessee	3,409	3,763	3,932	5,159	NA	7,840	-9.4	NA	-8.8
Texas	55,856	57,115	58,541	59,579	NA	47,819	-2.2	NA	1.7
Utah	27,640	25,933	25,534	25,482	NA	16,365	6.6	NA	6.0
Virginia	46,462	50,879	54,471	55,271	NA	45,552	-8.7	NA	.2
Washington	w	w	w	w	NA	w	w	NA	w
West Virginia Total	201,684	191,706	198,083	200,114	NA	139,529	5.2	NA	4.2
Northern	59,295	60,015	62,811	64,717	NA	54,429	-1.2	NA	.9
Southern	142,388	131,691	135,271	135,398	NA	85,099	8.1	NA	5.9
Wyoming	321,046	277,875	253,312	250,251	NA	147,439	15.5	NA	9.0
Appalachian Total ²	575,568	559,893	563,545	568,350	NA	472,480	2.8	NA	2.2
Interior Total ²	223,897	225,938	235,040	245,487	NA	208,691	-9	NA	.8
Western Total ²	521,191	476,042	442,469	434,642	NA	287,443	9.5	NA	6.8
East of Miss. River	735,609	720,654	728,628	742,949	NA	620,368	2.1	NA	1.9
West of Miss. River	585,047	541,219	512,426	505,529	NA	348,246	8.1	NA	5.9
U.S. Total	1,320,656	1,261,873	1,241,054	1,248,479	NA	968,614	4.6	NA	3.5

¹ For 1985, the Form EIA-7A solicited data on "Daily Productive Capacity." To obtain annual productive capacity for a mine in 1985, 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.

* Data round to zero.

w Withheld to avoid disclosure of individual company 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. 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."

Table 16. Capacity Utilization of Coal Mines by State, 1985, 1990-1994
(Percent)

Coal-Producing State and Region	1994	1993	1992	1991	1990	1985 ¹
Alabama	70.19	88.46	86.26	89.97	NA	86.79
Alaska	w	w	w	w	NA	w
Arizona	w	w	w	w	NA	w
Arkansas	w	w	w	w	NA	w
California	-	-	w	w	NA	w
Colorado	81.41	72.84	74.35	75.58	NA	90.55
Illinois	76.06	59.28	78.98	79.58	NA	88.47
Indiana	79.37	66.60	70.86	69.66	NA	92.21
Iowa	w	w	w	w	NA	85.36
Kansas	w	w	w	w	NA	71.66
Kentucky Total	75.54	76.11	82.15	79.45	NA	90.16
Eastern	76.70	76.15	79.72	80.12	NA	91.41
Western	71.89	76.00	89.95	77.64	NA	86.75
Louisiana	w	w	w	w	NA	w
Maryland	83.07	85.01	84.50	88.12	NA	87.35
Missouri	69.35	w	w	w	NA	94.53
Montana	81.47	70.64	80.03	78.65	NA	95.78
New Mexico	85.47	84.74	83.18	76.34	NA	91.52
North Dakota	89.88	87.89	85.83	82.08	NA	91.75
Ohio	67.87	67.94	73.19	64.27	NA	84.68
Oklahoma	83.98	71.95	69.73	79.08	NA	87.52
Pennsylvania Total	75.89	71.79	82.20	80.17	NA	86.72
Anthracite	74.02	68.80	75.22	74.44	NA	90.93
Bituminous	76.03	72.02	82.57	80.47	NA	86.46
Tennessee	87.27	79.73	86.50	81.46	NA	93.61
Texas	93.72	95.54	94.07	90.34	NA	95.06
Utah	88.27	84.22	83.57	86.12	NA	78.07
Virginia	79.61	77.07	78.70	75.65	NA	88.98
Washington	w	w	w	w	NA	w
West Virginia Total	80.07	67.91	81.70	83.42	NA	91.11
Northern	83.04	56.15	79.44	80.32	NA	91.53
Southern	78.83	73.28	82.75	84.90	NA	90.84
Wyoming	73.85	75.62	75.07	77.46	NA	95.44
Appalachian Total ²	77.07	72.85	80.63	80.13	NA	89.38
Interior Total ²	80.29	73.95	83.22	79.57	NA	89.90
Western Total ²	78.33	77.41	78.04	78.86	NA	93.45
East of Miss. River	76.73	71.37	80.47	79.26	NA	89.26
West of Miss. River	79.85	79.29	79.80	80.05	NA	93.27
U.S. Total	78.11	74.77	80.20	79.58	NA	90.70

¹ For 1985, the Form EIA-7A solicited data on "Daily Productive Capacity." To obtain annual productive capacity for a mine in 1985, 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.

^w Withheld to avoid disclosure of individual company data.

^{NA} Not available.

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.

Sources: Energy Information Administration, Form EIA-7A, "Coal Production Report."

Table 17. Production, Productive Capacity, and Capacity Utilization of Coal Mines by State and Mine Type, 1994
(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	14,471	21,296	67.95	8,726	11,753	74.25	23,197	33,049	70.19
Alaska	-	-	-	1,567	w	w	1,567	w	w
Arizona	-	-	-	13,056	w	w	13,056	w	w
Arkansas	12	w	w	18	w	w	30	w	w
Colorado	16,327	20,775	78.59	8,972	10,300	87.11	25,299	31,075	81.41
Illinois	43,281	54,524	79.38	9,516	14,890	63.91	52,797	69,414	76.06
Indiana	3,316	w	w	27,585	w	w	30,901	38,931	79.37
Iowa	-	-	-	46	w	w	46	w	w
Kansas	-	-	-	284	w	w	284	w	w
Kentucky Total	95,164	129,200	73.66	66,054	84,227	78.42	161,218	213,427	75.54
Eastern	72,718	98,481	73.84	51,335	63,251	81.16	124,053	161,731	76.70
Western	22,445	30,719	73.07	14,719	20,976	70.17	37,164	51,696	71.89
Louisiana	-	-	-	3,463	w	w	3,463	w	w
Maryland	2,839	w	w	759	w	w	3,598	4,332	83.07
Missouri	-	-	-	838	1,209	69.35	838	1,209	69.35
Montana	-	-	-	41,636	51,104	81.47	41,636	51,104	81.47
New Mexico	950	w	w	27,091	w	w	28,041	32,807	85.47
North Dakota	-	-	-	32,286	35,920	89.88	32,286	35,920	89.88
Ohio	13,607	14,891	91.38	16,207	29,035	55.82	29,814	43,925	67.87
Oklahoma	135	w	w	1,756	w	w	1,891	2,251	83.98
Pennsylvania Total	39,801	52,941	75.18	21,648	28,034	77.22	61,449	80,975	75.89
Anthracite	190	393	48.28	4,085	5,383	75.90	4,275	5,776	74.02
Bituminous	39,611	52,548	75.38	17,562	22,652	77.53	57,173	75,200	76.03
Tennessee	1,882	w	w	1,093	w	w	2,975	3,409	87.27
Texas	-	-	-	52,346	55,856	93.72	52,346	55,856	93.72
Utah	24,399	27,640	88.27	-	-	-	24,399	27,640	88.27
Virginia	27,944	35,640	78.40	9,045	10,822	83.58	36,988	46,462	79.61
Washington	-	-	-	4,893	w	w	4,893	w	w
West Virginia Total	111,520	137,701	80.99	49,969	63,983	78.10	161,489	201,684	80.07
Northern	43,683	52,788	82.75	5,558	6,508	85.41	49,241	59,295	83.04
Southern	67,837	84,913	79.89	44,411	57,475	77.27	112,248	142,388	78.83
Wyoming	2,735	w	w	234,351	w	w	237,086	321,046	73.85
Appalachian Total¹	284,782	366,409	77.72	158,782	209,159	75.91	443,564	575,568	77.07
Interior Total¹	69,189	90,376	76.56	110,571	133,521	82.81	179,761	223,897	80.29
Western Total¹	44,411	53,916	82.37	363,852	467,275	77.87	408,262	521,191	78.33
East of Miss. River	353,824	456,638	77.48	210,602	278,971	75.49	564,426	735,609	76.73
West of Miss. River	44,558	54,063	82.42	422,603	530,984	79.59	467,161	585,047	79.85
Unknown²	721	NA	NA	1,197	NA	NA	1,918	NA	NA
U.S. Total	399,103	510,701	78.01	634,401	809,955	78.18	1,033,504	1,320,656	78.11

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.

w Withheld to avoid disclosure of individual company 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 18. Productive Capacity and Capacity Utilization of Underground Coal Mines
by State and Mining Method, 1994
(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	9,928	53.30	53	100.00	11,315	80.66	-	-
Arkansas	w	w	-	-	-	-	-	-
Colorado	7,363	73.75	29	100.00	13,383	81.20	-	-
Illinois	36,190	81.23	852	86.74	17,482	75.20	-	-
Indiana	w	w	-	-	-	-	-	-
Kentucky Total	91,866	75.33	25,854	64.43	10,734	80.68	746	85.57
Eastern	66,825	76.32	23,385	63.27	7,525	83.49	746	85.57
Western	25,041	72.70	2,469	75.45	3,209	74.11	-	-
Maryland	w	w	-	-	w	w	-	-
New Mexico	-	-	-	-	w	w	-	-
Ohio	4,761	80.62	-	-	10,129	96.44	-	-
Oklahoma	w	w	-	-	-	-	-	-
Pennsylvania Total	24,099	67.68	1,554	57.61	27,098	83.28	190	14.56
Anthracite	-	-	203	79.80	-	-	190	14.56
Bituminous	24,099	67.68	1,351	54.27	27,098	83.28	-	-
Tennessee	w	w	w	w	-	-	-	-
Utah	9,819	80.48	870	91.98	16,951	92.60	-	-
Virginia	20,162	81.43	5,795	71.53	9,574	76.11	109	84.76
West Virginia Total	72,188	78.66	18,333	76.95	47,179	86.12	-	-
Northern	13,446	78.95	4,730	74.37	34,612	85.38	-	-
Southern	58,742	78.60	13,604	77.85	12,567	88.15	-	-
Wyoming	w	w	w	w	w	w	-	-
Appalachian Total³	200,765	75.62	49,455	69.35	115,144	85.02	1,046	72.58
Interior Total³	66,363	76.94	3,321	78.35	20,692	75.03	-	-
Western Total³	17,512	77.73	1,399	72.94	35,004	85.07	-	-
East of Miss. River	266,981	75.94	52,776	69.92	135,835	83.50	1,046	72.58
West of Miss. River	17,660	77.91	1,399	72.94	35,004	85.07	-	-
U.S. Total	284,641	76.06	54,175	70.00	170,839	83.82	1,046	72.58

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.

^w Withheld to avoid disclosure of individual company data.

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 19. Productive Capacity and Capacity Utilization of Coal Mines by State and Coal Rank, 1994
(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	33,049	70.19	-	-	-	-	-	-
Alaska	-	-	w	w	-	-	-	-
Arizona	w	w	-	-	-	-	-	-
Arkansas	w	w	-	-	-	-	w	w
Colorado	22,225	81.43	8,850	81.35	-	-	-	-
Illinois	69,414	76.06	-	-	-	-	-	-
Indiana	38,931	79.37	-	-	-	-	-	-
Iowa	w	w	-	-	-	-	-	-
Kansas	w	w	-	-	-	-	-	-
Kentucky Total	213,427	75.54	-	-	-	-	-	-
Eastern	161,731	76.70	-	-	-	-	-	-
Western	51,696	71.89	-	-	-	-	-	-
Louisiana	-	-	-	-	w	w	-	-
Maryland	4,332	83.07	-	-	-	-	-	-
Missouri	1,209	69.35	-	-	-	-	-	-
Montana	-	-	w	w	w	w	-	-
New Mexico	19,607	84.66	13,200	86.68	-	-	-	-
North Dakota	-	-	-	-	35,920	89.88	-	-
Ohio	43,925	67.87	-	-	-	-	-	-
Oklahoma	2,251	83.98	-	-	-	-	-	-
Pennsylvania Total	75,200	76.03	-	-	-	-	5,776	74.02
Anthracite	-	-	-	-	-	-	5,776	74.02
Bituminous	75,200	76.03	-	-	-	-	-	-
Tennessee	3,409	87.27	-	-	-	-	-	-
Texas	550	61.26	-	-	55,306	94.04	-	-
Utah	27,640	88.27	-	-	-	-	-	-
Virginia	46,462	79.61	-	-	-	-	-	-
Washington	w	w	w	w	-	-	-	-
West Virginia Total	201,684	80.07	-	-	-	-	-	-
Northern	59,295	83.04	-	-	-	-	-	-
Southern	142,388	78.83	-	-	-	-	-	-
Wyoming	w	w	w	w	-	-	-	-
Appalachian Total ¹	569,792	77.10	-	-	-	-	5,776	74.02
Interior Total ¹	164,823	75.40	-	-	59,056	93.93	w	w
Western Total ¹	87,212	86.16	397,611	75.58	36,368	89.66	-	-
East of Miss. River	729,833	76.75	-	-	-	-	5,776	74.02
West of Miss. River	91,994	85.39	397,611	75.58	95,424	92.30	w	w
U.S. Total	821,827	77.72	397,611	75.58	95,424	92.30	² 5,776	² 74.02

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

² Does not include Arkansas.

³ 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 20. Productive Capacity and Capacity Utilization of Coal Mines by State and Mine Production Range, 1994
(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	18,385	6,953	3,185	1,610	2,917	69.05	68.67	73.39	80.04	72.04
Alaska	w	-	-	-	-	w	-	-	-	-
Arizona	w	-	-	-	-	w	-	-	-	-
Arkansas	-	-	-	-	w	-	-	-	-	w
Colorado	26,596	w	2,200	-	w	83.90	w	75.49	-	w
Illinois	61,124	w	4,892	-	w	80.88	w	41.95	-	w
Indiana	20,278	12,277	4,366	1,045	965	86.92	68.17	80.90	73.83	62.39
Iowa	-	-	-	-	w	-	-	-	-	w
Kansas	-	-	w	-	-	-	-	w	-	-
Kentucky Total	62,579	51,344	53,600	25,005	20,898	82.76	80.99	76.88	61.82	53.47
Eastern	36,213	38,520	44,701	22,998	19,299	84.62	84.17	80.68	63.22	53.79
Western	26,366	12,824	8,899	2,007	1,599	80.21	71.43	57.81	45.80	49.59
Louisiana	w	w	-	-	-	w	w	-	-	-
Maryland	w	-	w	590	626	w	-	w	81.14	40.47
Missouri	-	-	w	893	w	-	-	w	63.47	w
Montana	w	-	w	-	-	w	-	72.15	-	-
New Mexico	w	w	-	-	-	w	w	-	-	-
North Dakota	35,920	-	-	-	-	89.88	-	-	-	-
Ohio	12,410	11,696	10,072	3,362	6,386	96.56	68.25	46.52	67.60	45.27
Oklahoma	-	-	1,460	w	w	-	-	80.17	w	w
Pennsylvania Total	33,357	w	w	7,097	14,701	89.80	w	w	69.46	54.90
Anthracite	-	w	w	902	2,728	-	w	w	87.83	56.64
Bituminous	33,357	7,562	16,113	6,195	11,973	89.80	89.71	60.65	66.79	54.50
Tennessee	-	w	1,692	w	929	-	w	86.43	w	83.54
Texas	55,026	-	w	-	w	94.07	-	w	-	w
Utah	25,707	w	w	w	w	89.20	w	w	w	w
Virginia	10,291	7,752	11,270	7,916	9,234	71.92	99.08	93.67	74.28	59.25
Washington	w	-	w	-	-	w	-	w	-	-
West Virginia Total	103,677	29,544	39,312	12,690	16,462	85.14	81.97	81.04	74.75	46.50
Northern	43,742	w	7,501	w	3,017	86.43	w	78.53	w	61.09
Southern	59,935	w	31,811	w	13,446	84.20	w	81.64	w	43.23
Wyoming	311,146	w	w	w	w	75.73	w	w	w	w
Appalachian Total¹	217,099	103,224	128,273	56,418	70,553	84.58	82.40	76.64	69.09	53.29
Interior Total¹	165,694	29,322	20,997	4,563	3,320	86.11	66.75	61.63	62.88	51.40
Western Total¹	502,081	6,350	10,629	610	1,522	79.83	55.11	31.80	48.80	17.98
East of Miss. River	324,867	131,696	146,431	59,470	73,145	83.67	78.87	74.47	68.39	53.35
West of Miss. River	560,007	7,200	13,469	2,121	2,250	81.30	59.24	41.51	69.60	24.78
U.S. Total	884,874	138,896	159,899	61,591	75,396	82.17	77.85	71.69	68.43	52.50

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

^w Withheld to avoid disclosure of individual company data.

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 21. Productive Capacity and Productivity of Coal Mines by State and Capacity Utilization Range, 1994
(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	10,576	4,909	3,071	5,917	8,575	33,049	2.26	3.15	2.68	2.17	1.48	2.25	
Alaska	-	-	-	w	-	w	-	-	-	6.94	-	6.94	
Arizona	w	w	-	-	-	w	7.13	6.58	-	-	-	6.71	
Arkansas	w	-	-	-	-	w	1.52	-	-	-	-	1.52	
Colorado	10,087	8,650	5,750	1,848	4,740	31,075	7.73	7.80	5.02	3.10	3.96	6.20	
Illinois	26,349	14,515	8,600	3,800	16,150	69,414	4.12	3.39	3.23	3.12	2.89	3.59	
Indiana	15,691	9,720	w	w	9,430	38,931	4.82	3.91	5.50	5.96	3.10	4.28	
Iowa	-	-	-	-	w	w	-	-	-	-	1.52	1.52	
Kansas	-	-	w	-	-	w	-	-	1.93	-	-	1.93	
Kentucky Total	84,427	32,805	29,758	11,952	54,483	213,427	4.00	3.75	3.20	3.04	1.71	3.25	
Eastern	73,654	23,130	16,517	7,872	40,557	161,731	3.99	3.58	3.78	2.64	1.54	3.24	
Western	10,773	9,675	13,241	4,080	13,926	51,696	4.03	4.21	2.66	4.21	2.39	3.28	
Louisiana	w	-	-	-	-	w	13.00	-	-	-	-	13.00	
Maryland	w	w	w	w	729	4,332	5.07	3.82	2.24	2.12	1.16	3.68	
Missouri	177	300	-	261	471	1,209	10.00	3.66	-	2.29	3.33	3.59	
Montana	w	w	w	w	-	51,104	41.05	20.50	19.31	16.31	-	21.92	
New Mexico	w	w	w	w	w	32,807	9.48	7.20	2.99	7.16	2.26	6.77	
North Dakota	28,000	-	-	3,968	3,952	35,920	19.40	-	-	12.88	22.70	18.84	
Ohio	15,094	7,776	2,814	616	17,625	43,925	3.53	3.70	3.97	2.75	2.82	3.42	
Oklahoma	1,390	260	-	500	101	2,251	2.99	2.19	-	2.21	1.59	2.68	
Pennsylvania Total	35,583	11,791	12,843	4,420	16,338	80,975	3.65	3.31	3.33	2.54	1.07	2.98	
Anthracite	2,407	815	876	243	1,435	5,776	4.45	2.03	2.45	1.47	.42	1.93	
Bituminous	33,176	10,976	11,967	4,178	14,903	75,200	3.60	3.47	3.41	2.65	1.27	3.11	
Tennessee	1,537	w	-	w	w	3,409	2.54	3.55	-	2.21	.42	2.23	
Texas	37,154	18,152	-	w	w	55,856	9.42	8.08	-	2.13	3.17	8.82	
Utah	17,722	4,400	2,856	2,500	163	27,640	6.72	9.45	4.09	7.86	.70	6.59	
Virginia	26,916	2,496	4,328	874	11,849	46,462	3.14	2.82	2.46	2.18	1.12	2.51	
Washington	w	-	w	-	-	w	4.26	-	2.49	-	-	4.11	
West Virginia Total	94,516	37,847	18,440	13,585	37,296	201,684	4.32	3.82	4.42	4.35	1.59	3.69	
Northern	27,847	11,564	9,790	1,815	8,280	59,295	4.10	3.71	4.04	2.99	1.73	3.63	
Southern	66,668	26,283	8,650	11,770	29,016	142,388	4.42	3.87	4.92	4.68	1.55	3.72	
Wyoming	97,578	88,100	w	w	67,868	321,046	24.52	32.21	39.13	32.69	14.45	26.05	
Appalachian Total¹	260,799	89,264	58,263	34,049	133,193	575,568	3.79	3.59	3.61	2.95	1.50	3.20	
Interior Total¹	95,314	52,622	24,691	10,681	40,588	223,897	5.60	4.55	2.98	3.59	2.73	4.43	
Western Total¹	184,923	141,266	49,904	66,376	78,723	521,191	14.36	16.57	12.56	17.43	10.32	14.58	
East of Miss. River	313,613	123,174	82,554	43,569	172,699	735,609	3.87	3.63	3.41	3.12	1.70	3.28	
West of Miss. River	227,424	159,978	50,304	67,537	79,804	585,047	12.88	14.61	12.06	15.61	9.96	13.22	
U.S. Total	541,036	283,152	132,858	111,106	252,504	1,320,656	5.45	6.31	4.69	6.06	2.36	4.98	

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

w Withheld to avoid disclosure of individual company data.

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 22. Productive Capacity and Capacity Utilization of Coal Mines by State and Recoverable Reserves Range, 1994
(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	8,682	89.09	12,554	52.15	11,813	75.48	33,049	70.19
Alaska	w	w	-	-	-	-	w	w
Arizona	w	w	-	-	-	-	w	w
Arkansas	-	-	-	-	w	w	w	w
Colorado	16,496	89.57	10,840	72.57	3,739	71.03	31,075	81.41
Illinois	13,942	91.92	29,832	76.47	25,640	66.96	69,414	76.06
Indiana	7,050	88.86	7,697	73.74	24,184	78.40	38,931	79.37
Iowa	-	-	w	w	-	-	w	w
Kansas	-	-	-	-	w	w	w	w
Kentucky Total	10,400	77.03	41,750	65.05	161,277	78.16	213,427	75.54
Eastern	-	-	26,063	66.40	135,668	78.68	161,731	76.70
Western	10,400	77.03	15,687	62.80	25,609	75.37	51,696	71.89
Louisiana	w	w	-	-	w	w	w	w
Maryland	w	w	w	w	1,267	72.26	4,332	83.07
Missouri	-	-	-	-	1,209	69.35	1,209	69.35
Montana	w	w	w	w	-	-	51,104	81.47
New Mexico	w	w	w	w	-	-	32,807	85.47
North Dakota	35,920	89.88	-	-	-	-	35,920	89.88
Ohio	10,710	90.72	7,144	77.08	26,071	55.97	43,925	67.87
Oklahoma	-	-	w	w	w	w	2,251	83.98
Pennsylvania Total	24,729	79.23	18,195	69.41	38,052	76.80	80,975	75.89
Anthracite	-	-	w	w	w	w	5,776	74.02
Bituminous	24,729	79.23	w	w	w	w	75,200	76.03
Tennessee	-	-	163	58.27	3,246	88.72	3,409	87.27
Texas	51,126	94.55	w	w	w	w	55,856	93.72
Utah	17,399	92.25	8,660	79.57	1,581	92.21	27,640	88.27
Virginia	-	-	11,302	66.18	35,160	83.93	46,462	79.61
Washington	-	-	w	w	w	w	w	w
West Virginia Total	34,875	82.42	57,642	83.46	109,167	77.53	201,684	80.07
Northern	25,175	81.81	16,755	87.46	17,366	80.56	59,295	83.04
Southern	9,700	84.01	40,887	81.82	91,801	76.96	142,388	78.83
Wyoming	312,146	74.33	w	w	w	w	321,046	73.85
Appalachian Total ¹	81,762	83.72	133,362	73.25	360,444	76.97	575,568	77.07
Interior Total ¹	85,418	91.46	57,611	72.80	80,868	73.81	223,897	80.29
Western Total ¹	473,872	78.90	37,049	76.03	10,271	60.50	521,191	78.33
East of Miss. River	113,154	84.44	186,578	72.91	435,877	76.36	735,609	76.73
West of Miss. River	527,898	80.49	41,444	76.66	15,706	66.69	585,047	79.85
U.S. Total	641,052	81.19	228,021	73.59	451,582	76.03	1,320,656	78.11

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

w Withheld to avoid disclosure of individual company data.

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 23. Productive Capacity and Capacity Utilization of Coal Mines by State,
Mine Type, and Union Type, 1994**
(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	21,505	77.37	-	-	11,545	56.81	33,049	70.19
Underground	16,311	79.52	-	-	4,985	30.09	21,296	67.95
Surface	5,194	70.63	-	-	6,559	77.11	11,753	74.25
Alaska	-	-	w	w	-	-	w	w
Surface	-	-	w	w	-	-	w	w
Arizona	w	w	-	-	-	-	w	w
Surface	w	w	-	-	-	-	w	w
Arkansas	-	-	-	-	w	w	w	w
Underground	-	-	-	-	w	w	w	w
Surface	-	-	-	-	w	w	w	w
Colorado	9,723	70.84	2,600	78.45	18,752	87.31	31,075	81.41
Underground	6,773	64.44	-	-	14,002	85.43	20,775	78.59
Surface	2,950	85.53	2,600	78.45	4,750	92.83	10,300	87.11
Illinois	55,579	71.68	2,542	95.78	11,293	93.16	69,414	76.06
Underground	41,907	75.23	2,542	95.78	10,075	92.51	54,524	79.38
Surface	13,672	60.81	-	-	1,218	98.61	14,890	63.91
Indiana	20,251	71.38	900	57.17	17,780	89.60	38,931	79.37
Underground	w	w	-	-	w	w	w	w
Surface	w	w	w	w	w	w	w	w
Iowa	-	-	-	-	w	w	w	w
Surface	-	-	-	-	w	w	w	w
Kansas	w	w	-	-	-	-	w	w
Surface	w	w	-	-	-	-	w	w
Kentucky Total	22,500	82.88	1,282	95.89	189,644	74.53	213,427	75.54
Underground	20,200	82.86	282	100.00	108,718	71.88	129,200	73.66
Surface	2,300	83.06	1,000	94.73	80,927	78.09	84,227	78.42
Eastern	10,440	86.43	1,282	95.89	150,009	75.86	161,731	76.70
Underground	10,140	86.37	282	100.00	88,058	72.31	98,481	73.84
Surface	300	88.33	1,000	94.73	61,951	80.91	63,251	81.16
Western	12,060	79.81	-	-	39,636	69.48	51,696	71.89
Underground	10,060	79.32	-	-	20,659	70.02	30,719	73.07
Surface	2,000	82.27	-	-	18,976	68.89	20,976	70.17
Louisiana	-	-	-	-	w	w	w	w
Surface	-	-	-	-	w	w	w	w
Maryland	-	-	-	-	4,332	83.07	4,332	83.07
Underground	-	-	-	-	w	w	w	w
Surface	-	-	-	-	w	w	w	w
Missouri	-	-	-	-	1,209	69.35	1,209	69.35
Surface	-	-	-	-	1,209	69.35	1,209	69.35
Montana	18,948	73.53	w	w	w	w	51,104	81.47
Surface	18,948	73.53	w	w	w	w	51,104	81.47
New Mexico	11,847	87.88	16,760	82.96	4,200	88.72	32,807	85.47
Underground	w	w	-	-	-	-	w	w
Surface	w	w	w	w	w	w	w	w
North Dakota	7,920	61.90	4,500	98.05	23,500	97.75	35,920	89.88
Surface	7,920	61.90	4,500	98.05	23,500	97.75	35,920	89.88
Ohio	15,811	90.47	232	63.99	27,882	55.09	43,925	67.87
Underground	12,410	96.56	-	-	2,481	65.46	14,891	91.38
Surface	3,402	68.22	232	63.99	25,401	54.08	29,035	55.82
Oklahoma	-	-	w	w	w	w	2,251	83.98
Underground	-	-	-	-	w	w	w	w
Surface	-	-	w	w	w	w	w	w
Pennsylvania Total	30,615	65.78	115	53.88	50,245	82.10	80,975	75.89
Underground	28,511	65.26	-	-	24,430	86.76	52,941	75.18
Surface	2,105	72.78	115	53.88	25,815	77.68	28,034	77.22
Anthracite	1,788	73.72	115	53.88	3,873	74.76	5,776	74.02
Underground	-	-	-	-	393	48.28	393	48.28
Surface	1,788	73.72	115	53.88	3,480	77.75	5,383	75.90
Bituminous	28,828	65.28	-	-	46,372	82.71	75,200	76.03
Underground	28,511	65.26	-	-	24,037	87.39	52,548	75.38
Surface	317	67.46	-	-	22,335	77.67	22,652	77.53
Tennessee	-	-	-	-	3,409	87.27	3,409	87.27
Underground	-	-	-	-	w	w	w	w
Surface	-	-	-	-	w	w	w	w
Texas	-	-	33,510	94.39	22,346	92.71	55,856	93.72
Surface	-	-	33,510	94.39	22,346	92.71	55,856	93.72

See footnotes at end of table.

Table 23. Productive Capacity and Capacity Utilization of Coal Mines by State, Mine Type, and Union Type, 1994 (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)
Utah	9,139	96.07	-	-	18,502	84.42	27,640	88.27
Underground	9,139	96.07	-	-	18,502	84.42	27,640	88.27
Virginia	15,444	73.59	-	-	31,018	82.60	46,462	79.61
Underground	14,566	72.69	-	-	21,075	82.35	35,640	78.40
Surface	879	88.56	-	-	9,943	83.14	10,822	83.58
Washington	-	-	w	w	w	w	w	w
Surface	-	-	w	w	w	w	w	w
West Virginia Total	100,864	80.71	-	-	100,820	79.43	201,684	80.07
Underground	74,092	83.64	-	-	63,608	77.89	137,701	80.99
Surface	26,772	72.59	-	-	37,212	82.06	63,983	78.10
Northern	41,144	85.33	-	-	18,152	77.85	59,295	83.04
Underground	41,144	85.33	-	-	11,644	73.63	52,788	82.75
Surface	-	-	-	-	6,508	85.41	6,508	85.41
Southern	59,720	77.53	-	-	82,668	79.78	142,388	78.83
Underground	32,948	81.54	-	-	51,964	78.85	84,913	79.89
Surface	26,772	72.59	-	-	30,704	81.35	57,475	77.27
Wyoming	w	w	w	w	311,940	73.48	321,046	73.85
Underground	-	-	-	-	w	w	w	w
Surface	w	w	w	w	w	w	w	w
Appalachian Total ¹	194,680	78.53	1,629	88.38	379,259	76.27	575,568	77.07
Underground	156,030	80.04	282	100.00	210,098	75.97	366,409	77.72
Surface	38,650	72.44	1,347	85.95	169,162	76.63	209,159	75.91
Interior Total ¹	88,291	72.72	37,096	93.59	98,511	82.06	223,897	80.29
Underground	55,452	74.81	2,542	95.78	32,382	78.05	90,376	76.56
Surface	32,839	69.20	34,554	93.43	66,129	84.02	133,521	82.81
Western Total ¹	77,066	81.33	56,881	83.47	387,244	76.98	521,191	78.33
Underground	17,912	78.68	-	-	36,004	84.20	53,916	82.37
Surface	59,154	82.13	56,881	83.47	351,240	76.24	467,275	77.87
East of Miss. River	282,570	76.72	5,071	86.55	447,968	76.62	735,609	76.73
Underground	211,482	78.67	2,824	96.20	242,332	76.24	456,638	77.48
Surface	71,089	70.95	2,247	74.42	205,636	77.07	278,971	75.49
West of Miss. River	77,466	81.27	90,535	87.54	417,047	77.92	585,047	79.85
Underground	17,912	78.68	-	-	36,151	84.27	54,063	82.42
Surface	59,554	82.05	90,535	87.54	380,895	77.31	530,984	79.59
U.S. Total	360,036	77.70	95,606	87.48	865,014	77.25	1,320,656	78.11
Underground	229,393	78.67	2,824	96.20	278,483	77.28	510,701	78.01
Surface	130,643	76.01	92,782	87.22	586,531	77.23	809,955	78.18

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

w Withheld to avoid disclosure of individual company data.

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 Mines

Coal accounts for 90 percent of the Nation's fossil energy reserves and is projected to last for more than 250 years.

Figure 3. Recoverable Coal Reserves at U.S. Coal Mines by Mine Type and by Region, 1985-1994

Figure 4. Average Recovery Percentage at U.S. Coal Mines by Mine Type and by Region, 1985-1994

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. Recoverable Coal Reserves by State, 1985, 1990-1994
(Million Short Tons)

Coal-Producing State and Region	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
Alabama	457	427	468	470	489	601	7.1	-1.7	-3.0
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	w
California	-	-	w	w	w	w	w	w	-
Colorado	676	609	608	618	546	640	11.1	5.5	.6
Illinois	963	1,064	1,199	1,257	1,174	1,591	-9.4	-4.8	-5.4
Indiana	304	379	405	420	444	542	-19.8	-9.0	-6.2
Iowa	w	w	w	w	w	w	w	w	w
Kansas	w	w	w	w	w	w	w	w	w
Kentucky Total	1,365	1,828	1,453	1,632	1,585	1,767	-25.3	-3.7	-2.8
Eastern	809	1,347	955	1,084	994	1,164	-40.0	-5.0	-4.0
Western	556	481	498	548	591	603	15.7	-1.5	-.9
Louisiana	w	w	w	w	w	151	w	w	w
Maryland	89	66	59	86	85	62	34.1	1.0	4.0
Missouri	12	w	w	w	w	w	w	w	w
Montana	1,283	1,285	1,352	1,393	1,872	1,762	-.2	-9.0	-3.5
New Mexico	1,458	1,473	1,495	1,608	1,527	1,504	-1.0	-1.1	-.3
North Dakota	1,695	1,411	1,335	1,386	1,414	1,630	20.1	4.6	.4
Ohio	479	520	576	591	692	829	-7.8	-8.8	-5.9
Oklahoma	43	46	48	40	38	74	-6.7	3.2	-5.8
Pennsylvania Total	913	940	937	986	1,126	1,484	-2.8	-5.1	-5.3
Anthracite	38	65	70	76	77	89	-42.1	-16.2	-9.0
Bituminous	875	874	867	910	1,050	1,396	.1	-4.4	-5.0
Tennessee	42	29	43	56	63	112	42.7	-9.6	-10.3
Texas	1,026	1,105	1,188	1,225	1,209	1,100	-7.1	-4.0	-.8
Utah	423	447	488	509	505	558	-5.2	-4.3	-3.0
Virginia	237	336	366	412	424	575	-29.5	-13.5	-9.4
Washington	w	w	w	w	w	w	w	w	w
West Virginia Total	1,830	1,931	2,043	2,122	2,115	2,737	-5.2	-3.6	-4.4
Northern	861	824	960	1,035	1,018	1,337	4.5	-4.1	-4.8
Southern	969	1,107	1,083	1,087	1,097	1,401	-12.5	-3.1	-4.0
Wyoming	6,999	6,831	6,751	6,336	6,564	6,693	2.5	1.6	.5
Appalachian Total ¹	4,855	5,596	5,446	5,807	5,989	7,566	-13.2	-5.1	-4.8
Interior Total ¹	3,069	3,300	3,559	3,715	3,682	4,313	-7.0	-4.4	-3.7
Western Total ¹	13,093	12,639	12,622	12,477	13,091	13,267	3.6	•	-.1
East of Miss. River	6,679	7,520	7,549	8,031	8,197	10,302	-11.2	-5.0	-4.7
West of Miss. River	14,337	14,016	14,078	13,968	14,564	14,844	2.3	-.4	-.4
U.S. Total	21,017	21,535	21,627	21,999	22,761	25,146	-2.4	-2.0	-2.0

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

• Data round to zero.

• Withheld to avoid disclosure of individual company data.

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 25. Average Recovery Percentage at Coal Mines by State, 1985, 1990-1994

Coal-Producing State and Region	1994	1993	1992	1991	1990	1985
Alabama	60.20	63.16	61.97	60.51	60.40	65.33
Alaska	w	w	w	w	w	w
Arizona	w	w	w	w	w	w
Arkansas	w	w	w	w	w	w
California	-	-	w	w	w	w
Colorado	77.12	71.99	71.56	69.09	68.55	62.72
Illinois	52.92	51.19	51.53	51.57	52.15	50.49
Indiana	72.75	73.12	74.48	72.48	71.24	72.30
Iowa	w	w	w	w	w	w
Kansas	w	w	w	w	w	w
Kentucky Total	59.45	62.26	63.24	62.87	63.21	66.94
Eastern	62.60	64.00	66.84	65.98	66.97	69.22
Western	54.86	57.38	56.36	56.71	56.88	62.55
Louisiana	w	w	w	w	w	w
Maryland	55.50	67.82	66.16	72.32	73.17	77.49
Missouri	81.48	w	w	w	w	w
Montana	90.51	90.43	89.70	89.89	82.47	90.29
New Mexico	92.42	92.28	91.92	92.21	92.31	91.94
North Dakota	89.84	90.96	90.62	90.99	90.91	89.59
Ohio	67.81	68.86	69.15	67.58	69.79	66.77
Oklahoma	63.89	66.11	66.73	70.48	72.35	81.26
Pennsylvania Total	68.23	67.95	66.12	63.77	67.12	67.63
Anthracite	65.06	61.04	62.62	62.85	51.38	48.60
Bituminous	68.37	68.47	66.41	63.85	68.26	68.83
Tennessee	65.18	68.92	69.80	73.50	68.12	66.38
Texas	86.10	84.23	85.39	84.02	83.22	87.78
Utah	46.10	47.51	49.04	52.71	52.41	54.93
Virginia	58.37	62.72	64.78	63.61	66.21	67.61
Washington	w	w	w	w	w	w
West Virginia Total	61.10	61.30	62.05	61.38	58.36	61.33
Northern	53.06	52.17	54.04	51.92	50.54	56.36
Southern	68.24	68.09	69.15	70.40	65.62	66.08
Wyoming	92.98	91.94	91.19	91.67	91.57	91.26
Appalachian Total ¹	63.07	64.11	64.62	63.64	63.79	65.38
Interior Total ¹	68.29	68.27	68.46	67.57	67.70	68.59
Western Total ¹	89.72	88.98	88.31	88.53	87.59	87.80
East of Miss. River	61.36	62.31	62.52	61.74	62.03	63.28
West of Miss. River	89.32	88.48	87.96	88.01	87.16	87.81
U.S. Total	80.43	79.34	79.08	78.42	78.11	77.76

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

^w Withheld to avoid disclosure of individual company data.

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 26. Recoverable Coal Reserves and Average Recovery Percentage at Mines
by State and Mine Type, 1994
(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	416	57.54	41	87.39	457	60.20
Alaska	-	-	w	w	w	w
Arizona	-	-	w	w	w	w
Arkansas	-	-	w	w	w	w
Colorado	418	70.43	258	87.95	676	77.12
Illinois	918	51.81	46	74.97	963	52.92
Indiana	w	w	w	w	304	72.75
Iowa	-	-	w	w	w	w
Kansas	-	-	w	w	w	w
Kentucky Total	1,046	53.44	320	79.10	1,365	59.45
Eastern	634	57.45	174	81.34	809	62.60
Western	411	47.26	145	76.39	556	54.86
Louisiana	-	-	w	w	w	w
Maryland	w	w	w	w	89	55.50
Missouri	-	-	12	81.48	12	81.48
Montana	-	-	1,283	90.51	1,283	90.51
New Mexico	w	w	w	w	1,458	92.42
North Dakota	-	-	1,695	89.84	1,695	89.84
Ohio	271	57.60	208	81.14	479	67.81
Oklahoma	w	w	w	w	43	63.89
Pennsylvania Total	757	65.56	156	81.20	913	68.23
Anthracite	23	73.43	15	52.05	38	65.06
Bituminous	734	65.31	141	84.26	875	68.37
Tennessee	w	w	w	w	42	65.18
Texas	-	-	1,026	86.10	1,026	86.10
Utah	423	46.10	-	-	423	46.10
Virginia	222	56.43	15	86.84	237	58.37
Washington	-	-	w	w	w	w
West Virginia Total	1,312	55.51	518	75.26	1,830	61.10
Northern	746	50.67	116	68.47	861	53.06
Southern	567	61.88	402	77.21	969	68.24
Wyoming	w	w	w	w	6,999	92.98
Appalachian Total¹	3,729	58.36	1,126	78.67	4,855	63.07
Interior Total¹	1,398	50.58	1,670	83.13	3,069	68.29
Western Total¹	871	58.33	12,222	91.95	13,093	89.72
East of Miss. River	5,093	56.21	1,586	77.91	6,679	61.36
West of Miss. River	905	58.39	13,433	91.40	14,337	89.32
U.S. Total	5,998	56.54	15,019	89.97	21,017	80.43

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

w Withheld to avoid disclosure of individual company data.

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 27. Recoverable Coal Reserves at Underground Coal Mines by State and Mining Method, 1994
(Million Short Tons)

Coal-Producing State and Region	Continuous ¹	Conventional ²	Longwall ³	Other ⁴	Total
Alabama	54	-	363	-	416
Colorado	60	-	358	-	418
Illinois	481	-	437	-	918
Indiana	w	-	-	-	w
Kentucky Total	677	106	260	3	1,046
Eastern	455	104	73	3	634
Western	223	2	186	-	411
Maryland	w	-	w	-	w
New Mexico	-	-	w	-	w
Ohio	17	-	254	-	271
Oklahoma	w	-	-	-	w
Pennsylvania Total	306	13	417	21	757
Anthracite	-	2	-	21	23
Bituminous	306	11	417	-	734
Tennessee	w	w	-	-	w
Utah	112	-	311	-	423
Virginia	116	19	87	*	222
West Virginia Total	442	106	764	-	1,312
Northern	61	50	635	-	746
Southern	381	56	129	-	567
Wyoming	-	w	w	-	w
Appalachian Total⁵	1,447	242	2,016	24	3,729
Interior Total⁵	773	2	623	-	1,398
Western Total⁵	172	6	693	-	871
East of Miss. River	2,186	244	2,640	24	5,093
West of Miss. River	205	6	693	-	905
U.S. Total	2,391	250	3,333	24	5,998

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.

w Withheld to avoid disclosure of individual company data.

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 28. Average Recovery Percentage at Underground Coal Mines by State and Mining Method, 1994

Coal-Producing State and Region	Continuous ¹	Conventional ²	Longwall ³	Other ⁴	Total
Alabama	52.24	-	58.33	-	57.54
Colorado	40.03	-	75.48	-	70.43
Illinois	45.93	-	58.28	-	51.81
Indiana	w	-	-	-	w
Kentucky Total	52.72	58.45	53.15	64.39	53.44
Eastern	54.98	58.70	70.75	64.39	57.45
Western	48.11	47.00	46.25	-	47.26
Maryland	w	-	w	-	w
New Mexico	-	-	w	-	w
Ohio	51.07	-	58.05	-	57.60
Oklahoma	w	-	-	-	w
Pennsylvania Total	65.98	67.20	64.72	75.00	65.56
Anthracite	-	57.67	-	75.00	73.43
Bituminous	65.98	69.02	64.72	-	65.31
Tennessee	w	w	-	-	w
Utah	46.11	-	46.10	-	46.10
Virginia	58.43	55.03	54.06	50.00	56.43
West Virginia Total	59.60	62.41	52.20	-	55.51
Northern	64.57	65.01	48.21	-	50.67
Southern	58.80	60.11	71.74	-	61.88
Wyoming	-	w	w	-	w
Appalachian Total ⁵	59.15	60.48	57.35	73.62	58.36
Interior Total ⁵	47.27	47.00	54.68	-	50.58
Western Total ⁵	44.00	68.00	61.80	-	58.33
East of Miss. River	54.94	60.36	56.72	73.62	56.21
West of Miss. River	46.63	68.00	61.80	-	58.39
U.S. Total	54.22	60.54	57.77	73.62	56.54

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.

w Withheld to avoid disclosure of individual company data.

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 29. Recoverable Coal Reserves and Average Recovery Percentage at U.S. Mines by Mine Production Range and Mine Type, 1994
(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	4,147	55.98	13,381	90.77	17,528	82.54
500 to 1,000	579	55.36	451	81.35	1,030	66.75
200 to 500	641	58.01	749	87.94	1,390	74.14
100 to 200	276	62.01	111	79.06	386	66.90
50 to 100	168	55.86	249	80.15	417	70.39
10 to 50	187	59.98	77	68.82	264	62.55
U.S. Total	5,998	56.54	15,019	89.97	21,017	80.43

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 30. Recoverable Coal Reserves and Average Recovery Percentage at U.S. Mines by Coalbed Thickness and Mine Type, 1994
(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	-	-	2	79.33	2	79.33
7-12	-	-	9	84.09	9	84.09
13-18	-	-	55	79.32	55	79.32
19-24	13	44.58	292	80.64	306	79.09
25-30	72	57.11	234	80.85	306	75.28
31-36	184	61.72	266	77.09	450	70.81
37-42	324	59.72	251	77.67	576	67.55
43-48	535	62.55	272	78.75	807	68.02
49-54	381	57.45	598	89.77	979	77.19
55-60	676	57.94	172	83.90	848	63.19
61-66	995	51.98	329	82.90	1,324	59.67
67-72	453	55.42	449	85.91	901	70.60
73-78	418	52.61	190	89.41	609	64.12
79-84	758	54.61	31	79.62	788	55.58
85-90	37	62.73	336	93.28	373	90.26
91-96	335	54.51	241	87.32	576	68.21
97-102	140	55.29	58	88.38	199	64.97
103-108	82	54.00	354	90.00	436	83.23
109-114	97	62.00	39	76.51	136	66.18
115-120	55	55.70	22	78.09	77	62.15
> 120	444	61.32	10,818	91.94	11,262	90.73
U.S. Total	5,998	56.54	15,019	89.97	21,017	80.43

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 Mines by State, Mine Type, and Union Type, 1994
(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	398	60.78	-	-	59	56.32	457	60.20
Underground	367	58.40	-	-	50	51.24	416	57.54
Surface	31	88.65	-	-	9	83.23	41	87.39
Alaska	-	-	w	w	-	-	w	w
Surface	-	-	w	w	-	-	w	w
Arizona	w	w	-	-	-	-	w	w
Surface	w	w	-	-	-	-	w	w
Arkansas	-	-	-	-	w	w	w	w
Surface	-	-	-	-	w	w	w	w
Colorado	166	68.61	41	90.00	470	79.01	676	77.12
Underground	137	63.90	-	-	281	73.62	418	70.43
Surface	28	91.35	41	90.00	189	87.00	258	87.95
Illinois	518	51.47	19	61.57	427	54.28	963	52.92
Underground	478	49.57	19	61.57	420	53.92	918	51.81
Surface	40	74.44	-	-	6	78.33	46	74.97
Indiana	218	71.99	-	-	86	74.70	304	72.75
Underground	w	w	-	-	w	w	w	w
Surface	w	w	w	w	w	w	w	w
Iowa	-	-	-	-	w	w	w	w
Surface	-	-	-	-	w	w	w	w
Kansas	w	w	-	-	-	-	w	w
Surface	w	w	-	-	-	-	w	w
Kentucky Total	239	47.54	3	80.00	1,123	61.94	1,365	59.45
Underground	236	46.99	-	-	810	55.32	1,046	53.44
Surface	4	81.94	3	80.00	313	79.05	320	79.10
Eastern	56	58.77	3	80.00	750	62.83	809	62.60
Underground	55	58.36	-	-	579	57.37	634	57.45
Surface	1	90.00	3	80.00	171	81.33	174	81.34
Western	183	44.12	-	-	373	60.14	556	54.86
Underground	180	43.52	-	-	231	50.18	411	47.26
Surface	3	80.00	-	-	142	76.32	145	76.39
Louisiana	-	-	-	-	w	w	w	w
Surface	-	-	-	-	w	w	w	w
Maryland	-	-	-	-	89	55.50	89	55.50
Underground	-	-	-	-	w	w	w	w
Surface	-	-	-	-	w	w	w	w
Missouri	-	-	-	-	12	81.48	12	81.48
Surface	-	-	-	-	12	81.48	12	81.48
Montana	227	91.10	w	w	w	w	1,283	90.51
Surface	227	91.10	w	w	w	w	1,283	90.51
New Mexico	124	80.85	1,127	94.88	207	86.00	1,458	92.42
Underground	w	w	-	-	-	-	w	w
Surface	w	w	w	w	w	w	w	w
North Dakota	398	90.00	203	90.00	1,093	89.76	1,695	89.84
Surface	398	90.00	203	90.00	1,093	89.76	1,695	89.84
Ohio	337	64.59	*	81.67	142	75.43	479	67.81
Underground	254	58.05	-	-	17	51.07	271	57.60
Surface	83	84.66	*	81.67	125	78.81	208	81.14
Oklahoma	-	-	w	w	w	w	43	63.89
Underground	-	-	-	-	w	w	w	w
Surface	-	-	w	w	w	w	w	w
Pennsylvania Total	437	61.84	1	98.89	475	74.06	913	68.23
Underground	430	61.49	-	-	327	70.89	757	65.56
Surface	8	81.22	1	98.89	147	81.11	156	81.20
Anthracite	3	75.85	1	98.89	34	63.30	38	65.06
Underground	-	-	-	-	23	73.43	23	73.43
Surface	3	75.85	1	98.89	11	41.82	15	52.05
Bituminous	434	61.74	-	-	441	74.89	875	68.37
Underground	430	61.49	-	-	304	70.70	734	65.31
Surface	5	84.92	-	-	137	84.24	141	84.26
Tennessee	-	-	-	-	42	65.18	42	65.18
Underground	-	-	-	-	w	w	w	w
Surface	-	-	-	-	w	w	w	w
Texas	-	-	485	89.11	542	83.41	1,026	86.10
Surface	-	-	485	89.11	542	83.41	1,026	86.10
Utah	166	41.69	-	-	257	48.95	423	46.10
Underground	166	41.69	-	-	257	48.95	423	46.10

See footnotes at end of table.

Table 31. Recoverable Coal Reserves and Average Recovery Percentage at Mines by State, Mine Type, and Union Type, 1994 (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
Virginia	97	55.40	-	-	139	60.44	237	58.37
Underground	95	54.72	-	-	126	57.71	222	56.43
Surface	2	85.62	-	-	13	87.04	15	86.84
Washington	-	-	w	w	w	w	w	w
Surface	-	-	w	w	w	w	w	w
West Virginia Total	1,158	57.57	-	-	672	67.19	1,830	61.10
Underground	872	51.53	-	-	440	63.41	1,312	55.51
Surface	286	75.97	-	-	232	74.38	518	75.26
Northern	638	48.28	-	-	224	66.69	861	53.06
Underground	638	48.28	-	-	108	64.78	746	50.67
Surface	-	-	-	-	116	68.47	116	68.47
Southern	521	68.94	-	-	448	67.44	969	68.24
Underground	235	60.37	-	-	332	62.96	567	61.88
Surface	286	75.97	-	-	116	80.25	402	77.21
Wyoming	w	w	w	w	6,793	92.98	6,999	92.98
Underground	-	-	-	-	w	w	w	w
Surface	w	w	w	w	w	w	w	w
Appalachian Total ¹	2,484	59.73	4	83.98	2,368	66.54	4,855	63.07
Underground	2,073	55.94	-	-	1,656	61.38	3,729	58.36
Surface	411	78.86	4	83.98	712	78.53	1,126	78.67
Interior Total ¹	922	54.91	504	88.08	1,642	69.74	3,069	68.29
Underground	677	48.00	19	61.57	702	52.76	1,398	50.58
Surface	245	73.95	485	89.12	940	82.43	1,670	83.13
Western Total ¹	1,650	82.58	2,439	91.71	9,004	90.48	13,093	89.72
Underground	316	52.07	-	-	555	61.89	871	58.33
Surface	1,334	89.80	2,439	91.71	8,449	92.36	12,222	91.95
East of Miss. River	3,403	58.42	23	65.12	3,254	64.41	6,679	61.36
Underground	2,750	53.98	19	61.57	2,324	58.80	5,093	56.21
Surface	653	77.08	4	83.98	929	78.47	1,586	77.91
West of Miss. River	1,652	82.55	2,925	91.28	9,760	89.87	14,337	89.32
Underground	316	52.07	-	-	589	61.78	905	58.39
Surface	1,337	89.75	2,925	91.28	9,171	91.68	13,433	91.40
U.S. Total	5,055	66.31	2,947	91.08	13,014	83.51	21,017	80.43
Underground	3,065	53.79	19	61.57	2,913	59.40	5,998	56.54
Surface	1,990	85.59	2,928	91.27	10,101	90.46	15,019	89.97

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

* Data round to zero.

W Withheld to avoid disclosure of individual company data.

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 32. Status of Recoverable Coal Reserves and Coal Production from Producing Federal Coal Leases by State, Fiscal Year 1994
(Million Short Tons)

Coal-Producing State	Number of Leases	Recoverable Coal Reserves	Production
Alabama	2	30	-
Alaska	-	20	-
Colorado	28	1,544	15.5
Kentucky	4	10	.1
Montana	17	939	30.6
New Mexico	7	274	6.5
North Dakota	4	148	1.7
Oklahoma	4	49	1.1
Utah	36	3,038	22.1
Washington	1	-	.3
Wyoming	41	6,665	214.7
U.S. Total	144	12,718	292.5

Note: Fiscal year 1994 is the period from July 1, 1993, to June 30, 1994. 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 and Bureau of Land Management, *Mineral Revenues 1994*

Producer/Distributor Stocks

Year-end producer/distributor stocks totaled 33 million short tons, a 31 percent increase since last year.

Table 33. Year-End Producer and Distributor Coal Stocks by State, 1990-1994
(Thousand Short Tons)

Coal-Producing State and Region	1994	1993	1992	1991	1990	Percent Change 1993-1994	Average Annual Percent Change
							1990-1994
Alabama	1,204	1,698	2,185	2,233	2,764	-29.1	-18.8
Alaska	58	19	71	75	124	205.2	-17.1
Arizona	2,634	1,590	1,555	1,461	1,191	65.7	22.0
Arkansas	2	5	6	-	-	-62.8	-
California	-	-	36	127	108	-	-
Colorado	1,575	1,155	955	850	1,274	36.3	5.4
Illinois	1,651	713	1,969	1,418	1,955	131.4	-4.1
Indiana	803	527	1,016	525	559	52.4	9.5
Iowa	-	-	-	*	*	-	-
Kansas	31	25	28	20	33	27.0	-1.1
Kentucky Total	5,025	3,216	3,796	4,646	4,114	56.3	5.1
Eastern	4,235	2,558	2,809	3,266	3,188	65.6	7.3
Western	790	658	987	1,379	926	20.2	-3.9
Louisiana	202	12	2	3	12	NM	101.0
Maryland	179	123	59	169	127	44.9	8.9
Missouri	-	2	-	5	-	-100.0	-
Montana	635	876	694	571	613	-27.5	.9
New Mexico	1,467	2,343	1,648	1,760	2,401	-37.4	-11.6
North Dakota	1,812	1,607	1,614	1,619	1,830	12.8	-.3
Ohio	833	550	1,087	821	887	51.4	-1.5
Oklahoma	4	5	19	41	52	-19.2	-48.1
Pennsylvania Total	2,787	1,826	2,903	2,844	2,558	52.6	2.2
Anthracite	249	234	198	196	200	6.4	5.6
Bituminous	2,538	1,592	2,706	2,647	2,358	59.4	1.8
Tennessee	57	35	21	94	97	60.3	-12.6
Texas	1,430	1,237	543	400	930	15.6	11.3
Utah	1,301	1,203	1,827	1,676	1,484	8.2	-3.2
Virginia	1,180	1,389	1,714	2,154	1,844	-15.0	-10.5
Washington	65	72	47	79	27	-9.6	25.2
West Virginia Total	6,692	4,059	7,405	6,464	5,250	64.9	6.3
Northern	1,940	685	3,222	3,083	1,470	183.4	7.2
Southern	4,752	3,374	4,183	3,382	3,779	40.8	5.9
Wyoming	1,592	998	2,794	2,918	3,185	59.4	-15.9
Appalachian Total ¹	17,166	12,239	18,183	18,045	13,891	40.3	-3.1
Interior Total ¹	4,913	3,182	4,570	3,791	4,467	54.4	2.4
Western Total ¹	11,140	9,863	11,241	11,135	12,237	12.9	-2.3
East of Miss. River	20,410	14,137	22,155	21,367	17,680	44.4	-5.4
West of Miss. River	12,809	11,147	11,838	11,604	13,264	14.9	-.9
U.S. Total	33,219	25,284	33,993	32,971	33,418	31.4	-.1

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

* Data round to zero.

NM Not meaningful as value is greater than 500.

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

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

Imports

Electro-Coal Transfer is a 25 million ton coal and dry bulk terminal located about 40 miles south of New Orleans on the Mississippi River. It has 5 million tons of coal storage space for domestic and international sellers of U.S. coal.

Figure 5. U.S. Coal Imports, 1985-1994

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

Table 34. U.S. Coal Imports by Continent and Country of Origin, 1985, 1990-1994
(Short Tons)

Continent and Country of Origin	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
North America Total	1,253,417	1,053,576	1,020,852	935,477	979,220	404,444	19.0	6.4	13.4
Canada	1,253,196	1,051,273	1,020,852	935,477	973,016	404,444	19.2	6.5	13.4
Guatemala	-	4	-	-	-	-	-100.0	-	-
Mexico	221	2,299	-	-	6,204	-	-90.4	-56.5	-
South America Total	4,920,202	5,415,318	2,301,933	2,416,309	1,690,987	594,151	-9.1	30.6	26.5
Colombia	3,389,654	4,117,036	1,763,150	1,881,439	1,428,147	594,151	-17.7	24.1	21.3
Venezuela	1,530,548	1,298,282	538,783	534,870	262,840	-	17.9	55.3	-
Europe Total	40	62	89	6	5,392	6,013	-35.5	-70.6	-42.7
Czechoslovakia	-	-	-	6	-	-	-	-	-
Denmark	-	60	-	-	130	-	-100.0	-100.0	-
Germany	-	-	-	-	1	43	-	-100.0	-100.0
Italy	-	-	-	-	-	8	-	-	-100.0
Netherlands	-	-	-	-	-	5,931	-	-	-100.0
Norway	-	-	-	-	46	31	-	-100.0	-100.0
Poland	40	2	-	-	-	-	NM	-	-
United Kingdom	-	-	89	-	5,215	-	-	-100.0	-
Asia Total	1,153,561	708,080	373,145	6,894	2	11	62.9	NM	261.3
China (Mainland)	111	-	284	202	-	-	-	-	-
India	-	-	66,154	-	-	-	-	-	-
Indonesia	1,130,468	708,080	253,287	6,641	-	-	59.6	-	-
Japan	1	-	-	1	2	11	-	-15.9	-23.4
Malaysia	-	-	53,419	-	-	-	-	-	-
Thailand	-	-	-	50	-	-	-	-	-
Vietnam	22,981	-	-	-	-	-	-	-	-
Oceania & Australia Total	100,313	105,452	100,986	31,106	23,794	38,914	-4.9	43.3	11.1
Australia	92,204	100,076	100,986	31,106	23,794	38,914	-7.9	40.3	10.0
New Zealand	8,109	5,376	-	-	-	-	50.8	-	-
Africa Total	156,452	26,419	5,762	-	-	908,885	492.2	-	-17.8
Gabon	-	-	-	-	-	188	-	-	-100.0
Nigeria	-	-	-	-	-	2	-	-	-100.0
South Africa, Rep of	149,748	20,319	5,762	-	-	908,695	NM	-	-18.1
Swaziland	6,704	6,100	-	-	-	-	9.9	-	-
Total	7,583,985	7,308,907	3,802,767	3,389,792	2,699,395	1,952,418	3.8	29.5	16.3

NM Not meaningful as value is greater than 500.

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 35. Coal Imports by Customs District, 1985, 1990-1994
(Short Tons)

Customs District	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
Eastern Total	1,554,466	1,275,919	340,317	361,097	351,348	72,366	21.8	45.0	40.6
Boston, MA	977,473	674,086	128,667	84,310	139,771	42,689	45.0	62.6	41.6
Baltimore, MD	88,668	224,579	-	-	-	-	-60.5	-	-
Portland, ME	385,097	236,473	108,863	207,152	143,868	236	62.8	27.9	127.5
Buffalo, NY	-	-	-	134	69	52	-	-100.0	-100.0
New York City, NY	-	2	-	-	1	62	-100.0	-100.0	-100.0
Ogdensburg, NY	-	-	-	-	45	-	-	-100.0	-
Philadelphia, PA	78,387	140,779	102,787	69,501	67,594	2	-44.3	3.8	223.8
Norfolk, VA	24,841	-	-	-	-	29,325	-	-	-1.8
Southern Total	4,106,306	4,321,336	2,053,672	2,061,987	1,384,974	1,479,422	-5.0	31.2	12.0
Mobile, AL	1,033,368	935,232	-	-	-	908,695	10.5	-	1.4
Savannah, GA	29,582	-	-	-	-	-	-	-	-
Miami, FL	7,496	-	-	-	-	-	-	-	-
Tampa, FL	2,080,757	2,263,893	1,419,581	1,680,398	1,058,354	59,155	-8.1	18.4	48.5
New Orleans, LA	524,256	675,827	154,600	23,731	-	320,566	-22.4	-	5.6
Wilmington, NC	26,648	-	-	-	46	-	-	390.6	-
San Juan, PR	80,016	107,506	169,707	211,313	234,989	190,957	-25.6	-23.6	-9.2
Houston-Galveston, TX	154,938	121,505	83,466	11,023	5,215	-	27.5	133.5	-
Laredo, TX	221	2,299	-	-	6,204	-	-90.4	-56.5	-
Port Arthur, TX	-	-	-	-	-	49	-	-	-100.0
Virgin Islands	169,024	215,074	226,318	135,522	80,166	-	-21.4	20.5	-
Western Total	710,576	730,662	461,675	116,420	96,480	340,554	-2.7	64.7	8.5
Los Angeles, CA	12	-	-	877	2	30	-	56.5	-9.7
San Francisco, CA	-	-	284	-	-	68,765	-	-	-100.0
Honolulu, HI	670,005	660,379	407,692	31,106	23,794	53,530	1.4	130.3	32.4
Great Falls, MT	34,426	41,580	36,237	57,916	42,017	143,227	-17.2	-4.8	-14.6
Seattle, WA	6,133	28,703	17,462	26,521	30,667	75,002	-78.6	-33.1	-24.3
Northern Total	1,212,637	980,990	947,103	850,288	866,593	60,076	23.6	8.8	39.6
Chicago, IL	283,106	134,485	230,677	208,021	316,534	-	110.5	-2.8	-
Detroit, MI	312,214	203,067	58,937	275	-	17,488	53.7	-	37.7
Duluth, MN	77,355	12,811	-	211	-	223	NM	-	91.5
Pembina, ND	539,962	630,627	657,400	641,781	550,059	42,334	-14.4	-5	32.7
Cleveland, OH	-	-	89	-	-	-	-	-	-
Milwaukee, WI	-	-	-	-	-	31	-	-	-100.0
Total	7,583,985	7,308,907	3,802,767	3,389,792	2,699,395	1,952,418	3.8	29.5	16.3

^{nm} Not meaningful as value is greater than 500.

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

Table 36. U.S. Receipts of Imported Coal by Country of Origin and Destination State, 1985, 1990-1994
(Short Tons)

Country of Origin and Destination State	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994
Australia Total	109,737	98,947	111,097	-	-	-	10.9
Hawaii	73,775	64,594	65,583	-	-	-	14.2
Virginia	35,962	34,353	45,514	-	-	-	4.7
Canada Total	1,317,929	664,835	103,943	26,920	33,600	42,700	98.2
Illinois	346,192	50,936	54,025	-	-	-	NM
Indiana	592,655	582,689	-	-	-	-	1.7
Massachusetts	-	-	32,800	-	-	42,700	-
Michigan	371,097	-	-	-	-	-	-
New Hampshire	-	-	-	-	33,600	-	-
Ohio	1,635	2,000	1,828	-	-	-	-18.3
Washington	6,350	29,210	15,290	26,920	-	-	-78.3
Colombia Total	3,150,128	3,642,728	1,504,138	1,582,600	1,112,470	390,749	-13.5
Alabama	178,330	57,602	-	-	-	-	209.6
Delaware	22,031	-	-	-	-	-	-
Florida	2,348,550	2,999,303	1,418,580	1,582,600	1,007,670	361,749	-21.7
Georgia	11,902	-	-	-	-	-	-
Maryland	88,000	224,000	-	-	-	-	-60.7
Massachusetts	135,500	187,200	-	-	104,800	-	-27.6
New Hampshire	163,311	52,143	48,400	-	-	-	213.2
New Jersey	22,500	-	-	-	-	-	-
North Carolina	26,600	-	-	-	-	-	-
Texas	153,404	122,480	37,158	-	-	-	25.2
Virginia	-	-	-	-	-	29,000	-
Indonesia Total	437,292	118,981	13,100	24,253	-	-	267.5
Florida	147,215	-	-	24,253	-	-	-
Indiana	-	11,100	-	-	-	-	-100.0
Louisiana	169,181	-	-	-	-	-	-
Maine	-	3,135	-	-	-	-	-100.0
Massachusetts	7,938	-	-	-	-	-	-
Mississippi	-	67,547	-	-	-	-	-100.0
New Hampshire	112,958	37,199	-	-	-	-	203.6
Ohio	-	-	13,100	-	-	-	-
Mexico Total	-	33,520	-	-	-	-	-100.0
Texas	-	33,520	-	-	-	-	-100.0
South Africa Total	127,300	-	-	-	-	865,500	-
Florida	127,300	-	-	-	-	865,500	-
Venezuela Total	1,456,645	936,945	240,584	333,027	220,100	-	55.5
Alabama	-	30,278	-	-	-	-	-100.0
Florida	421,674	312,193	-	42,200	40,100	-	35.1
Georgia	26,835	-	-	-	-	-	-
Maine	91,436	9,123	-	-	-	-	NM
Massachusetts	916,700	476,100	163,800	83,700	69,800	-	92.5
New Hampshire	-	109,251	34,300	207,127	110,200	-	-100.0
Texas	-	-	42,484	-	-	-	-
Total	6,599,031	5,495,956	1,972,862	1,966,800	1,366,170	1,298,949	20.1
Alabama	178,330	87,880	-	-	-	-	102.9
Delaware	22,031	-	-	-	-	-	-
Florida	3,044,739	3,311,496	1,418,580	1,649,053	1,047,770	1,227,249	-8.0
Georgia	38,737	-	-	-	-	-	-
Hawaii	73,775	64,594	65,583	-	-	-	14.2
Illinois	346,192	50,936	54,025	-	-	-	NM
Indiana	592,655	593,789	-	-	-	-	-2
Louisiana	169,181	-	-	-	-	-	-
Maine	91,436	12,258	-	-	-	-	NM
Maryland	88,000	224,000	-	-	-	-	-60.7
Massachusetts	1,060,138	663,300	196,600	83,700	174,600	42,700	59.8
Michigan	371,097	-	-	-	-	-	-
Mississippi	-	67,547	-	-	-	-	-100.0
New Hampshire	276,269	198,593	82,700	207,127	143,800	-	39.1
New Jersey	22,500	-	-	-	-	-	-
North Carolina	26,600	-	-	-	-	-	-
Ohio	1,635	2,000	14,928	-	-	-	-18.3
Texas	153,404	156,000	79,642	-	-	-	-1.7

See footnotes at end of table.

Table 36. U.S. Receipts of Imported Coal by Country of Origin and Destination State, 1985, 1990-1994 (Continued)
(Short Tons)

Country of Origin and Destination State	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994
Total (Continued)							
Virginia	35,962	34,353	45,514	-	-	29,000	4.7
Washington	6,350	29,210	15,290	26,920	-	-	-78.3

Not meaningful as value is greater than 500.

Notes: Data for 1985 through 1991 are only for receipts at electric utilities. Data for 1992 through 1994 are for receipts at electric utilities, manufacturing plants and coke plants. See Table 37 and Table 38 for related data. See Technical Note 1 for the difference between receipts of imported coal and U.S. coal imports.

Sources: • 1985-1991: Federal Energy Regulatory Commission (FERC), FERC Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants." • 1992-1994: 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 37. Imported Coal Received at Electric Utilities by Country of Origin and Destination State, 1985, 1990-1994
(Short Tons)

Country of Origin and Destination State	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
Canada Total	63,350	29,210	48,090	26,920	33,600	42,700	116.9	17.2	4.5
Massachusetts	-	-	32,800	-	-	42,700	-	-	-100.0
Michigan	57,000	-	-	-	-	-	-	-	-
New Hampshire	-	-	-	-	33,600	-	-	-100.0	-
Washington	6,350	29,210	15,290	26,920	-	-	-78.3	-	-
Colombia Total	2,971,798	3,585,126	1,504,138	1,582,600	1,112,470	390,749	-17.1	27.8	25.3
Delaware	22,031	-	-	-	-	-	-	-	-
Florida	2,348,550	2,999,303	1,418,580	1,582,600	1,007,670	361,749	-21.7	23.5	23.1
Georgia	11,902	-	-	-	-	-	-	-	-
Maryland	88,000	224,000	-	-	-	-	-60.7	-	-
Massachusetts	135,500	187,200	-	-	104,800	-	-27.6	6.6	-
New Hampshire	163,311	52,143	48,400	-	-	-	213.2	-	-
New Jersey	22,500	-	-	-	-	-	-	-	-
North Carolina	26,600	-	-	-	-	-	-	-	-
Texas	153,404	122,480	37,158	-	-	-	25.2	-	-
Virginia	-	-	-	-	-	29,000	-	-	-100.0
Indonesia Total	437,292	115,846	13,100	24,253	-	-	277.5	-	-
Florida	147,215	-	-	24,253	-	-	-	-	-
Indiana	-	11,100	-	-	-	-	-100.0	-	-
Louisiana	169,181	-	-	-	-	-	-	-	-
Massachusetts	7,938	-	-	-	-	-	-	-	-
Mississippi	-	67,547	-	-	-	-	-100.0	-	-
New Hampshire	112,958	37,199	-	-	-	-	203.6	-	-
Ohio	-	-	13,100	-	-	-	-	-	-
South Africa Total	127,300	-	-	-	-	865,500	-	-	-19.2
Florida	127,300	-	-	-	-	865,500	-	-	-19.2
Venezuela Total	1,365,209	897,544	240,584	333,027	220,100	-	52.1	57.8	-
Florida	421,674	312,193	-	42,200	40,100	-	35.1	80.1	-
Georgia	26,835	-	-	-	-	-	-	-	-
Massachusetts	916,700	476,100	163,800	83,700	69,800	-	92.5	90.4	-
New Hampshire	-	109,251	34,300	207,127	110,200	-	-100.0	-100.0	-
Texas	-	-	42,484	-	-	-	-	-	-
Total	4,964,949	4,627,726	1,805,912	1,966,800	1,366,170	1,298,949	7.3	38.1	16.1
Delaware	22,031	-	-	-	-	-	-	-	-
Florida	3,044,739	3,311,496	1,418,580	1,649,053	1,047,770	1,227,249	-8.0	30.6	10.6
Georgia	38,737	-	-	-	-	-	-	-	-
Indiana	-	11,100	-	-	-	-	-100.0	-	-
Louisiana	169,181	-	-	-	-	-	-	-	-
Maryland	88,000	224,000	-	-	-	-	-60.7	-	-
Massachusetts	1,060,138	663,300	196,600	83,700	174,600	42,700	59.8	57.0	42.9
Michigan	57,000	-	-	-	-	-	-	-	-
Mississippi	-	67,547	-	-	-	-	-100.0	-	-
New Hampshire	276,269	198,593	82,700	207,127	143,800	-	39.1	17.7	-
New Jersey	22,500	-	-	-	-	-	-	-	-
North Carolina	26,600	-	-	-	-	-	-	-	-
Ohio	-	-	13,100	-	-	-	-	-	-
Texas	153,404	122,480	79,642	-	-	-	25.2	-	-
Virginia	-	-	-	-	-	29,000	-	-	-100.0
Washington	6,350	29,210	15,290	26,920	-	-	-78.3	-	-

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

Table 38. Imported Coal Received at Manufacturing and Coke Plants by Country of Origin and Destination State, 1993-1994
(Short Tons)

Country of Origin and Destination State	Manufacturing			Coke Plants			Total		
	1994	1993	Percent Change 1993-1994	1994	1993	Percent Change 1993-1994	1994	1993	Percent Change 1993-1994
Australia Total	109,737	98,947	10.9	-	-	-	109,737	98,947	10.9
Hawaii	73,775	64,594	14.2	-	-	-	73,775	64,594	14.2
Virginia	35,962	34,353	4.7	-	-	-	35,962	34,353	4.7
Canada Total	1,635	2,000	-18.2	1,252,944	633,625	97.7	1,254,579	635,625	97.4
Illinois	-	-	-	346,192	50,936	NM	346,192	50,936	NM
Indiana	-	-	-	592,655	582,689	1.7	592,655	582,689	1.7
Michigan	-	-	-	314,097	-	-	314,097	-	-
Ohio	1,635	2,000	-18.2	-	-	-	1,635	2,000	-18.2
Colombia Total	178,330	57,602	209.6	-	-	-	178,330	57,602	209.6
Alabama	178,330	57,602	209.6	-	-	-	178,330	57,602	209.6
Indonesia Total	-	3,135	-100.0	-	-	-	-	3,135	-100.0
Maine	-	3,135	-100.0	-	-	-	-	3,135	-100.0
Mexico Total	-	33,520	-100.0	-	-	-	-	33,520	-100.0
Texas	-	33,520	-100.0	-	-	-	-	33,520	-100.0
Venezuela Total	91,436	39,401	132.1	-	-	-	91,436	39,401	132.1
Alabama	-	30,278	-100.0	-	-	-	-	30,278	-100.0
Maine	91,436	9,123	NM	-	-	-	91,436	9,123	NM
Total	381,138	234,605	62.5	1,252,944	633,625	97.7	1,634,082	868,230	88.2
Alabama	178,330	87,880	102.9	-	-	-	178,330	87,880	102.9
Hawaii	73,775	64,594	14.2	-	-	-	73,775	64,594	14.2
Illinois	-	-	-	346,192	50,936	NM	346,192	50,936	NM
Indiana	-	-	-	592,655	582,689	1.7	592,655	582,689	1.7
Maine	91,436	12,258	NM	-	-	-	91,436	12,258	NM
Michigan	-	-	-	314,097	-	-	314,097	-	-
Ohio	1,635	2,000	-18.2	-	-	-	1,635	2,000	-18.2
Texas	-	33,520	-100.0	-	-	-	-	33,520	-100.0
Virginia	35,962	34,353	4.7	-	-	-	35,962	34,353	4.7

NM Not meaningful as value is greater than 500.

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 1994, the average number of miners working daily at mines and/or preparation plants producing or processing 10 thousand or more short tons of coal dropped 4 percent from the 1993 level (Table 39), to 97,500 miners. Of the 26 coal-producing States, 14 had a decrease in employment. The majority of these States are in the Interior Region, which, in turn accounted for the largest share of the decrease (9 percent) in employment. The Appalachian Region had a 3-percent decrease, while the Western Region showed a slight increase of 0.9 percent in employment.

The average number of miners at underground mines in 1994 totaled 61,562 miners, accounting for 63 percent of all U.S. miners (Table 40). Employment at underground mines decreased 5 percent since 1993, with all three regions showing a decline.

In 1994, the average number of miners at surface mines dropped by 2 percent from the 1993 level to 35,938 miners (Table 41). Miners in the Interior and Appalachian Regions declined by 6 percent and 2 percent, respectively, while the Western Region increased 2 percent.

Mines that produced 1 million short tons or more of coal in 1994, accounted for 70 percent of total production and employed 45 percent of the miners. Of this total, 29 percent worked in underground mines and 16 percent at surface mines (Table 42). Over 42

thousand miners (43 percent) belonged to a union. The United Mine Workers of America (UMWA) represented 40 percent of the total coal mining workforce, while only 4 percent belonged to "other unions" (Table 45).

U.S. coal mine injuries in 1994 totaled 10,665, a 3-percent increase from the 1993 level. Of those injuries, 44 were fatal, 6 percent less than in 1993 (Table 46). Since 1990, fatal injuries have dropped at an average annual rate of almost 10 percent.

Productivity

In 1994, coal miners working daily averaged 4.98 short tons per miner per hour, a 6-percent rise from the 1993 level (Table 48). Increases occurred in the Appalachian and Western Regions, while the Interior Region remained the same as last year. Over the last decade (1985-1994), productivity at U.S. coal mines has increased at an average annual rate of 7 percent; both underground and surface mines had average annual productivity gains of almost 7 percent (Tables 49 and 50). However, the selective coal strike by the UMWA in 1993, adversely affected some of the more productive unionized mines. During the past 5 years, the average annual productivity gain at underground mines decreased somewhat. During the same period the growth rate at surface mines was 7 percent.

Employment

Miners from Windsor Coal Company located near West Liberty, West Virginia.

Tarped truck offer a safe and flexible means of delivering coal from mines to preparation plants or barge-loading facilities.

Geologist sampling coal core.

Figure 6. Average Number of U.S. Miners by Mine Type and by Region, 1985-1994

Figure 7. U.S. Coal Mining Productivity by Mine Type and by Region, 1985-1994

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 39. Average Number of Miners by State, 1985, 1990-1994

Coal-Producing State and Region	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
Alabama	5,418	5,399	5,386	6,314	6,534	8,616	0.3	-4.6	-5.0
Alaska	105	96	111	99	84	96	9.4	5.7	1.0
Arizona	864	876	888	900	951	885	-1.4	-2.4	-3
Arkansas	15	5	14	14	13	26	200.0	3.6	-5.9
California	-	-	8	8	5	9	-	-	-
Colorado	1,905	1,775	1,610	2,037	2,009	2,551	7.3	-1.3	-3.2
Illinois	6,591	7,303	8,323	9,102	10,018	13,858	-9.7	-9.9	-7.9
Indiana	3,206	3,331	3,652	3,919	4,195	5,187	-3.8	-6.5	-5.2
Iowa	20	90	101	97	135	142	-77.8	-37.9	-19.6
Kansas	63	81	96	92	132	228	-22.2	-16.9	-13.3
Kentucky Total	23,368	24,063	24,624	26,642	30,498	36,814	-2.9	-6.4	-4.9
Eastern	18,577	18,711	19,419	21,129	24,912	29,099	-7	-7.1	-4.9
Western	4,791	5,352	5,205	5,513	5,586	7,715	-10.5	-3.8	-5.1
Louisiana	111	99	77	103	103	72	12.1	1.9	4.9
Maryland	451	441	438	524	589	678	2.3	-6.4	-4.4
Missouri	116	180	323	312	347	1,108	-35.5	-24.0	-22.2
Montana	705	660	715	794	821	1,173	6.8	-3.7	-5.5
New Mexico	1,786	1,762	1,683	1,650	1,472	1,929	1.4	4.9	-8
North Dakota	645	782	744	814	931	1,132	-17.5	-8.8	-6.0
Ohio	3,983	3,866	4,515	5,293	5,866	8,954	3.0	-9.2	-8.6
Oklahoma	253	273	334	410	415	1,024	-7.3	-11.6	-14.4
Pennsylvania Total	9,975	10,940	12,659	13,506	15,903	22,207	-8.8	-11.0	-8.5
Anthracite	1,183	1,124	1,217	1,161	1,687	2,272	5.2	-8.5	-7.0
Bituminous	8,792	9,816	11,442	12,345	14,216	19,935	-10.4	-11.3	-8.7
Tennessee	669	646	804	1,242	1,697	2,622	3.6	-20.8	-14.1
Texas	1,733	1,841	2,001	2,149	2,131	2,360	-5.9	-5.0	-3.4
Utah	1,675	1,769	1,997	2,277	2,434	2,563	-5.3	-8.9	-4.6
Virginia	8,121	8,339	9,138	10,055	10,342	13,268	-2.6	-5.9	-5.3
Washington	570	567	612	638	777	677	.5	-7.4	-1.9
West Virginia Total	21,861	22,979	26,017	28,310	29,578	36,658	-4.9	-7.3	-5.6
Northern	6,659	7,274	8,481	9,468	10,053	12,324	-8.4	-9.8	-6.6
Southern	15,202	15,705	17,536	18,842	19,525	24,334	-3.2	-6.1	-5.1
Wyoming	3,291	3,159	3,326	3,301	3,330	4,444	4.2	-3	-3.3
Appalachian Total ¹	69,055	71,321	78,376	86,373	95,421	122,102	-3.2	-7.8	-6.1
Interior Total ¹	16,899	18,555	20,126	21,711	23,075	31,720	-8.9	-7.5	-6.8
Western Total ¹	11,546	11,446	11,694	12,518	12,814	15,459	.9	-2.6	-3.2
East of Miss. River	83,643	87,307	95,556	104,907	115,220	148,862	-4.2	-7.7	-6.2
West of Miss. River	13,857	14,015	14,640	15,695	16,090	20,419	-1.1	-3.7	-4.2
U.S. Total	97,500	101,322	110,196	120,602	131,310	169,281	-3.8	-7.2	-5.9

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 40. Average Number of Miners at Underground Mines by State, 1985, 1990-1994

Coal-Producing State and Region	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
Alabama	3,775	3,707	3,810	4,473	4,395	5,832	1.8	-3.7	-4.7
Arkansas	10	-	-	-	-	-	-	-	-
Colorado	1,248	1,119	1,085	1,530	1,509	1,464	11.5	-4.6	-1.8
Illinois	5,595	6,196	6,780	7,056	7,407	10,349	-9.7	-6.8	-6.6
Indiana	485	545	422	447	524	455	-11.0	-1.9	.7
Iowa	-	-	-	-	-	42	-	-	-
Kentucky Total	15,837	16,493	16,888	18,481	20,898	22,877	-4.0	-6.7	-4.0
Eastern	12,849	13,028	13,405	14,878	17,407	18,583	-1.4	-7.3	-4.0
Western	2,988	3,465	3,483	3,603	3,491	4,294	-13.8	-3.8	-3.9
Maryland	284	260	228	309	288	375	9.2	-3	-3.0
Montana	-	7	-	-	-	-	-100.0	-	-
New Mexico	168	246	141	63	10	249	-31.7	102.4	-4.3
Ohio	1,694	1,601	1,926	2,359	2,603	4,166	5.8	-10.2	-9.5
Oklahoma	32	40	24	31	36	-	-20.0	-2.9	-
Pennsylvania Total	6,192	6,853	8,113	8,751	9,937	14,185	-9.6	-11.1	-8.8
Anthracite	149	194	147	123	174	369	-23.2	-3.8	-9.6
Bituminous	6,043	6,659	7,966	8,628	9,763	13,816	-9.3	-11.3	-8.8
Tennessee	511	375	599	988	1,319	1,871	36.3	-21.1	-13.4
Utah	1,675	1,769	1,997	2,277	2,434	2,563	-5.3	-8.9	-4.6
Virginia	6,844	7,092	7,888	8,515	8,955	11,553	-3.5	-6.5	-5.6
West Virginia Total	16,956	18,040	20,738	22,512	23,584	31,106	-6.0	-7.9	-6.5
Northern	5,997	6,414	7,513	8,509	8,784	10,305	-6.5	-9.1	-5.8
Southern	10,959	11,626	13,225	14,003	14,800	20,801	-5.7	-7.2	-6.9
Wyoming	256	261	268	258	255	270	-1.9	.1	-6
Appalachian Total¹	49,105	50,956	56,707	62,785	68,488	87,671	-3.6	-8.0	-6.2
Interior Total¹	9,110	10,246	10,709	11,137	11,458	15,140	-11.1	-5.6	-5.5
Western Total¹	3,347	3,402	3,491	4,128	4,208	4,546	-1.6	-5.6	-3.3
East of Miss. River	58,173	61,162	67,392	73,891	79,910	102,769	-4.9	-7.6	-6.1
West of Miss. River	3,389	3,442	3,515	4,159	4,244	4,588	-1.5	-5.5	-3.3
U.S. Total	61,562	64,604	70,907	78,050	84,154	107,357	-4.7	-7.5	-6.0

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 Surface Mines by State, 1985, 1990-1994

Coal-Producing State and Region	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
Alabama	1,643	1,692	1,576	1,841	2,139	2,784	-2.9	-6.4	-5.7
Alaska	105	96	111	99	84	96	9.4	5.7	1.0
Arizona	864	876	888	900	951	885	-1.4	-2.4	-3
Arkansas	5	5	14	14	13	26	-	-21.2	-16.7
California	-	-	8	8	5	9	-	-	-
Colorado	657	656	525	507	500	1,087	.1	7.1	-5.4
Illinois	996	1,107	1,543	2,046	2,611	3,509	-10.0	-21.4	-13.0
Indiana	2,721	2,786	3,230	3,472	3,671	4,732	-2.3	-7.2	-6.0
Iowa	20	90	101	97	135	100	-77.8	-37.9	-16.4
Kansas	63	81	96	92	132	228	-22.2	-16.9	-13.3
Kentucky Total	7,531	7,570	7,736	8,161	9,600	13,937	-5	-5.9	-6.6
Eastern	5,728	5,683	6,014	6,251	7,505	10,516	.8	-6.5	-6.5
Western	1,803	1,887	1,722	1,910	2,095	3,421	-4.4	-3.7	-6.9
Louisiana	111	99	77	103	103	72	12.1	1.9	4.9
Maryland	167	181	210	215	301	303	-7.7	-13.7	-6.4
Missouri	116	180	323	312	347	1,108	-35.5	-24.0	-22.2
Montana	705	653	715	794	821	1,173	8.0	-3.7	-5.5
New Mexico	1,618	1,516	1,542	1,587	1,462	1,680	6.7	2.6	-4
North Dakota	645	782	744	814	931	1,132	-17.5	-8.8	-6.0
Ohio	2,289	2,265	2,589	2,934	3,263	4,788	1.0	-8.5	-7.9
Oklahoma	221	233	310	379	379	1,024	-5.1	-12.6	-15.7
Pennsylvania Total	3,783	4,087	4,546	4,755	5,966	8,022	-7.4	-10.8	-8.0
Anthracite	1,034	930	1,070	1,038	1,513	1,903	11.2	-9.1	-6.5
Bituminous	2,749	3,157	3,476	3,717	4,453	6,119	-12.9	-11.3	-8.5
Tennessee	158	271	205	254	378	751	-41.7	-19.6	-15.9
Texas	1,733	1,841	2,001	2,149	2,131	2,360	-5.9	-5.0	-3.4
Virginia	1,277	1,247	1,250	1,540	1,387	1,715	2.4	-2.0	-3.2
Washington	570	567	612	638	777	677	.5	-7.4	-1.9
West Virginia Total	4,905	4,939	5,279	5,798	5,994	5,552	-7	-4.9	-1.4
Northern	662	860	968	959	1,269	2,019	-23.0	-15.0	-11.6
Southern	4,243	4,079	4,311	4,839	4,725	3,533	4.0	-2.6	2.0
Wyoming	3,035	2,898	3,058	3,043	3,075	4,174	4.7	-3	-3.5
Appalachian Total ¹	19,950	20,365	21,669	23,588	26,933	34,431	-2.0	-7.2	-5.9
Interior Total ¹	7,789	8,309	9,417	10,574	11,617	16,580	-6.3	-9.5	-8.0
Western Total ¹	8,199	8,044	8,203	8,390	8,606	10,913	1.9	-1.2	-3.1
East of Miss. River	25,470	26,145	28,164	31,016	35,310	46,093	-2.6	-7.8	-6.4
West of Miss. River	10,468	10,573	11,125	11,536	11,846	15,831	-1.0	-3.0	-4.5
U.S. Total	35,938	36,718	39,289	42,552	47,156	61,924	-2.1	-6.6	-5.9

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 by State and Mine Production Range, 1994

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	3,132	912	347	224	409	196	198	5,418
Alaska	105	-	-	-	-	-	-	105
Arizona	831	-	-	-	-	-	33	864
Arkansas	-	-	-	-	-	15	-	15
Colorado	1,491	138	220	-	-	7	49	1,905
Illinois	6,018	93	251	-	-	5	224	6,591
Indiana	1,705	871	313	110	111	39	57	3,206
Iowa	-	-	-	-	-	20	-	20
Kansas	-	-	63	-	-	-	-	63
Kentucky Total	5,196	3,635	5,345	2,814	1,630	2,334	2,414	23,368
Eastern	2,741	2,843	4,588	2,653	1,523	2,176	2,053	18,577
Western	2,455	792	757	161	107	158	361	4,791
Louisiana	84	27	-	-	-	-	-	111
Maryland	219	-	58	78	16	47	33	451
Missouri	-	-	36	77	-	3	-	116
Montana	693	-	12	-	-	-	-	705
New Mexico	1,591	165	-	-	-	-	30	1,786
North Dakota	645	-	-	-	-	-	-	645
Ohio	1,437	855	491	316	351	345	188	3,983
Oklahoma	-	-	150	76	14	13	-	253
Pennsylvania Total	2,709	1,611	2,090	900	754	987	924	9,975
Anthracite	-	5	275	129	115	198	461	1,183
Bituminous	2,709	1,606	1,815	771	639	789	463	8,792
Tennessee	-	102	202	22	165	79	99	669
Texas	1,664	-	57	-	12	-	-	1,733
Utah	1,407	57	99	60	-	29	23	1,675
Virginia	1,677	1,044	1,291	1,206	1,086	787	1,030	8,121
Washington	522	-	48	-	-	-	-	570
West Virginia Total	9,436	2,032	3,907	1,560	1,219	1,176	2,531	21,861
Northern	4,413	86	820	357	199	285	499	6,659
Southern	5,023	1,946	3,087	1,203	1,020	891	2,032	15,202
Wyoming	3,027	72	74	80	22	-	16	3,291
Appalachian Total ²	21,351	9,399	12,974	6,959	5,523	5,793	7,056	69,055
Interior Total ²	11,926	1,783	1,627	424	244	253	642	16,899
Western Total ²	10,312	432	453	140	22	36	151	11,546
East of Miss. River	31,529	11,155	14,295	7,230	5,741	5,995	7,698	83,643
West of Miss. River	12,060	459	759	293	48	87	151	13,857
U.S. Total	43,589	11,614	15,054	7,523	5,789	6,082	7,849	97,500

¹ Includes all employees at preparation plants and tipplcs 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 43. Average Number of Miners at Underground Mines by State and Mine Production Range, 1994

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	3,132	492	42	-	15	-	94	3,775
Arkansas	-	-	-	-	-	10	-	10
Colorado	900	96	196	-	-	7	49	1,248
Illinois	5,397	-	30	-	-	-	168	5,595
Indiana	360	120	-	-	-	-	5	485
Kentucky Total	3,671	1,964	3,548	1,948	1,252	1,768	1,686	15,837
Eastern	1,694	1,648	3,222	1,890	1,206	1,732	1,457	12,849
Western	1,977	316	326	58	46	36	229	2,988
Maryland	219	-	-	16	-	16	33	284
New Mexico	-	165	-	-	-	-	3	168
Ohio	1,437	60	32	36	24	74	31	1,694
Oklahoma	-	-	-	32	-	-	-	32
Pennsylvania Total	2,581	1,199	1,227	424	242	177	342	6,192
Anthracite	-	-	-	-	30	34	85	149
Bituminous	2,581	1,199	1,227	424	212	143	257	6,043
Tennessee	-	102	92	22	132	75	88	511
Utah	1,407	57	99	60	-	29	23	1,675
Virginia	1,677	825	933	910	963	644	892	6,844
West Virginia Total	7,388	1,210	3,235	1,222	999	1,022	1,880	16,956
Northern	4,330	42	726	259	110	173	357	5,997
Southern	3,058	1,168	2,509	963	889	849	1,523	10,959
Wyoming	176	-	-	80	-	-	-	256
Appalachian Total ²	18,128	5,536	8,783	4,520	3,581	3,740	4,817	49,105
Interior Total ²	7,734	436	356	90	46	46	402	9,110
Western Total ²	2,483	318	295	140	-	36	75	3,347
East of Miss. River	25,862	5,972	9,139	4,578	3,627	3,776	5,219	58,173
West of Miss. River	2,483	318	295	172	-	46	75	3,389
U.S. Total	28,345	6,290	9,434	4,750	3,627	3,822	5,294	61,562

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 Surface Mines by State and Mine Production Range, 1994

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	-	420	305	224	394	196	104	1,643
Alaska	105	-	-	-	-	-	-	105
Arizona	831	-	-	-	-	-	33	864
Arkansas	-	-	-	-	-	5	-	5
Colorado	591	42	24	-	-	-	-	657
Illinois	621	93	221	-	-	5	56	996
Indiana	1,345	751	313	110	111	39	52	2,721
Iowa	-	-	-	-	-	20	-	20
Kansas	-	-	63	-	-	-	-	63
Kentucky Total	1,525	1,671	1,797	866	378	566	728	7,531
Eastern	1,047	1,195	1,366	763	317	444	596	5,728
Western	478	476	431	103	61	122	132	1,803
Louisiana	84	27	-	-	-	-	-	111
Maryland	-	-	58	62	16	31	-	167
Missouri	-	-	36	77	-	3	-	116
Montana	693	-	12	-	-	-	-	705
New Mexico	1,591	-	-	-	-	-	27	1,618
North Dakota	645	-	-	-	-	-	-	645
Ohio	-	795	459	280	327	271	157	2,289
Oklahoma	-	-	150	44	14	13	-	221
Pennsylvania Total	128	412	863	476	512	810	582	3,783
Anthracite	-	5	275	129	85	164	376	1,034
Bituminous	128	407	588	347	427	646	206	2,749
Tennessee	-	-	110	-	33	4	11	158
Texas	1,664	-	57	-	12	-	-	1,733
Virginia	-	219	358	296	123	143	138	1,277
Washington	522	-	48	-	-	-	-	570
West Virginia Total	2,048	822	672	338	220	154	651	4,905
Northern	83	44	94	98	89	112	142	662
Southern	1,965	778	578	240	131	42	509	4,243
Wyoming	2,851	72	74	-	22	-	16	3,035
Appalachian Total²	3,223	3,863	4,191	2,439	1,942	2,053	2,239	19,950
Interior Total²	4,192	1,347	1,271	334	198	207	240	7,789
Western Total²	7,829	114	158	-	22	-	76	8,199
East of Miss. River	5,667	5,183	5,156	2,652	2,114	2,219	2,479	25,470
West of Miss. River	9,577	141	464	121	48	41	76	10,468
U.S. Total	15,244	5,324	5,620	2,773	2,162	2,260	2,555	35,938

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 by State, Mine Type, and Union Type, 1994

Coal-Producing State and Region	UMWA	Other Unions	Union Total	Nonunion	Total
Alabama	3,990	-	3,990	1,428	5,418
Underground	3,318	-	3,318	457	3,775
Surface	672	-	672	971	1,643
Alaska	-	105	105	-	105
Surface	-	105	105	-	105
Arizona	831	-	831	33	864
Surface	831	-	831	33	864
Arkansas	-	-	-	15	15
Underground	-	-	-	10	10
Surface	-	-	-	5	5
Colorado	738	174	912	993	1,905
Underground	579	-	579	669	1,248
Surface	159	174	333	324	657
Illinois	5,245	246	5,491	1,100	6,591
Underground	4,338	246	4,584	1,011	5,595
Surface	907	-	907	89	996
Indiana	1,662	74	1,736	1,470	3,206
Underground	339	-	339	146	485
Surface	1,323	74	1,397	1,324	2,721
Iowa	-	-	-	20	20
Surface	-	-	-	20	20
Kansas	63	-	63	-	63
Surface	63	-	63	-	63
Kentucky Total	2,403	174	2,577	20,791	23,368
Underground	2,186	105	2,291	13,546	15,837
Surface	217	69	286	7,245	7,531
Eastern	1,090	174	1,264	17,313	18,577
Underground	1,052	105	1,157	11,692	12,849
Surface	38	69	107	5,621	5,728
Western	1,313	-	1,313	3,478	4,791
Underground	1,134	-	1,134	1,854	2,988
Surface	179	-	179	1,624	1,803
Louisiana	-	-	-	111	111
Surface	-	-	-	111	111
Maryland	-	-	-	451	451
Underground	-	-	-	284	284
Surface	-	-	-	167	167
Missouri	-	-	-	116	116
Surface	-	-	-	116	116
Montana	345	300	645	60	705
Surface	345	300	645	60	705
New Mexico	804	802	1,606	180	1,786
Underground	168	-	168	-	168
Surface	636	802	1,438	180	1,618
North Dakota	166	75	241	404	645
Surface	166	75	241	404	645
Ohio	1,907	26	1,933	2,050	3,983
Underground	1,437	-	1,437	257	1,694
Surface	470	26	496	1,793	2,289
Oklahoma	-	14	14	239	253
Underground	-	-	-	32	32
Surface	-	14	14	207	221
Pennsylvania Total	4,781	16	4,797	5,178	9,975
Underground	4,163	7	4,170	2,022	6,192
Surface	618	9	627	3,156	3,783
Anthracite	554	10	564	619	1,183
Underground	-	4	4	145	149
Surface	554	6	560	474	1,034
Bituminous	4,227	6	4,233	4,559	8,792
Underground	4,163	3	4,166	1,877	6,043
Surface	64	3	67	2,682	2,749
Tennessee	-	-	-	669	669
Underground	-	-	-	511	511
Surface	-	-	-	158	158
Texas	-	973	973	760	1,733
Surface	-	973	973	760	1,733
Utah	586	-	586	1,089	1,675
Underground	586	-	586	1,089	1,675
Virginia	2,894	-	2,894	5,227	8,121
Underground	2,751	-	2,751	4,093	6,844
Surface	143	-	143	1,134	1,277
Washington	-	522	522	48	570
Surface	-	522	522	48	570

See footnotes at end of table.

Table 45. Average Number of Miners by State, Mine Type, and Union Type, 1994 (Continued)

Coal-Producing State and Region	UMWA	Other Unions	Union Total	Nonunion	Total
West Virginia Total	11,719	34	11,753	10,108	21,861
Underground	9,663	15	9,678	7,278	16,956
Surface	2,056	19	2,075	2,830	4,905
Northern	4,512	-	4,512	2,147	6,659
Underground	4,512	-	4,512	1,485	5,997
Surface	-	-	-	662	662
Southern	7,207	34	7,241	7,961	15,202
Underground	5,151	15	5,166	5,793	10,959
Surface	2,056	19	2,075	2,168	4,243
Wyoming	387	153	540	2,751	3,291
Underground	-	-	-	256	256
Surface	387	153	540	2,495	3,035
Appalachian Total¹	26,381	250	26,631	42,424	69,055
Underground	22,384	127	22,511	26,594	49,105
Surface	3,997	123	4,120	15,830	19,950
Interior Total¹	8,283	1,307	9,590	7,309	16,899
Underground	5,811	246	6,057	3,053	9,110
Surface	2,472	1,061	3,533	4,256	7,789
Western Total¹	3,857	2,131	5,988	5,558	11,546
Underground	1,333	-	1,333	2,014	3,347
Surface	2,524	2,131	4,655	3,544	8,199
East of Miss. River	34,601	570	35,171	48,472	83,643
Underground	28,195	373	28,568	29,605	58,173
Surface	6,406	197	6,603	18,867	25,470
West of Miss. River	3,920	3,118	7,038	6,819	13,857
Underground	1,333	-	1,333	2,056	3,389
Surface	2,587	3,118	5,705	4,763	10,468
U.S. Total	38,521	3,688	42,209	55,291	97,500
Underground	29,528	373	29,901	31,661	61,562
Surface	8,993	3,315	12,308	23,630	35,938

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."

Figure 8. U.S. Coal Mine Injuries, 1985-1994

Figure 9. U.S. Coal Mine Fatalities, 1985-1994

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

Table 46. U.S. Coal Mine Injuries, 1985, 1990-1994

Injury Type	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
Injuries Total¹	10,665	10,364	10,109	11,386	12,312	9,150	2.9	-3.5	1.7
Fatal	44	47	54	61	66	68	-6.4	-9.6	-4.7
Nonfatal ²	10,621	10,317	10,055	11,325	12,246	9,082	3.1	-3.5	1.8
Injuries per 200,000									
Employee-Hours Total	6.28	6.53	7.32	7.90	7.92	5.10	-3.8	-5.6	2.3
Fatal	.03	.04	.04	.04	.04	.04	-25.0	-6.9	-3.2
Nonfatal ²	6.25	6.49	7.28	7.86	7.88	5.06	-3.7	-5.6	2.4

¹ Includes contractors and office workers.

² Includes only non-fatal injuries that resulted in absence from work.

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

Table 47. Profile of U.S. Coal Miners, 1986, 1990, 1992, 1994

	1994	1992	1990	1986
Age (mean, years)	NA	45	NA	39
Gender (percent)				
Female	NA	4	NA	2
Male	NA	96	NA	98
Education (percent)				
High School or above	NA	NA	NA	78
Experience (median, years)				
Years of experience in mining industry	NA	18	NA	11
Earnings (dollars)				
Average hourly earnings	NA	17.20	NA	15.39
Average weekly earnings	801.85	754.60	735.24	625.24

^{NA} Not available.

Note: Data are for production workers.

Sources: U.S. Department of Interior, Bureau of Mines, Information Circular 9192, "Characterization of the 1986 Coal Mining Workforce" (1988); U.S. Department of Labor, "Employment, Hours and Earnings," 1981-93, August 1993; and National Mining Association, "Summary of Labor Statistics for the U.S. Mining Industry" (1980-1994).

Productivity

At 4.98 short tons of coal per miner per hour, coal productivity has more than doubled since 1980 (1.93 short tons per miner per hour). This can be attributed to many technological improvements in machinery such as P&H's 4100 electric mining shovel, shown here operating at a coal seam near Beulah, North Dakota.

Table 48. Coal Mining Productivity by State, 1985, 1990-1994
(Short Tons of Coal Produced per Miner per Hour)

Coal-Producing State and Region	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
Alabama	2.25	2.35	2.49	2.17	2.23	1.70	-4.3	0.2	3.2
Alaska	6.94	7.40	6.93	6.82	8.46	6.20	-6.2	-4.8	1.3
Arizona	6.71	6.21	6.29	6.64	5.93	6.53	8.0	3.1	.3
Arkansas	1.52	1.39	1.68	2.27	1.46	1.80	9.9	1.0	-1.8
California	-	-	11.12	11.31	17.69	4.23	-	-	-
Colorado	6.20	5.85	5.27	5.05	4.24	3.30	6.0	10.0	7.3
Illinois	3.59	3.23	3.42	3.18	2.94	2.14	11.3	5.2	5.9
Indiana	4.28	4.46	4.09	4.02	3.84	2.85	-4.0	2.7	4.6
Iowa	1.52	.72	1.14	1.29	1.45	1.78	111.6	1.2	-1.7
Kansas	1.93	2.30	2.21	2.15	2.03	2.44	-16.1	-1.3	-2.6
Kentucky Total	3.25	3.25	3.20	3.01	2.83	2.23	.1	3.5	4.3
Eastern	3.24	3.18	3.10	2.90	2.66	2.13	1.9	5.1	4.8
Western	3.28	3.49	3.49	3.37	3.46	2.57	-5.9	-1.3	2.7
Louisiana	13.00	12.14	12.43	12.56	13.16	2.34	7.1	-3	21.0
Maryland	3.68	3.41	2.91	3.11	2.93	2.47	7.9	5.9	4.6
Missouri	3.59	1.84	3.10	2.69	2.99	2.28	95.0	4.6	5.2
Montana	21.92	19.49	20.16	18.99	18.78	14.73	12.5	3.9	4.5
New Mexico	6.77	6.68	6.68	6.25	7.64	5.43	1.4	-3.0	2.5
North Dakota	18.84	17.66	18.12	17.64	16.12	11.40	6.6	4.0	5.7
Ohio	3.42	3.46	3.04	2.67	2.80	2.02	-1.3	5.1	6.0
Oklahoma	2.68	2.80	2.17	2.30	2.08	1.74	-4.4	6.5	4.9
Pennsylvania Total	2.98	2.80	2.67	2.43	2.24	1.65	6.5	7.4	6.8
Anthracite	1.93	1.85	1.33	1.39	1.03	1.05	4.4	17.1	6.9
Bituminous	3.11	2.91	2.81	2.52	2.37	1.71	6.9	7.0	6.8
Tennessee	2.23	2.47	2.19	1.88	1.81	1.51	-9.6	5.3	4.4
Texas	8.82	8.42	7.34	7.17	7.48	6.26	4.8	4.2	3.9
Utah	6.59	5.96	5.46	4.80	4.74	2.80	10.5	8.6	10.0
Virginia	2.51	2.41	2.37	2.23	2.24	1.81	4.1	2.9	3.7
Washington	4.11	4.00	4.51	3.97	3.41	3.15	2.8	4.8	3.0
West Virginia Total	3.69	3.27	3.27	3.11	2.96	1.95	12.7	5.6	7.3
Northern	3.63	2.98	3.17	2.84	2.69	2.10	21.7	7.7	6.2
Southern	3.72	3.39	3.32	3.26	3.12	1.86	9.7	4.5	8.0
Wyoming	26.05	24.46	21.50	21.87	21.41	14.34	6.5	5.0	6.9
Appalachian Total ¹	3.20	3.00	2.95	2.74	2.60	1.90	6.4	5.3	5.9
Interior Total ¹	4.43	4.43	4.18	3.98	3.88	2.81	.1	3.3	5.2
Western Total ¹	14.58	13.53	12.73	12.42	11.82	8.55	7.8	5.4	6.1
East of Miss. River	3.28	3.11	3.07	2.86	2.73	2.00	5.5	4.7	5.6
West of Miss. River	13.22	12.14	11.03	10.79	10.41	7.40	8.9	6.2	6.7
U.S. Total	4.98	4.70	4.36	4.09	3.83	2.74	5.9	6.8	6.8

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. 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, 1985, 1990-1994
(Short Tons of Coal Produced per Miner per Hour)

Coal-Producing State and Region	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
Alabama	1.94	2.09	2.17	1.90	2.01	1.34	-6.9	-0.9	4.2
Arkansas	1.62	-	-	-	-	-	-	-	-
Colorado	5.81	5.21	4.52	4.23	3.26	2.16	11.4	15.5	11.6
Illinois	3.49	3.11	3.21	2.88	2.70	1.92	12.5	6.6	6.9
Indiana	2.82	2.49	2.80	2.97	2.90	1.79	13.2	-7	5.2
Iowa	-	-	-	-	-	1.77	-	-	-
Kentucky Total	2.89	2.93	2.91	2.71	2.54	1.94	-1.4	3.3	4.5
Eastern	2.87	2.89	2.86	2.66	2.44	1.90	-6	4.1	4.7
Western	2.96	3.10	3.05	2.86	2.93	2.11	-4.7	.2	3.8
Maryland	4.52	4.34	3.50	3.73	3.17	2.48	4.2	9.3	6.9
Montana	-	1.06	-	-	-	-	-100.0	-	-
New Mexico	2.57	1.63	.40	.71	4.27	1.64	57.0	-11.9	5.1
Ohio	3.51	3.27	3.01	2.55	2.34	1.66	7.4	10.6	8.7
Oklahoma	1.70	1.03	1.04	.52	1.30	-	64.7	6.9	-
Pennsylvania Total	3.18	2.91	2.81	2.38	2.12	1.37	9.4	10.6	9.8
Anthracite	.64	.74	.84	.51	.73	.65	-13.1	-3.3	-1
Bituminous	3.25	2.98	2.84	2.40	2.15	1.39	9.0	10.9	9.9
Tennessee	1.90	2.34	1.81	1.72	1.68	1.50	-18.7	3.2	2.7
Utah	6.59	5.96	5.46	4.80	4.74	2.80	10.5	8.6	10.0
Virginia	2.27	2.19	2.20	2.12	2.14	1.72	3.3	1.4	3.1
West Virginia Total	3.38	2.92	2.99	2.83	2.70	1.85	15.7	5.8	6.9
Northern	3.61	2.84	3.12	2.80	2.62	2.04	26.8	8.4	6.5
Southern	3.25	2.96	2.92	2.84	2.76	1.74	9.9	4.2	7.2
Wyoming	5.07	3.56	4.19	4.17	2.80	1.90	42.4	16.0	11.5
Appalachian Total ¹	2.96	2.75	2.76	2.54	2.40	1.71	7.6	5.4	6.3
Interior Total ¹	3.26	3.06	3.14	2.87	2.78	1.97	6.5	4.0	5.8
Western Total ¹	5.98	5.23	4.88	4.56	4.04	2.46	14.3	10.3	10.4
East of Miss. River	3.02	2.81	2.82	2.59	2.46	1.75	7.6	5.2	6.2
West of Miss. River	5.93	5.18	4.85	4.53	4.01	2.45	14.6	10.3	10.3
U.S. Total	3.19	2.95	2.93	2.69	2.54	1.78	8.2	5.9	6.7

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. 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, 1985, 1990-1994
(Short Tons of Coal Produced per Miner per Hour)

Coal-Producing State and Region	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
Alabama	3.07	3.01	3.28	2.84	2.69	2.40	1.9	3.4	2.8
Alaska	6.94	7.40	6.93	6.82	8.46	6.20	-6.2	-4.8	1.3
Arizona	6.71	6.21	6.29	6.64	5.93	6.53	8.0	3.1	.3
Arkansas	1.46	1.39	1.68	2.27	1.46	1.80	5.6	*	-2.3
California	-	-	11.12	11.31	17.69	4.23	-	-	-
Colorado	7.06	7.07	6.52	6.51	6.86	4.78	-1.1	.7	4.4
Illinois	4.12	3.86	4.47	4.30	3.64	2.69	6.7	3.1	4.8
Indiana	4.56	4.82	4.28	4.17	3.96	2.97	-5.5	3.6	4.9
Iowa	1.52	.72	1.14	1.29	1.45	1.78	111.6	1.2	-1.7
Kansas	1.93	2.30	2.21	2.15	2.03	2.44	-16.1	-1.3	-2.6
Kentucky Total	3.96	3.84	3.75	3.66	3.43	2.69	3.3	3.6	4.4
Eastern	3.97	3.74	3.57	3.43	3.13	2.53	6.0	6.1	5.1
Western	3.93	4.14	4.31	4.42	4.42	3.18	-5.1	-2.9	2.4
Louisiana	13.00	12.14	12.43	12.56	13.16	2.34	7.1	-3	21.0
Maryland	2.18	2.07	2.13	2.23	2.66	2.45	5.3	-4.8	-1.3
Missouri	3.59	1.84	3.10	2.69	2.99	2.28	95.0	4.6	5.2
Montana	21.92	19.59	20.16	18.99	18.78	14.73	11.9	3.9	4.5
New Mexico	7.18	7.26	7.11	6.31	7.66	5.95	-1.1	-1.6	2.1
North Dakota	18.84	17.66	18.12	17.64	16.12	11.40	6.6	4.0	5.7
Ohio	3.34	3.58	3.06	2.76	3.17	2.34	-6.8	1.3	4.0
Oklahoma	2.80	3.12	2.26	2.42	2.17	1.74	-10.1	6.6	5.5
Pennsylvania Total	2.67	2.63	2.45	2.53	2.42	2.11	1.4	2.5	2.7
Anthracite	2.13	2.09	1.39	1.51	1.06	1.13	2.0	19.0	7.2
Bituminous	2.84	2.78	2.74	2.80	2.81	2.36	2.1	.3	2.0
Tennessee	3.19	2.71	3.06	2.45	2.32	1.55	17.5	8.3	8.3
Texas	8.82	8.42	7.34	7.17	7.48	6.26	4.8	4.2	3.9
Virginia	3.73	3.55	3.50	2.95	2.89	2.37	5.1	6.6	5.2
Washington	4.11	4.00	4.51	3.97	3.41	3.15	2.8	4.8	3.0
West Virginia Total	4.62	4.35	4.27	4.18	4.02	2.54	6.3	3.5	6.9
Northern	3.78	3.70	3.52	3.16	3.30	2.47	2.1	3.4	4.8
Southern	4.75	4.49	4.43	4.38	4.21	2.58	5.8	3.0	7.0
Wyoming	27.37	26.03	22.76	23.11	22.84	15.09	5.1	4.6	6.8
Appalachian Total ¹	3.72	3.55	3.40	3.24	3.10	2.36	4.7	4.7	5.2
Interior Total ¹	5.71	5.71	5.21	5.08	4.86	3.46	*	4.1	5.7
Western Total ¹	17.68	16.49	15.46	15.33	15.18	10.83	7.2	3.9	5.6
East of Miss. River	3.85	3.74	3.61	3.49	3.32	2.52	2.9	3.7	4.8
West of Miss. River	15.19	13.94	12.49	12.36	12.26	8.61	8.9	5.5	6.5
U.S. Total	7.67	7.23	6.59	6.38	5.94	4.24	6.0	6.6	6.8

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 51. Coal Mining Productivity by State and Mine Type, 1994

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	85	5,418	2.25	18.53
Underground	17	3,775	1.94	15.61
Surface	68	1,643	3.07	25.38
Alaska	1	105	6.94	62.47
Surface	1	105	6.94	62.47
Arizona	3	864	6.71	65.13
Surface	3	864	6.71	65.13
Arkansas	2	15	1.52	14.47
Underground	1	10	1.62	14.55
Surface	1	5	1.46	14.64
Colorado	20	1,905	6.20	53.65
Underground	15	1,248	5.81	49.77
Surface	5	657	7.06	62.95
Illinois	44	6,591	3.59	30.74
Underground	29	5,595	3.49	29.77
Surface	15	996	4.12	35.56
Indiana	57	3,206	4.28	41.20
Underground	5	485	2.82	26.25
Surface	52	2,721	4.56	44.08
Iowa	1	20	1.52	15.19
Surface	1	20	1.52	15.19
Kansas	1	63	1.93	15.45
Surface	1	63	1.93	15.45
Kentucky Total	794	23,368	3.25	29.05
Underground	485	15,837	2.89	25.24
Surface	309	7,531	3.96	36.68
Eastern	708	18,577	3.24	29.03
Underground	447	12,849	2.87	25.07
Surface	261	5,728	3.97	37.03
Western	86	4,791	3.28	28.90
Underground	38	2,988	2.96	25.75
Surface	48	1,803	3.93	34.96
Louisiana	2	111	13.00	110.51
Surface	2	111	13.00	110.51
Maryland	14	451	3.68	31.53
Underground	4	284	4.52	37.88
Surface	10	167	2.18	18.80
Missouri	6	116	3.59	28.72
Surface	6	116	3.59	28.72
Montana	7	705	21.92	196.34
Surface	7	705	21.92	196.34
New Mexico	9	1,786	6.77	53.14
Underground	2	168	2.57	20.21
Surface	7	1,618	7.18	56.33
North Dakota	6	645	18.84	158.53
Surface	6	645	18.84	158.53
Ohio	138	3,983	3.42	32.05
Underground	19	1,694	3.51	33.55
Surface	119	2,289	3.34	31.24
Oklahoma	11	253	2.68	24.45
Underground	1	32	1.70	14.43
Surface	10	221	2.80	25.76
Pennsylvania Total	426	9,975	2.98	25.31
Underground	115	6,192	3.18	26.30
Surface	311	3,783	2.67	22.89
Anthracite	105	1,183	1.93	15.29
Underground	25	149	.64	5.07
Surface	80	1,034	2.13	16.87
Bituminous	321	8,792	3.11	26.95
Underground	90	6,043	3.25	27.11
Surface	231	2,749	2.84	24.96
Tennessee	32	669	2.23	19.27
Underground	21	511	1.90	16.00
Surface	11	158	3.19	28.83
Texas	13	1,733	8.82	88.37
Surface	13	1,733	8.82	88.37
Utah	18	1,675	6.59	57.19
Underground	18	1,675	6.59	57.19
Virginia	258	8,121	2.51	22.29
Underground	188	6,844	2.27	19.59
Surface	70	1,277	3.73	35.68

See footnotes at end of table.

Table 51. Coal Mining Productivity by State and Mine Type, 1994 (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
Washington	3	570	4.11	34.24
Surface	3	570	4.11	34.24
West Virginia Total	564	21,861	3.69	31.61
Underground	388	16,956	3.38	28.59
Surface	176	4,905	4.62	40.78
Northern	141	6,659	3.63	31.03
Underground	85	5,997	3.61	30.63
Surface	56	662	3.78	32.73
Southern	423	15,202	3.72	31.86
Underground	303	10,959	3.25	27.45
Surface	120	4,243	4.75	42.32
Wyoming	28	3,291	26.05	255.89
Underground	2	256	5.07	50.75
Surface	26	3,035	27.37	268.49
Appalachian Total⁵	2,225	69,055	3.20	27.98
Underground	1,199	49,105	2.96	25.43
Surface	1,026	19,950	3.72	33.31
Interior Total⁵	223	16,899	4.43	40.04
Underground	74	9,110	3.26	28.26
Surface	149	7,789	5.71	52.69
Western Total⁵	95	11,546	14.58	130.66
Underground	37	3,347	5.98	51.83
Surface	58	8,199	17.68	161.81
East of Miss. River	2,412	83,643	3.28	28.78
Underground	1,271	58,173	3.02	25.91
Surface	1,141	25,470	3.85	34.52
West of Miss. River	131	13,857	13.22	119.47
Underground	39	3,389	5.93	51.43
Surface	92	10,468	15.19	139.62
U.S. Total	2,543	97,500	4.98	43.71
Underground	1,310	61,562	3.19	27.43
Surface	1,233	35,938	7.67	68.95

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 mine employees.

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, 1985, 1990-1994

Coal-Producing State and Region	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
Alabama	240	250	245	239	250	259	-4.0	-1.0	-0.8
Underground	246	249	236	231	245	241	-1.2	.1	.2
Surface	231	253	258	254	259	278	-8.7	-2.8	-2.0
Alaska	246	250	224	265	272	250	-1.6	-2.5	-.2
Surface	246	250	224	265	272	250	-1.6	-2.5	-.2
Arizona	217	211	225	230	202	202	3.0	1.8	.8
Surface	217	211	225	230	202	202	3.0	1.8	.8
Arkansas	176	240	228	161	246	190	-26.7	-8.0	-8
Underground	85	-	-	-	-	-	-	-	-
Surface	240	240	228	161	246	190	-	-6	2.6
California	-	-	116	63	100	210	-	-	-
Surface	-	-	116	63	100	210	-	-	-
Colorado	258	243	278	275	269	267	6.3	-.9	-.4
Underground	288	282	268	260	257	253	2.3	2.9	1.4
Surface	204	188	290	292	284	276	8.4	-7.9	-3.3
Illinois	253	220	253	252	252	248	14.8	*	.2
Underground	257	222	258	259	260	232	15.8	-.3	1.1
Surface	231	212	233	235	234	276	9.3	-.3	-2.0
Indiana	274	254	250	245	265	264	7.6	.8	.4
Underground	285	246	263	284	262	318	16.0	2.1	-1.2
Surface	272	255	249	241	265	260	6.8	.7	.5
Iowa	150	260	259	250	259	296	-42.3	-12.7	-7.3
Underground	-	-	-	-	-	330	-	-	-
Surface	150	260	259	250	259	282	-42.3	-12.7	-6.8
Kansas	269	259	242	277	307	237	4.0	-3.3	1.4
Surface	269	259	242	277	307	237	4.0	-3.3	1.4
Kentucky Total	261	255	259	248	245	230	2.5	1.7	1.4
Underground	257	247	254	249	244	224	4.3	1.3	1.5
Surface	268	267	267	247	246	236	.2	2.1	1.4
Eastern	257	253	250	241	235	223	1.7	2.3	1.6
Underground	249	244	246	241	235	217	2.2	1.4	1.6
Surface	268	266	255	242	234	231	.8	3.5	1.7
Western	276	263	286	268	273	249	5.2	.3	1.2
Underground	283	256	278	273	272	251	10.5	1.0	1.4
Surface	266	270	296	261	274	247	-1.8	-.7	.8
Louisiana	290	293	335	268	291	97	-1.0	-.1	12.9
Surface	290	293	335	268	291	97	-1.0	-.1	12.9
Maryland	237	249	311	282	246	208	-4.8	-.9	1.5
Underground	236	249	339	291	252	213	-5.4	-1.7	1.1
Surface	243	250	251	260	237	199	-2.7	.6	2.3
Missouri	263	181	345	344	332	247	45.3	-5.7	.7
Surface	263	181	345	344	332	247	45.3	-5.7	.7
Montana	341	341	344	319	321	287	*	1.5	1.9
Underground	-	158	-	-	-	-	-100.0	-	-
Surface	341	341	344	319	321	287	*	1.5	1.9
New Mexico	283	297	284	279	278	289	-5.0	.4	-.2
Underground	241	241	241	71	253	236	-	-1.2	.3
Surface	284	299	284	279	278	291	-5.0	.5	-.3
North Dakota	303	307	287	265	247	256	-1.3	5.3	1.9
Surface	303	307	287	265	247	256	-1.3	5.3	1.9
Ohio	257	266	268	258	248	229	-3.3	.9	1.3
Underground	265	266	268	260	256	234	-.7	.8	1.4
Surface	251	266	267	257	243	226	-5.6	.8	1.1
Oklahoma	305	294	282	289	253	264	3.8	4.8	1.6
Underground	310	300	260	162	237	-	3.3	6.9	-
Surface	305	293	283	291	254	264	3.8	4.6	1.6
Pennsylvania Total	257	246	249	243	241	236	4.6	1.6	1.0
Underground	256	238	245	240	237	229	7.5	1.9	1.2
Surface	259	258	257	250	247	243	.2	1.2	.7
Anthracite	264	247	246	256	211	216	6.8	5.8	2.2
Underground	264	263	227	256	212	239	.3	5.6	1.1
Surface	264	246	247	256	211	214	7.3	5.8	2.4
Bituminous	256	246	249	243	243	237	4.4	1.4	.9
Underground	256	238	245	240	237	229	7.6	1.9	1.3
Surface	258	261	258	249	250	247	-1.2	.7	.5
Tennessee	230	223	243	236	222	228	2.9	.8	.1
Underground	233	254	241	239	225	228	-8.2	.9	.3
Surface	223	173	246	228	214	227	29.1	1.1	-.2

See footnotes at end of table.

Table 52. Weighted Average Number of Days Worked by State and Mine Type, 1985, 1990-1994 (Continued)

Coal-Producing State and Region	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
Texas	346	350	348	341	344	341	-1.2	0.1	0.2
Surface	346	350	348	341	344	341	-1.2	.1	.2
Utah	257	249	246	252	256	230	3.1	.1	1.2
Underground	257	249	246	252	256	230	3.1	.1	1.2
Virginia	245	246	253	241	243	223	-3	.2	1.1
Underground	243	245	256	243	245	220	-9	-.2	1.1
Surface	251	247	241	231	234	236	1.6	1.8	.7
Washington	263	252	231	230	254	355	4.5	.9	-3.3
Surface	263	252	231	230	254	355	4.5	.9	-3.3
West Virginia Total	252	227	246	241	240	229	11.2	1.2	1.1
Underground	244	217	243	240	239	231	12.8	.6	.6
Surface	270	248	255	244	245	220	8.9	2.5	2.3
Northern	246	194	235	240	252	238	27.2	-.5	.4
Underground	242	175	235	241	253	244	38.7	-1.1	-.1
Surface	278	271	236	238	244	210	2.5	3.4	3.2
Southern	255	238	251	242	235	223	6.9	2.1	1.5
Underground	246	235	248	240	229	223	4.3	1.7	1.1
Surface	268	243	258	245	245	225	10.4	2.3	2.0
Wyoming	341	345	339	339	334	317	-1.2	.5	.8
Underground	243	258	238	232	239	250	-5.7	.4	-.3
Surface	342	346	341	341	335	317	-1.1	.5	.8
Appalachian Total¹	253	243	250	243	240	230	4.0	1.3	1.1
Underground	248	235	247	241	239	227	5.4	.9	1.0
Surface	262	257	256	246	242	235	2.0	2.0	1.2
Interior Total¹	290	280	289	281	286	274	3.5	.3	.6
Underground	267	236	265	265	265	241	13.3	.2	1.1
Surface	304	302	304	290	296	288	.5	.6	.6
Western Total¹	319	320	316	312	306	293	-.4	1.0	.9
Underground	267	261	252	253	255	238	2.5	1.1	1.3
Surface	325	327	323	318	312	298	-.6	1.0	.9
East of Miss. River	256	243	253	246	245	235	5.0	1.0	.9
Underground	252	235	250	246	244	229	7.0	.8	1.0
Surface	262	256	257	246	247	244	2.5	1.5	.8
West of Miss. River	321	323	320	315	311	299	-.6	.8	.8
Underground	267	261	252	253	255	239	2.5	1.2	1.3
Surface	327	329	326	321	316	303	-.7	.8	.8
U.S. Total	285	280	280	274	271	259	2.0	1.3	1.1
Underground	253	238	251	246	245	230	6.5	.9	1.1
Surface	305	304	301	293	289	278	.4	1.4	1.1

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, 1994

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	246	246	257	209	198	179	240
Alaska	246	-	-	-	-	-	246
Arizona	217	-	-	-	-	-	217
Arkansas	-	-	-	-	-	176	176
Colorado	262	221	246	-	-	55	258
Illinois	253	210	273	-	-	176	253
Indiana	291	263	244	163	212	190	274
Iowa	-	-	-	-	-	150	150
Kansas	-	-	269	-	-	-	269
Kentucky Total	290	274	246	219	212	177	261
Eastern	290	270	247	223	212	178	257
Western	289	289	236	150	218	162	276
Louisiana	301	250	-	-	-	-	290
Maryland	236	-	220	246	260	244	237
Missouri	-	-	290	252	-	200	263
Montana	342	-	249	-	-	-	341
New Mexico	284	241	-	-	-	-	283
North Dakota	303	-	-	-	-	-	303
Ohio	261	269	274	244	181	205	257
Oklahoma	-	-	313	293	310	235	305
Pennsylvania Total	267	266	244	244	247	228	257
Anthracite	-	365	252	245	246	248	264
Bituminous	267	258	242	244	247	223	256
Tennessee	-	251	227	280	231	142	230
Texas	347	-	273	-	205	-	346
Utah	259	196	267	100	-	178	257
Virginia	217	280	268	226	220	184	245
Washington	261	-	299	-	-	-	263
West Virginia Total	263	262	241	212	197	198	252
Northern	247	259	247	235	244	239	246
Southern	275	262	240	205	185	179	255
Wyoming	342	212	206	181	281	-	341
Appalachian Total ²	264	267	248	225	214	199	253
Interior Total ²	298	271	254	204	220	174	290
Western Total ²	320	220	250	152	281	139	319
East of Miss. River	266	268	248	222	214	198	256
West of Miss. River	323	226	268	249	268	167	321
U.S. Total	302	266	249	223	214	197	285

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, 1994
(Short Tons of Coal Produced per Miner per Hour)

Coal-Producing State and Region	Continuous ¹	Conventional ²	Longwall ³	Other ⁴	Total
Alabama	2.02	1.48	1.93	-	1.94
Arkansas	1.62	-	-	-	1.62
Colorado	3.91	9.16	6.54	-	5.81
Illinois	3.56	-	3.40	-	3.49
Indiana	2.82	-	-	-	2.82
Kentucky Total	2.99	2.52	3.01	1.82	2.89
Eastern	2.91	2.43	3.88	1.82	2.87
Western	3.25	3.64	2.24	-	2.96
Maryland	2.76	-	4.71	-	4.52
New Mexico	-	-	2.57	-	2.57
Ohio	3.33	-	3.54	-	3.51
Oklahoma	1.70	-	-	-	1.70
Pennsylvania Total	2.11	1.23	4.58	.65	3.18
Anthracite	-	.64	-	.65	.64
Bituminous	2.11	1.22	4.58	-	3.25
Tennessee	1.93	1.77	-	-	1.90
Utah	4.96	-	7.07	-	6.59
Virginia	2.19	2.21	2.42	2.08	2.27
West Virginia Total	3.30	2.74	3.72	2.57	3.38
Northern	2.95	2.86	3.86	-	3.61
Southern	3.36	2.71	3.44	2.57	3.25
Wyoming	-	1.32	6.45	-	5.07
Appalachian Total⁵	2.80	2.46	3.38	1.85	2.96
Interior Total⁵	3.38	3.64	3.02	-	3.26
Western Total⁵	4.50	1.46	6.53	-	5.98
East of Miss. River	2.93	2.50	3.32	1.85	3.02
West of Miss. River	4.36	1.46	6.53	-	5.93
U.S. Total	2.98	2.50	3.68	1.85	3.19

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 mine employees. 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, 1994
(Short Tons of Coal Produced per Miner per Hour)

Coalbed Thickness (Inches)	Underground				Surface	Total
	Continuous ¹	Conventional ²	Longwall ³	Other ⁴		
< 7	-	-	-	-	4.01	4.01
7-12	-	-	-	-	3.85	3.85
13-18	-	-	-	-	4.27	4.27
19-24	3.01	1.76	-	1.58	4.42	4.34
25-30	2.90	2.45	-	1.57	4.01	3.87
31-36	2.64	2.73	-	2.79	4.51	3.75
37-42	2.94	2.63	2.21	2.06	4.74	3.87
43-48	3.42	2.53	2.70	-	4.98	3.98
49-54	3.05	2.87	2.35	2.93	5.76	4.20
55-60	3.89	3.24	2.99	-	5.35	4.19
61-66	3.17	2.94	3.98	-	6.36	4.53
67-72	4.06	3.61	4.36	2.27	5.96	5.11
73-78	3.59	-	3.74	-	6.44	4.29
79-84	3.41	3.61	3.57	-	5.78	3.85
85-90	2.98	-	4.20	-	6.11	5.72
91-96	4.22	1.33	4.68	1.42	6.81	5.59
97-102	5.09	-	3.36	-	5.90	4.38
103-108	3.42	-	5.05	-	13.99	9.08
109-114	-	-	8.23	-	5.31	6.64
115-120	3.68	2.56	5.13	-	4.38	4.70
> 120	5.16	-	9.09	-	16.41	15.36
U.S. Total⁵	2.98	2.50	3.68	1.85	7.67	4.98

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 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 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, 1994
(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	2.07	2.57	3.45	3.21	2.53	2.42	2.25
Underground	2.07	1.34	2.95	-	1.57	-	1.94
Surface	-	3.94	3.59	3.21	2.59	2.42	3.07
Alaska	6.94	-	-	-	-	-	6.94
Surface	6.94	-	-	-	-	-	6.94
Arizona	6.92	-	-	-	-	-	6.71
Surface	6.92	-	-	-	-	-	6.71
Arkansas	-	-	-	-	-	1.52	1.52
Underground	-	-	-	-	-	1.62	1.62
Surface	-	-	-	-	-	1.46	1.46
Colorado	6.87	5.10	3.66	-	-	9.16	6.20
Underground	6.77	4.50	3.12	-	-	9.16	5.81
Surface	7.06	6.26	8.69	-	-	-	7.06
Illinois	3.71	4.12	3.53	-	-	7.78	3.59
Underground	3.60	-	3.63	-	-	-	3.49
Surface	4.70	4.12	3.52	-	-	7.78	4.12
Indiana	4.54	3.89	4.64	5.14	4.11	3.50	4.28
Underground	3.00	2.34	-	-	-	-	2.82
Surface	4.99	4.12	4.64	5.14	4.11	3.50	4.56
Iowa	-	-	-	-	-	1.52	1.52
Surface	-	-	-	-	-	1.52	1.52
Kansas	-	-	1.93	-	-	-	1.93
Surface	-	-	1.93	-	-	-	1.93
Kentucky Total	3.81	4.63	3.48	3.00	2.59	2.09	3.25
Underground	3.35	4.05	3.31	2.94	2.44	1.82	2.89
Surface	4.93	5.26	3.84	3.13	3.08	2.89	3.96
Eastern	4.40	4.65	3.47	2.93	2.58	2.09	3.24
Underground	3.94	3.99	3.24	2.93	2.45	1.81	2.87
Surface	5.05	5.49	4.00	2.92	3.08	3.09	3.97
Western	3.20	4.59	3.54	4.92	2.75	2.09	3.28
Underground	2.91	4.39	3.96	3.93	2.27	2.14	2.96
Surface	4.61	4.70	3.11	5.14	3.08	2.07	3.93
Louisiana	13.06	12.78	-	-	-	-	13.00
Surface	13.06	12.78	-	-	-	-	13.00
Maryland	5.33	-	1.74	2.71	2.02	2.29	3.68
Underground	5.33	-	-	4.32	-	.83	4.52
Surface	-	-	1.74	2.30	2.02	2.88	2.18
Missouri	-	-	3.66	3.59	-	2.66	3.59
Surface	-	-	3.66	3.59	-	2.66	3.59
Montana	22.04	-	12.89	-	-	-	21.92
Surface	22.04	-	12.89	-	-	-	21.92
New Mexico	7.28	2.61	-	-	-	-	6.77
Underground	-	2.61	-	-	-	-	2.57
Surface	7.28	-	-	-	-	-	7.18
North Dakota	18.84	-	-	-	-	-	18.84
Surface	18.84	-	-	-	-	-	18.84
Ohio	3.59	4.11	3.67	3.31	3.53	1.96	3.42
Underground	3.59	3.88	3.65	2.88	2.65	2.51	3.51
Surface	-	4.15	3.67	3.35	3.56	1.94	3.34
Oklahoma	-	-	2.60	3.19	1.80	1.59	2.68
Underground	-	-	-	1.70	-	-	1.70
Surface	-	-	2.60	4.24	1.80	1.59	2.80
Pennsylvania Total	4.77	2.45	2.62	2.74	2.67	2.13	2.98
Underground	4.75	1.99	2.06	2.32	1.77	.93	3.18
Surface	5.05	3.24	3.45	3.04	2.94	2.38	2.67
Anthracite	-	37.97	3.01	2.98	3.21	1.99	1.93
Underground	-	-	-	-	1.28	1.51	.64
Surface	-	37.97	3.01	2.98	3.94	2.09	2.13
Bituminous	4.77	2.27	2.57	2.70	2.56	2.17	3.11
Underground	4.75	1.99	2.06	2.32	1.89	.78	3.25
Surface	5.05	2.77	3.61	3.06	2.76	2.45	2.84
Tennessee	-	2.99	3.38	1.82	1.87	1.72	2.23
Underground	-	2.99	3.02	1.82	1.74	1.33	1.90
Surface	-	-	3.69	-	2.27	10.02	3.19
Texas	9.01	-	3.08	-	3.17	-	8.82
Surface	9.01	-	3.08	-	3.17	-	8.82

See footnotes at end of table.

Table 56. Coal Mining Productivity by State, Mine Type, and Mine Production Range, 1994
(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	
Utah	7.16	5.34	2.86	2.22	-	1.48	6.59
Underground	7.16	5.34	2.86	2.22	-	1.48	6.59
Virginia	2.80	3.35	3.45	2.59	2.32	2.09	2.51
Underground	2.80	2.78	2.97	2.46	2.23	1.98	2.27
Surface	-	5.01	4.77	3.02	3.14	2.95	3.73
Washington	4.26	-	2.49	-	-	-	4.11
Surface	4.26	-	2.49	-	-	-	4.11
West Virginia Total	4.32	5.20	4.04	3.50	2.97	2.27	3.69
Underground	3.88	4.84	3.91	3.45	2.83	2.07	3.38
Surface	5.74	5.69	4.65	3.66	3.49	3.08	4.62
Northern	4.09	8.05	3.44	3.22	2.71	2.28	3.63
Underground	3.97	7.63	3.50	3.02	2.49	1.70	3.61
Surface	7.49	8.48	3.01	3.68	2.98	2.83	3.78
Southern	4.50	5.09	4.21	3.60	3.04	2.26	3.72
Underground	3.75	4.74	4.03	3.59	2.90	2.16	3.25
Surface	5.61	5.56	4.94	3.65	3.95	4.38	4.75
Wyoming	27.58	5.51	2.21	1.32	4.66	-	26.05
Underground	6.45	-	-	1.32	-	-	5.07
Surface	28.61	5.51	2.21	-	4.66	-	27.37
Appalachian Total²	3.96	4.06	3.50	2.98	2.64	2.13	3.20
Underground	3.65	3.43	3.28	2.91	2.40	1.82	2.96
Surface	5.46	4.85	3.97	3.12	3.03	2.49	3.72
Interior Total²	4.79	4.33	3.57	4.18	3.10	2.23	4.43
Underground	3.36	3.81	3.94	2.36	2.27	2.04	3.26
Surface	7.08	4.48	3.46	4.54	3.32	2.27	5.71
Western Total²	15.72	4.12	3.30	1.54	4.66	2.00	14.58
Underground	6.97	3.57	3.02	1.54	-	2.00	5.98
Surface	18.24	5.82	3.81	-	4.66	-	17.68
East of Miss. River	3.88	4.09	3.53	3.04	2.66	2.14	3.28
Underground	3.56	3.46	3.30	2.91	2.40	1.82	3.02
Surface	5.21	4.71	3.94	3.24	3.07	2.50	3.85
West of Miss. River	14.48	4.69	3.02	2.72	3.20	1.76	13.22
Underground	6.97	3.57	3.02	1.59	-	1.94	5.93
Surface	16.14	7.37	3.01	3.86	3.20	1.63	15.19
U.S. Total	7.16	4.11	3.50	3.02	2.67	2.13	4.98
Underground	3.87	3.47	3.29	2.87	2.40	1.82	3.19
Surface	12.37	4.76	3.85	3.27	3.07	2.48	7.67

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 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 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, 1994
(Short Tons of Coal Produced per Miner per Hour)

Coal-Producing State and Region	UMWA	Other Unions	Union Total	Nonunion	Total
Alabama	2.10	-	2.10	2.77	2.25
Underground	1.94	-	1.94	1.98	1.94
Surface	2.98	-	2.98	3.14	3.07
Alaska	-	6.94	6.94	-	6.94
Surface	-	6.94	6.94	-	6.94
Arizona	6.92	-	6.92	-	6.71
Surface	6.92	-	6.92	-	6.71
Arkansas	-	-	-	1.52	1.52
Underground	-	-	-	1.62	1.62
Surface	-	-	-	1.46	1.46
Colorado	4.70	6.76	5.05	7.07	6.20
Underground	3.81	-	3.81	7.18	5.81
Surface	7.87	6.76	7.33	6.80	7.06
Illinois	3.51	4.04	3.54	3.83	3.59
Underground	3.41	4.04	3.44	3.69	3.49
Surface	3.98	-	3.98	5.41	4.12
Indiana	4.24	3.02	4.18	4.37	4.28
Underground	2.60	-	2.60	3.23	2.82
Surface	4.71	3.02	4.61	4.52	4.56
Iowa	-	-	-	1.52	1.52
Surface	-	-	-	1.52	1.52
Kansas	1.93	-	1.93	-	1.93
Surface	1.93	-	1.93	-	1.93
Kentucky Total	3.52	3.47	3.51	3.22	3.25
Underground	3.42	1.61	3.36	2.81	2.89
Surface	4.65	5.28	4.84	3.93	3.96
Eastern	3.85	3.47	3.80	3.20	3.24
Underground	3.83	1.61	3.67	2.78	2.87
Surface	4.31	5.28	5.03	3.95	3.97
Western	3.26	-	3.26	3.29	3.28
Underground	3.06	-	3.06	2.90	2.96
Surface	4.71	-	4.71	3.85	3.93
Louisiana	-	-	-	13.00	13.00
Surface	-	-	-	13.00	13.00
Maryland	-	-	-	3.68	3.68
Underground	-	-	-	4.52	4.52
Surface	-	-	-	2.18	2.18
Missouri	-	-	-	3.59	3.59
Surface	-	-	-	3.59	3.59
Montana	16.14	22.38	19.13	41.05	21.92
Surface	16.14	22.38	19.13	41.05	21.92
New Mexico	6.15	6.80	6.51	9.20	6.77
Underground	2.57	-	2.57	-	2.57
Surface	7.16	6.80	6.94	9.20	7.18
North Dakota	16.19	16.45	16.31	20.10	18.84
Surface	16.19	16.45	16.31	20.10	18.84
Ohio	3.43	3.34	3.43	3.40	3.42
Underground	3.59	-	3.59	3.05	3.51
Surface	2.81	3.34	2.84	3.45	3.34
Oklahoma	-	4.82	4.82	2.59	2.68
Underground	-	-	-	1.70	1.70
Surface	-	4.82	4.82	2.71	2.80
Pennsylvania Total	2.24	1.65	2.24	3.56	2.98
Underground	2.35	-	2.35	4.64	3.18
Surface	1.44	2.74	1.46	2.86	2.67
Anthracite	1.40	2.85	1.43	2.31	1.93
Underground	-	-	-	.65	.64
Surface	1.40	4.22	1.44	2.81	2.13
Bituminous	2.34	-	2.34	3.71	3.11
Underground	2.35	-	2.35	4.91	3.25
Surface	1.73	-	1.63	2.87	2.84
Tennessee	-	-	-	2.23	2.23
Underground	-	-	-	1.90	1.90
Surface	-	-	-	3.19	3.19
Texas	-	8.36	8.36	9.63	8.82
Surface	-	8.36	8.36	9.63	8.82
Utah	8.17	-	8.17	5.95	6.59
Underground	8.17	-	8.17	5.95	6.59
Virginia	2.36	-	2.36	2.58	2.51
Underground	2.31	-	2.31	2.24	2.27
Surface	3.34	-	3.34	3.77	3.73

See footnotes at end of table.

Table 57. Coal Mining Productivity by State, Mine Type, and Union Type, 1994 (Continued)
(Short Tons of Coal Produced per Miner per Hour)

Coal-Producing State and Region	UMWA	Other Unions	Union Total	Nonunion	Total
Washington	-	4.26	4.26	2.49	4.11
Surface	-	4.26	4.26	2.49	4.11
West Virginia Total	3.41	-	3.39	4.05	3.69
Underground	3.19	-	3.18	3.68	3.38
Surface	4.37	-	4.32	4.83	4.62
Northern	3.82	-	3.82	3.21	3.63
Underground	3.82	-	3.82	2.93	3.61
Surface	-	-	-	3.78	3.78
Southern	3.15	-	3.13	4.28	3.72
Underground	2.62	-	2.61	3.89	3.25
Surface	4.37	-	4.32	5.15	4.75
Wyoming	6.12	10.94	7.44	28.50	26.05
Underground	-	-	-	5.07	5.07
Surface	6.12	10.94	7.44	30.18	27.37
Appalachian Total¹	2.93	2.76	2.93	3.36	3.20
Underground	2.82	1.26	2.81	3.10	2.96
Surface	3.56	3.89	3.57	3.76	3.72
Interior Total¹	3.60	7.57	4.41	4.45	4.43
Underground	3.29	4.04	3.32	3.16	3.26
Surface	4.34	8.10	5.97	5.48	5.71
Western Total¹	7.78	9.48	8.43	19.96	14.58
Underground	5.44	-	5.44	6.27	5.98
Surface	8.89	9.48	9.17	26.50	17.68
East of Miss. River	3.10	3.39	3.11	3.40	3.28
Underground	2.92	3.29	2.93	3.11	3.02
Surface	3.89	3.57	3.88	3.83	3.85
West of Miss. River	7.68	8.98	8.35	17.74	13.22
Underground	5.44	-	5.44	6.19	5.93
Surface	8.71	8.98	8.88	21.98	15.19
U.S. Total	3.58	8.27	4.12	5.61	4.98
Underground	3.03	3.29	3.04	3.34	3.19
Surface	5.35	8.71	6.47	8.27	7.67

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. 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 1994 reached a record 1,023 million short tons, 7 percent more than the 959 million short tons distributed in 1993 (Table 58). Compared with 1993, distribution of U.S. coal to domestic consumers rose 8 percent to 950 million short tons, while foreign distribution declined 4 percent to 73 million short tons (Table 59).

Texas was the leading destination for coal distributed domestically during 1993, with shipments totaling 95 million short tons, representing 9 percent of total distribution. Of the coal distributed in Texas during 1994, 55 percent was indigenous, with virtually all of the balance arriving from Wyoming and Colorado.

Other major destination States included Indiana, Ohio, and Pennsylvania, which collectively received 176 million short tons, or 17 percent of total 1994 distribution. As with distributions in Texas, a substantial portion of the coal distributed in these States was indigenous.

West Virginia was the leading source of U.S. coal distributed abroad during 1994, with foreign shipments totaling 36 million short tons, representing 50 percent of total foreign distributions. Other leading sources of U.S. coal distributed abroad during 1994 were Virginia and Kentucky, with foreign distributions totaling 12 million short tons and 7 million short tons, respectively. Collectively, foreign distributions of coal mined in these three States accounted for 76 percent of total amount of U.S. coal shipped abroad during 1994.

Rail continued to be the primary method of transporting coal during 1994, accounting for 584 million short tons or 57 percent of Coal shipments (Table 65). Coal transported by water (including shipments by river, shipments on the Great Lakes, and shipments through tidewater ports) accounted for 219 million short tons or 21 percent of total coal distributed. Distributions of coal by truck totaled 115 million short tons (11 percent of the total), while distributions by tramway and conveyor totaled 101 million short tons, or 10 percent of the total.

Figure 10. Coal Distribution, 1985-1994

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

Table 58. Distribution of U.S. Coal by State of Origin, 1990-1994
(Thousand Short Tons)

Coal-Producing State and Region	1994	1993	1992	1991	1990	Percent Change 1993-1994	Average Annual Percent Change
							1990-1994
Alabama	23,750	25,556	25,491	27,679	28,735	-7.1	-4.6
Alaska	1,505	1,598	1,531	1,483	1,580	-5.8	-1.2
Arizona	12,011	12,138	12,418	12,933	11,446	-1.0	1.2
Arkansas	28	25	32	1	13	9.1	21.6
California	-	-	142	23	57	-	-
Colorado	24,810	21,465	18,864	17,757	18,386	15.6	7.8
Illinois	51,973	42,000	58,913	58,553	60,592	23.8	-3.8
Indiana	30,684	29,664	31,393	31,412	36,122	3.4	-4.0
Iowa	46	175	287	350	380	-73.5	-40.9
Kansas	282	345	354	424	734	-18.3	-21.3
Kentucky Total	159,130	160,395	161,860	158,290	173,277	-8	-2.1
Eastern	124,257	125,041	120,186	117,462	128,010	-6	-7
Western	34,873	35,354	41,674	40,828	45,267	-1.4	-6.3
Louisiana	3,463	3,103	3,208	3,151	3,186	11.6	2.1
Maryland	3,460	3,572	3,480	3,773	3,606	-3.1	-1.0
Missouri	679	638	2,795	2,203	2,488	6.5	-27.7
Montana	41,916	35,916	38,866	38,119	37,866	16.7	2.6
New Mexico	28,570	27,942	24,827	22,378	23,380	2.3	5.1
North Dakota	32,056	32,372	31,702	29,741	29,206	-1.0	2.3
Ohio	28,749	28,315	29,550	30,023	34,335	1.5	-4.3
Oklahoma	1,925	2,309	1,954	1,867	1,778	-16.6	2.0
Pennsylvania Total	61,508	58,990	67,649	65,454	69,802	4.3	-3.1
Anthracite	4,700	3,331	3,554	3,182	3,012	41.1	11.8
Bituminous	56,808	55,659	64,095	62,272	66,790	2.1	-4.0
Tennessee	2,547	2,577	2,837	4,274	6,247	-1.1	-20.1
Texas	52,256	54,224	54,447	54,243	55,024	-3.6	-1.3
Utah	23,225	22,243	21,052	21,444	21,506	4.4	1.9
Virginia	38,548	41,639	45,728	43,495	48,038	-7.4	-5.3
Washington	4,877	4,714	5,283	5,096	5,000	3.4	-6
West Virginia Total	158,985	135,818	163,723	165,576	166,765	17.1	-1.2
Northern	45,535	37,100	50,646	52,633	58,200	22.7	-5.9
Southern	113,449	98,718	113,077	112,943	108,565	14.9	1.1
Wyoming	235,540	211,713	190,260	194,407	184,386	11.3	6.3
Appalachian Total ¹	441,805	421,508	458,645	457,735	464,640	4.8	-2.4
Interior Total ¹	176,208	167,836	195,057	193,030	205,584	5.0	-3.8
Western Total ¹	404,510	370,102	344,945	343,381	332,813	9.3	5.0
East of Miss. River	559,334	528,525	590,624	588,527	600,232	5.8	-3.1
West of Miss. River	463,190	430,920	408,023	405,619	396,416	7.5	4.0
U.S. Total	1,022,523	959,445	998,647	994,146	1,023,935	6.6	•

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

• Data round to zero.

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, 1990-1994
(Thousand Short Tons)

Coal-Producing State and Region	1994	1993	1992	1991	1990	Percent Change 1993-1994	Average Annual Percent Change
							1990-1994
Domestic							
Alabama	19,220	19,668	19,560	20,667	20,545	-2.3	-1.6
Alaska	789	855	797	811	783	-7.7	.2
Arizona	12,011	12,138	12,418	12,933	11,446	-1.0	1.2
Arkansas	28	25	29	1	7	9.1	40.9
California	-	-	142	23	57	-	-
Colorado	24,059	20,338	18,195	17,132	18,019	18.3	7.5
Illinois	51,737	41,330	57,670	57,290	60,222	25.2	-3.7
Indiana	30,477	29,475	31,216	31,204	35,967	3.4	-4.1
Iowa	46	175	287	350	380	-73.5	-40.9
Kansas	282	345	354	424	734	-18.3	-21.3
Kentucky Total	151,963	150,874	147,825	142,811	157,587	.7	-.9
Eastern	117,234	115,723	106,372	102,416	112,741	1.3	1.0
Western	34,729	35,151	41,453	40,395	44,847	-1.2	-6.2
Louisiana	3,463	3,103	3,208	3,151	3,186	11.6	2.1
Maryland	3,277	3,278	3,246	3,594	3,063	*	1.7
Missouri	679	638	2,795	2,203	2,488	6.5	-27.7
Montana	41,672	35,795	38,804	37,812	37,294	16.4	2.8
New Mexico	28,540	27,942	24,823	22,378	23,380	2.1	5.1
North Dakota	32,056	32,372	31,702	29,741	29,206	-1.0	2.3
Ohio	28,688	28,315	29,549	30,001	34,209	1.3	-4.3
Oklahoma	1,925	2,297	1,940	1,867	1,727	-16.2	2.8
Pennsylvania Total	55,207	53,482	61,208	58,151	62,917	3.2	-3.2
Anthracite	4,346	3,015	3,230	2,821	2,463	44.1	15.3
Bituminous	50,861	50,467	57,979	55,330	60,454	.8	-4.2
Tennessee	2,547	2,577	2,835	4,243	6,098	-1.1	-19.6
Texas	52,256	54,224	54,447	54,243	55,016	-3.6	-1.3
Utah	20,527	19,283	18,792	19,358	19,756	6.4	1.0
Virginia	26,866	27,388	28,504	25,390	28,863	-1.9	-1.8
Washington	4,731	4,621	5,020	4,894	4,893	2.4	-.8
West Virginia Total	122,779	102,659	112,917	111,785	118,032	19.6	1.0
Northern	39,985	34,573	44,093	45,586	50,042	15.7	-5.4
Southern	82,794	68,086	68,824	66,199	67,990	21.6	5.0
Wyoming	234,016	210,739	188,983	193,425	183,712	11.0	6.2
Appalachian Total ¹	375,819	353,089	364,191	356,247	370,316	6.4	-1.2
Interior Total ¹	175,622	166,763	193,400	191,126	204,574	5.3	-3.7
Western Total ¹	398,402	364,083	339,676	338,508	328,547	9.4	4.9
East of Miss. River	492,762	459,045	494,530	485,136	504,058	7.3	-2.3
West of Miss. River	457,081	424,890	402,737	400,746	392,085	7.6	3.9
U.S. Total	949,843	883,934	897,267	885,882	919,589	7.5	.8
Foreign							
Alabama	4,529	5,888	5,931	7,012	8,190	-23.1	-13.8
Alaska	716	743	734	672	797	-3.6	-2.6
Arkansas	-	-	3	-	6	-	-
Colorado	752	1,128	669	625	367	-33.3	19.7
Illinois	236	670	1,242	1,263	370	-64.8	-10.6
Indiana	206	188	177	208	155	9.5	7.4
Kentucky Total	7,167	9,521	14,036	15,478	15,690	-24.7	-17.8
Eastern	7,023	9,318	13,815	15,046	15,269	-24.6	-17.6
Western	144	204	221	433	421	-29.4	-23.6
Maryland	184	295	234	178	542	-37.6	-23.7
Montana	243	121	62	306	572	100.9	-19.2
New Mexico	30	-	5	-	-	-	-
Ohio	61	-	2	22	126	-	-16.7
Oklahoma	-	11	14	-	50	-100.0	-
Pennsylvania Total	6,301	5,508	6,440	7,303	6,884	14.4	-2.2
Anthracite	354	316	324	361	548	11.9	-10.4
Bituminous	5,947	5,192	6,116	6,942	6,336	14.5	-1.6
Tennessee	-	-	2	31	148	-	-
Texas	-	-	-	-	9	-	-
Utah	2,698	2,959	2,260	2,086	1,751	-8.8	11.4
Virginia	11,683	14,251	17,224	18,105	19,174	-18.0	-11.6
Washington	146	94	264	202	107	55.0	8.1
West Virginia Total	36,205	33,159	50,806	53,791	48,733	9.2	-7.2
Northern	5,550	2,527	6,553	7,047	8,158	119.6	-9.2
Southern	30,655	30,632	44,254	46,744	40,575	.1	-6.8
Wyoming	1,524	974	1,277	982	674	56.5	22.6

See footnotes at end of table.

Table 59. Domestic and Foreign Distribution of U.S. Coal by State of Origin, 1990-1994 (Continued)
(Thousand Short Tons)

Coal-Producing State and Region	1994	1993	1992	1991	1990	Percent Change 1993-1994	Average Annual Percent Change
							1990-1994
Foreign							
Appalachian Total ¹	65,986	68,419	94,454	101,488	370,316	-3.6	-1.2
Interior Total ¹	586	1,073	1,657	1,904	1,010	-45.4	-12.7
Western Total ¹	6,108	6,018	5,269	4,873	4,267	1.5	9.4
East of Miss. River	66,572	69,481	96,094	103,392	504,058	-4.2	-2.3
West of Miss. River	6,108	6,030	5,286	4,873	4,331	1.3	9.0
U.S. Total	72,680	75,510	101,380	108,264	104,346	-3.8	-8.6

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

• 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."

Table 60. Major U.S. Coal Distributors, 1994

Company Name	
Top Ten Distributors	
Arch Mineral Corp.	Montana Power Co.
Atlantic Richfield Co.	North American Coal Corp.
Consol Energy Inc.	Peabody Holding Co.
Cyprus AMAX Minerals Co.	The Pittston Co.
Kennecott Energy Co.	Zeigler Coal Holding Co.
Other Major Distributors	
Addington Resources, Inc.	Kerr-McGee Coal Corp.
AEP Service Corp.	Knife River Coal Mining Co.
Aluminum Co. of America	Logan & Kanawha Coal Co.
American Metals & Coal	Mapco Coal Inc.
Andalex Resources Inc.	Marigold Land Corp.
Anker Energy Corp.	Mincorp, Inc.
Ashland Coal Inc.	Minnesota Power & Light
A.T. Massey Coal Co., Inc.	Pacificorp Electric
Bethlehem Steel Corp.	Pardee Coal Co., Inc.
BHP Minerals Int'l.	Pen Holdings
Black Beauty Coal Corp.	Phibro Energy Inc.
Central Coal Corp.	Quaker Coal Co.
Centralia Mining Co.	Rochester & Pittsburgh Co.
Chevron Corp.	San Miguel Electric Coop.
Coal Arbed Int'l Trading Co.	Sun Coal Co.
Coal Resources	Teco Coal Corp.
Costain America Inc.	Texas Utilities Mining Co.
Decker Coal Co.	The Coastal Corp.
Dolet Hills Mining Venture	TMPA
Drummond Co.	Transco Energy Inc.
Electric Fuels Corp.	Trans Ocean Coal Co.
Exxon Corp.	United Coal Co.
General Dynamics Corp.	USX Corp.
James River Coal Co.	Western Fuels Association
Jim Walter Resources, Inc.	W.R. Grace & Co.

Notes: The top 10 distribution companies accounted for 48 percent of the total distribution. Companies are listed in alphabetical order to ensure nondisclosure of company data.

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

Table 61. Domestic Distribution of U.S. Coal by Coal-Producing Region and State, and Destination Census Division and State, 1990-1994
(Thousand Short Tons)

Coal-Producing Region and State, and Destination Census Division and State	1994	1993	1992	1991	1990	Percent Change 1993-1994	Average Annual Percent Change
							1990-1994
Appalachian Total	375,819	353,089	364,191	356,247	386,469	6.4	-0.7
Alabama	19,220	19,668	19,560	20,667	20,545	-2.3	-1.6
Middle Atlantic	496	492	228	*	-	.7	-
Pennsylvania	496	492	228	*	-	.7	-
East North Central	-	-	-	6	312	-	-
Indiana	-	-	-	6	312	-	-
West North Central	-	-	1	-	-	-	-
South Dakota	-	-	1	-	-	-	-
South Atlantic	89	207	287	112	252	-57.1	-22.9
Florida	85	202	185	69	158	-57.8	-14.2
Georgia	*	1	102	43	94	-69.3	-76.3
North Carolina	-	-	-	*	-	-	-
South Carolina	3	4	-	-	-	-20.2	-
East South Central	18,484	18,851	18,918	20,181	19,590	-1.9	-1.4
Alabama	18,351	18,716	18,849	20,150	19,535	-1.9	-1.5
Kentucky	-	-	-	-	1	-	-
Mississippi	129	132	68	28	49	-2.1	27.3
Tennessee	4	3	*	3	5	25.1	-5.3
West South Central	63	18	33	5	7	256.0	76.1
Arkansas	60	9	12	5	6	NM	74.1
Texas	3	8	21	*	*	-64.1	232.3
Kentucky, Eastern	117,234	115,723	106,372	102,416	112,741	1.3	1.0
New England	1,447	1,106	2,337	1,572	1,650	30.8	-3.2
Connecticut	787	576	837	912	920	36.5	-3.8
Maine	433	380	771	187	9	13.8	162.3
Massachusetts	227	71	729	465	706	221.7	-24.7
New Hampshire	-	79	-	8	15	-100.0	-
Middle Atlantic	4,522	3,679	3,901	4,238	2,742	22.9	13.3
New Jersey	63	61	204	36	21	3.3	32.2
New York	1,288	1,188	1,288	2,040	1,090	8.4	4.3
Pennsylvania	3,171	2,429	2,409	2,162	1,631	30.5	18.1
East North Central	24,669	25,309	21,902	23,622	29,008	-2.5	-4.0
Illinois	1,555	2,333	1,575	1,766	2,180	-33.4	-8.1
Indiana	2,109	2,074	2,645	2,299	2,831	1.7	-7.1
Michigan	9,524	8,857	8,083	8,648	10,193	7.5	-1.7
Ohio	10,532	11,294	8,648	9,915	12,658	-6.8	-4.5
Wisconsin	949	751	951	995	1,145	26.5	-4.6
West North Central	564	482	444	641	652	16.9	-3.6
Iowa	40	25	65	232	209	60.4	-33.7
Kansas	-	-	5	15	4	-	-
Minnesota	172	124	125	184	293	39.1	-12.4
Missouri	351	334	249	211	147	5.2	24.4
South Dakota	1	-	-	-	-	-	-
South Atlantic	60,914	57,532	52,997	50,747	53,711	5.9	3.2
Delaware	37	27	-	52	142	41.0	-28.3
District of Columbia	13	16	18	47	23	-18.8	-13.0
Florida	12,069	11,311	12,584	11,302	11,249	6.7	1.8
Georgia	15,649	14,163	11,770	12,277	13,325	10.5	4.1
Maryland	423	958	296	449	690	-55.9	-11.5
North Carolina	13,590	13,491	12,517	11,334	13,045	.7	1.0
South Carolina	11,443	9,962	9,847	9,587	9,103	14.9	5.9
Virginia	6,539	6,672	5,246	4,872	4,844	-2.0	7.8
West Virginia	1,151	932	721	826	1,291	23.5	-2.8
East South Central	22,813	26,008	22,917	19,666	22,951	-12.3	-1.1
Alabama	2,402	2,320	2,703	2,164	1,491	3.5	12.7
Kentucky	10,317	10,145	10,486	8,563	10,885	1.7	-1.3
Mississippi	1,006	1,731	1,616	2,105	2,140	-41.9	-17.2
Tennessee	9,088	11,811	8,112	6,835	8,435	-23.0	1.9
West South Central	802	104	95	237	360	NM	22.1
Arkansas	*	-	-	-	-	-	-
Louisiana	791	104	95	235	349	NM	22.7
Texas	10	-	-	1	11	-	-2.5
Mountain	10	-	2	-	-	-	-
Idaho	-	-	2	-	-	-	-
Wyoming	10	-	-	-	-	-	-
Pacific	15	4	-	-	*	265.1	143.1
Oregon	15	4	-	-	*	265.1	216.8
Washington	-	-	-	-	*	-	-

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, 1990-1994 (Continued)
(Thousand Short Tons)

Coal-Producing Region and State, and Destination Census Division and State	1994	1993	1992	1991	1990	Percent Change 1993-1994	Average Annual Percent Change
							1990-1994
Maryland	3,277	3,278	3,246	3,594	3,063	*	1.7
New England	-	11	-	-	11	-100.0	-
Connecticut	-	-	-	-	2	-	-
Massachusetts	-	11	-	-	9	-100.0	-
Middle Atlantic	-	19	6	22	70	-100.0	-
New York	-	-	4	8	22	-	-
Pennsylvania	-	19	2	14	48	-100.0	-
South Atlantic	3,277	3,230	3,166	3,553	2,956	1.4	2.6
Delaware	125	37	-	15	21	240.3	56.4
Maryland	1,034	820	1,159	1,363	1,584	26.1	-10.1
Virginia	1	-	1	37	106	-	-65.9
West Virginia	2,116	2,373	2,006	2,139	1,245	-10.8	14.2
Ohio	28,688	28,315	29,549	30,001	34,209	1.3	-4.3
New England	*	17	4	*	*	-99.8	-43.4
Connecticut	*	*	1	-	-	-78.3	-
Massachusetts	-	17	4	*	*	-100.0	-
Middle Atlantic	2,443	1,388	556	934	2,005	75.9	5.1
New Jersey	-	-	-	-	14	-	-
New York	124	52	47	45	149	138.2	-4.4
Pennsylvania	2,318	1,336	508	889	1,843	73.5	5.9
East North Central	24,810	25,119	27,497	27,875	29,289	-1.2	-4.1
Illinois	17	*	2	-	-	NM	-
Indiana	345	274	134	181	225	25.9	11.3
Michigan	522	474	419	627	751	10.0	-8.7
Ohio	23,907	24,370	26,941	27,061	28,301	-1.9	-4.1
Wisconsin	18	-	-	6	12	-	10.5
West North Central	33	83	-	*	27	-59.7	5.1
Iowa	15	67	-	-	-	-76.8	-
Missouri	18	16	-	*	27	11.2	-10.0
South Atlantic	971	1,041	1,385	995	1,961	-6.7	-16.1
Delaware	29	48	-	-	1	-39.5	138.6
Florida	-	-	-	172	-	-	-
Maryland	-	-	-	7	7	-	-
South Carolina	-	-	-	5	38	-	-
West Virginia	942	993	1,385	811	1,915	-5.1	-16.3
East South Central	130	261	-	49	705	-50.3	-34.5
Alabama	37	151	-	48	696	-75.7	-52.1
Kentucky	93	29	-	-	9	219.3	78.8
Tennessee	-	81	-	*	*	-100.0	-
West South Central	-	-	*	1	3	-	-
Louisiana	-	-	*	1	3	-	-
Pennsylvania,							
Anthracite	4,346	3,015	3,230	2,821	2,463	44.1	15.3
New England	54	64	73	74	88	-16.1	-11.6
Connecticut	11	13	14	13	13	-10.1	-2.8
Maine	6	8	12	11	11	-27.9	-13.3
Massachusetts	20	24	22	20	28	-15.2	-7.6
New Hampshire	8	10	14	22	24	-22.3	-24.2
Rhode Island	3	3	5	4	5	1.6	-10.8
Vermont	5	6	7	5	8	-15.1	-10.8
Middle Atlantic	3,227	2,618	2,916	2,554	2,077	23.2	11.6
New Jersey	17	20	17	18	23	-15.8	-7.1
New York	121	179	215	164	161	-32.5	-6.9
Pennsylvania	3,089	2,420	2,685	2,371	1,894	27.7	13.0
East North Central	36	39	40	31	41	-5.9	-2.8
Illinois	8	14	8	11	5	-43.5	11.0
Indiana	4	5	5	5	8	-18.9	-17.8
Michigan	2	*	1	2	1	484.4	26.6
Ohio	21	19	26	13	21	9.7	-9
Wisconsin	2	1	*	*	5	58.1	-20.5
West North Central	31	34	35	33	49	-8.3	-10.4
Iowa	26	28	27	29	47	-5.9	-14.0
Kansas	-	*	6	*	*	-100.0	-
Minnesota	3	3	*	*	*	19.4	64.2
Missouri	2	2	*	*	*	-9	258.2
Nebraska	*	2	2	4	1	-99.9	-82.7

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, 1990-1994 (Continued)
(Thousand Short Tons)

Coal-Producing Region and State, and Destination Census Division and State	1994	1993	1992	1991	1990	Percent Change 1993-1994	Average Annual Percent Change
							1990-1994
Pennsylvania,							
Anthracite (Continued)							
North Dakota	*	*	*	*	*	-69.8	-1.3
South Dakota	*	-	*	*	*	-	269.3
South Atlantic	79	64	51	39	51	24.2	11.4
Delaware	11	11	7	*	*	*	127.3
District of Columbia	*	*	*	*	*	-2.9	-12.0
Florida	8	6	7	4	8	30.1	-1.1
Georgia	*	*	1	1	2	-25.2	-36.2
Maryland	6	4	3	9	4	70.2	11.7
North Carolina	*	*	*	*	*	104.7	.3
South Carolina	8	11	*	3	12	-26.5	-9.8
Virginia	11	14	13	16	17	-23.0	-11.7
West Virginia	35	18	20	6	7	94.3	49.6
East South Central	28	34	42	44	60	-20.1	-17.8
Alabama	1	3	6	1	17	-59.9	-49.1
Kentucky	12	18	24	27	27	-33.7	-18.4
Mississippi	*	*	*	*	*	166.7	-.6
Tennessee	15	14	12	16	17	5.4	-3.7
West South Central	8	11	10	5	2	-31.3	45.6
Arkansas	1	*	4	3	*	345.0	44.5
Louisiana	3	8	*	*	*	-54.9	215.1
Oklahoma	*	*	1	*	*	-17.9	80.0
Texas	3	3	5	1	1	6.4	20.3
Mountain	18	3	*	1	1	NM	92.1
Arizona	*	*	*	*	*	NM	-3.3
Colorado	15	3	*	*	*	466.4	253.7
Idaho	3	*	-	-	-	NM	-
Montana	*	*	-	-	*	-	-
Nevada	-	-	-	-	1	-	-
New Mexico	*	*	*	-	-	69.2	-
Utah	*	*	-	*	*	-70.6	-30.1
Wyoming	*	*	*	*	*	28.6	-32.0
Pacific	7	10	*	*	*	-25.8	352.0
Alaska	*	-	-	-	-	-	-
California	*	*	*	*	*	145.7	134.7
Oregon	7	9	-	*	-	-29.4	-
Washington	-	-	*	*	*	-	-
Pennsylvania,							
Bituminous	50,861	50,467	57,979	55,330	60,454	.8	-4.2
New England	1,025	989	1,124	1,113	996	3.7	.7
Connecticut	12	*	131	87	14	NM	-5.5
Maine	24	2	19	1	*	NM	463.6
Massachusetts	292	330	294	290	695	-11.6	-19.5
New Hampshire	698	656	681	734	286	6.3	24.9
Vermont	-	*	-	*	*	-100.0	-
Middle Atlantic	38,188	37,417	43,559	40,806	46,212	2.1	-4.7
New Jersey	537	153	15	23	46	251.6	84.7
New York	5,551	6,228	8,532	6,893	7,844	-10.9	-8.3
Pennsylvania	32,100	31,036	35,012	33,889	38,322	3.4	-4.3
East North Central	6,288	6,502	7,466	7,138	7,364	-3.3	-3.9
Illinois	206	43	69	154	54	382.9	39.9
Indiana	629	505	380	277	391	24.6	12.6
Michigan	1,756	1,607	1,862	1,682	1,758	9.3	*
Ohio	2,769	3,848	3,567	3,411	3,856	-28.0	-7.9
Wisconsin	928	500	1,589	1,615	1,304	85.6	-8.1
West North Central	46	205	191	558	44	-77.7	1.0
Iowa	46	103	162	67	-	-55.6	-
Minnesota	-	-	28	492	44	-	-
Missouri	-	102	1	-	-	-100.0	-
North Dakota	-	*	-	-	-	-100.0	-
South Atlantic	3,783	3,955	4,090	4,957	4,935	-4.3	-6.4
Delaware	314	252	226	576	568	24.7	-13.8
District of Columbia	-	-	-	-	*	-	-
Florida	135	-	-	66	-	-	-
Maryland	2,278	2,372	2,437	2,624	3,001	-3.9	-6.7
South Carolina	-	-	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, 1990-1994 (Continued)
(Thousand Short Tons)

Coal-Producing Region and State, and Destination Census Division and State	1994	1993	1992	1991	1990	Percent Change 1993-1994	Average Annual Percent Change
							1990-1994
Pennsylvania,							
Bituminous (Continued)							
Virginia	55	29	5	71	27	87.3	19.1
West Virginia	1,002	1,302	1,421	1,616	1,339	-23.1	-7.0
East South Central	993	772	83	6	6	28.7	255.7
Alabama	34	46	1	*	6	-25.3	53.0
Kentucky	460	225	31	-	-	104.5	-
Mississippi	-	3	6	-	-	-100.0	-
Tennessee	500	498	46	6	-	.3	-
West South Central	-	*	*	2	*	-100.0	-
Texas	-	*	*	2	*	-100.0	-
Mountain	183	240	290	265	26	-23.4	62.7
Colorado	-	-	-	-	*	-	-
Utah	183	240	290	265	26	-23.4	62.8
Pacific	-	-	-	*	-	-	-
California	-	-	-	*	-	-	-
Tennessee	2,547	2,577	2,835	4,243	6,098	-1.1	-19.6
Middle Atlantic	-	-	-	5	2	-	-
New York	-	-	-	5	-	-	-
Pennsylvania	-	-	-	-	2	-	-
East North Central	1	*	24	63	207	NM	-72.3
Illinois	1	-	-	29	170	-	-70.9
Indiana	-	*	3	2	8	-100.0	-
Michigan	-	-	21	31	23	-	-
Ohio	-	-	-	1	4	-	-
Wisconsin	-	-	-	-	2	-	-
South Atlantic	301	303	387	820	2,133	-7	-38.7
Florida	40	-	-	242	143	-	-27.1
Georgia	202	204	259	384	1,590	-1.1	-40.3
North Carolina	58	96	114	150	124	-39.1	-17.1
South Carolina	-	3	13	34	269	-100.0	-
Virginia	-	*	1	10	7	-100.0	-
East South Central	2,223	2,215	2,376	3,292	3,712	.4	-12.0
Alabama	710	592	734	934	971	20.1	-7.5
Kentucky	135	122	39	436	601	10.3	-31.2
Tennessee	1,378	1,501	1,603	1,922	2,139	-8.2	-10.4
Virginia	26,866	27,388	28,504	25,390	28,863	-1.9	-1.8
New England	-	-	281	886	492	-	-
Maine	-	-	44	-	-	-	-
Massachusetts	-	-	237	693	490	-	-
New Hampshire	-	-	-	186	2	-	-
Vermont	-	-	-	7	-	-	-
Middle Atlantic	1,490	2,073	2,957	1,812	2,180	-28.1	-9.1
New Jersey	190	359	734	551	447	-47.1	-19.3
New York	156	108	96	128	128	45.4	5.2
Pennsylvania	1,143	1,607	2,127	1,134	1,606	-28.8	-8.1
East North Central	2,455	3,475	3,794	2,574	3,852	-29.4	-10.6
Illinois	302	260	478	380	406	16.1	-7.1
Indiana	1,202	2,045	2,240	1,339	1,242	-41.2	-8
Michigan	376	188	68	34	140	99.8	28.0
Ohio	488	875	940	772	2,005	-44.2	-29.8
Wisconsin	86	108	68	50	59	-20.0	10.0
West North Central	-	-	*	-	*	-	-
North Dakota	-	-	*	-	-	-	-
South Dakota	-	-	-	-	*	-	-
South Atlantic	18,898	18,553	16,839	16,290	18,247	1.9	.9
Delaware	203	155	208	137	226	31.0	-2.6
Florida	531	457	451	455	663	16.1	-5.4
Georgia	3,038	3,496	2,779	3,219	3,661	-13.1	-4.5
Maryland	90	8	79	115	376	NM	-30.1
North Carolina	5,634	5,867	5,207	4,520	4,592	-4.0	5.3
South Carolina	1,604	1,663	1,356	1,523	1,565	-3.5	.6
Virginia	6,867	6,076	6,082	5,457	5,638	13.0	5.0
West Virginia	930	832	677	864	1,525	11.8	-11.6
East South Central	3,658	3,026	3,432	3,312	3,366	20.9	2.1
Alabama	1,156	887	1,017	763	764	30.3	10.9

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, 1990-1994 (Continued)
(Thousand Short Tons)

Coal-Producing Region and State, and Destination Census Division and State	1994	1993	1992	1991	1990	Percent Change 1993-1994	Average Annual Percent Change
							1990-1994
Virginia (Continued)							
Kentucky	41	1	*	-	64	NM	-10.7
Tennessee	2,462	2,138	2,415	2,549	2,539	15.1	-8
West South Central	-	2	2	10	103	-100.0	-
Louisiana	-	-	-	-	90	-	-
Texas	-	2	2	10	13	-100.0	-
Mountain	320	103	192	198	-	211.6	-
Colorado	-	*	-	*	-	-100.0	-
Utah	320	103	192	198	-	211.7	-
West Virginia, Northern	39,985	34,573	44,093	45,586	50,042	15.7	-5.4
New England	1,086	1,002	2,776	2,216	2,142	8.4	-15.6
Connecticut	166	-	*	-	169	-	-6
Maine	-	-	-	-	12	-	-
Massachusetts	648	613	2,379	1,965	1,264	5.8	-15.4
New Hampshire	272	389	397	251	696	-30.0	-20.9
Middle Atlantic	12,566	9,769	13,804	15,039	16,090	28.6	-6.0
New Jersey	1,096	1,234	1,213	1,094	1,443	-11.1	-6.6
New York	3,079	1,336	2,530	3,393	4,185	130.5	-7.4
Pennsylvania	8,391	7,200	10,061	10,553	10,463	16.5	-5.4
East North Central	5,924	4,220	5,803	6,435	7,459	40.4	-5.6
Illinois	23	44	-	-	10	-46.9	24.4
Indiana	1,060	216	70	313	334	391.1	33.4
Michigan	392	113	114	81	170	246.7	23.2
Ohio	4,098	3,659	5,365	5,513	6,129	12.0	-9.6
Wisconsin	350	188	254	528	815	86.6	-19.0
West North Central	12	54	9	20	19	-78.5	-11.8
Iowa	2	-	-	1	-	-	-
Minnesota	10	-	9	19	19	-	-15.0
Missouri	-	54	-	-	-	-100.0	-
North Dakota	-	-	-	-	*	-	-
South Atlantic	19,270	17,772	20,988	21,434	23,875	8.4	-5.2
Delaware	969	1,096	1,111	714	872	-11.6	2.7
District of Columbia	10	12	6	9	20	-18.7	-16.2
Florida	449	580	452	454	686	-22.6	-10.0
Maryland	3,443	4,314	3,466	4,425	4,152	-20.2	-4.6
North Carolina	7	-	*	2	4	-	11.9
South Carolina	1	-	-	-	-	-	-
Virginia	75	306	243	276	260	-75.6	-26.8
West Virginia	14,316	11,464	15,710	15,553	17,881	24.9	-5.4
East South Central	492	749	167	53	3	-34.3	255.8
Alabama	34	27	-	*	-	27.5	-
Kentucky	160	130	4	9	3	23.7	168.8
Mississippi	5	5	4	13	-	4.3	-
Tennessee	293	589	159	31	-	-50.2	-
West South Central	368	154	-	-	-	138.4	-
Louisiana	368	154	-	-	-	138.4	-
Pacific	-	*	*	*	*	-100.0	-
California	-	*	*	*	*	-100.0	-
West Virginia, Southern	82,794	68,086	68,824	66,199	67,990	21.6	5.0
New England	1,351	917	1,109	416	179	47.2	65.8
Connecticut	-	106	21	*	*	-100.0	-
Maine	*	14	20	11	72	-99.8	-86.4
Massachusetts	1,351	739	971	304	93	82.7	95.3
New Hampshire	-	58	97	101	13	-100.0	-
Rhode Island	-	*	-	-	-	-100.0	-
Vermont	*	-	-	-	*	-	14.6
Middle Atlantic	6,738	6,965	5,160	4,570	6,048	-3.3	2.7
New Jersey	260	343	250	155	170	-24.1	11.1
New York	1,345	1,860	1,265	980	1,399	-27.6	-1.0
Pennsylvania	5,133	4,763	3,644	3,434	4,479	7.8	3.5
East North Central	27,503	22,906	25,560	24,205	23,796	20.1	3.7
Illinois	1,403	1,971	1,472	1,668	931	-28.8	10.8
Indiana	4,918	3,401	4,920	4,131	3,791	44.6	6.7
Michigan	5,903	4,048	6,120	6,951	6,794	45.8	-3.4
Ohio	14,802	12,485	12,457	11,163	12,053	18.6	5.3

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, 1990-1994 (Continued)
(Thousand Short Tons)

Coal-Producing Region and State, and Destination Census Division and State	1994	1993	1992	1991	1990	Percent Change 1993-1994	Average Annual Percent Change
							1990-1994
West Virginia,							
Southern (Continued)							
Wisconsin	478	1,002	592	293	227	-52.3	20.4
West North Central	237	223	364	253	291	6.4	-5.0
Iowa	70	69	77	39	107	.5	-10.2
Kansas	-	-	34	60	-	-	-
Minnesota	92	11	24	22	24	NM	39.6
Missouri	70	142	228	126	156	-50.8	-18.1
North Dakota	*	-	-	1	4	-	-71.1
South Dakota	6	-	-	5	-	-	-
South Atlantic	36,045	26,459	28,512	28,761	30,763	36.2	4.0
Delaware	621	617	361	723	590	.6	1.3
District of Columbia	24	23	27	10	27	4.0	-2.7
Florida	1,372	817	1,010	1,507	1,789	68.0	-6.4
Georgia	4,106	2,958	2,477	2,517	1,549	38.8	27.6
Maryland	2,855	1,376	2,296	1,721	1,961	107.5	9.8
North Carolina	6,910	6,167	7,963	6,047	6,270	12.0	2.5
South Carolina	394	107	121	178	83	268.7	47.5
Virginia	3,188	2,971	3,323	4,420	3,418	7.3	-1.7
West Virginia	16,575	11,423	10,934	11,638	15,076	45.1	2.4
East South Central	10,551	10,095	7,054	7,469	6,274	4.5	13.9
Alabama	4,392	3,736	2,362	2,335	1,026	17.6	43.8
Kentucky	4,744	4,704	3,755	4,062	4,901	.9	-8
Mississippi	93	87	34	4	21	7.3	44.9
Tennessee	1,322	1,569	904	1,067	326	-15.7	41.9
West South Central	60	49	22	31	31	21.9	18.0
Louisiana	4	2	-	14	8	141.5	-17.1
Oklahoma	56	48	22	18	22	16.7	25.6
Texas	1	-	-	-	*	-	17.4
Mountain	212	135	-	35	14	56.9	95.6
Idaho	*	-	-	-	-	-	-
Utah	211	135	-	35	14	56.6	95.5
Pacific	1	*	-	*	3	NM	-22.3
California	-	*	-	*	-	-100.0	-
Oregon	1	-	-	-	-	-	-
Washington	-	-	-	-	3	-	-
Interior Total	175,622	166,763	193,400	191,126	204,574	5.3	-3.7
Arkansas	28	25	29	1	7	9.1	40.9
New England	-	-	13	-	-	-	-
Vermont	-	-	13	-	-	-	-
West North Central	4	8	11	-	-	-56.8	-
Missouri	4	8	11	-	-	-56.8	-
West South Central	24	17	5	1	-	41.7	-
Arkansas	13	12	-	1	-	2.6	-
Oklahoma	*	5	5	-	-	-99.3	-
Texas	12	-	-	-	-	-	-
Illinois	51,737	41,330	57,670	57,290	60,222	25.2	-3.7
New England	-	-	-	*	*	-	-
Connecticut	-	-	-	*	-	-	-
Massachusetts	-	-	-	-	*	-	-
Middle Atlantic	*	*	*	1	*	81.5	29.3
New Jersey	-	-	*	-	-	-	-
New York	*	*	*	*	*	49.0	23.7
Pennsylvania	*	-	-	*	*	-	122.5
East North Central	28,299	20,483	28,821	29,022	30,701	38.1	-2.0
Illinois	17,517	15,206	18,167	18,787	18,700	15.2	-1.6
Indiana	9,574	4,541	9,595	9,185	10,571	110.8	-2.4
Michigan	51	-	6	5	10	-	49.8
Ohio	18	-	-	73	58	-	-24.9
Wisconsin	1,139	736	1,053	971	1,362	54.7	-4.4
West North Central	9,448	7,783	13,499	15,470	15,856	21.4	-12.1
Iowa	1,535	1,534	1,175	1,473	1,592	.1	-9
Kansas	193	179	640	1,320	1,157	7.8	-36.1
Minnesota	179	43	58	40	41	313.4	44.9
Missouri	7,541	6,027	11,625	12,637	13,067	25.1	-12.8
North Dakota	-	*	-	*	-	-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, 1990-1994 (Continued)
(Thousand Short Tons)

Coal-Producing Region and State, and Destination Census Division and State	1994	1993	1992	1991	1990	Percent Change 1993-1994	Average Annual Percent Change
							1990-1994
Illinois (Continued)							
South Atlantic	8,403	8,137	10,485	8,811	9,019	3.3	-1.8
Florida	5,846	4,782	5,529	4,464	4,150	22.3	8.9
Georgia	2,557	3,355	4,955	4,347	4,869	-23.8	-14.9
South Carolina	-	-	1	-	-	-	-
Virginia	-	*	-	*	-	-100.0	-
West Virginia	*	-	-	-	-	-	-
East South Central	5,453	4,823	4,780	3,681	4,482	13.1	5.0
Alabama	750	401	632	474	813	86.8	-2.0
Kentucky	343	535	7	15	453	-35.9	-6.7
Mississippi	1,164	1,106	1,879	1,518	1,218	5.3	-1.1
Tennessee	3,195	2,780	2,261	1,673	1,998	14.9	12.5
West South Central	46	58	81	99	82	-21.3	-13.5
Arkansas	30	37	81	99	82	-19.1	-22.1
Louisiana	-	21	-	-	-	-100.0	-
Oklahoma	16	-	-	-	-	-	-
Texas	-	-	-	*	-	-	-
Mountain	-	-	-	201	11	-	-
Montana	-	-	-	201	*	-	-
Wyoming	-	-	-	-	11	-	-
Indiana	30,477	29,475	31,216	31,204	35,967	3.4	-4.1
New England	*	21	-	-	-	-98.2	-
Connecticut	*	-	-	-	-	-	-
Massachusetts	-	21	-	-	-	-100.0	-
East North Central	27,088	26,347	27,677	27,023	30,173	2.8	-2.7
Illinois	1,597	1,562	1,021	1,698	2,373	2.3	-9.4
Indiana	24,733	23,913	24,655	22,619	25,301	3.4	-6
Michigan	135	184	338	311	407	-26.6	-24.1
Ohio	36	60	135	*	184	-39.4	-33.5
Wisconsin	587	628	1,528	2,394	1,908	-6.6	-25.5
West North Central	973	1,249	756	1,289	2,252	-22.2	-18.9
Iowa	426	646	746	1,027	2,003	-34.1	-32.1
Kansas	-	18	-	6	3	-100.0	-
Minnesota	43	-	-	91	51	-	-4.1
Missouri	504	585	11	165	196	-14.0	26.5
South Atlantic	19	264	548	316	443	-92.7	-54.3
Florida	-	96	-	171	443	-100.0	-
Georgia	19	153	548	144	-	-87.4	-
Virginia	-	15	-	-	-	-100.0	-
East South Central	2,313	1,506	2,071	2,401	2,895	53.6	-5.4
Alabama	56	60	127	127	72	-7.5	-6.2
Kentucky	2,219	1,313	1,694	2,039	2,450	69.0	-2.4
Mississippi	-	-	3	24	24	-	-
Tennessee	38	132	247	210	349	-71.1	-42.5
West South Central	4	1	-	2	-	257.9	-
Oklahoma	3	1	-	2	-	209.7	-
Texas	*	-	-	*	-	-	-
Iowa	46	175	287	350	380	-73.5	-40.9
West North Central	46	175	287	350	380	-73.5	-40.9
Iowa	46	175	287	347	367	-73.5	-40.4
Missouri	-	-	-	2	13	-	-
Kansas	282	345	354	424	734	-18.3	-21.3
West North Central	282	345	345	424	734	-18.3	-21.3
Kansas	165	167	165	136	348	-1.1	-17.0
Missouri	117	178	181	288	387	-34.3	-25.9
Kentucky, Western	34,729	35,151	41,453	40,395	44,847	-1.2	-6.2
New England	-	-	-	*	-	-	-
Connecticut	-	-	-	*	-	-	-
Middle Atlantic	*	*	*	-	*	152.6	23.0
Pennsylvania	*	*	*	-	*	152.6	23.0
East North Central	2,762	4,169	4,346	5,204	5,358	-33.7	-15.3
Illinois	192	659	214	470	1,224	-70.9	-37.1
Indiana	2,214	3,229	3,275	3,482	3,316	-31.4	-9.6
Michigan	12	28	8	74	59	-55.0	-32.3

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, 1990-1994 (Continued)
(Thousand Short Tons)

Coal-Producing Region and State, and Destination Census Division and State	1994	1993	1992	1991	1990	Percent Change 1993-1994	Average Annual Percent Change
							1990-1994
Kentucky, Western (Continued)							
Ohio	180	146	514	786	650	23.5	-27.5
Wisconsin	165	108	336	391	109	53.1	11.0
West North Central	1,170	352	896	1,027	2,482	232.6	-17.1
Iowa	377	217	271	383	492	73.5	-6.4
Kansas	-	-	-	3	2	-	-
Minnesota	26	32	27	2	2	-17.7	95.5
Missouri	766	102	598	640	1,986	NM	-21.2
South Atlantic	2,709	3,040	5,260	5,849	6,689	-10.9	-20.2
Florida	2,706	3,039	3,910	4,472	5,106	-11.0	-14.7
Georgia	-	-	1,350	1,358	1,496	-	-
North Carolina	*	-	-	-	-	-	-
South Carolina	*	-	-	-	29	-	-66.7
Virginia	-	-	*	-	14	-	-
West Virginia	3	1	*	19	44	122.3	-47.9
East South Central	28,048	27,512	30,682	27,911	29,781	1.9	-1.5
Alabama	2,038	1,761	2,310	1,627	2,235	15.7	-2.3
Kentucky	16,401	17,990	17,455	16,268	18,795	-8.8	-3.3
Mississippi	-	10	190	169	645	-100.0	-
Tennessee	9,609	7,751	10,727	9,847	8,106	24.0	4.3
West South Central	8	12	204	311	318	-31.5	-59.9
Arkansas	8	12	8	11	11	-31.5	-7.1
Louisiana	-	-	196	300	307	-	-
Louisiana	3,463	3,103	3,208	3,151	3,186	11.6	2.1
West North Central	-	*	-	-	-	-100.0	-
Missouri	-	*	-	-	-	-100.0	-
West South Central	3,463	3,103	3,208	3,151	3,186	11.6	2.1
Louisiana	3,463	3,103	3,208	3,151	3,186	11.6	2.1
Missouri	679	638	2,795	2,203	2,488	6.5	-27.7
East North Central	-	-	-	*	1	-	-
Illinois	-	-	-	*	1	-	-
West North Central	679	614	2,783	2,183	2,487	10.6	-27.7
Kansas	77	23	54	19	-	239.9	-
Missouri	602	592	2,729	2,164	2,487	1.8	-29.8
West South Central	-	2	-	-	-	-100.0	-
Oklahoma	-	2	-	-	-	-100.0	-
Oklahoma	1,925	2,297	1,940	1,867	1,727	-16.2	2.8
West North Central	27	57	83	23	52	-53.2	-15.5
Kansas	22	41	73	23	16	-46.5	7.9
Missouri	5	16	10	*	36	-70.1	-39.6
West South Central	1,896	2,240	1,857	1,841	1,612	-15.3	4.1
Arkansas	205	196	130	94	71	4.5	30.1
Oklahoma	1,532	1,869	1,601	1,569	1,389	-18.0	2.5
Texas	159	175	126	178	152	-8.8	1.3
Pacific	*	*	-	-	-	-10.0	-
California	*	*	-	-	-	-10.0	-
Texas	52,256	54,224	54,447	54,243	55,016	-3.6	-1.3
West South Central	52,256	54,224	54,447	54,243	55,016	-3.6	-1.3
Texas	52,256	54,224	54,447	54,243	55,016	-3.6	-1.3
Mountain	-	-	-	-	*	-	-
Wyoming	-	-	-	-	*	-	-
Western Total	398,402	364,083	339,676	338,508	328,547	9.4	4.9
Alaska	789	855	797	811	783	-7.7	.2
Pacific	789	855	797	811	783	-7.7	.2
Alaska	789	855	797	811	783	-7.7	.2
Arizona	12,011	12,138	12,418	12,933	11,446	-1.0	1.2
Mountain	12,011	12,138	12,418	12,933	11,446	-1.0	1.2
Arizona	7,580	7,566	7,441	7,869	7,275	.2	1.0
Nevada	4,431	4,572	4,977	5,064	4,171	-3.1	1.5
California	-	-	142	23	57	-	-
Pacific	-	-	142	23	57	-	-
California	-	-	142	23	57	-	-

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, 1990-1994 (Continued)
(Thousand Short Tons)

Coal-Producing Region and State, and Destination Census Division and State	1994	1993	1992	1991	1990	Percent Change 1993-1994	Average Annual Percent Change
							1990-1994
Colorado	24,059	20,338	18,195	17,132	18,019	18.3	7.5
New England	-	-	-	-	*	-	-
Rhode Island	-	-	-	-	*	-	-
East North Central	2,357	2,471	1,322	1,033	621	-4.6	39.6
Illinois	1,439	1,246	518	460	11	15.4	240.1
Indiana	457	978	794	573	591	-53.3	-6.2
Ohio	-	-	-	*	20	-	-
Wisconsin	462	246	10	-	-	87.4	-
West North Central	2,194	871	1,013	445	638	151.9	36.2
Iowa	171	135	122	-	28	26.8	57.1
Kansas	1,148	90	298	-	187	NM	57.5
Minnesota	23	8	-	-	62	199.8	-21.6
Missouri	775	566	526	386	301	36.9	26.7
Nebraska	77	72	67	59	60	7.1	6.3
South Atlantic	435	44	181	-	-	NM	-
Florida	423	-	181	-	-	-	-
Georgia	11	44	-	-	-	-75.5	-
West Virginia	2	-	-	-	-	-	-
East South Central	2,038	711	-	-	-	186.7	-
Kentucky	710	-	-	-	-	-	-
Mississippi	735	170	-	-	-	332.9	-
Tennessee	593	541	-	-	-	9.6	-
West South Central	2,563	2,628	2,250	2,267	2,461	-2.5	1.0
Oklahoma	26	121	-	58	56	-78.4	-17.5
Texas	2,537	2,507	2,250	2,208	2,404	1.2	1.3
Mountain	14,362	13,497	13,369	13,229	14,135	6.4	.4
Arizona	219	117	226	868	1,158	86.8	-34.1
Colorado	12,035	11,181	11,241	10,911	10,703	7.6	3.0
Idaho	-	-	-	12	22	-	-
Montana	-	-	-	6	1	-	-
Nevada	306	514	169	-	41	-40.5	65.1
New Mexico	84	84	69	64	64	.5	7.1
Utah	1,714	1,598	1,604	1,300	2,077	7.3	-4.7
Wyoming	4	3	60	67	69	45.2	-50.7
Pacific	73	80	60	158	161	-8.5	-17.9
California	22	33	24	107	104	-33.8	-32.4
Washington	52	47	37	50	58	8.9	-2.8
Montana	41,672	35,795	38,804	37,812	37,294	16.4	2.8
East North Central	17,875	15,841	15,717	16,771	17,052	12.8	1.2
Illinois	4,338	3,295	3,013	3,203	2,651	31.6	13.1
Indiana	749	433	451	725	573	72.9	6.9
Michigan	10,481	10,055	10,376	10,838	11,795	4.2	-2.9
Wisconsin	2,307	2,057	1,878	2,005	2,033	12.1	3.2
West North Central	10,668	9,411	9,152	10,243	10,400	13.4	.6
Iowa	*	1	-	-	-	-90.3	-
Minnesota	10,038	8,852	8,566	9,668	9,920	13.4	.3
Nebraska	71	136	142	150	131	-48.0	-14.2
North Dakota	559	422	444	425	349	32.4	12.5
East South Central	1,314	178	84	105	-	NM	-
Mississippi	1,314	178	82	105	-	NM	-
Tennessee	-	-	2	-	-	-	-
Mountain	10,718	9,233	11,276	10,687	9,842	16.1	2.2
Colorado	89	86	106	101	94	2.8	-1.5
Montana	10,581	9,115	11,159	10,578	9,742	16.1	2.1
Wyoming	49	31	11	8	6	57.2	72.3
Pacific	1,097	1,108	2,549	-	-	-1.0	-
Oregon	-	355	1,835	-	-	-100.0	-
Washington	1,097	753	715	-	-	45.7	-
New Mexico	28,540	27,942	24,823	22,378	23,380	2.1	5.1
East North Central	1,495	1,392	590	129	254	7.4	55.7
Illinois	-	-	-	-	211	-	-
Wisconsin	1,495	1,392	590	129	43	7.4	142.1
West North Central	-	-	-	8	18	-	-
Missouri	-	-	-	8	18	-	-
West South Central	296	350	216	182	143	-15.2	19.9
Oklahoma	-	5	-	-	-	-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, 1990-1994 (Continued)
(Thousand Short Tons)

Coal-Producing Region and State, and Destination Census Division and State	1994	1993	1992	1991	1990	Percent Change 1993-1994	Average Annual Percent Change
							1990-1994
New Mexico (Continued)							
Texas	296	345	216	182	143	-14.0	19.9
Mountain	26,749	26,201	24,005	21,973	22,731	2.1	4.1
Arizona	11,284	11,263	9,175	8,843	7,499	.2	10.8
Colorado	-	-	-	*	-	-	-
New Mexico	15,464	14,938	14,829	13,130	15,232	3.5	.4
Pacific	-	-	12	87	233	-	-
California	-	-	12	87	233	-	-
North Dakota	32,056	32,372	31,702	29,741	29,206	-1.0	2.3
East North Central	*	*	-	-	-	-55.1	-
Wisconsin	*	*	-	-	-	-55.1	-
West North Central	32,055	32,367	31,702	29,741	29,206	-1.0	2.3
Minnesota	-	-	-	1	2	-	-
North Dakota	29,731	30,215	29,573	27,405	27,137	-1.6	2.3
South Dakota	2,325	2,153	2,129	2,335	2,067	8.0	3.0
Mountain	-	*	-	-	-	-100.0	-
Montana	-	*	-	-	-	-100.0	-
Utah	20,527	19,283	18,792	19,358	19,756	6.4	1.0
Middle Atlantic	68	-	-	-	-	-	-
Pennsylvania	68	-	-	-	-	-	-
East North Central	656	421	233	10	-	55.8	-
Illinois	369	207	233	10	-	78.2	-
Indiana	178	204	-	-	-	-12.6	-
Michigan	66	-	-	-	-	-	-
Ohio	-	*	-	-	-	-100.0	-
Wisconsin	43	10	-	-	-	327.3	-
West North Central	414	382	80	*	*	8.5	NM
Iowa	-	-	-	*	*	-	-
Kansas	2	-	-	-	-	-	-
Missouri	412	382	79	-	-	8.0	-
Nebraska	-	*	*	-	-	-100.0	-
South Atlantic	-	159	32	-	-	-100.0	-
Florida	-	155	32	-	-	-100.0	-
West Virginia	-	4	-	-	-	-100.0	-
East South Central	218	-	-	-	-	-	-
Tennessee	218	-	-	-	-	-	-
West South Central	33	-	-	-	-	-	-
Texas	33	-	-	-	-	-	-
Mountain	15,793	15,456	15,289	16,632	17,080	2.2	-1.9
Arizona	86	89	101	111	93	-3.5	-2.0
Colorado	4	14	34	19	66	-71.0	-50.6
Idaho	59	95	61	89	80	-37.6	-7.0
Montana	29	42	42	34	38	-29.5	-6.5
Nevada	2,027	1,781	1,979	2,711	2,619	13.8	-6.2
Utah	13,586	13,418	13,035	13,605	14,107	1.3	-.9
Wyoming	2	18	37	62	78	-89.4	-60.5
Pacific	3,317	2,843	3,143	2,708	2,607	16.7	6.2
California	3,074	2,575	2,777	2,556	2,466	19.4	5.7
Oregon	127	123	113	2	2	3.9	201.1
Washington	115	145	253	150	139	-20.6	-4.6
Washington	4,731	4,621	5,020	4,894	4,893	2.4	-.8
Pacific	4,731	4,621	5,020	4,894	4,893	2.4	-.8
Washington	4,731	4,621	5,020	4,894	4,893	2.4	-.8
Wyoming	234,016	210,739	188,983	193,425	183,712	11.0	6.2
New England	*	14	-	*	-	-99.8	-
Connecticut	*	-	-	*	-	-	-
Massachusetts	-	14	-	-	-	-100.0	-
Middle Atlantic	-	-	*	9	-	-	-
New York	-	-	-	9	-	-	-
Pennsylvania	-	-	*	-	-	-	-
East North Central	42,685	37,648	30,920	31,402	28,688	13.4	10.4
Illinois	9,779	7,593	4,417	4,394	3,534	28.8	29.0
Indiana	15,417	12,635	11,804	11,967	11,561	22.0	7.5
Michigan	4,267	4,487	2,948	2,762	2,373	-4.9	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, 1990-1994 (Continued)
(Thousand Short Tons)

Coal-Producing Region and State, and Destination Census Division and State	1994	1993	1992	1991	1990	Percent Change	Average Annual Percent Change
						1993-1994	1990-1994
Wyoming (Continued)							
Ohio	-	-	124	45	-	-	-
Wisconsin	13,221	12,934	11,627	12,234	11,220	2.2	4.2
West North Central	67,523	61,641	52,269	53,239	51,682	9.5	6.9
Iowa	15,505	15,950	14,056	14,614	13,491	-2.8	3.5
Kansas	16,490	16,484	13,526	14,016	15,731	*	1.2
Minnesota	9,911	9,093	8,385	7,531	8,133	9.0	5.1
Missouri	16,112	10,815	7,958	7,976	5,912	49.0	28.5
Nebraska	8,908	8,801	7,882	8,583	7,950	1.2	2.9
North Dakota	-	5	5	*	*	-100.0	-
South Dakota	597	493	456	519	464	21.1	6.5
South Atlantic	5,836	938	12	1,128	2,207	NM	27.5
Florida	93	-	12	-	-	-	-
Georgia	4,914	726	-	1,128	2,205	NM	22.2
Maryland	829	213	-	-	-	289.8	-
West Virginia	-	-	-	-	2	-	-
East South Central	594	317	156	991	430	87.5	8.4
Alabama	251	-	-	115	217	-	3.7
Kentucky	-	248	1	238	213	-100.0	-
Mississippi	-	-	83	-	-	-	-
Tennessee	342	68	72	639	-	402.0	-
West South Central	80,246	76,692	72,339	72,484	67,385	4.6	4.5
Arkansas	12,184	10,826	11,571	12,268	10,898	12.5	2.8
Louisiana	11,215	11,133	10,039	9,690	9,030	.7	5.6
Oklahoma	17,577	16,726	16,733	15,489	13,920	5.1	6.0
Texas	39,270	38,007	33,995	35,036	33,537	3.3	4.0
Mountain	34,935	32,195	33,165	32,177	31,850	8.5	2.3
Arizona	-	5	-	-	-	-100.0	-
Colorado	5,132	5,538	4,952	5,321	5,359	-7.3	-1.1
Idaho	337	343	393	455	424	-1.7	-5.6
Montana	119	37	44	104	102	218.1	4.0
Nevada	1,014	753	802	797	575	34.7	15.2
Utah	-	-	586	216	4	-	-
Wyoming	28,334	25,519	26,388	25,284	25,387	11.0	2.8
Pacific	2,198	1,271	120	1,982	1,439	72.9	11.2
California	-	-	-	58	1	-	-
Oregon	2,197	1,270	114	1,892	1,059	73.0	20.0
Washington	1	1	6	33	379	-25.1	-77.3
U.S. Total	949,843	883,934	897,267	885,882	919,589	7.5	.8
New England	4,963	4,141	7,717	6,276	5,558	19.8	-2.8
Connecticut	976	695	1,003	1,012	1,119	40.3	-3.4
Maine	463	405	866	209	105	14.4	45.1
Massachusetts	2,538	1,840	4,634	3,737	3,284	37.9	-6.2
New Hampshire	978	1,192	1,189	1,302	1,037	-18.0	-1.5
Rhode Island	3	3	5	4	5	.9	-10.9
Vermont	5	6	20	12	8	-15.9	-10.9
Middle Atlantic	69,737	64,421	73,087	69,990	77,427	8.3	-2.6
New Jersey	2,163	2,169	2,433	1,878	2,163	-.3	*
New York	11,664	10,950	13,977	13,666	14,978	6.5	-6.1
Pennsylvania	55,910	51,302	56,677	54,446	60,287	9.0	-1.9
East North Central	214,903	196,343	201,713	202,545	214,175	9.4	.1
Illinois	38,745	34,433	31,186	33,031	32,461	12.5	4.5
Indiana	63,589	54,452	60,970	57,105	61,056	16.8	1.0
Michigan	33,487	30,041	30,363	32,046	34,474	11.5	-7
Ohio	56,850	56,755	58,716	58,752	65,939	.2	-3.6
Wisconsin	22,231	20,662	20,477	21,611	20,245	7.6	2.4
West North Central	126,407	116,337	113,921	115,949	117,270	8.7	1.9
Iowa	18,259	18,950	16,988	18,212	18,336	-3.6	-1
Kansas	18,097	17,002	14,801	15,599	17,447	6.4	.9
Minnesota	20,498	18,166	17,224	18,051	18,590	12.8	2.5
Missouri	27,278	19,921	24,207	24,602	24,734	36.9	2.5
Nebraska	9,055	9,011	8,093	8,796	8,142	.5	2.7
North Dakota	30,290	30,642	30,022	27,831	27,490	-1.1	2.4
South Dakota	2,929	2,646	2,586	2,859	2,531	10.7	3.7
South Atlantic	161,029	141,701	145,219	143,809	157,243	13.6	.6
Delaware	2,309	2,242	1,913	2,219	2,420	3.0	-1.2
District of Columbia	47	51	50	66	69	-8.5	-9.4

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, 1990-1994 (Continued)
(Thousand Short Tons)

Coal-Producing Region and State, and Destination Census Division and State	1994	1993	1992	1991	1990	Percent Change 1993-1994	Average Annual Percent Change
							1990-1994
U.S. Total (Continued)							
Florida	23,757	21,446	24,351	23,378	24,396	10.8	-0.7
Georgia	30,497	25,101	24,242	25,418	28,791	21.5	1.4
Maryland	10,959	10,063	9,735	10,712	11,776	8.9	-1.8
North Carolina	26,199	25,621	25,801	22,054	24,036	2.3	2.2
South Carolina	13,454	11,749	11,338	11,332	11,100	14.5	4.9
Virginia	16,735	16,084	14,915	15,159	14,332	4.0	3.9
West Virginia	37,071	29,343	32,874	33,473	40,324	26.3	-2.1
East South Central	99,350	97,057	92,761	89,160	94,255	2.4	1.3
Alabama	30,210	28,698	28,741	28,739	27,842	5.3	2.1
Kentucky	35,636	35,461	33,497	31,656	38,401	.5	-1.8
Mississippi	4,446	3,421	3,965	3,966	4,098	30.0	2.1
Tennessee	29,057	29,477	26,559	24,799	23,914	-1.4	5.0
West South Central	142,136	139,664	134,770	134,870	130,709	1.8	2.1
Arkansas	12,501	11,094	11,807	12,481	11,069	12.7	3.1
Louisiana	15,844	14,524	13,539	13,392	12,974	9.1	5.1
Oklahoma	19,210	18,777	18,362	17,136	15,388	2.3	5.7
Texas	94,581	95,269	91,062	91,862	91,277	-.7	.9
Mountain	115,311	109,200	110,007	108,329	107,137	5.6	1.9
Arizona	19,169	19,039	16,944	17,691	16,025	.7	4.6
Colorado	17,274	16,821	16,333	16,352	16,222	2.7	1.6
Idaho	400	438	456	556	525	-8.8	-6.6
Montana	10,729	9,194	11,245	10,924	9,883	16.7	2.1
Nevada	7,777	7,621	7,926	8,572	7,407	2.1	1.2
New Mexico	15,549	15,022	14,899	13,194	15,296	3.5	.4
Utah	16,015	15,493	15,707	15,619	16,228	3.4	-.3
Wyoming	28,399	25,571	26,497	25,421	25,551	11.1	2.7
Pacific	12,228	10,791	11,844	10,664	10,177	13.3	4.7
Alaska	789	855	797	811	783	-7.7	.2
California	3,096	2,608	2,955	2,833	2,861	18.7	2.0
Oregon	2,347	1,761	2,062	1,893	1,061	33.2	22.0
Washington	5,996	5,567	6,030	5,127	5,472	7.7	2.3

• Data round to zero.

^{nm} Not meaningful as value is greater than 500.

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, 1990-1994
(Thousand Short Tons)

Coal-Exporting State and Destination	1994	1993	1992	1991	1990	Percent Change 1993-1994	Average Annual Percent Change
							1990-1994
Alabama	4,529	5,888	5,931	7,012	8,190	-23.1	-13.8
Albania	-	-	22	63	70	-	-
Argentina	278	351	170	223	283	-20.8	-5
Belgium & Luxembourg	577	952	856	1,074	1,411	-39.5	-20.0
Brazil	44	212	-	112	173	-79.2	-29.0
Bulgaria	37	120	-	-	-	-69.3	-
China (Taiwan)	-	46	49	87	-	-100.0	-
France	*	-	-	-	125	-	-94.7
Hong Kong	-	-	-	89	-	-	-
Italy	586	*	138	443	429	NM	8.1
Japan	1,280	2,422	2,536	2,920	3,463	-47.2	-22.0
Morocco	-	43	-	-	-	-100.0	-
Netherlands	91	-	77	-	40	-	22.6
Romania	563	188	199	373	594	199.3	-1.4
South Africa, Rep of	-	-	229	-	-	-	-
Spain	28	-	-	-	-	-	-
Turkey	143	278	459	386	374	-48.8	-21.4
United Kingdom	905	1,277	1,197	1,213	1,226	-29.2	-7.3
Yugoslavia	-	-	-	29	-	-	-
Alaska	716	743	734	672	797	-3.6	-2.6
Korea, Republic of	716	743	734	672	797	-3.6	-2.6
Colorado	752	1,128	669	625	367	-33.3	19.7
China (Taiwan)	134	-	-	-	-	-	-
Hong Kong	46	-	-	-	-	-	-
Japan	395	918	669	625	367	-57.0	1.9
Korea, Republic of	177	209	-	-	-	-15.3	-
Illinois	236	670	1,242	1,263	370	-64.8	-10.6
Belgium & Luxembourg	-	-	58	79	24	-	-
Brazil	-	-	298	249	79	-	-
Canada	-	-	-	4	-	-	-
Denmark	-	-	45	-	-	-	-
France	-	-	-	-	46	-	-
Ireland	-	108	213	225	95	-100.0	-
Japan	236	109	53	59	6	115.8	151.8
Korea, Republic of	-	-	50	34	33	-	-
Morocco	-	452	350	464	-	-100.0	-
Netherlands	-	-	-	-	23	-	-
Spain	-	-	-	-	11	-	-
United Kingdom	-	-	175	148	42	-	-
Venezuela	-	-	-	-	11	-	-
Kentucky	7,167	9,521	14,036	15,478	15,690	-24.7	-17.8
Belgium & Luxembourg	583	601	651	973	1,255	-3.0	-17.5
Brazil	29	478	110	77	351	-94.0	-46.6
Canada	1,099	1,416	2,078	1,560	1,727	-22.3	-10.7
China (Taiwan)	3,260	4,419	3,758	4,329	3,751	-26.2	-3.4
Denmark	-	40	193	779	521	-100.0	-
Finland	-	2	-	-	-	-100.0	-
France	196	446	1,764	2,304	459	-56.0	-19.1
Greece	-	-	-	91	-	-	-
Honduras	-	-	-	*	-	-	-
Iceland	9	-	35	-	62	-	-38.4
Ireland	-	19	379	13	-	-100.0	-
Italy	993	998	930	1,013	3,551	-4	-27.3
Jamaica	32	47	39	59	59	-32.5	-14.4
Japan	124	328	342	539	596	-62.2	-32.5
Netherlands	331	294	2,229	1,649	1,308	12.6	-29.1
Norway	91	110	110	158	169	-17.8	-14.3
Portugal	30	-	-	183	-	-	-
Soviet Union	-	-	-	64	-	-	-
Spain	-	-	111	170	30	-	-
Sweden	19	238	514	343	270	-91.8	-48.2
Turkey	-	-	170	260	787	-	-
United Kingdom	371	86	581	835	706	332.0	-14.9
Yugoslavia	-	-	42	79	90	-	-

See footnotes at end of table.

Table 62. Foreign Distribution of U.S. Coal by Major Coal-Exporting States and Destination, 1990-1994 (Continued)
(Thousand Short Tons)

Coal-Exporting State and Destination	1994	1993	1992	1991	1990	Percent Change 1993-1994	Average Annual Percent Change
							1990-1994
Pennsylvania	6,301	5,508	6,440	7,303	6,884	14.4	-2.2
Argentina	-	46	-	-	-	-100.0	-
Australia	-	-	-	-	-	-	-
Belgium & Luxembourg	29	-	91	305	244	-	-41.2
Brazil	338	156	101	23	4	117.0	205.1
Bulgaria	-	71	73	106	-	-100.0	-
Canada	844	597	1,599	2,338	2,692	41.3	-25.2
Chile	-	-	38	206	278	-	-
China (Taiwan)	-	-	-	-	-	-	-
Costa Rica	-	-	-	-	-	-	-
Croatia	-	45	-	-	-	-100.0	-
Denmark	508	187	1,456	794	1,193	172.4	-19.2
Dominican Republic	65	59	158	201	90	9.5	-7.8
Finland	71	56	-	-	-	26.5	-
France	-	188	186	-	25	-100.0	-
Germany	197	102	153	29	97	92.9	19.4
Honduras	-	-	-	-	-	-	-
Indonesia	-	-	-	-	-	-	-
Ireland	1,015	911	-	-	-	11.4	-
Israel	922	940	1,101	986	496	-2.0	16.8
Italy	601	164	-	-	-	266.2	-
Japan	834	1,384	931	1,388	867	-39.7	-1.0
Korea, Republic of	214	91	-	-	-	135.8	-
Malaysia	-	-	-	-	-	-	-
Mexico	-	-	18	3	-	-	-
Morocco	-	-	-	185	561	-	-
Netherlands	261	-	2	-	3	-	217.9
New Zealand	-	-	-	-	-	-	-
Norway	14	30	49	66	40	-53.6	-22.8
Panama	-	-	-	-	-	-	-
Paraguay	-	-	3	-	-	-	-
Portugal	378	467	305	491	243	-19.2	11.6
Qatar	-	-	-	-	-	-	-
Saudi Arabia	-	-	-	-	-	-100.0	-
Sierra Leone	-	-	-	-	-	-	-
Singapore	-	-	-	-	-	-	-
Spain	-	-	-	129	-	-	-
Surinam	-	-	-	-	-	-100.0	-
Sweden	-	-	1	-	-	-	-
Trinidad & Tobago	-	1	2	2	-	-100.0	-
Turkey	-	-	-	11	8	-	-
United Arab Emirates	-	-	-	-	-	-100.0	-
United Kingdom	-	-	-	-	32	-100.0	-
Venezuela	11	15	39	39	12	-23.1	-1.3
Yugoslavia	-	-	134	-	-	-	-
Utah	2,698	2,959	2,260	2,086	1,751	-8.8	11.4
Canada	-	346	-	-	-	-100.0	-
China (Taiwan)	321	849	721	506	560	-62.2	-13.0
France	-	-	-	-	16	-	-
Hong Kong	-	-	359	433	111	-	-
Indonesia	-	-	-	-	-	-	-
Japan	2,377	1,764	1,180	1,147	1,063	34.7	22.3
Mexico	-	-	-	-	-	-100.0	-
Virginia	11,683	14,251	17,224	18,105	19,174	-18.0	-11.6
Albania	-	-	-	20	43	-	-
Algeria	250	466	665	427	409	-46.3	-11.5
Argentina	49	70	-	59	59	-29.3	-4.3
Austria	-	-	-	104	265	-	-
Belgium & Luxembourg	822	1,447	2,629	2,472	2,657	-43.2	-25.4
Brazil	1,131	2,469	2,803	2,667	2,908	-54.2	-21.0
Bulgaria	-	328	214	349	-	-100.0	-
Canada	786	1,229	1,331	1,404	1,244	-36.1	-10.8
China (Taiwan)	-	-	-	13	-	-	-
Croatia	-	339	-	-	-	-100.0	-
Denmark	-	-	74	-	64	-	-
Egypt	405	316	297	182	125	28.2	34.3

See footnotes at end of table.

Table 62. Foreign Distribution of U.S. Coal by Major Coal-Exporting States and Destination, 1990-1994 (Continued)
(Thousand Short Tons)

Coal-Exporting State and Destination	1994	1993	1992	1991	1990	Percent Change 1993-1994	Average Annual Percent Change
							1990-1994
Virginia (Continued)							
France	523	822	869	1,027	1,079	-36.3	-16.5
Germany	9	68	47	22	-	-87.4	-
Iceland	-	-	-	34	-	-	-
Ireland	-	-	-	12	-	-	-
Italy	1,676	1,903	1,674	2,072	2,671	-11.9	-11.0
Japan	1,964	403	710	474	1,444	387.4	8.0
Korea, Republic of	1,287	1,675	1,893	1,973	1,105	-23.2	3.9
Netherlands	712	546	1,176	1,641	1,767	30.2	-20.3
Norway	-	-	-	31	29	-	-
Portugal	85	-	353	298	217	-	-20.9
Romania	207	-	180	61	458	-	-18.0
Spain	1,205	1,782	1,352	1,343	1,688	-32.4	-8.1
Sweden	34	-	-	96	-	-	-
Turkey	-	-	-	470	97	-	-
United Kingdom	538	389	902	745	641	38.2	-4.3
Yugoslavia	-	-	54	108	206	-	-
West Virginia	36,205	33,159	50,806	53,792	48,733	9.2	-7.2
Albania	-	-	-	20	73	-	-
Algeria	*	-	-	*	-	-	-
Argentina	35	110	149	113	309	-67.8	-41.8
Austria	-	-	-	-	10	-	-
Belgium & Luxembourg	2,307	1,911	1,380	1,624	2,446	20.7	-1.4
Brazil	4,101	2,101	2,597	3,415	1,730	95.1	24.1
Bulgaria	1,568	535	546	440	90	193.4	104.1
Canada	5,644	4,108	8,911	7,464	6,992	37.4	-5.2
Chile	-	-	-	27	129	-	-
China (Taiwan)	308	117	250	229	782	162.4	-20.8
Croatia	-	52	151	-	-	-100.0	-
Denmark	-	140	2,116	3,638	1,748	-100.0	-
Egypt	592	499	491	510	560	18.7	1.4
Finland	375	176	183	517	98	113.2	39.9
France	3,492	3,140	5,984	5,600	4,676	11.2	-7.0
Germany	381	527	846	1,353	746	-27.7	-15.4
Greece	-	-	-	-	30	-	-
Iceland	-	-	7	5	-	-	-
Ireland	-	97	726	764	1,037	-100.0	-
Israel	-	-	185	150	198	-	-
Italy	3,626	3,476	5,973	7,141	5,544	4.3	-10.1
Japan	2,590	4,437	5,388	5,050	5,259	-41.6	-16.2
Korea, Republic of	575	660	513	558	1,806	-12.9	-24.9
Morocco	101	66	150	182	185	53.5	-14.1
Netherlands	3,333	3,269	4,023	4,174	3,801	2.0	-3.2
Nigeria	-	36	-	-	-	-100.0	-
Norway	-	-	13	-	-	-	-
Portugal	673	950	849	799	1,441	-29.2	-17.3
Romania	923	598	332	621	615	54.3	10.7
Slovenia	-	-	61	-	-	-	-
South Africa, Rep of	769	479	360	218	68	60.4	83.3
Spain	1,253	1,371	1,610	1,840	1,735	-8.6	-7.8
Sweden	885	501	723	758	658	76.7	7.7
Turkey	1,465	1,137	1,261	707	962	28.8	11.1
United Kingdom	1,210	2,668	4,644	5,146	4,377	-54.6	-27.5
Yugoslavia	-	-	385	730	629	-	-
Wyoming	1,524	974	1,277	982	674	56.5	22.6
Canada	-	-	-	20	62	-	-
Japan	-	*	-	*	-	-100.0	-
Spain	1,524	974	1,277	791	-	56.5	-
Yugoslavia	-	-	-	170	-	-	-
Unknown	-	-	-	-	612	-	-
Major States Total	71,811	74,801	100,619	107,318	102,630	-4.0	-8.5
Albania	-	-	22	103	187	-	-
Algeria	250	466	665	427	409	-46.3	-11.5
Argentina	362	576	319	395	651	-37.1	-13.6
Australia	-	-	-	-	*	-	-

See footnotes at end of table.

Table 62. Foreign Distribution of U.S. Coal by Major Coal-Exporting States and Destination, 1990-1994 (Continued)
(Thousand Short Tons)

Coal-Exporting State and Destination	1994	1993	1992	1991	1990	Percent Change 1993-1994	Average Annual Percent Change
							1990-1994
Major States Total (Continued)							
Austria	-	-	-	104	275	-	-
Belgium & Luxembourg	4,317	4,911	5,665	6,527	8,037	-12.1	-14.4
Brazil	5,642	5,416	5,909	6,543	5,245	4.2	1.8
Bulgaria	1,605	1,052	833	896	90	52.5	105.3
Canada	8,373	7,696	13,919	12,790	12,716	8.8	-9.9
Chile	-	-	38	233	407	-	-
China (Taiwan)	4,023	5,430	4,778	5,165	5,093	-25.9	-5.7
Costa Rica	-	-	*	*	-	-	-
Croatia	-	437	151	-	-	-100.0	-
Denmark	508	366	3,885	5,211	3,527	38.9	-38.4
Dominican Republic	65	59	158	201	90	9.5	-7.8
Egypt	997	814	789	692	685	22.4	9.8
Finland	445	234	183	517	98	90.3	46.1
France	4,211	4,595	8,804	8,930	6,426	-8.4	-10.0
Germany	586	697	1,045	1,405	843	-15.8	-8.7
Greece	-	-	-	91	30	-	-
Honduras	-	-	-	*	*	-	-
Hong Kong	46	-	359	522	111	-	-20.0
Iceland	9	-	42	39	62	-	-38.4
Indonesia	-	-	*	*	-	-	-
Ireland	1,015	1,135	1,317	1,015	1,132	-10.6	-2.7
Israel	922	940	1,286	1,136	693	-2.0	7.4
Italy	7,483	6,540	8,715	10,670	12,195	14.4	-11.5
Jamaica	32	47	39	59	59	-32.5	-14.4
Japan	9,799	11,765	11,808	12,203	13,064	-16.7	-6.9
Korea, Republic of	2,970	3,378	3,190	3,237	3,742	-12.1	-5.6
Malaysia	-	-	*	*	-	-	-
Mexico	-	*	18	3	-	-100.0	-
Morocco	101	561	500	830	745	-82.1	-39.4
Netherlands	4,728	4,109	7,506	7,463	6,942	15.1	-9.2
New Zealand	-	-	-	-	*	-	-
Nigeria	-	36	-	-	-	-100.0	-
Norway	105	141	172	254	237	-25.6	-18.5
Panama	-	-	*	*	*	-	-
Paraguay	-	-	3	-	-	-	-
Portugal	1,165	1,417	1,507	1,772	1,902	-17.8	-11.5
Qatar	-	-	*	-	-	-	-
Romania	1,693	786	711	1,055	1,667	115.3	.4
Saudi Arabia	-	*	-	-	*	-100.0	-
Sierra Leone	-	-	-	-	*	-	-
Singapore	-	-	-	*	*	-	-
Slovenia	-	-	61	-	-	-	-
South Africa, Rep of	769	479	589	218	68	60.4	83.3
Soviet Union	-	-	-	64	-	-	-
Spain	4,009	4,127	4,349	4,274	3,463	-2.9	3.7
Surinam	-	*	*	-	-	-100.0	-
Sweden	938	738	1,238	1,197	928	27.1	.3
Trinidad & Tobago	-	1	2	2	-	-100.0	-
Turkey	1,608	1,416	1,890	1,834	2,227	13.6	-7.8
United Arab Emirates	-	*	-	-	-	-100.0	-
United Kingdom	3,023	4,420	7,500	8,087	7,025	-31.6	-19.0
Venezuela	11	15	39	39	23	-23.1	-16.0
Yugoslavia	-	-	615	1,116	924	-	-
Unknown	-	-	-	-	612	-	-
Other States Total	870	709	761	947	1,716	22.7	-15.6
Brazil	184	295	-	-	-	-37.6	-
Canada	93	55	*	38	473	70.1	-33.4
China (Taiwan)	-	-	-	-	107	-	-
France	-	-	10	39	-	-	-
Ireland	-	-	10	-	22	-	-
Italy	-	-	-	-	3	-	-
Japan	-	-	-	202	-	-	-
Mexico	-	11	-	-	-	-100.0	-
Spain	153	-	52	258	155	-	-2
Turkey	-	-	-	-	2	-	-
United Kingdom	-	-	4	-	24	-	-
Unknown	439	348	685	410	931	26.0	-17.1

See footnotes at end of table.

Table 62. Foreign Distribution of U.S. Coal by Major Coal-Exporting States and Destination, 1990-1994 (Continued)
(Thousand Short Tons)

Coal-Exporting State and Destination	1994	1993	1992	1991	1990	Percent Change 1993-1994	Average Annual Percent Change
							1990-1994
U.S. Total	72,680	75,510	101,380	108,264	104,346	-3.8	-8.6
Albania	-	-	22	103	187	-	-
Algeria	250	466	665	427	409	-46.3	-11.5
Argentina	362	576	319	395	651	-37.1	-13.6
Australia	-	-	-	-	-	-	-
Austria	-	-	-	104	275	-	-
Belgium & Luxembourg	4,317	4,911	5,665	6,527	8,037	-12.1	-14.4
Brazil	5,826	5,711	5,909	6,543	5,245	2.0	2.7
Bulgaria	1,605	1,052	833	896	90	52.5	105.3
Canada	8,467	7,751	13,919	12,828	13,189	9.2	-10.5
Chile	-	-	38	233	407	-	-
China (Taiwan)	4,023	5,430	4,778	5,165	5,200	-25.9	-6.2
Costa Rica	-	-	-	-	-	-	-
Croatia	-	437	151	-	-	-100.0	-
Denmark	508	366	3,885	5,211	3,527	38.9	-38.4
Dominican Republic	65	59	158	201	90	9.5	-7.8
Egypt	997	814	789	692	685	22.4	9.8
Finland	445	234	183	517	98	90.3	46.1
France	4,211	4,595	8,813	8,969	6,426	-8.4	-10.0
Germany	586	697	1,045	1,405	843	-15.8	-8.7
Greece	-	-	-	91	30	-	-
Honduras	-	-	-	-	-	-	-
Hong Kong	46	-	359	522	111	-	-20.0
Iceland	9	-	42	39	62	-	-38.4
Indonesia	-	-	-	-	-	-	-
Ireland	1,015	1,135	1,327	1,015	1,154	-10.6	-3.2
Israel	922	940	1,286	1,136	693	-2.0	7.4
Italy	7,483	6,540	8,715	10,670	12,198	14.4	-11.5
Jamaica	32	47	39	59	59	-32.5	-14.4
Japan	9,799	11,765	11,808	12,405	13,064	-16.7	-6.9
Korea, Republic of	2,970	3,378	3,190	3,237	3,742	-12.1	-5.6
Malaysia	-	-	-	-	-	-	-
Mexico	-	11	18	3	-	-100.0	-
Morocco	101	561	500	830	745	-82.1	-39.4
Netherlands	4,728	4,109	7,506	7,463	6,942	15.1	-9.2
New Zealand	-	-	-	-	-	-	-
Nigeria	-	36	-	-	-	-100.0	-
Norway	105	141	172	254	237	-25.6	-18.5
Panama	-	-	-	-	-	-	-
Paraguay	-	-	3	-	-	-	-
Portugal	1,165	1,417	1,507	1,772	1,902	-17.8	-11.5
Qatar	-	-	-	-	-	-	-
Romania	1,693	786	711	1,055	1,667	115.3	.4
Saudi Arabia	-	-	-	-	-	-100.0	-
Sierra Leone	-	-	-	-	-	-	-
Singapore	-	-	-	-	-	-	-
Slovenia	-	-	61	-	-	-	-
South Africa, Rep of	769	479	589	218	68	60.4	83.3
Soviet Union	-	-	-	64	-	-	-
Spain	4,163	4,127	4,401	4,531	3,618	.9	3.6
Surinam	-	-	-	-	-	-100.0	-
Sweden	938	738	1,238	1,197	928	27.1	.3
Trinidad & Tobago	-	1	2	2	-	-100.0	-
Turkey	1,608	1,416	1,890	1,834	2,230	13.6	-7.8
United Arab Emirates	-	-	-	-	-	-100.0	-
United Kingdom	3,023	4,420	7,504	8,087	7,048	-31.6	-19.1
Venezuela	11	15	39	39	23	-23.1	-16.0
Yugoslavia	-	-	615	1,116	924	-	-
Unknown	439	348	685	410	1,543	26.0	-26.9

* Data round to zero.

nm Not meaningful as value is greater than 500.

Notes: Major coal-exporting States are those with total coal exports of over 600 thousand short tons in 1993. Totals may not equal sum of components due to independent rounding.

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, 1990-1994
(Thousand Short Tons)

Coal-Exporting State and Destination	1994	1993	1992	1991	1990	Percent Change 1993-1994	Average Annual Percent Change
							1990-1994
Alabama	4,353	5,841	5,789	6,476	7,724	-25.5	-13.4
Albania	-	-	22	63	70	-	-
Argentina	278	351	170	223	283	-20.8	-5
Belgium & Luxembourg	577	952	856	1,074	1,411	-39.5	-20.0
Brazil	44	212	-	112	173	-79.2	-29.0
Bulgaria	37	120	-	-	-	-69.3	-
China (Taiwan)	-	46	49	87	-	-100.0	-
France	-	-	-	-	125	-	-94.7
Italy	437	-	-	-	83	NM	51.5
Japan	1,280	2,418	2,532	2,917	3,456	-47.1	-22.0
Netherlands	91	-	77	-	-	-	-
Romania	563	188	199	373	594	199.3	-1.4
South Africa, Rep of	-	-	229	-	-	-	-
Turkey	143	278	459	386	374	-48.8	-21.4
United Kingdom	905	1,277	1,197	1,213	1,154	-29.2	-5.9
Yugoslavia	-	-	-	29	-	-	-
Colorado	-	-	-	-	290	-	-100.0
Japan	-	-	-	-	290	-	-
Illinois	236	109	614	546	237	115.8	-1
Belgium & Luxembourg	-	-	58	79	24	-	-
Brazil	-	-	298	249	79	-	-
France	-	-	-	-	46	-	-
Japan	236	109	32	36	2	115.8	232.9
Korea, Republic of	-	-	50	34	33	-	-
United Kingdom	-	-	175	148	42	-	-
Venezuela	-	-	-	-	11	-	-
Kentucky	2,180	3,310	4,971	4,354	7,104	-34.1	-25.6
Belgium & Luxembourg	81	68	-	546	632	19.5	-40.1
Brazil	29	478	110	77	299	-94.0	-44.4
Canada	1,073	1,356	1,373	1,125	1,106	-20.9	-8
China (Taiwan)	120	171	139	198	237	-29.4	-15.6
France	196	122	202	23	125	60.6	11.8
Iceland	9	-	35	-	45	-	-33.3
Italy	52	121	22	54	1,275	-56.6	-55.0
Japan	83	266	342	506	596	-68.8	-38.9
Netherlands	55	294	1,613	866	877	-81.2	-49.9
Norway	91	110	110	83	156	-17.8	-12.6
Soviet Union	-	-	-	64	-	-	-
Spain	-	-	-	29	11	-	-
Sweden	19	238	514	287	270	-91.8	-48.2
Turkey	-	-	170	260	787	-	-
United Kingdom	371	86	299	156	598	332.0	-11.3
Yugoslavia	-	-	42	79	90	-	-
Pennsylvania	1,624	1,919	1,266	1,331	522	-15.4	32.8
Argentina	-	46	-	-	-	-100.0	-
Belgium & Luxembourg	29	-	-	-	-	-	-
Brazil	333	148	90	-	-	124.6	-
Bulgaria	-	71	73	106	-	-100.0	-
Canada	-	10	-	8	42	-100.0	-
Chile	-	-	38	-	-	-	-
Dominican Republic	23	-	-	-	-	-	-
Finland	-	56	-	-	-	-100.0	-
Germany	174	-	-	-	-	-	-
Honduras	-	-	-	-	-	-	-
Italy	-	114	-	-	-	-100.0	-
Japan	834	1,384	931	1,217	448	-39.7	16.8
Korea, Republic of	214	91	-	-	-	135.8	-
Netherlands	17	-	-	-	-	-	-
United Kingdom	-	-	-	-	32	-	-
Yugoslavia	-	-	134	-	-	-	-
Utah	-	-	-	-	190	-	-100.0
France	-	-	-	-	16	-	-
Japan	-	-	-	-	174	-	-

See footnotes at end of table.

Table 63. Foreign Distribution of U.S. Metallurgical Coal by Major Coal-Exporting States and Destination, 1990-1994 (Continued)
(Thousand Short Tons)

Coal-Exporting State and Destination	1994	1993	1992	1991	1990	Percent Change 1993-1994	Average Annual Percent Change
							1990-1994
Virginia	11,193	13,512	14,021	14,404	16,435	-17.2	-9.2
Albania	-	-	-	20	43	-	-
Algeria	250	466	665	427	409	-46.3	-11.5
Argentina	49	70	-	59	59	-29.3	-4.3
Austria	-	-	-	104	265	-	-
Belgium & Luxembourg	822	1,447	2,241	2,111	2,405	-43.2	-23.5
Brazil	1,131	2,469	2,803	2,667	2,880	-54.2	-20.8
Bulgaria	-	328	214	349	-	-100.0	-
Canada	786	1,229	-	-	-	-36.1	-
China (Taiwan)	-	-	-	13	-	-	-
Croatia	-	339	-	-	-	-100.0	-
Egypt	405	316	297	182	125	28.2	34.3
France	523	822	785	871	992	-36.3	-14.8
Germany	9	68	47	22	-	-87.4	-
Iceland	-	-	-	34	-	-	-
Italy	1,343	1,286	774	545	2,096	4.4	-10.5
Japan	1,893	329	628	474	1,444	474.8	7.0
Korea, Republic of	1,287	1,675	1,893	1,973	1,105	-23.2	3.9
Netherlands	712	498	1,176	1,641	1,551	43.0	-17.7
Norway	-	-	-	31	29	-	-
Portugal	-	-	91	65	-	-	-
Romania	207	-	180	61	458	-	-18.0
Spain	1,205	1,782	1,270	1,337	1,688	-32.4	-8.1
Sweden	34	-	-	96	-	-	-
Turkey	-	-	-	470	97	-	-
United Kingdom	538	389	902	745	585	38.2	-2.1
Yugoslavia	-	-	54	108	206	-	-
West Virginia	31,612	27,627	35,353	35,891	29,995	14.4	1.3
Albania	-	-	-	20	73	-	-
Algeria	-	-	-	-	-	-	-
Argentina	35	110	149	113	309	-67.8	-41.8
Austria	-	-	-	-	10	-	-
Belgium & Luxembourg	1,299	1,236	280	785	1,002	5.1	6.7
Brazil	4,101	2,101	2,597	3,415	1,730	95.1	24.1
Bulgaria	1,568	535	546	440	90	193.4	104.1
Canada	5,605	4,071	8,021	7,351	5,067	37.7	2.6
Chile	-	-	-	27	21	-	-
China (Taiwan)	308	117	250	229	252	162.4	5.1
Croatia	-	52	151	-	-	-100.0	-
Egypt	592	499	491	510	560	18.7	1.4
Finland	375	176	183	388	98	113.2	39.9
France	3,492	2,695	3,253	3,194	2,574	29.6	7.9
Germany	381	237	278	403	265	60.8	9.5
Iceland	-	-	7	5	-	-	-
Italy	2,921	2,891	4,737	5,162	3,539	1.0	-4.7
Japan	2,143	4,079	5,019	4,560	4,918	-47.5	-18.8
Korea, Republic of	575	660	513	558	1,778	-12.9	-24.6
Netherlands	1,713	2,280	2,860	2,251	1,519	-24.8	3.0
Nigeria	-	36	-	-	-	-100.0	-
Norway	-	-	13	-	-	-	-
Portugal	-	126	95	-	175	-100.0	-
Romania	923	598	332	490	615	54.3	10.7
South Africa, Rep of	769	479	360	218	68	60.4	83.3
Spain	1,253	1,255	1,372	1,568	1,534	-2	-4.9
Sweden	885	501	723	751	634	76.7	8.7
Turkey	1,465	1,137	1,261	707	962	28.8	11.1
United Kingdom	1,210	1,757	1,476	2,015	1,651	-31.1	-7.5
Yugoslavia	-	-	385	730	551	-	-
Major States Total	51,198	52,318	62,013	63,003	62,496	-2.1	-4.9
Albania	-	-	22	103	187	-	-
Algeria	250	466	665	427	409	-46.3	-11.5
Argentina	362	576	319	395	651	-37.1	-13.6
Austria	-	-	-	104	275	-	-
Belgium & Luxembourg	2,808	3,703	3,435	4,596	5,474	-24.2	-15.4
Brazil	5,637	5,409	5,897	6,520	5,161	4.2	2.2
Bulgaria	1,605	1,052	833	896	90	52.5	105.3

See footnotes at end of table.

Table 63. Foreign Distribution of U.S. Metallurgical Coal by Major Coal-Exporting States and Destination, 1990-1994 (Continued)
(Thousand Short Tons)

Coal-Exporting State and Destination	1994	1993	1992	1991	1990	Percent Change 1993-1994	Average Annual Percent Change
							1990-1994
Major States Total (Continued)							
Canada	7,464	6,666	9,394	8,483	6,215	12.0	4.7
Chile	-	-	38	27	21	-	-
China (Taiwan)	428	334	437	528	489	28.3	-3.3
Croatia	-	392	151	-	-	-100.0	-
Dominican Republic	23	-	-	-	-	-	-
Egypt	997	814	789	692	685	22.4	9.8
Finland	375	232	183	388	98	61.8	39.9
France	4,211	3,639	4,240	4,088	3,878	15.7	2.1
Germany	563	305	324	426	265	84.7	20.7
Honduras	-	-	-	-	*	-	-
Iceland	9	-	42	39	45	-	-33.3
Italy	4,753	4,412	5,533	5,761	6,993	7.7	-9.2
Japan	6,469	8,586	9,485	9,709	11,327	-24.7	-13.1
Korea, Republic of	2,076	2,425	2,457	2,565	2,916	-14.4	-8.1
Netherlands	2,589	3,071	5,726	4,759	3,948	-15.7	-10.0
Nigeria	-	36	-	-	-	-100.0	-
Norway	91	110	124	114	184	-17.8	-16.2
Portugal	-	126	187	65	175	-100.0	-
Romania	1,693	786	711	924	1,667	115.3	.4
South Africa, Rep of	769	479	589	218	68	60.4	83.3
Soviet Union	-	-	-	64	-	-	-
Spain	2,458	3,037	2,643	2,933	3,233	-19.1	-6.6
Sweden	938	738	1,237	1,133	904	27.1	.9
Turkey	1,608	1,416	1,890	1,823	2,219	13.6	-7.7
United Kingdom	3,023	3,509	4,050	4,278	4,062	-13.8	-7.1
Venezuela	-	-	-	-	11	-	-
Yugoslavia	-	-	615	946	846	-	-
Other States Total	184	295	-	-	107	-37.6	14.6
Brazil	184	295	-	-	-	-37.6	-
China (Taiwan)	-	-	-	-	107	-	-
U.S. Total	51,382	52,613	62,013	63,003	62,603	-2.3	-4.8
Albania	-	-	22	103	187	-	-
Algeria	250	466	665	427	409	-46.3	-11.5
Argentina	362	576	319	395	651	-37.1	-13.6
Austria	-	-	-	104	275	-	-
Belgium & Luxembourg	2,808	3,703	3,435	4,596	5,474	-24.2	-15.4
Brazil	5,821	5,703	5,897	6,520	5,161	2.1	3.0
Bulgaria	1,605	1,052	833	896	90	52.5	105.3
Canada	7,464	6,666	9,394	8,483	6,215	12.0	4.7
Chile	-	-	38	27	21	-	-
China (Taiwan)	428	334	437	528	596	28.3	-7.9
Croatia	-	392	151	-	-	-100.0	-
Dominican Republic	23	-	-	-	-	-	-
Egypt	997	814	789	692	685	22.4	9.8
Finland	375	232	183	388	98	61.8	39.9
France	4,211	3,639	4,240	4,088	3,878	15.7	2.1
Germany	563	305	324	426	265	84.7	20.7
Honduras	-	-	-	-	*	-	-
Iceland	9	-	42	39	45	-	-33.3
Italy	4,753	4,412	5,533	5,761	6,993	7.7	-9.2
Japan	6,469	8,586	9,485	9,709	11,327	-24.7	-13.1
Korea, Republic of	2,076	2,425	2,457	2,565	2,916	-14.4	-8.1
Netherlands	2,589	3,071	5,726	4,759	3,948	-15.7	-10.0
Nigeria	-	36	-	-	-	-100.0	-
Norway	91	110	124	114	184	-17.8	-16.2
Portugal	-	126	187	65	175	-100.0	-
Romania	1,693	786	711	924	1,667	115.3	.4
South Africa, Rep of	769	479	589	218	68	60.4	83.3
Soviet Union	-	-	-	64	-	-	-
Spain	2,458	3,037	2,643	2,933	3,233	-19.1	-6.6
Sweden	938	738	1,237	1,133	904	27.1	.9
Turkey	1,608	1,416	1,890	1,823	2,219	13.6	-7.7
United Kingdom	3,023	3,509	4,050	4,278	4,062	-13.8	-7.1
Venezuela	-	-	-	-	11	-	-
Yugoslavia	-	-	615	946	846	-	-

* Data round to zero.

NA Not meaningful as value is greater than 500.

Notes: Major coal-exporting States are those with total coal exports of over 600 thousand short tons in 1993. Totals may not equal sum of components due to independent rounding.

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, 1990-1994
(Thousand Short Tons)

Coal-Exporting State and Destination	1994	1993	1992	1991	1990	Percent Change 1993-1994	Average Annual Percent Change
							1990-1994
Alabama	176	47	142	536	466	275.8	-21.5
Hong Kong	-	-	-	89	-	-	-
Italy	149	-	138	443	346	-	-19.0
Japan	-	4	4	3	7	-100.0	-
Morocco	-	43	-	-	-	-100.0	-
Netherlands	-	-	-	-	40	-	-
Spain	28	-	-	-	-	-	-
United Kingdom	-	-	-	-	72	-	-
Alaska	716	743	734	672	797	-3.6	-2.6
Korea, Republic of	716	743	734	672	797	-3.6	-2.6
Colorado	752	1,128	669	625	77	-33.3	76.9
China (Taiwan)	134	-	-	-	-	-	-
Hong Kong	46	-	-	-	-	-	-
Japan	395	918	669	625	77	-57.0	50.6
Korea, Republic of	177	209	-	-	-	-15.3	-
Illinois	-	561	629	717	133	-100.0	-100.0
Canada	-	-	-	4	-	-	-
Denmark	-	-	45	-	-	-	-
Ireland	-	108	213	225	95	-100.0	-
Japan	-	-	21	24	4	-	-
Morocco	-	452	350	464	-	-100.0	-
Netherlands	-	-	-	-	23	-	-
Spain	-	-	-	-	11	-	-
Kentucky	4,987	6,212	9,065	11,124	8,586	-19.7	-12.7
Belgium & Luxembourg	501	533	651	427	623	-5.9	-5.3
Brazil	-	-	-	-	52	-	-
Canada	26	60	705	435	621	-56.2	-54.7
China (Taiwan)	3,140	4,248	3,620	4,131	3,513	-26.1	-2.8
Denmark	-	40	193	779	521	-100.0	-
Finland	-	2	-	-	-	-100.0	-
France	-	324	1,561	2,281	333	-100.0	-
Greece	-	-	-	91	-	-	-
Honduras	-	-	-	-	-	-	-
Iceland	-	-	-	-	17	-	-
Ireland	-	19	379	13	-	-100.0	-
Italy	941	877	908	959	2,276	7.3	-19.8
Jamaica	32	47	39	59	59	-32.5	-14.4
Japan	41	61	-	33	-	-33.3	-
Netherlands	276	-	616	783	430	-	-10.5
Norway	-	-	-	75	13	-	-
Portugal	30	-	-	183	-	-	-
Spain	-	-	111	140	19	-	-
Sweden	-	-	-	56	-	-	-
United Kingdom	-	-	282	679	107	-	-
Pennsylvania	4,677	3,589	5,175	5,972	6,362	30.3	-7.4
Australia	-	-	-	-	-	-	-
Belgium & Luxembourg	-	-	91	305	244	-	-
Brazil	5	7	12	23	4	-33.4	6.2
Canada	844	587	1,599	2,330	2,650	43.7	-24.9
Chile	-	-	-	206	278	-	-
China (Taiwan)	-	-	-	-	-	-	-
Costa Rica	-	-	-	-	-	-	-
Croatia	-	45	-	-	-	-100.0	-
Denmark	508	187	1,456	794	1,193	172.4	-19.2
Dominican Republic	42	59	158	201	90	-29.9	-17.6
Finland	71	-	-	-	-	-	-
France	-	188	186	-	25	-100.0	-
Germany	23	102	153	29	97	-77.3	-30.0
Indonesia	-	-	-	-	-	-	-
Ireland	1,015	911	-	-	-	11.4	-
Israel	922	940	1,101	986	496	-2.0	16.8
Italy	601	50	-	-	-	NM	-
Japan	-	-	-	171	419	-	-
Malaysia	-	-	-	-	-	-	-

See footnotes at end of table.

Table 64. Foreign Distribution of U.S. Steam Coal by Major Coal-Exporting States and Destination, 1990-1994 (Continued)
(Thousand Short Tons)

Coal-Exporting State and Destination	1994	1993	1992	1991	1990	Percent Change 1993-1994	Average Annual Percent Change
							1990-1994
Pennsylvania (Continued)							
Mexico	-	-	18	3	-	-	-
Morocco	-	-	-	185	561	-	-
Netherlands	244	-	2	-	3	-	212.4
New Zealand	-	-	-	-	*	-	-
Norway	14	30	49	66	40	-53.6	-22.8
Panama	-	-	*	*	*	-	-
Paraguay	-	-	3	-	-	-	-
Portugal	378	467	305	491	243	-19.2	11.6
Qatar	-	-	*	-	-	-	-
Saudi Arabia	-	*	-	-	*	-100.0	-
Sierra Leone	-	-	-	-	*	-	-
Singapore	-	-	-	*	*	-	-
Spain	-	-	-	129	-	-	-
Surinam	-	*	*	-	-	-100.0	-
Sweden	-	-	1	-	-	-	-
Trinidad & Tobago	-	1	2	2	-	-100.0	-
Turkey	-	-	-	11	8	-	-
United Arab Emirates	-	*	-	-	-	-100.0	-
United Kingdom	-	*	-	*	-	-100.0	-
Venezuela	11	15	39	39	12	-23.1	-1.3
Utah	2,698	2,959	2,260	2,086	1,560	-8.8	14.7
Canada	-	346	-	-	-	-100.0	-
China (Taiwan)	321	849	721	506	560	-62.2	-13.0
Hong Kong	-	-	359	433	111	-	-
Indonesia	-	-	-	*	-	-	-
Japan	2,377	1,764	1,180	1,147	889	34.7	27.9
Mexico	-	*	-	-	-	-100.0	-
Virginia	490	739	3,203	3,700	2,740	-33.7	-35.0
Belgium & Luxembourg	-	-	388	361	252	-	-
Brazil	-	-	-	-	28	-	-
Canada	-	-	1,331	1,404	1,244	-	-
Denmark	-	-	74	-	64	-	-
France	-	-	85	156	87	-	-
Ireland	-	-	-	12	-	-	-
Italy	333	616	900	1,528	575	-45.9	-12.7
Japan	72	74	81	-	-	-2.9	-
Netherlands	-	49	-	-	216	-100.0	-
Portugal	85	-	262	233	217	-	-20.9
Spain	-	-	82	7	-	-	-
United Kingdom	-	-	-	-	57	-	-
West Virginia	4,593	5,532	15,453	17,900	18,739	-17.0	-29.6
Belgium & Luxembourg	1,008	675	1,100	838	1,444	49.4	-8.6
Canada	40	37	890	113	1,925	7.8	-62.1
Chile	-	-	-	-	108	-	-
China (Taiwan)	-	-	-	-	530	-	-
Denmark	-	140	2,116	3,638	1,748	-100.0	-
Finland	-	-	-	129	-	-	-
France	-	445	2,731	2,405	2,103	-100.0	-
Germany	-	290	569	950	480	-100.0	-
Greece	-	-	-	-	30	-	-
Ireland	-	97	726	764	1,037	-100.0	-
Israel	-	-	185	150	198	-	-
Italy	705	585	1,236	1,979	2,005	20.6	-23.0
Japan	447	358	369	490	341	24.8	7.0
Korea, Republic of	-	-	-	-	28	-	-
Morocco	101	66	150	182	185	53.5	-14.1
Netherlands	1,619	989	1,163	1,922	2,282	63.8	-8.2
Portugal	673	824	754	799	1,266	-18.4	-14.6
Romania	-	-	-	131	-	-	-
Slovenia	-	-	61	-	-	-	-
Spain	-	116	237	272	201	-100.0	-
Sweden	-	-	-	7	24	-	-
United Kingdom	-	911	3,168	3,131	2,727	-100.0	-
Yugoslavia	-	-	-	-	78	-	-

See footnotes at end of table.

Table 64. Foreign Distribution of U.S. Steam Coal by Major Coal-Exporting States and Destination, 1990-1994 (Continued)
(Thousand Short Tons)

Coal-Exporting State and Destination	1994	1993	1992	1991	1990	Percent Change 1993-1994	Average Annual Percent Change
							1990-1994
Wyoming	1,524	974	1,277	982	674	56.5	22.6
Canada	-	-	-	20	62	-	-
Japan	-	*	-	*	-	-100.0	-
Spain	1,524	974	1,277	791	-	56.5	-
Yugoslavia	-	-	-	170	-	-	-
Unknown	-	-	-	-	612	-	-
Major States Total	20,612	22,483	38,606	44,314	40,134	-8.3	-15.3
Australia	-	-	-	-	*	-	-
Belgium & Luxembourg	1,509	1,208	2,230	1,931	2,563	25.0	-12.4
Brazil	5	7	12	23	84	-33.4	-50.7
Canada	910	1,030	4,525	4,306	6,501	-11.7	-38.8
Chile	-	-	-	206	386	-	-
China (Taiwan)	3,595	5,097	4,341	4,637	4,604	-29.5	-6.0
Costa Rica	-	-	*	*	-	-	-
Croatia	-	45	-	-	-	-100.0	-
Denmark	508	366	3,885	5,211	3,527	38.9	-38.4
Dominican Republic	42	59	158	201	90	-29.9	-17.6
Finland	71	2	-	129	-	NM	-
France	-	957	4,563	4,842	2,548	-100.0	-
Germany	23	392	721	979	577	-94.1	-55.2
Greece	-	-	-	91	30	-	-
Honduras	-	-	-	*	-	-	-
Hong Kong	46	-	359	522	111	-	-20.0
Iceland	-	-	-	-	17	-	-
Indonesia	-	-	*	*	-	-	-
Ireland	1,015	1,135	1,317	1,015	1,132	-10.6	-2.7
Israel	922	940	1,286	1,136	693	-2.0	7.4
Italy	2,730	2,128	3,182	4,909	5,202	28.3	-14.9
Jamaica	32	47	39	59	59	-32.5	-14.4
Japan	3,331	3,179	2,323	2,493	1,737	4.8	17.7
Korea, Republic of	894	952	734	672	825	-6.1	2.0
Malaysia	-	-	*	*	-	-	-
Mexico	-	*	18	3	-	-100.0	-
Morocco	101	561	500	830	745	-82.1	-39.4
Netherlands	2,139	1,038	1,781	2,705	2,994	106.1	-8.1
New Zealand	-	-	-	-	*	-	-
Norway	14	30	49	140	53	-53.6	-28.1
Panama	-	-	*	*	-	-	-
Paraguay	-	-	3	-	-	-	-
Portugal	1,165	1,292	1,320	1,708	1,727	-9.8	-9.4
Qatar	-	-	*	-	-	-	-
Romania	-	-	-	131	-	-	-
Saudi Arabia	-	*	-	-	*	-100.0	-
Sierra Leone	-	-	-	-	*	-	-
Singapore	-	-	-	*	*	-	-
Slovenia	-	-	61	-	-	-	-
Spain	1,551	1,090	1,707	1,340	230	42.4	61.1
Surinam	-	*	*	-	-	-100.0	-
Sweden	-	-	1	64	24	-	-
Trinidad & Tobago	-	1	2	2	-	-100.0	-
Turkey	-	-	-	11	8	-	-
United Arab Emirates	-	*	-	-	-	-100.0	-
United Kingdom	-	911	3,450	3,810	2,963	-100.0	-
Venezuela	11	15	39	39	12	-23.1	-1.3
Yugoslavia	-	-	-	170	78	-	-
Unknown	-	-	-	-	612	-	-
Other States Total	686	414	761	947	1,609	65.5	-19.2
Canada	93	55	*	38	473	70.1	-33.4
France	-	-	10	39	-	-	-
Ireland	-	-	10	-	22	-	-
Italy	-	-	-	-	3	-	-
Japan	-	-	-	202	-	-	-
Mexico	-	11	-	-	-	-100.0	-
Spain	153	-	52	258	155	-	-2
Turkey	-	-	-	-	2	-	-
United Kingdom	-	-	4	-	24	-	-
Unknown	439	348	685	410	931	26.0	-17.1

See footnotes at end of table.

Table 64. Foreign Distribution of U.S. Steam Coal by Major Coal-Exporting States and Destination, 1990-1994 (Continued)
(Thousand Short Tons)

Coal-Exporting State and Destination	1994	1993	1992	1991	1990	Percent Change 1993-1994	Average Annual Percent Change
							1990-1994
U.S. Total	21,298	22,897	39,367	45,261	41,743	-7.0	-15.5
Australia	-	-	-	-	-	-	-
Belgium & Luxembourg	1,509	1,208	2,230	1,931	2,563	25.0	-12.4
Brazil	5	7	12	23	84	-33.4	-50.7
Canada	1,003	1,085	4,525	4,345	6,975	-7.6	-38.4
Chile	-	-	-	206	386	-	-
China (Taiwan)	3,595	5,097	4,341	4,637	4,604	-29.5	-6.0
Costa Rica	-	-	-	-	-	-	-
Croatia	-	45	-	-	-	-100.0	-
Denmark	508	366	3,885	5,211	3,527	38.9	-38.4
Dominican Republic	42	59	158	201	90	-29.9	-17.6
Finland	71	2	-	129	-	NM	-
France	-	957	4,573	4,881	2,548	-100.0	-
Germany	23	392	721	979	577	-94.1	-55.2
Greece	-	-	-	91	30	-	-
Honduras	-	-	-	-	-	-	-
Hong Kong	46	-	359	522	111	-	-20.0
Iceland	-	-	-	-	17	-	-
Indonesia	-	-	-	-	-	-	-
Ireland	1,015	1,135	1,327	1,015	1,154	-10.6	-3.2
Israel	922	940	1,286	1,136	693	-2.0	7.4
Italy	2,730	2,128	3,182	4,909	5,205	28.3	-14.9
Jamaica	32	47	39	59	59	-32.5	-14.4
Japan	3,331	3,179	2,323	2,695	1,737	4.8	17.7
Korea, Republic of	894	952	734	672	825	-6.1	2.0
Malaysia	-	-	-	-	-	-	-
Mexico	-	11	18	3	-	-100.0	-
Morocco	101	561	500	830	745	-82.1	-39.4
Netherlands	2,139	1,038	1,781	2,705	2,994	106.1	-8.1
New Zealand	-	-	-	-	-	-	-
Norway	14	30	49	140	53	-53.6	-28.1
Panama	-	-	-	-	-	-	-
Paraguay	-	-	3	-	-	-	-
Portugal	1,165	1,292	1,320	1,708	1,727	-9.8	-9.4
Qatar	-	-	-	-	-	-	-
Romania	-	-	-	131	-	-	-
Saudi Arabia	-	-	-	-	-	-100.0	-
Sierra Leone	-	-	-	-	-	-	-
Singapore	-	-	-	-	-	-	-
Slovenia	-	-	61	-	-	-	-
Spain	1,705	1,090	1,759	1,598	385	56.4	45.1
Surinam	-	-	-	-	-	-100.0	-
Sweden	-	-	1	64	24	-	-
Trinidad & Tobago	-	1	2	2	-	-100.0	-
Turkey	-	-	-	11	10	-	-
United Arab Emirates	-	-	-	-	-	-100.0	-
United Kingdom	-	911	3,454	3,810	2,986	-100.0	-
Venezuela	11	15	39	39	12	-23.1	-1.3
Yugoslavia	-	-	-	170	78	-	-
Unknown	439	348	685	410	1,543	26.0	-26.9

* Data round to zero.

NA Not meaningful as value is greater than 500.

Notes: Major coal-exporting States are those with total coal exports of over 600 thousand short tons in 1993. Totals may not equal sum of components due to independent rounding.

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, 1994
(Thousand Short Tons)

Origin State and Destination State	Railroad	Water				Truck	Tramway, Conveyor, and Slurry Pipeline	Unknown	Total
		River	Great Lakes	Tidewater	Total				
Alabama	5,724	3,345	-	4,529	7,875	8,633	1,429	89	23,750
Alabama	5,589	2,849	-	-	2,849	8,483	1,429	-	18,351
Arkansas	45	-	-	-	-	15	-	-	60
Florida	85	-	-	*	*	-	-	-	85
Georgia	-	-	-	-	-	*	-	-	*
Mississippi	2	-	-	-	-	127	-	-	129
Pennsylvania	-	496	-	-	496	-	-	-	496
South Carolina	-	-	-	-	-	3	-	-	3
Tennessee	-	-	-	-	-	4	-	-	4
Texas	2	-	-	-	-	1	-	-	3
Unknown State	-	-	-	-	-	-	-	89	89
Foreign	-	-	-	4,529	4,529	-	-	-	4,529
Alaska	575	-	-	716	716	214	-	-	1,505
Alaska	575	-	-	-	-	214	-	-	789
Foreign	-	-	-	716	716	-	-	-	716
Arizona	7,580	-	-	-	-	-	4,431	-	12,011
Arizona	7,580	-	-	-	-	-	-	-	7,580
Nevada	-	-	-	-	-	-	4,431	-	4,431
Arkansas	-	-	-	-	-	28	-	-	28
Arkansas	-	-	-	-	-	13	-	-	13
Missouri	-	-	-	-	-	4	-	-	4
Oklahoma	-	-	-	-	-	*	-	-	*
Texas	-	-	-	-	-	12	-	-	12
Colorado	18,756	558	-	752	1,310	4,708	-	36	24,810
Arizona	179	-	-	-	-	40	-	-	219
California	22	-	-	-	-	-	-	-	22
Colorado	7,458	-	-	-	-	4,576	-	-	12,035
Florida	423	-	-	-	-	-	-	-	423
Georgia	11	-	-	-	-	-	-	-	11
Illinois	959	480	-	-	480	*	-	-	1,439
Indiana	446	11	-	-	11	-	-	-	457
Iowa	171	-	-	-	-	-	-	-	171
Kansas	1,148	-	-	-	-	-	-	-	1,148
Kentucky	710	-	-	-	-	-	-	-	710
Minnesota	23	-	-	-	-	-	-	-	23
Mississippi	735	-	-	-	-	-	-	-	735
Missouri	769	-	-	-	-	7	-	-	775
Nebraska	77	-	-	-	-	-	-	-	77
Nevada	306	-	-	-	-	-	-	-	306
New Mexico	-	-	-	-	-	84	-	-	84
Oklahoma	26	-	-	-	-	-	-	-	26
Tennessee	593	-	-	-	-	-	-	-	593
Texas	2,537	-	-	-	-	-	-	-	2,537
Utah	1,714	-	-	-	-	-	-	-	1,714
Washington	52	-	-	-	-	-	-	-	52
West Virginia	-	2	-	-	2	-	-	-	2
Wisconsin	395	66	-	-	66	-	-	-	462
Wyoming	4	-	-	-	-	-	-	-	4
Unknown State	-	-	-	-	-	-	-	36	36
Foreign	-	-	-	752	752	-	-	-	752
Illinois	29,017	15,079	32	1,111	16,222	5,185	1,460	88	51,973
Alabama	10	740	-	-	740	-	-	-	750
Arkansas	30	-	-	-	-	-	-	-	30
Florida	345	4,799	-	701	5,501	-	-	-	5,846
Georgia	281	2,274	-	-	2,274	2	-	-	2,557
Illinois	10,742	738	-	-	738	4,578	1,460	-	17,517
Indiana	9,355	160	-	-	160	59	-	-	9,574
Iowa	775	647	-	-	647	113	-	-	1,535
Kansas	193	-	-	-	-	-	-	-	193
Kentucky	308	35	-	-	35	-	-	-	343
Michigan	41	-	10	-	10	-	-	-	51
Minnesota	133	9	-	-	9	37	-	-	179
Mississippi	13	978	-	174	1,152	-	-	-	1,164
Missouri	5,579	1,592	-	-	1,592	370	-	-	7,541

See footnotes at end of table.

Table 65. Distribution of U.S. Coal by Origin, Destination, and Method of Transportation, 1994
(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)									
New York	-	-	-	-	-	*	-	-	*
Ohio	-	18	-	-	18	*	-	-	18
Oklahoma	-	16	-	-	16	-	-	-	16
Pennsylvania	*	-	-	-	-	*	-	-	*
Tennessee	836	2,359	-	-	2,359	-	-	-	3,195
West Virginia	-	-	-	-	-	*	-	-	*
Wisconsin	377	714	22	-	737	25	-	-	1,139
Unknown State	-	-	-	-	-	-	-	88	88
Foreign	-	-	-	236	236	-	-	-	236
Indiana	16,101	3,665	349	206	4,220	9,703	580	80	30,684
Alabama	-	56	-	-	56	-	-	-	56
Connecticut	*	-	-	-	-	-	-	-	*
Georgia	19	-	-	-	-	-	-	-	19
Illinois	584	213	-	-	213	800	-	-	1,597
Indiana	14,339	961	216	-	1,177	8,638	580	-	24,733
Iowa	170	256	-	-	256	-	-	-	426
Kentucky	356	1,607	-	-	1,607	256	-	-	2,219
Michigan	-	-	133	-	133	2	-	-	135
Minnesota	43	-	-	-	-	-	-	-	43
Missouri	-	504	-	-	504	-	-	-	504
Ohio	3	33	-	-	33	*	-	-	36
Oklahoma	-	3	-	-	3	-	-	-	3
Tennessee	-	32	-	-	32	6	-	-	38
Texas	-	-	-	-	-	*	-	-	*
Wisconsin	587	-	-	-	-	-	-	-	587
Unknown State	-	-	-	-	-	-	-	80	80
Foreign	-	-	-	206	206	-	-	-	206
Iowa	-	-	-	-	-	46	-	-	46
Iowa	-	-	-	-	-	46	-	-	46
Kansas	22	-	-	-	-	260	-	-	282
Kansas	-	-	-	-	-	165	-	-	165
Missouri	22	-	-	-	-	95	-	-	117
Kentucky	97,429	34,832	2,290	8,818	45,940	14,229	3	1,521	159,123
Alabama	2,042	2,394	-	-	2,394	4	-	-	4,439
Arkansas	*	-	-	-	-	8	-	-	9
Connecticut	-	-	-	787	787	-	-	-	787
Delaware	37	-	-	-	-	-	-	-	37
District of Columbia	13	-	-	-	-	-	-	-	13
Florida	11,056	2,864	-	836	3,700	19	-	-	14,774
Georgia	15,478	71	-	-	71	100	-	-	15,649
Illinois	1,172	566	-	-	566	8	-	-	1,746
Indiana	1,629	2,565	-	-	2,565	128	-	-	4,322
Iowa	8	409	-	-	409	*	-	-	418
Kentucky	9,677	5,892	-	-	5,892	11,136	3	12	26,719
Louisiana	-	791	-	-	791	-	-	-	791
Maine	-	-	-	433	433	-	-	-	433
Maryland	109	-	-	314	314	-	-	-	423
Massachusetts	38	-	-	189	189	-	-	-	227
Michigan	7,763	826	733	-	1,559	215	-	-	9,536
Minnesota	32	106	60	-	166	-	-	-	198
Mississippi	356	650	-	-	650	-	-	-	1,006
Missouri	28	1,086	-	-	1,086	3	-	-	1,117
New Jersey	-	15	-	48	63	-	-	-	63
New York	1,259	29	-	-	29	-	-	-	1,288
North Carolina	13,357	21	-	-	21	212	-	-	13,590
Ohio	5,160	4,324	60	-	4,384	1,168	-	-	10,712
Oregon	15	-	-	-	-	-	-	-	15
Pennsylvania	997	2,018	-	-	2,018	156	-	-	3,171
South Carolina	11,346	-	-	-	-	96	-	-	11,442
South Dakota	-	1	-	-	1	-	-	-	1
Tennessee	8,691	9,468	-	-	9,468	533	-	-	18,692
Texas	8	2	-	-	2	1	-	-	10
Virginia	6,246	9	-	144	153	140	-	-	6,539

See footnotes at end of table.

Table 65. Distribution of U.S. Coal by Origin, Destination, and Method of Transportation, 1994
(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 (Continued)									
West Virginia	348	531	-	-	531	276	-	-	1,154
Wisconsin	428	196	465	-	661	25	-	-	1,114
Wyoming	10	-	-	-	-	-	-	-	10
Unknown State	-	-	-	-	-	-	-	1,510	1,510
Foreign	125	-	972	6,068	7,040	2	-	-	7,167
Kentucky, Eastern	87,954	15,861	2,278	8,507	26,645	8,158	3	1,490	124,250
Alabama	1,333	1,065	-	-	1,065	4	-	-	2,402
Arkansas	*	-	-	-	-	-	-	-	*
Connecticut	-	-	-	787	787	-	-	-	787
Delaware	37	-	-	-	-	-	-	-	37
District of Columbia	13	-	-	-	-	-	-	-	13
Florida	10,989	393	-	668	1,061	19	-	-	12,069
Georgia	15,478	71	-	-	71	100	-	-	15,649
Illinois	1,137	409	-	-	409	8	-	-	1,555
Indiana	1,498	504	-	-	504	107	-	-	2,109
Iowa	5	35	-	-	35	*	-	-	40
Kentucky	3,287	1,899	-	-	1,899	5,117	3	12	10,317
Louisiana	-	791	-	-	791	-	-	-	791
Maine	-	-	-	433	433	-	-	-	433
Maryland	109	-	-	314	314	-	-	-	423
Massachusetts	38	-	-	189	189	-	-	-	227
Michigan	7,763	826	720	-	1,546	215	-	-	9,524
Minnesota	32	79	60	-	140	-	-	-	172
Mississippi	356	650	-	-	650	-	-	-	1,006
Missouri	28	320	-	-	320	3	-	-	351
New Jersey	-	15	-	48	63	-	-	-	63
New York	1,259	29	-	-	29	-	-	-	1,288
North Carolina	13,357	21	-	-	21	212	-	-	13,590
Ohio	5,066	4,242	60	-	4,302	1,164	-	-	10,532
Oregon	15	-	-	-	-	-	-	-	15
Pennsylvania	997	2,018	-	-	2,018	156	-	-	3,171
South Carolina	11,346	-	-	-	-	96	-	-	11,442
South Dakota	-	1	-	-	1	-	-	-	1
Tennessee	6,813	1,756	-	-	1,756	514	-	-	9,083
Texas	8	2	-	-	2	1	-	-	10
Virginia	6,246	9	-	144	153	140	-	-	6,539
West Virginia	344	531	-	-	531	276	-	-	1,151
Wisconsin	263	196	465	-	661	25	-	-	949
Wyoming	10	-	-	-	-	-	-	-	10
Unknown State	-	-	-	-	-	-	-	1,479	1,479
Foreign	125	-	972	5,924	6,896	2	-	-	7,023
Kentucky, Western	9,475	18,971	12	312	19,295	6,072	-	31	34,873
Alabama	709	1,329	-	-	1,329	-	-	-	2,038
Arkansas	-	-	-	-	-	8	-	-	8
Florida	67	2,471	-	168	2,638	-	-	-	2,706
Illinois	35	157	-	-	157	-	-	-	192
Indiana	131	2,061	-	-	2,061	21	-	-	2,214
Iowa	3	375	-	-	375	-	-	-	377
Kentucky	6,390	3,993	-	-	3,993	6,018	-	-	16,401
Michigan	-	-	12	-	12	*	-	-	12
Minnesota	-	26	-	-	26	-	-	-	26
Missouri	-	766	-	-	766	-	-	-	766
North Carolina	-	-	-	-	-	*	-	-	*
Ohio	93	82	-	-	82	4	-	-	180
Pennsylvania	-	-	-	-	-	*	-	-	*
South Carolina	-	-	-	-	-	*	-	-	*
Tennessee	1,878	7,712	-	-	7,712	19	-	-	9,609
West Virginia	3	-	-	-	-	-	-	-	3
Wisconsin	165	-	-	-	-	-	-	-	165
Unknown State	-	-	-	-	-	-	-	31	31
Foreign	-	-	-	144	144	-	-	-	144
Louisiana	-	-	-	-	-	766	2,697	-	3,463

See footnotes at end of table.

Table 65. Distribution of U.S. Coal by Origin, Destination, and Method of Transportation, 1994
(Continued)
(Thousand Short Tons)

Origin State and Destination State	Railroad	Water				Truck	Tramway, Conveyor, and Slurry Pipeline	Unknown	Total
		River	Great Lakes	Tidewater	Total				
Louisiana (Continued)									
Louisiana	-	-	-	-	-	766	2,697	-	3,463
Maryland	2,528	260	-	184	444	489	-	-	3,460
Delaware	125	-	-	-	-	-	-	-	125
Maryland	744	-	-	-	-	290	-	-	1,034
Virginia	-	-	-	-	-	1	-	-	1
West Virginia	1,658	260	-	-	260	198	-	-	2,116
Foreign	-	-	-	184	184	-	-	-	184
Missouri	83	-	-	-	-	596	-	-	679
Kansas	-	-	-	-	-	77	-	-	77
Missouri	83	-	-	-	-	519	-	-	602
Montana	24,536	-	7,154	153	7,308	388	9,684	*	41,916
Colorado	89	-	-	-	-	-	-	-	89
Illinois	4,338	-	-	-	-	-	-	-	4,338
Indiana	749	-	-	-	-	-	-	-	749
Iowa	*	-	-	-	-	-	-	-	*
Michigan	4,228	-	6,253	-	6,253	-	-	-	10,481
Minnesota	9,981	-	57	-	57	*	-	-	10,038
Mississippi	1,314	-	-	-	-	-	-	-	1,314
Montana	551	-	-	-	-	346	9,684	-	10,581
Nebraska	71	-	-	-	-	-	-	-	71
North Dakota	559	-	-	-	-	-	-	-	559
Washington	1,097	-	-	-	-	-	-	-	1,097
Wisconsin	1,462	-	844	-	844	1	-	-	2,307
Wyoming	8	-	-	-	-	41	-	-	49
Unknown State	-	-	-	-	-	-	-	*	*
Foreign	90	-	-	153	153	-	-	-	243
New Mexico	22,547	-	-	30	30	5,993	-	-	28,570
Arizona	11,284	-	-	-	-	-	-	-	11,284
New Mexico	9,472	-	-	-	-	5,993	-	-	15,464
Texas	296	-	-	-	-	-	-	-	296
Wisconsin	1,495	-	-	-	-	-	-	-	1,495
Foreign	-	-	-	30	30	-	-	-	30
North Dakota	2,787	-	-	-	-	5,036	24,233	-	32,056
North Dakota	462	-	-	-	-	5,036	24,233	-	29,731
South Dakota	2,325	-	-	-	-	-	-	-	2,325
Wisconsin	-	-	-	-	-	*	-	-	*
Ohio	1,933	10,320	151	61	10,532	10,312	5,660	313	28,749
Alabama	1	35	-	-	35	-	-	-	37
Connecticut	-	-	-	-	-	*	-	-	*
Delaware	13	-	-	-	-	16	-	-	29
Illinois	-	17	-	-	17	-	-	-	17
Indiana	231	19	-	-	19	95	-	-	345
Iowa	6	-	-	-	-	9	-	-	15
Kentucky	-	79	-	-	79	14	-	-	93
Michigan	78	-	22	-	22	422	-	-	522
Missouri	18	-	-	-	-	-	-	-	18
New York	109	-	-	-	-	15	-	-	124
Ohio	1,474	7,386	111	-	7,496	9,279	5,647	11	23,907
Pennsylvania	1	1,885	-	-	1,885	433	-	-	2,318
West Virginia	2	899	-	-	899	27	13	-	942
Wisconsin	-	-	18	-	18	-	-	-	18
Unknown State	-	-	-	-	-	-	-	302	302
Foreign	-	-	-	61	61	-	-	-	61
Oklahoma	-	-	-	-	-	1,923	-	2	1,925
Arkansas	-	-	-	-	-	205	-	-	205
California	-	-	-	-	-	*	-	-	*
Kansas	-	-	-	-	-	22	-	-	22
Missouri	-	-	-	-	-	5	-	-	5
Oklahoma	-	-	-	-	-	1,532	-	-	1,532
Texas	-	-	-	-	-	159	-	-	159
Unknown State	-	-	-	-	-	-	-	2	2

See footnotes at end of table.

Table 65. Distribution of U.S. Coal by Origin, Destination, and Method of Transportation, 1994
(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	25,350	7,071	1,337	5,671	14,078	15,451	5,397	1,231	61,508
Alabama	*	34	-	-	34	1	-	-	35
Alaska	-	-	-	-	-	*	-	-	*
Arizona	-	-	-	-	-	*	-	-	*
Arkansas	1	-	-	-	-	*	-	-	1
California	*	-	-	-	-	*	-	-	*
Colorado	13	-	-	-	-	2	-	-	15
Connecticut	11	-	-	-	-	11	-	-	23
Delaware	305	7	-	-	7	13	-	-	324
District of Columbia	-	-	-	-	-	*	-	-	*
Florida	7	135	-	-	135	1	-	-	143
Georgia	*	-	-	-	-	*	-	-	*
Idaho	3	-	-	-	-	*	-	-	3
Illinois	7	185	-	-	185	22	-	-	214
Indiana	91	521	-	-	521	20	-	-	633
Iowa	26	46	-	-	46	-	-	-	72
Kentucky	12	460	-	-	460	*	-	-	472
Louisiana	3	-	-	-	-	*	-	-	3
Maine	26	-	-	-	-	5	-	-	30
Maryland	1,912	-	-	120	120	253	-	-	2,285
Massachusetts	291	-	-	-	-	21	-	-	312
Michigan	1,416	18	312	-	329	13	-	-	1,758
Minnesota	1	-	-	-	-	2	-	-	3
Mississippi	*	-	-	-	-	*	-	-	*
Missouri	-	-	-	-	-	2	-	-	2
Montana	*	-	-	-	-	-	-	-	*
Nebraska	-	-	-	-	-	*	-	-	*
New Hampshire	699	-	-	-	-	7	-	-	705
New Jersey	488	-	-	-	-	67	-	-	554
New Mexico	-	-	-	-	-	*	-	-	*
New York	4,319	521	-	-	521	831	-	-	5,671
North Carolina	*	-	-	-	-	*	-	-	*
North Dakota	-	-	-	-	-	*	-	-	*
Ohio	1,719	774	192	-	966	104	-	-	2,789
Oklahoma	*	-	-	-	-	*	-	-	*
Oregon	7	-	-	-	-	-	-	-	7
Pennsylvania	12,772	3,218	-	-	3,218	13,784	5,397	18	35,189
Rhode Island	-	-	-	-	-	3	-	-	3
South Carolina	4	-	-	-	-	4	-	-	8
South Dakota	-	-	-	-	-	*	-	-	*
Tennessee	149	354	-	-	354	12	-	-	514
Texas	1	-	-	-	-	2	-	-	3
Utah	183	-	-	-	-	-	-	-	183
Vermont	1	-	-	-	-	4	-	-	5
Virginia	30	-	-	-	-	36	-	-	65
West Virginia	25	792	-	-	792	219	-	-	1,037
Wisconsin	585	7	336	-	344	2	-	-	930
Wyoming	*	-	-	-	-	-	-	-	*
Unknown State	-	-	-	-	-	-	-	1,213	1,213
Foreign	242	-	497	5,551	6,049	11	-	-	6,301
Pennsylvania Anthracite	376	-	40	131	171	2,627	668	859	4,700
Alabama	*	-	-	-	-	1	-	-	1
Alaska	-	-	-	-	-	*	-	-	*
Arizona	-	-	-	-	-	*	-	-	*
Arkansas	1	-	-	-	-	*	-	-	1
California	*	-	-	-	-	*	-	-	*
Colorado	13	-	-	-	-	2	-	-	15
Connecticut	*	-	-	-	-	11	-	-	11
Delaware	*	-	-	-	-	11	-	-	11
District of Columbia	-	-	-	-	-	*	-	-	*
Florida	7	-	-	-	-	1	-	-	8
Georgia	*	-	-	-	-	*	-	-	*
Idaho	3	-	-	-	-	*	-	-	3
Illinois	7	-	-	-	-	1	-	-	8
Indiana	*	-	-	-	-	3	-	-	4
Iowa	26	-	-	-	-	-	-	-	26
Kentucky	11	-	-	-	-	*	-	-	12

See footnotes at end of table.

Table 65. Distribution of U.S. Coal by Origin, Destination, and Method of Transportation, 1994
(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)									
Louisiana	3	-	-	-	-	*	-	-	3
Maine	2	-	-	-	-	4	-	-	6
Maryland	3	-	-	-	-	3	-	-	6
Massachusetts	2	-	-	-	-	18	-	-	20
Michigan	2	-	-	-	-	*	-	-	2
Minnesota	1	-	-	-	-	2	-	-	3
Mississippi	*	-	-	-	-	*	-	-	*
Missouri	-	-	-	-	-	2	-	-	2
Montana	*	-	-	-	-	-	-	-	*
Nebraska	-	-	-	-	-	*	-	-	*
New Hampshire	1	-	-	-	-	7	-	-	8
New Jersey	3	-	-	-	-	14	-	-	17
New Mexico	-	-	-	-	-	*	-	-	*
New York	10	-	-	-	-	110	-	-	121
North Carolina	*	-	-	-	-	*	-	-	*
North Dakota	-	-	-	-	-	*	-	-	*
Ohio	*	-	-	-	-	20	-	-	21
Oklahoma	*	-	-	-	-	*	-	-	*
Oregon	7	-	-	-	-	-	-	-	7
Pennsylvania	77	-	-	-	-	2,344	668	-	3,089
Rhode Island	-	-	-	-	-	3	-	-	3
South Carolina	4	-	-	-	-	4	-	-	8
South Dakota	-	-	-	-	-	*	-	-	*
Tennessee	3	-	-	-	-	12	-	-	15
Texas	1	-	-	-	-	2	-	-	3
Utah	*	-	-	-	-	-	-	-	*
Vermont	1	-	-	-	-	4	-	-	5
Virginia	1	-	-	-	-	10	-	-	11
West Virginia	7	-	-	-	-	28	-	-	35
Wisconsin	*	-	-	-	-	2	-	-	2
Wyoming	*	-	-	-	-	-	-	-	*
Unknown State	-	-	-	-	-	-	-	859	859
Foreign	179	-	40	131	171	5	-	-	354
Pennsylvania Bituminous	24,974	7,071	1,297	5,540	13,908	12,824	4,729	373	56,808
Alabama	-	34	-	-	34	-	-	-	34
Connecticut	11	-	-	-	-	*	-	-	12
Delaware	305	7	-	-	7	2	-	-	314
Florida	-	135	-	-	135	-	-	-	135
Illinois	-	185	-	-	185	21	-	-	206
Indiana	91	521	-	-	521	17	-	-	629
Iowa	-	46	-	-	46	-	-	-	46
Kentucky	*	460	-	-	460	-	-	-	460
Maine	24	-	-	-	-	*	-	-	24
Maryland	1,909	-	-	120	120	250	-	-	2,278
Massachusetts	289	-	-	-	-	3	-	-	292
Michigan	1,415	18	312	-	329	12	-	-	1,756
New Hampshire	698	-	-	-	-	-	-	-	698
New Jersey	485	-	-	-	-	52	-	-	537
New York	4,309	521	-	-	521	721	-	-	5,551
Ohio	1,719	774	192	-	966	84	-	-	2,769
Pennsylvania	12,695	3,218	-	-	3,218	11,440	4,729	18	32,100
Tennessee	146	354	-	-	354	-	-	-	500
Utah	183	-	-	-	-	-	-	-	183
Virginia	29	-	-	-	-	26	-	-	55
West Virginia	18	792	-	-	792	191	-	-	1,002
Wisconsin	585	7	336	-	344	-	-	-	928
Unknown State	-	-	-	-	-	-	-	355	355
Foreign	63	-	458	5,420	5,878	6	-	-	5,947
Tennessee	1,724	512	-	-	512	289	-	22	2,547
Alabama	199	512	-	-	512	-	-	-	710
Florida	40	-	-	-	-	-	-	-	40
Georgia	97	-	-	-	-	105	-	-	202
Illinois	1	-	-	-	-	-	-	-	1
Kentucky	122	-	-	-	-	12	-	-	135
North Carolina	51	-	-	-	-	7	-	-	58

See footnotes at end of table.

Table 65. Distribution of U.S. Coal by Origin, Destination, and Method of Transportation, 1994
(Continued)
(Thousand Short Tons)

Origin State and Destination State	Railroad	Water				Truck	Tramway, Conveyor, and Slurry Pipeline	Unknown	Total
		River	Great Lakes	Tidewater	Total				
Tennessee (Continued)									
Tennessee	1,213	-	-	-	-	165	-	-	1,378
Unknown State	-	-	-	-	-	-	-	22	22
Texas	20,296	-	-	-	-	13,987	17,974	-	52,256
Texas	20,296	-	-	-	-	13,987	17,974	-	52,256
Utah	11,613	40	109	2,698	2,846	6,021	2,716	28	23,225
Arizona	86	-	-	-	-	-	-	-	86
California	3,061	-	-	-	-	13	-	-	3,074
Colorado	-	-	-	-	-	4	-	-	4
Idaho	3	-	-	-	-	56	-	-	59
Illinois	329	40	-	-	40	-	-	-	369
Indiana	178	-	-	-	-	-	-	-	178
Kansas	2	-	-	-	-	*	-	-	2
Michigan	-	-	66	-	66	-	-	-	66
Missouri	412	-	-	-	-	-	-	-	412
Montana	-	-	-	-	-	29	-	-	29
Nevada	1,887	-	-	-	-	140	-	-	2,027
Oregon	127	-	-	-	-	1	-	-	127
Pennsylvania	68	-	-	-	-	-	-	-	68
Tennessee	182	-	-	-	-	36	-	-	218
Texas	33	-	-	-	-	-	-	-	33
Utah	5,131	-	-	-	-	5,739	2,716	-	13,586
Washington	114	-	-	-	-	1	-	-	115
Wisconsin	-	-	43	-	43	-	-	-	43
Wyoming	-	-	-	-	-	2	-	-	2
Unknown State	-	-	-	-	-	-	-	28	28
Foreign	-	-	-	2,698	2,698	-	-	-	2,698
Virginia	23,378	1,434	973	10,897	13,304	741	1,080	46	38,548
Alabama	1,155	-	-	-	-	1	-	-	1,156
Delaware	203	-	-	-	-	-	-	-	203
Florida	531	-	-	-	-	-	-	-	531
Georgia	3,036	-	-	-	-	3	-	-	3,038
Illinois	23	280	-	-	280	-	-	-	302
Indiana	984	219	-	-	219	-	-	-	1,202
Kentucky	40	-	-	-	-	*	-	-	41
Maryland	90	-	-	-	-	-	-	-	90
Michigan	216	-	159	-	159	*	-	-	376
New Jersey	190	-	-	-	-	-	-	-	190
New York	156	-	-	-	-	-	-	-	156
North Carolina	5,545	-	-	-	-	90	-	-	5,634
Ohio	348	112	28	-	140	-	-	-	488
Pennsylvania	624	518	-	-	518	1	-	-	1,143
South Carolina	1,573	-	-	-	-	31	-	-	1,604
Tennessee	2,405	-	-	-	-	57	-	-	2,462
Utah	320	-	-	-	-	-	-	-	320
Virginia	5,228	-	-	-	-	559	1,080	*	6,867
West Virginia	649	281	-	-	281	-	-	-	930
Wisconsin	62	24	-	-	24	-	-	-	86
Unknown State	-	-	-	-	-	-	-	46	46
Foreign	*	-	786	10,897	11,683	-	-	-	11,683
Washington	-	-	-	142	142	100	4,635	-	4,877
Washington	-	-	-	-	-	97	4,635	-	4,731
Foreign	-	-	-	142	142	3	-	-	146
West Virginia	67,742	40,146	5,540	32,582	78,268	5,926	6,686	363	158,985
Alabama	2,579	1,825	-	-	1,825	21	-	-	4,425
Connecticut	43	-	-	29	29	94	-	-	166
Delaware	1,518	72	-	-	72	*	-	-	1,589
District of Columbia	24	-	-	-	-	10	-	-	34
Florida	1,066	87	-	663	749	6	-	-	1,822
Georgia	3,911	196	-	-	196	-	-	-	4,108
Idaho	*	-	-	-	-	-	-	-	*
Illinois	906	520	-	-	520	-	-	-	1,426
Indiana	3,840	2,135	-	-	2,135	3	-	-	5,978

See footnotes at end of table.

Table 65. Distribution of U.S. Coal by Origin, Destination, and Method of Transportation, 1994
(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)									
Iowa	17	54	-	-	54	-	-	-	71
Kentucky	1,932	2,732	-	-	2,732	240	-	-	4,905
Louisiana	-	356	-	16	372	-	-	-	372
Maine	-	-	-	-	-	-	-	-	-
Maryland	5,817	-	-	337	337	144	-	-	6,298
Massachusetts	1,350	-	-	649	649	-	-	-	1,999
Michigan	5,779	303	213	-	516	-	-	-	6,295
Minnesota	52	39	10	-	49	-	-	-	102
Mississippi	28	70	-	-	70	-	-	-	98
Missouri	23	47	-	-	47	-	-	-	70
New Hampshire	272	-	-	-	-	-	-	-	272
New Jersey	967	266	-	123	389	-	-	-	1,356
New York	4,302	89	27	-	116	6	-	-	4,424
North Carolina	6,846	-	-	-	-	71	-	-	6,917
North Dakota	-	-	-	-	-	-	-	-	-
Ohio	4,895	12,958	393	-	13,351	653	-	-	18,899
Oklahoma	7	41	-	-	41	8	-	-	56
Oregon	1	-	-	-	-	-	-	-	1
Pennsylvania	3,629	9,328	-	28	9,357	539	-	-	13,524
South Carolina	387	-	-	-	-	8	-	-	395
South Dakota	-	6	-	-	6	-	-	-	6
Tennessee	403	1,192	-	-	1,192	21	-	-	1,615
Texas	-	1	-	-	1	-	-	-	1
Utah	211	-	-	-	-	-	-	-	211
Vermont	-	-	-	-	-	-	-	-	-
Virginia	2,886	50	-	178	228	149	-	-	3,263
West Virginia	12,492	7,763	-	-	7,763	3,949	6,686	1	30,891
Wisconsin	449	15	361	-	377	3	-	-	829
Unknown State	-	-	-	-	-	-	-	362	362
Foreign	1,108	-	4,537	30,561	35,097	-	-	-	36,205
West Virginia, Northern	15,741	15,615	2,096	3,798	21,509	3,354	4,665	267	45,535
Alabama	-	34	-	-	34	-	-	-	34
Connecticut	43	-	-	29	29	94	-	-	166
Delaware	897	72	-	-	72	-	-	-	969
District of Columbia	-	-	-	-	-	10	-	-	10
Florida	390	59	-	-	59	-	-	-	449
Illinois	-	23	-	-	23	-	-	-	23
Indiana	37	1,023	-	-	1,023	-	-	-	1,060
Iowa	-	2	-	-	2	-	-	-	2
Kentucky	79	81	-	-	81	-	-	-	160
Louisiana	-	352	-	16	368	-	-	-	368
Maryland	3,005	-	-	294	294	144	-	-	3,443
Massachusetts	648	-	-	-	-	-	-	-	648
Michigan	361	-	32	-	32	-	-	-	392
Minnesota	-	-	10	-	10	-	-	-	10
Mississippi	-	5	-	-	5	-	-	-	5
New Hampshire	272	-	-	-	-	-	-	-	272
New Jersey	732	266	-	99	365	-	-	-	1,096
New York	3,052	-	27	-	27	-	-	-	3,079
North Carolina	7	-	-	-	-	-	-	-	7
Ohio	708	3,343	-	-	3,343	47	-	-	4,098
Pennsylvania	1,226	6,770	-	-	6,770	395	-	-	8,391
South Carolina	1	-	-	-	-	-	-	-	1
Tennessee	7	286	-	-	286	-	-	-	293
Virginia	21	-	-	-	-	53	-	-	75
West Virginia	3,749	3,292	-	-	3,292	2,609	4,665	-	14,316
Wisconsin	2	7	342	-	349	-	-	-	350
Unknown State	-	-	-	-	-	-	-	267	267
Foreign	504	-	1,686	3,360	5,046	-	-	-	5,550
West Virginia, Southern	52,001	24,531	3,444	28,785	56,759	2,573	2,021	95	113,449
Alabama	2,579	1,791	-	-	1,791	21	-	-	4,392
Delaware	621	-	-	-	-	-	-	-	621
District of Columbia	24	-	-	-	-	-	-	-	24
Florida	676	27	-	663	690	6	-	-	1,372
Georgia	3,911	196	-	-	196	-	-	-	4,106

See footnotes at end of table.

Table 65. Distribution of U.S. Coal by Origin, Destination, and Method of Transportation, 1994
(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)									
Idaho	*	-	-	-	-	-	-	-	*
Illinois	906	497	-	-	497	-	-	-	1,403
Indiana	3,803	1,112	-	-	1,112	3	-	-	4,918
Iowa	17	52	-	-	52	-	-	-	70
Kentucky	1,853	2,651	-	-	2,651	240	-	-	4,744
Louisiana	-	4	-	-	4	-	-	-	4
Maine	-	-	-	-	-	*	-	-	*
Maryland	2,812	-	-	43	43	-	-	-	2,855
Massachusetts	702	-	-	649	649	*	-	-	1,351
Michigan	5,419	303	181	-	484	*	-	-	5,903
Minnesota	52	39	-	-	39	-	-	-	92
Mississippi	28	65	-	-	65	*	-	-	93
Missouri	23	47	-	-	47	-	-	-	70
New Jersey	236	-	-	24	24	-	-	-	260
New York	1,250	89	-	-	89	6	-	-	1,345
North Carolina	6,839	-	-	-	-	71	-	-	6,910
North Dakota	-	*	-	-	*	-	-	-	*
Ohio	4,187	9,616	393	-	10,008	606	-	-	14,802
Oklahoma	7	41	-	-	41	8	-	-	56
Oregon	1	-	-	-	-	-	-	-	1
Pennsylvania	2,403	2,558	-	28	2,586	144	-	-	5,133
South Carolina	386	-	-	-	-	8	-	-	394
South Dakota	-	6	-	-	6	-	-	-	6
Tennessee	396	906	-	-	906	21	-	-	1,322
Texas	-	1	-	-	1	-	-	-	1
Utah	211	-	-	-	-	-	-	-	211
Vermont	-	-	-	-	-	*	-	-	*
Virginia	2,865	50	-	178	228	96	-	-	3,188
West Virginia	8,743	4,471	-	-	4,471	1,339	2,021	1	16,575
Wisconsin	448	9	19	-	28	3	-	-	478
Unknown State	-	-	-	-	-	-	-	95	95
Foreign	603	-	2,851	27,201	30,052	-	-	-	30,655
Wyoming	204,652	12,650	858	1,524	15,032	3,880	11,977	*	235,540
Alabama	251	-	-	-	-	-	-	-	251
Arkansas	12,184	-	-	-	-	-	-	-	12,184
Colorado	5,132	-	-	-	-	*	-	-	5,132
Connecticut	-	-	-	-	-	*	-	-	*
Florida	93	-	-	-	-	-	-	-	93
Georgia	4,914	-	-	-	-	-	-	-	4,914
Idaho	284	-	-	-	-	53	-	-	337
Illinois	9,774	-	-	-	-	5	-	-	9,779
Indiana	11,872	3,545	-	-	3,545	*	-	-	15,417
Iowa	15,036	469	-	-	469	-	-	-	15,505
Kansas	16,490	-	-	-	-	-	-	-	16,490
Louisiana	5,734	5,481	-	-	5,481	-	-	-	11,215
Maryland	829	-	-	-	-	-	-	-	829
Michigan	4,080	-	188	-	188	-	-	-	4,267
Minnesota	9,241	-	670	-	670	-	-	-	9,911
Missouri	13,019	3,093	-	-	3,093	-	-	-	16,112
Montana	117	-	-	-	-	2	-	-	119
Nebraska	8,908	-	-	-	-	*	-	-	8,908
Nevada	1,014	-	-	-	-	-	-	-	1,014
Oklahoma	17,577	-	-	-	-	-	-	-	17,577
Oregon	2,197	-	-	-	-	-	-	-	2,197
South Dakota	87	-	-	-	-	510	-	-	597
Tennessee	342	-	-	-	-	-	-	-	342
Texas	39,270	-	-	-	-	-	-	-	39,270
Washington	1	-	-	-	-	-	-	-	1
Wisconsin	13,159	62	-	-	62	-	-	-	13,221
Wyoming	13,047	-	-	-	-	3,309	11,977	-	28,334
Unknown State	-	-	-	-	-	-	-	*	*
Foreign	-	-	-	1,524	1,524	-	-	-	1,524
U.S. Total	584,371	129,911	18,793	70,075	218,779	114,904	100,640	3,822	1,022,516

See footnotes at end of table.

Table 65. Distribution of U.S. Coal by Origin, Destination, and Method of Transportation, 1994
(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)									
Alabama	11,826	8,445	-	-	8,445	8,510	1,429	-	30,210
Alaska	575	-	-	-	-	214	-	-	789
Arizona	19,129	-	-	-	-	40	-	-	19,169
Arkansas	12,260	-	-	-	-	241	-	-	12,501
California	3,083	-	-	-	-	13	-	-	3,096
Colorado	12,691	-	-	-	-	4,582	-	-	17,274
Connecticut	54	-	-	816	816	106	-	-	976
Delaware	2,202	78	-	-	78	29	-	-	2,309
District of Columbia	37	-	-	-	-	10	-	-	47
Florida	13,647	7,885	-	2,200	10,085	26	-	-	23,757
Georgia	27,747	2,540	-	-	2,540	210	-	-	30,497
Idaho	291	-	-	-	-	109	-	-	400
Illinois	28,834	3,039	-	-	3,039	5,413	1,460	-	38,745
Indiana	43,713	10,136	216	-	10,352	8,944	580	-	63,589
Iowa	16,209	1,881	-	-	1,881	169	-	-	18,259
Kansas	17,833	-	-	-	-	264	-	-	18,097
Kentucky	13,158	10,805	-	-	10,805	11,659	3	12	35,636
Louisiana	5,737	6,628	-	16	6,644	766	2,697	-	15,844
Maine	26	-	-	433	433	5	-	-	463
Maryland	9,501	-	-	770	770	687	-	-	10,959
Massachusetts	1,680	-	-	837	837	21	-	-	2,538
Michigan	23,602	1,146	8,088	-	9,234	652	-	-	33,487
Minnesota	19,507	154	797	-	951	39	-	-	20,498
Mississippi	2,447	1,698	-	174	1,872	127	-	-	4,446
Missouri	19,952	6,321	-	-	6,321	1,005	-	-	27,278
Montana	667	-	-	-	-	378	9,684	-	10,728
Nebraska	9,055	-	-	-	-	-	-	-	9,055
Nevada	3,206	-	-	-	-	140	4,431	-	7,777
New Hampshire	971	-	-	-	-	7	-	-	978
New Jersey	1,645	281	-	170	452	67	-	-	2,163
New Mexico	9,472	-	-	-	-	6,077	-	-	15,549
New York	10,145	638	27	-	666	853	-	-	11,664
North Carolina	25,799	21	-	-	21	380	-	-	26,199
North Dakota	1,021	-	-	-	-	5,036	24,233	-	30,290
Ohio	13,599	25,606	783	-	26,389	11,204	5,647	11	56,850
Oklahoma	17,610	60	-	-	60	1,540	-	-	19,210
Oregon	2,346	-	-	-	-	1	-	-	2,347
Pennsylvania	18,091	17,463	-	28	17,491	14,913	5,397	18	55,910
Rhode Island	-	-	-	-	-	3	-	-	3
South Carolina	13,309	-	-	-	-	143	-	-	13,452
South Dakota	2,412	7	-	-	7	510	-	-	2,929
Tennessee	14,814	13,404	-	-	13,404	834	-	-	29,052
Texas	62,443	2	-	-	2	14,162	17,974	-	94,581
Utah	7,560	-	-	-	-	5,739	2,716	-	16,015
Vermont	1	-	-	-	-	4	-	-	5
Virginia	14,390	59	-	322	380	885	1,080	-	16,735
Washington	1,264	-	-	-	-	98	4,635	-	5,996
West Virginia	15,175	10,528	-	-	10,528	4,668	6,698	1	37,071
Wisconsin	18,999	1,087	2,091	-	3,177	56	-	-	22,231
Wyoming	13,070	-	-	-	-	3,352	11,977	-	28,399
Unknown State	-	-	-	-	-	-	-	3,780	3,780
Foreign	1,564	-	6,792	64,309	71,100	16	-	-	72,680

* 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 1994 reached a record 930 million short tons, surpassing by 0.4 percent the previous record of 926 million short tons consumed during 1993 (Table 67). Consumption of coal by U.S. electric utilities rose 0.5 percent to a record 817 million short tons, accounting for 88 percent of total domestic coal consumption (Table 69). Compared with 1993, coal consumption at U.S. coke plants during 1994 rose 1 percent to 32 million short tons, while coal consumption at other U.S. industrial plants rose 0.4 percent to 75 million short tons (Table 71 and Table 73).

Electric Utility Use

Leading the 1994 increase in electric utility coal consumption was the additional 12 million short tons of coal consumed by coal-fired electricity generators in the East North Central, West North Central, and Mountain Divisions. Collectively, electric utilities in these three divisions accounted for 49 percent of total electric utility coal consumption during 1994.

In the East North Central Division, electric utility coal consumption rose 2 percent to 183 million short tons as utilities in Illinois and Michigan continued to rely upon coal-fired generation to replace reduced generation from nuclear units. Coal consumption in the West North Central Division rose 4 percent to 112 million short tons as coal-fired generation rose in response to increased electricity demand. Similarly, electric utility coal consumption in the Mountain Division rose 4 percent to 109 million short tons as utilities increased coal-fired generation to meet rising electricity demand.

The increased 1994 electric utility coal consumption in these three divisions was offset by reductions totaling 10 million short tons (4 percent) in the coal consumed by electric utilities in the East South Central, West South Central, and Middle Atlantic Divisions. In the West South Central Division, compared with 1993, electric utility coal consumption declined 2 percent to 131 million short tons as sharply increased nuclear generation in Texas supplanted coal-fired generation.

Similarly, in the East South Central Division, electric utility coal use fell 5 percent to 86 million short tons in response to increased nuclear generation, primarily in Tennessee. In the Middle Atlantic Division, electric utility coal consumption fell 5 percent to 48 million short tons as lower electricity demand, coupled with increased nuclear generation in Pennsylvania and New York, eroded coal's share of the division's total electricity generation.

Notably, compared with 1993, the total amount of coal consumed by U.S. electric utilities during 1994 rose 0.4 percent despite a drop of 0.2 percent in the total amount of electricity produced by coal-fired electric utility generating units during the year. This unusual inverse relationship between the growth rates for coal consumption and coal-fired electricity generation reflects in part the increasing use by electric utilities of low-sulfur Western coal, particularly coal mined in Wyoming. Coal from Wyoming is also lower in heat content than the coal it supplements or replaces. This emerging coal consumption pattern reflects the phase-in of sulfur emission standards set by the Clean Air Act Amendments of 1990.

Coke Plant Use

The increase in the total amount of coal consumed at U.S. coke plants during 1994 was attributable in part to plants in Pennsylvania, where coke plant coal consumption rose by more than one-half million short tons (5 percent) to 11 million short tons. This increase, coupled with more coal consumed at coke plants in Ohio and elsewhere, more than offset the 2 million short ton decline in coal consumption at coke plants in Indiana.

Other Uses

The slight increase in total coal consumption at other industrial plants during 1994 is primarily due to increased use of coal by manufacturers. Coal consumption at manufacturing plants rose 1 million short tons (2 percent) to 68 million short tons, accounting for 90 percent of the coal consumed in the other industrial category.¹ This increase more than offset a 12-percent decline in coal consumption by the non-manufacturing components of the other industrial category, primarily the agricultural, mining and construction sectors.

¹ Energy Information Administration "Quarterly Coal Report October - December 1994," DOE/EIA-0121 (94/4Q) (Washington, DC, May 1995), Table 50.

Coal consumption in the residential and commercial sector in 1994 was 6 million short tons, 3 percent lower than in 1993.

Coal Stocks

Consumer coal stocks at the end of 1994 went up 16 million short tons to 136 million short tons from 120 million short tons at the end of 1993, primarily because of a 14-percent increase in coal inventories in the electric utility sector (Table 68 and Table 70). Electric utilities built up their coal stocks after the 1993 coal strike, which had left 1993 year-end utility coal stocks at 111 million short tons, the lowest level since 1976. Coal stocks at coke plants rose 11 percent, while coal stocks at other industrial plants went down 2 percent (Table 72 and Table 74).

Foreign Markets

U.S. coal exports in 1994 totaled 71 million short tons, 3 million short tons less than in 1993, and the lowest level since 1979 (Table 76). The primary reason for the decline in coal exports was the lower demand for metallurgical coal (Table 77).

U.S. metallurgical coal exports in 1994 amounted to 47 million short tons, a decrease of 5 percent from 1993. The largest decline, 6 percent, was in metallurgical coal shipments to Europe. In tonnage terms, there were no substantial increases in metallurgical coal exports to any of the importing countries.

Total U.S. steam coal exports in 1994 were 24 million short tons, a drop of 3 percent from the 1993 level (Table 78). Steam coal accounted for 34 percent of total U.S. coal exports in 1994, up from 33 percent in 1993.

Domestic Markets

In 1994, coal consumption at electric utility plants totaled 817 million short tons. Texas, Indiana, Ohio and Pennsylvania together accounted for 28 percent. Cook Coal Terminal (photo) receives and transloads coal onto river barges for delivery to electric utility plants.

Figure 11. U.S. Coal Consumption, 1985-1994

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, 1994

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

See footnotes at end of table.

Table 66. Major U.S. Coal Consumers, 1994 (Continued)

Company Name	Plant Location
Top Ten Manufacturers	
Aluminum Company of America	(IN) (OH) (TN) (TX)
Archer Daniels Midland Company	(IA) (IL) (MN) (NE)
Basin Electric Power Coop	(ND)
Champion International Corporation	(AL) (FL) (ME) (MI) (MN) (NC) (NY) (OH)
E I Du Pont De Nemours & Company	(DE) (KY) (MS) (NC) (NJ) (SC) (TN) (VA) (WV)
Eastman Kodak Company	(AR) (NY) (SC) (TN) (TX)
General Motors Company	(AL) (IL) (IN) (MI) (MO) (NY) (OH) (WI)
Hoechst AG	(SC) (TX) (VA)
Holderbank Financier Glaris	(AL) (CO) (IA) (MI) (MO) (MS) (MT) (SC) (UT) (WA)
Westvaco Corporation	(MD) (PA) (SD) (VA)
Other Major Manufacturers	
A E Staley Manufacturing Company	(IL) (IN) (TN)
Amalgamated Sugar Company (The)	(ID) (OR)
American Crystal Sugar Company	(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)
CPC International Inc	(IL) (NC)
Dow Chemical Company (The)	(LA)
Dravo Corporation	(AL) (KY)
Elkem A/S	(OH) (WV)
Fort Howard Corporation	(GA) (OK) (WI)
FMC Corporation	(NC) (WV) (WY)
G E Company	(IN) (KY) (PA)
Georgia-Pacific Corporation	(AR) (GA) (MI) (VA) (WI)
Inland Steel Industries Inc	(IN)
International Paper Company	(AL) (LA) (PA) (SC) (WI)
Jefferson Smurfit Corporation	(AL) (FL) (IL) (IN) (OH)
Kerr-McGee Corporation	(CA)
Lafarge Corporation	(IA) (IL) (KS) (MI) (MO) (OH) (PA) (TX)
Lone Star Industries	(FL) (IL) (IN) (MO) (OK) (PA) (TX)
Marblehead Lime	(IL) (IN) (MI)
Mead Corporation (The)	(MI) (OH) (TN)
Monsanto Company	(AL) (IA) (ID) (IL) (MA) (WV)
PPG Industries Inc	(WV)
Southdown Inc	(CA) (CO) (FL) (OH) (TN)
Southern Company (The)	(AL) (ME) (MI) (PA) (WI)
Stone Container Corporation	(AZ) (FL) (MI) (SC) (VA)
Tenneco Inc	(OH) (TN) (WY)
Union Camp Corporation	(AL) (GA) (OH) (SC) (VA)
Top Ten Coke Producers	
AK Steel Corporation	(KY) (OH)
Bethlehem Steel Corporation	(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 Corporation	(IL) (MI)
Sun Coal Company	(VA)
USX Corporation	(IN) (PA)
Wheeling Pittsburgh Steel Corporation	(WV)

Note: Major electric utility coal consumers are companies that consumed more than 3.6 million short tons of coal in 1994. 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, 1985, 1990-1994
(Thousand Short Tons)

Census Division and State	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
New England Total	6,553	6,485	7,298	7,012	6,771	6,766	1.0	-0.8	-0.3
Connecticut	862	788	849	856	971	815	9.4	-2.9	.6
Maine	464	449	856	374	265	206	3.4	15.0	9.5
Massachusetts	3,932	3,811	4,257	4,451	4,337	4,176	3.2	-2.4	-7
New Hampshire	1,287	1,428	1,311	1,315	1,186	1,481	-9.9	2.0	-1.5
Rhode Island	3	3	5	4	5	9	.9	-10.9	-10.1
Vermont	5	6	20	12	8	80	-15.9	-11.5	-26.7
Middle Atlantic Total	67,536	70,389	71,418	70,594	73,812	72,440	-4.0	-2.2	-8
New Jersey	1,969	2,353	2,348	2,326	3,029	3,943	-16.3	-10.2	-7.4
New York	11,474	11,878	12,996	13,338	13,465	11,944	-3.4	-3.9	-4
Pennsylvania	54,094	56,158	56,074	54,931	57,319	56,553	-3.7	-1.4	-5
East North Central Total	213,188	210,632	200,660	208,583	209,619	199,699	1.2	.4	.7
Illinois	39,077	38,135	31,599	34,677	33,904	37,601	2.5	3.6	.4
Indiana	59,996	60,353	58,765	60,790	61,701	53,291	-6	-7	1.3
Michigan	35,674	32,217	31,554	33,879	34,713	32,794	10.7	.7	.9
Ohio	56,711	59,031	58,671	58,578	59,205	57,979	-3.9	-1.1	-2
Wisconsin	21,731	20,897	20,071	20,659	20,097	18,034	4.0	2.0	2.1
West North Central Total	125,591	120,940	115,505	116,707	116,268	98,849	3.8	1.9	2.7
Iowa	19,341	19,188	17,992	18,741	17,929	14,342	.8	1.9	3.4
Kansas	17,158	17,386	14,227	14,881	15,175	14,715	-1.3	3.1	1.7
Minnesota	18,729	18,321	16,924	16,993	18,377	12,744	2.2	.5	4.4
Missouri	27,663	23,381	25,180	25,773	25,836	24,733	18.3	1.7	1.3
Nebraska	9,300	9,666	8,212	8,859	8,266	6,653	-3.8	3.0	3.8
North Dakota	30,363	30,302	30,301	28,597	28,114	22,958	.2	1.9	3.1
South Dakota	3,036	2,696	2,670	2,863	2,571	2,703	12.6	4.3	1.3
South Atlantic Total	151,935	150,580	144,178	144,073	149,455	141,214	.9	.4	.8
Delaware	2,226	2,446	1,770	2,186	2,293	2,766	-9.0	-7	-2.4
District of Columbia	47	51	50	66	69	140	-8.5	-9.4	-11.5
Florida	26,082	26,430	26,368	26,004	25,233	19,305	-1.3	.8	3.4
Georgia	29,254	27,081	25,481	26,957	30,067	29,898	8.0	-7	-2
Maryland	10,491	10,268	9,713	10,709	11,193	10,013	2.2	-1.6	.5
North Carolina	23,282	25,760	24,075	20,877	21,150	22,052	-9.6	2.4	.6
South Carolina	12,993	12,914	11,285	11,451	11,447	10,479	.6	3.2	2.4
Virginia	12,792	13,584	13,418	13,980	13,105	11,656	-5.8	-6	1.0
West Virginia	34,767	32,046	32,019	31,843	34,896	34,907	8.5	-1	*
East South Central Total	99,289	104,027	93,804	90,785	91,126	87,683	-4.5	2.2	1.4
Alabama	31,473	33,047	31,510	29,349	27,640	27,069	-4.8	3.3	1.7
Kentucky	38,090	39,095	34,704	34,517	34,449	30,990	-2.6	2.5	2.3
Mississippi	4,285	4,030	3,485	3,812	4,159	4,519	6.3	.8	-6
Tennessee	25,440	27,854	24,106	23,107	24,878	25,105	-8.7	.5	.1
West South Central Total	138,251	140,797	135,210	133,635	131,478	112,519	-1.8	1.3	2.3
Arkansas	12,596	11,447	12,538	12,261	12,092	12,682	10.0	1.0	-1
Louisiana	14,100	13,676	13,674	12,965	12,547	9,217	3.1	2.9	4.8
Oklahoma	17,726	18,866	17,430	16,345	15,423	13,602	-6.0	3.5	3.0
Texas	93,829	96,809	91,568	92,064	91,415	77,017	-3.1	.6	2.2
Mountain Total	115,695	110,673	112,163	105,177	107,158	89,391	4.5	1.9	2.9
Arizona	19,580	18,991	17,915	16,805	16,419	16,364	3.1	4.5	2.0
Colorado	17,475	17,070	16,696	16,218	16,710	15,242	2.4	1.1	1.5
Idaho	534	528	535	673	549	486	1.0	-7	1.0
Montana	11,089	9,247	11,040	10,549	9,676	5,713	19.9	3.5	7.6
Nevada	7,968	7,806	8,088	8,091	7,442	5,539	2.1	1.7	4.1
New Mexico	15,374	15,012	14,832	12,858	15,111	14,589	2.4	.4	.6
Utah	16,216	15,848	15,719	14,834	15,738	8,303	2.3	.8	7.7
Wyoming	27,459	26,171	27,339	25,150	25,514	23,155	4.9	1.8	1.9
Pacific Total	12,162	11,422	12,186	11,055	9,792	8,929	6.5	5.6	3.5
Alaska	796	863	782	802	784	733	-7.7	.4	.9
California	2,498	2,453	2,821	2,816	2,899	1,942	1.8	-3.6	2.8
Hawaii	86	73	47	37	28	46	17.6	32.4	7.3
Oregon	2,479	2,099	2,124	1,940	934	592	18.1	27.6	17.2
Washington	6,303	5,934	6,402	5,461	5,147	5,616	6.2	5.2	1.3
U.S. Total	930,201	925,944	892,421	887,621	895,480	818,049	.4	.9	1.4

* 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."

Figure 12. U.S. Consumer Coal Stocks, 1985-1994

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, 1985, 1990-1994
(Thousand Short Tons)

Census Division and State	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
New England Total	1,117	989	1,253	1,134	1,145	999	13.0	-0.6	1.2
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
Vermont	-	-	-	-	-	w	w	w	w
Middle Atlantic Total	14,068	14,060	19,486	18,246	18,776	17,859	*	-7.0	-2.6
New Jersey	w	w	w	w	w	w	w	w	w
New York	w	w	w	w	w	w	w	w	w
Pennsylvania	12,060	12,265	15,976	15,546	15,426	14,763	-1.7	-6.0	-2.2
East North Central Total	35,833	30,162	43,661	43,179	45,411	46,405	18.8	-5.8	-2.8
Illinois	w	w	w	w	w	7,836	w	w	w
Indiana	11,707	7,798	12,507	11,387	12,226	12,869	50.1	-1.1	-1.0
Michigan	w	w	w	w	w	w	w	w	w
Ohio	7,815	7,630	10,804	10,618	10,471	9,727	2.4	-7.0	-2.4
Wisconsin	3,436	3,193	w	w	w	w	7.6	w	w
West North Central Total	17,717	14,898	w	w	w	w	18.9	w	w
Iowa	4,178	3,819	4,857	5,133	4,920	5,013	9.4	-4.0	-2.0
Kansas	2,623	2,024	2,759	3,321	3,742	3,573	29.6	-8.5	-3.4
Minnesota	2,234	1,250	2,252	2,693	2,336	4,109	78.7	-1.1	-6.5
Missouri	4,570	3,704	w	w	w	w	23.4	w	w
Nebraska	w	w	w	w	w	2,065	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	24,427	19,092	29,282	29,952	29,422	25,615	27.9	-4.5	-5
Delaware	w	w	w	w	w	w	w	w	w
Florida	3,914	3,541	4,121	4,880	4,972	2,997	10.5	-5.8	3.0
Georgia	4,843	2,926	4,836	5,419	5,704	5,339	65.5	-4.0	-1.1
Maryland	w	w	w	w	w	w	w	w	w
North Carolina	4,318	3,059	4,715	4,866	4,659	5,391	41.1	-1.9	-2.4
South Carolina	2,533	1,893	2,451	2,241	2,316	1,933	33.8	2.3	3.0
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	11,267	9,277	14,400	15,026	16,846	17,099	21.4	-9.6	-4.5
Alabama	4,132	2,797	4,529	4,671	4,372	4,833	47.7	-1.4	-1.7
Kentucky	w	w	w	w	w	w	w	w	w
Mississippi	w	w	w	w	w	w	w	w	w
Tennessee	1,764	1,877	w	w	w	w	-6.0	w	w
West South Central Total	15,959	15,105	16,898	18,318	w	19,717	5.6	w	-2.3
Arkansas	1,777	1,881	1,591	2,165	1,735	2,567	-5.5	.6	-4.0
Louisiana	1,922	2,000	1,755	2,301	2,503	w	-3.9	-6.4	w
Oklahoma	2,467	2,052	3,161	2,919	2,721	4,374	20.2	-2.4	-6.2
Texas	9,793	9,172	10,392	10,932	w	w	6.8	w	w
Mountain Total	w	w	w	w	w	w	w	w	w
Arizona	3,242	3,717	3,596	4,229	3,129	w	-12.8	.9	w
Colorado	3,145	3,454	3,439	3,487	3,334	w	-8.9	-1.4	w
Idaho	78	86	101	79	140	66	-9.5	-13.6	1.9
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	2,553	1,841	2,242	2,835	3,293	w	38.6	-6.2	w
Pacific Total	w	w	w	w	w	w	w	w	w
Alaska	2	5	6	8	w	w	-49.8	w	w
California	126	93	109	139	122	w	35.5	.8	w
Hawaii	w	w	w	w	w	17	w	w	w
Oregon	w	w	w	w	w	w	w	w	w
Washington	569	459	736	1,194	1,378	398	24.0	-19.8	4.0
U.S. Total	136,139	120,458	163,692	167,711	168,210	170,234	13.0	-5.1	-2.4

* Data round to zero.

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,
1985, 1990-1994
(Thousand Short Tons)**

Census Division and State	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
New England Total	5,945	5,736	6,112	6,421	6,305	6,098	3.6	-1.4	-0.3
Connecticut	821	745	817	840	958	774	10.3	-3.8	.7
Massachusetts	3,845	3,652	4,044	4,339	4,201	3,863	5.3	-2.2	*
New Hampshire	1,279	1,339	1,251	1,242	1,146	1,433	-4.5	2.8	-1.3
Vermont	-	-	-	-	-	28	-	-	-
Middle Atlantic Total	48,326	51,079	52,488	52,617	54,197	52,976	-5.4	-2.8	-1.0
New Jersey	1,887	2,123	2,118	2,081	2,740	3,476	-11.1	-8.9	-6.6
New York	8,395	8,699	9,963	9,874	9,993	7,787	-3.5	-4.3	.8
Pennsylvania	38,044	40,257	40,407	40,662	41,465	41,713	-5.5	-2.1	-1.0
East North Central Total	183,282	179,833	169,029	173,718	171,756	158,390	1.9	1.6	1.6
Illinois	32,599	31,744	25,264	27,754	27,396	31,608	2.7	4.4	.3
Indiana	50,554	48,836	46,937	47,720	47,654	38,310	3.5	1.5	3.1
Michigan	31,106	28,749	28,238	29,896	29,726	25,896	8.2	1.1	2.0
Ohio	49,326	51,456	50,358	49,577	48,848	46,700	-4.1	.2	.6
Wisconsin	19,696	19,049	18,231	18,771	18,133	15,876	3.4	2.1	2.4
West North Central Total	111,672	107,584	102,557	104,246	103,445	87,259	3.8	1.9	2.8
Iowa	16,565	16,623	15,357	15,846	15,331	12,491	-3	1.9	3.2
Kansas	16,989	17,226	14,068	14,732	15,018	14,351	-1.4	3.1	1.9
Minnesota	17,046	16,844	15,841	16,114	16,916	11,498	1.2	.2	4.5
Missouri	26,375	21,945	23,815	24,286	24,231	22,779	20.2	2.1	1.6
Nebraska	8,879	9,297	7,881	8,524	8,027	6,380	-4.5	2.5	3.7
North Dakota	23,248	23,290	23,192	22,174	21,579	17,354	-2	1.9	3.3
South Dakota	2,570	2,360	2,402	2,570	2,345	2,407	8.9	2.3	.7
South Atlantic Total	133,984	132,885	126,093	123,729	128,072	122,187	.8	1.1	1.0
Delaware	2,007	2,223	1,628	1,958	2,056	2,543	-9.7	-6	-2.6
Florida	24,758	25,108	25,016	24,870	24,022	18,283	-1.4	.8	3.4
Georgia	27,293	25,339	23,656	24,848	27,812	28,285	7.7	-5	-4
Maryland	9,717	9,521	8,993	8,632	8,945	7,046	2.0	2.1	3.6
North Carolina	20,624	23,055	21,011	18,078	18,005	19,610	-10.5	3.4	.6
South Carolina	10,597	10,410	9,078	9,218	9,131	7,888	1.8	3.8	3.3
Virginia	8,670	9,447	8,661	8,568	8,228	7,166	-8.2	1.3	2.1
West Virginia	30,318	27,782	28,050	27,557	29,873	31,367	9.1	.4	-4
East South Central Total	85,622	90,365	80,203	77,917	77,579	73,750	-5.2	2.5	1.7
Alabama	25,817	27,533	24,988	23,700	22,010	21,545	-6.2	4.1	2.0
Kentucky	34,564	35,264	31,715	31,432	30,867	27,085	-2.0	2.9	2.7
Mississippi	3,989	3,767	3,237	3,570	3,888	4,267	5.9	.6	-7
Tennessee	21,253	23,801	20,263	19,216	20,814	20,853	-10.7	.5	.2
West South Central Total	131,168	134,009	129,351	127,908	125,698	105,627	-2.1	1.1	2.4
Arkansas	12,250	11,116	12,241	11,978	11,836	12,302	10.2	.9	*
Louisiana	13,479	13,089	13,077	12,406	11,748	8,760	3.0	3.5	4.9
Oklahoma	16,961	17,668	16,699	15,668	14,866	12,747	-4.0	3.3	3.2
Texas	88,479	92,135	87,333	87,856	87,248	71,818	-4.0	.3	2.3
Mountain Total	108,651	104,093	105,609	98,400	100,505	81,647	4.4	2.0	3.2
Arizona	18,853	18,316	17,280	16,116	15,758	14,448	2.9	4.6	3.0
Colorado	16,596	16,252	15,902	15,416	15,924	14,295	2.1	1.0	1.7
Montana	10,513	8,869	10,768	10,223	9,399	5,480	18.5	2.8	7.5
Nevada	7,772	7,608	7,914	7,892	7,270	5,427	2.1	1.7	4.1
New Mexico	15,297	14,942	14,775	12,809	15,065	14,498	2.4	.4	.6
Utah	14,269	13,995	13,857	12,829	13,563	6,325	2.0	1.3	9.5
Wyoming	25,350	24,111	25,114	23,115	23,526	21,173	5.1	1.9	2.0
Pacific Total	8,621	7,924	8,419	7,313	5,992	5,907	8.8	9.5	4.3
Alaska	271	298	277	298	290	296	-8.8	-1.7	-1.0
Oregon	2,333	1,981	1,994	1,831	850	418	17.8	28.7	21.0
Washington	6,016	5,646	6,148	5,184	4,852	5,192	6.5	5.5	1.6
U.S. Total	817,270	813,508	779,860	772,268	773,549	693,841	.5	1.4	1.8

* 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, 1985, 1990-1994**
(Thousand Short Tons)

Census Division and State	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
New England Total	1,079	967	1,237	1,128	1,113	992	11.5	-0.8	0.9
Connecticut	202	160	150	173	140	-	26.0	9.6	-
Massachusetts	629	449	727	583	597	613	40.0	1.3	.3
New Hampshire	248	358	361	373	348	340	-30.8	-8.1	-3.4
Rhode Island	-	-	-	-	28	28	-	-	-
Vermont	-	-	-	-	-	12	-	-	-
Middle Atlantic Total	12,687	12,564	17,743	16,638	17,148	16,163	1.0	-7.3	-2.6
New Jersey	688	501	771	681	740	843	37.3	-1.8	-2.2
New York	999	953	2,106	1,546	2,045	1,692	4.9	-16.4	-5.7
Pennsylvania	11,000	11,110	14,866	14,412	14,363	13,628	-1.0	-6.4	-2.3
East North Central Total	32,088	27,296	40,250	39,394	40,740	40,841	17.5	-5.8	-2.6
Illinois	4,526	4,019	7,399	6,977	7,398	6,977	12.6	-11.6	-4.7
Indiana	10,449	6,935	11,294	9,953	10,610	11,322	50.7	-4	-9
Michigan	6,505	6,206	7,402	8,099	9,093	8,881	4.8	-8.0	-3.4
Ohio	7,499	7,249	10,395	10,213	9,956	8,976	3.4	-6.8	-2.0
Wisconsin	3,109	2,887	3,760	4,151	3,683	4,686	7.7	-4.1	-4.4
West North Central Total	16,739	14,123	19,712	20,169	19,324	23,392	18.5	-3.5	-3.6
Iowa	3,642	3,401	4,301	4,499	4,206	4,416	7.1	-3.5	-2.1
Kansas	2,610	2,008	2,747	3,310	3,729	3,513	30.0	-8.5	-3.2
Minnesota	2,134	1,182	2,175	2,616	2,253	3,942	80.5	-1.3	-6.6
Missouri	4,410	3,555	6,211	5,458	4,434	6,049	24.0	-1	-3.4
Nebraska	1,276	1,272	1,798	1,976	1,589	2,036	.3	-5.3	-5.0
North Dakota	2,406	2,417	2,194	1,999	2,828	3,137	-4	-3.9	-2.9
South Dakota	259	287	285	312	286	300	-9.7	-2.5	-1.6
South Atlantic Total	23,226	17,877	27,977	28,746	27,799	24,019	29.9	-4.4	-4
Delaware	470	192	361	458	406	434	144.5	3.7	.9
Florida	3,813	3,451	4,021	4,781	4,822	2,905	10.5	-5.7	3.1
Georgia	4,699	2,825	4,692	5,251	5,473	5,157	66.3	-3.7	-1.0
Maryland	1,306	1,455	2,400	2,220	2,114	1,636	-10.2	-11.3	-2.5
North Carolina	4,139	2,887	4,512	4,657	4,419	5,129	43.3	-1.6	-2.3
South Carolina	2,255	1,648	2,206	1,988	2,052	1,624	36.8	2.4	3.7
Virginia	2,064	1,418	1,922	1,685	1,639	1,682	45.5	5.9	2.3
West Virginia	4,479	4,001	7,863	7,707	6,874	5,453	11.9	-10.1	-2.2
East South Central Total	10,317	8,370	13,401	14,210	15,876	15,992	23.3	-10.2	-4.8
Alabama	3,652	2,331	4,071	4,247	3,869	4,324	56.6	-1.4	-1.8
Kentucky	4,466	3,990	5,415	5,881	7,612	6,864	11.9	-12.5	-4.7
Mississippi	690	417	899	933	799	957	65.6	-3.6	-3.6
Tennessee	1,509	1,632	3,016	3,148	3,596	3,846	-7.5	-19.5	-9.9
West South Central Total	15,520	13,867	16,483	17,694	15,344	17,788	11.9	.3	-1.5
Arkansas	1,751	1,866	1,572	2,150	1,722	2,513	-6.1	.4	-3.9
Louisiana	1,872	1,932	1,701	2,235	2,458	1,978	-3.1	-6.6	-6
Oklahoma	2,319	1,944	3,066	2,835	2,633	4,194	19.3	-3.1	-6.4
Texas	9,578	8,125	10,143	10,474	8,531	9,103	17.9	2.9	.6
Mountain Total	14,559	15,529	16,009	18,086	16,828	16,626	-6.2	-3.5	-1.5
Arizona	3,197	3,687	3,543	4,177	3,090	3,163	-13.3	.8	.1
Colorado	3,118	3,428	3,410	3,466	3,298	4,989	-9.0	-1.4	-5.1
Montana	517	721	735	741	767	634	-28.2	-9.4	-2.2
Nevada	1,034	1,195	1,447	1,412	1,222	1,387	-13.5	-4.1	-3.2
New Mexico	1,462	1,506	1,570	1,399	1,538	1,434	-2.9	-1.3	.2
Utah	2,753	3,264	3,153	4,123	3,697	997	-15.6	-7.1	11.9
Wyoming	2,476	1,728	2,153	2,767	3,215	4,022	43.3	-6.3	-5.2
Pacific Total	683	748	1,317	1,812	1,993	563	-8.7	-23.5	2.2
Alaska	2	5	6	8	2	2	-49.8	1.8	1.4
Oregon	150	312	615	660	675	184	-52.0	-31.4	-2.2
Washington	531	431	697	1,145	1,316	378	23.2	-20.3	3.9
U.S. Total	126,897	111,341	154,130	157,876	156,166	156,376	14.0	-5.0	-2.3

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, 1985, 1990-1994
(Thousand Short Tons)

Census Division and State	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
New England Total	553	647	1,045	507	325	386	-14.6	14.2	4.1
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
Rhode Island	-	w	-	-	w	w	w	w	w
Vermont	-	w	w	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	1,559	1,704	1,610	1,959	1,844	2,565	-8.5	-4.1	-5.4
Pennsylvania	4,044	4,311	4,173	4,049	4,090	3,852	-6.2	-3	.5
East North Central Total	17,098	17,699	16,931	18,670	18,886	19,789	-3.4	-2.4	-1.6
Illinois	4,187	3,970	3,736	4,426	3,888	3,399	5.5	1.9	2.3
Indiana	4,244	4,587	4,263	4,404	4,629	5,119	-7.5	-2.1	-2.1
Michigan	2,890	3,230	3,127	3,149	3,656	3,962	-10.5	-5.7	-3.4
Ohio	3,794	4,100	3,970	4,813	4,753	5,178	-7.5	-5.5	-3.4
Wisconsin	1,984	1,811	1,835	1,878	1,960	2,131	9.5	.3	-.8
West North Central Total	13,238	12,753	12,505	11,741	11,972	10,476	3.8	2.5	2.6
Iowa	2,735	2,494	2,571	2,672	2,353	1,572	9.6	3.8	6.3
Kansas	137	137	158	148	157	363	*	-3.3	-10.3
Minnesota	1,455	1,370	1,059	785	1,283	1,027	6.2	3.2	3.9
Missouri	1,070	1,177	1,137	1,235	1,321	1,565	-9.1	-5.1	-4.1
Nebraska	w	w	w	w	w	261	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	1,303	1,307	1,335	1,133	1,207	911	-2	1.9	4.0
Georgia	1,933	1,720	1,787	2,101	2,232	1,575	12.4	-3.5	2.3
Maryland	738	731	706	1,040	945	718	1.0	-6.0	.3
North Carolina	2,396	2,476	2,860	2,702	2,989	2,247	-3.2	-5.4	.7
South Carolina	2,334	2,395	2,177	2,212	2,310	2,525	-2.5	.3	-.9
Virginia	2,838	2,863	3,592	4,301	3,756	3,334	-.9	-6.8	-1.8
West Virginia	2,637	2,406	2,266	2,310	2,918	2,086	9.6	-2.5	2.6
East South Central Total	w	w	w	w	w	w	w	w	w
Alabama	2,394	2,268	3,136	2,468	2,237	2,541	5.5	1.7	-.7
Kentucky	1,994	2,392	1,648	2,044	2,253	2,510	-16.6	-3.0	-2.5
Mississippi	w	w	w	w	w	w	w	w	w
Tennessee	4,097	3,942	3,686	3,702	3,779	3,949	3.9	2.0	.4
West South Central Total	7,082	6,780	5,846	5,716	5,769	w	4.4	5.3	w
Arkansas	346	330	295	283	256	379	4.8	7.8	-1.0
Louisiana	w	w	w	w	w	w	w	w	w
Oklahoma	w	w	w	w	w	852	w	w	w
Texas	5,350	4,667	4,225	4,198	4,157	4,788	14.6	6.5	1.2
Mountain Total	5,614	5,163	4,973	4,954	4,841	5,909	8.7	3.8	-.6
Arizona	727	674	632	689	660	w	7.8	2.4	w
Colorado	857	780	735	738	729	791	9.8	4.1	.9
Idaho	494	486	484	604	489	439	1.7	.3	1.3
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	835	727	525	508	676	472	14.9	5.4	6.5
Wyoming	1,867	1,873	2,126	1,896	1,857	w	-.3	.1	w
Pacific Total	2,769	2,677	3,161	3,113	3,214	2,313	3.4	-3.6	2.0
Alaska	w	2	-	-	-	-	w	w	w
California	2,332	2,311	2,821	2,771	2,874	1,889	.9	-5.1	2.4
Hawaii	w	w	w	w	w	46	w	w	w
Oregon	w	w	w	w	w	w	w	w	w
Washington	201	174	163	197	229	208	15.8	-3.2	-.3
U.S. Total	75,179	74,892	74,042	75,405	76,330	75,372	.4	-.4	*

* Data round to zero.

* 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, 1985, 1990-1994
(Thousand Short Tons)

Census Division and State	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
New England Total	38	21	16	6	32	7	80.5	4.9	20.5
Connecticut	-	-	-	-	-	w	w	w	w
Maine	w	w	w	w	w	w	w	w	w
Massachusetts	w	w	w	w	w	w	NM	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	250	321	402	296	365	390	-22.0	-9.0	-4.8
Pennsylvania	298	287	306	282	330	390	3.6	-2.5	-2.9
East North Central Total	2,462	2,044	2,505	2,583	2,955	3,523	20.5	-4.5	-3.9
Illinois	426	368	389	422	508	534	15.7	-4.3	-2.5
Indiana	690	470	732	764	856	841	47.0	-5.2	-2.2
Michigan	865	702	882	891	1,046	1,126	23.2	-4.6	-2.9
Ohio	153	198	228	190	216	418	-22.7	-8.3	-10.6
Wisconsin	328	306	274	315	330	604	7.0	-1	-6.6
West North Central Total	978	775	1,020	1,163	1,156	1,174	26.2	-4.1	-2.0
Iowa	535	418	556	635	714	597	28.1	-6.9	-1.2
Kansas	13	16	11	10	13	60	-15.1	.7	-15.4
Minnesota	99	68	77	78	84	167	47.0	4.3	-5.6
Missouri	159	148	227	210	177	225	7.3	-2.7	-3.8
Nebraska	w	w	w	w	w	29	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	101	90	100	99	151	92	11.8	-9.6	.9
Georgia	144	101	144	167	231	183	42.8	-11.2	-2.6
Maryland	36	41	35	37	35	44	-12.2	.8	-2.1
North Carolina	179	172	203	209	240	262	4.2	-7.1	-4.1
South Carolina	278	245	245	253	263	308	13.4	1.4	-1.1
Virginia	217	216	275	206	308	372	.4	-8.4	-5.8
West Virginia	130	167	156	131	192	204	-22.1	-9.3	-4.9
East South Central Total	w	w	w	w	w	w	w	w	w
Alabama	183	132	127	131	183	298	38.0	*	-5.3
Kentucky	112	73	127	123	142	178	52.2	-5.8	-5.0
Mississippi	w	w	w	w	w	w	w	w	w
Tennessee	256	246	270	219	233	346	3.9	2.3	-3.3
West South Central Total	439	1,218	395	603	1,214	w	-63.9	-22.4	w
Arkansas	26	15	19	15	13	54	68.3	18.3	-8.0
Louisiana	w	w	w	w	w	w	w	w	w
Oklahoma	w	w	w	w	w	181	w	w	w
Texas	215	1,026	228	437	1,067	1,639	-79.0	-33.0	-20.2
Mountain Total	267	332	360	307	417	416	-19.7	-10.6	-4.8
Arizona	45	30	53	52	39	w	47.9	3.7	w
Colorado	26	25	29	21	36	54	3.8	-7.9	-7.8
Idaho	78	86	101	79	140	66	-9.5	-13.6	1.9
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	13	20	26	39	60	151	-35.0	-31.4	-23.7
Wyoming	77	113	89	68	78	w	-32.1	-3	w
Pacific Total	w	w	w	w	w	w	w	w	w
California	126	93	109	139	122	225	35.5	.8	-6.3
Hawaii	w	w	w	w	w	17	w	w	w
Oregon	w	w	w	w	w	w	w	w	w
Washington	38	27	39	49	62	20	37.3	-11.9	7.3
U.S. Total	6,585	6,716	6,965	7,061	8,716	10,438	-1.9	-6.8	-5.0

* Data round to zero.

w Withheld to avoid disclosure of individual company data.

NM Not meaningful as value is greater than 500.

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,
1985, 1990-1994**
(Thousand Short Tons)

Census Division and State	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
Middle Atlantic Total	W	W	W	W	W	W	W	W	W
New York	W	W	W	W	W	W	W	W	W
Pennsylvania	10,849	10,333	9,868	8,812	10,456	9,762	5.0	0.9	1.2
East North Central Total	11,356	11,643	13,224	14,742	17,233	19,622	-2.5	-9.9	-5.9
Illinois	W	W	W	W	W	2,358	W	W	W
Indiana	4,841	6,591	7,153	8,234	8,867	9,338	-26.5	-14.0	-7.0
Michigan	W	-	-	W	W	W	W	W	W
Ohio	3,092	2,892	3,755	3,698	4,949	5,242	6.9	-11.1	-5.7
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	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	3,253	3,206	3,297	3,166	3,288	2,883	1.4	-3	1.3
Kentucky	W	W	W	W	W	W	W	W	W
Tennessee	-	-	-	W	W	W	-	W	W
West South Central Total	-	-	-	-	-	W	-	W	W
Texas	-	-	-	-	-	W	-	W	W
Mountain Total	W	W	W	W	W	W	W	W	W
Utah	W	W	W	W	W	W	W	W	W
U.S. Total	31,740	31,323	32,366	33,854	38,877	41,056	1.3	-4.9	-2.8

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,
1985, 1990-1994**
(Thousand Short Tons)

Census Division and State	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
Middle Atlantic Total	W	W	W	W	W	W	W	W	W
New York	W	W	W	W	W	W	NM	W	W
Pennsylvania	762	868	804	852	733	745	-12.1	1.0	0.3
East North Central Total	1,282	822	906	1,203	1,716	2,041	55.9	-7.0	-5.0
Illinois	W	W	W	W	W	326	W	W	W
Indiana	567	394	481	669	761	707	44.1	-7.1	-2.4
Michigan	W	-	-	W	W	W	W	W	W
Ohio	163	183	180	215	299	332	-10.9	-14.0	-7.6
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	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	297	333	332	293	320	211	-10.9	-1.8	3.9
Kentucky	W	W	W	W	W	W	W	W	W
Tennessee	-	-	-	-	W	W	W	W	W
West South Central Total	-	21	21	21	W	W	-	W	W
Texas	-	21	21	21	W	W	-	W	W
Mountain Total	W	W	W	W	W	W	W	W	W
Utah	W	W	W	W	W	W	W	W	W
U.S. Total	2,657	2,401	2,597	2,773	3,329	3,420	10.6	-5.5	-2.8

W Withheld to avoid disclosure of individual company data.
NM Not meaningful as value is greater than 500.
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, 1985, 1990-1994
(Thousand Short Tons)

Census Division and State	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
New England Total	56	102	141	84	142	282	-45.1	-20.8	-16.5
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	1,351	1,498	1,916	1,698	1,594	1,767	-9.8	-4.0	-2.9
New Jersey	w	w	w	w	w	w	w	w	w
New York	w	w	w	w	w	w	w	w	w
Pennsylvania	1,156	1,257	1,626	1,408	1,308	1,226	-8.0	-3.0	-6
East North Central Total	1,452	1,458	1,476	1,453	1,743	1,898	-4	-4.5	-2.9
Illinois	w	w	w	w	w	236	w	w	w
Indiana	356	339	411	433	551	524	5.0	-10.3	-4.2
Michigan	w	w	w	w	w	w	w	w	w
Ohio	498	584	588	489	654	859	-14.6	-6.6	-5.9
Wisconsin	w	w	w	w	w	w	w	w	w
West North Central Total	w	w	w	w	w	w	w	w	w
Iowa	40	70	64	223	245	278	-42.4	-36.3	-19.3
Kansas	32	23	*	*	*	1	40.8	207.1	43.5
Minnesota	229	107	25	94	179	219	113.1	6.4	.5
Missouri	w	w	w	w	w	w	w	w	w
Nebraska	w	w	w	w	w	12	w	w	w
North Dakota	w	w	w	w	w	w	w	w	w
South Dakota	w	w	w	w	w	w	NM	w	w
South Atlantic Total	887	904	632	490	744	999	-1.9	4.5	-1.3
Delaware	w	w	w	w	w	w	w	w	w
District of Columbia	47	51	50	66	69	140	-8.5	-9.4	-11.5
Florida	20	16	16	*	5	110	27.6	44.4	-17.2
Georgia	28	22	38	8	22	38	29.0	6.3	-3.2
Maryland	w	w	w	w	w	w	w	w	w
North Carolina	263	229	204	97	156	195	14.7	13.8	3.4
South Carolina	61	109	31	22	6	66	-43.8	75.7	-.8
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	386	417	458	376	473	474	-7.4	-4.9	-2.2
Alabama	11	40	89	17	105	99	-73.4	-43.5	-22.0
Kentucky	w	w	w	w	w	w	w	w	w
Mississippi	-	w	w	w	w	w	w	w	w
Tennessee	w	w	w	w	w	w	w	w	w
West South Central Total	1	8	13	12	11	11	-83.0	-40.1	-20.9
Arkansas	*	1	2	*	*	1	-60.7	12.3	-12.4
Louisiana	-	w	-	w	-	-	w	w	w
Oklahoma	w	w	w	w	*	3	w	w	w
Texas	*	6	10	11	w	w	-98.9	w	w
Mountain Total	w	w	w	w	w	w	w	w	w
Arizona	*	1	4	*	w	w	-90.4	w	w
Colorado	23	38	58	65	w	w	-39.4	w	w
Idaho	40	43	51	68	61	47	-6.4	-9.8	-1.6
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	w	w	w	w	w	w	w	w	w
Wyoming	242	187	99	138	w	w	29.3	w	w
Pacific Total	773	821	607	630	w	w	-5.8	w	w
Alaska	520	563	514	504	w	w	-7.7	w	w
California	166	142	*	44	w	w	17.0	w	w
Hawaii	w	w	w	w	w	w	w	w	w
Oregon	w	w	w	w	w	w	w	w	w
Washington	86	114	91	80	66	216	-24.4	6.9	-9.7
U.S. Total	6,013	6,221	6,153	6,094	6,724	7,779	-3.3	-2.8	-2.8

* Data round to zero.

w Withheld to avoid disclosure of individual company data.

NM Not meaningful as value is greater than 500.

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

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

Foreign Markets

Today, many developing nations are depending more on U.S. coal. In 1994, U.S. coal exports totaled 71 million short tons.

Figure 13. U.S. Coal Exports, 1985-1994

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

Table 76. U.S. Coal Exports by Destination, 1985, 1990-1994
(Thousand Short Tons)

Continent and Country of Destination	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
North America Total	9,505	9,219	15,331	11,454	15,859	16,839	3.1	-12.0	-6.1
Canada ¹	9,193	8,889	15,140	11,178	15,511	16,393	3.4	-12.3	-6.2
Mexico	241	250	77	92	210	366	-3.5	3.4	-4.5
Other ²	71	81	115	184	137	80	-11.6	-15.1	-1.2
South America Total	5,946	5,750	6,769	7,661	6,902	6,809	3.4	-3.6	-1.5
Argentina	453	524	335	429	640	588	-13.7	-8.3	-2.9
Brazil	5,482	5,197	6,370	7,052	5,847	5,862	5.5	-1.6	-7
Other ²	12	28	64	180	415	359	-57.0	-58.7	-31.4
Europe Total	35,825	37,575	57,255	65,520	58,382	45,106	-4.6	-11.5	-2.5
Belgium & Luxembourg	4,911	5,229	7,196	7,464	8,500	4,427	-6.1	-12.8	1.1
Bulgaria	1,238	906	602	946	88	275	36.7	93.7	18.2
Denmark	477	336	3,832	4,658	3,188	2,159	41.9	-37.8	-15.4
Finland	377	252	205	530	95	1,269	49.3	41.0	-12.6
France	2,875	3,972	8,060	9,509	6,879	4,481	-27.6	-19.6	-4.8
Germany	323	508	1,003	1,742	1,057	1,078	-36.3	-25.6	-12.5
Ireland	974	985	1,449	1,313	1,458	429	-1.2	-9.6	9.5
Italy	7,543	6,918	9,344	11,274	11,947	10,252	9.0	-10.9	-3.3
Netherlands	4,874	5,562	9,148	9,625	8,369	6,327	-12.4	-12.6	-2.8
Norway	87	101	118	200	177	266	-14.2	-16.4	-11.7
Portugal	1,057	1,491	1,479	1,629	1,786	959	-29.1	-12.3	1.1
Romania	1,553	720	753	1,147	1,718	1,160	115.7	-2.5	3.3
Spain	4,132	4,064	4,535	4,694	3,791	3,456	1.7	2.2	2.0
Sweden	702	736	1,165	1,239	866	1,353	-4.7	-5.1	-7.0
Turkey	1,335	1,605	1,990	2,186	2,117	2,196	-16.8	-10.9	-5.4
United Kingdom	3,363	4,111	5,595	6,171	5,177	2,676	-18.2	-10.2	2.6
Yugoslavia	-	78	726	979	933	849	-100.0	-100.0	-100.0
Other ²	8	*	54	214	236	1,498	NM	-57.7	-44.4
Asia Total	17,957	19,500	20,540	21,788	22,725	22,343	-7.9	-5.7	-2.4
China (Taiwan)	3,374	3,435	3,560	4,547	4,604	3,154	-1.8	-7.5	.8
Israel	864	849	824	651	639	464	1.7	7.8	7.1
Japan	10,158	11,878	12,304	12,269	13,338	15,372	-14.5	-6.6	-4.5
Korea, Republic of	3,558	3,316	3,352	3,711	3,999	3,228	7.3	-2.9	1.1
Other ²	3	22	500	611	145	125	-84.7	-61.1	-33.2
Oceania & Australia Total	1	1	*	*	3	1	-47.6	-32.5	.3
Other ²	1	1	*	*	3	1	-47.6	-32.5	.3
Africa Total	2,124	2,474	2,621	2,545	1,933	1,582	-14.1	2.4	3.3
Algeria	355	409	611	522	479	829	-13.2	-7.2	-9.0
Egypt	1,048	868	848	769	646	504	20.8	12.8	8.5
Morocco	83	587	737	1,013	752	193	-85.8	-42.3	-8.9
South Africa, Rep of	638	567	425	239	55	54	12.3	84.4	31.5
Other ²	-	42	-	2	-	1	-100.0	-	-100.0
Total	71,359	74,519	102,516	108,969	105,804	92,680	-4.2	-9.4	-2.9

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 1993.

* Data round to zero.

NM Not meaningful as value is greater than 500.

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, 1985, 1990-1994
(Thousand Short Tons)

Continent and Country of Destination	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
North America Total	4,246	4,853	4,957	4,060	4,399	7,351	-12.5	-0.9	-5.9
Canada ¹	4,032	4,663	4,920	4,019	4,396	7,010	-13.5	-2.1	-6.0
Mexico	214	190	36	41	3	303	12.9	191.3	-3.8
Other ²	-	*	*	*	*	38	-100.0	-100.0	-100.0
South America Total	5,926	5,514	6,524	7,416	6,468	6,637	7.5	-2.2	-1.3
Argentina	449	487	332	428	640	588	-7.7	-8.5	-2.9
Brazil	5,477	5,027	6,165	6,958	5,753	5,776	8.9	-1.2	-6
Other ²	-	-	27	30	75	274	-	-100.0	-100.0
Europe Total	25,245	26,791	33,365	38,544	36,690	28,494	-5.8	-8.9	-1.3
Belgium & Luxembourg	3,706	4,030	5,165	5,531	6,098	3,727	-8.0	-11.7	-1
Bulgaria	1,184	849	602	946	49	32	39.5	121.8	49.5
Denmark	-	106	-	568	56	-	-100.0	-100.0	-
Finland	311	252	205	389	95	-	23.4	34.4	-
France	2,816	3,101	4,314	5,851	4,961	3,826	-9.2	-13.2	-3.3
Germany	288	203	247	561	701	646	41.9	-19.9	-8.6
Ireland	-	-	-	-	-	60	-	-	-100.0
Italy	5,045	4,965	6,180	6,489	7,029	6,284	1.6	-7.9	-2.4
Netherlands	3,231	3,743	4,836	4,598	3,975	3,279	-13.7	-5.0	-2
Norway	73	70	91	101	109	108	4.2	-9.5	-4.2
Portugal	-	149	135	74	258	269	-100.0	-100.0	-100.0
Romania	663	373	753	1,003	1,718	1,160	78.0	-21.2	-6.0
Spain	2,656	2,994	2,795	3,402	3,479	2,711	-11.3	-6.5	-2
Sweden	702	736	1,165	1,231	843	1,099	-4.7	-4.5	-4.9
Turkey	1,335	1,604	1,989	2,066	2,101	1,892	-16.8	-10.7	-3.8
United Kingdom	3,228	3,573	4,175	4,657	4,090	2,363	-9.6	-5.7	3.5
Yugoslavia	-	43	658	869	920	820	-100.0	-100.0	-100.0
Other ²	7	-	54	207	209	219	-	-56.9	-31.6
Asia Total	9,877	10,608	12,655	12,894	14,721	16,442	-6.9	-9.5	-5.5
China (Taiwan)	296	285	424	459	394	315	3.5	-6.9	-7
Israel	-	-	143	109	55	-	-	-100.0	-
Japan	7,195	8,028	9,480	9,395	11,044	13,903	-10.4	-10.1	-7.0
Korea, Republic of	2,386	2,276	2,608	2,931	3,206	2,104	4.8	-7.1	1.4
Other ²	-	19	-	-	23	119	-100.0	-100.0	-100.0
Oceania & Australia Total	-	-	-	-	1	-	-	-100.0	-
Other ²	-	-	-	-	1	-	-	-100.0	-
Africa Total	2,040	1,886	1,925	1,731	1,180	1,388	8.1	14.7	4.4
Algeria	355	409	611	522	479	829	-13.2	-7.2	-9.0
Egypt	1,047	868	848	768	646	504	20.7	12.8	8.4
Morocco	-	-	41	202	-	-	-	-	-
South Africa, Rep of	638	567	425	239	55	54	12.3	84.4	31.5
Other ²	-	42	-	-	-	-	-100.0	-	-
Total	47,334	49,652	59,426	64,645	63,459	60,313	-4.7	-7.1	-2.6

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 1993.

* 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, 1985, 1990-1994
(Thousand Short Tons)

Continent and Country of Destination	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
North America Total	5,259	4,366	10,374	7,394	11,460	9,488	20.5	-17.7	-6.3
Canada ¹	5,161	4,225	10,219	7,159	11,115	9,383	22.1	-17.4	-6.4
Mexico	26	60	40	52	208	64	-55.8	-40.3	-9.3
Other ²	71	81	115	184	137	41	-11.6	-15.1	6.2
South America Total	20	236	245	245	435	172	-91.4	-53.5	-21.1
Argentina	4	38	3	1	-	*	-90.4	-	26.4
Brazil	5	170	205	94	94	86	-97.3	-52.9	-27.7
Other ²	12	28	37	150	340	85	-57.0	-56.6	-19.5
Europe Total	10,580	10,784	23,891	26,975	21,692	16,612	-1.9	-16.4	-4.9
Belgium & Luxembourg	1,205	1,199	2,031	1,933	2,402	699	.4	-15.8	6.2
Bulgaria	54	57	-	-	39	244	-4.7	8.4	-15.4
Denmark	477	230	3,832	4,090	3,132	2,159	107.0	-37.5	-15.4
Finland	66	1	-	142	-	1,269	65.6	-	-28.0
France	58	870	3,745	3,658	1,918	655	-93.3	-58.2	-23.5
Germany	35	305	756	1,181	356	432	-88.4	-43.8	-24.3
Ireland	974	985	1,449	1,313	1,458	369	-1.2	-9.6	11.4
Italy	2,498	1,954	3,164	4,785	4,917	3,968	27.9	-15.6	-5.0
Netherlands	1,643	1,819	4,312	5,027	4,393	3,048	-9.7	-21.8	-6.6
Norway	13	31	27	99	68	157	-56.7	-33.5	-24.0
Portugal	1,057	1,342	1,344	1,555	1,528	690	-21.3	-8.8	4.8
Romania	890	347	-	144	-	-	156.2	-	-
Spain	1,476	1,070	1,740	1,292	312	745	37.9	47.4	7.9
Sweden	-	-	*	8	23	254	-	-100.0	-100.0
Turkey	-	*	*	120	17	303	-100.0	-100.0	-100.0
United Kingdom	135	538	1,421	1,514	1,088	312	-74.9	-40.7	-8.9
Yugoslavia	-	35	68	110	13	29	-100.0	-100.0	-100.0
Other ²	*	*	*	6	27	1,279	181.1	-66.2	-59.7
Asia Total	8,080	8,892	7,885	8,894	8,004	5,901	-9.1	.2	3.5
China (Taiwan)	3,078	3,150	3,136	4,088	4,211	2,839	-2.3	-7.5	.9
Israel	864	849	681	542	584	464	1.7	10.3	7.1
Japan	2,963	3,850	2,823	2,874	2,294	1,468	-23.0	6.6	8.1
Korea, Republic of	1,172	1,040	744	779	793	1,124	12.7	10.2	.4
Other ²	3	3	500	611	122	5	24.8	-59.4	-4.7
Oceania & Australia Total	1	1	*	*	2	1	-47.6	-28.7	.3
Other ²	1	1	*	*	2	1	-47.6	-28.7	.3
Africa Total	85	588	696	814	753	194	-85.6	-42.1	-8.8
Egypt	1	1	1	1	*	*	136.3	29.4	36.1
Morocco	83	587	695	811	752	193	-85.8	-42.3	-8.9
Other ²	-	-	-	2	-	1	-	-	-100.0
Total	24,025	24,867	43,090	44,323	42,345	32,367	-3.4	-13.2	-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 1993.

* 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 79. Coal Exports by Customs District, 1985, 1990-1994
(Thousand Short Tons)

Customs District	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
Eastern Total	43,474	45,138	64,826	69,185	66,160	55,755	-3.7	-10.0	-2.7
Boston, MA	-	33	-	-	54	-	-100.0	-100.0	-
Baltimore, MD	7,912	7,354	9,450	9,790	7,786	7,682	7.6	.4	.3
Portland, ME	1	1	*	-	1	1	-13.5	-2.3	-2.0
Buffalo, NY	166	67	1,971	773	503	17	148.0	-24.3	28.7
New York City, NY	1	1	4	5	17	451	15.4	-47.9	-47.9
Ogdensburg, NY	337	44	66	110	54	23	NM	58.1	34.7
Philadelphia, PA	213	190	252	639	3,237	4,430	12.2	-49.4	-28.6
Norfolk, VA	34,845	37,448	53,083	57,868	54,508	43,152	-6.9	-10.6	-2.3
St. Albans, VT	*	*	*	*	-	-	486.9	-	-
Southern Total	15,607	16,658	21,343	25,667	21,988	18,945	-6.3	-8.2	-2.1
Mobile, AL	4,997	6,262	6,853	8,743	7,607	9,031	-20.2	-10.0	-6.4
Savannah, GA	1	-	37	*	*	-	-	40.4	-
Miami, FL	3	2	2	2	1	1	24.9	20.9	36.2
Tampa, FL	*	*	-	11	19	1	-38.9	-70.3	21.6
New Orleans, LA	9,475	9,705	13,480	15,494	12,811	8,377	-2.4	-7.3	1.4
Wilmington, NC	-	-	-	-	-	108	-	-	-100.0
San Juan, PR	26	-	-	-	-	3	NM	-	29.3
Charleston, SC	957	475	791	1,161	1,193	1,080	101.5	-5.3	-1.3
El Paso, TX	-	*	1	*	-	1	-100.0	-	-100.0
Houston-Galveston, TX	121	155	145	206	154	149	-21.5	-5.8	-2.3
Laredo, TX	26	59	36	49	201	46	-56.1	-40.2	-6.2
Port Arthur, TX	-	-	-	-	-	151	-	-	-100.0
Virgin Islands	-	-	*	-	-	-	-	-	-
Western Total	3,813	4,201	3,651	4,430	3,009	1,631	-9.2	6.1	9.9
Anchorage, AK	719	733	728	777	793	603	-1.8	-2.4	2.0
Nogales, AZ	*	*	*	-	3	-	-71.7	-58.1	-
Los Angeles, CA	2,963	3,358	2,721	2,840	1,936	1,023	-11.8	11.2	12.5
San Diego, CA	1	1	4	2	3	*	-37.5	-32.1	10.4
San Francisco, CA	1	-	60	33	188	3	-	-73.3	-13.3
Great Falls, MT	1	*	-	-	*	1	89.9	47.5	-3
Portland, OR	-	2	-	576	4	*	-100.0	-100.0	-100.0
Seattle, WA	128	106	137	202	82	1	20.6	11.6	75.5
Northern Total	8,437	8,495	12,557	9,635	14,622	16,348	-7	-12.8	-7.1
Chicago, IL	24	-	*	*	47	39	-	-16.0	-5.5
Detroit, MI	2,600	609	2,181	520	3,901	39	327.0	-9.6	59.5
Duluth, MN	161	134	119	130	504	*	19.8	-24.8	109.4
Pembina, ND	10	1	*	*	*	1	NM	146.1	31.4
Cleveland, OH	5,642	7,751	10,258	8,985	10,073	16,269	-27.2	-13.5	-11.1
Milwaukee, WI	-	-	-	-	96	-	-	-100.0	-
Other Ports	28	26	138	51	25	-	5.0	2.5	-
Total	71,359	74,519	102,516	108,969	105,804	92,680	-4.2	-9.4	-2.9

* Data round to zero.

NM Not meaningful as value is greater than 500.

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

Figure 14. Coal Prices, 1985-1994
(Nominal Dollars per Short Ton)

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

The average mine price of U.S. coal in 1994 was \$19.41 per short ton, a drop of 2 percent from 1993, and the 12th straight year of decline. Since 1985 the average mine price of U.S. coal has declined at an average annual rate of almost 3 percent (Table 80). During this period, the average mine price of coal East of the Mississippi River declined at an average annual rate of approximately 2 percent, whereas West of the Mississippi River the decline was over 3 percent. In real dollars, the decline over this period was over 6 percent (Table 81).

Compared with 1993, the average mine price of coal fell about 1 percent in both the Appalachian and Interior Regions, while the decline was 5 percent for the Western Region. In the major coal-producing States, average mine prices fell almost 7 percent in

Wyoming and 1 percent in West Virginia, but rose slightly in Kentucky.

Consumer Prices

The average price of coal delivered to electric utilities during 1994 was \$28.02 per short ton, 2 percent below the average price of \$28.58 per short ton reported for 1993 (Table 92). Similarly, compared with 1993, the average price of coal delivered to coke plants declined 2 percent to \$46.56 per short ton, while the average price of coal delivered to other industrial plants rose 1 percent to \$32.54 per short ton (Table 94 and Table 96).

The average price of U.S. coal imports in 1994 was \$30.21 per short ton, a 1-percent increase over the 1993 level (Table 98). The average price of coal

imported from Colombia, which accounted for 47 percent of U.S. imports, rose almost 1 percent. Over the last 10 years, the average price of U.S. coal imports has declined at an average annual rate of 2 percent.

The average price of U.S. coal exports in 1994 was \$39.93 per short ton, a decline of almost 4 percent

(Table 99). The average price of metallurgical coal dropped 3 percent, while the average price of steam coal decreased by 5 percent. Over the last decade, the average price of U.S. coal exports has declined at an annual average rate of 2 percent. Metallurgical and steam coal export prices have decreased at average annual rates of 2 and 3 percent, respectively.

Mine Prices

In 1994, underground mining accounted for 39 percent of total coal production. Of the 399 million short tons of coal produced from underground mines, continuous mining accounted for 45 percent. The average mine price for underground coal was \$26.39 per short ton.

Table 80. Average Mine Price of Coal by State, 1985, 1990-1994
(Nominal Dollars per Short Ton)

Coal-Producing State and Region	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
Alabama	\$40.12	\$42.34	\$40.82	\$41.14	\$43.04	\$42.84	-5.2	-1.7	-0.7
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	w
California	-	-	w	w	w	w	w	w	-
Colorado	19.76	20.35	21.33	22.18	21.75	\$24.65	-2.9	-2.4	-2.4
Illinois	23.14	25.27	27.66	28.35	27.73	30.80	-8.5	-4.4	-3.1
Indiana	22.28	22.89	23.41	23.58	23.91	26.54	-2.7	-1.7	-1.9
Iowa	w	w	w	w	w	26.13	w	w	w
Kansas	w	w	w	w	w	26.00	w	w	w
Kentucky Total	24.88	24.77	24.50	25.45	25.19	28.24	.4	-.3	-1.4
Eastern	25.25	25.50	25.00	26.37	25.84	28.77	-1.0	-.6	-1.4
Western	23.63	22.36	23.10	22.88	23.32	26.73	5.7	.3	-1.3
Louisiana	w	w	w	w	w	w	w	w	w
Maryland	26.34	25.21	25.39	25.73	25.97	\$27.40	4.5	.3	-.4
Missouri	21.78	w	w	w	w	27.08	w	w	-2.4
Montana	10.39	11.05	10.20	10.76	9.42	13.18	-5.9	2.5	-2.6
New Mexico	23.29	22.96	23.14	23.25	22.43	23.41	1.4	.9	*
North Dakota	7.62	7.63	7.48	7.84	7.67	9.30	-.2	-.2	-2.2
Ohio	29.13	28.04	26.93	27.75	28.65	33.97	3.8	.4	-1.7
Oklahoma	25.57	24.91	25.76	28.52	30.39	31.72	2.6	-4.2	-2.4
Pennsylvania Total	26.18	26.50	28.61	29.40	30.15	32.91	-1.2	-3.5	-2.5
Anthracite	36.07	32.94	34.24	36.34	39.40	45.80	9.5	-2.2	-2.6
Bituminous	25.45	26.03	28.34	29.06	29.72	32.07	-2.3	-3.8	-2.5
Tennessee	27.17	27.23	27.11	26.74	27.96	28.54	-.2	-.7	-.5
Texas	12.38	12.87	12.42	12.21	11.20	11.60	-3.8	2.5	.7
Utah	19.27	20.81	21.11	22.59	18.53	27.69	-7.4	1.0	-3.9
Virginia	26.84	26.80	27.55	27.45	28.05	30.16	.1	-1.1	-1.3
Washington	w	w	w	w	w	w	w	w	w
West Virginia Total	27.42	27.58	28.15	28.62	28.62	\$33.47	-.6	-1.1	-2.2
Northern	26.77	28.09	29.03	30.16	29.05	31.98	-4.7	-2.0	-1.9
Southern	27.71	27.40	27.76	27.93	28.40	34.43	1.1	-.6	-2.4
Wyoming	6.83	7.32	8.14	8.09	8.43	11.36	-6.7	-5.1	-5.5
Appalachian Total ¹	27.36	27.64	27.95	28.69	28.89	32.35	-1.0	-1.3	-1.8
Interior Total ¹	19.87	20.03	21.61	21.86	21.45	24.40	-.8	-1.9	-2.3
Western Total ¹	10.57	11.14	11.60	11.71	11.60	14.53	-5.1	-2.3	-3.5
East of Miss. River	26.44	26.81	27.34	27.97	28.09	31.44	-1.4	-1.5	-1.9
West of Miss. River	10.91	11.50	11.98	12.06	11.81	14.57	-5.1	-1.9	-3.2
U.S. Total	19.41	19.85	21.03	21.49	21.76	25.20	-2.2	-2.8	-2.9

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

w Data round to zero.

* 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. 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, 1985, 1990-1994
(Real Dollars per Short Ton)

Coal-Producing State and Region	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
Alabama	\$31.81	\$34.28	\$33.76	\$34.98	\$37.98	\$45.39	-7.2	-4.3	-3.9
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	w
California	-	-	w	w	w	w	w	w	-
Colorado	15.67	16.48	17.64	18.86	19.20	\$26.11	-4.9	-4.9	-5.5
Illinois	18.35	20.46	22.88	24.11	24.47	32.63	-10.3	-6.9	-6.2
Indiana	17.67	18.54	19.37	20.05	21.10	28.11	-4.7	-4.3	-5.0
Iowa	w	w	w	w	w	27.68	w	w	w
Kansas	w	w	w	w	w	27.54	w	w	w
Kentucky Total	19.73	20.06	20.27	21.64	22.23	29.91	-1.6	-2.9	-4.5
Eastern	20.02	20.65	20.67	22.42	22.81	30.47	-3.0	-3.2	-4.5
Western	18.74	18.10	19.10	19.46	20.59	28.32	3.5	-2.3	-4.5
Louisiana	w	w	w	w	w	w	w	w	w
Maryland	20.89	20.41	21.00	21.88	22.92	\$29.02	2.3	-2.3	-3.6
Missouri	17.27	w	w	w	w	28.69	w	w	-5.5
Montana	8.24	8.95	8.43	9.15	8.32	13.96	-7.9	-2	-5.7
New Mexico	18.47	18.59	19.14	19.77	19.79	24.80	-6	-1.7	-3.2
North Dakota	6.04	6.18	6.19	6.66	6.77	9.85	-2.2	-2.8	-5.3
Ohio	23.10	22.71	22.28	23.60	25.28	35.99	1.7	-2.2	-4.8
Oklahoma	20.27	20.17	21.31	24.25	26.83	33.60	.5	-6.8	-5.4
Pennsylvania Total	20.77	21.46	23.66	25.00	26.61	34.86	-3.2	-6.0	-5.6
Anthracite	28.60	26.67	28.32	30.90	34.78	48.52	7.2	-4.8	-5.7
Bituminous	20.18	21.08	23.44	24.71	26.23	33.98	-4.3	-6.3	-5.6
Tennessee	21.54	22.05	22.42	22.74	24.67	30.23	-2.3	-3.3	-3.7
Texas	9.82	10.42	10.27	10.38	9.88	12.29	-5.8	-1	-2.4
Utah	15.28	16.85	17.46	19.21	16.36	29.34	-9.3	-1.7	-7.0
Virginia	21.28	21.70	22.79	23.34	24.76	31.95	-1.9	-3.7	-4.4
Washington	w	w	w	w	w	w	w	w	w
West Virginia Total	21.75	22.33	23.28	24.34	25.26	\$35.45	-2.6	-3.7	-5.3
Northern	21.23	22.74	24.01	25.65	25.64	33.87	-6.7	-4.6	-5.0
Southern	21.97	22.18	22.96	23.75	25.06	36.47	-9	-3.2	-5.5
Wyoming	5.41	5.92	6.73	6.88	7.44	12.03	-8.6	-7.6	-8.5
Appalachian Total ¹	21.70	22.38	23.12	24.40	25.50	34.27	-3.0	-3.9	-4.9
Interior Total ¹	15.76	16.22	17.87	18.59	18.93	25.85	-2.8	-4.5	-5.3
Western Total ¹	8.38	9.02	9.59	9.96	10.24	15.39	-7.1	-4.9	-6.5
East of Miss. River	20.97	21.71	22.61	23.79	24.80	33.31	-3.4	-4.1	-5.0
West of Miss. River	8.65	9.31	9.91	10.26	10.42	15.44	-7.1	-4.5	-6.2
U.S. Total	15.39	16.07	17.39	18.28	19.21	26.70	-4.2	-5.4	-5.9

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

w Withheld to avoid disclosure of individual company data.

Notes: Real prices are in 1987 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, 1994
(Dollars per Short Ton)

Coal-Producing State and Region	Underground		Surface		Total	
	Nominal	Real ¹	Nominal	Real ¹	Nominal	Real ¹
Alabama	\$39.92	\$31.66	\$40.45	\$32.08	\$40.12	\$31.81
Alaska	-	-	w	w	w	w
Arizona	-	-	w	w	w	w
Arkansas	w	w	w	w	w	w
Colorado	19.05	15.11	21.05	16.69	19.76	15.67
Illinois	23.18	18.38	22.92	18.18	23.14	18.35
Indiana	w	w	w	w	22.28	17.67
Iowa	-	-	w	w	w	w
Kansas	-	-	w	w	w	w
Kentucky Total	26.14	20.73	23.07	18.29	24.88	19.73
Eastern	26.19	20.77	23.92	18.97	25.25	20.02
Western	25.97	20.59	20.07	15.92	23.63	18.74
Louisiana	-	-	w	w	w	w
Maryland	w	w	w	w	26.34	20.89
Missouri	-	-	21.78	17.27	21.78	17.27
Montana	-	-	10.39	8.24	10.39	8.24
New Mexico	w	w	w	w	23.29	18.47
North Dakota	-	-	7.62	6.04	7.62	6.04
Ohio	31.61	25.07	27.04	21.44	29.13	23.10
Oklahoma	w	w	w	w	25.57	20.27
Pennsylvania Total	26.59	21.09	25.43	20.17	26.18	20.77
Anthracite	35.28	27.98	36.10	28.63	36.07	28.60
Bituminous	26.55	21.06	22.95	18.20	25.45	20.18
Tennessee	w	w	w	w	27.17	21.54
Texas	-	-	12.38	9.82	12.38	9.82
Utah	19.27	15.28	-	-	19.27	15.28
Virginia	27.33	21.67	25.33	20.09	26.84	21.28
Washington	-	-	w	w	w	w
West Virginia Total	27.93	22.15	26.29	20.85	27.42	21.75
Northern	27.33	21.68	22.34	17.72	26.77	21.23
Southern	28.31	22.45	26.79	21.24	27.71	21.97
Wyoming	w	w	w	w	6.83	5.41
Appalachian Total ²	28.01	22.21	26.20	20.78	27.36	21.70
Interior Total ²	24.31	19.28	17.09	13.55	19.87	15.76
Western Total ²	19.23	15.25	9.51	7.54	10.57	8.38
East of Miss. River	27.29	21.64	25.02	19.84	26.44	20.97
West of Miss. River	19.23	15.25	10.04	7.96	10.91	8.65
U.S. Total	26.39	20.93	15.02	11.91	19.41	15.39

¹ Real prices are in 1987 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.

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. 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, 1994
(Nominal Dollars per Short Ton)

Coal-Producing State and Region	Continuous ¹	Conventional ²	Longwall ³	Other ⁴	Total
Alabama	\$36.11	\$39.62	\$40.57	-	\$39.92
Arkansas	w	-	-	-	w
Colorado	15.73	17.37	19.83	-	19.05
Illinois	22.92	-	23.60	-	23.18
Indiana	w	-	-	-	w
Kentucky Total	25.70	25.38	29.15	\$20.63	26.14
Eastern	26.15	25.23	28.30	20.63	26.19
Western	24.33	27.01	30.63	-	25.97
Maryland	w	-	w	-	w
New Mexico	-	-	w	-	w
Ohio	21.79	-	32.94	-	31.61
Oklahoma	w	-	-	-	w
Pennsylvania Total	29.77	26.87	25.12	35.91	26.59
Anthracite	-	35.17	-	35.91	35.28
Bituminous	29.77	25.03	25.12	-	26.55
Tennessee	w	w	-	-	w
Utah	16.23	-	19.90	-	19.27
Virginia	25.73	25.24	30.68	18.15	27.33
West Virginia Total	27.00	26.22	29.30	30.72	27.93
Northern	21.25	20.59	29.10	-	27.33
Southern	27.84	28.05	29.72	30.72	28.31
Wyoming	-	w	w	-	w
Appalachian Total ⁵	26.89	25.72	29.87	21.19	28.01
Interior Total ⁵	23.77	27.01	25.26	-	24.31
Western Total ⁵	16.02	18.57	19.87	-	19.23
East of Miss. River	26.07	25.77	29.16	21.19	27.29
West of Miss. River	16.10	18.57	19.87	-	19.23
U.S. Total	25.66	25.73	27.27	21.19	26.39

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.

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 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, 1994**
(Thousand Short Tons, Nominal Dollars per Short Ton)

Coal-Producing State and County	Number of Mines	Production	Average Mine Price
Alabama	85	23,266	40.12
Bibb	2	137	w
Blount	2	6	-
Cullman	3	157	w
Fayette	3	1,521	w
Jackson	3	24	w
Jefferson	12	7,232	\$39.25
Marion	3	256	w
Shelby	1	418	w
Tuscaloosa	10	6,848	\$41.24
Walker	41	6,215	41.32
Winston	5	452	29.01
Alaska	1	1,567	w
Yukon River	1	1,567	w
Arizona	2	13,056	w
Navajo	2	13,056	w
Arkansas	6	51	w
Johnson	2	25	w
Scott	1	2	-
Sebastian	3	24	w
Colorado	18	25,304	19.76
Delta	1	751	w
Fremont	1	310	w
Garfield	1	5	-
Gunnison	3	5,710	w
La Plata	1	235	w
Las Animas	1	1,114	w
Mesa	2	358	w
Moffat	3	7,766	w
Montrose	1	380	w
Rio Blanco	1	1,527	w
Routt	3	7,148	w
Illinois	34	52,797	23.14
Christian	1	1,457	w
Clinton	1	3,007	w
Franklin	3	6,602	w
Fulton	1	499	w
Gallatin	2	1,409	w
Jefferson	2	4,138	w
Logan	1	1,673	w
Macoupin	3	4,809	w
McDonough	1	434	w
Perry	8	9,559	\$16.97
Randolph	2	3,434	w
Saline	4	8,070	24.76
Schuyler	1	603	w
St Clair	1	227	w
Wabash	1	2,676	w
Washington	1	2,225	w
White	1	1,977	w
Indiana	55	30,927	22.28
Clay	8	1,844	\$23.71
Daviess	9	4,905	21.03
Dubois	1	610	w
Gibson	2	1,819	w
Greene	8	3,051	22.22
Knox	4	1,953	w
Monroe	1	73	w
Owen	1	329	w
Pike	7	3,790	19.65
Spencer	3	799	w
Sullivan	3	4,798	w
Vigo	1	911	w
Warrick	7	6,045	19.70
Iowa	1	46	w
Marion	1	46	w
Kansas	1	284	w
Crawford	1	284	w
Kentucky	673	161,642	24.88
Bell	26	4,695	\$26.59
Breathitt	8	3,746	20.98

See footnotes at end of table.

**Table 84. Coal Production, Number of Mines, and Average Mine Price,
by State and County, 1994 (Continued)**
(Thousand Short Tons, Nominal Dollars per Short Ton)

Coal-Producing State and County	Number of Mines	Production	Average Mine Price
Kentucky (Continued)			
Butler	2	26	w
Caldwell	1	9	-
Christian	2	1,534	w
Clay	8	552	\$25.70
Daviess	10	1,131	18.49
Floyd	61	7,292	22.74
Greenup	1	10	-
Harlan	73	12,524	28.96
Henderson	5	3,333	23.22
Hopkins	16	7,567	21.95
Jackson	3	89	w
Johnson	10	1,369	26.43
Knott	58	12,755	24.11
Knox	24	1,159	29.46
Laurel	2	70	w
Lawrence	3	243	w
Lee	1	17	w
Leslie	11	8,679	22.62
Letcher	41	7,608	21.40
Magoffin	4	1,054	w
Martin	36	12,481	\$31.56
McLean	2	636	w
Muhlenberg	6	2,822	17.96
Ohio	9	3,150	17.68
Owsley	3	73	w
Perry	35	15,050	24.48
Pike	181	33,147	24.55
Union	4	6,741	27.13
Webster	9	10,247	27.39
Whitley	17	1,342	28.09
Wolfe	1	492	w
Louisiana	2	3,463	w
De Soto	1	2,697	w
Red River	1	766	w
Maryland	20	3,632	26.34
Allegany	10	556	w
Garrett	10	3,076	w
Missouri	6	838	21.78
Barton	1	256	w
Bates	2	176	w
Ralls	2	284	w
Vernon	1	122	w
Montana	8	41,640	10.39
Big Horn	4	24,779	\$11.09
Musselshell	1	3	-
Richland	1	323	w
Rosebud	2	16,535	w
New Mexico	7	28,041	23.29
Colfax	2	2,144	w
McKinley	2	11,993	w
San Juan	3	13,903	w
North Dakota	6	32,286	7.62
Bowman	1	2,317	w
McLean	1	7,146	w
Mercer	2	17,273	w
Oliver	2	5,550	w
Ohio	134	29,897	29.13
Belmont	13	6,380	\$23.03
Carroll	3	103	w
Columbiana	13	966	\$16.91
Coshocton	6	1,188	w
Guernsey	9	374	23.22
Harrison	12	2,562	24.91
Hocking	1	1	-
Holmes	4	436	w
Jackson	4	1,424	w
Jefferson	18	1,522	24.69
Lawrence	1	19	w
Mahoning	2	60	w
Meigs	2	4,310	w

See footnotes at end of table.

**Table 84. Coal Production, Number of Mines, and Average Mine Price,
by State and County, 1994 (Continued)**
(Thousand Short Tons, Nominal Dollars per Short Ton)

Coal-Producing State and County	Number of Mines	Production	Average Mine Price
Ohio (Continued)			
Monroe	1	3,143	w
Morgan	1	875	w
Muskingum	4	498	\$48.83
Noble	3	952	w
Perry	6	491	20.64
Stark	8	390	16.16
Tuscarawas	16	2,174	21.22
Vinton	6	2,016	23.07
Washington	1	13	w
Oklahoma	14	1,911	25.57
Craig	1	149	w
Haskell	2	30	w
Latimer	1	311	w
Le Flore	5	1,118	\$26.28
Nowata	2	151	w
Okmulgee	2	142	w
Wagoner	1	10	-
Pennsylvania	505	62,237	26.18
Allegheny	7	60	w
Armstrong	34	5,352	\$29.58
Beaver	2	124	w
Bedford	1	2	-
Blair	1	70	w
Butler	14	465	24.47
Cambria	19	2,557	29.03
Carbon	1	343	w
Centre	4	89	w
Clarion	9	1,196	w
Clearfield	67	4,791	\$24.93
Clinton	1	21	w
Columbia	7	244	31.68
Dauphin	1	2	-
Elk	9	468	25.61
Fayette	29	598	20.68
Greene	16	26,642	24.74
Indiana	32	4,799	32.12
Jefferson	33	1,544	26.87
Lackawanna	6	274	w
Lawrence	6	179	26.63
Luzerne	18	825	40.41
Lycoming	1	283	w
Mercer	2	21	w
Northumberland	20	278	w
Schuylkill	88	2,652	42.54
Snyder	1	2	-
Somerset	41	6,054	19.41
Sullivan	1	1	-
Washington	14	1,714	23.91
Westmoreland	20	589	21.64
Tennessee	24	2,987	27.17
Campbell	9	1,390	\$27.43
Claiborne	1	207	w
Fentress	1	86	w
Marion	2	123	w
Morgan	3	136	w
Scott	1	201	w
Sequatchie	7	843	27.36
Texas	13	52,346	12.38
Atascosa	1	2,874	w
Freestone	1	5,311	w
Grimes	1	3,639	w
Harrison	2	3,670	w
Leon	1	8,544	w
Milam	1	5,889	w
Panola	1	8,157	w
Robertson	1	1,901	w
Rusk	1	5,285	w
Titus	1	6,739	w
Webb	2	337	w

See footnotes at end of table.

**Table 84. Coal Production, Number of Mines, and Average Mine Price,
by State and County, 1994 (Continued)**
(Thousand Short Tons, Nominal Dollars per Short Ton)

Coal-Producing State and County	Number of Mines	Production	Average Mine Price
Utah	14	24,399	19.27
Carbon	8	11,240	\$20.97
Emery	5	9,590	w
Sevier	1	3,569	w
Virginia	231	37,129	26.84
Buchanan	89	13,594	\$26.61
Dickenson	29	4,303	28.79
Lee	16	2,472	25.56
Russell	14	1,468	w
Scott	2	37	w
Tazewell	21	2,482	21.58
Wise	60	12,774	27.57
Washington	3	4,893	w
King	1	258	w
Lewis	1	2,084	w
Thurston	1	2,550	w
West Virginia	462	161,776	27.42
Barbour	11	2,080	\$21.40
Boone	48	26,300	29.65
Braxton	2	281	w
Brooke	2	1,278	w
Clay	9	3,435	27.60
Fayette	12	5,844	29.60
Gilmer	1	36	w
Grant	4	3,107	w
Greenbrier	13	159	21.95
Harrison	11	4,078	w
Kanawha	15	6,201	24.56
Lincoln	1	977	w
Logan	38	17,633	26.61
Marion	8	4,738	25.56
Marshall	3	7,695	w
Mason	1	67	w
McDowell	80	4,941	20.84
Mercer	2	37	w
Mineral	3	140	w
Mingo	59	25,681	27.02
Monongalia	16	16,062	26.68
Nicholas	25	4,849	28.46
Ohio	1	37	w
Preston	20	2,389	22.04
Raleigh	19	4,965	32.00
Randolph	8	858	23.97
Tucker	2	134	w
Upshur	12	1,901	20.24
Wayne	5	2,242	25.35
Webster	12	4,501	21.58
Wyoming	19	9,130	29.26
Wyoming	29	237,092	6.83
Campbell	17	205,573	\$5.65
Carbon	3	4,100	w
Converse	2	11,418	w
Hot Springs	1	6	-
Lincoln	2	4,612	w
Sheridan	1	94	w
Sweetwater	3	11,290	w
U.S. Total	2,354	1,033,504	19.41

* 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 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, 1994
(Nominal Dollars per Short Ton)

Coal-Producing State and Region	Bituminous	Subbituminous	Lignite	Anthracite	Total
Alabama	\$40.12	-	-	-	\$40.12
Alaska	-	w	-	-	w
Arizona	w	-	-	-	w
Arkansas	w	-	-	w	w
Colorado	19.06	\$21.51	-	-	19.76
Illinois	23.14	-	-	-	23.14
Indiana	22.28	-	-	-	22.28
Iowa	w	-	-	-	w
Kansas	w	-	-	-	w
Kentucky Total	24.88	-	-	-	24.88
Eastern	25.25	-	-	-	25.25
Western	23.63	-	-	-	23.63
Louisiana	-	-	w	-	w
Maryland	26.34	-	-	-	26.34
Missouri	21.78	-	-	-	21.78
Montana	-	w	w	-	10.39
New Mexico	w	w	-	-	23.29
North Dakota	-	-	\$7.62	-	7.62
Ohio	\$29.13	-	-	-	29.13
Oklahoma	25.57	-	-	-	25.57
Pennsylvania Total	25.45	-	-	\$36.07	26.18
Anthracite	-	-	-	36.07	36.07
Bituminous	25.45	-	-	-	25.45
Tennessee	27.17	-	-	-	27.17
Texas	25.74	-	12.30	-	12.38
Utah	19.27	-	-	-	19.27
Virginia	26.84	-	-	-	26.84
Washington	w	w	-	-	w
West Virginia Total	27.42	-	-	-	27.42
Northern	26.77	-	-	-	26.77
Southern	27.71	-	-	-	27.71
Wyoming	w	w	-	-	6.83
Appalachian Total ¹	27.28	-	-	36.07	27.36
Interior Total ¹	23.11	-	12.61	w	19.87
Western Total ¹	20.61	8.37	7.66	-	10.57
East of Miss. River	26.37	-	-	36.07	26.44
West of Miss. River	20.78	8.37	10.77	w	10.91
U.S. Total	25.68	8.37	10.77	² 36.07	19.41

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

² Does not include Arkansas.

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, 1994
(Nominal Dollars per Short Ton)

Mine Production Range (thousand short tons)	Underground	Surface	Total
Over 1,000	\$26.64	\$12.07	\$16.90
500 to 1,000	28.14	25.13	26.41
200 to 500	25.77	24.06	25.06
100 to 200	24.24	26.04	25.00
50 to 100	23.83	24.17	23.99
10 to 50	24.62	24.29	24.44
U.S. Total	26.39	15.02	19.41

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, 1994
(Nominal Dollars per Short Ton)

Coalbed Thickness (inches)	Underground	Surface	Total
< 7	-	w	w
7-12	-	\$31.02	\$31.02
13-18	-	26.45	26.45
19-24	\$28.52	19.83	20.17
25-30	23.64	24.12	24.03
31-36	26.19	24.33	25.21
37-42	25.72	21.98	24.08
43-48	28.49	26.29	27.71
49-54	29.92	23.12	27.15
55-60	29.48	21.91	27.03
61-66	27.25	24.39	26.52
67-72	25.11	23.24	24.28
73-78	28.46	19.51	26.45
79-84	23.09	23.02	23.08
85-90	21.31	22.52	22.22
91-96	27.40	13.99	20.88
97-102	25.34	21.43	24.27
103-108	24.38	8.52	11.44
109-114	w	w	w
115-120	\$27.21	\$23.12	\$26.01
> 120	17.99	9.09	9.67
U.S. Total	26.39	15.02	19.41

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 88. Average Mine Price of Coal by State and Productivity Range, 1994
(Nominal Dollars per Short Ton)

Coal-Producing State and Region	Productivity Range (short tons per miner per hour)					Total
	>= 16	8 to 16	4 to 8	2 to 4	0 to 2	
Alabama	-	w	\$34.67	\$40.23	w	\$40.12
Alaska	-	-	w	-	-	w
Arizona	-	-	w	-	-	w
Arkansas	-	-	-	-	w	w
Colorado	-	\$16.29	19.15	34.01	-	19.76
Illinois	w	-	w	24.91	-	23.14
Indiana	-	w	w	24.81	w	22.28
Iowa	-	-	-	-	w	w
Kansas	-	-	-	-	w	w
Kentucky Total	\$32.57	\$22.41	\$24.07	25.82	\$25.22	24.88
Eastern	32.57	24.64	24.75	25.76	25.49	25.25
Western	-	16.68	21.10	25.99	21.31	23.63
Louisiana	-	w	-	-	-	w
Maryland	-	-	w	w	w	26.34
Missouri	-	w	w	\$22.69	-	21.78
Montana	w	w	-	-	-	10.39
New Mexico	-	w	w	w	-	23.29
North Dakota	w	w	-	-	-	7.62
Ohio	w	w	\$22.90	\$34.24	\$39.14	29.13
Oklahoma	-	-	w	w	w	25.57
Pennsylvania Total	\$21.44	\$24.25	\$23.35	\$25.75	\$35.92	26.18
Anthracite	w	w	30.95	34.46	56.26	36.07
Bituminous	w	w	22.96	25.62	31.82	25.45
Tennessee	-	w	w	w	w	27.17
Texas	-	\$11.75	w	w	-	12.38
Utah	-	18.55	\$20.01	w	w	19.27
Virginia	-	w	26.49	\$27.08	w	26.84
Washington	-	-	w	w	-	w
West Virginia Total	w	w	26.66	28.56	\$26.25	27.42
Northern	-	w	26.39	27.48	20.57	26.77
Southern	w	w	26.75	29.35	26.96	27.71
Wyoming	\$5.63	\$16.31	19.21	w	w	6.83
Appalachian Total ¹	22.51	25.62	25.58	28.47	32.63	27.36
Interior Total ¹	w	12.55	19.99	25.25	22.50	19.87
Western Total ¹	6.44	16.98	20.46	29.54	13.50	10.57
East of Miss. River	22.22	24.58	24.52	27.66	32.47	26.44
West of Miss. River	6.44	14.78	20.03	28.48	17.55	10.91
U.S. Total	6.60	17.15	23.41	27.69	31.79	19.41

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 89. Average Mine Price of Underground Coal by State and Productivity Range, 1994
(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	-	-	-	\$38.52	\$43.16	\$39.92
Arkansas	-	-	-	-	w	w
Colorado	-	w	\$14.33	w	-	19.05
Illinois	-	-	19.07	\$24.87	-	23.18
Indiana	-	-	-	w	-	w
Kentucky Total	-	\$28.27	24.76	26.82	25.56	26.14
Eastern	-	w	25.32	26.66	w	26.19
Western	-	w	21.53	27.18	w	25.97
Maryland	-	-	w	-	w	w
New Mexico	-	-	-	w	-	w
Ohio	-	-	w	33.58	w	31.61
Oklahoma	-	-	-	-	w	w
Pennsylvania Total	-	w	w	26.30	\$34.81	26.59
Anthracite	-	-	-	-	35.28	35.28
Bituminous	-	w	w	26.30	34.79	26.55
Tennessee	-	-	-	w	w	w
Utah	-	\$18.55	\$20.01	w	w	19.27
Virginia	-	-	27.63	\$27.45	\$26.39	27.33
West Virginia Total	-	28.18	26.92	28.73	26.45	27.93
Northern	-	w	26.97	27.75	w	27.33
Southern	-	w	26.88	29.51	w	28.31
Wyoming	-	-	w	-	w	w
Appalachian Total ¹	-	26.63	26.01	28.57	32.77	28.01
Interior Total ¹	-	w	19.72	w	w	24.31
Western Total ¹	-	w	18.61	w	w	19.23
East of Miss. River	-	w	24.98	27.90	32.77	27.29
West of Miss. River	-	w	18.61	31.40	w	19.23
U.S. Total	-	21.66	24.04	27.97	32.28	26.39

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 90. Average Mine Price of Surface Coal by State and Productivity Range, 1994
(Nominal Dollars per Short Ton)

Coal-Producing State and Region	Productivity Range (short tons per miner per hour)					Total
	>=16	8 to 16	4 to 8	2 to 4	0 to 2	
Alabama	-	w	\$34.67	\$43.12	\$37.92	\$40.45
Alaska	-	-	w	-	-	w
Arizona	-	-	w	-	-	w
Arkansas	-	-	-	-	w	w
Colorado	-	w	w	-	-	21.05
Illinois	w	-	\$21.27	w	-	22.92
Indiana	-	w	w	w	w	w
Iowa	-	-	-	-	w	w
Kansas	-	-	-	-	w	w
Kentucky Total	w	\$20.71	23.49	\$23.03	w	\$23.07
Eastern	w	22.84	24.23	23.57	w	23.92
Western	-	16.35	20.84	20.82	w	20.07
Louisiana	-	w	-	-	-	w
Maryland	-	-	w	w	w	w
Missouri	-	w	w	22.69	-	\$21.78
Montana	w	w	-	-	-	10.39
New Mexico	-	w	w	w	-	w
North Dakota	w	w	-	-	-	7.62
Ohio	w	w	\$23.11	\$35.14	\$19.23	27.04
Oklahoma	-	-	w	w	w	w
Pennsylvania Total	w	w	\$21.83	\$24.52	\$37.45	25.43
Anthracite	w	w	30.95	34.46	59.50	36.10
Bituminous	w	w	20.74	24.02	25.84	22.95
Tennessee	-	w	w	w	w	w
Texas	-	\$11.75	w	w	-	12.38
Virginia	-	w	\$26.00	\$23.75	w	25.33
Washington	-	-	w	w	-	w
West Virginia Total	w	w	26.37	27.20	\$19.01	26.29
Northern	-	w	22.96	23.57	19.01	22.34
Southern	w	w	26.66	28.38	-	26.79
Wyoming	w	w	w	w	w	w
Appalachian Total ¹	22.51	23.93	25.18	28.13	32.10	26.20
Interior Total ¹	19.32	w	20.10	w	w	17.09
Western Total ¹	6.44	w	21.13	w	w	9.51
East of Miss. River	22.22	w	24.13	26.88	w	25.02
West of Miss. River	6.44	w	20.48	25.18	w	10.04
U.S. Total	6.60	15.31	22.99	26.78	30.24	15.02

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 91. Average Mine Price by State and Disposition, 1994
(Nominal Dollars per Short Ton)

Coal-Producing State and Region	Open Market ¹	Captive ²	Total
Alabama	w	w	40.12
Alaska	w	w	w
Arizona	w	-	w
Arkansas	w	-	w
Colorado	19.76	-	19.76
Illinois	w	w	23.14
Indiana	22.28	22.44	22.28
Iowa	w	-	w
Kansas	w	-	w
Kentucky Total	24.90	23.55	24.88
Eastern	25.29	23.55	25.25
Western	23.63	-	23.63
Louisiana	w	-	w
Maryland	26.34	-	26.34
Missouri	21.78	-	21.78
Montana	w	w	10.39
New Mexico	23.29	-	23.29
North Dakota	w	w	7.62
Ohio	23.68	52.54	29.13
Oklahoma	25.57	-	25.57
Pennsylvania Total	26.38	19.86	26.18
Anthracite	46.82	11.43	36.07
Bituminous	25.30	41.21	25.45
Tennessee	27.17	-	27.17
Texas	14.06	11.76	12.38
Utah	20.65	16.18	19.27
Virginia	26.26	30.22	26.84
Washington	w	w	w
West Virginia Total	27.29	32.35	27.42
Northern	26.43	34.77	26.77
Southern	27.66	30.20	27.71
Wyoming	6.37	12.77	6.83
Appalachian Total ³	26.98	35.11	27.36
Interior Total ³	22.05	11.88	19.87
Western Total ³	10.23	14.16	10.57
East of Miss. River	26.12	34.86	26.44
West of Miss. River	10.54	12.92	10.91
U.S. Total	19.57	17.80	19.41

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.

^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."

Consumer Prices

Figure 15. U.S. Coal Prices by Sector, 1985-1994

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, 1985, 1990-1994
(Nominal Dollars per Short Ton)

Census Division and State	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
New England Total	\$42.81	\$43.34	\$45.14	\$47.13	\$47.38	\$53.98	-1.2	-2.5	-2.5
Connecticut	46.45	44.80	51.30	57.35	56.35	61.81	3.7	-4.7	-3.1
Massachusetts	43.00	43.39	44.11	45.33	45.30	52.37	-9	-1.3	-2.2
New Hampshire	39.66	42.39	44.69	46.20	47.39	54.05	-6.4	-4.3	-3.4
Middle Atlantic Total	36.33	36.66	37.56	38.99	38.56	39.83	-9	-1.5	-1.0
New Jersey	48.49	47.50	46.62	47.76	48.37	50.87	2.1	*	-5
New York	37.63	38.63	38.62	41.19	41.45	43.35	-2.6	-2.4	-1.5
Pennsylvania	35.39	35.73	36.81	38.05	37.25	38.26	-9	-1.3	-9
East North Central Total	30.56	30.98	32.05	32.63	33.17	39.89	-1.3	-2.0	-2.9
Illinois	32.69	35.30	37.06	36.76	37.79	45.60	-7.4	-3.5	-3.6
Indiana	26.79	26.73	27.89	28.41	28.78	35.00	.2	-1.8	-2.9
Michigan	32.90	33.17	34.23	35.20	35.60	43.96	-8	-1.9	-3.2
Ohio	34.70	34.05	34.40	35.33	36.01	40.02	1.9	-9	-1.6
Wisconsin	23.13	22.96	25.92	26.19	26.18	33.35	.7	-3.0	-4.0
West North Central Total	16.76	16.88	18.92	19.44	19.66	23.44	-7	-3.9	-3.6
Iowa	17.39	17.53	19.58	19.62	19.89	26.85	-8	-3.3	-4.7
Kansas	17.85	17.69	20.99	22.06	22.23	24.58	.9	-5.3	-3.5
Minnesota	20.09	20.07	20.96	22.18	22.00	24.92	.1	-2.3	-2.4
Missouri	21.39	24.40	27.57	27.65	28.03	31.98	-12.3	-6.5	-4.4
Nebraska	13.11	12.92	12.77	12.73	12.88	19.27	1.5	.4	-4.2
North Dakota	9.28	9.38	9.45	9.37	9.10	11.59	-1.0	.5	-2.4
South Dakota	13.10	13.30	13.68	13.65	13.97	14.45	-1.5	-1.6	-1.1
South Atlantic Total	39.53	40.80	41.28	42.18	41.86	45.98	-3.1	-1.4	-1.7
Delaware	41.98	44.02	45.31	46.51	47.31	49.52	-4.6	-2.9	-1.8
Florida	43.71	43.58	45.03	45.87	45.72	51.86	.3	-1.1	-1.9
Georgia	39.82	43.29	43.36	42.95	42.48	45.53	-8.0	-1.6	-1.5
Maryland	39.84	40.78	40.68	41.83	41.96	44.21	-2.3	-1.3	-1.1
North Carolina	41.77	42.36	43.00	44.49	44.64	49.34	-1.4	-1.6	-1.8
South Carolina	39.84	40.17	39.13	41.37	43.54	47.98	-8	-2.2	-2.0
Virginia	37.05	37.57	37.81	38.87	39.29	46.18	-1.4	-1.4	-2.4
West Virginia	34.70	35.42	36.88	37.93	36.66	39.81	-2.0	-1.4	-1.5
East South Central Total	32.43	33.30	33.05	33.93	33.98	40.04	-2.6	-1.2	-2.3
Alabama	40.42	42.56	41.67	43.82	44.58	48.71	-5.0	-2.4	-2.0
Kentucky	27.16	27.29	27.01	27.19	27.58	32.14	-5	-4	-1.8
Mississippi	35.54	40.51	39.94	41.92	41.49	61.52	-12.3	-3.8	-5.9
Tennessee	30.61	30.94	31.01	30.48	32.12	36.34	-1.0	-1.2	-1.9
West South Central Total	20.79	22.14	22.55	22.98	22.91	25.72	-6.1	-2.4	-2.3
Arkansas	27.91	29.50	28.84	27.90	28.17	27.15	-5.4	-2	.3
Louisiana	25.04	25.65	24.93	27.09	27.78	37.00	-2.3	-2.5	-4.2
Oklahoma	17.50	21.32	21.47	23.17	24.98	28.82	-17.9	-8.5	-5.4
Texas	19.84	20.91	21.58	21.66	21.19	23.59	-5.1	-1.6	-1.9
Mountain Total	21.83	22.11	21.64	22.22	22.19	22.44	-1.3	-4	-3
Arizona	28.26	27.78	28.31	29.16	29.98	27.41	1.7	-1.5	.3
Colorado	21.01	21.59	21.67	21.49	20.81	22.49	-2.7	.2	-8
Montana	11.79	11.78	12.14	11.44	11.47	12.23	*	.7	-4
Nevada	32.37	32.34	32.32	31.28	33.16	36.84	.1	-6	-1.4
New Mexico	25.48	24.61	23.83	25.02	24.03	20.06	3.5	1.5	2.7
Utah	26.10	27.34	27.54	27.40	26.80	32.34	-4.5	-6	-2.3
Wyoming	14.09	14.03	13.42	14.55	14.74	16.10	.4	-1.1	-1.5
Pacific Total	21.93	21.55	22.17	23.16	24.42	26.85	1.8	-2.6	-2.2
Oregon	19.18	19.75	21.23	18.28	18.02	33.12	-2.9	1.6	-5.9
Washington	22.93	22.09	22.48	24.86	25.64	26.78	3.8	-2.8	-1.7
U.S. Total	28.03	28.58	29.36	30.02	30.45	34.53	-1.9	-2.0	-2.3

* 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, 1985, 1990-1994
(Real Dollars per Short Ton)**

Census Division and State	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
New England Total	\$33.95	\$35.09	\$37.34	\$40.08	\$41.82	\$57.18	-3.3	-5.1	-5.6
Connecticut	36.84	36.27	42.43	48.76	49.73	65.48	1.5	-7.2	-6.2
Massachusetts	34.10	35.13	36.48	38.55	39.98	55.48	-2.9	-3.9	-5.3
New Hampshire	31.45	34.33	36.96	39.29	41.83	57.25	-8.4	-6.9	-6.4
Middle Atlantic Total	28.81	29.69	31.07	33.15	34.03	42.20	-2.9	-4.1	-4.1
New Jersey	38.45	38.46	38.56	40.61	42.70	53.89	*	-2.6	-3.7
New York	29.85	31.28	31.94	35.03	36.58	45.92	-4.6	-5.0	-4.7
Pennsylvania	28.06	28.93	30.45	32.36	32.88	40.53	-3.0	-3.9	-4.0
East North Central Total	24.24	25.09	26.51	27.75	29.28	42.26	-3.4	-4.6	-6.0
Illinois	25.93	28.59	30.65	31.26	33.35	48.31	-9.3	-6.1	-6.7
Indiana	21.25	21.65	23.07	24.15	25.40	37.07	-1.8	-4.4	-6.0
Michigan	26.09	26.86	28.31	29.93	31.42	46.57	-2.9	-4.5	-6.2
Ohio	27.52	27.57	28.45	30.04	31.79	42.39	-2	-3.5	-4.7
Wisconsin	18.34	18.59	21.44	22.27	23.11	35.33	-1.3	-5.6	-7.0
West North Central Total	13.29	13.67	15.65	16.53	17.36	24.83	-2.8	-6.4	-6.7
Iowa	13.79	14.19	16.19	16.69	17.55	28.44	-2.8	-5.8	-7.7
Kansas	14.16	14.32	17.36	18.75	19.62	26.04	-1.1	-7.8	-6.5
Minnesota	15.93	16.25	17.33	18.86	19.42	26.39	-1.9	-4.8	-5.4
Missouri	16.96	19.76	22.80	23.51	24.74	33.88	-14.1	-9.0	-7.4
Nebraska	10.40	10.46	10.56	10.83	11.37	20.41	-6	-2.2	-7.2
North Dakota	7.36	7.59	7.82	7.96	8.03	12.27	-3.1	-2.2	-5.5
South Dakota	10.39	10.77	11.31	11.61	12.33	15.31	-3.5	-4.2	-4.2
South Atlantic Total	31.35	33.04	34.14	35.86	36.95	48.70	-5.1	-4.0	-4.8
Delaware	33.29	35.65	37.48	39.55	41.76	52.46	-6.6	-5.5	-4.9
Florida	34.66	35.29	37.24	39.00	40.35	54.94	-1.8	-3.7	-5.0
Georgia	31.58	35.05	35.87	36.52	37.49	48.23	-9.9	-4.2	-4.6
Maryland	31.60	33.02	33.65	35.57	37.03	46.83	-4.3	-3.9	-4.3
North Carolina	33.12	34.30	35.56	37.83	39.40	52.26	-3.4	-4.2	-4.9
South Carolina	31.59	32.53	32.37	35.18	38.43	50.83	-2.9	-4.8	-5.1
Virginia	29.38	30.42	31.27	33.05	34.68	48.92	-3.4	-4.0	-5.5
West Virginia	27.52	28.68	30.50	32.26	32.35	42.17	-4.0	-4.0	-4.6
East South Central Total	25.72	26.97	27.34	28.85	29.99	42.41	-4.6	-3.8	-5.4
Alabama	32.05	34.46	34.46	37.27	39.35	51.60	-7.0	-5.0	-5.1
Kentucky	21.54	22.10	22.34	23.12	24.35	34.04	-2.5	-3.0	-4.9
Mississippi	28.18	32.80	33.03	35.65	36.62	65.17	-14.1	-6.3	-8.9
Tennessee	24.28	25.05	25.65	25.91	28.35	38.50	-3.1	-3.8	-5.0
West South Central Total	16.48	17.93	18.65	19.54	20.22	27.24	-8.0	-5.0	-5.4
Arkansas	22.13	23.89	23.86	23.72	24.86	28.76	-7.3	-2.9	-2.9
Louisiana	19.86	20.77	20.62	23.04	24.52	39.20	-4.4	-5.1	-7.3
Oklahoma	13.87	17.26	17.75	19.71	22.04	30.53	-19.6	-10.9	-8.4
Texas	15.73	16.93	17.85	18.42	18.71	24.99	-7.1	-4.2	-5.0
Mountain Total	17.31	17.90	17.90	18.89	19.59	23.78	-3.3	-3.0	-3.5
Arizona	22.41	22.50	23.41	24.79	26.46	29.04	-4	-4.1	-2.8
Colorado	16.66	17.48	17.92	18.27	18.36	23.82	-4.7	-2.4	-3.9
Montana	9.35	9.54	10.04	9.73	10.12	12.96	-2.0	-2.0	-3.6
Nevada	25.67	26.18	26.73	26.60	29.27	39.02	-2.0	-3.2	-4.5
New Mexico	20.20	19.92	19.71	21.28	21.21	21.25	1.4	-1.2	-6
Utah	20.70	22.13	22.78	23.30	23.65	34.26	-6.5	-3.3	-5.4
Wyoming	11.17	11.36	11.10	12.37	13.01	17.05	-1.7	-3.7	-4.6
Pacific Total	17.39	17.45	18.34	19.69	21.55	28.44	-3	-5.2	-5.3
Oregon	15.21	15.99	17.56	15.54	15.91	35.08	-4.9	-1.1	-8.9
Washington	18.18	17.89	18.60	21.14	22.63	28.36	1.6	-5.3	-4.8
U.S. Total	22.22	23.14	24.28	25.53	26.88	36.58	-4.0	-4.6	-5.4

* Data round to zero.

Notes: Real prices are in 1987 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, 1985, 1990-1994
(Nominal Dollars per Short Ton)

Census Division and State	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
New England Total	\$55.73	\$57.83	\$65.71	\$66.74	\$65.11	\$59.35	-3.6	-3.8	-0.7
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	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	42.20	42.15	43.95	43.79	44.07	47.77	.1	-1.1	-1.4
Pennsylvania	33.66	34.04	35.70	35.89	36.61	39.81	-1.1	-2.1	-1.8
East North Central Total	34.72	34.54	35.05	35.98	36.16	40.54	.5	-1.0	-1.7
Illinois	29.13	29.42	29.24	30.81	31.28	39.11	-1.0	-1.8	-3.2
Indiana	31.35	30.91	31.58	33.01	32.83	36.03	1.4	-1.1	-1.5
Michigan	41.20	41.46	42.17	43.69	43.39	49.38	-6	-1.3	-2.0
Ohio	35.75	34.82	35.24	34.85	35.04	35.97	2.7	.5	-1
Wisconsin	41.23	40.85	42.27	43.31	43.41	49.20	.9	-1.3	-1.9
West North Central Total	18.61	18.00	17.76	18.34	18.41	21.02	3.4	.3	-1.3
Iowa	28.52	28.01	27.17	29.15	30.26	37.46	1.8	-1.5	-3.0
Kansas	32.25	33.06	31.96	30.81	28.69	36.29	-2.4	3.0	-1.3
Minnesota	35.66	35.81	35.63	36.26	36.63	42.77	-4	-7	-2.0
Missouri	32.87	32.12	31.48	31.28	30.18	34.95	2.3	2.1	-7
Nebraska	w	w	w	w	w	46.59	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	46.60	48.28	48.27	47.42	47.22	50.53	-3.5	-3	-9
Georgia	45.71	45.20	45.18	44.95	44.90	45.17	1.1	.4	.1
Maryland	32.18	32.18	32.83	33.71	28.71	32.81	*	2.9	-2
North Carolina	43.62	43.44	43.46	43.05	44.86	47.22	.4	-7	-9
South Carolina	43.84	43.35	43.31	43.19	43.79	44.09	1.1	*	-1
Virginia	41.56	41.27	40.97	40.53	41.05	42.01	.7	.3	-1
West Virginia	32.73	32.91	31.93	32.08	31.88	35.32	-5	.6	-8
East South Central Total	w	w	w	w	w	w	w	w	w
Alabama	38.74	39.01	39.76	40.43	40.58	45.31	-7	-1.1	-1.7
Kentucky	43.22	42.30	43.78	46.54	45.81	45.94	2.2	-1.4	-7
Mississippi	w	w	w	w	w	w	w	w	w
Tennessee	35.34	35.41	35.52	35.66	35.16	39.34	-2	.1	-1.2
West South Central Total	22.95	21.38	22.80	23.31	21.28	w	7.3	1.9	w
Arkansas	44.28	44.06	44.61	45.09	45.39	45.26	.5	-6	-2
Louisiana	w	w	w	w	w	w	w	w	w
Oklahoma	w	w	w	w	w	38.43	w	w	w
Texas	19.54	17.58	18.14	18.61	16.79	24.92	11.1	3.9	-2.7
Mountain Total	28.78	28.51	28.66	29.60	28.75	32.19	.9	*	-1.2
Arizona	41.35	40.51	40.95	40.09	39.54	w	2.1	1.1	w
Colorado	28.96	28.63	30.34	29.27	26.93	28.24	1.1	1.8	.3
Idaho	33.35	32.78	33.29	33.91	31.78	32.85	1.7	1.2	.2
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	26.57	26.51	25.35	26.43	28.49	28.55	.2	-1.7	-8
Wyoming	22.87	23.43	23.67	25.19	24.91	w	-2.4	-2.1	w
Pacific Total	44.92	43.83	43.37	45.75	45.96	51.38	2.5	-6	-1.5
California	43.39	42.86	42.05	44.79	45.11	52.39	1.2	-1.0	-2.1
Hawaii	w	w	w	w	w	56.77	w	w	w
Oregon	w	w	w	w	w	w	w	w	w
Washington	58.86	53.11	56.25	59.16	55.63	49.73	10.8	1.4	1.9
U.S. Total	32.55	32.23	32.78	33.54	33.59	37.21	1.0	-8	-1.5

* 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, 1985, 1990-1994
(Real Dollars per Short Ton)**

Census Division and State	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
New England Total	\$44.20	\$46.83	\$54.35	\$56.75	\$57.46	\$62.87	-5.6	-6.3	-3.8
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	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	33.47	34.13	36.35	37.24	38.89	50.60	-1.9	-3.7	-4.5
Pennsylvania	26.69	27.57	29.53	30.52	32.31	42.18	-3.2	-4.7	-4.9
East North Central Total	27.53	27.97	28.99	30.60	31.92	42.94	-1.5	-3.6	-4.8
Illinois	23.10	23.82	24.19	26.20	27.61	41.43	-3.0	-4.4	-6.3
Indiana	24.86	25.03	26.12	28.07	28.98	38.17	-6	-3.8	-4.6
Michigan	32.67	33.57	34.88	37.15	38.30	52.31	-2.7	-3.9	-5.1
Ohio	28.35	28.19	29.14	29.63	30.92	38.11	.5	-2.1	-3.2
Wisconsin	32.70	33.07	34.97	36.83	38.31	52.12	-1.1	-3.9	-5.0
West North Central Total	14.76	14.58	14.69	15.59	16.25	22.27	1.3	-2.4	-4.5
Iowa	22.62	22.68	22.47	24.79	26.71	39.68	-3	-4.1	-6.0
Kansas	25.57	26.77	26.43	26.20	25.32	38.44	-4.4	.2	-4.4
Minnesota	28.28	29.00	29.47	30.83	32.33	45.31	-2.5	-3.3	-5.1
Missouri	26.07	26.01	26.03	26.60	26.64	37.02	.2	-5	-3.8
Nebraska	w	w	w	w	w	49.35	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	36.96	39.10	39.92	40.32	41.68	53.53	-5.5	-3.0	-4.0
Georgia	36.25	36.60	37.37	38.23	39.63	47.85	-9	-2.2	-3.0
Maryland	25.52	26.06	27.15	28.67	25.34	34.75	-2.1	.2	-3.4
North Carolina	34.59	35.18	35.95	36.60	39.60	50.02	-1.7	-3.3	-4.0
South Carolina	34.76	35.10	35.82	36.73	38.65	46.71	-9	-2.6	-3.2
Virginia	32.96	33.42	33.88	34.46	36.23	44.50	-1.4	-2.3	-3.3
West Virginia	25.95	26.65	26.41	27.28	28.14	37.42	-2.6	-2.0	-4.0
East South Central Total	w	w	w	w	w	w	w	w	w
Alabama	30.72	31.59	32.89	34.38	35.81	47.99	-2.7	-3.8	-4.8
Kentucky	34.27	34.25	36.21	39.57	40.43	48.67	*	-4.0	-3.8
Mississippi	w	w	w	w	w	w	w	w	w
Tennessee	28.03	28.68	29.38	30.33	31.03	41.67	-2.3	-2.5	-4.3
West South Central Total	18.20	17.31	18.86	19.82	18.78	w	5.1	-8	w
Arkansas	35.11	35.68	36.90	38.35	40.06	47.95	-1.6	-3.2	-3.4
Louisiana	w	w	w	w	w	w	w	w	w
Oklahoma	w	w	w	w	w	40.71	w	w	w
Texas	15.50	14.23	15.00	15.82	14.82	26.40	8.9	1.1	-5.7
Mountain Total	22.83	23.09	23.70	25.17	25.37	34.10	-1.1	-2.6	-4.4
Arizona	32.79	32.80	33.87	34.09	34.90	w	*	-1.5	w
Colorado	22.96	23.18	25.09	24.89	23.77	29.91	-9	-8	-2.9
Idaho	26.44	26.54	27.53	28.83	28.05	34.80	-3	-1.4	-3.0
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	21.07	21.47	20.97	22.47	25.14	30.25	-1.8	-4.3	-3.9
Wyoming	18.14	18.97	19.58	21.42	21.99	w	-4.4	-4.7	w
Pacific Total	35.62	35.49	35.87	38.91	40.56	54.43	.4	-3.2	-4.6
California	34.41	34.71	34.78	38.09	39.82	55.50	-8	-3.6	-5.2
Hawaii	w	w	w	w	w	60.14	w	w	w
Oregon	w	w	w	w	w	w	w	w	w
Washington	46.68	43.00	46.52	50.31	49.10	52.68	8.5	-1.3	-1.3
U.S. Total	25.82	26.10	27.11	28.52	29.65	39.42	-1.1	-3.4	-4.6

* Data round to zero.

W Withheld to avoid disclosure of individual company data.

Notes: Price data are for manufacturing plants only. Real prices are in 1987 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, 1985, 1990-1994
(Nominal Dollars per Short Ton)

Census Division and State	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
Middle Atlantic Total	W	W	W	W	W	W	W	W	W
New York	W	W	W	W	W	W	W	W	W
Pennsylvania	\$46.25	\$46.41	\$46.49	\$46.86	\$45.78	\$50.49	-0.3	0.3	-1.0
East North Central Total	47.23	49.52	50.37	50.70	48.81	57.46	-4.6	-8	-2.1
Illinois	W	W	W	W	W	55.83	W	W	W
Indiana	50.90	52.29	53.72	53.31	49.39	59.98	-2.6	.8	-1.8
Michigan	W	-	-	W	W	W	W	W	W
Ohio	42.02	45.07	46.68	46.15	48.29	54.89	-6.8	-3.4	-2.9
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	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	47.45	47.50	47.80	48.35	48.93	54.19	-1	-8	-1.5
Kentucky	W	W	W	W	W	W	W	W	W
Tennessee	-	-	-	W	W	W	-	W	W
West South Central Total	-	-	-	-	-	W	-	W	W
Texas	-	-	-	-	-	W	-	W	W
Mountain Total	W	W	W	W	W	W	W	W	W
Utah	W	W	W	W	W	W	W	W	W
U.S. Total	46.56	47.44	47.92	48.88	47.73	54.33	-1.9	-6	-1.7

* 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, 1985, 1990-1994
(Real Dollars per Short Ton)

Census Division and State	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
Middle Atlantic Total	W	W	W	W	W	W	W	W	W
New York	W	W	W	W	W	W	W	W	W
Pennsylvania	\$36.68	\$37.58	\$38.46	\$39.85	\$40.41	\$53.48	-2.4	-2.4	-4.1
East North Central Total	37.46	40.10	41.66	43.11	43.08	60.87	-6.6	-3.4	-5.3
Illinois	W	W	W	W	W	59.14	W	W	W
Indiana	40.37	42.34	44.43	45.33	43.59	63.54	-4.7	-1.9	-4.9
Michigan	W	-	-	W	W	W	W	W	W
Ohio	33.32	36.49	38.61	39.24	42.63	58.15	-8.7	-6.0	-6.0
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	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	37.63	38.46	39.54	41.11	43.19	57.41	-2.2	-3.4	-4.6
Kentucky	W	W	W	W	W	W	W	W	W
Tennessee	-	-	-	W	W	W	-	W	W
West South Central Total	-	-	-	-	-	W	-	W	W
Texas	-	-	-	-	-	W	-	W	W
Mountain Total	W	W	W	W	W	W	W	W	W
Utah	W	W	W	W	W	W	W	W	W
U.S. Total	36.92	38.42	39.63	41.57	42.13	57.56	-3.9	-3.2	-4.8

* Withheld to avoid disclosure of individual company data.

Notes: Real prices are in 1987 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

Coal is the second largest freight commodity moved on the Nation's inland waterways. Traditionally, the United States has been one of the world's major coal exporters with Japan and Canada being its principal export markets.

Table 98. Average Price of U.S. Coal Imports by Continent and Country of Origin, 1985, 1990-1994
(Nominal Dollars per Short Ton)

Continent and Country of Origin	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
North America Total	\$30.61	\$29.00	\$27.88	\$25.10	\$24.55	\$32.34	5.5	5.7	-0.6
Canada	30.61	29.02	27.88	25.10	24.45	32.34	5.5	5.8	-6
Mexico	-	21.19	-	-	38.36	-	-100.0	-100.0	-
South America Total	29.00	27.64	33.04	34.64	37.59	36.20	4.9	-6.3	-2.4
Colombia	27.46	27.26	32.25	32.87	36.87	36.20	.7	-7.1	-3.0
Venezuela	32.41	28.87	35.61	40.87	41.50	-	12.3	-6.0	-
Europe Total	-	32.08	34.12	-	37.17	26.95	-100.0	-100.0	-100.0
Denmark	-	32.08	-	-	36.35	-	-100.0	-100.0	-
Germany	-	-	-	-	-	26.95	-	-	-100.0
United Kingdom	-	-	34.12	-	37.19	-	-	-100.0	-
Asia Total	34.09	42.70	38.75	-	-	-	-20.2	-	-
India	-	-	23.65	-	-	-	-	-	-
Indonesia	33.80	42.70	40.94	-	-	-	-20.8	-	-
Malaysia	-	-	47.06	-	-	-	-	-	-
Vietnam	48.08	-	-	-	-	-	-	-	-
Oceania & Australia Total	31.16	31.56	36.07	37.97	41.73	31.57	-1.2	-7.0	-1
Australia	30.02	31.56	36.07	37.97	41.73	31.57	-4.9	-7.9	-5
New Zealand	44.15	-	-	-	-	-	-	-	-
Africa Total	25.33	27.81	49.29	-	-	35.06	-8.9	-	-3.5
South Africa, Rep of	25.33	-	49.29	-	-	35.06	-	-	-3.5
Swaziland	-	27.81	-	-	-	-	-100.0	-	-
Total¹	29.98	29.36	32.48	32.34	33.43	34.92	2.1	-2.7	-1.7
U.S. Total²	30.21	29.89	33.46	33.12	34.45	36.04	1.1	-3.2	-1.9

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 \$50 per short ton, inclusively.

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

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, 1985, 1990-1994
(Nominal Dollars per Short Ton)

Continent and Country of Destination	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
North America Total	\$32.86	\$34.16	\$33.06	\$33.61	\$32.71	\$48.51	-3.8	0.1	-4.2
Canada ¹	32.50	33.86	33.00	33.48	32.63	48.69	-4.0	-1	-4.4
Mexico	44.27	44.03	43.48	43.64	37.55	44.70	.5	4.2	-1
Other ²	35.37	35.10	36.39	35.70	34.18	39.56	.8	.8	-1.2
South America Total	42.28	43.77	45.54	46.24	46.26	49.29	-3.4	-2.2	-1.7
Argentina	42.51	43.21	45.44	45.59	45.80	49.09	-1.6	-1.8	-1.6
Brazil	42.26	43.84	45.57	46.44	46.88	49.46	-3.6	-2.6	-1.7
Other ²	40.67	39.46	42.96	38.80	36.79	47.12	3.1	2.5	-1.6
Europe Total	42.32	43.38	42.67	43.08	43.92	44.01	-2.4	-9	-4
Belgium & Luxembourg	42.23	43.14	44.01	44.82	45.02	45.76	-2.1	-1.6	-9
Bulgaria	42.09	41.96	43.29	42.57	49.24	44.32	.3	-3.8	-6
Denmark	29.23	34.95	32.69	32.95	34.37	37.93	-16.4	-4.0	-2.8
Finland	41.14	39.61	40.81	44.77	44.72	40.80	3.8	-2.1	.1
France	44.23	42.24	39.38	40.18	43.00	46.33	4.7	.7	-5
Germany	45.33	38.98	38.27	39.33	41.61	42.33	16.3	2.2	.8
Ireland	33.82	35.84	36.81	39.53	38.54	46.91	-5.6	-3.2	-3.6
Italy	43.00	44.33	45.34	45.38	44.72	42.05	-3.0	-1.0	.2
Netherlands	41.99	44.22	43.34	43.18	42.93	44.73	-5.0	-5	-7
Norway	47.37	-	47.95	32.11	-	40.68	-	-	1.7
Portugal	36.25	37.70	40.74	40.87	40.80	47.22	-3.8	-2.9	-2.9
Romania	35.10	36.28	41.62	45.89	47.53	45.33	-3.3	-7.3	-2.8
Spain	46.35	47.03	46.82	45.23	46.74	46.23	-1.4	-2	*
Sweden	45.56	45.96	46.66	47.72	48.20	45.34	-9	-1.4	*
Turkey	41.28	42.58	45.54	46.84	46.13	47.30	-3.0	-2.7	-1.5
United Kingdom	45.22	45.90	45.54	46.35	47.30	46.82	-1.5	-1.1	-4
Yugoslavia	-	39.60	45.04	46.61	46.11	48.06	-100.0	-100.0	-100.0
Other ²	38.14	40.67	37.05	44.28	46.28	35.78	-6.2	-4.7	.7
Asia Total	38.66	40.58	42.65	43.24	43.32	43.43	-4.7	-2.8	-1.3
China (Taiwan)	38.65	39.49	41.23	41.73	38.64	41.70	-2.1	*	-8
Israel	33.23	34.79	39.11	39.87	39.42	42.17	-4.5	-4.2	-2.6
Japan	38.58	40.88	42.91	43.39	44.26	45.16	-5.6	-3.4	-1.7
Korea, Republic of	40.24	42.12	44.93	45.95	46.38	42.68	-4.5	-3.5	-6
Other ²	37.24	44.23	37.06	38.61	38.91	40.79	-15.8	-1.1	-1.0
Oceania & Australia Total	39.99	34.46	34.50	-	36.60	-	16.0	2.2	-
Other ²	39.99	34.46	34.50	-	36.60	-	16.0	2.2	-
Africa Total	43.59	42.55	42.97	41.26	39.77	46.41	2.5	2.3	-7
Algeria	43.24	44.32	46.35	46.50	47.67	48.18	-2.4	-2.4	-1.2
Egypt	43.14	44.86	46.08	45.69	45.97	44.88	-3.8	-1.6	-4
Morocco	35.03	33.86	33.80	33.73	31.34	45.36	3.5	2.8	-2.8
South Africa, Rep of	45.67	46.87	47.79	48.92	-	47.10	-2.6	-	-3
Other ²	-	40.53	-	40.81	-	40.02	-100.0	-	-100.0
Total³	40.24	41.53	41.44	42.35	42.25	45.04	-3.1	-1.2	-1.2
U.S. Total⁴	39.93	41.41	41.34	42.39	42.63	48.18	-3.6	-1.6	-2.1

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 1993.

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 \$28 to \$50 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,
1985, 1990-1994**
(Real Dollars per Short Ton)

Continent and Country of Destination	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
North America Total	\$26.06	\$27.66	\$27.35	\$28.58	\$28.87	\$51.39	-5.8	-2.5	-7.3
Canada ¹	25.78	27.42	27.29	28.47	28.80	51.58	-6.0	-2.7	-7.4
Mexico	35.11	35.65	35.96	37.11	33.14	47.35	-1.5	1.4	-3.3
Other ²	28.05	28.42	30.10	30.36	30.17	41.91	-1.3	-1.8	-4.4
South America Total	33.53	35.44	37.67	39.32	40.83	52.21	-5.4	-4.8	-4.8
Argentina	33.71	34.99	37.59	38.77	40.43	52.00	-3.7	-4.4	-4.7
Brazil	33.52	35.49	37.69	39.49	41.38	52.40	-5.6	-5.1	-4.8
Other ²	32.25	31.95	35.53	33.00	32.47	49.92	.9	-2	-4.7
Europe Total	33.56	35.13	35.29	36.63	38.77	46.62	-4.4	-3.5	-3.6
Belgium & Luxembourg	33.49	34.93	36.40	38.11	39.74	48.48	-4.1	-4.2	-4.0
Bulgaria	33.38	33.98	35.81	36.20	43.46	46.95	-1.8	-6.4	-3.7
Denmark	23.18	28.30	27.04	28.02	30.34	40.18	-18.1	-6.5	-5.9
Finland	32.62	32.07	33.76	38.07	39.47	43.22	1.7	-4.6	-3.1
France	35.08	34.20	32.57	34.16	37.96	49.08	2.5	-1.9	-3.7
Germany	35.95	31.56	31.66	33.45	36.73	44.84	13.9	-5	-2.4
Ireland	26.82	29.02	30.44	33.61	34.02	49.69	-7.6	-5.8	-6.6
Italy	34.10	35.89	37.50	38.59	39.47	44.54	-5.0	-3.6	-2.9
Netherlands	33.30	35.81	35.85	36.72	37.89	47.38	-7.0	-3.2	-3.8
Norway	37.57	-	39.66	27.31	-	43.09	-	-	-1.5
Portugal	28.75	30.53	33.70	34.75	36.01	50.02	-5.8	-5.5	-6.0
Romania	27.83	29.37	34.43	39.02	41.95	48.02	-5.3	-9.8	-5.9
Spain	36.75	38.08	38.72	38.46	41.25	48.97	-3.5	-2.8	-3.1
Sweden	36.13	37.22	38.60	40.58	42.55	48.03	-2.9	-4.0	-3.1
Turkey	32.74	34.48	37.67	39.83	40.71	50.11	-5.0	-5.3	-4.6
United Kingdom	35.86	37.17	37.66	39.42	41.75	49.60	-3.5	-3.7	-3.5
Yugoslavia	-	32.06	37.26	39.64	40.70	50.91	-100.0	-100.0	-100.0
Other ²	30.25	32.93	30.64	37.66	40.85	37.90	-8.1	-7.2	-2.5
Asia Total	30.66	32.86	35.28	36.77	38.23	46.01	-6.7	-5.4	-4.4
China (Taiwan)	30.65	31.98	34.10	35.48	34.10	44.18	-4.1	-2.6	-4.0
Israel	26.35	28.17	32.35	33.90	34.79	44.67	-6.4	-6.7	-5.7
Japan	30.59	33.10	35.49	36.90	39.06	47.84	-7.6	-5.9	-4.8
Korea, Republic of	31.91	34.11	37.16	39.08	40.94	45.21	-6.4	-6.0	-3.8
Other ²	29.53	35.81	30.66	32.84	34.34	43.21	-17.5	-3.7	-4.1
Oceania & Australia Total	31.71	27.90	28.54	-	32.31	-	13.6	-5	-
Other ²	31.71	27.90	28.54	-	32.31	-	13.6	-5	-
Africa Total	34.57	34.45	35.54	35.09	35.10	49.16	.3	-4	-3.8
Algeria	34.29	35.89	38.34	39.54	42.07	51.03	-4.4	-5.0	-4.3
Egypt	34.21	36.32	38.12	38.85	40.57	47.54	-5.8	-4.2	-3.6
Morocco	27.78	27.42	27.96	28.68	27.66	48.05	1.3	.1	-5.9
South Africa, Rep of	36.21	37.96	39.53	41.60	-	49.89	-4.6	-	-3.5
Other ²	-	32.82	-	34.70	-	42.39	-100.0	-	-100.0
Total³	31.91	33.62	34.27	36.02	37.29	47.71	-5.1	-3.8	-4.4
U.S. Total⁴	31.67	33.53	34.19	36.05	37.62	51.04	-5.6	-4.2	-5.2

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 1993.

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 \$28 to \$50 (nominal) per short ton, inclusively.

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

Notes: Real prices are in 1987 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,
1985, 1990-1994**
(Nominal Dollars per Short Ton)

Continent and Country of Destination	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
North America Total	\$35.08	\$36.03	\$36.43	\$38.54	\$37.93	\$47.43	-2.6	-1.9	-3.3
Canada ¹	34.58	35.66	36.34	38.43	37.93	48.53	-3.0	-2.3	-3.7
Mexico	44.53	45.16	47.92	49.20	43.67	45.67	-1.4	.5	-3
Other ²	-	-	-	-	49.93	46.38	-	-100.0	-100.0
South America Total	42.29	43.91	45.65	46.44	46.84	49.39	-3.7	-2.5	-1.7
Argentina	42.56	43.63	45.45	45.62	45.80	49.11	-2.4	-1.8	-1.6
Brazil	42.26	43.94	45.65	46.48	46.95	49.49	-3.8	-2.6	-1.7
Other ²	-	-	47.40	49.78	48.84	48.19	-	-100.0	-100.0
Europe Total	44.54	45.57	46.57	46.91	47.29	48.06	-2.3	-1.5	-.8
Belgium & Luxembourg	45.07	45.88	47.02	47.52	47.96	47.53	-1.7	-1.5	-.6
Bulgaria	42.13	41.99	43.29	42.57	49.44	-	.3	-3.9	-
Denmark	-	36.29	-	29.37	-	-	-100.0	-	-
Finland	42.34	39.61	40.81	46.21	44.72	-	6.9	-1.3	-
France	44.36	45.17	44.39	43.96	45.29	48.15	-1.8	-.5	-.9
Germany	45.88	46.17	45.79	48.55	45.69	-	-.6	.1	-
Ireland	-	-	-	-	-	48.99	-	-	-100.0
Italy	45.32	45.93	47.44	48.28	47.70	48.81	-1.3	-1.3	-.8
Netherlands	45.07	46.17	47.00	47.11	47.12	48.73	-2.4	-1.1	-.9
Norway	47.37	-	47.95	-	-	44.00	-	-	.8
Portugal	-	38.43	44.33	48.11	45.79	49.56	-100.0	-100.0	-100.0
Romania	32.65	36.26	41.62	46.47	47.53	45.33	-10.0	-9.0	-3.6
Spain	46.36	47.47	48.48	48.45	48.24	49.53	-2.3	-1.0	-.7
Sweden	45.56	45.96	46.67	47.76	48.61	45.75	-.9	-1.6	*
Turkey	41.28	42.58	45.54	46.87	46.16	48.94	-3.0	-2.8	-1.9
United Kingdom	45.15	46.64	47.72	48.46	48.49	48.86	-3.2	-1.8	-.9
Yugoslavia	-	48.31	45.04	46.61	46.11	48.06	-100.0	-100.0	-100.0
Other ²	38.00	-	37.00	44.32	48.05	46.45	-	-5.7	-2.2
Asia Total	41.45	44.04	45.39	46.00	46.18	48.52	-5.9	-2.7	-1.7
China (Taiwan)	42.48	44.86	45.63	46.80	47.48	49.30	-5.3	-2.7	-1.6
Israel	-	-	40.13	42.18	43.64	-	-	-100.0	-
Japan	40.57	43.53	44.98	45.52	45.60	48.89	-6.8	-2.9	-2.0
Korea, Republic of	44.00	45.67	47.13	47.54	48.07	47.56	-3.7	-2.2	-.9
Other ²	-	45.13	-	-	-	49.98	-100.0	-	-100.0
Africa Total	43.95	45.25	46.29	45.03	46.67	46.61	-2.9	-1.5	-.6
Algeria	43.24	44.32	46.35	46.50	47.67	48.18	-2.4	-2.4	-1.2
Egypt	43.14	44.86	46.09	45.70	45.98	44.88	-3.8	-1.6	-.4
Morocco	-	-	34.22	34.54	-	-	-	-	-
South Africa, Rep of	45.67	46.87	47.79	48.92	-	47.10	-2.6	-	-.3
Other ²	-	40.53	-	-	-	-	-100.0	-	-
Total³	42.74	44.11	45.36	46.07	46.29	48.19	-3.1	-2.0	-1.3
U.S. Total⁴	42.77	44.11	45.41	46.15	46.51	50.46	-3.0	-2.1	-1.8

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 1993.

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 \$28 to \$50 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, 1985, 1990-1994
(Real Dollars per Short Ton)

Continent and Country of Destination	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
North America Total	\$27.82	\$29.18	\$30.13	\$32.77	\$33.48	\$50.24	-4.6	-4.5	-6.3
Canada ¹	27.42	28.88	30.06	32.68	33.48	51.41	-5.0	-4.9	-6.7
Mexico	35.32	36.57	39.63	41.83	38.54	48.38	-3.4	-2.2	-3.4
Other ²	-	-	-	-	44.07	49.13	-	-100.0	-100.0
South America Total	33.53	35.56	37.76	39.49	41.34	52.32	-5.7	-5.1	-4.8
Argentina	33.75	35.33	37.60	38.79	40.43	52.03	-4.5	-4.4	-4.7
Brazil	33.52	35.58	37.76	39.52	41.44	52.42	-5.8	-5.2	-4.8
Other ²	-	-	39.21	42.33	43.11	51.05	-	-100.0	-100.0
Europe Total	35.32	36.90	38.52	39.89	41.74	50.91	-4.3	-4.1	-4.0
Belgium & Luxembourg	35.74	37.15	38.89	40.41	42.33	50.35	-3.8	-4.1	-3.7
Bulgaria	33.41	34.00	35.81	36.20	43.64	-	-1.8	-6.5	-
Denmark	-	29.38	-	24.97	-	-	-100.0	-	-
Finland	33.58	32.07	33.76	39.30	39.47	-	4.7	-4.0	-
France	35.18	36.57	36.72	37.38	39.98	51.01	-3.8	-3.1	-4.0
Germany	36.39	37.39	37.87	41.28	40.32	-	-2.7	-2.5	-
Ireland	-	-	-	-	-	51.89	-	-	-100.0
Italy	35.94	37.19	39.24	41.05	42.10	51.70	-3.3	-3.9	-3.9
Netherlands	35.74	37.38	38.88	40.06	41.59	51.62	-4.4	-3.7	-4.0
Norway	37.57	-	39.66	-	-	46.61	-	-	-2.4
Portugal	-	31.12	36.67	40.91	40.41	52.50	-100.0	-100.0	-100.0
Romania	25.89	29.36	34.43	39.52	41.95	48.02	-11.8	-11.4	-6.6
Spain	36.76	38.44	40.10	41.20	42.58	52.46	-4.4	-3.6	-3.9
Sweden	36.13	37.22	38.60	40.61	42.90	48.47	-2.9	-4.2	-3.2
Turkey	32.74	34.48	37.67	39.85	40.74	51.84	-5.0	-5.3	-5.0
United Kingdom	35.81	37.77	39.47	41.21	42.80	51.76	-5.2	-4.4	-4.0
Yugoslavia	-	39.12	37.26	39.64	40.70	50.91	-100.0	-100.0	-100.0
Other ²	30.14	-	30.60	37.69	42.41	49.20	-	-8.2	-5.3
Asia Total	32.87	35.66	37.54	39.11	40.76	51.40	-7.8	-5.2	-4.8
China (Taiwan)	33.69	36.33	37.74	39.79	41.90	52.23	-7.3	-5.3	-4.8
Israel	-	-	33.19	35.87	38.51	-	-	-100.0	-
Japan	32.17	35.25	37.20	38.71	40.25	51.79	-8.7	-5.4	-5.1
Korea, Republic of	34.89	36.98	38.98	40.43	42.42	50.38	-5.6	-4.8	-4.0
Other ²	-	36.54	-	-	-	52.95	-100.0	-	-100.0
Africa Total	34.85	36.64	38.29	38.29	41.19	49.38	-4.9	-4.1	-3.8
Algeria	34.29	35.89	38.34	39.54	42.07	51.03	-4.4	-5.0	-4.3
Egypt	34.21	36.33	38.12	38.86	40.58	47.54	-5.8	-4.2	-3.6
Morocco	-	-	28.31	29.37	-	-	-	-	-
South Africa, Rep of	36.21	37.96	39.53	41.60	-	49.89	-4.6	-	-3.5
Other ²	-	32.82	-	-	-	-	-100.0	-	-
Total³	33.89	35.72	37.52	39.18	40.85	51.05	-5.1	-4.6	-4.4
U.S. Total⁴	33.91	35.71	37.56	39.25	41.05	53.46	-5.0	-4.6	-4.9

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 1993.

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 \$28 to \$50 (nominal) per short ton, inclusively.

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

Notes: Real prices are in 1987 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,
1985, 1990-1994**
(Nominal Dollars per Short Ton)

Continent and Country of Destination	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
North America Total	\$30.54	\$31.85	\$31.42	\$30.49	\$30.49	\$48.60	-4.1	*	-5.0
Canada ¹	30.41	31.66	31.35	30.28	30.30	48.70	-3.9	0.1	-5.1
Mexico	41.42	40.40	38.19	39.16	37.46	39.22	2.5	2.5	.6
Other ²	35.37	35.10	36.39	35.70	34.16	28.72	.8	.9	2.3
South America Total	37.59	40.05	42.38	39.13	37.16	43.60	-6.1	.3	-1.6
Argentina	34.46	37.81	38.57	35.95	-	39.98	-8.9	-	-1.6
Brazil	-	40.61	42.95	43.64	42.44	45.36	-100.0	-100.0	-100.0
Other ²	40.67	39.46	36.96	36.32	35.83	42.97	3.1	3.2	-6
Europe Total	36.01	37.47	36.99	37.74	38.55	39.62	-3.9	-1.7	-1.0
Belgium & Luxembourg	33.49	34.09	36.35	37.08	37.64	39.05	-1.8	-2.9	-1.7
Bulgaria	41.40	41.51	-	-	48.99	44.32	-3	-4.1	-8
Denmark	29.23	34.34	32.69	33.14	34.37	37.93	-14.9	-4.0	-2.8
Finland	35.47	40.85	-	40.82	-	40.80	-13.1	-	-1.5
France	38.11	31.83	33.64	33.93	37.07	35.65	19.7	.7	.7
Germany	40.67	34.19	35.82	34.95	35.27	42.33	18.9	3.6	-4
Ireland	33.82	35.84	36.81	39.53	38.54	46.13	-5.6	-3.2	-3.4
Italy	38.30	40.26	41.32	41.71	40.76	40.01	-4.9	-1.5	-5
Netherlands	35.95	40.21	39.24	39.59	39.14	42.96	-10.6	-2.1	-1.9
Norway	-	-	-	32.11	-	39.33	-	-	-100.0
Portugal	36.25	37.62	40.38	40.52	39.96	46.89	-3.6	-2.4	-2.8
Romania	37.26	36.29	-	42.64	-	-	2.7	-	-
Spain	40.84	39.22	38.47	34.32	34.92	36.94	4.1	4.0	1.1
Sweden	-	-	34.53	41.64	35.00	43.59	-	-100.0	-100.0
Turkey	-	40.84	40.72	46.38	39.30	35.18	-100.0	-100.0	-100.0
United Kingdom	47.21	40.87	38.96	39.69	42.67	40.75	15.5	2.6	1.6
Yugoslavia	-	29.03	-	40.97	-	40.02	-100.0	-	-100.0
Other ²	40.92	40.67	42.07	40.79	39.95	34.24	.6	.6	2.0
Asia Total	35.24	36.52	38.27	39.18	38.09	39.52	-3.5	-1.9	-1.3
China (Taiwan)	38.28	39.01	40.63	41.16	37.81	41.24	-1.9	.3	-8
Israel	33.23	34.79	38.89	39.41	39.02	42.17	-4.5	-3.9	-2.6
Japan	33.69	35.45	35.98	36.05	37.80	37.11	-5.0	-2.8	-1.1
Korea, Republic of	32.56	34.34	37.24	39.97	39.63	37.07	-5.2	-4.8	-1.4
Other ²	37.24	37.31	37.06	38.61	38.91	40.00	-2	-1.1	-8
Oceania & Australia Total	39.99	34.46	34.50	-	36.60	-	16.0	2.2	-
Other ²	39.99	34.46	34.50	-	36.60	-	16.0	2.2	-
Africa Total	35.12	33.86	33.78	33.56	31.34	45.34	3.7	2.9	-2.8
Egypt	40.89	40.88	39.92	40.81	35.91	-	*	3.3	-
Morocco	35.03	33.86	33.77	33.53	31.34	45.36	3.5	2.8	-2.8
Other ²	-	-	-	40.81	-	40.02	-	-	-100.0
Total³	34.65	36.10	35.86	36.86	36.28	42.50	-4.0	-1.1	-2.2
U.S. Total⁴	34.34	36.03	35.73	36.91	36.81	43.92	-4.7	-1.7	-2.7

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 1993.

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 \$28 to \$50 per short ton, inclusively.

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

* Data round to zero.

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,
1985, 1990-1994**
(Real Dollars per Short Ton)

Continent and Country of Destination	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
North America Total	\$24.22	\$25.79	\$25.99	\$25.93	\$26.91	\$51.48	-6.1	-2.6	-8.0
Canada ¹	24.11	25.64	25.93	25.75	26.75	51.59	-5.9	-2.5	-8.1
Mexico	32.84	32.71	31.59	33.30	33.06	41.55	.4	-.2	-2.6
Other ²	28.05	28.42	30.10	30.36	30.15	30.43	-1.3	-1.8	-.9
South America Total	29.81	32.43	35.05	33.28	32.80	46.18	-8.1	-2.3	-4.7
Argentina	27.33	30.62	31.90	30.57	-	42.36	-10.7	-	-4.8
Brazil	-	32.89	35.53	37.11	37.46	48.05	-100.0	-100.0	-100.0
Other ²	32.25	31.95	30.57	30.89	31.62	45.52	.9	.5	-3.8
Europe Total	28.56	30.34	30.59	32.09	34.02	41.98	-5.9	-4.3	-4.2
Belgium & Luxembourg	26.55	27.61	30.06	31.53	33.22	41.37	-3.8	-5.4	-4.8
Bulgaria	32.83	33.61	-	-	43.24	46.95	-2.3	-6.6	-3.9
Denmark	23.18	27.81	27.04	28.18	30.34	40.18	-16.6	-6.5	-5.9
Finland	28.13	33.07	-	34.71	-	43.22	-14.9	-	-4.7
France	30.22	25.77	27.83	28.85	32.72	37.77	17.3	-2.0	-2.4
Germany	32.25	27.69	29.63	29.72	31.13	44.84	16.5	.9	-3.6
Ireland	26.82	29.02	30.44	33.61	34.02	48.86	-7.6	-5.8	-6.4
Italy	30.37	32.60	34.18	35.47	35.97	42.38	-6.8	-4.1	-3.6
Netherlands	28.51	32.56	32.46	33.66	34.54	45.51	-12.4	-4.7	-5.1
Norway	-	-	-	27.31	-	41.66	-	-	-100.0
Portugal	28.75	30.46	33.40	34.46	35.27	49.67	-5.6	-5.0	-5.9
Romania	29.54	29.38	-	36.26	-	-	.5	-	-
Spain	32.39	31.76	31.82	29.18	30.82	39.13	2.0	1.2	-2.1
Sweden	-	-	28.56	35.41	30.89	46.18	-	-100.0	-100.0
Turkey	-	33.07	33.68	39.44	34.69	37.27	-100.0	-100.0	-100.0
United Kingdom	37.44	33.09	32.22	33.75	37.66	43.17	13.1	-.1	-1.6
Yugoslavia	-	23.51	-	34.84	-	42.40	-100.0	-	-100.0
Other ²	32.45	32.93	34.80	34.69	35.26	36.27	-1.4	-2.0	-1.2
Asia Total	27.94	29.57	31.66	33.31	33.62	41.86	-5.5	-4.5	-4.4
China (Taiwan)	30.36	31.58	33.61	35.00	33.37	43.69	-3.9	-2.3	-4.0
Israel	26.35	28.17	32.17	33.51	34.44	44.67	-6.4	-6.5	-5.7
Japan	26.72	28.70	29.76	30.65	33.36	39.31	-6.9	-5.4	-4.2
Korea, Republic of	25.82	27.81	30.80	33.99	34.98	39.26	-7.1	-7.3	-4.5
Other ²	29.53	30.21	30.66	32.84	34.34	42.37	-2.3	-3.7	-3.9
Oceania & Australia Total	31.71	27.90	28.54	-	32.31	-	13.6	-.5	-
Other ²	31.71	27.90	28.54	-	32.31	-	13.6	-.5	-
Africa Total	27.85	27.42	27.94	28.53	27.66	48.03	1.5	.2	-5.9
Egypt	32.43	33.10	33.02	34.71	31.69	-	-2.0	.6	-
Morocco	27.78	27.42	27.94	28.51	27.66	48.05	1.3	.1	-5.9
Other ²	-	-	-	34.70	-	42.39	-	-	-100.0
Total³	27.48	29.23	29.66	31.35	32.02	45.03	-6.0	-3.8	-5.3
U.S. Total⁴	27.23	29.18	29.55	31.39	32.49	46.52	-6.6	-4.3	-5.8

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 1993.

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 \$28 to \$50 (nominal) per short ton, inclusively.

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

Notes: Real prices are in 1987 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, 1992, recoverable U.S. coal reserves were estimated to total 265 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 38 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) accounting, respectively, for 32 percent and 30 percent of total reserves.

Compared with 1993, the average sulfur content of coal delivered to the Nation's electric utilities during 1994 remained virtually constant at 1.17 percent by weight, while the average ash content of electric utility coal declined slightly to 9.36 percent by weight

(Table 106). The average heat content of electric utility coal rose slightly to 10,338 Btu per pound. In comparison, the quality of coal received at manufacturing and coke plants in 1994 showed a 20-percent increase in ash content and a 6-percent decrease in the sulfur content (Table 107).

The estimated amount of sulfur dioxide emitted during 1994 by coal-burning electricity generators totaled 13 million short tons, 9 percent less than the estimated 14 million short tons of sulfur dioxide emitted during 1993. Compared with 1993, nitrogen oxide emissions attributable to electricity generators declined by 3 percent to 5 million short tons and carbon dioxide emissions dropped 1 percent to 1,692 million short tons.

Table 105. Estimate of Recoverable Reserves of Coal by Sulfur Range, State, and Mine Type
(Million Short Tons Remaining as of January 1, 1992)

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	-	428	386	2,075	200	-	3,089
Surface	-	259	273	1,685	139	-	2,356
Underground	-	169	112	391	61	-	733
Alaska, Southern	2,458	95	-	-	-	-	2,552
Surface	390	42	-	-	-	-	432
Underground	2,067	53	-	-	-	-	2,120
Alaska, Northern	-	-	-	-	-	-	-
Surface	-	-	-	-	-	-	-
Underground	-	-	-	-	-	-	-
Arizona	-	158	-	-	-	-	158
Surface	-	106	-	-	-	-	106
Underground	-	51	-	-	-	-	51
Arkansas ¹	-	8	163	45	6	7	228
Surface	-	2	73	24	1	1	101
Underground	-	7	90	20	5	6	127
Colorado ¹	3,711	2,338	3,688	329	97	-	10,163
Surface	291	127	3,326	41	14	-	3,799
Underground	3,420	2,212	363	288	83	-	6,365
Georgia	1	1	*	*	*	*	2
Surface	*	*	*	*	*	*	1
Underground	*	*	*	*	*	*	1
Idaho	*	1	*	*	-	-	2
Surface	-	-	-	-	-	-	-
Underground	*	1	*	*	-	-	2
Illinois	-	-	888	2,784	5,483	20,936	30,091
Surface	-	-	37	195	1,693	2,746	4,672
Underground	-	-	851	2,589	3,789	18,190	25,419
Indiana	-	318	188	685	1,141	2,065	4,396
Surface	-	69	30	117	163	335	714
Underground	-	249	158	568	978	1,730	3,682
Iowa	-	-	-	-	408	720	1,128
Surface	-	-	-	-	320	-	320
Underground	-	-	-	-	87	720	807
Kansas	-	-	-	-	226	458	684
Surface	-	-	-	-	226	458	684
Underground	-	-	-	-	-	-	-
Kentucky, Eastern	222	2,052	1,509	877	218	113	4,991
Surface	37	330	299	227	45	23	961
Underground	185	1,722	1,210	650	173	89	4,030
Kentucky, Western	-	-	-	159	2,753	6,468	9,380
Surface	-	-	-	127	941	1,297	2,365
Underground	-	-	-	32	1,812	5,171	7,015
Louisiana	-	-	-	359	-	-	359
Surface	-	-	-	359	-	-	359
Underground	-	-	-	-	-	-	-
Maryland	-	32	59	121	210	-	422
Surface	-	3	8	13	34	-	58
Underground	-	29	51	108	177	-	364
Michigan	-	-	8	23	16	11	59
Surface	-	-	1	2	1	*	3
Underground	-	-	8	21	16	11	55
Missouri	-	-	-	-	170	3,685	3,855
Surface	-	-	-	-	150	3,015	3,166
Underground	-	-	-	-	20	670	689
Montana	33,650	16,846	16,798	4,820	2,023	1,372	75,508
Surface	18,086	7,013	9,521	2,449	1,610	906	39,585
Underground	15,563	9,833	7,277	2,371	412	466	35,923
New Mexico ¹	-	802	934	696	64	-	2,496
Surface	-	236	716	470	-	-	1,421
Underground	-	565	219	226	64	-	1,074
North Carolina	-	-	*	2	2	1	5
Surface	-	-	-	-	-	-	-
Underground	-	-	*	2	2	1	5
North Dakota	441	760	1,393	3,481	868	374	7,316
Surface	441	760	1,393	3,481	868	374	7,316
Underground	-	-	-	-	-	-	-
Ohio	82	170	338	1,056	2,653	7,494	11,794
Surface	20	97	170	420	873	2,330	3,910
Underground	62	73	168	636	1,780	5,164	7,883

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, 1992)

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	-	222	123	179	114	183	821
Surface	-	67	25	34	34	83	244
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	181	468	96	17	2	*	764
Surface	86	263	62	11	1	*	423
Underground	95	205	35	6	1	-	341
Pennsylvania, Bituminous	-	287	820	5,076	4,212	1,542	11,936
Surface	-	24	69	327	242	144	806
Underground	-	263	751	4,750	3,969	1,398	11,131
South Dakota	-	-	104	1	172	-	277
Surface	-	-	104	1	172	-	277
Underground	-	-	-	-	-	-	-
Tennessee	-	108	63	228	101	-	500
Surface	-	39	24	95	41	-	198
Underground	-	69	39	134	60	-	302
Texas	-	-	600	5,768	3,462	382	10,212
Surface	-	-	600	5,768	3,462	382	10,212
Underground	-	-	-	-	-	-	-
Utah	387	694	566	883	229	307	3,066
Surface	8	32	19	85	35	34	212
Underground	379	661	548	798	194	274	2,854
Virginia ¹	214	691	437	145	-	-	1,487
Surface	45	206	169	48	-	-	468
Underground	169	485	269	97	-	-	1,020
Washington	63	92	86	502	-	-	743
Surface	-	-	-	68	-	-	68
Underground	63	92	86	434	-	-	675
West Virginia	671	6,684	2,810	4,122	2,554	3,256	20,097
Surface	121	1,526	590	462	183	110	2,992
Underground	551	5,157	2,220	3,660	2,371	3,147	17,105
Wyoming	6,941	17,892	10,327	7,487	1,180	2,269	46,096
Surface	4,588	9,126	4,273	2,362	539	2,236	23,125
Underground	2,353	8,766	6,055	5,125	641	33	22,972
U.S. Total	49,025	51,146	42,385	41,920	28,562	51,644	264,682
Surface	24,115	20,328	21,778	18,871	11,788	14,476	111,356
Underground	24,909	30,818	20,608	23,049	16,774	37,169	153,326

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: An Update by Heat and Sulfur Content* (DOE/EIA-0529(92)).

Table 106. Average Quality of Coal Received at Electric Utilities by Census Division and State, 1985, 1990-1994

Census Division and State and Quality ¹	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
New England									
Btu	12,897	13,033	13,120	13,176	13,136	13,305	-1	*	*
Sulfur	.98	1.11	1.18	1.17	1.24	1.30	-11.5	-5.7	-3.1
Ash	7.49	7.62	7.66	7.52	7.43	7.47	-1.7	.2	*
Connecticut									
Btu	13,094	13,144	13,167	13,238	13,233	13,158	*	*	*
Sulfur	.54	.55	.55	.55	.54	.54	-3.0	*	-1
Ash	7.38	6.95	6.25	6.07	6.36	6.81	6.2	3.8	.9
Massachusetts									
Btu	12,814	12,951	13,070	13,141	13,062	13,280	-1	*	*
Sulfur	.91	1.03	1.17	1.22	1.23	1.17	-11.6	-7.2	-2.7
Ash	7.85	8.10	8.26	8.14	7.89	7.52	-3.1	-1	.5
New Hampshire									
Btu	13,032	13,179	13,260	13,247	13,303	13,452	-1	-1	*
Sulfur	1.52	1.62	1.61	1.43	1.81	2.07	-6.5	-4.3	-3.4
Ash	6.40	6.75	6.52	6.43	6.75	7.66	-5.2	-1.3	-2.0
Middle Atlantic									
Btu	12,509	12,556	12,555	12,455	12,409	12,362	*	*	*
Sulfur	2.01	1.96	1.99	2.04	2.05	2.00	2.7	-5	.1
Ash	11.52	11.29	11.45	12.28	12.38	12.77	2.0	-1.8	-1.1
New Jersey									
Btu	13,341	13,397	13,465	13,402	13,429	13,238	*	*	*
Sulfur	1.29	1.29	1.29	1.27	1.16	1.37	-1	2.7	-7
Ash	7.44	7.21	6.84	7.31	7.36	8.07	3.2	.3	-9
New York									
Btu	12,959	12,914	12,978	12,923	12,846	12,600	*	*	*
Sulfur	1.71	1.55	1.65	1.77	1.84	1.93	10.0	-1.8	-1.4
Ash	7.98	8.15	8.02	8.88	9.13	10.82	-2.1	-3.3	-3.3
Pennsylvania									
Btu	12,368	12,443	12,399	12,302	12,241	12,245	-1	*	*
Sulfur	2.11	2.07	2.12	2.14	2.16	2.06	2.0	-5	.3
Ash	12.49	12.11	12.56	13.30	13.46	13.52	3.1	-1.9	-9
East North Central									
Btu	10,837	10,885	11,005	10,971	10,988	11,036	*	*	*
Sulfur	1.55	1.61	1.77	1.82	1.82	1.93	-3.7	-3.9	-2.4
Ash	8.34	8.41	8.72	8.75	8.93	9.28	-8	-1.7	-1.2
Illinois									
Btu	10,181	10,362	10,666	10,721	10,789	10,485	-2	-1	*
Sulfur	1.46	1.63	1.91	2.00	2.07	1.85	-10.8	-8.4	-2.6
Ash	7.44	7.51	8.19	8.54	8.81	8.39	-1.0	-4.1	-1.3
Indiana									
Btu	10,535	10,539	10,628	10,570	10,562	10,657	*	*	*
Sulfur	1.76	1.78	1.88	1.98	2.06	2.32	-9	-3.8	-3.0
Ash	8.09	8.23	8.43	8.45	8.58	9.49	-1.7	-1.5	-1.8
Michigan									
Btu	10,925	10,853	10,995	11,052	11,131	11,696	1	*	-1
Sulfur	.68	.68	.69	.70	.70	.82	.9	-7	-2.0
Ash	6.97	6.61	6.76	6.58	6.79	7.45	5.4	.6	-7
Ohio									
Btu	12,052	12,049	11,983	11,945	11,882	11,813	*	*	*
Sulfur	2.34	2.39	2.57	2.63	2.44	2.54	-2.3	-1.1	-9
Ash	10.91	11.01	11.24	11.39	11.47	11.49	-9	-1.2	-6
Wisconsin									
Btu	9,565	9,490	9,725	9,643	9,642	9,774	1	*	*
Sulfur	.51	.49	.71	.81	.81	1.14	3.5	-11.0	-8.6
Ash	6.27	6.11	6.18	6.20	6.33	7.04	2.6	-2	-1.3
West North Central									
Btu	8,480	8,366	8,602	8,665	8,701	8,749	1	-1	*
Sulfur	.68	.63	.91	.92	.96	1.21	7.4	-8.4	-6.3
Ash	6.82	6.74	7.18	7.23	7.41	8.40	1.2	-2.0	-2.3
Iowa									
Btu	8,783	8,660	8,867	8,890	8,892	9,098	1	*	*
Sulfur	.57	.52	.67	.67	.70	.91	9.2	-5.3	-5.1
Ash	5.59	5.47	5.78	5.99	5.98	6.49	2.2	-1.7	-1.6

See footnotes at end of table.

Table 106. Average Quality of Coal Received at Electric Utilities by Census Division and State, 1985, 1990-1994 (Continued)

Census Division and State and Quality ¹	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
Kansas									
Btu	8,708	8,654	8,900	8,998	8,948	8,768	1	-1	*
Sulfur	.49	.43	.49	.59	.58	.94	13.3	-4.4	-7.1
Ash	5.63	5.19	5.74	5.63	5.81	7.45	8.5	-8	-3.1
Minnesota									
Btu	8,821	8,844	8,838	8,802	8,788	8,725	*	*	*
Sulfur	.46	.44	.45	.48	.51	.86	6.5	-2.3	-6.6
Ash	6.64	6.40	6.57	7.08	7.58	9.14	3.7	-3.3	-3.5
Missouri									
Btu	9,718	9,860	10,321	10,298	10,400	10,645	-1	-2	-1
Sulfur	1.03	1.02	1.80	1.84	2.01	2.40	1.3	-15.4	-8.9
Ash	6.65	6.54	7.71	8.00	8.33	10.00	1.6	-5.5	-4.4
Nebraska									
Btu	8,571	8,561	8,553	8,542	8,561	8,649	*	*	*
Sulfur	.35	.35	.37	.35	.35	.39	-2.5	-6	-1.4
Ash	5.17	5.11	5.00	4.97	5.05	5.35	1.1	.6	-4
North Dakota									
Btu	6,593	6,570	6,558	6,606	6,636	6,575	*	*	*
Sulfur	.75	.74	.87	.83	.81	.74	2.1	-1.9	.2
Ash	9.39	9.47	9.29	9.17	9.26	9.18	-9	.3	.2
South Dakota									
Btu	6,049	6,057	6,034	6,025	6,096	6,105	*	*	*
Sulfur	.91	.90	.92	.87	.90	.85	1.2	.5	.7
Ash	8.81	8.82	9.34	9.04	8.44	7.83	-1	1.1	1.3
South Atlantic									
Btu	12,362	12,465	12,461	12,425	12,395	12,390	-1	*	*
Sulfur	1.33	1.39	1.52	1.51	1.52	1.53	-4.4	-3.2	-1.5
Ash	9.72	9.81	9.95	9.94	9.99	10.28	-9	-7	-6
Delaware									
Btu	12,954	13,027	13,064	13,053	13,035	12,962	-1	*	*
Sulfur	.92	.94	1.03	.96	.97	1.04	-1.9	-1.2	-1.3
Ash	9.09	9.08	8.83	8.66	8.71	9.00	.2	1.1	.1
Florida									
Btu	12,293	12,332	12,370	12,351	12,364	12,225	*	*	*
Sulfur	1.60	1.57	1.68	1.73	1.73	1.84	2.5	-1.9	-1.5
Ash	8.19	8.04	8.33	8.42	8.44	9.25	1.8	-7	-1.3
Georgia									
Btu	11,774	12,148	12,039	11,936	11,893	12,120	-3	*	*
Sulfur	1.05	1.37	1.68	1.63	1.63	1.79	-23.3	-10.3	-5.7
Ash	8.99	9.94	10.29	10.00	9.81	9.93	-9.5	-2.1	-1.1
Maryland									
Btu	12,824	12,752	12,753	12,796	12,734	12,663	1	*	*
Sulfur	1.16	1.31	1.36	1.34	1.44	1.42	-11.4	-5.4	-2.3
Ash	9.91	10.02	10.47	10.46	10.48	10.94	-1.1	-1.4	-1.1
North Carolina									
Btu	12,416	12,465	12,456	12,506	12,544	12,487	*	*	*
Sulfur	.95	.96	.92	.94	.96	.88	-1.2	-1	.8
Ash	10.27	10.12	10.17	9.96	9.89	10.10	1.5	.9	.2
South Carolina									
Btu	12,771	12,802	12,817	12,724	12,655	12,566	*	*	*
Sulfur	1.21	1.17	1.14	1.19	1.19	1.25	3.9	.4	-4
Ash	8.87	8.92	8.77	9.09	9.21	9.68	-6	-9	-1.0
Virginia									
Btu	12,778	12,817	12,830	12,768	12,714	12,814	*	*	*
Sulfur	.99	1.00	1.03	1.00	.96	.93	-5	.7	.7
Ash	9.91	9.60	9.48	9.79	9.84	9.14	3.2	.2	.9
West Virginia									
Btu	12,468	12,489	12,524	12,505	12,452	12,414	*	*	*
Sulfur	1.87	1.94	2.05	1.92	1.89	1.84	-3.6	-3	.2
Ash	11.50	11.61	11.32	11.41	11.55	11.80	-9	-1	-3
East South Central									
Btu	11,909	11,988	11,933	11,924	11,855	11,753	-1	*	*
Sulfur	1.88	1.91	1.99	2.01	2.10	2.02	-1.8	-2.8	-8
Ash	10.66	10.92	10.70	10.83	11.12	11.39	-2.3	-1.0	-7
Alabama									
Btu	12,088	12,092	12,061	12,107	12,094	12,056	*	*	*
Sulfur	1.30	1.33	1.43	1.40	1.51	1.50	-1.7	-3.5	-1.5
Ash	11.54	11.79	11.80	11.77	11.74	11.84	-2.1	-4	-3

See footnotes at end of table.

Table 106. Average Quality of Coal Received at Electric Utilities by Census Division and State, 1985, 1990-1994 (Continued)

Census Division and State and Quality ¹	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
Kentucky									
Btu	11,683	11,697	11,620	11,552	11,558	11,385	*	*	*
Sulfur	2.34	2.39	2.44	2.53	2.59	2.66	-2.2	-2.6	-1.4
Ash	11.35	11.64	11.60	11.80	12.12	12.12	-2.5	-1.6	-7
Mississippi									
Btu	11,312	12,338	12,507	12,555	12,543	12,126	-8	-3	-1
Sulfur	1.02	1.41	1.69	1.56	1.64	1.34	-27.2	-11.1	-2.9
Ash	7.88	8.52	8.31	8.09	7.84	9.17	-7.5	.1	-1.7
Tennessee									
Btu	12,186	12,268	12,182	12,169	11,966	11,829	-1	*	*
Sulfur	2.00	1.92	2.02	2.04	2.00	1.91	4.2	*	.5
Ash	8.94	9.14	8.31	8.59	9.46	10.41	-2.2	-1.4	-1.7
West South Central									
Btu	7,709	7,646	7,648	7,662	7,701	7,771	1	*	*
Sulfur	.62	.64	.65	.65	.65	.52	-3.1	-9	2.0
Ash	9.50	10.06	10.25	10.42	10.04	9.29	-5.6	-1.4	.2
Arkansas									
Btu	8,707	8,665	8,724	8,734	8,740	8,604	*	*	*
Sulfur	.32	.32	.32	.32	.34	.33	-2.1	-1.6	-3
Ash	4.92	5.06	5.12	5.14	5.26	5.64	-2.8	-1.6	-1.5
Louisiana									
Btu	8,136	8,092	8,122	8,223	8,194	8,453	1	*	*
Sulfur	.51	.52	.50	.49	.49	.48	-1.8	1.1	.7
Ash	7.16	7.13	7.20	7.24	7.47	6.57	.4	-1.0	1.0
Oklahoma									
Btu	8,573	8,621	8,700	8,792	8,894	8,584	-1	-1	*
Sulfur	.35	.37	.42	.44	.47	.36	-5.7	-6.7	-1
Ash	5.07	5.21	5.24	5.27	5.50	5.27	-2.7	-2.0	-4
Texas									
Btu	7,346	7,284	7,234	7,225	7,291	7,404	1	*	*
Sulfur	.73	.75	.76	.75	.74	.59	-2.0	-2	2.4
Ash	11.31	11.95	12.33	12.56	11.80	10.96	-5.4	-1.0	.3
Mountain									
Btu	9,755	9,751	9,722	9,777	9,792	9,742	*	*	*
Sulfur	.55	.54	.55	.53	.55	.54	2.0	*	.1
Ash	11.11	11.19	11.15	10.90	11.00	11.08	-8	.2	*
Arizona									
Btu	10,281	10,271	10,303	10,356	10,482	10,493	*	*	*
Sulfur	.51	.49	.51	.51	.49	.53	3.9	1.3	-3
Ash	11.97	12.08	12.19	12.49	11.95	11.58	-9	*	.4
Colorado									
Btu	9,946	9,888	9,920	9,888	9,808	9,749	1	*	*
Sulfur	.40	.38	.38	.37	.38	.39	4.7	1.5	.4
Ash	7.12	6.97	7.01	6.76	6.95	6.87	2.1	.6	.4
Montana									
Btu	8,500	8,496	8,576	8,522	8,564	8,654	*	*	*
Sulfur	.66	.65	.66	.65	.63	.69	.8	.9	-5
Ash	9.05	8.99	8.92	8.81	8.84	9.50	.7	.6	-5
Nevada									
Btu	11,291	11,012	11,051	11,121	11,122	11,384	3	*	*
Sulfur	.49	.49	.49	.50	.53	.51	1.6	-1.7	-4
Ash	9.57	9.73	9.67	9.80	9.82	9.29	-1.6	-6	.3
New Mexico									
Btu	9,043	8,992	9,013	9,092	9,117	9,188	1	*	*
Sulfur	.82	.81	.81	.80	.79	.75	.8	.7	1.0
Ash	22.44	22.77	22.49	22.26	21.84	20.83	-1.4	.7	.8
Utah									
Btu	11,491	11,489	11,384	11,469	11,483	11,804	*	*	*
Sulfur	.47	.48	.47	.46	.49	.50	-1.2	-1.2	-7
Ash	10.25	10.47	11.24	10.52	10.13	9.87	-2.1	.3	.4
Wyoming									
Btu	8,766	8,779	8,840	8,756	8,811	8,755	*	*	*
Sulfur	.52	.51	.52	.51	.54	.51	1.5	-8	.3
Ash	8.00	7.78	7.54	7.64	7.69	8.20	2.8	1.0	-3

See footnotes at end of table.

Table 106. Average Quality of Coal Received at Electric Utilities by Census Division and State, 1985, 1990-1994 (Continued)

Census Division and State and Quality ¹	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
Pacific									
Btu	8,543	8,283	8,550	8,122	8,169	8,102	3	1	1
Sulfur	.57	.63	.59	.57	.64	.94	-9.4	-2.6	-5.3
Ash	11.14	12.58	11.39	12.22	13.00	14.34	-11.4	-3.8	-2.8
Oregon									
Btu	8,937	8,801	9,642	8,429	8,348	8,292	2	2	1
Sulfur	.37	.38	.40	.32	.31	.31	-1.0	4.5	2.1
Ash	5.89	4.98	4.42	4.60	4.57	4.33	18.1	6.5	3.5
Washington									
Btu	8,400	8,125	8,189	8,014	8,135	8,100	3	1	*
Sulfur	.65	.71	.66	.66	.70	.94	-9.2	-2.0	-4.1
Ash	13.04	14.90	13.69	14.88	14.62	14.46	-12.5	-2.8	-1.1
U.S. Total									
Btu	10,338	10,315	10,395	10,378	10,465	10,480	*	*	*
Sulfur	1.17	1.18	1.29	1.30	1.35	1.38	-1.2	-3.5	-1.9
Ash	9.36	9.55	9.71	9.76	9.85	10.05	-2.0	-1.3	-8

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, 1993-1994

Census Division and State and Quality ¹	1994	1993	Percent Change 1993-1994
New England			
Btu	13,383	13,232	1.1
Sulfur	.72	1.20	-39.9
Ash	5.86	6.87	-14.7
Maine			
Btu	13,162	13,062	.8
Sulfur	.71	1.29	-44.6
Ash	5.30	7.18	-26.2
Massachusetts			
Btu	13,939	13,992	-.4
Sulfur	.73	.78	-6.3
Ash	7.26	5.48	32.5
Middle Atlantic			
Btu	12,549	12,367	1.5
Sulfur	1.14	1.06	8.1
Ash	6.95	7.37	-5.7
New Jersey			
Btu	12,515	11,685	7.1
Sulfur	.93	.83	12.1
Ash	12.40	10.71	15.8
New York²			
Btu	13,203	13,044	1.2
Sulfur	1.34	1.69	-21.1
Ash	6.69	7.73	-13.5
Pennsylvania²			
Btu	12,326	12,117	1.7
Sulfur	1.10	.99	11.2
Ash	7.00	7.30	-4.2
East North Central			
Btu	11,947	11,192	6.7
Sulfur	1.52	2.40	-36.5
Ash	7.61	6.98	9.1
Illinois²			
Btu	11,387	11,312	.7
Sulfur	1.94	4.83	-59.9
Ash	7.66	7.03	8.9
Indiana²			
Btu	11,641	9,091	28.0
Sulfur	1.45	1.28	13.0
Ash	7.50	6.77	10.7
Michigan²			
Btu	12,470	12,547	-.6
Sulfur	1.02	1.05	-2.8
Ash	7.82	6.98	12.0
Ohio²			
Btu	12,429	12,201	1.9
Sulfur	1.60	1.40	14.6
Ash	7.66	7.10	7.9
Wisconsin			
Btu	11,873	11,745	1.1
Sulfur	1.52	1.83	-17.2
Ash	7.30	7.25	.7
West North Central			
Btu	8,710	8,589	1.4
Sulfur	.88	.90	-2.1
Ash	6.56	6.46	1.6
Iowa			
Btu	10,480	10,344	1.3
Sulfur	.98	1.13	-13.9
Ash	6.38	6.41	-.4
Kansas			
Btu	12,249	12,479	-1.8
Sulfur	3.11	3.14	-.8
Ash	11.04	11.78	-6.3

See footnotes at end of table.

Table 107. Average Quality of Coal Received at Manufacturing and Coke Plants by Census Division and State, 1993-1994 (Continued)

Census Division and State and Quality ¹	1994	1993	Percent Change 1993-1994
Minnesota			
Btu	10,112	10,003	1.1
Sulfur	.54	.51	5.6
Ash	5.15	4.56	12.9
Missouri²			
Btu	11,510	11,527	-.1
Sulfur	1.92	2.01	-4.5
Ash	10.10	10.11	-.1
Nebraska			
Btu	9,931	9,979	-.5
Sulfur	.40	.37	7.4
Ash	5.95	5.20	14.5
North Dakota			
Btu	7,142	7,172	-.4
Sulfur	.71	.70	1.8
Ash	6.14	6.16	-.2
South Dakota			
Btu	9,418	8,159	15.4
Sulfur	.77	.39	98.9
Ash	7.15	5.42	31.8
South Atlantic			
Btu	13,040	12,669	2.9
Sulfur	1.14	1.11	2.8
Ash	7.98	7.63	4.5
Delaware			
Btu	13,300	13,087	1.6
Sulfur	1.89	2.00	-5.5
Ash	7.73	9.26	-16.6
Florida			
Btu	12,933	12,742	1.5
Sulfur	.93	.97	-3.4
Ash	8.93	9.46	-5.6
Georgia			
Btu	13,267	12,870	3.1
Sulfur	1.29	1.30	-1.3
Ash	8.90	7.73	15.3
Maryland²			
Btu	12,330	12,422	-.7
Sulfur	1.89	1.93	-2.1
Ash	10.90	13.32	-18.2
North Carolina			
Btu	13,188	13,321	-1.0
Sulfur	.91	.92	-.3
Ash	7.20	6.89	4.5
South Carolina			
Btu	12,994	12,955	.3
Sulfur	1.12	1.22	-8.3
Ash	7.95	8.67	-8.4
Virginia²			
Btu	13,198	12,069	9.4
Sulfur	1.04	.98	6.3
Ash	7.50	7.29	3.0
West Virginia²			
Btu	12,780	12,131	5.3
Sulfur	1.24	1.06	17.7
Ash	7.54	6.32	19.3
East South Central			
Btu	12,869	11,824	8.8
Sulfur	1.09	.74	47.2
Ash	7.51	4.54	65.6
Alabama²			
Btu	12,694	10,871	16.8
Sulfur	.98	.71	38.0
Ash	7.27	4.25	70.9
Kentucky²			
Btu	13,150	10,237	28.4
Sulfur	.99	.90	11.1
Ash	6.59	6.04	9.2

See footnotes at end of table.

Table 107. Average Quality of Coal Received at Manufacturing and Coke Plants by Census Division and State, 1993-1994 (Continued)

Census Division and State and Quality ¹	1994	1993	Percent Change 1993-1994
Mississippi			
Btu	11,786	12,013	-1.9
Sulfur	1.44	2.52	-42.9
Ash	9.98	10.33	-3.4
Tennessee ²			
Btu	12,958	13,059	-.8
Sulfur	1.32	1.08	21.9
Ash	8.47	8.38	1.1
West South Central			
Btu	8,925	8,794	1.5
Sulfur	1.00	1.05	-4.5
Ash	11.18	11.55	-3.2
Arkansas			
Btu	12,646	12,850	-1.6
Sulfur	2.10	1.97	6.5
Ash	10.11	9.78	3.3
Louisiana			
Btu	9,051	9,255	-2.2
Sulfur	.35	.39	-11.6
Ash	5.09	5.83	-12.8
Oklahoma			
Btu	10,118	11,263	-10.2
Sulfur	.73	.89	-17.4
Ash	6.18	6.86	-10.0
Texas ²			
Btu	8,447	8,153	3.6
Sulfur	1.04	1.09	-5.0
Ash	12.72	12.98	-2.0
Mountain			
Btu	10,601	9,681	9.5
Sulfur	.68	.56	23.3
Ash	7.05	6.75	4.4
Arizona			
Btu	11,072	9,188	20.5
Sulfur	.48	.46	5.0
Ash	11.09	11.17	-.7
Colorado			
Btu	10,785	10,557	2.2
Sulfur	.58	.54	7.2
Ash	7.00	6.52	7.4
Idaho			
Btu	9,988	6,138	62.7
Sulfur	.79	.71	10.7
Ash	5.72	6.03	-5.0
Montana			
Btu	8,496	8,065	5.3
Sulfur	.57	.46	23.8
Ash	7.65	9.31	-17.8
Nevada			
Btu	11,907	6,994	70.3
Sulfur	.26	.28	-6.4
Ash	4.01	4.63	-13.5
New Mexico			
Btu	12,688	12,776	-.7
Sulfur	.94	.74	27.0
Ash	9.87	9.95	-.8
Utah ²			
Btu	11,679	11,530	1.3
Sulfur	.82	.44	86.5
Ash	7.68	7.12	7.8
Wyoming			
Btu	10,098	10,071	.3
Sulfur	.70	.72	-3.4
Ash	5.27	5.12	3.0

See footnotes at end of table.

Table 107. Average Quality of Coal Received at Manufacturing and Coke Plants by Census Division and State, 1993-1994 (Continued)

Census Division and State and Quality ¹	1994	1993	Percent Change 1993-1994
Pacific			
Btu	11,745	12,221	-3.9
Sulfur	.52	.49	5.4
Ash	8.89	8.58	3.7
California			
Btu	11,950	12,441	-3.9
Sulfur	.52	.49	5.9
Ash	8.93	8.35	7.0
Hawaii			
Btu	8,395	8,594	-2.3
Sulfur	.50	.51	-2.5
Ash	18.02	17.14	5.1
Oregon			
Btu	10,704	10,216	4.8
Sulfur	.53	.51	3.0
Ash	6.48	5.94	9.2
Washington			
Btu	11,818	12,151	-2.7
Sulfur	.58	.56	4.6
Ash	5.63	9.47	-40.5
U.S. Total			
Btu	11,316	10,885	4.0
Sulfur	1.16	1.23	-5.5
Ash	7.63	6.34	20.3

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.

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."

Table 108. Estimated Emissions from Coal-Fired Electric Generation, by Census Division and State, 1990-1994
(Thousand Short Tons)

Census Division and State	1994	1993	1992	1991	1990	Percent Change 1993-1994	Average Annual Percent Change
							1990-1994
New England							
Sulfur Dioxide	111	119	140	146	152	-7.4	-7.6
Nitrogen Oxides	44	47	51	53	52	-6.0	-4.0
Carbon Dioxide	15,723	15,286	16,526	17,387	16,973	2.9	-1.9
Connecticut							
Sulfur Dioxide	8	8	9	9	10	4.8	-4.9
Nitrogen Oxides	5	4	5	5	6	10.3	-3.8
Carbon Dioxide	2,177	1,986	2,205	2,267	2,583	9.6	-4.2
Massachusetts							
Sulfur Dioxide	64	72	88	103	100	-10.1	-10.3
Nitrogen Oxides	23	26	31	33	31	-10.7	-7.3
Carbon Dioxide	10,102	9,734	10,926	11,713	11,165	3.8	-2.5
New Hampshire							
Sulfur Dioxide	38	40	43	33	42	-4.9	-2.7
Nitrogen Oxides	16	17	16	16	15	-3.0	1.8
Carbon Dioxide	3,444	3,565	3,395	3,407	3,225	-3.4	1.7
Middle Atlantic							
Sulfur Dioxide	1,338	1,383	1,469	1,481	1,524	-3.3	-3.2
Nitrogen Oxides	296	347	362	366	383	-14.8	-6.3
Carbon Dioxide	123,106	130,307	134,485	134,531	137,414	-5.5	-2.7
New Jersey							
Sulfur Dioxide	48	56	55	57	69	-13.9	-8.5
Nitrogen Oxides	23	27	27	26	33	-16.9	-8.9
Carbon Dioxide	5,321	6,222	6,250	6,176	7,992	-14.5	-9.7
New York							
Sulfur Dioxide	200	211	253	249	263	-5.6	-6.7
Nitrogen Oxides	51	53	61	63	63	-4.5	-5.1
Carbon Dioxide	21,929	22,726	26,096	26,098	25,881	-3.5	-4.1
Pennsylvania							
Sulfur Dioxide	1,090	1,116	1,161	1,175	1,192	-2.3	-2.2
Nitrogen Oxides	222	267	274	277	288	-16.7	-6.2
Carbon Dioxide	95,856	101,358	102,139	102,257	103,541	-5.4	-1.9
East North Central							
Sulfur Dioxide	4,346	4,661	4,759	5,040	5,182	-6.8	-4.3
Nitrogen Oxides	1,444	1,453	1,382	1,431	1,419	-.6	.4
Carbon Dioxide	399,197	392,429	373,551	381,713	376,964	1.7	1.4
Illinois							
Sulfur Dioxide	774	790	817	827	893	-2.1	-3.5
Nitrogen Oxides	273	271	220	245	248	.6	2.4
Carbon Dioxide	63,218	62,197	52,323	57,079	57,527	1.6	2.4
Indiana							
Sulfur Dioxide	1,172	1,204	1,168	1,370	1,454	-2.7	-5.3
Nitrogen Oxides	409	408	404	412	412	.3	-.2
Carbon Dioxide	111,837	108,574	105,018	106,357	105,643	3.0	1.4
Michigan							
Sulfur Dioxide	393	354	343	375	365	10.9	1.9
Nitrogen Oxides	241	233	224	238	235	3.4	.6
Carbon Dioxide	70,552	65,084	63,294	67,036	66,866	8.4	1.3
Ohio							
Sulfur Dioxide	1,818	2,131	2,170	2,183	2,193	-14.7	-4.6
Nitrogen Oxides	402	424	424	417	408	-5.3	-.4
Carbon Dioxide	120,931	126,012	122,699	120,337	117,142	-4.0	.8
Wisconsin							
Sulfur Dioxide	189	181	259	286	278	4.3	-9.2
Nitrogen Oxides	119	116	110	119	115	2.4	.9
Carbon Dioxide	32,659	30,562	30,217	30,904	29,786	6.9	2.3
West North Central							
Sulfur Dioxide	1,070	1,016	1,195	1,294	1,336	5.3	-5.4
Nitrogen Oxides	665	649	620	655	647	2.6	.7
Carbon Dioxide	192,095	188,637	180,692	185,036	188,285	1.8	.5
Iowa							
Sulfur Dioxide	172	175	174	182	179	-2.1	-1.0
Nitrogen Oxides	114	115	109	115	110	-1.6	.7
Carbon Dioxide	26,009	26,237	24,612	25,604	28,667	-.9	-2.4

See footnotes at end of table.

Table 108. Estimated Emissions from Coal-Fired Electric Generation, by Census Division and State, 1990-1994 (Continued)
(Thousand Short Tons)

Census Division and State	1994	1993	1992	1991	1990	Percent Change 1993-1994	Average Annual Percent Change
							1990-1994
Kansas							
Sulfur Dioxide	71	70	66	76	87	1.8	-4.8
Nitrogen Oxides	107	107	79	86	91	-.1	4.2
Carbon Dioxide	30,555	31,609	26,207	27,713	28,428	-3.3	1.8
Minnesota							
Sulfur Dioxide	87	87	77	80	84	-.6	.7
Nitrogen Oxides	112	115	103	116	110	-1.9	.6
Carbon Dioxide	32,596	32,770	29,665	30,313	31,262	-.5	1.0
Missouri							
Sulfur Dioxide	505	463	664	726	779	9.1	-10.3
Nitrogen Oxides	201	178	203	207	208	12.4	-.9
Carbon Dioxide	50,590	45,067	50,189	51,159	51,551	12.3	-.5
Nebraska							
Sulfur Dioxide	54	58	52	53	51	-6.6	1.9
Nitrogen Oxides	64	66	56	61	63	-3.0	.4
Carbon Dioxide	16,045	16,806	14,315	15,473	14,580	-4.5	2.4
North Dakota							
Sulfur Dioxide	148	131	130	145	126	12.5	4.1
Nitrogen Oxides	56	57	59	58	55	-.6	.4
Carbon Dioxide	33,204	33,298	32,865	31,733	30,999	-.3	1.7
South Dakota							
Sulfur Dioxide	33	31	32	33	31	8.5	1.7
Nitrogen Oxides	12	11	11	12	10	8.8	2.8
Carbon Dioxide	3,096	2,850	2,841	3,042	2,798	8.6	2.6
South Atlantic							
Sulfur Dioxide	2,638	3,050	3,139	3,104	3,197	-13.5	-4.7
Nitrogen Oxides	913	941	907	905	934	-2.9	-.5
Carbon Dioxide	323,844	334,732	307,981	312,545	323,246	-3.3	*
Delaware							
Sulfur Dioxide	35	39	31	39	41	-9.9	-3.4
Nitrogen Oxides	14	16	12	15	16	-13.5	-3.6
Carbon Dioxide	5,334	5,790	4,327	6,561	6,583	-7.9	-5.1
Florida							
Sulfur Dioxide	444	460	533	514	472	-3.5	-1.5
Nitrogen Oxides	192	197	199	199	184	-2.4	1.1
Carbon Dioxide	50,557	62,486	51,313	62,015	60,208	-19.1	-4.3
Georgia							
Sulfur Dioxide	553	687	766	774	853	-19.6	-10.3
Nitrogen Oxides	144	147	142	157	179	-1.7	-5.3
Carbon Dioxide	61,820	59,140	55,732	56,701	64,291	4.5	-1.0
Maryland							
Sulfur Dioxide	218	236	228	224	250	-7.9	-3.4
Nitrogen Oxides	68	70	66	61	66	-2.7	.8
Carbon Dioxide	25,633	25,016	23,724	22,693	23,570	2.5	2.1
North Carolina							
Sulfur Dioxide	362	421	368	322	328	-14.0	2.5
Nitrogen Oxides	145	166	152	134	130	-12.5	2.8
Carbon Dioxide	52,548	58,988	53,833	46,689	46,554	-10.9	3.1
South Carolina							
Sulfur Dioxide	187	178	150	159	163	5.5	3.5
Nitrogen Oxides	71	69	61	61	60	2.8	4.2
Carbon Dioxide	27,541	27,039	23,627	23,898	23,448	1.9	4.1
Virginia							
Sulfur Dioxide	159	178	165	162	149	-10.6	1.6
Nitrogen Oxides	55	59	55	55	53	-6.6	.9
Carbon Dioxide	22,614	24,883	22,788	22,500	21,505	-9.1	1.3
West Virginia							
Sulfur Dioxide	679	850	897	909	942	-20.1	-7.8
Nitrogen Oxides	224	217	221	223	245	3.3	-2.3
Carbon Dioxide	77,797	71,390	72,637	71,489	77,088	9.0	.2
East South Central							
Sulfur Dioxide	1,779	2,297	2,148	2,075	2,116	-22.5	-4.2
Nitrogen Oxides	611	677	599	589	582	-9.8	1.2
Carbon Dioxide	207,467	219,866	194,727	189,588	186,444	-5.6	2.7

See footnotes at end of table.

Table 108. Estimated Emissions from Coal-Fired Electric Generation, by Census Division and State, 1990-1994 (Continued)
(Thousand Short Tons)

Census Division and State	1994	1993	1992	1991	1990	Percent Change 1993-1994	Average Annual Percent Change
							1990-1994
Alabama							
Sulfur Dioxide	512	548	523	519	508	-6.6	0.2
Nitrogen Oxides	164	188	169	165	151	-12.4	2.1
Carbon Dioxide	63,980	67,926	61,786	59,268	54,545	-5.8	4.1
Kentucky							
Sulfur Dioxide	685	826	749	723	726	-17.1	-1.4
Nitrogen Oxides	270	287	258	256	252	-5.8	1.8
Carbon Dioxide	81,374	83,029	74,549	73,398	71,445	-2.0	3.3
Mississippi							
Sulfur Dioxide	76	88	94	97	105	-14.2	-7.8
Nitrogen Oxides	24	26	23	26	28	-6.4	-3.6
Carbon Dioxide	9,267	9,476	8,201	9,199	9,946	-2.2	-1.8
Tennessee							
Sulfur Dioxide	507	834	783	736	776	-39.3	-10.1
Nitrogen Oxides	152	176	150	142	151	-13.8	.2
Carbon Dioxide	52,846	59,435	50,191	47,723	50,508	-11.1	1.1
West South Central							
Sulfur Dioxide	750	783	755	730	730	-4.1	.7
Nitrogen Oxides	597	622	606	612	584	-3.9	.6
Carbon Dioxide	210,908	215,416	208,874	207,321	202,798	-2.1	1.0
Arkansas							
Sulfur Dioxide	68	62	66	66	69	8.7	-.5
Nitrogen Oxides	60	56	64	64	63	7.7	-1.0
Carbon Dioxide	22,274	20,128	22,161	21,949	21,591	10.7	.8
Louisiana							
Sulfur Dioxide	121	116	110	103	98	3.7	5.3
Nitrogen Oxides	72	79	77	73	70	-8.3	.7
Carbon Dioxide	24,417	23,653	22,852	21,126	19,961	3.2	5.2
Oklahoma							
Sulfur Dioxide	92	104	107	103	102	-11.9	-2.4
Nitrogen Oxides	93	96	91	90	86	-3.6	1.9
Carbon Dioxide	30,781	32,336	30,937	29,257	27,867	-4.8	2.5
Texas							
Sulfur Dioxide	470	500	472	458	461	-5.9	.5
Nitrogen Oxides	372	390	374	386	365	-4.8	.5
Carbon Dioxide	133,436	139,299	132,925	134,988	133,378	-4.2	*
Mountain							
Sulfur Dioxide	476	452	455	428	439	5.2	2.0
Nitrogen Oxides	529	508	520	504	523	3.9	.3
Carbon Dioxide	204,787	201,553	194,127	181,465	171,070	1.6	4.6
Arizona							
Sulfur Dioxide	137	130	125	119	115	5.0	4.4
Nitrogen Oxides	106	102	96	91	92	3.6	3.7
Carbon Dioxide	26,463	31,194	26,537	23,690	24,659	-15.2	1.8
Colorado							
Sulfur Dioxide	88	83	85	82	86	6.6	.5
Nitrogen Oxides	101	99	98	100	103	2.2	-.5
Carbon Dioxide	34,205	32,520	32,055	31,518	23,020	5.2	10.4
Montana							
Sulfur Dioxide	21	20	22	20	18	3.0	4.0
Nitrogen Oxides	51	42	52	55	50	20.7	.4
Carbon Dioxide	19,026	15,908	19,692	18,737	17,232	19.6	2.5
Nevada							
Sulfur Dioxide	53	52	57	54	53	1.1	-.3
Nitrogen Oxides	46	45	47	46	43	1.6	1.7
Carbon Dioxide	19,012	18,763	19,501	19,512	17,865	1.3	1.6
New Mexico							
Sulfur Dioxide	63	58	58	50	60	9.3	1.4
Nitrogen Oxides	97	94	94	82	103	2.9	-1.7
Carbon Dioxide	29,011	28,411	18,047	15,770	17,607	2.1	13.3
Utah							
Sulfur Dioxide	29	31	30	28	31	-6.5	-1.7
Nitrogen Oxides	43	43	50	50	51	-.2	-4.4
Carbon Dioxide	33,235	32,888	32,441	30,276	32,466	1.0	.6

See footnotes at end of table.

Table 108. Estimated Emissions from Coal-Fired Electric Generation, by Census Division and State, 1990-1994 (Continued)
(Thousand Short Tons)

Census Division and State	1994	1993	1992	1991	1990	Percent Change 1993-1994	Average Annual Percent Change
							1990-1994
Wyoming							
Sulfur Dioxide	85	78	78	75	76	9.3	3.0
Nitrogen Oxides	86	84	84	80	81	2.5	1.5
Carbon Dioxide	43,835	41,869	45,853	41,962	38,221	4.7	3.5
Pacific							
Sulfur Dioxide	83	83	85	71	65	-1.0	6.3
Nitrogen Oxides	49	45	48	42	33	8.2	10.0
Carbon Dioxide	14,799	13,447	14,562	11,959	9,565	10.0	11.5
Alaska							
Sulfur Dioxide	1	1	1	1	1	-2.4	-3.1
Oregon							
Sulfur Dioxide	14	13	14	11	5	12.3	30.8
Nitrogen Oxides	14	13	13	12	6	12.3	26.8
Carbon Dioxide	4,120	3,685	4,007	3,246	1,495	11.8	28.8
Washington							
Sulfur Dioxide	67	70	70	59	59	-3.4	3.5
Nitrogen Oxides	35	33	35	30	28	6.6	5.5
Carbon Dioxide	10,678	9,762	10,555	8,713	8,070	9.4	7.3
U.S. Total							
Sulfur Dioxide	12,590	13,844	14,144	14,370	14,740	-9.1	-3.9
Nitrogen Oxides	5,148	5,288	5,096	5,158	5,156	-2.6	*
Carbon Dioxide	1,691,926	1,711,673	1,625,526	1,621,545	1,612,759	-1.1	1.2

* Data round to zero.

Notes: Estimates are derived from the Form EIA-767, "Steam-Electric Plant Operation and Design Report." (See Explanatory Notes for methodology.)
Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration, Form EIA-767, "Steam-Electric Plant Operation and Design Report."

Table 109. Estimated Emissions from Fossil-Fuel Electric Generation by Census Division, State and Fuel, 1994
(Thousand Short Tons)

Census Division and State	Coal			Petroleum			Gas			Other		
	Sulfur Dioxide	Nitrogen Oxides	Carbon Dioxide	Sulfur Dioxide	Nitrogen Oxides	Carbon Dioxide	Sulfur Dioxide	Nitrogen Oxides	Carbon Dioxide	Sulfur Dioxide	Nitrogen Oxides	Carbon Dioxide
New England Total	111	44	15,723	87	17	11,142	*	8	2,832	*	*	175
Connecticut	8	5	2,177	17	4	3,094	*	1	474	*	*	15
Maine	0	0	0	5	1	684	0	0	0	0	0	0
Massachusetts	64	23	10,102	54	10	6,055	*	7	2,240	*	*	12
New Hampshire	38	16	3,444	12	2	1,271	0	*	77	*	*	12
Rhode Island	0	0	0	*	*	36	0	*	32	0	0	0
Vermont	0	0	0	*	*	3	0	*	9	*	*	135
Middle Atlantic Total	1,338	296	123,106	66	24	17,401	*	31	13,597	*	*	45
New Jersey	48	23	5,321	4	3	1,485	*	6	1,843	*	*	1
New York	200	51	21,929	45	16	11,482	*	24	10,981	0	0	0
Pennsylvania	1,090	222	95,856	17	6	4,435	*	1	773	*	*	43
East North Central Total	4,346	1,444	399,197	10	3	2,440	*	8	2,972	1	1	720
Illinois	774	273	63,218	6	2	1,294	*	5	2,039	0	0	1
Indiana	1,172	409	111,837	*	*	172	*	1	463	0	0	0
Michigan	393	241	70,552	3	1	704	*	1	310	0	0	*
Ohio	1,818	402	120,931	*	*	239	0	*	38	1	1	442
Wisconsin	189	119	32,659	*	*	30	*	*	123	*	*	277
West North Central Total	1,070	665	192,095	1	*	262	*	8	2,280	1	1	1,032
Iowa	172	114	26,009	*	*	35	*	*	105	*	*	40
Kansas	71	107	30,555	*	*	47	*	5	1,480	*	*	1
Minnesota	87	112	32,596	*	*	21	*	1	361	1	1	983
Missouri	505	201	50,590	1	*	111	*	1	188	0	*	*
Nebraska	54	64	16,045	*	*	7	*	*	144	0	*	*
North Dakota	148	56	33,204	*	*	38	0	0	*	0	0	0
South Dakota	33	12	3,096	*	*	3	0	*	2	*	*	8
South Atlantic Total	2,638	913	323,844	305	60	36,672	*	21	6,774	*	*	175
Delaware	35	14	5,334	8	2	1,445	*	1	275	*	*	5
District of Columbia	0	0	0	2	*	268	0	0	0	*	*	17
Florida	444	192	50,557	250	50	28,833	*	19	5,720	*	*	43
Georgia	553	144	61,820	1	*	95	0	*	52	*	*	7
Maryland	218	68	25,633	31	5	3,675	*	1	520	*	*	102
North Carolina	362	145	52,548	*	*	159	0	0	0	0	0	0
South Carolina	187	71	27,541	*	*	88	*	*	150	0	0	*
Virginia	159	55	22,614	13	2	1,919	0	*	35	0	0	0
West Virginia	679	224	77,797	*	*	189	0	*	21	0	0	0
East South Central Total	1,779	611	207,467	16	2	1,234	*	12	3,946	*	*	8
Alabama	512	164	63,980	*	*	76	*	1	203	0	0	0
Kentucky	685	270	81,374	*	*	120	0	*	15	0	*	*
Mississippi	76	24	9,267	16	2	943	*	12	3,728	*	*	8
Tennessee	507	152	52,846	*	*	96	0	0	0	0	0	0
West South Central Total	750	597	210,908	2	1	599	*	255	85,794	0	0	0
Arkansas	68	60	22,274	*	*	76	*	4	1,506	0	0	0
Louisiana	121	72	24,417	1	*	219	*	45	15,338	0	0	0
Oklahoma	92	93	30,781	*	*	31	*	27	8,034	0	0	0
Texas	470	372	133,436	1	*	272	*	179	60,916	0	0	0
Mountain Total	476	529	204,787	1	1	355	*	13	4,706	0	*	*
Arizona	137	106	26,463	*	*	114	*	2	716	0	0	0
Colorado	88	101	34,205	*	*	5	*	1	282	0	*	*
Montana	21	51	19,026	*	*	9	0	*	31	0	*	*
Nevada	53	46	19,012	1	*	143	*	5	1,413	0	0	0
New Mexico	63	97	29,011	*	*	21	*	4	1,810	0	0	0
Utah	29	43	33,235	*	*	23	*	1	446	0	0	0
Wyoming	85	86	43,835	*	*	39	0	*	7	0	0	0
Pacific Contiguous Total	82	49	14,799	4	2	1,571	*	92	34,900	*	*	632
California	0	0	0	4	2	1,562	*	92	34,899	0	0	0
Oregon	14	14	4,120	*	*	5	0	0	0	0	0	0
Washington	67	35	10,678	*	*	5	0	*	*	*	*	632
Pacific Noncontiguous												
Total	1	0	0	18	8	4,610	0	0	0	0	0	0
Alaska	1	0	0	*	*	1	0	0	0	0	0	0
Hawaii	0	0	0	18	8	4,609	0	0	0	0	0	0
U.S. Total	12,590	5,148	1,691,926	510	118	76,286	1	450	157,800	2	3	2,786

* Data round to zero.

Notes: Estimates are derived from the Form EIA-767, "Steam-Electric Plant Operation and Design Report." (See Technical Notes for methodology.) Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration, Form EIA-767, "Steam-Electric Plant Operation and Design Report."

Appendix A

Major Coal Producing States

Lignite is being transported across the Louisiana & Pacific Railroads by Texas Utilities Mining Company's electric-powered rail system.

Major Coal Producing States

U.S. Coal production totaled 1,034 million short tons in 1994. Wyoming, West Virginia, and Kentucky accounted for 54 percent of total coal production.

Table A1. Alabama Coal Statistics, 1985, 1990-1994

Category	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
Supply (thousand short tons)									
Recoverable Reserves	457,144	426,635	467,741	470,434	489,395	601,396	7.1	-1.7	-3.0
Productive Capacity¹	33,049	27,916	29,815	30,195	NA	31,899	18.4	NA	.4
Production Total	23,266	24,768	25,796	27,269	29,030	27,685	-6.1	-5.4	-1.9
Underground	14,471	15,557	15,944	17,070	17,540	14,418	-7.0	-4.7	*
Surface	8,795	9,211	9,852	10,199	11,490	13,267	-4.5	-6.5	-4.5
Capacity Utilization²	70.19	88.46	86.26	89.97	NA	86.79	-20.6	NA	-2.3
Ratio of Recoverable Reserves to Production	19.6	17.2	18.1	17.3	16.9	21.7	14.1	3.9	-1.1
Number of Miners	5,418	5,399	5,386	6,314	6,534	8,616	.3	-4.6	-5.0
Productivity Total³	2.25	2.35	2.49	2.17	2.23	1.70	-4.3	.2	3.2
Underground	1.94	2.09	2.17	1.90	2.01	1.34	-6.9	-.9	4.2
Surface	3.07	3.01	3.28	2.84	2.69	2.40	1.9	3.4	2.8
Producer/Distributor Stocks .	1,204	1,698	2,185	2,233	2,764	-	-29.1	-18.8	-
Imports³	178	88	-	-	-	-	102.9	-	-
Distribution (thousand short tons)									
Distribution Total	23,750	25,556	25,491	27,679	28,735	NA	-7.1	-4.6	NA
Domestic Distribution Total	19,220	19,668	19,560	20,667	20,545	NA	-2.3	-1.6	NA
Within State	18,351	18,716	18,849	20,150	19,535	NA	-1.9	-1.5	NA
To Other States	870	952	711	517	1,010	NA	-8.7	-3.7	NA
Foreign Distribution Total ...	4,529	5,888	5,931	7,012	8,190	NA	-23.1	-13.8	NA
Metallurgical	4,353	5,841	5,789	6,476	7,724	NA	-25.5	-13.4	NA
Steam	176	47	142	536	466	NA	275.8	-21.5	NA
Overseas Total⁴	4,529	5,888	5,931	7,012	8,190	NA	-23.1	-13.8	NA
Metallurgical	4,353	5,841	5,789	6,476	7,724	NA	-25.5	-13.4	NA
Steam	176	47	142	536	466	NA	275.8	-21.5	NA
Demand (thousand short tons)									
Consumption Total	31,473	33,047	31,510	29,349	27,640	27,069	-4.8	3.3	1.7
Electric Utility	25,817	27,533	24,988	23,700	22,010	21,545	-6.2	4.1	2.0
Industrial	2,394	2,268	3,136	2,468	2,237	2,541	5.5	1.7	-.7
Coke	3,253	3,206	3,297	3,166	3,288	2,883	1.4	-.3	1.3
Residential/Commercial	11	40	89	17	105	99	-73.4	-43.5	-22.0
Consumer Stocks Total	4,132	2,797	4,529	4,671	4,372	4,833	47.7	-1.4	-1.7
Electric Utility	3,652	2,331	4,071	4,247	3,869	4,324	56.6	-1.4	-1.8
All Other	480	466	458	424	503	509	3.0	-1.2	-.6
Coal Prices (nominal dollars per short ton)									
Mine Total	\$40.12	\$42.34	\$40.82	\$41.14	\$43.04	\$42.84	-5.2	-1.7	-.7
Underground	39.92	42.00	40.70	40.19	42.48	44.22	-5.0	-1.5	-1.1
Surface	40.45	42.91	41.02	42.72	43.90	41.35	-5.7	-2.0	-.2
Consumer									
Electric Utility	40.42	42.56	41.67	43.82	44.58	48.71	-5.0	-2.4	-2.0
Industrial	38.74	39.01	39.76	40.43	40.58	45.31	-.7	-1.1	-1.7
Coke	47.45	47.50	47.80	48.35	48.93	54.19	-.1	-.8	-1.5

¹ For 1985, the Form EIA-7A solicited data on "Daily Productive Capacity." To obtain annual productive capacity for a mine in 1985, 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 1994 include imports to electric utilities, manufacturing plants and coke plants. Imports for 1985 through 1991 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."

Table A2. Arizona Coal Statistics, 1985, 1990-1994

Category	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
Supply (thousand short tons)									
Recoverable Reserves	w	w	w	w	w	w	w	w	w
Productive Capacity ¹	w	w	w	13,800	NA	w	0.6	NA	w
Production Total	13,056	12,173	12,512	13,203	11,304	9,625	7.3	3.7	3.4
Surface	13,056	12,173	12,512	13,203	11,304	9,625	7.3	3.7	3.4
Capacity Utilization ²	w	w	w	95.67	NA	w	6.6	NA	w
Ratio of Recoverable Reserves to Production	w	w	w	w	w	w	w	w	w
Number of Miners	864	876	888	900	951	885	-1.4	-2.4	-.3
Productivity Total ³	6.71	6.21	6.29	6.64	5.93	6.53	8.0	3.1	.3
Surface	6.71	6.21	6.29	6.64	5.93	6.53	8.0	3.1	.3
Producer/Distributor Stocks .	2,634	1,590	1,555	1,461	1,191	-	65.7	22.0	-
Distribution (thousand short tons)									
Distribution Total	12,011	12,138	12,418	12,933	11,446	NA	-1.0	1.2	NA
Domestic Distribution Total	12,011	12,138	12,418	12,933	11,446	NA	-1.0	1.2	NA
Within State	7,580	7,566	7,441	7,869	7,275	NA	.2	1.0	NA
To Other States	4,431	4,572	4,977	5,064	4,171	NA	-3.1	1.5	NA
Demand (thousand short tons)									
Consumption Total	19,580	18,991	17,915	16,805	16,419	16,364	3.1	4.5	2.0
Electric Utility	18,853	18,316	17,280	16,116	15,758	14,448	2.9	4.6	3.0
Industrial	727	674	632	689	660	w	7.8	2.4	w
Residential/Commercial	*	1	4	*	w	w	-90.4	w	w
Consumer Stocks Total	3,242	3,717	3,596	4,229	3,129	w	-12.8	.9	w
Electric Utility	3,197	3,687	3,543	4,177	3,090	3,163	-13.3	.8	.1
All Other	45	30	53	52	39	w	47.9	3.7	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	\$28.26	\$27.78	\$28.31	\$29.16	\$29.98	\$27.41	1.7	-1.5	.3
Industrial	41.35	40.51	40.95	40.09	39.54	w	2.1	1.1	w

¹ For 1985, the Form EIA-7A solicited data on "Daily Productive Capacity." To obtain annual productive capacity for a mine in 1985, 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, 1985, 1990-1994

Category	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
Supply (thousand short tons)									
Recoverable Reserves	676,272	608,815	608,067	617,752	546,239	639,885	11.1	5.5	0.6
Productive Capacity ¹	31,075	30,040	25,848	23,593	NA	18,998	3.4	NA	5.6
Production Total	25,304	21,886	19,226	17,834	18,910	17,202	15.6	7.5	4.4
Underground	16,332	12,843	10,246	9,601	10,628	6,346	27.2	11.3	11.1
Surface	8,972	9,043	8,981	8,233	8,281	10,856	-8	2.0	-2.1
Capacity Utilization ²	81.41	72.84	74.35	75.58	NA	90.55	11.8	NA	-1.2
Ratio of Recoverable Reserves to Production	26.7	27.8	31.6	34.6	28.9	37.2	-3.9	-1.9	-3.6
Number of Miners	1,905	1,775	1,610	2,037	2,009	2,551	7.3	-1.3	-3.2
Productivity Total ²	6.20	5.85	5.27	5.05	4.24	3.30	6.0	10.0	7.3
Underground	5.81	5.21	4.52	4.23	3.26	2.16	11.4	15.5	11.6
Surface	7.06	7.07	6.52	6.51	6.86	4.78	-1	.7	4.4
Producer/Distributor Stocks .	1,575	1,155	955	850	1,274	-	36.3	5.4	-
Distribution (thousand short tons)									
Distribution Total	24,810	21,465	18,864	17,757	18,386	NA	15.6	7.8	NA
Domestic Distribution Total	24,059	20,338	18,195	17,132	18,019	NA	18.3	7.5	NA
Within State	12,035	11,181	11,241	10,911	10,703	NA	7.6	3.0	NA
To Other States	12,024	9,157	6,954	6,222	7,316	NA	31.3	13.2	NA
Foreign Distribution Total ...	752	1,128	669	625	367	NA	-33.3	19.7	NA
Metallurgical	-	-	-	-	290	NA	-	-100.0	NA
Steam	752	1,128	669	625	77	NA	-33.3	76.9	NA
Overseas Total ³	752	1,128	669	625	367	NA	-33.3	19.7	NA
Metallurgical	-	-	-	-	290	NA	-	-	NA
Steam	752	1,128	669	625	77	NA	-33.3	76.9	NA
Demand (thousand short tons)									
Consumption Total	17,475	17,070	16,696	16,218	16,710	15,242	2.4	1.1	1.5
Electric Utility	16,596	16,252	15,902	15,416	15,924	14,295	2.1	1.0	1.7
Industrial	857	780	735	738	729	791	9.8	4.1	.9
Residential/Commercial	23	38	58	65	w	w	-39.4	w	w
Consumer Stocks Total	3,145	3,454	3,439	3,487	3,334	w	-8.9	-1.4	w
Electric Utility	3,118	3,428	3,410	3,466	3,298	4,989	-9.0	-1.4	-5.1
All Other	26	25	29	21	36	w	3.8	-7.9	w
Coal Prices (nominal dollars per short ton)									
Mine Total	\$19.76	\$20.35	\$21.33	\$22.18	\$21.75	\$24.65	-2.9	-2.4	-2.4
Underground	19.05	20.53	21.80	24.09	24.27	28.91	-7.2	-5.9	-4.5
Surface	21.05	20.10	20.80	19.96	18.53	22.16	4.7	3.2	-6
Consumer									
Electric Utility	21.01	21.59	21.67	21.49	20.81	22.49	-2.7	.2	-8
Industrial	28.96	28.63	30.34	29.27	26.93	28.24	1.1	1.8	.3

¹ For 1985, the Form EIA-7A solicited data on "Daily Productive Capacity." To obtain annual productive capacity for a mine in 1985, 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, 1985, 1990-1994

Category	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
Supply (thousand short tons)									
Recoverable Reserves	963,470	1,063,832	1,199,313	1,256,524	1,173,982	1,590,899	-9.4	-4.8	-5.4
Productive Capacity ¹	69,414	69,320	75,787	75,710	NA	66,919	.1	NA	.4
Production Total	52,797	41,098	59,857	60,258	60,393	59,201	28.5	-3.3	-1.3
Underground	43,281	33,096	46,965	43,134	41,671	37,343	30.8	.9	1.6
Surface	9,516	8,002	12,892	17,124	18,722	21,858	18.9	-15.6	-8.8
Capacity Utilization ²	76.06	59.28	78.98	79.58	NA	88.47	28.3	NA	-1.7
Ratio of Recoverable Reserves to Production	18.3	25.9	20.0	20.8	19.4	26.9	-29.5	-1.6	-4.2
Number of Miners	6,591	7,303	8,323	9,102	10,018	13,858	-9.7	-9.9	-7.9
Productivity Total ³	3.59	3.23	3.42	3.18	2.94	2.14	11.3	5.2	5.9
Underground	3.49	3.11	3.21	2.88	2.70	1.92	12.5	6.6	6.9
Surface	4.12	3.86	4.47	4.30	3.64	2.69	6.7	3.1	4.8
Producer/Distributor Stocks .	1,651	713	1,969	1,418	1,955	-	131.4	-4.1	-
Imports ⁴	346	51	54	-	-	-	NM	-	-
Distribution (thousand short tons)									
Distribution Total	51,973	42,000	58,913	58,553	60,592	NA	23.8	-3.8	NA
Domestic Distribution Total	51,737	41,330	57,670	57,290	60,222	NA	25.2	-3.7	NA
Within State	17,517	15,206	18,167	18,787	18,700	NA	15.2	-1.6	NA
To Other States	34,220	26,124	39,503	38,503	41,522	NA	31.0	-4.7	NA
Foreign Distribution Total ...	236	670	1,242	1,263	370	NA	-64.8	-10.6	NA
Metallurgical	236	109	614	546	237	NA	115.8	-1	NA
Steam	-	561	629	717	133	NA	-100.0	-100.0	NA
Canada Total	-	-	-	4	-	NA	-	-	NA
Steam	-	-	-	4	-	NA	-	-	NA
Overseas Total ⁴	236	670	1,242	1,259	370	NA	-64.8	-10.6	NA
Metallurgical	236	109	614	546	237	NA	115.8	-1	NA
Steam	-	561	629	713	133	NA	-100.0	-	NA
Demand (thousand short tons)									
Consumption Total	39,077	38,135	31,599	34,677	33,904	37,601	2.5	3.6	.4
Electric Utility	32,599	31,744	25,264	27,754	27,396	31,608	2.7	4.4	.3
Industrial	4,187	3,970	3,736	4,426	3,888	3,399	5.5	1.9	2.3
Coke	w	w	w	w	w	2,358	w	w	w
Residential/Commercial	w	w	w	w	w	236	w	w	w
Consumer Stocks Total	w	w	w	w	w	7,836	w	w	w
Electric Utility	4,526	4,019	7,399	6,977	7,398	6,977	12.6	-11.6	-4.7
All Other	w	w	w	w	w	859	w	w	w
Coal Prices (nominal dollars per short ton)									
Mine Total	\$23.14	\$25.27	\$27.66	\$28.35	\$27.73	\$30.80	-8.5	-4.4	-3.1
Underground	23.18	25.54	27.93	29.05	28.30	31.78	-9.2	-4.9	-3.4
Surface	22.92	24.18	26.69	26.59	26.45	29.14	-5.2	-3.5	-2.6
Consumer									
Electric Utility	32.69	35.30	37.06	36.76	37.79	45.60	-7.4	-3.5	-3.6
Industrial	29.13	29.42	29.24	30.81	31.28	39.11	-1.0	-1.8	-3.2
Coke	w	w	w	w	w	55.83	w	w	w

¹ For 1985, the Form EIA-7A solicited data on "Daily Productive Capacity." To obtain annual productive capacity for a mine in 1985, 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 1994 include imports to electric utilities, manufacturing plants and coke plants. Imports for 1985 through 1991 include only imports to electric utilities.

⁴ Includes Mexico.

w Withheld to avoid disclosure of individual company data.

NM Not meaningful as value is greater than 500.

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, 1985, 1990-1994

Category	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
Supply (thousand short tons)									
Recoverable Reserves	304,225	379,294	404,549	419,790	444,020	542,089	-19.8	-9.0	-6.2
Productive Capacity ¹	38,931	43,955	42,990	45,155	NA	36,107	-11.4	NA	.8
Production Total	30,927	29,295	30,466	31,468	35,907	33,294	5.6	-3.7	-.8
Underground	3,324	2,583	2,641	2,832	3,037	2,053	28.7	2.3	5.5
Surface	27,603	26,713	27,825	28,636	32,870	31,241	3.3	-4.3	-1.4
Capacity Utilization ²	79.37	66.60	70.86	69.66	NA	92.21	19.2	NA	-1.6
Ratio of Recoverable Reserves to Production	9.8	12.9	13.3	13.3	12.4	16.3	-24.0	-5.5	-5.4
Number of Miners	3,206	3,331	3,652	3,919	4,195	5,187	-3.8	-6.5	-5.2
Productivity Total ³	4.28	4.46	4.09	4.02	3.84	2.85	-4.0	2.7	4.6
Underground	2.82	2.49	2.80	2.97	2.90	1.79	13.2	-.7	5.2
Surface	4.56	4.82	4.28	4.17	3.96	2.97	-5.5	3.6	4.9
Producer/Distributor Stocks ..	803	527	1,016	525	559	-	52.4	9.5	-
Imports ³	593	594	-	-	-	-	-2	-	-
Distribution (thousand short tons)									
Distribution Total	30,684	29,664	31,393	31,412	36,122	NA	3.4	-4.0	NA
Domestic Distribution Total ..	30,477	29,475	31,216	31,204	35,967	NA	3.4	-4.1	NA
Within State	24,733	23,913	24,655	22,619	25,301	NA	3.4	-.6	NA
To Other States	5,744	5,562	6,561	8,585	10,666	NA	3.3	-14.3	NA
Foreign Distribution Total ...	206	188	177	208	155	NA	9.5	7.4	NA
Steam	206	188	177	208	155	NA	9.5	7.4	NA
Canada Total	-	-	-	3	1	NA	-	-	NA
Steam	-	-	-	3	1	NA	-	-	NA
Overseas Total ⁴	206	188	177	204	154	NA	9.5	7.5	NA
Steam	206	188	177	204	154	NA	9.5	7.5	NA
Demand (thousand short tons)									
Consumption Total	59,996	60,353	58,765	60,790	61,701	53,291	-.6	-.7	1.3
Electric Utility	50,554	48,836	46,937	47,720	47,654	38,310	3.5	1.5	3.1
Industrial	4,244	4,587	4,263	4,404	4,629	5,119	-7.5	-2.1	-2.1
Coke	4,841	6,591	7,153	8,234	8,867	9,338	-26.5	-14.0	-7.0
Residential/Commercial	356	339	411	433	551	524	5.0	-10.3	-4.2
Consumer Stocks Total	11,707	7,798	12,507	11,387	12,226	12,869	50.1	-1.1	-1.0
Electric Utility	10,449	6,935	11,294	9,953	10,610	11,322	50.7	-.4	-.9
All Other	1,258	863	1,214	1,434	1,616	1,547	45.7	-6.1	-2.3
Coal Prices (nominal dollars per short ton)									
Mine Total	\$22.28	\$22.89	\$23.41	\$23.58	\$23.91	\$26.54	-2.7	-1.7	-1.9
Underground	w	w	w	w	w	w	w	w	w
Surface	w	w	w	w	w	w	w	w	w
Consumer									
Electric Utility	\$26.79	\$26.73	\$27.89	\$28.41	\$28.78	\$35.00	.2	-1.8	-2.9
Industrial	31.35	30.91	31.58	33.01	32.83	36.03	1.4	-1.1	-1.5
Coke	50.90	52.29	53.72	53.31	49.39	59.98	-2.6	.8	-1.8

¹ For 1985, the Form EIA-7A solicited data on "Daily Productive Capacity." To obtain annual productive capacity for a mine in 1985, 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 1994 include imports to electric utilities, manufacturing plants and coke plants. Imports for 1985 through 1991 include only imports to electric utilities.

⁴ 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 A6. Kentucky Coal Statistics, 1985, 1990-1994

Category	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
Supply (thousand short tons)									
Recoverable Reserves	1,365,188	1,828,072	1,452,789	1,632,076	1,585,081	1,767,179	-25.3	-3.7	-2.8
Productive Capacity ¹	213,427	204,805	195,352	199,282	NA	166,298	4.2	NA	2.8
Production Total	161,642	156,299	161,068	158,980	173,322	149,929	3.4	-1.7	.8
Underground	95,414	92,207	96,053	97,332	105,290	80,266	3.5	-2.4	1.9
Surface	66,227	64,092	65,016	61,647	68,032	69,664	3.3	-.7	-.6
Capacity Utilization ²	75.54	76.11	82.15	79.45	NA	90.16	-.8	NA	-1.9
Ratio of Recoverable Reserves to Production	8.4	11.7	9.0	10.3	9.1	11.8	-27.8	-2.0	-3.6
Number of Miners	23,368	24,063	24,624	26,642	30,498	36,814	-2.9	-6.4	-4.9
Productivity Total ²	3.25	3.25	3.20	3.01	2.83	2.23	.1	3.5	4.3
Underground	2.89	2.93	2.91	2.71	2.54	1.94	-1.4	3.3	4.5
Surface	3.96	3.84	3.75	3.66	3.43	2.69	3.3	3.6	4.4
Producer/Distributor Stocks .	5,025	3,216	3,796	4,646	4,114	-	56.3	5.1	-
Distribution (thousand short tons)									
Domestic Distribution Total	151,963	150,874	147,825	142,811	157,587	NA	.7	-.9	NA
Within State	26,719	28,136	27,941	24,831	29,679	NA	-5.0	-2.6	NA
To Other States	125,244	122,738	119,883	117,980	127,908	NA	2.0	-.5	NA
Foreign Distribution Total ...	7,167	9,521	14,036	15,478	15,690	NA	-24.7	-17.8	NA
Metallurgical	2,180	3,310	4,971	4,354	7,104	NA	-34.1	-25.6	NA
Steam	4,987	6,212	9,065	11,124	8,586	NA	-19.7	-12.7	NA
Canada Total	1,099	1,416	2,078	1,560	1,727	NA	-22.3	-10.7	NA
Metallurgical	1,073	1,356	1,373	1,125	1,106	NA	-20.9	-.8	NA
Steam	26	60	705	435	621	NA	-56.2	-54.7	NA
Overseas Total ³	6,067	8,106	11,958	13,918	13,963	NA	-25.1	-18.8	NA
Metallurgical	1,107	1,954	3,599	3,229	5,998	NA	-43.3	-34.5	NA
Steam	4,961	6,152	8,359	10,689	7,966	NA	-19.4	-11.2	NA
Demand (thousand short tons)									
Consumption Total	38,090	39,095	34,704	34,517	34,449	30,990	-2.6	2.5	2.3
Electric Utility	34,564	35,264	31,715	31,432	30,867	27,085	-2.0	2.9	2.7
Industrial	1,994	2,392	1,648	2,044	2,253	2,510	-16.6	-3.0	-2.5
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	4,466	3,990	5,415	5,881	7,612	6,864	11.9	-12.5	-4.7
All Other	w	w	w	w	w	w	w	w	w
Coal Prices (nominal dollars per short ton)									
Mine Total	\$24.88	\$24.77	\$24.50	\$25.45	\$25.19	\$28.24	.4	-.3	-1.4
Underground	26.14	25.07	25.18	25.92	25.24	29.15	4.3	.9	-1.2
Surface	23.07	24.35	23.50	24.70	25.11	27.19	-5.3	-2.1	-1.8
Consumer									
Electric Utility	27.16	27.29	27.01	27.19	27.58	32.14	-.5	-.4	-1.8
Industrial	43.22	42.30	43.78	46.54	45.81	45.94	2.2	-1.4	-.7
Coke	w	w	w	w	w	w	w	w	w

¹ For 1985, the Form EIA-7A solicited data on "Daily Productive Capacity." To obtain annual productive capacity for a mine in 1985, 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 A7. Montana Coal Statistics, 1985, 1990-1994

Category	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
Supply (thousand short tons)									
Recoverable Reserves	1,282,525	1,284,806	1,351,609	1,392,795	1,872,492	1,761,962	-0.2	-9.0	-3.5
Productive Capacity¹	51,104	50,849	48,582	48,604	NA	34,752	.5	NA	4.4
Production Total	41,640	35,917	38,889	38,237	37,616	33,286	15.9	2.6	2.5
Underground	3	10	10	3	-	-	-69.9	-	-
Surface	41,636	35,907	38,879	38,235	37,616	33,286	15.9	2.6	2.5
Capacity Utilization²	81.47	70.64	80.03	78.65	NA	95.78	15.3	NA	-1.8
Ratio of Recoverable Reserves to Production	30.8	35.8	34.8	36.4	49.8	52.9	-13.9	-11.3	-5.8
Number of Miners	705	660	715	794	821	1,173	6.8	-3.7	-5.5
Productivity Total²	21.92	19.49	20.16	18.99	18.78	14.73	12.5	3.9	4.5
Underground	-	1.06	-	-	-	-	-100.0	-	-
Surface	21.92	19.59	20.16	18.99	18.78	14.73	11.9	3.9	4.5
Producer/Distributor Stocks .	635	876	694	571	613	-	-27.5	.9	-
Distribution (thousand short tons)									
Distribution Total	41,916	35,916	38,866	38,119	37,866	NA	16.7	2.6	NA
Domestic Distribution Total	41,672	35,795	38,804	37,812	37,294	NA	16.4	2.8	NA
Within State	10,581	9,115	11,159	10,578	9,742	NA	16.1	2.1	NA
To Other States	31,092	26,680	27,645	27,234	27,552	NA	16.5	3.1	NA
Foreign Distribution Total ...	243	121	62	306	572	NA	100.9	-19.2	NA
Steam	243	121	62	306	572	NA	100.9	-19.2	NA
Canada Total	90	54	-	10	417	NA	66.7	-31.9	NA
Steam	90	54	-	10	417	NA	66.7	-31.9	NA
Overseas Total³	153	67	62	297	155	NA	128.3	-.2	NA
Steam	153	67	62	297	155	NA	128.3	-.2	NA
Demand (thousand short tons)									
Consumption Total	11,089	9,247	11,040	10,549	9,676	5,713	19.9	3.5	7.6
Electric Utility	10,513	8,869	10,768	10,223	9,399	5,480	18.5	2.8	7.5
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	517	721	735	741	767	634	-28.2	-9.4	-2.2
All Other	w	w	w	w	w	w	w	w	w
Coal Prices (nominal dollars per short ton)									
Mine Total	\$10.39	\$11.05	\$10.20	\$10.76	\$9.42	\$13.18	-5.9	2.5	-2.6
Underground	-	w	-	-	-	-	-100.0	-	-
Surface	10.39	w	10.20	10.76	9.42	13.18	w	w	w
Consumer									
Electric Utility	11.79	\$11.78	12.14	11.44	11.47	12.23	*	.7	-.4
Industrial	w	w	w	w	w	w	w	w	w

¹ For 1985, the Form EIA-7A solicited data on "Daily Productive Capacity." To obtain annual productive capacity for a mine in 1985, 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.

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, 1985, 1990-1994

Category	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
Supply (thousand short tons)									
Recoverable Reserves	1,457,523	1,472,927	1,494,541	1,608,287	1,526,520	1,504,051	-1.0	-1.1	-0.3
Productive Capacity ¹	32,807	33,360	29,512	28,187	NA	24,258	-1.6	NA	3.4
Production Total	28,041	28,268	24,549	21,518	24,292	22,202	-8	3.6	2.6
Underground	950	719	93	25	76	803	32.1	88.1	1.9
Surface	27,091	27,549	24,456	21,492	24,217	21,399	-1.7	2.8	2.6
Capacity Utilization ²	85.47	84.74	83.18	76.34	NA	91.52	.9	NA	-8
Ratio of Recoverable									
Reserves to Production	52.0	52.1	60.9	74.7	62.8	67.7	-2	-4.6	-2.9
Number of Miners	1,786	1,762	1,683	1,650	1,472	1,929	1.4	4.9	-8
Productivity Total ³	6.77	6.68	6.68	6.25	7.64	5.43	1.4	-3.0	2.5
Underground	2.57	1.63	.40	.71	4.27	1.64	57.0	-11.9	5.1
Surface	7.18	7.26	7.11	6.31	7.66	5.95	-1.1	-1.6	2.1
Producer/Distributor Stocks .	1,467	2,343	1,648	1,760	2,401	-	-37.4	-11.6	-
Distribution (thousand short tons)									
Distribution Total	28,570	27,942	24,827	22,378	23,380	NA	2.3	5.1	NA
Domestic Distribution Total	28,540	27,942	24,823	22,378	23,380	NA	2.1	5.1	NA
Within State	15,464	14,938	14,829	13,130	15,232	NA	3.5	.4	NA
To Other States	13,076	13,004	9,993	9,248	8,149	NA	.5	12.5	NA
Foreign Distribution Total ...	30	-	5	-	-	NA	-	-	NA
Steam	30	-	5	-	-	NA	-	-	NA
Overseas Total ⁴	30	-	5	-	-	NA	-	-	NA
Steam	30	-	5	-	-	NA	-	-	NA
Demand (thousand short tons)									
Consumption Total	15,374	15,012	14,832	12,858	15,111	14,589	2.4	.4	.6
Electric Utility	15,297	14,942	14,775	12,809	15,065	14,498	2.4	.4	.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	1,462	1,506	1,570	1,399	1,538	1,434	-2.9	-1.3	.2
All Other	w	w	w	w	w	w	w	w	w
Coal Prices (nominal dollars per short ton)									
Mine Total	\$23.29	\$22.96	\$23.14	\$23.25	\$22.43	\$23.41	1.4	.9	*
Underground	w	w	w	w	w	w	w	w	w
Surface	w	w	w	w	w	w	w	w	w
Consumer									
Electric Utility	\$25.48	\$24.61	\$23.83	\$25.02	\$24.03	\$20.06	3.5	1.5	2.7
Industrial	w	w	w	w	w	w	w	w	w

¹ For 1985, the Form EIA-7A solicited data on "Daily Productive Capacity." To obtain annual productive capacity for a mine in 1985, 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.

⁴ 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 A9. North Dakota Coal Statistics, 1985, 1990-1994

Category	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
Supply (thousand short tons)									
Recoverable Reserves	1,694,548	1,411,026	1,335,164	1,385,624	1,414,294	1,629,607	20.1	4.6	0.4
Productive Capacity ¹	35,920	36,371	36,986	35,976	NA	29,287	-1.2	NA	2.3
Production Total	32,286	31,973	31,744	29,530	29,213	26,871	1.0	2.5	2.1
Surface	32,286	31,973	31,744	29,530	29,213	26,871	1.0	2.5	2.1
Capacity Utilization ²	89.88	87.89	85.83	82.08	NA	91.75	2.3	NA	-2
Ratio of Recoverable Reserves to Production	52.5	44.1	42.1	46.9	48.4	60.6	18.9	2.0	-1.6
Number of Miners	645	782	744	814	931	1,132	-17.5	-8.8	-6.0
Productivity Total ³	18.84	17.66	18.12	17.64	16.12	11.40	6.6	4.0	5.7
Surface	18.84	17.66	18.12	17.64	16.12	11.40	6.6	4.0	5.7
Producer/Distributor Stocks .	1,812	1,607	1,614	1,619	1,830	-	12.8	-3	-
Distribution (thousand short tons)									
Distribution Total	32,056	32,372	31,702	29,741	29,206	NA	-1.0	2.3	NA
Domestic Distribution Total	32,056	32,372	31,702	29,741	29,206	NA	-1.0	2.3	NA
Within State	29,731	30,215	29,573	27,405	27,137	NA	-1.6	2.3	NA
To Other States	2,325	2,157	2,129	2,337	2,069	NA	7.8	3.0	NA
Demand (thousand short tons)									
Consumption Total	30,363	30,302	30,301	28,597	28,114	22,958	.2	1.9	3.1
Electric Utility	23,248	23,290	23,192	22,174	21,579	17,354	-2	1.9	3.3
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	2,406	2,417	2,194	1,999	2,828	3,137	-4	-3.9	-2.9
All Other	w	w	w	w	w	w	w	w	w
Coal Prices (nominal dollars per short ton)									
Mine Total	\$7.62	\$7.63	\$7.48	\$7.84	\$7.67	\$9.30	-2	-2	-2.2
Surface	7.62	7.63	7.48	7.84	7.67	9.30	-2	-2	-2.2
Consumer									
Electric Utility	9.28	9.38	9.45	9.37	9.10	11.59	-1.0	.5	-2.4
Industrial	w	w	w	w	w	w	w	w	w

¹ For 1985, the Form EIA-7A solicited data on "Daily Productive Capacity." To obtain annual productive capacity for a mine in 1985, 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, 1985, 1990-1994

Category	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
Supply (thousand short tons)									
Recoverable Reserves	479,235	519,768	575,973	590,604	691,984	829,473	-7.8	-8.8	-5.9
Productive Capacity ¹	43,925	42,236	41,329	47,397	NA	41,819	4.0	NA	.5
Production Total	29,897	28,816	30,403	30,569	35,252	35,411	3.8	-4.0	-1.9
Underground	13,607	10,437	12,031	12,237	12,920	13,630	30.4	1.3	*
Surface	16,290	18,379	18,371	18,333	22,332	21,781	-11.4	-7.6	-3.2
Capacity Utilization ²	67.87	67.94	73.19	64.27	NA	84.68	-1	NA	-2.4
Ratio of Recoverable Reserves to Production	16.0	18.0	18.9	19.3	19.6	23.4	-11.1	-4.9	-4.1
Number of Miners	3,983	3,866	4,515	5,293	5,866	8,954	3.0	-9.2	-8.6
Productivity Total ³	3.42	3.46	3.04	2.67	2.80	2.02	-1.3	5.1	6.0
Underground	3.51	3.27	3.01	2.55	2.34	1.66	7.4	10.6	8.7
Surface	3.34	3.58	3.06	2.76	3.17	2.34	-6.8	1.3	4.0
Producer/Distributor Stocks .	833	550	1,087	821	887	-	51.4	-1.5	-
Imports ⁴	2	2	15	-	-	-	-18.3	-	-
Distribution (thousand short tons)									
Distribution Total	28,749	28,315	29,550	30,023	34,335	NA	1.5	-4.3	NA
Domestic Distribution Total	28,688	28,315	29,549	30,001	34,209	NA	1.3	-4.3	NA
Within State	23,907	24,370	26,941	27,061	28,301	NA	-1.9	-4.1	NA
To Other States	4,782	3,944	2,608	2,940	5,908	NA	21.2	-5.1	NA
Foreign Distribution Total ...	61	-	2	22	126	NA	-	-16.7	NA
Steam	61	-	2	22	126	NA	-	-16.7	NA
Canada Total	-	-	*	3	55	NA	-	-	NA
Steam	-	-	*	3	55	NA	-	-	NA
Overseas Total ⁴	61	-	1	19	72	NA	-	-4.0	NA
Steam	61	-	1	19	72	NA	-	-4.0	NA
Demand (thousand short tons)									
Consumption Total	56,711	59,031	58,671	58,578	59,205	57,979	-3.9	-1.1	-2
Electric Utility	49,326	51,456	50,358	49,577	48,848	46,700	-4.1	.2	.6
Industrial	3,794	4,100	3,970	4,813	4,753	5,178	-7.5	-5.5	-3.4
Coke	3,092	2,892	3,755	3,698	4,949	5,242	6.9	-11.1	-5.7
Residential/Commercial	498	584	588	489	654	859	-14.6	-6.6	-5.9
Consumer Stocks Total	7,815	7,630	10,804	10,618	10,471	9,727	2.4	-7.0	-2.4
Electric Utility	7,499	7,249	10,395	10,213	9,956	8,976	3.4	-6.8	-2.0
All Other	316	381	408	405	515	751	-17.0	-11.5	-9.2
Coal Prices (nominal dollars per short ton)									
Mine Total	\$29.13	\$28.04	\$26.93	\$27.75	\$28.65	\$33.97	3.8	.4	-1.7
Underground	31.61	30.73	30.11	31.52	33.93	41.75	2.9	-1.8	-3.0
Surface	27.04	26.51	24.84	25.22	25.57	29.11	2.0	1.4	-8
Consumer									
Electric Utility	34.70	34.05	34.40	35.33	36.01	40.02	1.9	-.9	-1.6
Industrial	35.75	34.82	35.24	34.85	35.04	35.97	2.7	.5	-.1
Coke	42.02	45.07	46.68	46.15	48.29	54.89	-6.8	-3.4	-2.9

¹ For 1985, the Form EIA-7A solicited data on "Daily Productive Capacity." To obtain annual productive capacity for a mine in 1985, 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 1994 include imports to electric utilities, manufacturing plants and coke plants. Imports for 1985 through 1991 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 A11. Pennsylvania Coal Statistics, 1985, 1990-1994

Category	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
Supply (thousand short tons)									
Recoverable Reserves	912,870	939,706	937,427	985,784	1,126,272	1,484,165	-2.8	-5.1	-5.3
Productive Capacity ¹	80,975	82,148	82,968	80,418	NA	81,082	-1.4	NA	*
Production Total	62,237	59,700	68,981	65,381	70,514	70,311	4.2	-3.1	-1.3
Underground	39,974	36,934	45,112	40,953	40,530	36,266	8.2	-.3	1.1
Surface	22,263	22,766	23,868	24,429	29,984	34,045	-2.2	-7.2	-4.6
Capacity Utilization ²	75.89	71.79	82.20	80.17	NA	86.72	5.7	NA	-1.5
Ratio of Recoverable Reserves to Production	14.7	15.7	13.6	15.1	16.0	21.1	-6.8	-2.1	-4.0
Number of Miners	9,975	10,940	12,659	13,506	15,903	22,207	-8.8	-11.0	-8.5
Productivity Total ²	2.98	2.80	2.67	2.43	2.24	1.65	6.5	7.4	6.8
Underground	3.18	2.91	2.81	2.38	2.12	1.37	9.4	10.6	9.8
Surface	2.67	2.63	2.45	2.53	2.42	2.11	1.4	2.5	2.7
Producer/Distributor Stocks ..	2,787	1,826	2,903	2,844	2,558	-	52.6	2.2	-
Distribution (thousand short tons)									
Domestic Distribution Total	55,207	53,482	61,208	58,151	62,917	NA	3.2	-3.2	NA
Within State	35,189	33,456	37,696	36,260	40,216	NA	5.2	-3.3	NA
To Other States	20,018	20,026	23,512	21,891	22,702	NA	*	-3.1	NA
Foreign Distribution Total ...	6,301	5,508	6,440	7,303	6,884	NA	14.4	-2.2	NA
Metallurgical	1,624	1,919	1,266	1,331	522	NA	-15.4	32.8	NA
Steam	4,677	3,589	5,175	5,972	6,362	NA	30.3	-7.4	NA
Canada Total	844	597	1,599	2,338	2,692	NA	41.3	-25.2	NA
Metallurgical	-	10	-	8	42	NA	-100.0	-	NA
Steam	844	587	1,599	2,330	2,650	NA	43.7	-24.9	NA
Overseas Total ³	5,457	4,911	4,841	4,966	4,192	NA	11.1	6.8	NA
Metallurgical	1,624	1,909	1,266	1,323	480	NA	-14.9	35.6	NA
Steam	3,833	3,002	3,575	3,642	3,712	NA	27.7	.8	NA
Demand (thousand short tons)									
Consumption Total	54,094	56,158	56,074	54,931	57,319	56,553	-3.7	-1.4	-5
Electric Utility	38,044	40,257	40,407	40,662	41,465	41,713	-5.5	-2.1	-1.0
Industrial	4,044	4,311	4,173	4,049	4,090	3,852	-6.2	-.3	.5
Coke	10,849	10,333	9,868	8,812	10,456	9,762	5.0	.9	1.2
Residential/Commercial	1,156	1,257	1,626	1,408	1,308	1,226	-8.0	-3.0	-.6
Consumer Stocks Total	12,060	12,265	15,976	15,546	15,426	14,763	-1.7	-6.0	-2.2
Electric Utility	11,000	11,110	14,866	14,412	14,363	13,628	-1.0	-6.4	-2.3
All Other	1,060	1,155	1,110	1,135	1,063	1,135	-8.2	-.1	-.8
Coal Prices (nominal dollars per short ton)									
Mine Total	\$26.18	\$26.50	\$28.61	\$29.40	\$30.15	\$32.91	-1.2	-3.5	-2.5
Underground	26.59	27.35	30.23	31.72	33.23	36.25	-2.8	-5.4	-3.4
Surface	25.43	25.09	25.48	25.42	25.91	29.35	1.4	-.5	-1.6
Consumer									
Electric Utility	35.39	35.73	36.81	38.05	37.25	38.26	-.9	-1.3	-.9
Industrial	33.66	34.04	35.70	35.89	36.61	39.81	-1.1	-2.1	-1.8
Coke	46.25	46.41	46.49	46.86	45.78	50.49	-.3	.3	-1.0

¹ For 1985, the Form EIA-7A solicited data on "Daily Productive Capacity." To obtain annual productive capacity for a mine in 1985, 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.

⁴ 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, 1985, 1990-1994

Category	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
Supply (thousand short tons)									
Recoverable Reserves	1,026,309	1,104,864	1,188,240	1,225,124	1,209,492	1,099,540	-7.1	-4.0	-0.8
Productive Capacity ¹	55,856	57,115	58,541	59,579	NA	47,819	-2.2	NA	1.7
Production Total	52,346	54,567	55,071	53,825	55,755	45,459	-4.1	-1.6	1.6
Surface	52,346	54,567	55,071	53,825	55,755	45,459	-4.1	-1.6	1.6
Capacity Utilization ²	93.72	95.54	94.07	90.34	NA	95.06	-1.9	NA	-1
Ratio of Recoverable									
Reserves to Production	19.6	20.3	21.6	22.8	21.7	24.2	-3.2	-2.5	-2.3
Number of Miners	1,733	1,841	2,001	2,149	2,131	2,360	-5.9	-5.0	-3.4
Productivity Total ²	8.82	8.42	7.34	7.17	7.48	6.26	4.8	4.2	3.9
Surface	8.82	8.42	7.34	7.17	7.48	6.26	4.8	4.2	3.9
Producer/Distributor Stocks .	1,430	1,237	543	400	930	-	15.6	11.3	-
Imports ³	153	156	80	-	-	-	-1.7	-	-
Distribution (thousand short tons)									
Distribution Total	52,256	54,224	54,447	54,243	55,024	NA	-3.6	-1.3	NA
Domestic Distribution Total	52,256	54,224	54,447	54,243	55,016	NA	-3.6	-1.3	NA
Within State	52,256	54,224	54,447	54,243	55,016	NA	-3.6	-1.3	NA
To Other States	-	-	-	-	-	NA	-	-	NA
Foreign Distribution Total ...	-	-	-	-	9	NA	-	-100.0	NA
Steam	-	-	-	-	9	NA	-	-100.0	NA
Overseas Total ⁴	-	-	-	-	9	NA	-	-	NA
Steam	-	-	-	-	9	NA	-	-	NA
Demand (thousand short tons)									
Consumption Total	93,829	96,809	91,568	92,064	91,415	77,017	-3.1	.6	2.2
Electric Utility	88,479	92,135	87,333	87,856	87,248	71,818	-4.0	.3	2.3
Industrial	5,350	4,667	4,225	4,198	4,157	4,788	14.6	6.5	1.2
Coke	-	-	-	-	-	w	-	-	-
Residential/Commercial	-	6	10	11	w	w	-98.9	w	w
Consumer Stocks Total	9,793	9,172	10,392	10,932	w	w	6.8	w	w
Electric Utility	9,578	8,125	10,143	10,474	8,531	9,103	17.9	2.9	.6
All Other	215	1,047	248	458	w	w	-79.4	w	w
Coal Prices (nominal dollars per short ton)									
Mine Total	\$12.38	\$12.87	\$12.42	\$12.21	\$11.20	\$11.60	-3.8	2.5	.7
Surface	12.38	12.87	12.42	12.21	11.20	11.60	-3.8	2.5	.7
Consumer									
Electric Utility	19.84	20.91	21.58	21.66	21.19	23.59	-5.1	-1.6	-1.9
Industrial	19.54	17.58	18.14	18.61	16.79	24.92	11.1	3.9	-2.7
Coke	-	-	-	-	-	w	-	-	-

¹ For 1985, the Form EIA-7A solicited data on "Daily Productive Capacity." To obtain annual productive capacity for a mine in 1985, 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 1994 include imports to electric utilities, manufacturing plants and coke plants. Imports for 1985 through 1991 include only imports to electric utilities.

⁴ Includes Mexico.

⁵ 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, 1985, 1990-1994

Category	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
Supply (thousand short tons)									
Recoverable Reserves	423,349	446,729	488,109	508,872	505,042	557,794	-5.2	-4.3	-3.0
Productive Capacity¹	27,640	25,933	25,534	25,482	NA	16,365	6.6	NA	6.0
Production Total	24,399	21,847	21,339	21,945	22,058	12,776	11.7	2.5	7.4
Underground	24,399	21,847	21,339	21,945	22,058	12,776	11.7	2.5	7.4
Capacity Utilization²	88.27	84.22	83.57	86.12	NA	78.07	4.8	NA	1.4
Ratio of Recoverable Reserves to Production	17.3	20.4	22.9	23.2	22.9	43.7	-15.1	-6.7	-9.7
Number of Miners	1,675	1,769	1,997	2,277	2,434	2,563	-5.3	-8.9	-4.6
Productivity Total²	6.59	5.96	5.46	4.80	4.74	2.80	10.5	8.6	10.0
Underground	6.59	5.96	5.46	4.80	4.74	2.80	10.5	8.6	10.0
Producer/Distributor Stocks ..	1,301	1,203	1,827	1,676	1,484	-	8.2	-3.2	-
Distribution (thousand short tons)									
Distribution Total	23,225	22,243	21,052	21,444	21,506	NA	4.4	1.9	NA
Domestic Distribution Total ..	20,527	19,283	18,792	19,358	19,756	NA	6.4	1.0	NA
Within State	13,586	13,418	13,035	13,605	14,107	NA	1.3	-9	NA
To Other States	6,941	5,866	5,758	5,753	5,649	NA	18.3	5.3	NA
Foreign Distribution Total ...	2,698	2,959	2,260	2,086	1,751	NA	-8.8	11.4	NA
Metallurgical	-	-	-	-	190	NA	-	-100.0	NA
Steam	2,698	2,959	2,260	2,086	1,560	NA	-8.8	14.7	NA
Canada Total	-	346	-	-	-	NA	-100.0	-	NA
Steam	-	346	-	-	-	NA	-100.0	-	NA
Overseas Total³	2,698	2,613	2,260	2,086	1,751	NA	3.2	11.4	NA
Metallurgical	-	-	-	-	190	NA	-	-	NA
Steam	2,698	2,613	2,260	2,086	1,560	NA	3.2	14.7	NA
Demand (thousand short tons)									
Consumption Total	16,216	15,848	15,719	14,834	15,738	8,303	2.3	.8	7.7
Electric Utility	14,269	13,995	13,857	12,829	13,563	6,325	2.0	1.3	9.5
Industrial	835	727	525	508	676	472	14.9	5.4	6.5
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	2,753	3,264	3,153	4,123	3,697	997	-15.6	-7.1	11.9
All Other	w	w	w	w	w	w	w	w	w
Coal Prices (nominal dollars per short ton)									
Mine Total	\$19.27	\$20.81	\$21.11	\$22.59	\$18.53	\$27.69	-7.4	1.0	-3.9
Underground	19.27	20.81	21.11	22.59	18.53	27.69	-7.4	1.0	-3.9
Consumer									
Electric Utility	26.10	27.34	27.54	27.40	26.80	32.34	-4.5	-6	-2.3
Industrial	26.57	26.51	25.35	26.43	28.49	28.55	.2	-1.7	-8
Coke	w	w	w	w	w	w	w	w	w

¹ For 1985, the Form EIA-7A solicited data on "Daily Productive Capacity." To obtain annual productive capacity for a mine in 1985, 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, 1985, 1990-1994

Category	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
Supply (thousand short tons)									
Recoverable Reserves	236,773	335,883	365,823	411,849	423,584	575,205	-29.5	-13.5	-9.4
Productive Capacity ¹	46,462	50,879	54,471	55,271	NA	45,552	-8.7	NA	.2
Production Total	37,129	39,317	43,024	41,954	46,917	40,531	-5.6	-5.7	-1.0
Underground	28,054	30,166	34,715	34,138	39,150	33,271	-7.0	-8.0	-1.9
Surface	9,075	9,151	8,308	7,816	7,767	7,260	-8	4.0	2.5
Capacity Utilization ²	79.61	77.07	78.70	75.65	NA	88.98	3.3	NA	-1.2
Ratio of Recoverable Reserves to Production	6.4	8.5	8.5	9.8	9.0	14.2	-25.3	-8.3	-8.5
Number of Miners	8,121	8,339	9,138	10,055	10,342	13,268	-2.6	-5.9	-5.3
Productivity Total ³	2.51	2.41	2.37	2.23	2.24	1.81	4.1	2.9	3.7
Underground	2.27	2.19	2.20	2.12	2.14	1.72	3.3	1.4	3.1
Surface	3.73	3.55	3.50	2.95	2.89	2.37	5.1	6.6	5.2
Producer/Distributor Stocks .	1,180	1,389	1,714	2,154	1,844	-	-15.0	-10.5	-
Imports ³	36	34	46	-	-	29	4.7	-	2.4
Distribution (thousand short tons)									
Distribution Total	38,548	41,639	45,728	43,495	48,038	NA	-7.4	-5.3	NA
Domestic Distribution Total	26,866	27,388	28,504	25,390	28,863	NA	-1.9	-1.8	NA
Within State	6,867	6,076	6,082	5,457	5,638	NA	13.0	5.0	NA
To Other States	19,999	21,312	22,422	19,933	23,226	NA	-6.2	-3.7	NA
Foreign Distribution Total ...	11,683	14,251	17,224	18,105	19,174	NA	-18.0	-11.6	NA
Metallurgical	11,193	13,512	14,021	14,404	16,435	NA	-17.2	-9.2	NA
Steam	490	739	3,203	3,700	2,740	NA	-33.7	-35.0	NA
Canada Total	786	1,229	1,331	1,404	1,244	NA	-36.1	-10.8	NA
Metallurgical	786	1,229	-	-	-	NA	-36.1	-	NA
Steam	-	-	1,331	1,404	1,244	NA	-	-	NA
Overseas Total ⁴	10,897	13,021	15,893	16,701	17,931	NA	-16.3	-11.7	NA
Metallurgical	10,407	12,283	14,021	14,404	16,435	NA	-15.3	-10.8	NA
Steam	490	739	1,873	2,296	1,496	NA	-33.7	-24.4	NA
Demand (thousand short tons)									
Consumption Total	12,792	13,584	13,418	13,980	13,105	11,656	-5.8	-.6	1.0
Electric Utility	8,670	9,447	8,661	8,568	8,228	7,166	-8.2	1.3	2.1
Industrial	2,838	2,863	3,592	4,301	3,756	3,334	-9	-6.8	-1.8
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	2,064	1,418	1,922	1,685	1,639	1,682	45.5	5.9	2.3
All Other	w	w	w	w	w	w	w	w	w
Coal Prices (nominal dollars per short ton)									
Mine Total	\$26.84	\$26.80	\$27.55	\$27.45	\$28.05	\$30.16	.1	-1.1	-1.3
Underground	27.33	27.26	27.88	27.76	28.39	30.37	.2	-.9	-1.2
Surface	25.33	25.29	26.17	26.12	26.32	29.18	.1	-.9	-1.5
Consumer									
Electric Utility	37.05	37.57	37.81	38.87	39.29	46.18	-1.4	-1.4	-2.4
Industrial	41.56	41.27	40.97	40.53	41.05	42.01	.7	.3	-.1
Coke	w	w	w	w	w	w	w	w	w

¹ For 1985, the Form EIA-7A solicited data on "Daily Productive Capacity." To obtain annual productive capacity for a mine in 1985, 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 1994 include imports to electric utilities, manufacturing plants and coke plants. Imports for 1985 through 1991 include only imports to electric utilities.

⁴ 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 A15. West Virginia Coal Statistics, 1985, 1990-1994

Category	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
Supply (thousand short tons)									
Recoverable Reserves	1,829,630	1,930,903	2,043,062	2,122,087	2,115,125	2,737,393	-5.2	-3.6	-4.4
Productive Capacity ¹	201,684	191,706	198,083	200,114	NA	139,529	5.2	NA	4.2
Production Total	161,776	130,525	162,164	167,352	169,205	127,125	23.9	-1.1	2.7
Underground	111,679	87,997	115,212	119,821	123,306	103,475	26.9	-2.4	.8
Surface	50,097	42,528	46,952	47,530	45,898	23,650	17.8	2.2	8.7
Capacity Utilization ²	80.07	67.91	81.70	83.42	NA	91.11	17.9	NA	-1.4
Ratio of Recoverable Reserves to Production	11.3	14.8	12.6	12.7	12.5	21.5	-23.5	-2.5	-6.9
Number of Miners	21,861	22,979	26,017	28,310	29,578	36,658	-4.9	-7.3	-5.6
Productivity Total ²	3.69	3.27	3.27	3.11	2.96	1.95	12.7	5.6	7.3
Underground	3.38	2.92	2.99	2.83	2.70	1.85	15.7	5.8	6.9
Surface	4.62	4.35	4.27	4.18	4.02	2.54	6.3	3.5	6.9
Producer/Distributor Stocks .	6,692	4,059	7,405	6,464	5,250	-	64.9	6.3	-
Distribution (thousand short tons)									
Domestic Distribution Total	122,779	102,659	112,917	111,785	118,032	NA	19.6	1.0	NA
Within State	30,891	22,887	26,644	27,191	32,957	NA	35.0	-1.6	NA
To Other States	91,888	79,772	86,273	84,593	85,075	NA	15.2	1.9	NA
Foreign Distribution Total ...	36,205	33,159	50,806	53,792	48,733	NA	9.2	-7.2	NA
Metallurgical	31,612	27,627	35,353	35,891	29,995	NA	14.4	1.3	NA
Steam	4,593	5,532	15,453	17,900	18,739	NA	-17.0	-29.6	NA
Canada Total	5,644	4,108	8,911	7,464	6,992	NA	37.4	-5.2	NA
Metallurgical	5,605	4,071	8,021	7,351	5,067	NA	37.7	2.6	NA
Steam	40	37	890	113	1,925	NA	7.8	-62.1	NA
Overseas Total ³	30,561	29,052	41,895	46,328	41,741	NA	5.2	-7.5	NA
Metallurgical	26,008	23,556	27,332	28,540	24,928	NA	10.4	1.1	NA
Steam	4,553	5,495	14,564	17,787	16,813	NA	-17.1	-27.9	NA
Demand (thousand short tons)									
Consumption Total	34,767	32,046	32,019	31,843	34,896	34,907	8.5	-.1	*
Electric Utility	30,318	27,782	28,050	27,557	29,873	31,367	9.1	.4	-.4
Industrial	2,637	2,406	2,266	2,310	2,918	2,086	9.6	-2.5	2.6
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	4,479	4,001	7,863	7,707	6,874	5,453	11.9	-10.1	-2.2
All Other	w	w	w	w	w	w	w	w	w
Coal Prices (nominal dollars per short ton)									
Mine Total	\$27.42	\$27.58	\$28.15	\$28.62	\$28.62	\$33.47	-.6	-1.1	-2.2
Underground	27.93	28.54	29.14	29.63	29.75	34.31	-2.1	-1.6	-2.3
Surface	26.29	25.57	25.72	26.08	25.55	29.78	2.8	.7	-1.4
Consumer									
Electric Utility	34.70	35.42	36.88	37.93	36.66	39.81	-2.0	-1.4	-1.5
Industrial	32.73	32.91	31.93	32.08	31.88	35.32	-.5	.6	-.8
Coke	w	w	w	w	w	w	w	w	w

¹ For 1985, the Form EIA-7A solicited data on "Daily Productive Capacity." To obtain annual productive capacity for a mine in 1985, 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.

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, 1985, 1990-1994

Category	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
Supply (thousand short tons)									
Recoverable Reserves	6,999,460	6,830,720	6,750,718	6,336,075	6,563,528	6,693,133	2.5	1.6	0.5
Productive Capacity ¹	321,046	277,875	253,312	250,251	NA	147,439	15.5	NA	9.0
Production Total	237,092	210,129	190,172	193,854	184,249	140,711	12.8	6.5	6.0
Underground	2,735	2,136	2,511	2,418	1,722	1,058	28.0	12.3	11.1
Surface	234,357	207,993	187,661	191,437	182,527	139,653	12.7	6.4	5.9
Capacity Utilization ²	73.85	75.62	75.07	77.46	NA	95.44	-2.3	NA	-2.8
Ratio of Recoverable Reserves to Production	29.5	32.5	35.5	32.7	35.6	47.6	-9.2	-4.6	-5.2
Number of Miners	3,291	3,159	3,326	3,301	3,330	4,444	4.2	-3	-3.3
Productivity Total ³	26.05	24.46	21.50	21.87	21.41	14.34	6.5	5.0	6.9
Underground	5.07	3.56	4.19	4.17	2.80	1.90	42.4	16.0	11.5
Surface	27.37	26.03	22.76	23.11	22.84	15.09	5.1	4.6	6.8
Producer/Distributor Stocks ..	1,592	998	2,794	2,918	3,185	-	59.4	-15.9	-
Distribution (thousand short tons)									
Distribution Total	235,540	211,713	190,260	194,407	184,386	NA	11.3	6.3	NA
Domestic Distribution Total ..	234,016	210,739	188,983	193,425	183,712	NA	11.0	6.2	NA
Within State	28,334	25,519	26,388	25,284	25,387	NA	11.0	2.8	NA
To Other States	205,682	185,220	162,595	168,141	158,325	NA	11.0	6.8	NA
Foreign Distribution Total ...	1,524	974	1,277	982	674	NA	56.5	22.6	NA
Steam	1,524	974	1,277	982	674	NA	56.5	22.6	NA
Canada Total	-	-	-	20	62	NA	-	-	NA
Steam	-	-	-	20	62	NA	-	-	NA
Overseas Total ³	1,524	974	1,277	962	612	NA	56.5	25.6	NA
Steam	1,524	974	1,277	962	612	NA	56.5	25.6	NA
Demand (thousand short tons)									
Consumption Total	27,459	26,171	27,339	25,150	25,514	23,155	4.9	1.8	1.9
Electric Utility	25,350	24,111	25,114	23,115	23,526	21,173	5.1	1.9	2.0
Industrial	1,867	1,873	2,126	1,896	1,857	w	-3	.1	w
Residential/Commercial	242	187	99	138	w	w	29.3	w	w
Consumer Stocks Total	2,553	1,841	2,242	2,835	3,293	w	38.6	-6.2	w
Electric Utility	2,476	1,728	2,153	2,767	3,215	4,022	43.3	-6.3	-5.2
All Other	77	113	89	68	78	w	-32.1	-3	w
Coal Prices (nominal dollars per short ton)									
Mine Total	\$6.83	\$7.32	\$8.14	\$8.09	\$8.43	\$11.36	-6.7	-5.1	-5.5
Underground	w	w	w	w	w	w	w	w	w
Surface	w	w	w	w	w	w	w	w	w
Consumer									
Electric Utility	\$14.09	\$14.03	\$13.42	\$14.55	\$14.74	\$16.10	.4	-1.1	-1.5
Industrial	22.87	23.43	23.67	25.19	24.91	w	-2.4	-2.1	w

¹ For 1985, the Form EIA-7A solicited data on "Daily Productive Capacity." To obtain annual productive capacity for a mine in 1985, 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 A17. All Other States Coal Statistics, 1985, 1990-1994

Category	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
Supply (thousand short tons)									
Recoverable Reserves	476,538	506,419	514,739	577,615	588,588	864,482	-5.9	-5.1	-6.4
Productive Capacity¹	23,451	23,567	28,144	29,465	NA	30,625	-.5	NA	-2.9
Production Total	19,672	18,848	22,284	22,807	25,140	26,921	4.4	-5.9	-3.4
Underground	4,880	4,523	4,367	5,717	6,617	7,089	7.9	-7.3	-4.1
Surface	14,792	14,325	17,917	17,089	18,523	19,832	3.3	-5.5	-3.2
Capacity Utilization²	83.52	79.48	78.65	76.94	NA	87.91	5.1	NA	-6
Ratio of Recoverable Reserves to Production	24.2	26.9	23.1	25.3	23.4	32.1	-9.8	.8	-3.1
Number of Miners	2,373	2,478	2,918	3,539	4,297	6,682	-4.2	-13.8	-10.9
Productivity Total³	3.82	3.59	3.40	3.09	2.84	2.09	6.5	7.7	6.9
Underground	2.86	3.05	2.40	2.27	1.95	1.67	-6.2	10.0	6.1
Surface	4.30	3.80	3.78	3.52	3.39	2.29	13.1	6.1	7.2
Producer/Distributor Stocks .	598	297	289	612	580	-	101.2	.8	-
Imports⁴	5,291	4,571	1,779	1,967	1,366	1,270	15.7	40.3	17.2
Distribution (thousand short tons)									
Distribution Total	398,435	374,259	415,136	411,964	434,912	NA	6.5	-2.2	NA
Domestic Distribution Total	17,767	17,914	20,654	21,561	23,417	NA	-.8	-6.7	NA
Within State	25	100	143	106	142	NA	-75.2	-35.4	NA
To Other States	17,743	17,814	20,511	21,454	23,276	NA	-.4	-6.6	NA
Foreign Distribution Total ...	1,046	1,142	1,250	1,083	1,651	NA	-8.5	-10.8	NA
Metallurgical	109	51	-	*	*	NA	114.8	NM	NA
Steam	937	1,092	1,250	1,083	1,651	NA	-14.2	-13.2	NA
Canada Total	3	1	-	23	*	NA	275.7	70.3	NA
Steam	3	1	-	23	*	NA	275.7	70.3	NA
Overseas Total⁴	1,042	1,142	1,250	1,060	1,650	NA	-8.7	-10.8	NA
Metallurgical	109	51	-	*	*	NA	114.8	NM	NA
Steam	934	1,091	1,250	1,060	1,650	NA	-14.4	-13.3	NA
Demand (thousand short tons)									
Consumption Total	371,817	365,045	350,253	351,883	354,565	324,102	1.8	1.2	1.5
Electric Utility	334,773	329,279	315,259	314,762	315,146	282,955	1.7	1.5	1.9
Industrial	31,795	31,970	31,728	31,954	33,065	31,416	-.5	-1.0	.1
Coke	2,723	1,243	1,148	2,806	3,740	6,358	119.0	-7.6	-9.0
Residential/Commercial	2,526	2,552	2,119	2,360	2,614	3,374	-1.0	-.8	-3.2
Consumer Stocks Total	57,506	48,850	68,257	71,836	71,991	75,746	17.7	-5.5	-3.0
Electric Utility	53,253	45,411	64,006	67,654	66,880	69,671	17.3	-5.5	-2.9
All Other	4,252	3,439	4,251	4,182	5,111	6,075	23.7	-4.5	-3.9
Coal Prices (nominal dollars per short ton)									
Mine Total	\$23.19	\$23.14	\$24.39	\$25.57	\$25.18	\$27.73	.2	-2.0	-2.0
Underground	26.97	26.72	27.26	26.50	28.25	29.61	.9	-1.1	-1.0
Surface	21.94	22.02	23.69	25.26	24.09	27.05	-.3	-2.3	-2.3
Consumer									
Electric Utility	29.70	30.68	31.79	32.31	33.18	38.14	-3.2	-2.7	-2.7
Industrial	38.72	38.95	39.35	39.70	40.30	44.32	-.6	-1.0	-1.5
Coke	50.89	58.19	53.10	56.62	53.79	56.30	-12.5	-1.4	-1.1

¹ For 1985, the Form EIA-7A solicited data on "Daily Productive Capacity." To obtain annual productive capacity for a mine in 1985, 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 1994 include imports to electric utilities, manufacturing plants and coke plants. Imports for 1985 through 1991 include only imports to electric utilities.

⁴ Includes Mexico.

* Data round to zero.

NM Not meaningful as value is greater than 500.

NA Not available.

Notes: Other States include Alaska, Arkansas, California, Georgia, 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, 1985, 1990-1994

Category	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
Supply (thousand short tons)									
Recoverable Reserves	21,016,526	21,535,283	21,626,971	21,998,540	22,761,328	25,145,997	-2.4	-2.0	-2.0
Productive Capacity ¹	1,320,656	1,261,873	1,241,054	1,248,479	NA	968,614	4.6	NA	3.5
Production Total	1,033,504	945,424	997,545	995,984	1,029,076	878,540	9.3	.1	1.8
Underground	399,103	351,053	407,239	407,225	424,546	348,795	13.7	-1.5	1.5
Surface	634,401	594,371	590,306	588,759	604,529	529,746	6.7	1.2	2.0
Capacity Utilization ²	78.11	74.77	80.20	79.58	NA	90.70	4.5	NA	-1.6
Ratio of Recoverable Reserves to Production	20.3	22.8	21.7	22.1	22.1	28.6	-10.7	-2.1	-3.7
Number of Miners	97,500	101,322	110,196	120,602	131,310	169,281	-3.8	-7.2	-5.9
Productivity Total ³	4.98	4.70	4.36	4.09	3.83	2.74	5.9	6.8	6.8
Underground	3.19	2.95	2.93	2.69	2.54	1.78	8.2	5.9	6.7
Surface	7.67	7.23	6.59	6.38	5.94	4.24	6.0	6.6	6.8
Producer/Distributor Stocks .	33,219	25,284	33,993	32,971	33,418	34,090	31.4	-.1	-.3
Imports ³	6,599	5,496	1,973	1,967	1,366	1,299	20.1	48.2	19.8
Distribution (thousand short tons)									
Distribution Total	1,022,523	959,445	998,647	994,146	1,023,935	NA	6.6	*	NA
Domestic Distribution Total	949,843	883,934	897,267	885,882	919,589	NA	7.5	.8	NA
Within State	353,765	339,034	355,232	345,486	365,065	NA	4.3	-.8	NA
To Other States	596,078	544,900	542,035	540,395	554,524	NA	9.4	1.8	NA
Foreign Distribution Total ...	72,680	75,510	101,380	108,264	104,346	NA	-3.8	-8.6	NA
Metallurgical	51,307	52,369	62,013	63,003	62,496	NA	-2.0	-4.8	NA
Steam	21,374	23,141	39,367	45,261	41,849	NA	-7.6	-15.5	NA
Canada Total	8,467	7,751	13,919	12,828	13,189	NA	9.2	-10.5	NA
Metallurgical	7,464	6,666	9,394	8,483	6,215	NA	12.0	4.7	NA
Steam	1,003	1,085	4,525	4,345	6,975	NA	-7.6	-38.4	NA
Overseas Total ⁴	64,214	67,759	87,461	95,436	91,156	NA	-5.2	-8.4	NA
Metallurgical	43,843	45,703	52,619	54,520	56,282	NA	-4.1	-6.0	NA
Steam	20,371	22,057	34,842	40,916	34,875	NA	-7.6	-12.6	NA
Demand (thousand short tons)									
Consumption Total	930,201	925,944	892,421	887,621	895,480	818,049	.4	.9	1.4
Electric Utility	817,270	813,508	779,860	772,268	773,549	693,841	.5	1.4	1.8
Industrial	75,179	74,892	74,042	75,405	76,330	75,372	.4	-.4	*
Coke	31,740	31,323	32,366	33,854	38,877	41,056	1.3	-4.9	-2.8
Residential/Commercial	6,013	6,221	6,153	6,094	6,724	7,779	-3.3	-2.8	-2.8
Consumer Stocks Total	136,139	120,458	163,692	167,711	168,210	170,234	13.0	-5.1	-2.4
Electric Utility	126,897	111,341	154,130	157,876	156,166	156,376	14.0	-5.0	-2.3
All Other	9,243	9,117	9,562	9,835	12,044	13,857	1.4	-6.4	-4.4
Coal Prices (nominal dollars per short ton)									
Mine Total	\$19.41	\$19.85	\$21.03	\$21.49	\$21.76	\$25.20	-2.2	-2.8	-2.9
Underground	26.39	26.92	27.83	28.56	28.58	32.91	-2.0	-2.0	-2.4
Surface	15.02	15.67	16.34	16.60	16.98	20.13	-4.1	-3.0	-3.2
Consumer									
Electric Utility	28.03	28.58	29.36	30.02	30.45	34.53	-1.9	-2.0	-2.3
Industrial	32.55	32.23	32.78	33.54	33.59	37.21	1.0	-.8	-1.5
Coke	46.56	47.44	47.92	48.88	47.73	54.33	-1.9	-.6	-1.7

¹ For 1985, the Form EIA-7A solicited data on "Daily Productive Capacity." To obtain annual productive capacity for a mine in 1985, 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 1994 include imports to electric utilities, manufacturing plants and coke plants. Imports for 1985 through 1991 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

Sampling coal seam.

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, 15, 24, 34, 48, 67, 68, 76, 80, 92, 94, 96, 98, and 99.

Table B1. Trends in U.S. Coal Production, Imports, Consumption, Exports, and Stocks, 1985, 1990-1994
(Million Metric Tons)

Activity	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
Production	938	858	905	904	934	797	9.3	0.1	1.8
Imports	7	7	3	3	2	2	3.8	29.5	16.3
Producer and Distributor Stocks ¹ ..	30	23	31	30	30	31	31.4	-.1	-.3
Consumption	844	840	810	805	812	742	.4	.9	1.4
Exports	65	68	93	99	96	84	-4.2	-9.4	-2.9
Consumer Stocks ¹	124	109	148	152	153	154	13.0	-5.1	-2.4

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, 1985, 1990-1994
(Thousand Metric Tons)

Coal-Producing State and Region	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
Alabama	21,106	22,469	23,401	24,738	26,335	25,115	-6.1	-5.4	-1.9
Alaska	1,422	1,452	1,392	1,303	1,548	1,300	-2.1	-2.1	1.0
Arizona	11,844	11,043	11,351	11,977	10,254	8,731	7.3	3.7	3.4
Arkansas	46	40	53	47	53	62	14.6	-3.6	-3.2
California	-	-	94	51	55	65	-	-	-
Colorado	22,955	19,854	17,442	16,179	17,155	15,605	15.6	7.5	4.4
Illinois	47,896	37,283	54,301	54,665	54,787	53,706	28.5	-3.3	-1.3
Indiana	28,057	26,576	27,639	28,547	32,574	30,204	5.6	-3.7	-8
Iowa	42	159	262	312	346	536	-73.6	-41.0	-24.7
Kansas	258	310	329	377	654	902	-16.6	-20.7	-13.0
Kentucky Total	146,639	141,792	146,119	144,224	157,235	136,013	3.4	-1.7	.8
Eastern	112,897	109,036	108,302	106,340	116,479	100,706	3.5	-.8	1.3
Western	33,742	32,756	37,817	37,884	40,756	35,307	3.0	-4.6	-.5
Louisiana	3,141	2,843	2,939	2,858	2,890	188	10.5	2.1	36.8
Maryland	3,295	3,044	3,031	3,423	3,163	2,634	8.3	1.0	2.5
Missouri	761	592	2,618	2,090	2,401	5,045	28.4	-25.0	-19.0
Montana	37,775	32,583	35,280	34,688	34,125	30,197	15.9	2.6	2.5
New Mexico	25,438	25,644	22,270	19,520	22,038	20,142	-.8	3.6	2.6
North Dakota	29,289	29,005	28,797	26,790	26,502	24,377	1.0	2.5	2.1
Ohio	27,122	26,141	27,581	27,732	31,980	32,124	3.8	-4.0	-1.9
Oklahoma	1,733	1,595	1,580	1,670	1,540	3,008	8.7	3.0	-5.9
Pennsylvania Total	56,460	54,159	62,578	59,313	63,969	63,785	4.2	-3.1	-1.3
Anthracite	4,192	3,906	3,160	3,125	3,181	3,884	7.3	7.1	.8
Bituminous	52,268	50,253	59,419	56,188	60,788	59,901	4.0	-3.7	-1.5
Tennessee	2,709	2,764	3,154	3,892	5,618	6,658	-2.0	-16.7	-9.5
Texas	47,488	49,502	49,960	48,829	50,580	41,240	-4.1	-1.6	1.6
Utah	22,135	19,819	19,359	19,908	20,011	11,590	11.7	2.5	7.4
Virginia	33,683	35,668	39,030	38,060	42,562	36,769	-5.6	-5.7	-1.0
Washington	4,439	4,300	4,764	4,666	4,537	4,026	3.2	-.5	1.1
West Virginia Total	146,760	118,411	147,112	151,819	153,500	115,326	23.9	-1.1	2.7
Northern	44,739	30,665	45,379	47,314	51,384	45,196	45.9	-3.4	-.1
Southern	102,022	87,746	101,734	104,504	102,116	70,130	16.3	*	4.3
Wyoming	215,086	190,626	172,522	175,862	167,148	127,651	12.8	6.5	6.0
Appalachian Total ¹	404,033	371,690	414,189	415,317	443,607	383,118	8.7	-2.3	.6
Interior Total ¹	163,164	151,658	177,499	177,280	186,582	170,197	7.6	-3.3	-.5
Western Total ¹	370,382	334,327	313,270	310,945	303,373	243,683	10.8	5.1	4.8
East of Miss. River	513,729	468,306	533,946	536,413	571,724	502,335	9.7	-2.6	.2
West of Miss. River	423,851	389,369	371,012	367,129	361,838	294,663	8.8	4.0	4.1
U.S. Total	937,580	857,675	904,958	903,542	933,562	796,999	9.3	.1	1.8

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, 1985, 1990-1994
(Thousand Metric Tons)

Coal-Producing State and Region	1994	1993	1992	1991	1990	1985 ¹	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
Alabama	29,982	25,325	27,048	27,392	NA	28,938	18.4	NA	0.4
Alaska	w	w	w	w	NA	w	w	NA	w
Arizona	w	w	w	w	NA	w	w	NA	w
Arkansas	w	w	w	w	NA	w	w	NA	w
California	-	-	w	w	NA	w	w	NA	-
Colorado	28,191	27,252	23,449	21,403	NA	17,234	3.4	NA	5.6
Illinois	62,971	62,886	68,753	68,683	NA	60,708	.1	NA	.4
Indiana	35,318	39,875	39,000	40,964	NA	32,756	-11.4	NA	.8
Iowa	w	w	w	w	NA	628	w	NA	w
Kansas	w	w	w	w	NA	1,258	w	NA	w
Kentucky Total	193,618	185,796	177,220	180,786	NA	150,863	4.2	NA	2.8
Eastern	146,720	142,717	135,212	132,040	NA	110,165	2.8	NA	3.2
Western	46,897	43,079	42,008	48,747	NA	40,698	8.9	NA	1.6
Louisiana	w	w	w	w	NA	w	w	NA	w
Maryland	3,930	3,563	3,539	3,854	NA	3,015	10.3	NA	3.0
Missouri	1,097	w	w	w	NA	5,337	w	NA	-16.1
Montana	46,361	46,129	44,073	44,093	NA	31,527	.5	NA	4.4
New Mexico	29,762	30,264	26,773	25,571	NA	22,007	-1.6	NA	3.4
North Dakota	32,586	32,995	33,553	32,637	NA	26,569	-1.2	NA	2.3
Ohio	39,848	38,315	37,493	42,997	NA	37,937	4.0	NA	.5
Oklahoma	2,042	2,197	2,256	2,112	NA	3,437	-7.0	NA	-5.6
Pennsylvania Total	73,460	74,524	75,267	72,954	NA	73,557	-1.4	NA	*
Anthracite	5,240	5,267	3,758	3,668	NA	4,271	-5	NA	2.3
Bituminous	68,220	69,256	71,509	69,286	NA	69,285	-1.5	NA	-2
Tennessee	3,092	3,414	3,567	4,680	NA	7,113	-9.4	NA	-8.8
Texas	50,672	51,814	53,108	54,049	NA	43,381	-2.2	NA	1.7
Utah	25,075	23,526	23,164	23,117	NA	14,846	6.6	NA	6.0
Virginia	42,150	46,156	49,415	50,141	NA	41,324	-8.7	NA	.2
Washington	w	w	w	w	NA	w	w	NA	w
West Virginia Total	182,964	173,913	179,697	181,541	NA	126,578	5.2	NA	4.2
Northern	53,792	54,445	56,981	58,710	NA	49,377	-1.2	NA	.9
Southern	129,172	119,468	122,716	122,831	NA	77,201	8.1	NA	5.9
Wyoming	291,248	252,084	229,801	227,024	NA	133,754	15.5	NA	9.0
Appalachian Total ²	522,147	507,927	511,239	515,599	NA	428,626	2.8	NA	2.2
Interior Total ²	203,116	204,968	213,225	222,702	NA	189,322	-.9	NA	.8
Western Total ²	472,817	431,858	401,401	394,300	NA	260,764	9.5	NA	6.8
East of Miss. River	667,333	653,767	661,000	673,992	NA	562,789	2.1	NA	1.9
West of Miss. River	530,746	490,986	464,865	458,609	NA	315,923	8.1	NA	5.9
U.S. Total	1,198,079	1,144,753	1,125,866	1,132,601	NA	878,712	4.6	NA	3.5

¹ For 1985, Form EIA-7A solicited data on "Daily Productive Capacity." To obtain annual productive capacity for a mine in 1985, 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.

* Data round to zero.

w Withheld to avoid disclosure of individual company data.

NA Not available.

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.

Sources: Energy Information Administration, Form EIA-7A, "Coal Production Report."

Table B4. Recoverable Coal Reserves by State, 1985, 1990-1994
(Million Metric Tons)

Coal-Producing State and Region	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
Alabama	415	387	424	427	444	546	7.1	-1.7	-3.0
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	w
California	-	-	w	w	w	w	w	w	w
Colorado	614	552	552	560	496	580	11.1	5.5	.6
Illinois	874	965	1,088	1,140	1,065	1,443	-9.4	-4.8	-5.4
Indiana	276	344	367	381	403	492	-19.8	-9.0	-6.2
Iowa	w	w	w	w	w	w	w	w	w
Kansas	w	w	w	w	w	w	w	w	w
Kentucky Total	1,238	1,658	1,318	1,481	1,438	1,603	-25.3	-3.7	-2.8
Eastern	734	1,222	866	983	902	1,056	-40.0	-5.0	-4.0
Western	505	436	452	497	536	547	15.7	-1.5	-.9
Louisiana	w	w	w	w	w	137	w	w	w
Maryland	80	60	53	78	77	56	34.1	1.0	4.0
Missouri	11	w	w	w	w	w	w	w	w
Montana	1,163	1,166	1,226	1,264	1,699	1,598	-.2	-9.0	-3.5
New Mexico	1,322	1,336	1,356	1,459	1,385	1,364	-1.0	-1.1	-.3
North Dakota	1,537	1,280	1,211	1,257	1,283	1,478	20.1	4.6	.4
Ohio	435	472	523	536	628	752	-7.8	-8.8	-5.9
Oklahoma	39	42	44	36	34	67	-6.7	3.2	-5.8
Pennsylvania Total	828	852	850	894	1,022	1,346	-2.8	-5.1	-5.3
Anthracite	34	59	64	69	70	80	-42.1	-16.2	-9.0
Bituminous	794	793	787	825	952	1,266	.1	-4.4	-5.0
Tennessee	38	27	39	51	57	102	42.7	-9.6	-10.3
Texas	931	1,002	1,078	1,111	1,097	997	-7.1	-4.0	-.8
Utah	384	405	443	462	458	506	-5.2	-4.3	-3.0
Virginia	215	305	332	374	384	522	-29.5	-13.5	-9.4
Washington	w	w	w	w	w	w	w	w	w
West Virginia Total	1,660	1,752	1,853	1,925	1,919	2,483	-5.2	-3.6	-4.4
Northern	781	747	871	939	924	1,213	4.5	-4.1	-4.8
Southern	879	1,005	982	986	995	1,271	-12.5	-3.1	-4.0
Wyoming	6,350	6,197	6,124	5,748	5,954	6,072	2.5	1.6	.5
Appalachian Total ¹	4,404	5,076	4,941	5,268	5,433	6,864	-13.2	-5.1	-4.8
Interior Total ¹	2,784	2,994	3,228	3,370	3,340	3,913	-7.0	-4.4	-3.7
Western Total ¹	11,878	11,466	11,450	11,319	11,876	12,036	3.6	*	-.1
East of Miss. River	6,059	6,822	6,848	7,286	7,437	9,346	-11.2	-5.0	-4.7
West of Miss. River	13,007	12,715	12,772	12,671	13,212	13,466	2.3	-.4	-.4
U.S. Total	19,066	19,536	19,620	19,957	20,649	22,812	-2.4	-2.0	-2.0

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

* Data round to zero.

w Withheld to avoid disclosure of individual company data.

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, 1985, 1990-1994
(Metric Tons)

Continent and Country of Origin	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
North America Total	1,137,082	955,786	926,102	848,646	888,336	366,903	19.0	6.4	13.4
Canada	1,136,881	953,696	926,102	848,646	882,708	366,903	19.2	6.5	13.4
Guatemala	-	4	-	-	-	-	-100.0	-	-
Mexico	201	2,086	-	-	5,628	-	-90.4	-56.5	-
South America Total	4,463,532	4,912,696	2,088,277	2,192,038	1,534,039	539,005	-9.1	30.6	26.5
Colombia	3,075,043	3,734,915	1,599,502	1,706,814	1,295,594	539,005	-17.7	24.1	21.3
Venezuela	1,388,489	1,177,781	488,775	485,224	238,445	-	17.9	55.3	-
Europe Total	36	56	81	5	4,892	5,455	-35.7	-70.7	-42.8
Czechoslovakia	-	-	-	5	-	-	-	-	-
Denmark	-	54	-	-	118	-	-100.0	-100.0	-
Germany	-	-	-	-	1	39	-	-100.0	-100.0
Italy	-	-	-	-	-	7	-	-	-100.0
Netherlands	-	-	-	-	-	5,381	-	-	-100.0
Norway	-	-	-	-	42	28	-	-100.0	-100.0
Poland	36	2	-	-	-	-	NM	-	-
United Kingdom	-	-	81	-	4,731	-	-	-100.0	-
Asia Total	1,046,493	642,359	338,513	6,254	2	10	62.9	NM	261.2
China (Mainland)	101	-	258	183	-	-	-	-	-
India	-	-	60,014	-	-	-	-	-	-
Indonesia	1,025,543	642,359	229,779	6,025	-	-	59.6	-	-
Japan	1	-	-	1	2	10	-	-15.9	-22.6
Malaysia	-	-	48,461	-	-	-	-	-	-
Thailand	-	-	-	45	-	-	-	-	-
Vietnam	20,848	-	-	-	-	-	-	-	-
Oceania & Australia Total	91,002	95,664	91,613	28,219	21,586	35,302	-4.9	43.3	11.1
Australia	83,646	90,787	91,613	28,219	21,586	35,302	-7.9	40.3	10.0
New Zealand	7,356	4,877	-	-	-	-	50.8	-	-
Africa Total	141,931	23,967	5,227	-	-	824,528	492.2	-	-17.8
Gabon	-	-	-	-	-	171	-	-	-100.0
Nigeria	-	-	-	-	-	2	-	-	-100.0
South Africa, Rep of	135,849	18,433	5,227	-	-	824,355	NM	-	-18.1
Swaziland	6,082	5,534	-	-	-	-	9.9	-	-
Total	6,880,076	6,630,528	3,449,813	3,075,162	2,448,855	1,771,203	3.8	29.5	16.3

^{NM} Not meaningful as value is greater than 500.

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, 1985, 1990-1994
(Metric Tons of Coal Produced per Miner per Hour)

Coal-Producing State and Region	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
Alabama	2.04	2.14	2.26	1.97	2.02	1.54	-4.3	0.2	3.2
Alaska	6.30	6.71	6.29	6.19	7.67	5.63	-6.2	-4.8	1.3
Arizona	6.08	5.63	5.71	6.03	5.38	5.92	8.0	3.1	.3
Arkansas	1.38	1.26	1.52	2.06	1.33	1.63	9.9	1.0	-1.8
California	-	-	10.09	10.26	16.04	3.84	-	-	-
Colorado	5.62	5.30	4.78	4.58	3.84	2.99	6.0	10.0	7.3
Illinois	3.26	2.93	3.10	2.89	2.66	1.95	11.3	5.2	5.9
Indiana	3.88	4.04	3.71	3.65	3.48	2.59	-4.0	2.7	4.6
Iowa	1.38	.65	1.03	1.17	1.31	1.61	111.6	1.2	-1.7
Kansas	1.75	2.09	2.00	1.95	1.84	2.22	-16.1	-1.3	-2.6
Kentucky Total	2.95	2.94	2.90	2.73	2.57	2.02	.1	3.5	4.3
Eastern	2.94	2.88	2.82	2.63	2.41	1.93	1.9	5.1	4.8
Western	2.97	3.16	3.17	3.05	3.14	2.34	-5.9	-1.3	2.7
Louisiana	11.79	11.02	11.27	11.40	11.94	2.12	7.1	-3	21.0
Maryland	3.34	3.10	2.64	2.82	2.66	2.24	7.9	5.9	4.6
Missouri	3.26	1.67	2.81	2.44	2.71	2.07	95.0	4.6	5.2
Montana	19.89	17.68	18.29	17.23	17.04	13.36	12.5	3.9	4.5
New Mexico	6.14	6.06	6.06	5.67	6.93	4.93	1.4	-3.0	2.5
North Dakota	17.09	16.02	16.43	16.00	14.62	10.34	6.6	4.0	5.7
Ohio	3.10	3.14	2.76	2.43	2.54	1.83	-1.3	5.1	6.0
Oklahoma	2.43	2.54	1.97	2.08	1.89	1.57	-4.4	6.5	4.9
Pennsylvania Total	2.71	2.54	2.43	2.21	2.03	1.50	6.5	7.4	6.8
Anthracite	1.75	1.68	1.21	1.26	.93	.96	4.4	17.1	6.9
Bituminous	2.82	2.64	2.55	2.29	2.15	1.55	6.9	7.0	6.8
Tennessee	2.03	2.24	1.98	1.71	1.65	1.37	-9.6	5.3	4.4
Texas	8.00	7.63	6.66	6.50	6.78	5.68	4.8	4.2	3.9
Utah	5.98	5.41	4.96	4.35	4.30	2.54	10.5	8.6	10.0
Virginia	2.28	2.18	2.15	2.02	2.03	1.64	4.1	2.9	3.7
Washington	3.73	3.62	4.09	3.60	3.09	2.86	2.8	4.8	3.0
West Virginia Total	3.35	2.97	2.97	2.82	2.69	1.77	12.7	5.6	7.3
Northern	3.29	2.70	2.88	2.57	2.44	1.91	21.7	7.7	6.2
Southern	3.37	3.07	3.01	2.95	2.83	1.69	9.7	4.5	8.0
Wyoming	23.63	22.19	19.50	19.84	19.42	13.01	6.5	5.0	6.9
Appalachian Total ¹	2.90	2.73	2.67	2.48	2.36	1.72	6.4	5.3	5.9
Interior Total ¹	4.02	4.01	3.79	3.61	3.52	2.54	.1	3.3	5.2
Western Total ¹	13.23	12.27	11.55	11.27	10.72	7.76	7.8	5.4	6.1
East of Miss. River	2.98	2.82	2.78	2.60	2.48	1.82	5.5	4.7	5.6
West of Miss. River	11.99	11.01	10.01	9.79	9.44	6.71	8.9	6.2	6.7
U.S. Total	4.51	4.26	3.96	3.71	3.47	2.49	5.9	6.8	6.8

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. 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, 1985, 1990-1994
(Thousand Metric Tons)

Census Division and State	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
New England Total	5,945	5,883	6,620	6,361	6,143	6,138	1.0	-0.8	-0.3
Connecticut	782	715	770	777	881	740	9.4	-2.9	.6
Maine	421	407	777	339	240	187	3.4	15.0	9.5
Massachusetts	3,567	3,457	3,862	4,038	3,934	3,788	3.2	-2.4	-7
New Hampshire	1,167	1,295	1,189	1,193	1,076	1,344	-9.9	2.0	-1.5
Rhode Island	3	3	4	4	5	8	.9	-10.9	-10.1
Vermont	4	5	18	11	7	72	-15.9	-11.5	-26.7
Middle Atlantic Total	61,268	63,856	64,790	64,042	66,961	65,716	-4.0	-2.2	-8
New Jersey	1,786	2,135	2,130	2,110	2,747	3,577	-16.3	-10.2	-7.4
New York	10,409	10,776	11,790	12,100	12,215	10,835	-3.4	-3.9	-4
Pennsylvania	49,073	50,945	50,870	49,832	51,999	51,304	-3.7	-1.4	-5
East North Central Total	193,401	191,082	182,035	189,223	190,163	181,164	1.2	.4	.7
Illinois	35,450	34,595	28,667	31,459	30,757	34,111	2.5	3.6	.4
Indiana	54,427	54,751	53,310	55,148	55,974	48,345	-6	-7	1.3
Michigan	32,363	29,226	28,626	30,734	31,491	29,751	10.7	.7	.9
Ohio	51,447	53,552	53,225	53,141	53,710	52,598	-3.9	-1.1	-2
Wisconsin	19,714	18,957	18,208	18,741	18,231	16,360	4.0	2.0	2.1
West North Central Total	113,935	109,715	104,785	105,875	105,477	89,674	3.8	1.9	2.7
Iowa	17,546	17,407	16,322	17,001	16,265	13,011	.8	1.9	3.4
Kansas	15,566	15,772	12,906	13,500	13,766	13,349	-1.3	3.1	1.7
Minnesota	16,991	16,620	15,354	15,416	16,672	11,561	2.2	.5	4.4
Missouri	25,096	21,211	22,843	23,381	23,438	22,438	18.3	1.7	1.3
Nebraska	8,437	8,769	7,450	8,037	7,499	6,035	-3.8	3.0	3.8
North Dakota	27,545	27,490	27,488	25,943	25,505	20,828	.2	1.9	3.1
South Dakota	2,754	2,445	2,422	2,598	2,332	2,452	12.6	4.3	1.3
South Atlantic Total	137,833	136,604	130,796	130,701	135,583	128,107	.9	.4	.8
Delaware	2,020	2,219	1,605	1,983	2,080	2,509	-9.0	-7	-2.4
District of Columbia	43	46	46	60	63	127	-8.5	-9.4	-11.5
Florida	23,661	23,977	23,921	23,590	22,891	17,513	-1.3	.8	3.4
Georgia	26,539	24,567	23,116	24,455	27,276	27,123	8.0	-7	-2
Maryland	9,518	9,315	8,811	9,715	10,154	9,083	2.2	-1.6	.5
North Carolina	21,121	23,369	21,840	18,940	19,187	20,005	-9.6	2.4	.6
South Carolina	11,787	11,715	10,238	10,388	10,385	9,506	.6	3.2	2.4
Virginia	11,605	12,323	12,173	12,682	11,888	10,574	-5.8	-6	1.0
West Virginia	31,540	29,072	29,047	28,887	31,658	31,667	8.5	-1	*
East South Central Total	90,074	94,371	85,097	82,359	82,668	79,545	-4.5	2.2	1.4
Alabama	28,552	29,980	28,585	26,625	25,074	24,556	-4.8	3.3	1.7
Kentucky	34,555	35,467	31,483	31,313	31,251	28,114	-2.6	2.5	2.3
Mississippi	3,887	3,656	3,161	3,458	3,773	4,099	6.3	.8	-6
Tennessee	23,079	25,268	21,868	20,962	22,569	22,775	-8.7	.5	.1
West South Central Total	125,419	127,729	122,660	121,232	119,275	102,075	-1.8	1.3	2.3
Arkansas	11,427	10,384	11,374	11,123	10,970	11,505	10.0	1.0	-1
Louisiana	12,791	12,407	12,405	11,762	11,383	8,362	3.1	2.9	4.8
Oklahoma	16,080	17,115	15,812	14,828	13,992	12,340	-6.0	3.5	3.0
Texas	85,121	87,823	83,069	83,519	82,931	69,869	-3.1	.6	2.2
Mountain Total	104,957	100,401	101,752	95,415	97,212	81,094	4.5	1.9	2.9
Arizona	17,763	17,228	16,252	15,245	14,895	14,845	3.1	4.5	2.0
Colorado	15,853	15,485	15,146	14,713	15,159	13,828	2.4	1.1	1.5
Idaho	484	479	485	610	498	441	1.0	-7	1.0
Montana	10,060	8,389	10,015	9,570	8,778	5,183	19.9	3.5	7.6
Nevada	7,229	7,081	7,338	7,340	6,751	5,025	2.1	1.7	4.1
New Mexico	13,947	13,619	13,455	11,664	13,709	13,235	2.4	.4	.6
Utah	14,711	14,377	14,260	13,457	14,277	7,532	2.3	.8	7.7
Wyoming	24,910	23,742	24,801	22,815	23,145	21,005	4.9	1.8	1.9
Pacific Total	11,034	10,362	11,055	10,029	8,884	8,100	6.5	5.6	3.5
Alaska	722	783	718	728	711	665	-7.7	.4	.9
California	2,266	2,226	2,559	2,554	2,630	1,762	1.8	-3.6	2.8
Hawaii	78	66	42	33	25	41	17.6	32.4	7.3
Oregon	2,249	1,904	1,927	1,760	848	537	18.1	27.6	17.2
Washington	5,718	5,383	5,808	4,954	4,669	5,095	6.2	5.2	1.3
U.S. Total	843,865	840,003	809,591	805,236	812,366	742,121	.4	.9	1.4

* 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,
1985, 1990-1994**
(Thousand Metric Tons)

Census Division and State	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
New England Total	1,013	897	1,137	1,029	1,039	906	13.0	-0.6	1.2
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
Vermont	-	-	-	-	-	w	w	w	w
Middle Atlantic Total	12,762	12,755	17,678	16,553	17,033	16,201	•	-7.0	-2.6
New Jersey	w	w	w	w	w	w	w	w	w
New York	w	w	w	w	w	w	w	w	w
Pennsylvania	10,940	11,127	14,493	14,104	13,994	13,393	-1.7	-6.0	-2.2
East North Central Total	32,507	27,363	39,609	39,172	41,196	42,098	18.8	-5.8	-2.8
Illinois	w	w	w	w	w	7,109	w	w	w
Indiana	10,620	7,074	11,347	10,330	11,091	11,675	50.1	-1.1	-1.0
Michigan	w	w	w	w	w	w	w	w	w
Ohio	7,090	6,922	9,801	9,632	9,499	8,824	2.4	-7.0	-2.4
Wisconsin	3,118	2,896	w	w	w	w	7.6	w	w
West North Central Total	16,072	13,515	w	w	w	w	18.9	w	w
Iowa	3,790	3,465	4,406	4,657	4,463	4,547	9.4	-4.0	-2.0
Kansas	2,380	1,836	2,503	3,012	3,395	3,241	29.6	-8.5	-3.4
Minnesota	2,026	1,134	2,043	2,443	2,119	3,727	78.7	-1.1	-6.5
Missouri	4,145	3,360	w	w	w	w	23.4	w	w
Nebraska	w	w	w	w	w	1,873	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	22,160	17,320	26,565	27,172	26,691	23,238	27.9	-4.5	-5
Delaware	w	w	w	w	w	w	w	w	w
Florida	3,550	3,212	3,739	4,427	4,511	2,719	10.5	-5.8	3.0
Georgia	4,394	2,655	4,387	4,916	5,175	4,844	65.5	-4.0	-1.1
Maryland	w	w	w	w	w	w	w	w	w
North Carolina	3,917	2,776	4,277	4,415	4,227	4,891	41.1	-1.9	-2.4
South Carolina	2,298	1,717	2,223	2,033	2,101	1,753	33.8	2.3	3.0
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	10,221	8,416	13,063	13,631	15,283	15,512	21.4	-9.6	-4.5
Alabama	3,748	2,538	4,109	4,237	3,966	4,384	47.7	-1.4	-1.7
Kentucky	w	w	w	w	w	w	w	w	w
Mississippi	w	w	w	w	w	w	w	w	w
Tennessee	1,601	1,703	w	w	w	w	-6.0	w	w
West South Central Total	14,478	13,703	15,330	16,617	w	17,887	5.6	w	-2.3
Arkansas	1,612	1,706	1,444	1,964	1,574	2,329	-5.5	.6	-4.0
Louisiana	1,744	1,814	1,592	2,087	2,271	w	-3.9	-6.4	w
Oklahoma	2,238	1,862	2,867	2,648	2,469	3,968	20.2	-2.4	-6.2
Texas	8,884	8,320	9,427	9,917	w	w	6.8	w	w
Mountain Total	w	w	w	w	w	w	w	w	w
Arizona	2,941	3,372	3,263	3,837	2,839	w	-12.8	.9	w
Colorado	2,853	3,133	3,120	3,163	3,025	w	-8.9	-1.4	w
Idaho	71	78	92	71	127	60	-9.5	-13.6	1.9
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	2,316	1,670	2,034	2,571	2,987	w	38.6	-6.2	w
Pacific Total	w	w	w	w	w	w	w	w	w
Alaska	2	4	5	7	w	w	-49.8	w	w
California	114	84	99	126	110	w	35.5	.8	w
Hawaii	w	w	w	w	w	16	w	w	w
Oregon	w	w	w	w	w	w	w	w	w
Washington	516	416	667	1,083	1,250	361	24.0	-19.8	4.0
U.S. Total	123,504	109,278	148,499	152,145	152,598	154,433	13.0	-5.1	-2.4

• Data round to zero.

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, 1985, 1990-1994
(Thousand Metric Tons)

Continent and Country of Destination	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
North America Total	8,623	8,363	13,908	10,391	14,387	15,276	3.1	-12.0	-6.1
Canada ¹	8,340	8,064	13,734	10,140	14,071	14,872	3.4	-12.3	-6.2
Mexico	218	226	70	84	191	332	-3.5	3.4	-4.5
Other ²	65	73	104	167	125	72	-11.6	-15.1	-1.2
South America Total	5,394	5,216	6,141	6,950	6,262	6,177	3.4	-3.6	-1.5
Argentina	411	476	304	390	581	533	-13.7	-8.3	-2.9
Brazil	4,973	4,715	5,778	6,397	5,304	5,318	5.5	-1.6	-7
Other ²	11	26	58	163	377	326	-57.0	-58.7	-31.4
Europe Total	32,500	34,088	51,941	59,439	52,964	40,920	-4.6	-11.5	-2.5
Belgium & Luxembourg	4,455	4,744	6,528	6,771	7,711	4,016	-6.1	-12.8	1.1
Bulgaria	1,123	822	546	858	80	250	36.7	93.7	18.2
Denmark	432	305	3,477	4,225	2,892	1,958	41.9	-37.8	-15.4
Finland	342	229	186	481	86	1,152	49.3	41.0	-12.6
France	2,608	3,603	7,312	8,626	6,241	4,065	-27.6	-19.6	-4.8
Germany	293	461	910	1,581	959	978	-36.3	-25.6	-12.5
Ireland	883	894	1,314	1,191	1,322	389	-1.2	-9.6	9.5
Italy	6,843	6,276	8,476	10,227	10,838	9,300	9.0	-10.9	-3.3
Netherlands	4,421	5,046	8,299	8,732	7,592	5,740	-12.4	-12.6	-2.8
Norway	79	92	107	181	161	241	-14.2	-16.4	-11.7
Portugal	958	1,353	1,342	1,478	1,620	870	-29.1	-12.3	1.1
Romania	1,409	653	683	1,040	1,559	1,052	115.7	-2.5	3.3
Spain	3,748	3,687	4,114	4,258	3,439	3,135	1.7	2.2	2.0
Sweden	636	668	1,057	1,124	785	1,227	-4.7	-5.1	-7.0
Turkey	1,211	1,456	1,805	1,983	1,921	1,992	-16.8	-10.9	-5.4
United Kingdom	3,051	3,730	5,076	5,598	4,697	2,427	-18.2	-10.2	2.6
Yugoslavia	-	71	659	888	846	770	-100.0	-100.0	-100.0
Other ²	7	*	49	194	214	1,359	NM	-57.7	-44.4
Asia Total	16,290	17,690	18,633	19,766	20,616	20,269	-7.9	-5.7	-2.4
China (Taiwan)	3,061	3,117	3,230	4,125	4,177	2,861	-1.8	-7.5	.8
Israel	784	770	748	591	580	421	1.7	7.8	7.1
Japan	9,215	10,776	11,162	11,130	12,100	13,945	-14.5	-6.6	-4.5
Korea, Republic of	3,228	3,008	3,041	3,366	3,628	2,929	7.3	-2.9	1.1
Other ²	3	20	454	554	132	113	-84.7	-61.1	-33.2
Oceania & Australia Total	*	1	*	*	2	*	-47.5	-32.5	.4
Other ²	*	1	*	*	2	*	-47.5	-32.5	.4
Africa Total	1,927	2,245	2,378	2,309	1,753	1,435	-14.1	2.4	3.3
Algeria	322	371	555	474	435	752	-13.2	-7.2	-9.0
Egypt	951	788	770	698	586	458	20.8	12.8	8.5
Morocco	76	533	668	919	682	175	-85.8	-42.3	-8.9
South Africa, Rep of	578	515	385	217	50	49	12.3	84.4	31.5
Other ²	-	38	-	2	-	1	-100.0	-	-100.0
Total	64,735	67,603	93,001	98,855	95,984	84,078	-4.2	-9.4	-2.9

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 1993.

* Data round to zero.

NM Not meaningful as value is greater than 500.

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 by State, 1985, 1990-1994
(Nominal Dollars per Metric Ton)

Coal-Producing State and Region	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
Alabama	\$44.22	\$46.67	\$45.00	\$45.34	\$47.44	\$47.23	-5.2	-1.7	-0.7
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	w
California	-	-	w	w	w	w	w	w	w
Colorado	21.78	22.44	23.51	24.45	23.98	\$27.17	-2.9	-2.4	-2.4
Illinois	25.50	27.86	30.49	31.25	30.56	33.95	-8.5	-4.4	-3.1
Indiana	24.56	25.23	25.81	26.00	26.36	29.25	-2.7	-1.7	-1.9
Iowa	w	w	w	w	w	28.80	w	w	w
Kansas	w	w	w	w	w	28.66	w	w	w
Kentucky Total	27.42	27.31	27.01	28.05	27.77	31.13	.4	-.3	-1.4
Eastern	27.83	28.11	27.55	29.07	28.49	31.71	-1.0	-.6	-1.4
Western	26.05	24.64	25.46	25.22	25.71	29.47	5.7	.3	-1.3
Louisiana	w	w	w	w	w	w	w	w	w
Maryland	29.04	27.79	27.99	28.36	28.63	\$30.20	4.5	.3	-.4
Missouri	24.01	w	w	w	w	29.86	w	w	-2.4
Montana	11.46	12.18	11.24	11.86	10.38	14.53	-5.9	2.5	-2.6
New Mexico	25.68	25.31	25.51	25.63	24.72	25.80	1.4	.9	*
North Dakota	8.40	8.41	8.25	8.64	8.46	10.25	-.2	-.2	-2.2
Ohio	32.11	30.91	29.69	30.59	31.58	37.45	3.8	.4	-1.7
Oklahoma	28.18	27.46	28.40	31.44	33.50	34.97	2.6	-4.2	-2.4
Pennsylvania Total	28.86	29.21	31.53	32.40	33.24	36.28	-1.2	-3.5	-2.5
Anthracite	39.76	36.31	37.74	40.05	43.43	50.49	9.5	-2.2	-2.6
Bituminous	28.05	28.70	31.24	32.03	32.76	35.36	-2.3	-3.8	-2.5
Tennessee	29.95	30.01	29.88	29.48	30.82	31.46	-.2	-.7	-.5
Texas	13.65	14.19	13.69	13.46	12.34	12.79	-3.8	2.5	..7
Utah	21.24	22.94	23.27	24.91	20.43	30.53	-7.4	1.0	-3.9
Virginia	29.59	29.55	30.37	30.26	30.92	33.24	.1	-1.1	-1.3
Washington	w	w	w	w	w	w	w	w	w
West Virginia Total	30.23	30.40	31.03	31.55	31.54	\$36.89	-.6	-1.1	-2.2
Northern	29.51	30.96	32.00	33.24	32.03	35.25	-4.7	-2.0	-1.9
Southern	30.54	30.20	30.60	30.78	31.30	37.95	1.1	-.6	-2.4
Wyoming	7.53	8.06	8.97	8.92	9.29	12.52	-6.7	-5.1	-5.5
Appalachian Total ¹	30.16	30.47	30.81	31.63	31.84	35.66	-1.0	-1.3	-1.8
Interior Total ¹	21.90	22.08	23.82	24.10	23.64	26.90	-.8	-1.9	-2.3
Western Total ¹	11.65	12.28	12.78	12.91	12.79	16.02	-5.1	-2.3	-3.5
East of Miss. River	29.15	29.56	30.13	30.84	30.97	34.66	-1.4	-1.5	-1.9
West of Miss. River	12.03	12.68	13.21	13.29	13.01	16.06	-5.1	-1.9	-3.2
U.S. Total	21.40	21.88	23.18	23.69	23.99	27.78	-2.2	-2.8	-2.9

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

* Data round to zero.

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. 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, 1985, 1990-1994
(Nominal Dollars per Metric Ton)

Census Division and State	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
New England Total	\$47.19	\$47.78	\$49.76	\$51.95	\$52.23	\$59.50	-1.2	-2.5	-2.5
Connecticut	51.20	49.38	56.55	63.21	62.11	68.14	3.7	-4.7	-3.1
Massachusetts	47.40	47.83	48.62	49.97	49.93	57.73	-.9	-1.3	-2.2
New Hampshire	43.72	46.73	49.26	50.93	52.24	59.58	-6.4	-4.3	-3.4
Middle Atlantic Total	40.04	40.41	41.41	42.97	42.50	43.91	-.9	-1.5	-1.0
New Jersey	53.45	52.36	51.39	52.64	53.32	56.08	2.1	*	-.5
New York	41.49	42.58	42.57	45.41	45.69	47.78	-2.6	-2.4	-1.5
Pennsylvania	39.01	39.39	40.58	41.94	41.06	42.18	-.9	-1.3	-.9
East North Central Total	33.69	34.15	35.33	35.97	36.56	43.98	-1.3	-2.0	-2.9
Illinois	36.04	38.92	40.85	40.52	41.66	50.27	-7.4	-3.5	-3.6
Indiana	29.54	29.47	30.75	31.31	31.72	38.58	.2	-1.8	-2.9
Michigan	36.26	36.57	37.73	38.80	39.24	48.46	-.8	-1.9	-3.2
Ohio	38.25	37.54	37.92	38.95	39.70	44.11	1.9	-.9	-1.6
Wisconsin	25.50	25.31	28.57	28.87	28.86	36.76	.7	-3.0	-4.0
West North Central Total	18.47	18.60	20.86	21.43	21.68	25.83	-.7	-3.9	-3.6
Iowa	19.17	19.32	21.58	21.63	21.92	29.59	-.8	-3.3	-4.7
Kansas	19.68	19.49	23.14	24.31	24.51	27.09	.9	-5.3	-3.5
Minnesota	22.14	22.12	23.10	24.45	24.26	27.46	.1	-2.3	-2.4
Missouri	23.58	26.90	30.39	30.48	30.90	35.26	-12.3	-6.5	-4.4
Nebraska	14.45	14.24	14.07	14.03	14.20	21.24	1.5	.4	-4.2
North Dakota	10.23	10.34	10.42	10.32	10.03	12.77	-1.0	.5	-2.4
South Dakota	14.44	14.66	15.07	15.04	15.40	15.93	-1.5	-1.6	-1.1
South Atlantic Total	43.57	44.98	45.50	46.49	46.15	50.68	-3.1	-1.4	-1.7
Delaware	46.28	48.53	49.95	51.27	52.15	54.59	-4.6	-2.9	-1.8
Florida	48.18	48.04	49.63	50.56	50.39	57.17	.3	-1.1	-1.9
Georgia	43.89	47.72	47.80	47.35	46.83	50.19	-8.0	-1.6	-1.5
Maryland	43.92	44.95	44.84	46.11	46.25	48.73	-2.3	-1.3	-1.1
North Carolina	46.04	46.69	47.40	49.04	49.21	54.39	-1.4	-1.6	-1.8
South Carolina	43.92	44.28	43.14	45.60	48.00	52.89	-.8	-2.2	-2.0
Virginia	40.84	41.41	41.67	42.85	43.31	50.90	-1.4	-1.4	-2.4
West Virginia	38.25	39.05	40.65	41.81	40.41	43.88	-2.0	-1.4	-1.5
East South Central Total	35.75	36.71	36.43	37.40	37.46	44.13	-2.6	-1.2	-2.3
Alabama	44.55	46.91	45.93	48.31	49.14	53.69	-5.0	-2.4	-2.0
Kentucky	29.94	30.08	29.77	29.98	30.41	35.42	-.5	-.4	-1.8
Mississippi	39.18	44.66	44.02	46.21	45.74	67.81	-12.3	-3.8	-5.9
Tennessee	33.75	34.11	34.18	33.59	35.41	40.06	-1.0	-1.2	-1.9
West South Central Total	22.91	24.40	24.86	25.33	25.26	28.35	-6.1	-2.4	-2.3
Arkansas	30.76	32.52	31.79	30.75	31.05	29.92	-5.4	-.2	.3
Louisiana	27.61	28.27	27.48	29.86	30.62	40.79	-2.3	-2.5	-4.2
Oklahoma	19.29	23.50	23.66	25.55	27.53	31.77	-17.9	-8.5	-5.4
Texas	21.86	23.05	23.79	23.88	23.36	26.00	-5.1	-1.6	-1.9
Mountain Total	24.07	24.37	23.85	24.49	24.46	24.74	-1.3	-.4	-.3
Arizona	31.15	30.63	31.20	32.14	33.04	30.22	1.7	-1.5	.3
Colorado	23.16	23.80	23.88	23.69	22.94	24.79	-2.7	.2	-.8
Montana	12.99	12.98	13.38	12.61	12.64	13.48	*	.7	-.4
Nevada	35.68	35.64	35.63	34.48	36.55	40.61	.1	-.6	-1.4
New Mexico	28.08	27.12	26.27	27.58	26.49	22.12	3.5	1.5	2.7
Utah	28.77	30.13	30.35	30.20	29.54	35.65	-4.5	-.6	-2.3
Wyoming	15.53	15.47	14.79	16.03	16.24	17.74	.4	-1.1	-1.5
Pacific Total	24.18	23.75	24.44	25.53	26.91	29.60	1.8	-2.6	-2.2
Oregon	21.14	21.77	23.40	20.15	19.86	36.51	-2.9	1.6	-5.9
Washington	25.27	24.35	24.78	27.41	28.27	29.51	3.8	-2.8	-1.7
U.S. Total	30.89	31.51	32.36	33.10	33.57	38.07	-1.9	-2.0	-2.3

* 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, 1985, 1990-1994
(Nominal Dollars per Metric Ton)

Census Division and State	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
New England Total	\$61.44	\$63.75	\$72.43	\$73.57	\$71.77	\$65.42	-3.6	-3.8	-0.7
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	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	46.52	46.47	48.44	48.27	48.57	52.66	.1	-1.1	-1.4
Pennsylvania	37.10	37.53	39.35	39.57	40.36	43.89	-1.1	-2.1	-1.8
East North Central Total	38.27	38.07	38.64	39.66	39.86	44.68	.5	-1.0	-1.7
Illinois	32.11	32.43	32.23	33.96	34.48	43.11	-1.0	-1.8	-3.2
Indiana	34.56	34.07	34.81	36.38	36.19	39.72	1.4	-1.1	-1.5
Michigan	45.42	45.70	46.49	48.16	47.83	54.43	-6	-1.3	-2.0
Ohio	39.40	38.38	38.84	38.41	38.62	39.65	2.7	.5	-.1
Wisconsin	45.45	45.02	46.60	47.74	47.85	54.24	.9	-1.3	-1.9
West North Central Total	20.52	19.84	19.57	20.21	20.29	23.17	3.4	.3	-1.3
Iowa	31.44	30.87	29.94	32.13	33.36	41.29	1.8	-1.5	-3.0
Kansas	35.55	36.44	35.23	33.96	31.63	40.00	-2.4	3.0	-1.3
Minnesota	39.31	39.47	39.27	39.97	40.38	47.15	-.4	-.7	-2.0
Missouri	36.24	35.40	34.70	34.48	33.27	38.52	2.3	2.1	-.7
Nebraska	W	W	W	W	W	51.36	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	51.37	53.22	53.20	52.27	52.06	55.70	-3.5	-.3	-.9
Georgia	50.39	49.82	49.80	49.55	49.49	49.80	1.1	.4	.1
Maryland	35.47	35.47	36.18	37.16	31.64	36.16	*	2.9	-.2
North Carolina	48.08	47.89	47.91	47.45	49.45	52.05	.4	-.7	-.9
South Carolina	48.32	47.78	47.74	47.61	48.27	48.60	1.1	*	-.1
Virginia	45.82	45.49	45.16	44.67	45.25	46.30	.7	.3	-.1
West Virginia	36.07	36.28	35.20	35.37	35.14	38.94	-.5	.6	-.8
East South Central Total	W	W	W	W	W	W	W	W	W
Alabama	42.70	43.00	43.83	44.57	44.73	49.94	-.7	-1.1	-1.7
Kentucky	47.64	46.63	48.26	51.30	50.50	50.64	2.2	-1.4	-.7
Mississippi	W	W	W	W	W	W	W	W	W
Tennessee	38.96	39.04	39.16	39.31	38.76	43.36	-.2	.1	-1.2
West South Central Total	25.29	23.57	25.13	25.70	23.46	W	7.3	1.9	W
Arkansas	48.81	48.57	49.18	49.71	50.03	49.89	.5	-.6	-.2
Louisiana	W	W	W	W	W	W	W	W	W
Oklahoma	W	W	W	W	W	42.37	W	W	W
Texas	21.54	19.38	19.99	20.51	18.51	27.47	11.1	3.9	-2.7
Mountain Total	31.73	31.43	31.59	32.63	31.69	35.48	.9	*	-1.2
Arizona	45.58	44.65	45.14	44.20	43.59	W	2.1	1.1	W
Colorado	31.92	31.56	33.44	32.27	29.68	31.13	1.1	1.8	.3
Idaho	36.76	36.13	36.70	37.38	35.03	36.22	1.7	1.2	.2
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	29.29	29.23	27.94	29.13	31.40	31.48	.2	-1.7	-.8
Wyoming	25.21	25.83	26.09	27.76	27.46	W	-2.4	-2.1	W
Pacific Total	49.51	48.31	47.80	50.43	50.66	56.64	2.5	-.6	-1.5
California	47.83	47.25	46.35	49.37	49.73	57.75	1.2	-1.0	-2.1
Hawaii	W	W	W	W	W	62.58	W	W	W
Oregon	W	W	W	W	W	W	W	W	W
Washington	64.89	58.54	62.00	65.22	61.32	54.81	10.8	1.4	1.9
U.S. Total	35.88	35.53	36.14	36.97	37.03	41.02	1.0	-.8	-1.5

* 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, 1985, 1990-1994
(Nominal Dollars per Metric Ton)

Census Division and State	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
Middle Atlantic Total	W	W	W	W	W	W	W	W	W
New York	W	W	W	W	W	W	W	W	W
Pennsylvania	\$50.98	\$51.16	\$51.25	\$51.65	\$50.46	\$55.65	-0.3	0.3	-1.0
East North Central Total	52.06	54.58	55.53	55.89	53.81	63.34	-4.6	-8	-2.1
Illinois	W	W	W	W	W	61.54	W	W	W
Indiana	56.11	57.64	59.21	58.77	54.45	66.12	-2.6	.8	-1.8
Michigan	W	-	-	W	W	W	W	W	W
Ohio	46.32	49.68	51.45	50.87	53.24	60.51	-6.8	-3.4	-2.9
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	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	52.31	52.36	52.70	53.29	53.94	59.74	-1	-8	-1.5
Kentucky	W	W	W	W	W	W	W	W	W
Tennessee	-	-	-	W	W	W	-	W	W
West South Central Total	-	-	-	-	-	W	-	W	W
Texas	-	-	-	-	-	W	-	W	W
Mountain Total	W	W	W	W	W	W	W	W	W
Utah	W	W	W	W	W	W	W	W	W
U.S. Total	51.32	52.30	52.82	53.88	52.61	59.89	-1.9	-6	-1.7

* 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, 1985, 1990-1994
(Nominal Dollars per Metric Ton)

Continent and Country of Origin	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
North America Total	\$33.74	\$31.97	\$30.73	\$27.67	\$27.07	\$35.64	5.5	5.7	-0.6
Canada	33.74	31.98	30.73	27.67	26.95	35.64	5.5	5.8	-.6
Mexico	-	23.35	-	-	42.29	-	-100.0	-100.0	-
South America Total	31.97	30.46	36.42	38.19	41.43	39.90	4.9	-6.3	-2.4
Colombia	30.27	30.04	35.55	36.24	40.64	39.90	.7	-7.1	-3.0
Venezuela	35.73	31.82	39.25	45.06	45.75	-	12.3	-6.0	-
Europe Total	-	35.65	37.49	-	40.98	29.79	-100.0	-100.0	-100.0
Denmark	-	35.65	-	-	40.05	-	-100.0	-100.0	-
Germany	-	-	-	-	-	29.79	-	-	-100.0
United Kingdom	-	-	37.49	-	41.00	-	-	-100.0	-
Asia Total	37.58	47.07	42.71	-	-	-	-20.2	-	-
India	-	-	26.07	-	-	-	-	-	-
Indonesia	37.26	47.07	45.13	-	-	-	-20.8	-	-
Malaysia	-	-	51.87	-	-	-	-	-	-
Vietnam	53.00	-	-	-	-	-	-	-	-
Oceania & Australia Total	34.35	34.79	39.76	41.86	46.00	34.80	-1.2	-7.0	-.1
Australia	33.09	34.79	39.76	41.86	46.00	34.80	-4.9	-7.9	-.5
New Zealand	48.67	-	-	-	-	-	-	-	-
Africa Total	27.92	30.66	54.33	-	-	38.65	-8.9	-	-3.5
South Africa, Rep of	27.92	-	54.33	-	-	38.65	-	-	-3.5
Swaziland	-	30.66	-	-	-	-	-100.0	-	-
Total¹	33.05	32.37	35.80	35.65	36.85	38.49	2.1	-2.7	-1.7
U.S. Total²	33.30	32.94	36.88	36.51	37.98	39.73	1.1	-3.2	-1.9

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 \$50 per short ton (\$18.14 to \$45.36 per metric ton), inclusively.

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

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, 1985, 1990-1994
(Nominal Dollars per Metric Ton)

Continent and Country of Destination	1994	1993	1992	1991	1990	1985	Percent Change 1993-1994	Average Annual Percent Change	
								1990-1994	1985-1994
North America Total	\$36.22	\$37.65	\$36.44	\$37.05	\$36.06	\$53.47	-3.8	0.1	-4.2
Canada ¹	35.83	37.33	36.37	36.91	35.97	53.67	-4.0	-.1	-4.4
Mexico	48.80	48.54	47.93	48.11	41.39	49.27	.5	4.2	-.1
Other ²	38.99	38.69	40.11	39.36	37.68	43.61	.8	.8	-1.2
South America Total	46.61	48.25	50.20	50.97	50.99	54.33	-3.4	-2.2	-1.7
Argentina	46.85	47.63	50.09	50.26	50.49	54.11	-1.6	-1.8	-1.6
Brazil	46.59	48.32	50.23	51.20	51.68	54.53	-3.6	-2.6	-1.7
Other ²	44.81	43.51	47.36	42.77	40.55	51.94	3.0	2.5	-1.6
Europe Total	46.65	47.82	47.03	47.49	48.41	48.52	-2.4	-.9	-.4
Belgium & Luxembourg	46.55	47.55	48.51	49.40	49.63	50.44	-2.1	-1.6	-.9
Bulgaria	46.40	46.25	47.72	46.92	54.28	48.85	.3	-3.8	-.6
Denmark	32.22	38.53	36.03	36.32	37.89	41.81	-16.4	-4.0	-2.8
Finland	45.34	43.66	44.99	49.35	49.30	44.98	3.8	-2.1	.1
France	48.76	46.56	43.40	44.29	47.40	51.07	4.7	.7	-.5
Germany	49.97	42.97	42.19	43.36	45.87	46.66	16.3	2.2	.8
Ireland	37.28	39.51	40.57	43.57	42.49	51.71	-5.6	-3.2	-3.6
Italy	47.40	48.86	49.97	50.02	49.30	46.35	-3.0	-1.0	.2
Netherlands	46.28	48.75	47.78	47.60	47.32	49.31	-5.0	-.5	-.7
Norway	52.22	-	52.86	35.40	-	44.84	-	-	1.7
Portugal	39.96	41.56	44.91	45.05	44.97	52.05	-3.8	-2.9	-2.9
Romania	38.69	39.99	45.88	50.58	52.40	49.97	-3.3	-7.3	-2.8
Spain	51.09	51.84	51.61	49.85	51.52	50.96	-1.4	-.2	*
Sweden	50.22	50.66	51.44	52.60	53.14	49.98	-.9	-1.4	*
Turkey	45.51	46.94	50.20	51.63	50.85	52.14	-3.0	-2.7	-1.5
United Kingdom	49.84	50.60	50.20	51.09	52.14	51.61	-1.5	-1.1	-.4
Yugoslavia	-	43.65	49.65	51.38	50.83	52.97	-100.0	-100.0	-100.0
Other ²	42.04	44.91	40.84	48.81	51.02	39.44	-6.4	-4.7	.7
Asia Total	42.62	44.74	47.02	47.67	47.75	47.87	-4.7	-2.8	-1.3
China (Taiwan)	42.60	43.53	45.45	46.00	42.59	45.97	-2.1	*	-.8
Israel	36.63	38.35	43.11	43.95	43.45	46.49	-4.5	-4.2	-2.6
Japan	42.53	45.06	47.30	47.83	48.78	49.78	-5.6	-3.4	-1.7
Korea, Republic of	44.35	46.43	49.53	50.65	51.13	47.04	-4.5	-3.5	-.6
Other ²	41.05	48.75	40.85	42.56	42.89	44.96	-15.8	-1.1	-1.0
Oceania & Australia Total	44.04	37.99	38.08	-	40.34	-	15.9	2.2	-
Other ²	44.04	37.99	38.08	-	40.34	-	15.9	2.2	-
Africa Total	48.05	46.90	47.37	45.49	43.84	51.15	2.5	2.3	-.7
Algeria	47.66	48.85	51.10	51.26	52.55	53.10	-2.4	-2.4	-1.2
Egypt	47.55	49.45	50.80	50.36	50.67	49.47	-3.8	-1.6	-.4
Morocco	38.62	37.32	37.26	37.18	34.54	50.00	3.5	2.8	-2.8
South Africa, Rep of	50.34	51.67	52.68	53.92	-	51.92	-2.6	-	-.3
Other ²	-	44.68	-	44.99	-	44.09	-100.0	-	-100.0
Total³	44.36	45.77	45.68	46.69	46.57	49.65	-3.1	-1.2	-1.2
U.S. Total⁴	44.02	45.65	45.57	46.73	46.99	53.11	-3.6	-1.6	-2.1

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 1993.

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 \$28 to \$50 per short ton (\$25.40 to \$45.36 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

In 1986, American Electric Power and Ohio Power Company donated 9,154 acres of land to the International Center for the Preservation of Wild Animals. The land once used for surface mining was reclaimed and now some 15 species of wild and endangered animals occupy this land.

References

Figure C1. Coal-Bearing Areas of the United States

Sources: U.S.G.S., Coalfields of the United States, 1960-61; Texas Bureau of Economic Geology, Lignite Resources in Texas, 1980; Louisiana Geological Survey, Near Surface Lignite in Louisiana, 1981; Colorado Geological Survey, Coal Resources and Development Map, 1981.

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

Principles				
The lower rank coals can be classified based on heat content. The heat content of the higher rank coals is generally above 14,000 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.				
Coal Rank	Coal Group	Basis of Classification		
Coals Classified by Fixed Carbon		Fixed Carbon Percentage ¹		Agglomerating Character
		Equal to or Greater than	Less than	
I. Anthracitic	1. Meta-anthracite	98	--	Non-agglomerating
	2. Anthracite	92	98	Non-agglomerating
	3. Semianthracite ²	86	92	Non-agglomerating
II. Bituminous	1. Low-volatile bituminous	78	86	Commonly agglomerating ³
	2. Medium-volatile bituminous	69 ⁴	78	Commonly agglomerating ³
	3. High-volatile A bituminous	--	69 ⁴	Commonly agglomerating ³
Coals Classified by Heat Content		Heat Content in Btu per Pound ⁵		
		Equal to or Greater than	Less than	
II. Bituminous	4. High-volatile B bituminous	13,000	14,000	Commonly agglomerating ³
	5. High-volatile C bituminous	11,500	13,000	Commonly agglomerating ³
	6. High-volatile C bituminous	10,500	11,500	Agglomerating
III. Subbituminous	1. Subbituminous A	10,500	11,500	Non-agglomerating
	2. Subbituminous B	9,500	10,500	Non-agglomerating
	3. Subbituminous C	8,300	9,500	Non-agglomerating
IV. Lignitic	1. Lignite A	6,300	8,300	Non-agglomerating
	2. Lignite B	--	6,300	Non-agglomerating

¹ 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.

² If agglomerating, classify in low-volatile group of the bituminous class.

³ There may be nonagglomerating varieties in the bituminous class, most notably in the high-volatile C bituminous group.

⁴ Coals having 69 percent or more fixed carbon are classified according to fixed carbon, regardless of Btu value. Coals with less than 69 percent fixed carbon, but with 14,000 or more Btu per pound, are classified as high-volatile A bituminous.

⁵ Calorific values in Btu per pound, on a moist mineral-matter-free basis.

Note: Terms in this table are defined in the Glossary.

Source: Adapted from American Society for Testing and Materials 1988, Standard Classification of Coal by Rank, ASTM Designation D 388-91a.

Table C2. Approximate Heat Content of Coal
(Million Btu per Short Ton)

Coal Rank Sector	1981	1982	1983	1984	1985	1986	1987
Anthracite							
Production	22.291	23.289	22.734	23.107	22.428	23.084	23.108
Consumption	22.080	22.518	21.583	22.322	20.817	21.512	22.435
Non-electric utility users	23.749	24.578	24.536	25.128	23.031	24.399	26.293
Electric utilities	18.168	18.160	16.516	17.018	16.784	15.578	15.962
Imports and exports	25.400	25.400	25.400	25.400	25.400	25.400	25.400
Bituminous Coal and Lignite							
Production	22.301	22.233	22.048	22.005	21.867	21.908	21.918
Consumption	21.710	21.670	21.576	21.570	21.368	21.462	21.514
Residential and commercial	22.010	22.226	22.438	22.406	22.568	22.669	22.800
Coke plants	26.800	26.800	26.800	26.800	26.800	26.800	26.800
Other industrial and transportation	22.572	22.695	22.680	22.525	22.013	22.185	22.360
Electric utilities	21.091	21.200	21.141	21.108	20.965	20.091	21.143
Imports	25.000	25.000	25.000	25.000	25.000	25.000	25.000
Exports	26.176	26.231	26.300	26.410	26.320	26.308	26.304
Coal Coke	24.800	24.800	24.800	24.800	24.800	24.800	24.800
	1988	1989	1990	1991	1992	1993	1994
Anthracite							
Production	23.266	23.385	22.574	22.573	22.572	22.573	22.574
Consumption	22.423	22.623	21.668	21.410	21.423	21.262	21.711
Non-electric utility users	26.021	27.196	25.199	25.268	24.617	24.096	24.280
Electric utilities	17.312	16.310	16.140	15.858	16.944	16.534	14.878
Imports and exports	25.400	25.400	25.400	25.400	25.400	25.400	25.400
Bituminous Coal and Lignite							
Production	21.817	21.759	21.819	21.678	21.643	21.383	21.348
Consumption	21.324	21.268	21.330	21.146	21.142	21.983	20.012
Residential and commercial	23.135	22.917	22.678	22.635	22.768	22.749	23.004
Coke plants	26.800	26.800	26.800	26.800	26.800	26.800	26.800
Other industrial and transportation	22.341	22.324	22.444	22.448	22.242	22.111	22.036
Electric utilities	20.905	20.854	20.935	20.761	20.792	20.644	20.699
Imports	25.000	25.000	25.000	25.000	25.000	25.000	25.000
Exports	26.308	26.166	26.207	26.192	26.165	26.341	26.335
Coal Coke	24.800	24.800	24.800	24.800	24.800	24.800	24.800

Note: Values for 1994 are preliminary.

Source: Calculated by Energy Information Administration. See *Monthly Energy Review* DOE/EIA-0035 Appendix A for detailed description.

Coal Reports and Feature Articles

Coal Reports

- *Weekly Coal Production* DOE/EIA-0218 (95-33)
- *Coal Data: A Reference*, DOE/EIA-0064 (93) February 1995
- *State Coal Profiles*, DOE/EIA-0576, January 1994
- *Quarterly Coal Report*, DOE/EIA-0121 (95/1Q).
- *The Changing Structure of the U.S. Coal Industry: An Update*, DOE/EIA-0513(93), July 1993.
- *U.S. Coal Reserves: An Update by Heat and Sulfur Content*, DOE/EIA-0529(92), February 1993.
- *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(95/06), June 1995.
- *Electric Power Annual*, DOE/EIA-0348(94), Vol. 1, July 1995.
- *Longwall Mining*, DOE/EIA-TR-0588 March 1995.
- *Monthly Energy Review*, DOE/EIA-0035(95/08) August 1995.

- *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

- *Carbon Dioxide Emission Factors for Coal*, August 1994. (Quarterly Coal Report, DOE/EIA-0121 (94/1Q), August 1994).
- *Federal and Indian Coal Lands: A Growing Source of Energy and Revenue*, October 1993 (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*, October 1992 (Coal Production 1991, DOE/EIA-0118(91), October 1992).
- *Profile of New Coal Mines in the 1980's*, September 1991 (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).

Appendix D

Explanatory Notes

*The enclosed conveyor provides stability, controls dust, and facilitates all-weather inspection and maintenance.
The exhaust fans prevent build-up of coal dust.*

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); miner profile data were collected by the Bituminous Coal Operators Association, Washington, D.C., and the U.S. Department of Labor (Bureau of Labor Statistics); 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 1994 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 1994. 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 thousand short tons or more of coal in 1994 and preparation plants with 5 thousand 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. The respondents to this survey are compared 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 1994, there were 2,543 mining operations that produced, processed, or prepared 10 thousand or more short tons of coal. Of these mining operations, 80.0 percent (2,059) responded to the EIA-7A survey. In 1994, there were 1,898 mines that produced 10 thousand or more short tons of coal. Of these mines, 80.9 percent (1,535) responded to the EIA-7A survey and they accounted for 994 million short tons, or 96.2 percent of the 1994 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	72	22,391	28	875	100	23,266
Alaska	1	1,567	-	-	1	1,567
Arizona	3	13,056	-	-	3	13,056
Arkansas	4	38	2	12	6	51
Colorado	20	25,274	1	29	21	25,304
Illinois	40	52,797	4	-	44	52,797
Indiana	54	30,738	13	189	67	30,927
Iowa	1	46	-	-	1	46
Kansas	1	284	-	-	1	284
Kentucky Total	648	145,247	253	16,395	901	161,642
Eastern	576	108,543	232	15,904	808	124,447
Western	72	36,704	21	491	93	37,195
Louisiana	2	3,463	-	-	2	3,463
Maryland	18	3,581	3	50	21	3,632
Missouri	6	838	-	-	6	838
Montana	7	41,636	1	3	8	41,640
New Mexico	-9	28,041	-	-	9	28,041
North Dakota	7	32,286	-	-	7	32,286
Ohio	142	29,585	23	312	165	29,897
Oklahoma	13	1,900	1	10	14	1,911
Pennsylvania Total	516	60,107	120	2,130	636	62,237
Anthracite	149	3,832	56	789	205	4,621
Bituminous	367	56,275	64	1,341	431	57,616
Tennessee	31	2,916	6	71	37	2,987
Texas	13	52,346	-	-	13	52,346
Utah	17	24,399	1	-	18	24,399
Virginia	228	32,866	68	4,263	296	37,129
Washington	3	4,893	-	-	3	4,893
West Virginia Total	481	14,780	160	13,972	641	161,776
Northern	130	47,377	33	1,939	163	49,316
Southern	351	100,427	127	12,033	478	112,460
Wyoming	28	236,901	3	191	31	237,092
U.S. Total	2,365	995,001	687	38,503	3,052	1,033,504

Note: 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.² 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 to 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. Data from Form EIA-7A are maintained on an automated database at the EIA 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, 1995. 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 1993 production was 100 thousand short tons or more.

Some forms could not be delivered. Where possible, address corrections were obtained. In some instances, mining operations that had reported in earlier surveys

² Sampling error is a measure of the variation that occurs by chance because a sample rather than a complete enumeration of units is surveyed.

or operated only in 1994 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 561 mines, which produced 38.5 million short tons, or 3.7 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 thousand or more short tons, missing production quantity data were derived from the secondary source for 363 mines, representing 3.7 percent (37.7 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 thousand or more short tons, value data were estimated for 455 mines, representing 4.4 percent (45 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 thousand or more short tons, one or more of these data elements were derived from secondary sources or estimated for 387 mines representing 3.7 percent (38 million short tons) of their production total. Of the mining operations that produced, processed, or prepared 10 thousand or more short tons, one or more of these data elements were derived from secondary sources or estimated for 476 mining operations, or 18.7 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 1993 recoverable reserves minus the mine's 1994 production. If this calculation could not be made, the mine's projected production for 1995 was used. If recoverable coal reserves for 1993 and 1994 and projected production for 1995 were all missing, no estimate was made. In 1994, recoverable reserves were reported by or estimated for 1,331 mines, representing 973.6 million short tons, or 70 percent of the mines whose production exceeded 10 thousand or more short tons.

Missing *recovery percentage* data were estimated by using 1994 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 1994 production. If productive capacity was reported as less than annual production, productive capacity was equated to 1994 production. There were 654 in-scope mines with production of 178.0 million short tons for which 1994 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 1994 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 75.39 versus 78.11, when those mines are included. In 1994, there were 30 mines that produced 1.2 million short tons of refuse bituminous and subbituminous coal. Those operations are 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 thousand 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 thousand or more tons in the past year were required to report. In 1994, 768 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 manufac-

Table D2. Interquartile Range and Average Mine Price by State and Mine Type, 1994
(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	39.92	8.69	40.45	10.82	40.12	8.69
Alaska	-	-	w	w	w	w
Arizona	-	-	w	w	w	w
Arkansas	w	w	w	w	w	w
Colorado	19.05	2.51	21.05	5.00	19.76	8.61
Illinois	25.54	4.90	24.18	14.70	23.14	5.75
Indiana	w	w	w	w	22.28	5.11
Iowa	-	-	w	w	w	w
Kansas	-	-	w	w	w	w
Kentucky Total	26.14	5.05	23.07	5.66	24.88	6.64
Eastern	26.19	5.09	23.92	5.28	25.25	7.23
Western	25.97	3.33	20.07	3.73	23.63	5.11
Louisiana	-	-	w	w	w	w
Maryland	w	w	w	w	26.34	-
Missouri	-	-	w	w	w	w
Montana	w	w	w	w	10.39	10.32
New Mexico	w	w	w	w	23.29	4.69
North Dakota	-	-	7.62	1.26	7.62	1.26
Ohio	31.61	23.00	27.04	9.81	29.13	8.51
Oklahoma	w	w	w	w	25.57	8.29
Pennsylvania Total	26.59	6.15	25.43	8.22	26.18	5.68
Anthracite	w	w	w	w	36.07	43.45
Bituminous	w	w	w	w	25.45	4.89
Tennessee	w	w	w	w	27.17	.42
Texas	-	-	12.38	1.43	12.38	1.43
Utah	19.27	6.32	-	-	19.27	6.32
Virginia	27.33	9.35	25.33	3.34	26.84	7.34
Washington	-	-	w	w	w	w
West Virginia Total	27.93	8.02	26.29	5.66	27.42	7.66
Northern	27.33	10.32	22.34	4.39	26.77	9.51
Southern	28.31	4.71	26.79	6.34	27.71	5.19
Wyoming	w	w	w	w	6.83	2.62
Appalachian Total ¹	28.01	6.44	26.20	6.37	27.36	7.39
Interior Total ¹	24.31	5.09	17.09	9.24	19.87	12.11
Western Total ¹	19.23	7.00	9.51	5.31	10.57	11.99
U.S. Total	26.39	7.81	15.02	15.65	19.41	17.79

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."

turing plants. See Technical Note 5 for data adjustment procedures for coal consumption for the other industrial sector.

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 thousand short tons of coal per per year. In 1994, 768 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 1994, there were 33 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 1994, there were 33 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 thousand short tons annually.³ Data on coal production and purchases, distribution by consumer category, and method of transportation are reported.

In 1994, there were over 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 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 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 thousand plants, account for 100 percent of total electric utility generation.

Current year data from this survey are considered final.

³ For the States of Arkansas, Maryland, Oklahoma, and the anthracite portion of Pennsylvania, the threshold is 10,000 tons.

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 the 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 1994 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 thousand facilities.

Form EIA-867 data for 1994 are preliminary. Data for prior years are final.

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 as well as the destination country 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 links 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 accounts for transshipments 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.

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 due to reporting time differences and survey threshold differences.

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.

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 $C = (Sb - Se \text{ (change in stocks)}) + R$. 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 (C_m) is estimated for each month in the quarter as $C_m = (C_{m3}/C_3) \times C$ where C_{m3}/C_3 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 4th 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 1 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 associated 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 thousand 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 non-utility power producers who are not in the manufacturing sector.

9. Revisions

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 one 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,
1984-1994**

Year	Implicit Price Deflator (1987 = 100)
1984	91.0
1985	94.4
1986	96.9
1987	100.0
1988	103.9
1989	108.5
1990	113.3
1991 ^a	117.6
1992 ^a	120.9
1993 ^a	123.5
1994	126.1

^a 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.

$$\sqrt[n]{\frac{V_n}{V_0}} - 1 \quad (1)$$

Where: V_0 = the value for the base period.
 V_n = the value for the n^{th} 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 carbon, 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.

- **Pennsylvania 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 be 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 sequential 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 Lading 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 atmospheric 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 Francisco, 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 discharged 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.

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 negotiation 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. Comprises two groups classified according to the following ASTM Specification

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 aviation 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 thousand 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. Excluded are silt, culm, refuse bank, slurry dam, and dredge operations except for Pennsylvania anthracite. Excludes mines producing less than 10 thousand short tons of coal during the year, and preparation plants with less than 5 thousand 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.

utilities):

Photovoltaic and Solar Thermal Energy (as used at electric. Energy radiated by the sun as electromagnetic waves (electromagnetic radiation) that is converted at electric utilities into electricity by means of solar (photovoltaic) 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 deposits at active, producing mines as of the end of the year, as reported on Form EIA-7A. 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 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 thousand 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 device 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 one percent), medium (greater than one percent and less than or equal to three percent), and high (greater than three 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.

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