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Preface

The *Annual Coal Report* (ACR) provides information about U.S. coal production, number of mines, productive capacity, recoverable reserves, employment, productivity, consumption, stocks, and prices to a wide audience, including Congress, Federal and State agencies, the coal industry, and the general public. This report is published by EIA to fulfill data collection and dissemination responsibilities as specified in the Federal Energy Administration Act of 1974 (Public Law 93-275), as amended.

This report presents annual data on U.S. coal production, number of mines, productive capacity, recoverable reserves, employment, productivity, consumption, stocks, and prices. Coal production, number of mines, employment, and productivity are based on the U.S. Department of Labor's Mine Safety and Health Administration's survey form 7000-2, "Quarterly Mine

Employment and Coal Production Report." Productive capacity, recoverable reserves, and prices are based on EIA's annual survey form EIA-7A, "Annual Survey of Coal Production and Preparation." Consumption and stocks are based on various other EIA survey forms.

This report is the 40th annual report on the coal industry published by EIA and continues the series formerly included in the *Minerals Yearbook* published by the U.S. Bureau of Mines. All data for 2015 and prior years are final.

The Office of Oil, Gas, and Coal Supply Statistics acknowledges the cooperation of the respondents in supplying the information published in the *Annual Coal Report*, and appreciates the valuable assistance of State coal mining agencies and the U.S. Department of Labor, Mine Safety and Health Administration.

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Executive Summary

Production

In 2015, U.S. coal production dropped 10.3% year-over-year to below 900 million short tons, the lowest annual production level since 1986. The number of producing mines in the United States continued its declining trend, falling to 853 mines, which is more than 13% fewer mines than in 2014. Production in all three regions – the Western, Interior, and Appalachian – decreased in 2015.

The Appalachian region's coal production in 2015 was 220.7 million short tons, the lowest level since 1978, after a decline of 17.3% from 2014. The declining trend resulted from historically-low coal productions from West Virginia and Kentucky, which produced 95.6 and 61.4 million short tons, respectively, which represent 14.8% and 20.6% drops from 2014.

Coal production in the Interior region in 2015 was 167.4 million short tons, a decrease of 11.2% from 2014 levels, marking the first decline in production in the past six years. Illinois, the largest coal-producing state in the Interior region, declined by 1.9 million short ton (3.2%) to 56.1 million short tons.

Coal production in the Western region in 2015 decreased by 35.4 million short tons to 507.4 million short tons. Wyoming, the largest coal-producing state in the region, decreased production by 15.4 million short tons in 2015 to 375.7 million short tons, the lowest level since 2002. Montana's production in 2015 was 41.9 million short tons, 6.1% lower than in 2014.

Productive Capacity

Productive capacity is the maximum amount of coal that can be produced annually, as reported by mining companies. In 2015, the collective productive capacity of U.S. coal mines decreased for the fourth year in a row, to 1,164.9 million short tons, a decline of 6.3% from the 2014 level. Notable declines in productive capacity occurred in Kentucky (19.8%), Utah (18.4%), and Colorado (10.1%).

Capacity utilization at underground mines and surface mines in 2015 both fell from the 2014 levels. The overall capacity utilization across all mines decreased from 80.1% to 76.7%.

Employment

The total number of employees at U.S. coal mines in 2015 decreased by 12.0% to 65,971 employees. This is the lowest average number of mine employees on record since EIA began collecting data in 1978. The average total number of employees at underground mines and surface mines declined by 13.6% and 9.3%, respectively. West Virginia and Kentucky had the largest declines in the average number of employees in 2015, decreasing by 2,840 (15.5%) and 2,013 employees (17.0%), respectively. Although there were fewer coal mine employees in the United States in 2015 than in 2014, the average production per employee-hour increased by 5.4% to 6.3 short tons per employee hour.

Consumption

U.S. coal consumption in 2015 was 797.7 million short tons, a decline of 13.1% from 2014. Coal consumption in the electric power sector decreased by 113.6 million short tons to 738.0 million short tons, the lowest level since 1987. Coal consumption in the industrial, coke, and commercial and institutional sectors was 58.6 million short tons in 2015, a 8.9% decrease from the 2014 level.

Stocks

U.S. coal stocks in 2015 ended at 238.8 million short tons, 20.6% higher than at the same time in 2014. Stocks in the electric power sector were up by 44.1 million short tons to 195.9 million short tons at the end of 2015, the highest year-ending stocks on record. In contrast, coal stocks held by the other industrial, coke, commercial, and institutional sectors were 3.2 million short tons lower at 42.9 million short tons at the end of 2015 than they were at the end of 2014.

Sales Price

The total average sales price of coal from U.S. mines declined by 8.6% from the prior year to \$31.83 per short ton in 2015, the fourth consecutive year of declining average prices since 2011. The average sales price of coal from surface mines and underground mines declined by 6.0% and 8.4%, respectively, to \$21.47 and \$52.20 per short ton. Some of the largest state-level price declines in 2015 are listed:

- Average sales price in Virginia (\$63.04 per short ton) decreased by 19.6%, a cumulative decline of 53.3% from the 2011 average sales price.
- Average sales price in West Virginia (\$60.31 per short ton) declined by 8.2%.
- Average sales price in Illinois (\$40.77 per short ton) declined by 13.5%.

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Coal Production

Table 1. Coal Production and Number of Mines by State and Mine Type, 2015 and 2014

(thousand short tons)

Coal-Producing State and Region ¹	2015		2014		Percent Change	
	Number of Mines	Production	Number of Mines	Production	Number of Mines	Production
Alabama	37	13,191	36	16,363	2.8	-19.4
Underground	8	9,897	7	12,516	14.3	-20.9
Surface	29	3,294	29	3,847	-	-14.4
Alaska	1	1,177	1	1,502	-	-21.6
Surface	1	1,177	1	1,502	-	-21.6
Arizona	1	6,805	1	8,051	-	-15.5
Surface	1	6,805	1	8,051	-	-15.5
Arkansas	2	91	2	94	-	-2.7
Underground	1	91	1	87	-	4.9
Surface	1	-	1	7	-	-97.3
Colorado	9	18,879	10	24,007	-10.0	-21.4
Underground	5	13,141	6	18,123	-16.7	-27.5
Surface	4	5,738	4	5,884	-	-2.5
Illinois	23	56,101	22	57,969	4.6	-3.2
Underground	14	51,973	13	52,713	7.7	-1.4
Surface	9	4,128	9	5,256	-	-21.5
Indiana	24	34,295	29	39,267	-17.2	-12.7
Underground	9	15,608	9	18,105	-	-13.8
Surface	15	18,688	20	21,162	-25.0	-11.7
Kansas	1	199	2	66	-50.0	200.2
Surface	1	199	2	66	-50.0	200.2
Kentucky Total	210	61,425	252	77,335	-16.7	-20.6
Underground	81	43,378	93	52,807	-12.9	-17.9
Surface	129	18,047	159	24,527	-18.9	-26.4
Kentucky (East)	193	28,101	231	37,390	-16.5	-24.8
Underground	70	14,598	80	18,414	-12.5	-20.7
Surface	123	13,503	151	18,976	-18.5	-28.8
Kentucky (West)	17	33,324	21	39,945	-19.1	-16.6
Underground	11	28,780	13	34,393	-15.4	-16.3
Surface	6	4,544	8	5,551	-25.0	-18.2
Louisiana	2	3,439	2	2,605	-	32.0
Surface	2	3,439	2	2,605	-	32.0
Maryland	18	1,922	20	1,978	-10.0	-2.8
Underground	2	599	2	718	-	-16.6
Surface	16	1,323	18	1,260	-11.1	5.0
Mississippi	2	3,143	2	3,737	-	-15.9
Surface	2	3,143	2	3,737	-	-15.9
Missouri	1	138	1	363	-	-61.9
Surface	1	138	1	363	-	-61.9
Montana	6	41,864	6	44,562	-	-6.1
Underground	1	6,420	1	7,902	-	-18.8
Surface	5	35,444	5	36,660	-	-3.3
New Mexico	3	19,679	3	21,963	-	-10.4
Underground	1	6,518	1	8,800	-	-25.9
Surface	2	13,161	2	13,164	-	s
North Dakota	4	28,802	4	29,157	-	-1.2
Surface	4	28,802	4	29,157	-	-1.2
Ohio	25	17,041	28	22,252	-10.7	-23.4
Underground	11	12,220	11	15,550	-	-21.4
Surface	14	4,821	17	6,703	-17.7	-28.1
Oklahoma	5	780	6	904	-16.7	-13.7
Underground	1	391	1	398	-	-1.9
Surface	4	389	5	506	-20.0	-23.1
Pennsylvania Total	195	50,031	222	60,910	-12.2	-17.9
Underground	45	43,894	51	52,912	-11.8	-17.0
Surface	150	6,137	171	7,998	-12.3	-23.3

Coal-Producing State and Region ¹	2015		2014		Percent Change	
	Number of Mines	Production	Number of Mines	Production	Number of Mines	Production
Pennsylvania (Anthracite)	58	1,953	61	1,833	-4.9	6.6
Underground	8	86	8	93	-	-6.9
Surface	50	1,867	53	1,740	-5.7	7.3
Pennsylvania (Bituminous)	137	48,077	161	59,076	-14.9	-18.6
Underground	37	43,807	43	52,819	-14.0	-17.1
Surface	100	4,270	118	6,258	-15.3	-31.8
Tennessee	10	897	7	839	42.9	6.9
Underground	4	531	3	622	33.3	-14.5
Surface	6	366	4	218	50.0	68.3
Texas	14	35,918	16	43,654	-12.5	-17.7
Surface	14	35,918	16	43,654	-12.5	-17.7
Utah	9	14,419	8	17,934	12.5	-19.6
Underground	8	14,103	7	17,379	14.3	-18.9
Surface	1	316	1	555	-	-43.2
Virginia	65	13,914	69	15,059	-5.8	-7.6
Underground	32	9,677	38	11,067	-15.8	-12.6
Surface	33	4,237	31	3,992	6.5	6.1
West Virginia Total	151	95,633	191	112,187	-20.9	-14.8
Underground	81	75,290	100	81,636	-19.0	-7.8
Surface	70	20,343	91	30,551	-23.1	-33.4
West Virginia (Northern)	26	47,785	32	48,858	-18.8	-2.2
Underground	17	46,865	17	47,520	-	-1.4
Surface	9	920	15	1,339	-40.0	-31.3
West Virginia (Southern)	125	47,848	159	63,329	-21.4	-24.5
Underground	64	28,424	83	34,116	-22.9	-16.7
Surface	61	19,424	76	29,213	-19.7	-33.5
Wyoming	16	375,773	18	395,665	-11.1	-5.0
Underground	1	3,090	1	3,370	-	-8.3
Surface	15	372,682	17	392,295	-11.8	-5.0
Appalachia Total	694	220,730	804	266,979	-13.7	-17.3
Underground	253	166,706	292	193,434	-13.4	-13.8
Surface	441	54,024	512	73,545	-13.9	-26.5
Appalachia Central	393	90,760	466	116,617	-15.7	-22.2
Underground	170	53,230	204	64,219	-16.7	-17.1
Surface	223	37,530	262	52,399	-14.9	-28.4
Appalachia Northern	264	116,779	302	133,998	-12.6	-12.9
Underground	75	103,579	81	116,699	-7.4	-11.2
Surface	189	13,200	221	17,299	-14.5	-23.7
Appalachia Southern	37	13,191	36	16,363	2.8	-19.4
Underground	8	9,897	7	12,516	14.3	-20.9
Surface	29	3,294	29	3,847	-	-14.4
Interior Region Total	91	167,430	103	188,604	-11.7	-11.2
Underground	36	96,843	37	105,697	-2.7	-8.4
Surface	55	70,586	66	82,908	-16.7	-14.9
Illinois Basin	64	123,720	72	137,181	-11.1	-9.8
Underground	34	96,361	35	105,212	-2.9	-8.4
Surface	30	27,359	37	31,969	-18.9	-14.4
Other Interior	27	43,709	31	51,423	-12.9	-15.0
Underground	2	482	2	485	-	-0.6
Surface	25	43,227	29	50,938	-13.8	-15.1
Western Region Total	49	507,397	51	542,842	-3.9	-6.5
Underground	16	43,272	16	55,573	-	-22.1
Surface	33	464,125	35	487,269	-5.7	-4.8
Powder River Basin	16	398,577	16	418,156	-	-4.7
Surface	16	398,577	16	418,156	-	-4.7
Uinta Basin	14	31,919	14	40,122	-	-20.5
Underground	11	26,419	11	34,522	-	-23.5
Surface	3	5,500	3	5,601	-	-1.8
Other Western	19	76,901	21	84,563	-9.5	-9.1
Underground	5	16,853	5	21,052	-	-20.0
Surface	14	60,048	16	63,512	-12.5	-5.5

Coal-Producing State and Region ¹	2015		2014		Percent Change	
	Number of Mines	Production	Number of Mines	Production	Number of Mines	Production
East of Mississippi River	760	347,594	878	407,897	-13.4	-14.8
West of Mississippi River	74	547,963	80	590,528	-7.5	-7.2
U.S. Subtotal	834	895,557	958	998,425	-12.9	-10.3
Refuse Recovery	19	1,384	27	1,624	-29.6	-14.8
U.S. Total	853	896,941	985	1,000,049	-13.4	-10.3

¹ For a definition of coal producing regions, see the Glossary.

-- No data reported.

s = Absolute percentage less than 0.05 or value is less than 0.5 of the table metric.

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

Source: U.S. Department of Labor, Mine Safety and Health Administration Form 7000-2, 'Quarterly Mine Employment and Coal Production Report.'

Table 2. Coal Production and Number of Mines by State, County, and Mine Type, 2015

(thousand short tons)

Coal-Producing State and County	Underground		Surface		Total	
	Number of Mines	Production	Number of Mines	Production	Number of Mines	Production
Alabama	8	9,897	29	3,294	37	13,191
Bibb	-	-	1	63	1	63
Franklin	-	-	2	147	2	147
Jackson	-	-	1	4	1	4
Jefferson	4	5,214	7	1,356	11	6,570
Shelby	1	138	1	138	2	277
Tuscaloosa	1	2,417	4	102	5	2,519
Walker	2	2,128	11	1,192	13	3,320
Winston	-	-	2	292	2	292
Alaska	-	-	1	1,177	1	1,177
Denali	-	-	1	1,177	1	1,177
Arizona	-	-	1	6,805	1	6,805
Navajo	-	-	1	6,805	1	6,805
Arkansas	1	91	1	-	2	91
Sebastian	1	91	1	-	2	91
Colorado	5	13,141	4	5,738	9	18,879
Delta	1	1,023	-	-	1	1,023
Gunnison	1	5,075	-	-	1	5,075
La Plata	1	815	-	-	1	815
Moffat	-	-	2	4,441	2	4,441
Montrose	-	-	1	238	1	238
Rio Blanco	1	2,106	1	1,058	2	3,165
Routt	1	4,122	-	-	1	4,122
Illinois	14	51,973	9	4,128	23	56,101
Franklin	1	10,588	-	-	1	10,588
Gallatin	-	-	1	1,101	1	1,101
Hamilton	1	5,816	-	-	1	5,816
Jackson	-	-	1	23	1	23
Macoupin	1	2,011	-	-	1	2,011
Montgomery	1	1,877	-	-	1	1,877
Perry	1	3,353	2	339	3	3,692
Randolph	2	1,958	2	1,020	4	2,979
Saline	3	10,250	2	734	5	10,984
Sangamon	1	2,155	-	-	1	2,155
Wabash	-	-	1	910	1	910
Washington	1	5,954	-	-	1	5,954
White	1	2,373	-	-	1	2,373
Williamson	1	5,638	-	-	1	5,638
Indiana	9	15,608	15	18,688	24	34,295
Clay	-	-	1	290	1	290
Daviess	-	-	1	1,014	1	1,014
Dubois	-	-	2	1,369	2	1,369
Gibson	3	7,979	2	2,338	5	10,316
Greene	1	3	-	-	1	3
Knox	3	6,273	1	113	4	6,386
Pike	1	19	3	1,633	4	1,651
Sullivan	1	1,334	1	7,878	2	9,212
Warrick	-	-	4	4,055	4	4,055
Kansas	-	-	1	199	1	199
Linn	-	-	1	199	1	199
Kentucky	81	43,378	129	18,047	210	61,425
Bell	4	693	8	784	12	1,477
Breathitt	-	-	3	270	3	270
Daviess	-	-	1	335	1	335
Floyd	10	1,586	8	806	18	2,391
Harlan	11	2,640	11	1,153	22	3,793

Coal-Producing State and County	Underground		Surface		Total	
	Number of Mines	Production	Number of Mines	Production	Number of Mines	Production
Hopkins	2	6,845	-	-	2	6,845
Johnson	-	-	5	122	5	122
Knott	3	1,652	4	1,046	7	2,698
Knox	2	64	8	329	10	393
Laurel	-	-	2	7	2	7
Lawrence	1	115	4	258	5	373
Leslie	3	668	2	694	5	1,362
Letcher	4	252	12	298	16	550
Magoffin	-	-	2	258	2	258
Martin	1	868	3	477	4	1,345
Mclean	1	843	-	-	1	843
Muhlenberg	3	3,568	-	-	3	3,568
Ohio	2	2,540	5	4,209	7	6,749
Perry	6	1,782	13	4,488	19	6,270
Pike	24	4,178	26	2,120	50	6,298
Union	1	9,114	-	-	1	9,114
Webster	2	5,871	-	-	2	5,871
Whitley	1	100	11	369	12	469
Wolfe	-	-	1	24	1	24
Louisiana	-	-	2	3,439	2	3,439
De Soto	-	-	1	3,244	1	3,244
Natchitoches	-	-	1	195	1	195
Maryland	2	599	16	1,323	18	1,922
Allegany	1	128	9	1,001	10	1,129
Garrett	1	471	7	322	8	793
Mississippi	-	-	2	3,143	2	3,143
Choctaw	-	-	1	2,976	1	2,976
Kemper	-	-	1	167	1	167
Missouri	-	-	1	138	1	138
Bates	-	-	1	138	1	138
Montana	1	6,420	5	35,444	6	41,864
Big Horn	-	-	3	25,503	3	25,503
Musselshell	1	6,420	-	-	1	6,420
Richland	-	-	1	270	1	270
Rosebud	-	-	1	9,671	1	9,671
New Mexico	1	6,518	2	13,161	3	19,679
Mckinley	-	-	1	7,476	1	7,476
San Juan	1	6,518	1	5,685	2	12,203
North Dakota	-	-	4	28,802	4	28,802
Mclean	-	-	1	7,980	1	7,980
Mercer	-	-	2	16,428	2	16,428
Oliver	-	-	1	4,394	1	4,394
Ohio	11	12,220	14	4,821	25	17,041
Belmont	1	4,756	1	645	2	5,401
Carroll	2	186	-	-	2	186
Guernsey	-	-	1	17	1	17
Harrison	2	842	2	1,897	4	2,739
Jackson	-	-	1	155	1	155
Jefferson	2	303	2	91	4	394
Monroe	1	5,249	-	-	1	5,249
Noble	-	-	1	430	1	430
Perry	2	752	1	604	3	1,356
Stark	-	-	1	61	1	61
Tuscarawas	1	133	2	757	3	890
Vinton	-	-	2	164	2	164
Oklahoma	1	391	4	389	5	780
Haskell	-	-	1	22	1	22
Le Flore	1	391	1	174	2	565
Nowata	-	-	1	191	1	191
Okmulgee	-	-	1	2	1	2
Pennsylvania	45	43,894	150	6,137	195	50,031

Coal-Producing State and County	Underground		Surface		Total	
	Number of Mines	Production	Number of Mines	Production	Number of Mines	Production
Allegheny	-	-	2	5	2	5
Armstrong	7	1,252	1	24	8	1,275
Beaver	1	309	-	-	1	309
Bedford	-	-	1	119	1	119
Blair	-	-	1	17	1	17
Butler	-	-	1	36	1	36
Cambria	2	411	6	436	8	847
Carbon	-	-	1	31	1	31
Clarion	-	-	2	10	2	10
Clearfield	3	847	30	1,228	33	2,075
Columbia	-	-	2	148	2	148
Dauphin	1	16	-	-	1	16
Elk	-	-	3	9	3	9
Fayette	-	-	6	24	6	24
Greene	6	28,379	1	129	7	28,508
Indiana	10	1,958	13	161	23	2,119
Jefferson	1	45	6	752	7	797
Luzerne	-	-	7	483	7	483
Lycoming	-	-	1	120	1	120
Mercer	-	-	1	45	1	45
Northumberland	2	15	10	237	12	252
Schuylkill	5	55	30	968	35	1,023
Somerset	5	1,521	15	529	20	2,050
Venango	-	-	1	11	1	11
Washington	1	8,999	3	493	4	9,492
Westmoreland	1	87	6	122	7	209
Tennessee	4	531	6	366	10	897
Campbell	-	-	1	68	1	68
Claiborne	4	531	4	290	8	821
Davidson	-	-	1	8	1	8
Texas	-	-	14	35,918	14	35,918
Atascosa	-	-	1	2,574	1	2,574
Freestone	-	-	1	1,387	1	1,387
Harrison	-	-	2	3,851	2	3,851
Hopkins	-	-	1	512	1	512
Lee	-	-	1	6,482	1	6,482
Leon	-	-	1	3,354	1	3,354
Limestone	-	-	1	8,115	1	8,115
Maverick	-	-	1	715	1	715
Panola	-	-	2	3,384	2	3,384
Robertson	-	-	1	2,080	1	2,080
Rusk	-	-	2	3,465	2	3,465
Utah	8	14,103	1	316	9	14,419
Carbon	4	7,101	-	-	4	7,101
Emery	2	967	-	-	2	967
Kane	1	11	1	316	2	327
Sevier	1	6,024	-	-	1	6,024
Virginia	32	9,677	33	4,237	65	13,914
Buchanan	16	5,654	12	1,446	28	7,101
Dickenson	8	2,506	5	1,079	13	3,585
Russell	-	-	3	349	3	349
Tazewell	2	354	3	375	5	729
Wise	6	1,163	10	988	16	2,151
West Virginia	81	75,290	70	20,343	151	95,633
Barbour	1	989	1	16	2	1,006
Boone	9	4,692	9	3,789	18	8,481
Fayette	3	1,084	3	1,626	6	2,710
Grant	1	51	-	-	1	51
Greenbrier	2	342	5	575	7	917
Harrison	1	130	1	3	2	133
Kanawha	5	4,940	7	2,718	12	7,658

Coal-Producing State and County	Underground		Surface		Total	
	Number of Mines	Production	Number of Mines	Production	Number of Mines	Production
Logan	8	4,812	14	4,749	22	9,562
Marion	2	13,588	4	172	6	13,760
Marshall	2	16,377	-	-	2	16,377
Mcdowell	19	1,486	12	1,195	31	2,682
Mercer	-	-	1	150	1	150
Mingo	2	1,382	4	2,530	6	3,912
Monongalia	2	2,714	2	27	4	2,741
Nicholas	1	655	-	-	1	655
Ohio	1	6,031	-	-	1	6,031
Raleigh	8	3,808	5	1,825	13	5,633
Taylor	1	3,384	-	-	1	3,384
Tucker	1	2,108	-	-	1	2,108
Upshur	1	598	-	-	1	598
Wayne	2	1,031	-	-	2	1,031
Webster	4	896	1	701	5	1,596
Wyoming	5	4,191	1	267	6	4,458
Wyoming	1	3,090	15	372,682	16	375,773
Campbell	-	-	11	328,222	11	328,222
Converse	-	-	1	35,181	1	35,181
Lincoln	-	-	1	4,471	1	4,471
Sweetwater	1	3,090	2	4,809	3	7,899
U.S. Subtotal	305	306,821	529	588,736	834	895,557
Refuse Recovery	-	-	-	-	19	1,384
U.S. Total	305	306,821	529	588,736	853	896,941

- = No data reported.

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

Source: U.S. Department of Labor, Mine Safety and Health Administration Form 7000-2, 'Quarterly Mine Employment and Coal Production Report.'

Table 3. Underground Coal Production by State and Mining Method, 2015

(thousand short tons)

Coal-Producing State and Region ¹	Continuous ²	Conventional and Other ³	Longwall ⁴	Total
Alabama	419	-	9,478	9,897
Arkansas	91	-	-	91
Colorado	815	-	12,327	13,141
Illinois	17,819	2,011	32,143	51,973
Indiana	15,589	19	-	15,608
Kentucky Total	43,216	162	-	43,378
Kentucky (East)	14,436	162	-	14,598
Kentucky (West)	28,780	-	-	28,780
Maryland	599	-	-	599
Montana	-	-	6,420	6,420
New Mexico	-	-	6,518	6,518
Ohio	2,209	7	10,005	12,220
Oklahoma	391	-	-	391
Pennsylvania Total	8,608	33	35,253	43,894
Pennsylvania (Anthracite)	55	32	-	86
Pennsylvania (Bituminous)	8,553	1	35,253	43,807
Tennessee	518	13	-	531
Utah	1,730	11	12,363	14,103
Virginia	5,271	53	4,353	9,677
West Virginia Total	25,105	65	50,119	75,290
West Virginia (Northern)	2,936	-	43,929	46,865
West Virginia (Southern)	22,169	65	6,190	28,424
Wyoming	-	-	3,090	3,090
Appalachia Total	57,165	332	109,208	166,706
Appalachia Central	42,394	293	10,543	53,230
Appalachia Northern	14,352	39	89,187	103,579
Appalachia Southern	419	-	9,478	9,897
Interior Region Total	62,671	2,030	32,143	96,843
Illinois Basin	62,189	2,030	32,143	96,361
Other Interior	482	-	-	482
Western Region Total	2,544	11	40,717	43,272
Uinta Basin	1,730	-	24,689	26,419
Other Western	815	11	16,027	16,853
East of Mississippi River	119,354	2,362	141,351	263,067
West of Mississippi River	3,026	11	40,717	43,754
U.S. Total	122,380	2,373	182,068	306,821

1 For a definition of coal producing regions, see the Glossary.

2 Mines that produce greater than 50 percent of their coal by continuous mining methods.

3 Mines that: 1. produce greater than 50 percent of their coal by conventional mining methods, 2. produce coal using shortwall, scoop loading, hand loading, or other methods, 3. have a 50/50 percent continuous/conventional split in mining methods, or 4. produce less than 25,000 short tons, which are not required to provide data.

4 Mines that have any production from the longwall mining method. A typical longwall mining operation uses 80 percent longwall mining and 20 percent continuous mining.

- = No data reported.

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

Source: U.S. Energy Information Administration Form EIA-7A, 'Annual Survey of Coal Production and Preparation,' and U.S. Department of Labor, Mine Safety and Health Administration Form 7000-2, 'Quarterly Mine Employment and Coal Production Report.'

Table 4. Coal Production by Coalbed Thickness and Mine Type, 2015

(thousand short tons)

Coal Thickness (inches)	Underground	Surface	Total
Under 7	-	818	818
7 - Under 13	-	1,848	1,848
13 - Under 19	388	4,884	5,272
19 - Under 25	98	8,632	8,730
25 - Under 31	2,110	9,864	11,974
31 - Under 37	11,441	11,016	22,457
37 - Under 43	14,266	11,633	25,898
43 - Under 49	18,079	13,435	31,514
49 - Under 55	12,961	10,484	23,446
55 - Under 61	38,629	5,891	44,520
61 - Under 67	20,596	14,054	34,649
67 - Under 73	36,735	10,987	47,721
73 - Under 79	48,425	10,617	59,042
79 - Under 85	28,187	1,388	29,576
85 - Under 91	12,410	4,065	16,475
91 - Under 97	23,384	1,954	25,338
97 - Under 103	1,580	1,097	2,677
103 - Under 109	6,420	6,252	12,671
109 - Under 115	3,153	1,431	4,584
115 - 120	16,950	11,443	28,393
Over 120	10,631	445,375	456,006
Unknown *	379	1,566	3,329
U.S. Total	306,821	588,736	896,941

* Includes mines with production of less than 25,000 short tons, which are not required to provide data, and refuse recovery.

- = No data reported.

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

Source: U.S. Energy Information Administration Form EIA-7A, 'Annual Survey of Coal Production and Preparation,' and U.S. Department of Labor, Mine Safety and Health Administration Form 7000-2, 'Quarterly Mine Employment and Coal Production Report.'

Table 5. Coal Production and Coalbed Thickness by Major Coalbeds and Mine Type, 2015

Coalbed ID Number ¹ Coalbed Name	Production (thousand short tons)			Thickness (inches)			
	Underground	Surface	Total	Average ²	Low	High	
1699	Wyodak	-	339,982	339,982	768	160	900
0484	Herrin (Illinois No. 6)	55,537	2,973	58,510	72	41	86
0212	Pittsburgh	53,496	475	53,971	81	36	108
0489	No. 9	38,568	10,237	48,806	64	24	80
0036	Pittsburgh	30,329	1,658	31,987	73	18	84
1696	Anderson-Dietz 1-Dietz 2	-	18,925	18,925	929	660	960
1569	Beulah-Zap	-	15,681	15,681	202	114	210
1808	Rosebud	-	12,605	12,605	255	186	276
1701	Smith	-	11,831	11,831	884	884	884
0084	Lower Kittanning	7,624	4,089	11,713	62	10	93
1570	Hagel	-	11,627	11,627	134	130	144
1787	Roland	-	11,590	11,590	463	385	495
0344	Pocahontas No. 3	9,668	-	9,668	62	35	84
0280	Blue Creek	9,090	153	9,243	50	16	54
1488	Fruitland No. 8	6,518	1,819	8,337	158	145	162
0103	Stockton-Lewiston	2,423	4,076	6,499	68	10	125
1003	Menefee Formation	815	5,607	6,422	79	78	84
0204	Mammoth	6,420	-	6,420	108	108	108
0111	Coalburg	115	6,109	6,224	74	5	124
1847	Upper Hiawatha	6,024	-	6,024	120	120	120
0168	Lower Elkhorn	5,139	727	5,865	47	18	76
0071	Upper Freeport	5,015	817	5,832	61	4	91
0151	Upper Elkhorn No. 3	3,963	1,773	5,736	44	17	115
0176	Eagle	4,992	677	5,669	44	22	50
1495	Deadman	3,090	2,073	5,163	130	108	144
Major Coalbeds Total	248,826	465,504	714,330	454	4	960	
Other Coalbeds	57,616	121,665	179,281	82	4	540	
Unknown *	379	1,566	3,329	NA	NA	NA	
U.S. Total	306,821	588,736	896,941	378	-	960	

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. See Coalbed name discussion in note below.

2 Average thickness is the bed thickness weighted by bed production.

* Includes mines with production of less than 25,000 short tons, which are not required to provide data, and refuse recovery.

-- No data reported.

NA = Not Available.

Note: This table lists the top 25 producing coalbeds. The category 'Other Coalbeds' includes all coalbeds from which less than 8.0 million short tons were produced during the year. In some regions, coalbeds are characteristically discontinuous or uncorrelatable from one location to another, and production is identified by the geological formations, coal groups, or coal zones of the native rock where the coalbeds occur. These types of coalbeds are found primarily in the Rocky Mountain States and even in the Gulf Coast lignite belt. Coalbeds of these types are also included in 'Other Coalbeds,' even though production may exceed 8.0 million short tons. Totals may not equal sum of components due to independent rounding. The coalbed name given is the name most commonly used in the State having the greatest production from that coalbed. The States having greatest production for each coalbed are Alabama (coalbed 0280); Colorado (1750); Illinois (0484); Indiana (0483); Eastern Kentucky (0100, 0135, 0142, 0151, and 0168); Western Kentucky (0489); Montana (1699 and 1808); New Mexico (1488); North Dakota (1569); Pennsylvania (0036 and 0071); West Virginia (0084, 00103, 0111, 0121, 0157, and 0176); and Wyoming (1697, 1699, and 1787). In some other States where these are major producing beds, the following alternative coalbed names are also used: 0084, No.5 (Ohio); 0111, Peach Orchard (Eastern Kentucky); 0121, Quakertown (Pennsylvania); 0157, Windrock (Tennessee); Phillips (Virginia); Chilton (West Virginia); 0142, Lower Splint (Virginia); 0151, Jellico (Tennessee); Taggart (Virginia); Cedar Grove (West Virginia); 0157, Elkhorn No. 1 (East Kentucky); Rich Mountain (Tennessee); 0168, Imboden (Virginia); No. 2 Gas (West Virginia); 0176, Middle Eagle (West Virginia); 0484, No. 11 (Western Kentucky); 0489, No. 5 (Illinois and Indiana).

Source: U.S. Energy Information Administration Form EIA-7A, 'Annual Survey of Coal Production and Preparation,' and U.S. Department of Labor, Mine Safety and Health Administration Form 7000-2, 'Quarterly Mine Employment and Coal Production Report.'

Table 6. Coal Production and Number of Mines by State and Coal Rank, 2015

(thousand short tons)

Coal-Producing State and Region ¹	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	37	13,191	-	-	-	-	-	-	37	13,191
Alaska	-	-	1	1,177	-	-	-	-	1	1,177
Arizona	1	6,805	-	-	-	-	-	-	1	6,805
Arkansas	2	91	-	-	-	-	-	-	2	91
Colorado	7	14,438	2	4,441	-	-	-	-	9	18,879
Illinois	23	56,101	-	-	-	-	-	-	23	56,101
Indiana	24	34,295	-	-	-	-	-	-	24	34,295
Kansas	1	199	-	-	-	-	-	-	1	199
Kentucky Total	210	61,425	-	-	-	-	-	-	210	61,425
Kentucky (East)	193	28,101	-	-	-	-	-	-	193	28,101
Kentucky (West)	17	33,324	-	-	-	-	-	-	17	33,324
Louisiana	-	-	-	-	2	3,439	-	-	2	3,439
Maryland	18	1,922	-	-	-	-	-	-	18	1,922
Mississippi	-	-	-	-	2	3,143	-	-	2	3,143
Missouri	1	138	-	-	-	-	-	-	1	138
Montana	1	6,420	4	35,174	1	270	-	-	6	41,864
New Mexico	2	13,994	1	5,685	-	-	-	-	3	19,679
North Dakota	-	-	-	-	4	28,802	-	-	4	28,802
Ohio	25	17,041	-	-	-	-	-	-	25	17,041
Oklahoma	5	780	-	-	-	-	-	-	5	780
Pennsylvania Total	137	48,077	-	-	-	-	58	1,953	195	50,031
Pennsylvania (Anthracite)	-	-	-	-	-	-	58	1,953	58	1,953
Pennsylvania (Bituminous)	137	48,077	-	-	-	-	-	-	137	48,077
Tennessee	10	897	-	-	-	-	-	-	10	897
Texas	-	-	-	-	14	35,918	-	-	14	35,918
Utah	9	14,419	-	-	-	-	-	-	9	14,419
Virginia	65	13,914	-	-	-	-	-	-	65	13,914
West Virginia Total	151	95,633	-	-	-	-	-	-	151	95,633
West Virginia (Northern)	26	47,785	-	-	-	-	-	-	26	47,785
West Virginia (Southern)	125	47,848	-	-	-	-	-	-	125	47,848
Wyoming	1	2,735	15	373,037	-	-	-	-	16	375,773
Appalachia Total	636	218,777	-	-	-	-	58	1,953	694	220,730
Appalachia Central	393	90,760	-	-	-	-	-	-	393	90,760
Appalachia Northern	206	114,825	-	-	-	-	58	1,953	264	116,779
Appalachia Southern	37	13,191	-	-	-	-	-	-	37	13,191
Interior Region Total	73	124,930	-	-	18	42,500	-	-	91	167,430
Illinois Basin	64	123,720	-	-	-	-	-	-	64	123,720
Other Interior	9	1,209	-	-	18	42,500	-	-	27	43,709
Western Region Total	21	58,810	23	419,515	5	29,072	-	-	49	507,397
Powder River Basin	-	-	16	398,577	-	-	-	-	16	398,577
Uinta Basin	12	27,478	2	4,441	-	-	-	-	14	31,919
Other Western	9	31,333	5	16,497	5	29,072	-	-	19	76,901
East of Mississippi River	700	342,497	-	-	2	3,143	58	1,953	760	347,594
West of Mississippi River	30	60,019	23	419,515	21	68,429	-	-	74	547,963
U.S. Subtotal	730	402,516	23	419,515	23	71,572	58	1,953	834	895,557
Refuse Recovery	10	1,195	-	-	-	-	9	188	19	1,384
U.S. Total	740	403,712	23	419,515	23	71,572	67	2,142	853	896,941

¹ For a definition of coal producing regions, see Glossary.

- = No data reported.

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

Source: U.S. Energy Information Administration Form EIA-7A, 'Annual Survey of Coal Production and Preparation,' and U.S. Department of Labor, Mine Safety and Health Administration Form 7000-2, 'Quarterly Mine Employment and Coal Production Report.'

Table 7. Coal Production by State, Mine Type, and Union Status, 2015

(thousand short tons)

Coal-Producing State and Region ¹	Union		Nonunion		Total	
	Underground	Surface	Underground	Surface	Underground	Surface
Alabama	9,478	251	419	2,982	9,897	3,233
Alaska	-	1,177	-	-	-	1,177
Arizona	-	6,805	-	-	-	6,805
Arkansas	-	-	91	-	91	-
Colorado	2,106	2,357	11,035	3,380	13,141	5,738
Illinois	-	-	51,973	4,103	51,973	4,103
Indiana	-	-	15,586	18,688	15,586	18,688
Kansas	-	-	-	199	-	199
Kentucky Total	-	-	43,269	17,557	43,269	17,557
Kentucky (East)	-	-	14,489	13,034	14,489	13,034
Kentucky (West)	-	-	28,780	4,523	28,780	4,523
Louisiana	-	-	-	3,439	-	3,439
Maryland	-	-	599	1,283	599	1,283
Mississippi	-	-	-	3,143	-	3,143
Missouri	-	-	-	138	-	138
Montana	-	18,457	6,420	16,987	6,420	35,444
New Mexico	6,518	5,685	-	7,476	6,518	13,161
North Dakota	-	6,527	-	22,274	-	28,802
Ohio	4,756	-	7,457	4,786	12,213	4,786
Oklahoma	-	-	391	365	391	365
Pennsylvania Total	12,463	640	31,343	4,817	43,806	5,457
Pennsylvania (Anthracite)	-	640	-	1,003	-	1,643
Pennsylvania (Bituminous)	12,463	-	31,343	3,814	43,806	3,814
Tennessee	-	-	518	338	518	338
Texas	-	23,344	-	12,573	-	35,918
Utah	-	-	14,092	316	14,092	316
Virginia	-	-	9,624	4,204	9,624	4,204
West Virginia Total	36,072	1,915	39,140	18,278	75,212	20,193
West Virginia (Northern)	32,406	-	14,459	857	46,865	857
West Virginia (Southern)	3,666	1,915	24,681	17,420	28,347	19,336
Wyoming	3,090	6,544	-	366,138	3,090	372,682
Appalachia Total	62,769	2,806	103,590	49,722	166,359	52,528
Appalachia Central	3,666	1,915	49,312	34,997	52,978	36,913
Appalachia Northern	49,625	640	53,859	11,743	103,484	12,383
Appalachia Southern	9,478	251	419	2,982	9,897	3,233
Interior Region Total	-	23,344	96,822	47,171	96,822	70,516
Illinois Basin	-	-	96,340	27,313	96,340	27,313
Other Interior	-	23,344	482	19,858	482	43,202
Western Region Total	11,714	47,553	31,547	416,572	43,261	464,125
Powder River Basin	-	18,187	-	380,390	-	398,577
Uinta Basin	2,106	2,119	24,313	3,380	26,419	5,500
Other Western	9,608	27,247	7,234	32,802	16,842	60,048
East of Mississippi River	62,769	2,806	199,930	80,179	262,699	82,985
West of Mississippi River	11,714	70,897	32,029	433,287	43,743	504,184
U.S. Subtotal	74,483	73,703	231,959	513,466	306,442	587,169
Unknown *	-	-	-	-	379	1,566
U.S. Total	74,483	73,703	231,959	513,466	306,821	588,736

¹ For a definition of coal producing regions, see Glossary.

* Includes mines with production of less than 25,000 short tons, which are not required to provide data.

- = No data reported.

Note: Totals may not equal sum of components because of independent rounding. Excludes refuse recovery operations.

Source: U.S. Energy Information Administration Form EIA-7A, 'Annual Survey of Coal Production and Preparation,' and U.S. Department of Labor, Mine Safety and Health Administration Form 7000-2, 'Quarterly Mine Employment and Coal Production Report.'

Table 8. Coal Disposition by State, 2015

(thousand short tons)

Coal-Producing State	Open Market Sales ¹	Captive Sales / Transactions ²	Exports ³	Total
Alabama	5,102	3	8,555	13,660
Alaska	1,013	-	149	1,162
Arizona	6,574	-	-	6,574
Arkansas	193	-	-	193
Colorado	8,590	9,023	1,641	19,254
Illinois	36,491	10,792	9,757	57,040
Indiana	21,548	13,175	20	34,744
Kansas	199	-	-	199
Kentucky Total	56,928	218	2,545	59,691
Kentucky (East)	24,540	218	2,545	27,304
Kentucky (West)	32,388	-	-	32,388
Louisiana	3,647	-	-	3,647
Maryland	1,741	-	239	1,981
Mississippi	3,266	1	s	3,266
Missouri	138	-	-	138
Montana	31,809	10,395	-	42,204
New Mexico	11,076	8,070	-	19,146
North Dakota	24,628	4,246	-	28,873
Ohio	9,719	6,816	-	16,535
Oklahoma	772	-	-	772
Pennsylvania Total	39,239	3,226	7,025	49,490
Pennsylvania (Anthracite)	1,676	91	40	1,807
Pennsylvania (Bituminous)	37,563	3,135	6,986	47,684
Tennessee	905	-	-	905
Texas	7,706	28,369	505	36,580
Utah	13,370	296	735	14,400
Virginia	6,688	331	6,881	13,901
West Virginia Total	60,076	8,385	20,007	88,468
West Virginia (Northern)	31,088	6,974	7,057	45,119
West Virginia (Southern)	28,988	1,411	12,951	43,349
Wyoming	244,781	130,953	52	375,786
U.S. Subtotal	596,199	234,299	58,113	888,611
Other Exports *	-	-	15,845	15,845
U.S. Total **	596,199	234,299	73,958	904,456

1 Open market sales include all coal sold on the open market to other coal companies or consumers; excludes exports.

2 Captive sales transactions include all coal used by the producing company or sold to affiliated or parent companies; excludes exports.

3 State level total and U.S. subtotal include the quantity of coal exported by coal mines only.

* Estimated quantity of coal exported by coal brokers, coal traders and coal terminals.

** Excludes mines producing less than 25,000 short tons, which are not required to provide data, and refuse recovery.

- = No data reported.

s = Value is less than 0.5 of the table metric.

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

Source: U.S. Energy Information Administration Form EIA-7A, 'Annual Survey of Coal Production and Preparation.'

Table 9. Major U.S. Coal Mines, 2015

Rank	Mine Name / Operating Company	Mine Type	State	Production (short tons)
1	North Antelope Rochelle Mine / Peabody Powder River Mining LLC	Surface	Wyoming	109,343,913
2	Black Thunder / Thunder Basin Coal Company LLC	Surface	Wyoming	99,450,689
3	Antelope Coal Mine / Antelope Coal LLC	Surface	Wyoming	35,181,059
4	Cordero Rojo Mine / Cordero Mining LLC	Surface	Wyoming	22,871,976
5	Eagle Butte Mine / Alpha Coal West, Inc.	Surface	Wyoming	19,649,723
6	Belle Ayr Mine / Alpha Coal West, Inc.	Surface	Wyoming	18,318,629
7	Spring Creek Coal Company / Spring Creek Coal LLC	Surface	Montana	16,987,420
8	Rawhide Mine / Peabody Caballo Mining, LLC	Surface	Wyoming	15,167,996
9	Freedom Mine / The Coteau Properties Company	Surface	North Dakota	14,294,690
10	Buckskin Mine / Buckskin Mining Company	Surface	Wyoming	13,666,830
11	Caballo Mine / Peabody Caballo Mining, LLC	Surface	Wyoming	11,402,062
12	Mc#1 Mine / M-Class Mining LLC	Underground	Illinois	10,587,790
13	Marshall County Mine / The Marshall County Coal Company	Underground	West Virginia	10,294,865
14	Bailey Mine / Consol Pennsylvania Coal Company	Underground	Pennsylvania	10,185,898
15	Rosebud Mine&crusher/Conveyor / Western Energy Company	Surface	Montana	9,671,003
16	River View Mine / River View Coal LLC	Underground	Kentucky	9,114,413
17	Enlow Fork Mine / Consol Pennsylvania Coal Company	Underground	Pennsylvania	8,999,294
18	Kosse Strip / Luminant Mining Company LLC	Surface	Texas	8,114,714
19	Falkirk Mine / Falkirk Mining Company	Surface	North Dakota	7,979,800
20	Bear Run Mine / Peabody Bear Run Mining LLC	Surface	Indiana	7,878,025
21	Coal Creek Mine / Thunder Basin Coal Company LLC	Surface	Wyoming	7,840,491
22	Cumberland Mine / Cumberland Coal Resources LP	Underground	Pennsylvania	7,490,061
23	El Segundo / Peabody New Mexico Services	Surface	New Mexico	7,476,237
24	Harrison County Mine / The Harrison County Coal Company	Underground	West Virginia	7,106,441
25	Kayenta Mine / Peabody Western Coal Company	Surface	Arizona	6,804,555
26	San Juan Mine 1 / San Juan Coal Company	Underground	New Mexico	6,517,519
27	Three Oaks / Luminant Mining Company LLC	Surface	Texas	6,482,152
28	Marion County Mine / The Marion County Coal Company	Underground	West Virginia	6,481,620
29	Bull Mountains Mine No 1 / Signal Peak Energy LLC	Underground	Montana	6,419,645
30	Dry Fork Mine / Western Fuels-Wyoming Inc	Surface	Wyoming	6,369,206
31	Ohio County Mine / The Ohio County Coal Company	Underground	West Virginia	6,081,768
32	Tunnel Ridge Mine / Tunnel Ridge, LLC	Underground	West Virginia	6,030,582
33	Sufco / Canyon Fuel Company LLC	Underground	Utah	6,024,483
34	Lively Grove Mine / Prairie State Generating Company	Underground	Illinois	5,953,533
35	Mine No. 1 / Hamilton County Coal, LLC	Underground	Illinois	5,815,950
36	Navajo Mine / BHP Billiton Mine Management	Surface	New Mexico	5,685,040
37	Mach #1 Mine / Mach Mining LLC	Underground	Illinois	5,638,291
38	Absaloka Mine / Westmoreland Resources Inc.	Surface	Montana	5,534,969
39	Century Mine / American Energy Corporation	Underground	Ohio	5,248,702
40	New Future Mine / The American Coal Company	Underground	Illinois	5,163,506
41	West Elk Mine / Mountain Coal Company, L.L.C.	Underground	Colorado	5,074,821
42	Powhatan No. 6 Mine / The Ohio Valley Coal Company	Underground	Ohio	4,756,028
43	Kemmerer Mine / Westmoreland Kemmerer, LLC	Surface	Wyoming	4,470,864
44	Skyline Mine #3 / Canyon Fuel Company LLC	Underground	Utah	4,408,963
45	Center Mine / Bni Coal Ltd	Surface	North Dakota	4,393,986
46	Buchanan Mine #1 / Buchanan Minerals, LLC	Underground	Virginia	4,353,037
47	Wyodak Mine / Wyodak Resources Development Corp	Surface	Wyoming	4,140,386
48	Foidel Creek Mine / Peabody Twentymile Mining LLC	Underground	Colorado	4,122,448
Subtotal				621,046,073
All Other Mines				275,894,490
U.S. Total				896,940,563

Note: Major mines are mines that produced more than 4 million short tons in 2015. Company listed indicates the firm operating the mine.

Source: U.S. Energy Information Administration Form EIA-7A, 'Annual Survey of Coal Production and Preparation,' and U.S. Department of Labor, Mine Safety and Health Administration Form 7000-2, 'Quarterly Mine Employment and Coal Production Report.'

Table 10. Major U.S. Coal Producers, 2015

Rank	Controlling Company Name	Production (thousand short tons)	Percent of Total Production
1	Peabody Energy Corp	175,908	19.6
2	Arch Coal Inc	130,654	14.6
3	Cloud Peak Energy	75,040	8.4
4	Alpha Natural Resources	70,398	7.8
5	Murray Energy Corp	55,524	6.2
6	Alliance Resource Partners LP	44,716	5.0
7	Westmoreland Coal Company	36,628	4.1
8	NACCO Industries Inc	30,593	3.4
9	CONSOL Energy Inc	24,929	2.8
10	Energy Future Holdings Corporation	23,344	2.6
11	Coalfield Transport Inc	20,114	2.2
12	RWE Trading Americas Inc	17,508	2.0
13	Kiewit Peter Sons' Inc	16,241	1.8
14	Bowie Resources Partners LLC	12,220	1.4
15	Virginia Conservation Legacy Fund (Vclf)	9,217	1.0
16	Armstrong Energy Inc	8,074	0.9
17	Brent K Bilisland	7,323	0.8
18	Coronado Coal LLC	6,955	0.8
19	Global Mining Group LLC	6,420	0.7
20	Western Fuels Assoc Inc	6,369	0.7
21	J Clifford Forrest	6,074	0.7
22	Prairie State Energy Campus	5,954	0.7
23	Navajo Transitional Energy Co	5,685	0.6
24	Warrior Met Coal Intermediate Holdco LLC	5,452	0.6
25	Jeffery A Hoops	5,238	0.6
26	MidAmerican Energy Holdings Co	5,163	0.6
	Subtotal	811,742	90.5
	All Other Coal Producers	85,199	9.5
	U.S. Total	896,941	100.0

Note: The listed companies each produced more than 5 million short tons of coal in 2015. A controlling company of a mine is defined as the company 'controlling the coal, particularly the sale of the coal.' Most often, but not always, this is the owner of the mine.

Source: U.S. Department of Labor, Mine Safety and Health Administration Form 7000-2, 'Quarterly Mine Employment and Coal Production Report.'

Productive Capacity

Table 11. Productive Capacity of Coal Mines by State, 2015 and 2014

(thousand short tons)

Coal-Producing State	2015			2014			Percent Change		
	Underground	Surface	Total	Underground	Surface	Total	Underground	Surface	Total
Alabama	10,955	4,664	15,620	13,915	5,530	19,445	-21.3	-15.7	-19.7
Alaska	-	3,000	3,000	-	3,000	3,000	-	-	-
Arizona	-	8,500	8,500	-	8,500	8,500	-	-	-
Arkansas	275	-	275	240	-	240	14.6	-	14.6
Colorado	20,622	6,218	26,841	23,200	6,642	29,842	-11.1	-6.4	-10.1
Illinois	69,975	7,390	77,365	68,336	8,008	76,344	2.4	-7.7	1.3
Indiana	21,404	24,128	45,531	21,130	28,274	49,404	1.3	-14.7	-7.8
Kansas	-	209	209	-	65	65	-	221.5	221.5
Kentucky Total	53,236	25,282	78,518	64,940	32,921	97,861	-18.0	-23.2	-19.8
Kentucky (East)	19,080	19,098	38,178	23,700	25,651	49,351	-19.5	-25.5	-22.6
Kentucky (West)	34,156	6,184	40,340	41,240	7,270	48,510	-17.2	-14.9	-16.8
Louisiana	-	4,153	4,153	-	3,274	3,274	-	26.8	26.8
Maryland	993	1,864	2,857	837	1,874	2,711	18.6	-0.5	5.4
Mississippi	-	8,700	8,700	-	8,700	8,700	-	-	-
Missouri	-	138	138	-	378	378	-	-63.5	-63.5
Montana	10,000	41,900	51,900	10,000	41,900	51,900	-	-	-
New Mexico	9,000	18,400	27,400	9,000	18,400	27,400	-	-	-
North Dakota	-	32,500	32,500	-	32,828	32,828	-	-1.0	-1.0
Ohio	18,412	24,127	42,538	22,293	23,037	45,330	-17.4	4.7	-6.2
Oklahoma	500	431	931	500	700	1,200	-	-38.4	-22.4
Pennsylvania Total	51,967	9,882	61,849	56,699	10,914	67,613	-8.3	-9.5	-8.5
Pennsylvania (Anthracite)	129	4,812	4,940	101	3,339	3,440	27.7	44.1	43.6
Pennsylvania (Bituminous)	51,838	5,070	56,909	56,598	7,575	64,173	-8.4	-33.1	-11.3
Tennessee	685	541	1,226	641	311	952	6.9	74.0	28.8
Texas	-	41,227	41,227	-	45,824	45,824	-	-10.0	-10.0
Utah	17,847	2,000	19,847	22,313	2,000	24,313	-20.0	-	-18.4
Virginia	11,831	5,595	17,426	12,413	6,096	18,509	-4.7	-8.2	-5.9
West Virginia Total	91,153	31,145	122,298	98,157	40,665	138,822	-7.1	-23.4	-11.9
West Virginia (Northern)	53,331	1,330	54,661	53,574	1,474	55,049	-0.5	-9.8	-0.7
West Virginia (Southern)	37,822	29,816	67,638	44,583	39,190	83,773	-15.2	-23.9	-19.3
Wyoming	4,700	469,340	474,040	5,000	484,262	489,262	-6.0	-3.1	-3.1
U.S. Total	393,555	771,337	1,164,892	429,614	814,102	1,243,716	-8.4	-5.3	-6.3

- = No data reported.

Note: Productive capacity is the maximum amount of coal that can be produced annually as reported by mining companies on Form EIA-7A, 'Annual Survey of Coal Production and Preparation.' Excluding refuse recovery and mines producing less than 25,000 short tons, which are not required to provide data. Totals may not equal sum of components because of independent rounding.

Source: U.S. Energy Information Administration Form EIA-7A, 'Annual Survey of Coal Production and Preparation.'

Table 12. Capacity Utilization of Coal Mines by State, 2015 and 2014

(percent)

Coal-Producing State	2015			2014		
	Underground	Surface	Total	Underground	Surface	Total
Alabama	90.34	69.67	84.17	89.95	68.96	83.98
Alaska	-	39.25	39.25	-	50.06	50.06
Arizona	-	80.05	80.05	-	94.71	94.71
Arkansas	33.19	-	33.19	36.25	-	36.25
Colorado	63.72	92.27	70.34	78.07	88.60	80.42
Illinois	74.27	55.83	72.51	77.14	65.64	75.93
Indiana	72.83	77.45	75.28	85.68	74.83	79.47
Kansas	-	95.31	95.31	-	76.77	76.77
Kentucky Total	81.28	69.45	77.47	81.16	72.80	78.35
Kentucky (East)	75.94	68.25	72.09	77.27	71.85	74.46
Kentucky (West)	84.26	73.14	82.56	83.40	76.15	82.31
Louisiana	-	82.80	82.80	-	79.56	79.56
Maryland	60.32	68.81	65.86	85.82	64.31	70.95
Mississippi	-	36.13	36.13	-	42.96	42.96
Missouri	-	100.00	100.00	-	96.02	96.02
Montana	64.20	84.59	80.66	79.02	87.49	85.86
New Mexico	72.42	71.53	71.82	97.77	71.54	80.16
North Dakota	-	88.62	88.62	-	88.82	88.82
Ohio	66.33	19.84	39.96	69.70	28.99	49.01
Oklahoma	78.14	84.68	81.17	79.61	70.79	74.46
Pennsylvania Total	84.40	57.33	80.08	93.21	68.20	89.17
Pennsylvania (Anthracite)	42.71	37.45	37.59	65.02	48.74	49.22
Pennsylvania (Bituminous)	84.51	76.19	83.77	93.26	76.77	91.31
Tennessee	75.65	62.48	69.84	97.02	69.89	88.15
Texas	-	87.12	87.12	-	95.22	95.22
Utah	78.96	15.78	72.60	77.89	27.76	73.76
Virginia	81.35	75.14	79.36	88.64	64.11	80.56
West Virginia Total	82.53	64.91	78.04	83.13	74.40	80.57
West Virginia (Northern)	87.88	66.35	87.35	88.70	85.74	88.62
West Virginia (Southern)	74.98	64.85	70.51	76.44	73.97	75.28
Wyoming	65.75	79.41	79.27	67.39	81.01	80.87
U.S. Total	77.88	76.16	76.74	82.50	78.86	80.12

- = No data reported.

Note: Capacity utilization is the ratio of annual production to annual productive capacity. Excludes refuse recovery and mines producing less than 25,000 short tons, which are not required to provide data. Totals may not equal sum of components because of independent rounding.

Source: U.S. Energy Information Administration Form EIA-7A, 'Annual Survey of Coal Production and Preparation,' for productive capacity, and U.S. Department of Labor, Mine Safety and Health Administration Form 7000-2, 'Quarterly Mine Employment and Coal Production Report,' for annual production.

Table 13. Productive Capacity and Capacity Utilization of Underground Coal Mines by State and Mining Method, 2015

(thousand short tons)

Coal-Producing State	Continuous ¹		Conventional and Other ²		Longwall ³		Total	
	Productive Capacity	Capacity Utilization Percent	Productive Capacity	Capacity Utilization Percent	Productive Capacity	Capacity Utilization Percent	Productive Capacity	Capacity Utilization Percent
Alabama	509	82.44	-	-	10,447	90.73	10,955	90.34
Arkansas	275	33.19	-	-	-	-	275	33.19
Colorado	1,000	81.45	-	-	19,622	62.82	20,622	63.72
Illinois	20,906	85.24	3,500	57.46	45,569	70.54	69,975	74.27
Indiana	21,404	72.83	-	-	-	-	21,404	72.83
Kentucky Total	53,178	81.27	58	90.91	-	-	53,236	81.28
Kentucky (East)	19,021	75.89	58	90.91	-	-	19,080	75.94
Kentucky (West)	34,156	84.26	-	-	-	-	34,156	84.26
Maryland	993	60.32	-	-	-	-	993	60.32
Montana	-	-	-	-	10,000	64.20	10,000	64.20
New Mexico	-	-	-	-	9,000	72.42	9,000	72.42
Ohio	2,912	75.85	-	-	15,500	64.55	18,412	66.33
Oklahoma	500	78.14	-	-	-	-	500	78.14
Pennsylvania Total	10,717	80.32	-	-	41,250	85.46	51,967	84.40
Pennsylvania (Anthracite)	129	42.71	-	-	-	-	129	42.71
Pennsylvania (Bituminous)	10,588	80.78	-	-	41,250	85.46	51,838	84.51
Tennessee	685	75.65	-	-	-	-	685	75.65
Utah	1,867	92.65	-	-	15,980	77.37	17,847	78.96
Virginia	7,331	71.90	-	-	4,500	96.73	11,831	81.35
West Virginia Total	34,957	71.82	-	-	56,196	89.19	91,153	82.53
West Virginia (Northern)	4,612	63.66	-	-	48,718	90.17	53,331	87.88
West Virginia (Southern)	30,344	73.06	-	-	7,478	82.78	37,822	74.98
Wyoming	-	-	-	-	4,700	65.75	4,700	65.75
U.S. Total	157,233	77.83	3,558	58.01	232,764	78.22	393,555	77.88

1 Mines that produce greater than 50 percent of their coal by continuous mining methods.

2 Mines that produce greater than 50 percent of their coal by conventional methods or mines that produce coal using shortwall, scoop loading, hand loading, or other methods or a 50/50 percent continuous/conventional split in mining method.

3 Mines that have any production from the longwall mining method. A typical longwall mining operation uses 80 percent longwall mining and 20 percent continuous mining.

- = No data reported.

Note: Productive capacity is the maximum amount of coal that can be produced annually. Capacity utilization is the ratio of total production to annual productive capacity. Excludes refuse recovery and mines producing less than 25,000 short tons, which are not required to provide data. Totals may not equal sum of components because of independent rounding.

Source: U.S. Energy Information Administration Form EIA-7A, 'Annual Survey of Coal Production and Preparation,' for productive capacity, and U.S. Department of Labor, Mine Safety and Health Administration Form 7000-2, 'Quarterly Mines Employment and Coal Production Report,' for annual production.

Recoverable Reserves

Table 14. Recoverable Coal Reserves and Average Recovery Percentage at Producing Mines by State, 2015 and 2014

(million short tons)

Coal-Producing State	2015		2014		Percent Change Recoverable Coal Reserves
	Recoverable Coal Reserves	Average Recovery Percentage	Recoverable Coal Reserves	Average Recovery Percentage	
Alabama	228	49.57	228	46.00	-0.2
Alaska	51	85.00	53	85.00	-2.2
Arizona	209	90.00	216	90.00	-3.2
Arkansas	25	60.00	25	60.00	s
Colorado	298	77.52	333	76.35	-10.6
Illinois	2,435	54.85	2,463	59.16	-1.1
Indiana	627	68.63	646	67.05	-3.0
Kansas	s	90.00	s	90.00	-89.7
Kentucky Total	837	55.41	889	57.71	-5.9
Kentucky (East)	357	46.46	360	51.23	-0.8
Kentucky (West)	479	62.08	529	62.12	-9.4
Louisiana	89	88.80	92	92.16	-3.5
Maryland	18	79.06	22	79.28	-15.5
Mississippi	694	90.34	698	90.35	-0.5
Missouri	s	100.00	1	100.00	-26.4
Montana	817	90.75	858	90.75	-4.8
New Mexico	167	87.89	186	87.18	-10.2
North Dakota	974	90.15	1,003	90.17	-2.9
Ohio	245	56.43	379	59.49	-35.4
Oklahoma	8	61.37	9	63.10	-11.0
Pennsylvania Total	1,296	72.37	1,256	73.95	3.3
Pennsylvania (Anthracite)	149	40.10	122	39.82	21.9
Pennsylvania (Bituminous)	1,148	76.56	1,133	77.62	1.3
Tennessee	2	66.74	1	46.08	120.0
Texas	633	93.08	703	93.34	-9.9
Utah	128	69.39	97	73.38	32.3
Virginia	195	59.13	253	59.16	-22.9
West Virginia Total	1,667	65.80	2,028	64.17	-17.8
West Virginia (Northern)	921	70.11	943	67.43	-2.4
West Virginia (Southern)	746	60.48	1,085	61.34	-31.2
Wyoming	6,681	91.70	6,913	92.02	-3.4
U.S. Total	18,327	78.62	19,351	79.04	-5.3

- = No data reported.

s = Absolute percentage less than 0.05 or value is less than 0.5 of the table metric.

Note: 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 refuse recovery and mines producing less than 25,000 short tons, which are not required to provide data. Totals may not equal sum of components because of independent rounding.

Source: U.S. Energy Information Administration Form EIA-7A, 'Annual Survey of Coal Production and Preparation,' and U.S. Department of Labor, Mine Safety and Health Administration Form 7000-2, 'Quarterly Mine Employment and Coal Production Report.'

Table 15. Recoverable Coal Reserves at Producing Mines, Estimated Recoverable Reserves, and Demonstrated Reserve Base by Mining Method, 2015

(million short tons)

Coal-Resource State	Underground - Minable Coal			Surface - Minable Coal			Total		
	Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base	Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base	Recoverable Reserves at Producing Mines	Estimated Recoverable Reserves	Demonstrated Reserve Base
Alabama	204	389	772	24	2,219	3,115	228	2,608	3,887
Alaska	-	2,335	5,423	51	482	666	51	2,817	6,089
Arizona	-	-	-	209	-	-	209	-	-
Arkansas	25	126	271	-	101	144	25	227	415
Colorado	185	5,749	10,955	112	3,741	4,754	298	9,490	15,710
Georgia	-	1	2	-	1	2	-	2	4
Idaho	-	2	4	-	-	-	-	2	4
Illinois	2,409	27,696	87,190	27	10,032	16,484	2,435	37,728	103,674
Indiana	280	3,502	8,455	347	273	466	627	3,774	8,921
Iowa	-	807	1,732	-	320	457	-	1,127	2,189
Kansas	-	-	-	s	679	970	-	679	970
Kentucky Total	689	6,804	15,828	147	7,217	12,497	837	14,021	28,326
Kentucky (East)	261	301	539	96	4,994	8,943	357	5,295	9,482
Kentucky (West)	429	6,504	15,290	51	2,223	3,555	479	8,727	18,844
Louisiana	-	-	-	89	280	377	89	280	377
Maryland	8	307	560	11	29	43	18	336	603
Michigan	-	55	123	-	3	5	-	58	128
Mississippi	-	-	-	694	-	-	694	-	-
Missouri	-	689	1,479	s	3,154	4,506	-	3,843	5,985
Montana	234	35,882	70,879	583	38,630	47,795	817	74,512	118,673
New Mexico	11	2,743	6,030	156	4,035	5,766	167	6,778	11,796
North Carolina	-	5	11	-	-	-	-	5	11
North Dakota	-	-	-	974	6,630	8,690	974	6,630	8,690
Ohio	229	7,574	17,215	16	3,702	5,655	245	11,276	22,870
Oklahoma	7	570	1,223	s	219	313	8	789	1,536
Oregon	-	6	15	-	2	3	-	9	17
Pennsylvania Total	1,106	10,185	22,238	190	969	4,126	1,296	11,154	26,365
Pennsylvania (Anthracite)	1	340	3,841	148	417	3,334	149	757	7,175
Pennsylvania (Bituminous)	1,105	9,845	18,398	43	552	792	1,148	10,397	19,190
South Dakota	-	-	-	-	277	366	-	277	366
Tennessee	1	272	496	2	171	251	2	442	748
Texas	-	-	-	633	9,134	11,866	633	9,134	11,866
Utah	127	2,318	4,729	1	210	265	128	2,528	4,994
Virginia	177	480	854	18	302	472	195	782	1,326
Washington	-	674	1,332	-	6	8	-	681	1,340
West Virginia Total	1,395	14,697	27,539	272	1,997	3,165	1,667	16,694	30,703
West Virginia (Northern)	915	NA	NA	6	NA	NA	921	NA	NA
West Virginia (Southern)	480	NA	NA	266	NA	NA	746	NA	NA
Wyoming	34	22,915	42,435	6,647	13,297	16,059	6,681	36,212	58,494
U.S. Total	7,120	146,785	327,791	11,207	108,111	149,287	18,327	254,896	477,078

-- No data reported.

NA = Not Available.

s = Value is less than 0.5 of the table metric.

Notes: Recoverable coal reserves at producing mines represent the quantity of coal that can be recovered (i.e. mined) from existing coal reserves at reporting mines. EIA's estimated recoverable reserves include the coal in the demonstrated reserve base considered recoverable after excluding coal estimated to be unavailable due to land use restrictions, and after applying assumed mining recovery rates. This estimate does not include any specific economic feasibility criteria. The effective date for the demonstrated reserve base, as customarily worded, is 'Remaining as of January 1, 2016.' These data are contemporaneous with the Recoverable Reserves at Producing Mines, customarily presented as of the end of the reporting year's mining, that is in this case, December 31, 2015. The demonstrated reserve base includes publicly available data on coal mapped to measured and indicated degrees of accuracy and found at depths and in coalbed thicknesses considered technologically minable at the time of determinations; see Glossary for criteria. All reserve expressions exclude silt, culm, refuse bank, slurry dam, and dredge operations. Reserves at Producing Mines exclude mines producing less than 25,000 short tons, which are not required to provide reserves data.

Source: U.S. Energy Information Administration Form EIA-7A, 'Annual Survey of Coal Production and Preparation,' and U.S. Department of Labor, Mine Safety and Health Administration Form 7000-2, 'Quarterly Mine Employment and Coal Production Report.'

Table 16. Recoverable Coal Reserves and Average Recovery Percentage at Producing Underground Coal Mines by State and Mining Method, 2015

(million short tons)

Coal-Producing State	Continuous ¹		Conventional and Other ²		Longwall ³		Total	
	Recoverable Coal Reserves at Producing Mines	Average Recovery Percentage	Recoverable Coal Reserves at Producing Mines	Average Recovery Percentage	Recoverable Coal Reserves at Producing Mines	Average Recovery Percentage	Recoverable Coal Reserves at Producing Mines	Average Recovery Percentage
Alabama	11	47.88	-	-	193	45.44	204	45.57
Arkansas	25	60.00	-	-	-	-	25	60.00
Colorado	3	60.00	-	-	183	72.22	185	72.04
Illinois	454	52.84	69	66.00	1,886	54.53	2,409	54.54
Indiana	280	58.81	-	-	-	-	280	58.81
Kentucky Total	689	52.40	s	65.00	-	-	689	52.40
Kentucky (East)	261	41.93	s	65.00	-	-	261	41.94
Kentucky (West)	429	58.76	-	-	-	-	429	58.76
Maryland	8	57.00	-	-	-	-	8	57.00
Montana	-	-	-	-	234	80.00	234	80.00
New Mexico	-	-	-	-	11	48.00	11	48.00
Ohio	58	55.62	-	-	172	54.14	229	54.51
Oklahoma	7	60.00	-	-	-	-	7	60.00
Pennsylvania Total	184	57.78	-	-	922	79.66	1,106	76.02
Pennsylvania (Anthracite)	1	53.00	-	-	-	-	1	53.00
Pennsylvania (Bituminous)	183	57.81	-	-	922	79.66	1,105	76.05
Tennessee	1	42.00	-	-	-	-	1	42.00
Utah	17	87.12	-	-	109	66.22	127	69.10
Virginia	90	48.17	-	-	88	66.00	177	56.99
West Virginia Total	454	47.20	-	-	941	70.19	1,395	62.70
West Virginia (Northern)	41	47.35	-	-	874	71.08	915	70.02
West Virginia (Southern)	414	47.18	-	-	66	58.44	480	48.74
Wyoming	-	-	-	-	34	55.00	34	55.00
U.S. Total	2,280	52.96	69	66.00	4,771	64.49	7,120	60.81

1 Mines that produce greater than 50 percent of their coal by continuous mining methods.

2 Mines that produce greater than 50 percent of their coal by conventional methods or mines that produce coal using shortwall, scoop loading, hand loading, or other methods or a 50/50 percent continuous/conventional split in mining method.

3 Mines that have any production from the longwall mining method. A typical longwall mining operation uses 80 percent longwall mining and 20 percent continuous mining.

- = No data reported.

s = Absolute percentage less than 0.05 or value is less than 0.5 of the table metric.

Note: Recoverable coal reserves at producing mines 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 mines producing less than 25,000 short tons, which are not required to provide data and refuse recovery.

Source: U.S. Energy Information Administration Form EIA-7A, 'Annual Survey of Coal Production and Preparation,' and U.S. Department of Labor, Mine Safety and Health Administration Form 7000-2, 'Quarterly Mines Employment and Coal Production Report.'

Table 17. Recoverable Coal Reserves and Average Recovery Percentage at Producing U.S. Mines by Mine Production Range and Mine Type, 2015

(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	6,034	62.49	10,074	91.21	16,108	80.45
Over 500 to 1,000	400	49.35	82	83.76	483	55.22
Over 200 to 500	339	51.87	178	59.74	517	54.58
Over 100 to 200	195	51.12	746	84.60	941	77.66
Over 50 to 100	134	57.11	49	81.15	183	63.52
Over 10 to 50	13	52.36	78	57.12	90	56.45
10 or Under	4	50.00	s	67.00	4	50.18
U.S. Total	7,120	60.81	11,207	89.94	18,327	78.62

s = Absolute percentage less than 0.05 or value is less than 0.5 of the table metric.

Note: Recoverable coal reserves at producing mines 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.

Source: U.S. Energy Information Administration Form EIA-7A, 'Annual Survey of Coal Production and Preparation,' and U.S. Department of Labor, Mine Safety and Health Administration Form 7000-2, 'Quarterly Mines Employment and Coal Production Report.'

Employment

Table 18. Average Number of Employees by State and Mine Type, 2015 and 2014

Coal-Producing State and Region ¹	2015			2014			Percent Change		
	Underground	Surface	Total	Underground	Surface	Total	Underground	Surface	Total
Alabama	2,464	748	3,212	2,852	842	3,694	-13.6	-11.2	-13.0
Alaska	-	113	113	-	120	120	-	-5.8	-5.8
Arizona	-	403	403	-	387	387	-	4.1	4.1
Arkansas	73	2	75	82	2	84	-11.0	-	-10.7
Colorado	1,201	441	1,642	1,372	450	1,822	-12.5	-2.0	-9.9
Illinois	3,746	400	4,146	3,772	446	4,218	-0.7	-10.3	-1.7
Indiana	1,818	1,493	3,311	2,201	1,609	3,810	-17.4	-7.2	-13.1
Kansas	-	7	7	-	10	10	-	-30.0	-30.0
Kentucky Total	7,001	2,820	9,821	8,191	3,643	11,834	-14.5	-22.6	-17.0
Kentucky (East)	3,879	2,425	6,304	4,349	3,217	7,566	-10.8	-24.6	-16.7
Kentucky (West)	3,122	395	3,517	3,842	426	4,268	-18.7	-7.3	-17.6
Louisiana	-	307	307	-	299	299	-	2.7	2.7
Maryland	165	194	359	167	219	386	-1.2	-11.4	-7.0
Mississippi	-	330	330	-	324	324	-	1.9	1.9
Missouri	-	15	15	-	20	20	-	-25.0	-25.0
Montana	313	1,017	1,330	324	996	1,320	-3.4	2.1	0.8
New Mexico	483	647	1,130	488	661	1,149	-1.0	-2.1	-1.7
North Dakota	-	1,261	1,261	-	1,285	1,285	-	-1.9	-1.9
Ohio	1,559	750	2,309	1,997	926	2,923	-21.9	-19.0	-21.0
Oklahoma	74	87	161	77	102	179	-3.9	-14.7	-10.1
Pennsylvania Total	4,780	1,853	6,633	5,821	2,117	7,938	-17.9	-12.5	-16.4
Pennsylvania (Anthracite)	82	923	1,005	85	871	956	-3.5	6.0	5.1
Pennsylvania (Bituminous)	4,698	930	5,628	5,736	1,246	6,982	-18.1	-25.4	-19.4
Tennessee	181	95	276	158	64	222	14.6	48.4	24.3
Texas	-	2,689	2,689	-	2,806	2,806	-	-4.2	-4.2
Utah	1,158	53	1,211	1,330	63	1,393	-12.9	-15.9	-13.1
Virginia	2,166	827	2,993	2,863	764	3,627	-24.3	8.2	-17.5
West Virginia Total	12,555	2,935	15,490	14,338	3,992	18,330	-12.4	-26.5	-15.5
West Virginia (Northern)	5,315	182	5,497	5,677	211	5,888	-6.4	-13.7	-6.6
West Virginia (Southern)	7,240	2,753	9,993	8,661	3,781	12,442	-16.4	-27.2	-19.7
Wyoming	308	6,327	6,635	315	6,309	6,624	-2.2	0.3	0.2
Appalachia Total	27,749	9,827	37,576	32,545	12,141	44,686	-14.7	-19.1	-15.9
Appalachia Central	13,466	6,100	19,566	16,031	7,826	23,857	-16.0	-22.1	-18.0
Appalachia Northern	11,819	2,979	14,798	13,662	3,473	17,135	-13.5	-14.2	-13.6
Appalachia Southern	2,464	748	3,212	2,852	842	3,694	-13.6	-11.2	-13.0
Interior Region Total	8,833	5,725	14,558	9,974	6,044	16,018	-11.4	-5.3	-9.1
Illinois Basin	8,686	2,288	10,974	9,815	2,481	12,296	-11.5	-7.8	-10.8
Other Interior	147	3,437	3,584	159	3,563	3,722	-7.5	-3.5	-3.7
Western Region Total	3,463	10,262	13,725	3,829	10,271	14,100	-9.6	-0.1	-2.7
Powder River Basin	-	6,633	6,633	-	6,592	6,592	-	0.6	0.6
Uinta Basin	2,229	435	2,664	2,559	457	3,016	-12.9	-4.8	-11.7
Other Western	1,234	3,194	4,428	1,270	3,222	4,492	-2.8	-0.9	-1.4
East of Mississippi River	36,435	12,445	48,880	42,360	14,946	57,306	-14.0	-16.7	-14.7
West of Mississippi River	3,610	13,369	16,979	3,988	13,510	17,498	-9.5	-1.0	-3.0
U.S. Subtotal	40,045	25,814	65,859	46,348	28,456	74,804	-13.6	-9.3	-12.0
Refuse Recovery	-	-	112	-	-	127	-	-	-11.8
U.S. Total	40,045	25,814	65,971	46,348	28,456	74,931	-13.6	-9.3	-12.0

1 For a definition of coal producing regions, see the Glossary.

-- No data reported.

Note: Includes all employees engaged in production, preparation, processing, development, maintenance, repair shop, or yard work at mining operations, including office workers. Excludes preparation plants with less than 5,000 employee hours per year, which are not required to provide data.

Source: U.S. Department of Labor, Mine Safety and Health Administration Form 7000-2, 'Quarterly Mine Employment and Coal Production Report.'

Table 19. Average Number of Employees at Underground and Surface Mines by State and Mine Production Range, 2015

Coal-Producing State, Region ¹ and Mine Type	Mine Production Range (thousand short tons)							Zero ²	Total Number of Employees
	Above 1,000	Above 500 to 1,000	Above 200 to 500	Above 100 to 200	Above 50 to 100	Above 10 to 50	Above 0 to 10		
Alabama	2,157	-	326	329	193	72	18	117	3,212
Underground	2,157	-	-	135	47	21	-	104	2,464
Surface	-	-	326	194	146	51	18	13	748
Alaska	113	-	-	-	-	-	-	-	113
Surface	113	-	-	-	-	-	-	-	113
Arizona	403	-	-	-	-	-	-	-	403
Surface	403	-	-	-	-	-	-	-	403
Arkansas	-	-	-	-	73	-	2	-	75
Underground	-	-	-	-	73	-	-	-	73
Surface	-	-	-	-	-	-	2	-	2
Colorado	1,492	121	29	-	-	-	-	-	1,642
Underground	1,080	121	-	-	-	-	-	-	1,201
Surface	412	-	29	-	-	-	-	-	441
Illinois	3,656	246	50	-	-	10	12	172	4,146
Underground	3,518	88	-	-	-	-	-	140	3,746
Surface	138	158	50	-	-	10	12	32	400
Indiana	2,750	243	52	57	-	16	29	145	3,311
Underground	1,567	88	-	-	-	16	29	99	1,818
Surface	1,183	155	52	57	-	-	-	46	1,493
Kansas	-	-	-	7	-	-	-	-	7
Surface	-	-	-	7	-	-	-	-	7
Kentucky Total	3,325	1,099	1,707	830	573	683	279	1,309	9,821
Underground	3,025	776	1,173	559	277	249	85	846	7,001
Surface	300	323	534	271	296	434	194	463	2,820
Kentucky (East)	429	914	1,642	812	542	665	279	1,005	6,304
Underground	331	661	1,132	559	246	249	85	605	3,879
Surface	98	253	510	253	296	416	194	400	2,425
Kentucky (West)	2,896	185	65	18	31	18	-	304	3,517
Underground	2,694	115	41	-	31	-	-	241	3,122
Surface	202	70	24	18	-	18	-	63	395
Louisiana	280	-	-	27	-	-	-	-	307
Surface	280	-	-	27	-	-	-	-	307
Maryland	-	-	186	44	55	23	13	38	359
Underground	-	-	95	32	-	-	-	38	165
Surface	-	-	91	12	55	23	13	-	194
Mississippi	218	-	-	112	-	-	-	-	330
Surface	218	-	-	112	-	-	-	-	330
Missouri	-	-	-	15	-	-	-	-	15
Surface	-	-	-	15	-	-	-	-	15
Montana	1,318	-	12	-	-	-	-	-	1,330
Underground	313	-	-	-	-	-	-	-	313
Surface	1,005	-	12	-	-	-	-	-	1,017
New Mexico	1,130	-	-	-	-	-	-	-	1,130
Underground	483	-	-	-	-	-	-	-	483
Surface	647	-	-	-	-	-	-	-	647
North Dakota	1,261	-	-	-	-	-	-	-	1,261
Surface	1,261	-	-	-	-	-	-	-	1,261
Ohio	1,129	708	44	213	37	72	9	85	2,309
Underground	991	329	-	143	-	50	5	29	1,559
Surface	138	379	44	70	37	22	4	56	750
Oklahoma	-	-	74	80	-	6	1	-	161
Underground	-	-	74	-	-	-	-	-	74
Surface	-	-	-	80	-	6	1	-	87
Pennsylvania Total	3,492	60	950	440	483	366	205	606	6,633
Underground	3,492	60	663	195	73	59	28	189	4,780
Surface	-	-	287	245	410	307	177	417	1,853
Pennsylvania (Anthracite)	-	-	87	74	240	134	77	384	1,005

Coal-Producing State, Region ¹ and Mine Type	Mine Production Range (thousand short tons)								Total Number of Employees
	Above 1,000	Above 500 to 1,000	Above 200 to 500	Above 100 to 200	Above 50 to 100	Above 10 to 50	Above 0 to 10	Zero ²	
Underground	-	-	-	-	-	31	25	26	82
Surface	-	-	87	74	240	103	52	358	923
Pennsylvania (Bituminous)	3,492	60	863	366	243	232	128	222	5,628
Underground	3,492	60	663	195	73	28	3	163	4,698
Surface	-	-	200	171	170	204	125	59	930
Tennessee	-	-	84	24	51	80	2	35	276
Underground	-	-	84	-	22	46	-	29	181
Surface	-	-	-	24	29	34	2	6	95
Texas	2,341	157	191	-	-	-	-	-	2,689
Surface	2,341	157	191	-	-	-	-	-	2,689
Utah	822	180	95	10	-	9	-	84	1,211
Underground	822	180	65	10	-	9	-	72	1,158
Surface	-	-	30	-	-	-	-	12	53
Virginia	730	93	900	351	270	220	59	370	2,993
Underground	730	-	648	237	131	153	6	261	2,166
Surface	-	93	252	114	139	67	53	109	827
West Virginia Total	7,339	2,811	2,275	870	223	376	70	1,526	15,490
Underground	6,318	2,282	1,882	569	103	253	25	1,123	12,555
Surface	1,021	529	393	301	120	123	45	403	2,935
West Virginia (Northern)	4,369	479	202	130	19	75	9	214	5,497
Underground	4,369	403	202	122	19	57	-	143	5,315
Surface	-	76	-	8	-	18	9	71	182
West Virginia (Southern)	2,970	2,332	2,073	740	204	301	61	1,312	9,993
Underground	1,949	1,879	1,680	447	84	196	25	980	7,240
Surface	1,021	453	393	293	120	105	36	332	2,753
Wyoming	6,635	-	-	-	-	-	-	-	6,635
Underground	308	-	-	-	-	-	-	-	308
Surface	6,327	-	-	-	-	-	-	-	6,327
Appalachia Total	15,276	4,586	6,407	3,083	1,854	1,874	655	3,782	37,576
Underground	14,019	3,332	4,504	1,870	622	831	149	2,378	27,749
Surface	1,257	1,254	1,903	1,213	1,232	1,043	506	1,404	9,827
Appalachia Central	4,129	3,339	4,699	1,927	1,067	1,266	401	2,722	19,566
Underground	3,010	2,540	3,544	1,243	483	644	116	1,875	13,466
Surface	1,119	799	1,155	684	584	622	285	847	6,100
Appalachia Northern	8,990	1,247	1,382	827	594	536	236	943	14,798
Underground	8,852	792	960	492	92	166	33	399	11,819
Surface	138	455	422	335	502	370	203	544	2,979
Appalachia Southern	2,157	-	326	329	193	72	18	117	3,212
Underground	2,157	-	-	135	47	21	-	104	2,464
Surface	-	-	326	194	146	51	18	13	748
Interior Region Total	12,141	831	432	316	104	50	44	621	14,558
Underground	7,779	291	115	-	104	16	29	480	8,833
Surface	4,362	540	317	316	-	34	15	141	5,725
Illinois Basin	9,302	674	167	75	31	44	41	621	10,974
Underground	7,779	291	41	-	31	16	29	480	8,686
Surface	1,523	383	126	75	-	28	12	141	2,288
Other Interior	2,839	157	265	241	73	6	3	-	3,584
Underground	-	-	74	-	73	-	-	-	147
Surface	2,839	157	191	241	-	6	3	-	3,437
Western Region Total	13,174	301	136	10	-	9	-	84	13,725
Underground	3,006	301	65	10	-	9	-	72	3,463
Surface	10,168	-	71	-	-	-	-	12	10,262
Powder River Basin	6,633	-	-	-	-	-	-	-	6,633
Surface	6,633	-	-	-	-	-	-	-	6,633
Uinta Basin	2,314	180	65	10	-	-	-	84	2,664
Underground	1,902	180	65	10	-	-	-	72	2,229
Surface	412	-	-	-	-	-	-	12	435
Other Western	4,227	121	71	-	-	9	-	-	4,428
Underground	1,104	121	-	-	-	9	-	-	1,234
Surface	3,123	-	71	-	-	-	-	-	3,194
East of Mississippi River	24,796	5,260	6,574	3,270	1,885	1,918	696	4,403	48,880

Coal-Producing State, Region ¹ and Mine Type	Mine Production Range (thousand short tons)							Zero ²	Total Number of Employees
	Above 1,000	Above 500 to 1,000	Above 200 to 500	Above 100 to 200	Above 50 to 100	Above 10 to 50	Above 0 to 10		
Underground	21,798	3,623	4,545	1,870	653	847	178	2,858	36,435
Surface	2,998	1,637	2,029	1,400	1,232	1,071	518	1,545	12,445
West of Mississippi River	15,795	458	401	139	73	15	3	84	16,979
Underground	3,006	301	139	10	73	9	-	72	3,610
Surface	12,789	157	262	129	-	6	3	12	13,369
U.S. Subtotal	40,591	5,718	6,975	3,409	1,958	1,933	699	4,487	65,859
Underground	24,804	3,924	4,684	1,880	726	856	178	2,930	40,045
Surface	15,787	1,794	2,291	1,529	1,232	1,077	521	1,557	25,814
Refuse Recovery	-	6	11	10	22	44	19	-	112
U.S. Total	40,591	5,724	6,986	3,419	1,980	1,977	718	4,487	65,971

1 For a definition of coal producing regions, see the Glossary.

2 Includes all employees at preparation plants and tipples not co-located with a mine.

- = No data reported.

Note: Includes all employees engaged in production, preparation, processing, development, maintenance, repair shop, or yard work at mining operations, including office workers. Excludes preparation plants with less than 5,000 employee hours per year, which are not required to provide data.

Source: U.S. Department of Labor, Mine Safety and Health Administration Form 7000-2, 'Quarterly Mine Employment and Coal Production Report.'

Table 20. Average Number of Employees at Underground and Surface Mines by State and Union Status, 2015

Coal-Producing State and Region ¹	Union		Nonunion	
	Underground	Surface	Underground	Surface
Alabama	2,209	56	255	658
Alaska	-	113	-	-
Arizona	-	403	-	-
Arkansas	-	-	73	-
Colorado	170	209	1,031	232
Illinois	-	-	3,746	398
Indiana	-	-	1,783	1,493
Kansas	-	-	-	7
Kentucky Total	21	12	6,765	2,409
Kentucky (East)	11	12	3,653	2,032
Kentucky (West)	10	-	3,112	377
Louisiana	-	-	-	307
Maryland	-	-	165	178
Mississippi	-	-	-	330
Missouri	-	-	-	15
Montana	-	732	313	285
New Mexico	483	329	-	318
North Dakota	-	289	-	972
Ohio	510	-	1,032	724
Oklahoma	-	-	74	80
Pennsylvania Total	1,448	324	3,283	1,333
Pennsylvania (Anthracite)	-	320	57	591
Pennsylvania (Bituminous)	1,448	4	3,226	742
Tennessee	-	-	167	88
Texas	-	1,479	-	1,210
Utah	14	-	1,135	42
Virginia	55	4	2,072	791
West Virginia Total	4,133	306	8,330	2,538
West Virginia (Northern)	3,203	13	2,112	152
West Virginia (Southern)	930	293	6,218	2,386
Wyoming	308	518	-	5,809
Appalachia Total	8,366	702	18,957	8,342
Appalachia Central	996	309	12,110	5,297
Appalachia Northern	5,161	337	6,592	2,387
Appalachia Southern	2,209	56	255	658
Interior Region Total	10	1,479	8,788	4,217
Illinois Basin	10	-	8,641	2,268
Other Interior	-	1,479	147	1,949
Western Region Total	975	2,593	2,479	7,658
Powder River Basin	-	720	-	5,913
Uinta Basin	184	180	2,045	244
Other Western	791	1,693	434	1,501
East of Mississippi River	8,376	702	27,598	10,940
West of Mississippi River	975	4,072	2,626	9,277
U.S. Total	9,351	4,774	30,224	20,217

¹ For a definition of coal producing regions, see the Glossary.

- = No data reported.

Note: Includes all employees at preparation plants and tipples not co-located with a mine. Includes all employees engaged in production, preparation, processing, development, maintenance, repair shop, or yard work at mining operations, including office workers. Excludes mines producing less than 25,000 short tons and preparation plants with less than 5,000 employee hours per year, which are not required to provide data.

Source: U.S. Energy Information Administration Form EIA-7A, 'Annual Survey of Coal Production and Preparation,' and U.S. Department of Labor, Mine Safety and Health Administration Form 7000-2, 'Quarterly Mine Employment and Coal Production Report.'

Productivity

Table 21. Coal Productivity by State and Mine Type, 2015 and 2014

Coal-Producing State, Region ¹ and Mine Type	Number of Mining Operations ²			Number of Employees ³			Average Production per Employee Hour (short tons) ⁴		
	2015	2014	Percent Change	2015	2014	Percent Change	2015	2014	Percent Change
Alabama	45	46	-2.2	3,212	3,694	-13.0	1.69	1.88	-10.0
Underground	13	13	-	2,464	2,852	-13.6	1.63	1.84	-11.6
Surface	32	33	-3.0	748	842	-11.2	1.92	2.02	-5.0
Alaska	1	1	-	113	120	-5.8	4.62	5.43	-15.0
Surface	1	1	-	113	120	-5.8	4.62	5.43	-15.0
Arizona	1	1	-	403	387	4.1	6.97	8.06	-13.5
Surface	1	1	-	403	387	4.1	6.97	8.06	-13.5
Arkansas	2	2	-	75	84	-10.7	0.56	0.53	5.7
Underground	1	1	-	73	82	-11.0	0.56	0.49	13.9
Surface	1	1	-	2	2	-	0.19	6.39	-97.0
Colorado	9	10	-10.0	1,642	1,822	-9.9	5.54	6.23	-11.0
Underground	5	6	-16.7	1,201	1,372	-12.5	5.21	6.15	-15.2
Surface	4	4	-	441	450	-2.0	6.50	6.50	-0.1
Illinois	31	32	-3.1	4,146	4,218	-1.7	6.09	5.99	1.6
Underground	19	19	-	3,746	3,772	-0.7	6.24	6.13	1.9
Surface	12	13	-7.7	400	446	-10.3	4.67	4.92	-5.1
Indiana	30	37	-18.9	3,311	3,810	-13.1	4.38	4.21	4.0
Underground	12	13	-7.7	1,818	2,201	-17.4	3.67	3.36	9.2
Surface	18	24	-25.0	1,493	1,609	-7.2	5.21	5.36	-2.8
Kansas	1	2	-50.0	7	10	-30.0	12.26	3.86	217.9
Surface	1	2	-50.0	7	10	-30.0	12.26	3.86	217.9
Kentucky Total	307	356	-13.8	9,821	11,834	-17.0	2.92	2.80	4.0
Underground	130	144	-9.7	7,001	8,191	-14.5	2.77	2.70	2.5
Surface	177	212	-16.5	2,820	3,643	-22.6	3.35	3.06	9.4
Kentucky (East)	279	323	-13.6	6,304	7,566	-16.7	2.23	2.23	0.3
Underground	111	123	-9.8	3,879	4,349	-10.8	1.82	1.89	-3.6
Surface	168	200	-16.0	2,425	3,217	-24.6	2.95	2.69	9.8
Kentucky (West)	28	33	-15.2	3,517	4,268	-17.6	3.92	3.70	6.0
Underground	19	21	-9.5	3,122	3,842	-18.7	3.75	3.50	7.2
Surface	9	12	-25.0	395	426	-7.3	5.51	5.73	-3.7
Louisiana	2	2	-	307	299	2.7	5.23	3.96	32.2
Surface	2	2	-	307	299	2.7	5.23	3.96	32.2
Maryland	19	21	-9.5	359	386	-7.0	2.56	2.36	8.6
Underground	3	3	-	165	167	-1.2	1.83	1.83	-0.2
Surface	16	18	-11.1	194	219	-11.4	3.13	2.82	11.0
Mississippi	2	2	-	330	324	1.9	5.59	5.71	-2.0
Surface	2	2	-	330	324	1.9	5.59	5.71	-2.0
Missouri	1	1	-	15	20	-25.0	3.52	7.11	-50.5
Surface	1	1	-	15	20	-25.0	3.52	7.11	-50.5
Montana	6	6	-	1,330	1,320	0.8	15.76	16.57	-4.8
Underground	1	1	-	313	324	-3.4	9.49	10.66	-11.0
Surface	5	5	-	1,017	996	2.1	17.91	18.81	-4.8
New Mexico	3	3	-	1,130	1,149	-1.7	8.55	9.21	-7.2
Underground	1	1	-	483	488	-1.0	6.83	8.89	-23.2
Surface	2	2	-	647	661	-2.1	9.77	9.43	3.6
North Dakota	4	5	-20.0	1,261	1,285	-1.9	11.79	11.48	2.7
Surface	4	5	-20.0	1,261	1,285	-1.9	11.79	11.48	2.7
Ohio	34	38	-10.5	2,309	2,923	-21.0	3.59	3.38	6.3
Underground	15	14	7.1	1,559	1,997	-21.9	3.71	3.43	8.1
Surface	19	24	-20.8	750	926	-19.0	3.32	3.25	2.0
Oklahoma	5	6	-16.7	161	179	-10.1	1.84	1.87	-1.4
Underground	1	1	-	74	77	-3.9	1.86	1.91	-2.7
Surface	4	5	-20.0	87	102	-14.7	1.82	1.83	-0.6
Pennsylvania Total	258	300	-14.0	6,633	7,938	-16.4	3.61	3.52	2.4
Underground	70	78	-10.3	4,780	5,821	-17.9	4.32	4.02	7.3
Surface	188	222	-15.3	1,853	2,117	-12.5	1.65	1.93	-14.3

Coal-Producing State, Region ¹ and Mine Type	Number of Mining Operations ²			Number of Employees ³			Average Production per Employee Hour (short tons) ⁴		
	2015	2014	Percent Change	2015	2014	Percent Change	2015	2014	Percent Change
Pennsylvania (Anthracite)	94	99	-5.1	1,005	956	5.1	0.94	0.98	-3.6
Underground	17	17	-	82	85	-3.5	0.57	0.60	-3.6
Surface	77	82	-6.1	923	871	6.0	0.97	1.01	-4.0
Pennsylvania (Bituminous)	164	201	-18.4	5,628	6,982	-19.4	4.07	3.83	6.3
Underground	53	61	-13.1	4,698	5,736	-18.1	4.38	4.07	7.6
Surface	111	140	-20.7	930	1,246	-25.4	2.39	2.58	-7.6
Tennessee	12	10	20.0	276	222	24.3	1.69	1.85	-8.5
Underground	5	4	25.0	181	158	14.6	1.46	1.73	-15.3
Surface	7	6	16.7	95	64	48.4	2.18	2.30	-5.0
Texas	14	16	-12.5	2,689	2,806	-4.2	6.28	7.22	-13.0
Surface	14	16	-12.5	2,689	2,806	-4.2	6.28	7.22	-13.0
Utah	17	17	-	1,211	1,393	-13.1	5.66	5.97	-5.2
Underground	14	13	7.7	1,158	1,330	-12.9	5.87	6.13	-4.2
Surface	3	4	-25.0	53	63	-15.9	2.15	3.32	-35.3
Virginia	89	101	-11.9	2,993	3,627	-17.5	2.16	1.92	12.4
Underground	45	56	-19.6	2,166	2,863	-24.3	2.03	1.79	13.6
Surface	44	45	-2.2	827	764	8.2	2.53	2.43	4.0
West Virginia Total	234	288	-18.8	15,490	18,330	-15.5	2.77	2.69	3.2
Underground	128	155	-17.4	12,555	14,338	-12.4	2.69	2.53	6.6
Surface	106	133	-20.3	2,935	3,992	-26.5	3.12	3.24	-3.6
West Virginia (Northern)	39	46	-15.2	5,497	5,888	-6.6	3.89	3.70	5.2
Underground	25	26	-3.8	5,315	5,677	-6.4	3.93	3.71	5.9
Surface	14	20	-30.0	182	211	-13.7	2.57	3.30	-22.2
West Virginia (Southern)	195	242	-19.4	9,993	12,442	-19.7	2.15	2.22	-2.9
Underground	103	129	-20.2	7,240	8,661	-16.4	1.77	1.75	1.3
Surface	92	113	-18.6	2,753	3,781	-27.2	3.15	3.24	-2.6
Wyoming	16	18	-11.1	6,635	6,624	0.2	27.38	28.62	-4.3
Underground	1	1	-	308	315	-2.2	4.43	4.39	1.0
Surface	15	17	-11.8	6,327	6,309	0.3	28.61	30.05	-4.8
Appalachia Total	970	1,127	-13.9	37,576	44,686	-15.9	2.72	2.66	2.1
Underground	390	446	-12.6	27,749	32,545	-14.7	2.73	2.63	3.9
Surface	580	681	-14.8	9,827	12,141	-19.1	2.67	2.75	-2.8
Appalachia Central	575	676	-14.9	19,566	23,857	-18.0	2.17	2.17	-0.1
Underground	264	312	-15.4	13,466	16,031	-16.0	1.82	1.79	1.7
Surface	311	364	-14.6	6,100	7,826	-22.1	2.99	2.94	1.5
Appalachia Northern	350	405	-13.6	14,798	17,135	-13.6	3.69	3.53	4.4
Underground	113	121	-6.6	11,819	13,662	-13.5	4.03	3.78	6.6
Surface	237	284	-16.5	2,979	3,473	-14.2	2.22	2.45	-9.4
Appalachia Southern	45	46	-2.2	3,212	3,694	-13.0	1.69	1.88	-10.0
Underground	13	13	-	2,464	2,852	-13.6	1.63	1.84	-11.6
Surface	32	33	-3.0	748	842	-11.2	1.92	2.02	-5.0
Interior Region Total	116	133	-12.8	14,558	16,018	-9.1	5.05	4.98	1.5
Underground	52	55	-5.5	8,833	9,974	-11.4	4.70	4.37	7.5
Surface	64	78	-17.9	5,725	6,044	-5.3	5.65	6.05	-6.8
Illinois Basin	89	102	-12.7	10,974	12,296	-10.8	4.84	4.60	5.2
Underground	50	53	-5.7	8,686	9,815	-11.5	4.76	4.42	7.7
Surface	39	49	-20.4	2,288	2,481	-7.8	5.17	5.34	-3.2
Other Interior	27	31	-12.9	3,584	3,722	-3.7	5.77	6.35	-9.3
Underground	2	2	-	147	159	-7.5	1.29	1.26	2.6
Surface	25	29	-13.8	3,437	3,563	-3.5	6.00	6.61	-9.3
Western Region Total	57	61	-6.6	13,725	14,100	-2.7	17.92	18.36	-2.4
Underground	22	22	-	3,463	3,829	-9.6	5.97	6.71	-11.1
Surface	35	39	-10.3	10,262	10,271	-0.1	22.04	22.89	-3.7
Powder River Basin	16	16	-	6,633	6,592	0.6	29.34	30.55	-4.0
Surface	16	16	-	6,633	6,592	0.6	29.34	30.55	-4.0
Uinta Basin	22	23	-4.3	2,664	3,016	-11.7	5.77	6.27	-8.0
Underground	17	17	-	2,229	2,559	-12.9	5.68	6.30	-9.9
Surface	5	6	-16.7	435	457	-4.8	6.24	6.09	2.5
Other Western	19	22	-13.6	4,428	4,492	-1.4	8.36	8.91	-6.1
Underground	5	5	-	1,234	1,270	-2.8	6.48	7.50	-13.7

Coal-Producing State, Region ¹ and Mine Type	Number of Mining Operations ²			Number of Employees ³			Average Production per Employee Hour (short tons) ⁴		
	2015	2014	Percent Change	2015	2014	Percent Change	2015	2014	Percent Change
Surface	14	17	-17.6	3,194	3,222	-0.9	9.11	9.51	-4.2
East of Mississippi River	1,061	1,231	-13.8	48,880	57,306	-14.7	3.24	3.12	3.8
Underground	440	499	-11.8	36,435	42,360	-14.0	3.24	3.07	5.5
Surface	621	732	-15.2	12,445	14,946	-16.7	3.24	3.27	-0.9
West of Mississippi River	82	90	-8.9	16,979	17,498	-3.0	15.51	15.96	-2.8
Underground	24	24	-	3,610	3,988	-9.5	5.74	6.47	-11.3
Surface	58	66	-12.1	13,369	13,510	-1.0	18.20	18.86	-3.5
U.S. Subtotal	1,143	1,321	-13.5	65,859	74,804	-12.0	6.28	5.95	5.5
Underground	464	523	-11.3	40,045	46,348	-13.6	3.45	3.35	3.2
Surface	679	798	-14.9	25,814	28,456	-9.3	10.95	10.42	5.0
Refuse Recovery	25	33	-24.2	112	127	-11.8	8.99	13.21	-32.0
U.S. Total	1,168	1,354	-13.7	65,971	74,931	-12.0	6.28	5.96	5.4

1 For a definition of coal producing regions, see the Glossary.

2 Mining operations that consist of a mine and preparation plant or preparation plant processing both underground and surface coal are reported as two operations.

3 Includes all employees engaged in production, processing, development, maintenance, repair shop, or yard work at mining operations, including office workers.

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

- = No data reported.

Note: Excludes preparation plants with less than 5,000 employee hours per year, which are not required to provide data.

Source: U.S. Energy Information Administration Form EIA-7A, 'Annual Survey of Coal Production and Preparation,' and U.S. Department of Labor, Mine Safety and Health Administration Form 7000-2, 'Quarterly Mine Employment and Coal Production Report.'

Table 22. Underground Coal Mining Productivity by State and Mining Method, 2015

(short tons produced per employee hour)

Coal-Producing State, Region ¹ and Mine Type	Continuous ²	Conventional and Other ³	Longwall ⁴	Total
Alabama	0.67	-	1.74	1.63
Arkansas	0.56	-	-	0.56
Colorado	3.18	-	5.44	5.21
Illinois	4.49	7.95	7.83	6.24
Indiana	3.70	-	-	3.70
Kentucky Total	2.78	1.91	-	2.77
Kentucky (East)	1.83	1.91	-	1.83
Kentucky (West)	3.75	-	-	3.75
Maryland	1.83	-	-	1.83
Montana	-	-	9.49	9.49
New Mexico	-	-	6.83	6.83
Ohio	2.04	-	4.53	3.71
Oklahoma	1.86	-	-	1.86
Pennsylvania Total	2.57	-	5.22	4.33
Pennsylvania (Anthracite)	0.49	-	-	0.49
Pennsylvania (Bituminous)	2.64	-	5.22	4.38
Tennessee	1.57	-	-	1.57
Utah	3.72	-	6.44	5.91
Virginia	1.42	-	4.40	2.04
West Virginia Total	1.72	-	3.81	2.71
West Virginia (Northern)	1.76	-	4.33	3.97
West Virginia (Southern)	1.71	-	2.06	1.78
Wyoming	-	-	4.43	4.43
Appalachia Total	1.79	1.91	3.83	2.75
Appalachia Central	1.70	1.91	2.64	1.83
Appalachia Northern	2.23	-	4.67	4.05
Appalachia Southern	0.67	-	1.74	1.63
Interior Region Total	3.86	7.95	7.83	4.70
Illinois Basin	3.92	7.95	7.83	4.77
Other Interior	1.29	-	-	1.29
Western Region Total	3.53	-	6.25	5.98
Uinta Basin	3.72	-	5.90	5.68
Other Western	3.18	-	6.88	6.51
East of Mississippi River	2.50	7.35	4.33	3.25
West of Mississippi River	2.77	-	6.25	5.75
U.S. Total	2.50	7.35	4.65	3.47

1 For a definition of coal producing regions, see the Glossary.

2 Mines that produce greater than 50 percent of their coal by continuous mining methods.

3 Mines that produce greater than 50 percent of their coal by conventional mining methods or mines that produce coal using shortwall, scoop loading, hand loading, or other methods or a 50/50 percent continuous/conventional split in mining method.

4 Mines that have any production from longwall mining method. A typical longwall mining operation use 80 percent longwall mining and 20 percent continuous mining.

- = No data reported.

Note: For each State, stand alone preparation plant hours are distributed across mining methods by the proportion of underground hours for all stand alone mines. Productivity is calculated by dividing total coal production by the total direct labor hours worked by all employees engaged in production, preparation, processing, development, maintenance, repair shop, or yard work at mining operations, including office workers. Excludes mines producing less than 25,000 short tons of coal and preparation plants with less than 5,000 employee hours during the year, which are not required to provide data.

Source: U.S. Energy Information Administration Form EIA-7A, 'Annual Survey of Coal Production and Preparation,' and U.S. Department of Labor, Mine Safety and Health Administration Form 7000-2, 'Quarterly Mine Employment and Coal Production Report.'

Table 23. Coal Mining Productivity by State, Mine Type, and Mine Production Range, 2015

(short tons produced per employee hour)

Coal-Producing State, Region ¹ and Mine Type	Mine Production Range (thousand short tons)							Total ²
	Above 1,000	Above 500 to 1,000	Above 200 to 500	Above 100 to 200	Above 50 to 100	Above 10 to 50	10 or Under	
Alabama	1.79	-	2.10	1.42	1.56	1.21	1.11	1.69
Underground	1.79	-	-	0.75	0.80	1.06	-	1.63
Surface	-	-	2.10	1.93	1.83	1.31	1.11	1.92
Alaska	4.62	-	-	-	-	-	-	4.62
Surface	4.62	-	-	-	-	-	-	4.62
Arizona	6.97	-	-	-	-	-	-	6.97
Surface	6.97	-	-	-	-	-	-	6.97
Arkansas	-	-	-	-	0.56	-	0.19	0.56
Underground	-	-	-	-	0.56	-	-	0.56
Surface	-	-	-	-	-	-	0.19	0.19
Colorado	5.75	3.18	4.75	-	-	-	-	5.54
Underground	5.44	3.18	-	-	-	-	-	5.21
Surface	6.60	-	4.75	-	-	-	-	6.50
Illinois	6.43	5.39	5.57	-	-	2.59	0.47	6.09
Underground	6.53	3.95	-	-	-	-	-	6.24
Surface	3.73	6.13	5.57	-	-	2.59	0.47	4.67
Indiana	4.65	4.42	5.13	4.76	-	0.61	0.5	4.38
Underground	4.04	3.07	-	-	-	0.61	0.5	3.67
Surface	5.45	5.05	5.13	4.76	-	-	-	5.21
Kansas	-	-	-	12.26	-	-	-	12.26
Surface	-	-	-	12.26	-	-	-	12.26
Kentucky Total	4.23	3.13	2.84	2.41	2.61	1.63	0.82	2.92
Underground	4.05	2.32	2.22	1.67	2.09	1.43	0.53	2.77
Surface	6.21	4.98	4.14	3.97	3.16	1.72	0.88	3.35
Kentucky (East)	3.63	2.95	2.78	2.40	2.59	1.65	0.82	2.23
Underground	3.49	2.18	2.18	1.67	2.02	1.43	0.53	1.82
Surface	3.99	4.73	4.10	4.10	3.16	1.75	0.88	2.95
Kentucky (West)	4.32	4.09	3.95	2.70	2.98	0.87	-	3.92
Underground	4.11	3.07	3.36	-	2.98	-	-	3.75
Surface	7.64	6.25	4.85	2.70	-	0.87	-	5.51
Louisiana	5.41	-	-	3.34	-	-	-	5.23
Surface	5.41	-	-	3.34	-	-	-	5.23
Maryland	-	-	2.86	3.21	2.84	2.82	1.64	2.56
Underground	-	-	2.40	2.45	-	-	-	1.83
Surface	-	-	3.26	4.63	2.84	2.82	1.64	3.13
Mississippi	6.78	-	-	1.35	-	-	-	5.59
Surface	6.78	-	-	1.35	-	-	-	5.59
Missouri	-	-	-	3.52	-	-	-	3.52
Surface	-	-	-	3.52	-	-	-	3.52
Montana	15.81	-	10.85	-	-	-	-	15.76
Underground	9.49	-	-	-	-	-	-	9.49
Surface	18.00	-	10.85	-	-	-	-	17.91
New Mexico	8.55	-	-	-	-	-	-	8.55
Underground	6.83	-	-	-	-	-	-	6.83
Surface	9.77	-	-	-	-	-	-	9.77
North Dakota	11.79	-	-	-	-	-	-	11.79
Surface	11.79	-	-	-	-	-	-	11.79
Ohio	4.49	3.07	3.94	2.68	2.80	0.59	1.03	3.59
Underground	4.53	2.25	-	2.63	-	0.48	2.46	3.71
Surface	4.15	3.79	3.94	2.77	2.80	0.88	0.39	3.32
Oklahoma	-	-	1.86	1.84	-	1.74	1.01	1.84
Underground	-	-	1.86	-	-	-	-	1.86
Surface	-	-	-	1.84	-	1.74	1.01	1.82
Pennsylvania Total	4.96	4.16	3.08	2.62	1.80	2.03	1.15	3.61
Underground	4.96	4.16	3.16	2.74	2.13	1.43	0.82	4.32
Surface	-	-	2.92	2.52	1.74	2.13	1.22	1.65

Coal-Producing State, Region ¹ and Mine Type	Mine Production Range (thousand short tons)							Total ²
	Above 1,000	Above 500 to 1,000	Above 200 to 500	Above 100 to 200	Above 50 to 100	Above 10 to 50	10 or Under	
Pennsylvania (Anthracite)	-	-	2.01	2.09	1.34	1.76	0.92	0.94
Underground	-	-	-	-	-	0.98	0.80	0.57
Surface	-	-	2.01	2.09	1.34	1.97	0.98	0.97
Pennsylvania (Bituminous)	4.96	4.16	3.20	2.73	2.24	2.21	1.36	4.07
Underground	4.96	4.16	3.16	2.74	2.13	2.07	1.57	4.38
Surface	-	-	3.34	2.71	2.29	2.22	1.36	2.39
Tennessee	-	-	2.35	2.20	2.18	1.02	4.69	1.69
Underground	-	-	2.35	-	1.59	0.63	-	1.46
Surface	-	-	-	2.20	2.53	2.18	4.69	2.18
Texas	6.83	3.95	1.61	-	-	-	-	6.28
Surface	6.83	3.95	1.61	-	-	-	-	6.28
Utah	7.16	3.83	2.77	9.24	-	0.64	-	5.66
Underground	7.16	3.83	2.47	9.24	-	0.64	-	5.87
Surface	-	-	3.20	-	-	-	-	2.15
Virginia	3.40	2.68	2.38	2.01	1.63	1.22	0.72	2.16
Underground	3.40	-	1.70	1.57	1.38	1.26	0.68	2.03
Surface	-	2.68	4.19	2.99	1.91	1.14	0.73	2.53
West Virginia Total	3.86	2.44	2.00	1.87	2.15	1.25	0.67	2.77
Underground	3.83	2.13	1.73	1.35	1.48	0.69	0.21	2.69
Surface	4.03	3.77	3.42	2.75	2.74	2.41	0.80	3.12
West Virginia (Northern)	4.40	2.06	2.52	2.30	2.99	0.55	1.39	3.89
Underground	4.40	1.69	2.52	1.86	2.99	-	-	3.93
Surface	-	4.09	-	5.55	-	2.93	1.39	2.57
West Virginia (Southern)	3.06	2.51	1.96	1.82	2.12	1.48	0.60	2.15
Underground	2.50	2.22	1.65	1.26	1.34	0.98	0.21	1.77
Surface	4.03	3.71	3.42	2.65	2.74	2.33	0.73	3.15
Wyoming	27.38	-	-	-	-	-	-	27.38
Underground	4.43	-	-	-	-	-	-	4.43
Surface	28.61	-	-	-	-	-	-	28.61
Appalachia Total	3.80	2.66	2.46	2.14	2.04	1.52	0.97	2.72
Underground	3.78	2.18	2.06	1.67	1.67	1.01	0.66	2.73
Surface	4.04	3.92	3.39	2.83	2.24	1.91	1.03	2.67
Appalachia Central	3.18	2.64	2.33	2.09	2.20	1.47	0.78	2.17
Underground	2.84	2.21	1.84	1.50	1.67	1.16	0.47	1.82
Surface	4.02	3.95	3.90	3.18	2.70	1.78	0.85	2.99
Appalachia Northern	4.62	2.69	3.01	2.62	1.96	1.64	1.18	3.69
Underground	4.63	2.09	2.96	2.53	2.22	0.58	0.92	4.03
Surface	4.15	3.85	3.11	2.74	1.91	2.15	1.23	2.22
Appalachia Southern	1.79	-	2.10	1.42	1.56	1.21	1.11	1.69
Underground	1.79	-	-	0.75	0.80	1.06	-	1.63
Surface	-	-	2.10	1.93	1.83	1.31	1.11	1.92
Interior Region Total	5.53	4.57	2.88	2.99	0.97	1.29	0.11	5.05
Underground	5.14	3.33	2.36	-	0.97	0.61	0.5	4.70
Surface	6.27	5.24	3.11	2.99	-	1.67	0.60	5.65
Illinois Basin	5.21	4.69	4.74	4.21	2.98	1.22	0.8	4.84
Underground	5.14	3.33	3.36	-	2.98	0.61	0.5	4.76
Surface	5.57	5.68	5.23	4.21	-	1.65	0.47	5.17
Other Interior	6.69	3.95	1.69	2.44	0.56	1.74	0.76	5.77
Underground	-	-	1.86	-	0.56	-	-	1.29
Surface	6.69	3.95	1.61	2.44	-	1.74	0.76	6.00
Western Region Total	18.58	3.58	3.72	9.24	-	0.64	-	17.92
Underground	6.43	3.58	2.47	9.24	-	0.64	-	5.97
Surface	22.24	-	4.74	-	-	-	-	22.04
Powder River Basin	29.34	-	-	-	-	-	-	29.34
Surface	29.34	-	-	-	-	-	-	29.34
Uinta Basin	6.24	3.83	2.47	9.24	-	-	-	5.77
Underground	6.17	3.83	2.47	9.24	-	-	-	5.68
Surface	6.60	-	-	-	-	-	-	6.24
Other Western	8.60	3.18	4.74	-	-	0.64	-	8.36
Underground	6.88	3.18	-	-	-	0.64	-	6.48
Surface	9.23	-	4.74	-	-	-	-	9.11

Coal-Producing State, Region ¹ and Mine Type	Mine Production Range (thousand short tons)							Total ²
	Above 1,000	Above 500 to 1,000	Above 200 to 500	Above 100 to 200	Above 50 to 100	Above 10 to 50	10 or Under	
East of Mississippi River	4.36	2.92	2.53	2.18	2.05	1.51	0.88	3.24
Underground	4.27	2.28	2.08	1.67	1.70	1.00	0.44	3.24
Surface	4.99	4.35	3.51	2.85	2.24	1.90	1.03	3.24
West of Mississippi River	16.55	3.70	2.36	3.24	0.56	1.11	0.76	15.51
Underground	6.43	3.58	2.10	9.24	0.56	0.64	-	5.74
Surface	18.95	3.95	2.51	2.87	-	1.74	0.76	18.20
U.S. Subtotal	8.80	2.98	2.52	2.23	1.98	1.51	0.88	6.28
Underground	4.51	2.37	2.08	1.70	1.57	1.00	0.44	3.45
Surface	16.03	4.32	3.39	2.86	2.24	1.90	1.02	10.95
Refuse Recovery	-	44.70	17.19	11.57	5.01	2.21	2.37	8.99
U.S. Total	8.80	3.03	2.53	2.24	2.01	1.52	0.91	6.28

1 For a definition of coal producing regions, see the Glossary.

2 Includes all employees at preparation plants and tipplers not co-located with a mine.

- = No data reported.

Note: Productivity is calculated by dividing total coal production by the total labor hours worked by all employees engaged in production, preparation, processing, development, maintenance, repair shop, or yard work at mining operations, including office workers. Excludes preparation plants with less than 5,000 employee hours during the year, which are not required to provide data.

Source: U.S. Energy Information Administration Form EIA-7A, 'Annual Survey of Coal Production and Preparation,' and U.S. Department of Labor, Mine Safety and Health Administration Form 7000-2, 'Quarterly Mine Employment and Coal Production Report.'

Table 24. Coal Mining Productivity by State, Mine Type, and Union Status, 2015

(short tons produced per employee hour)

Coal-Producing State and Region ¹	Union		Nonunion	
	Underground	Surface	Underground	Surface
Alabama	1.75	2.52	0.64	1.90
Alaska	-	4.62	-	-
Arizona	-	6.97	-	-
Arkansas	-	-	0.56	-
Colorado	5.72	5.71	5.12	7.18
Illinois	-	-	6.24	4.69
Indiana	-	-	3.72	5.21
Kansas	-	-	-	12.26
Kentucky Total	-	-	2.78	3.52
Kentucky (East)	-	-	1.84	3.11
Kentucky (West)	-	-	3.76	5.65
Louisiana	-	-	-	5.23
Maryland	-	-	1.83	3.18
Mississippi	-	-	-	5.59
Missouri	-	-	-	3.52
Montana	-	13.17	9.49	29.41
New Mexico	6.83	8.67	-	10.80
North Dakota	-	12.01	-	11.73
Ohio	4.14	-	3.53	3.40
Oklahoma	-	-	1.86	1.84
Pennsylvania Total	4.07	0.99	4.47	1.78
Pennsylvania (Anthracite)	-	1.01	0.50	0.92
Pennsylvania (Bituminous)	4.07	-	4.54	2.45
Tennessee	-	-	1.57	2.07
Texas	-	7.33	-	4.97
Utah	-	-	5.97	2.55
Virginia	-	-	2.10	2.59
West Virginia Total	3.83	2.55	2.12	3.25
West Virginia (Northern)	4.41	-	3.17	2.80
West Virginia (Southern)	1.78	2.66	1.78	3.28
Wyoming	4.43	6.33	-	30.53
Appalachian Total	3.27	1.84	2.50	2.81
Appalachia Central	1.67	2.55	1.85	3.10
Appalachia Northern	4.29	0.95	3.84	2.42
Appalachia Southern	1.75	2.52	0.64	1.90
Interior Region Total	-	7.33	4.71	5.09
Illinois Basin	-	-	4.78	5.19
Other Interior	-	7.33	1.29	4.96
Western Region Total	5.73	9.01	6.08	26.44
Powder River Basin	-	13.21	-	31.16
Uinta Basin	5.36	5.85	5.71	6.82
Other Western	5.81	7.70	7.76	10.75
East of Mississippi River	3.27	1.84	3.25	3.40
West of Mississippi River	5.73	8.38	5.76	22.57
U.S. Total	3.51	7.38	3.46	11.99

¹ For a definition of coal producing regions, see the Glossary.

- = No data reported.

Note: Productivity is calculated by dividing total coal production by the total direct labor hours worked by all employees engaged in production, preparation, processing, development, maintenance, repair shop, or yard work at mining operations, including office workers. Excludes mines producing less than 25,000 short tons of coal and preparation plants with less than 5,000 employee hours during the year, which are not required to provide data.

Source: U.S. Energy Information Administration Form EIA-7A, 'Annual Survey of Coal Production and Preparation,' and U.S. Department of Labor, Mine Safety and Health Administration Form 7000-2, 'Quarterly Mine Employment and Coal Production Report.'

Domestic Markets

Table 25. Coal Consumers in the Manufacturing and Coke Sectors, 2015

Company Name	Plant Location
Top Ten Manufacturers	
American Crystal Sugar Co	MN, ND
Archer Daniels Midland	IA, IL, MN, NE
Carmeuse Lime Stone Inc	AL, IN, KY, MI, OH, PA, TN, WI
Cemex Inc	AL, CA, CO, FL, GA, KY, OH, TN, TX
Dakota Gasification Company	ND
Eastman Chemical Company	TN
Georgia-Pacific Consumer Products LP	AL, GA, OK, WI
Holcim (US) Inc	AL, CO, MD, MO, MT, OK, SC, TX, UT
Mittal Steel USA	IN
NewPage Corporation	MD, MI, WI
Other Major Manufacturers	
Ash Grove Cement Co	AR, KS, MT, NE, OR, UT
Axiall Corporation	WV
Blue Ridge Paper Prod Inc	NC
Buzzi Unicem USA	IN, MO, OK, PA, TN, TX
Cabot Norit Americas Inc	OK, TX
California Portland Cement Co	AZ, CA
Cargill Incorporated	GA, IA, MI, OH
Cliffs Natural Resources Silver Bay Pwr Co	MN
Doyon Utilities	AK
ESSROC Materials Inc	IN, PA
FMC Corporation	WY
GCC America	CO, NM, SD
Glatfelter Corp	PA
Graymont Western US Inc	MT, NV, UT, WA, WI
Ingredion Incorporated	IL, NC
International Paper Co	AL, GA, SC
Lafarge North America	IA, IL, MI, NY, PA
Lehigh Cement Co	AL, IA, IN, MD, PA
Lhoist North America	AL, AZ, MO, NV, TX, VA
Meadwestvaco Corporation	VA
Mississippi Lime Company	KY, MO, OH
PH Glatfelter CO	OH
RED-Rochester LLC	NY
RockTenn CP LLC	FL, VA
Searles Valley Minerals	CA
Solvay Chemicals Inc	WY
TATA Chemicals Ltd	WY
TXI Operations LP	TX
Tate and Lyle Ingredients Americas Inc	IL, IN, TN
Western Sugar Cooperative	CO, MT, NE, WY
Top Ten Coke Producers	
AK Steel Corp	OH
ArcelorMittal Monessen	PA
DTE Energy Services	MI, PA
Drummond Company Inc	AL
Mittal Steel USA	IN, OH
Mountain State Carbon	WV
SunCoke Energy Inc	IL, IN, OH, VA
Tonawanda Coke Corp	NY
United States Steel Coporation	IL, IN, PA
Walter Coke Inc	AL

Note: 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. Manufacturers and coke producers are listed in alphabetical order.

Source: U.S. Energy Information Administration, Form EIA-3, 'Quarterly Survey of Non-Electric Sector Coal Data.' Prior to third quarter 2014, coke plant data was collected under Form EIA-5, 'Quarterly Coal Consumption and Quality Report - Coke Plants.'

Table 26. U.S. Coal Consumption by End Use Sector, Census Division, and State, 2015 and 2014

(thousand short tons)

Census Division and State	2015				2014				Total		Percent Change
	Electric Power ¹	Other Industrial	Coke	Commercial and Institutional	Electric Power ¹	Other Industrial	Coke	Commercial and Institutional	2015	2014	
New England	1,844	75	-	-	2,340	90	-	-	1,918	2,430	-21.0
Connecticut	359	-	-	-	499	-	-	-	359	499	-28.2
Maine	74	30	-	-	53	33	-	-	104	85	21.4
Massachusetts	1,005	45	-	-	1,244	57	-	-	1,050	1,301	-19.3
New Hampshire	406	-	-	-	544	-	-	-	406	544	-25.4
Rhode Island	s	-	-	-	s	-	-	-	s	s	-
Middle Atlantic	33,322	2,071	6,219	75	41,675	2,175	6,595	117	41,687	50,562	-17.6
New Jersey	893	-	-	-	1,214	-	-	-	893	1,214	-26.4
New York	1,038	572	151	-	2,154	594	120	-	1,761	2,867	-38.6
Pennsylvania	31,391	1,499	6,068	75	38,307	1,581	6,475	117	39,033	46,481	-16.0
East North Central	163,744	7,449	10,584	308	189,199	8,854	11,352	490	182,084	209,895	-13.3
Illinois	43,446	2,690	1,042	97	51,563	3,123	1,500	123	47,274	56,309	-16.0
Indiana	38,734	1,554	4,515	62	48,582	1,840	4,783	139	44,865	55,344	-18.9
Michigan	29,487	929	1,463	47	29,401	1,114	1,360	68	31,925	31,944	-0.1
Ohio	30,518	1,062	3,564	82	38,417	1,326	3,709	133	35,226	43,585	-19.2
Wisconsin	21,559	1,214	-	20	21,235	1,452	-	27	22,793	22,713	0.4
West North Central	123,903	12,863	-	321	136,585	13,430	-	388	137,087	150,404	-8.9
Iowa	16,840	2,849	-	173	19,705	3,094	-	209	19,863	23,008	-13.7
Kansas	15,851	115	-	-	18,199	121	-	-	15,967	18,320	-12.8
Minnesota	14,459	957	-	8	16,534	1,236	-	10	15,425	17,781	-13.3
Missouri	38,468	951	-	67	43,041	1,095	-	95	39,487	44,231	-10.7
Nebraska	14,508	1,175	-	-	15,036	1,217	-	-	15,683	16,253	-3.5
North Dakota	22,786	6,619	-	72	22,289	6,452	-	74	29,477	28,816	2.3
South Dakota	990	197	-	-	1,780	215	-	-	1,187	1,995	-40.5
South Atlantic	105,904	4,243	1,702	200	126,212	5,283	1,805	229	112,050	133,528	-16.1
Delaware	276	-	-	-	397	-	-	-	276	397	-30.4
District of Columbia	-	-	-	2	-	-	-	2	2	2	-4.7
Florida	19,157	576	-	-	23,012	618	-	-	19,733	23,630	-16.5
Georgia	19,307	463	-	2	22,660	817	-	4	19,772	23,481	-15.8
Maryland	6,036	681	-	1	7,411	705	-	7	6,718	8,123	-17.3
North Carolina	15,666	552	-	145	19,539	592	-	150	16,364	20,282	-19.3
South Carolina	9,277	439	-	s	11,797	549	-	s	9,716	12,346	-21.3
Virginia	7,961	683	1,025	50	9,513	1,087	1,041	66	9,719	11,706	-17.0
West Virginia	28,223	849	677	-	31,883	914	764	-	29,750	33,561	-11.4
East South Central	75,202	4,592	1,204	21	87,569	5,137	1,546	79	81,019	94,331	-14.1
Alabama	21,025	1,350	1,204	-	23,901	1,688	1,546	-	23,580	27,135	-13.1
Kentucky	34,380	996	-	15	39,214	1,030	-	19	35,391	40,262	-12.1
Mississippi	4,830	111	-	-	6,550	110	-	-	4,941	6,660	-25.8
Tennessee	14,967	2,135	-	6	17,903	2,310	-	60	17,107	20,274	-15.6
West South Central	126,018	1,989	-	6	152,314	2,402	-	8	128,013	154,724	-17.3
Arkansas	12,815	197	-	-	19,281	227	-	-	13,012	19,508	-33.3
Louisiana	10,777	239	-	-	12,632	189	-	-	11,016	12,821	-14.1
Oklahoma	15,647	602	-	-	18,743	691	-	-	16,249	19,434	-16.4
Texas	86,779	951	-	6	101,658	1,296	-	8	87,737	102,962	-14.8
Mountain	101,900	3,588	-	14	107,678	3,862	-	30	105,502	111,571	-5.4
Arizona	19,812	235	-	-	22,911	221	-	-	20,047	23,132	-13.3
Colorado	17,529	355	-	3	17,877	373	-	6	17,887	18,257	-2.0
Idaho	-	192	-	-	-	350	-	2	192	352	-45.5
Montana	10,277	279	-	2	10,180	281	-	1	10,558	10,462	0.9
Nevada	1,507	301	-	-	3,446	331	-	-	1,808	3,777	-52.1
New Mexico	11,882	69	-	-	11,913	60	-	-	11,950	11,973	-0.2
Utah	14,580	662	-	-	15,062	614	-	-	15,242	15,676	-2.8
Wyoming	26,313	1,496	-	8	26,289	1,632	-	21	27,817	27,941	-0.4
Pacific	6,234	1,588	-	559	8,030	1,712	-	544	8,381	10,287	-18.5
Alaska	731	1	-	559	655	1	-	544	1,291	1,200	7.6

Census Division and State	2015				2014				Total		Percent Change
	Electric Power ¹	Other Industrial	Coke	Commercial and Institutional	Electric Power ¹	Other Industrial	Coke	Commercial and Institutional	2015	2014	
California	s	1,334	-	-	278	1,399	-	-	1,334	1,677	-20.4
Hawaii	697	50	-	-	769	61	-	-	747	831	-10.0
Oregon	1,401	100	-	-	1,853	109	-	-	1,501	1,963	-23.5
Washington	3,405	102	-	-	4,475	141	-	-	3,507	4,616	-24.0
U.S. Total	738,071	38,459	19,708	1,503	851,602	42,946	21,297	1,887	797,742	917,731	-13.1

¹ The electric power sector (electric utilities and independent power producers) comprises electricity-only and combined-heat-and-power(CHP) plants whose primary business is to sell electricity, or electricity and heat, to the public (i.e. NAICS 22 plants).

- = No data reported.

NM = Not Meaningful.

s = Absolute percentage less than 0.05 or value is less than 0.5 of the table metric.

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

Source: U.S. Energy Information Administration Form EIA-923, 'Power Plant Operations Report,' Form EIA-3, 'Quarterly Survey of Non-Electric Sector Coal Data,' and Form EIA-7A, 'Annual Survey of Coal Production and Preparation.' Prior to third quarter 2014, coke plant data was collected under Form EIA-5, 'Quarterly Coal Consumption and Quality Report - Coke Plants.'

Table 27. Year-End Coal Stocks by Sector, Census Division, and State, 2015 and 2014

(thousand short tons)

Census Division and State	2015					2014					Total		
	Electric Power ¹	Other Industrial	Commercial and Institutional	Producer and Distributor	Electric Power ¹	Other Industrial	Commercial and Institutional	Producer and Distributor	2015	2014	Percent Change		
New England	1,758	6	-	-	243	1,611	9	-	-	281	2,006	1,900	5.6
Connecticut	w	-	-	-	-	w	-	-	-	-	w	w	191.4
Maine	s	1	-	-	-	s	1	-	-	-	1	1	18.6
Massachusetts	w	5	-	-	243	w	8	-	-	281	w	w	-5.2
New Hampshire	w	-	-	-	-	w	-	-	-	-	w	w	59.9
Rhode Island	s	-	-	-	-	w	-	-	-	-	s	w	w
Middle Atlantic	8,165	342	797	50	1,247	8,320	297	684	46	1,272	10,603	10,619	-0.2
New Jersey	932	-	-	-	-	893	-	-	-	-	932	893	4.3
New York	513	139	11	-	-	894	106	7	-	-	663	1,007	-34.2
Pennsylvania	6,721	203	787	50	1,247	6,533	191	678	46	1,272	9,008	8,720	3.3
East North Central	43,920	937	1,172	93	5,656	33,839	1,015	1,654	130	6,383	51,778	43,021	20.4
Illinois	11,108	135	137	17	2,851	7,461	224	209	27	4,066	14,247	11,986	18.9
Indiana	11,491	255	367	41	1,483	8,985	172	568	48	1,583	13,637	11,356	20.1
Michigan	7,743	352	347	14	58	6,982	316	457	34	157	8,514	7,945	7.2
Ohio	8,578	37	321	18	720	6,566	70	421	17	249	9,674	7,323	32.1
Wisconsin	4,999	158	-	3	545	3,846	233	-	4	328	5,706	4,411	29.4
West North Central	31,675	925	-	66	2,265	20,648	958	-	67	3,032	34,932	24,706	41.4
Iowa	6,892	189	-	37	92	3,856	286	-	42	127	7,211	4,312	67.2
Kansas	4,985	37	-	-	1	2,990	28	-	-	1	5,023	3,019	66.4
Minnesota	4,933	283	-	12	53	2,337	281	-	11	245	5,282	2,874	83.8
Missouri	9,764	71	-	2	-	6,497	102	-	3	1	9,837	6,602	49.0
Nebraska	3,068	104	-	-	-	2,970	80	-	-	-	3,172	3,050	4.0
North Dakota	w	176	-	15	2,119	w	164	-	11	2,660	w	w	-13.0
South Dakota	w	65	-	-	-	w	17	-	-	-	w	w	68.1
South Atlantic	35,355	525	70	72	6,688	29,373	501	97	76	7,557	42,710	37,605	13.6
Delaware	w	-	-	-	-	w	-	-	-	-	w	w	-42.3
District of Columbia	-	-	-	3	-	-	-	-	3	-	3	3	-7.3
Florida	6,344	46	-	-	-	5,245	73	-	-	-	6,390	5,318	20.2
Georgia	6,683	138	-	-	-	5,605	131	-	2	-	6,821	5,738	18.9
Maryland	2,051	17	-	-	841	1,857	15	-	14	407	2,909	2,293	26.9
North Carolina	7,621	29	-	42	-	6,125	25	-	26	-	7,691	6,175	24.6
South Carolina	5,891	108	-	s	-	4,102	99	-	s	-	5,999	4,201	42.8
Virginia	1,401	78	s	27	1,217	1,603	63	s	31	1,812	2,724	3,509	-22.4
West Virginia	w	109	70	-	4,629	w	97	97	-	5,338	w	w	-0.7
East South Central	18,959	251	197	11	4,546	17,780	288	204	14	4,737	23,963	23,023	4.1
Alabama	4,324	84	197	-	591	4,131	109	204	-	1,167	5,196	5,610	-7.4
Kentucky	8,934	34	-	11	1,907	8,396	38	-	11	1,392	10,886	9,836	10.7
Mississippi	1,706	4	-	-	2,047	1,818	2	-	-	2,172	3,757	3,993	-5.9
Tennessee	3,995	130	-	s	s	3,436	138	-	3	6	4,125	3,584	15.1
West South Central	34,018	600	-	2	1,237	22,419	464	-	4	2,748	35,856	25,635	39.9
Arkansas	5,056	43	-	-	-	3,023	34	-	-	13	5,099	3,071	66.0
Louisiana	3,831	8	-	-	158	3,361	10	-	-	1,419	3,998	4,789	-16.5
Oklahoma	5,923	208	-	-	-	2,940	144	-	-	-	6,131	3,084	98.8
Texas	19,208	341	-	2	1,078	13,095	276	-	4	1,316	20,629	14,691	40.4
Mountain	20,743	555	-	4	13,778	16,388	458	-	6	12,688	35,080	29,539	18.8
Arizona	4,728	41	-	-	713	2,688	46	-	-	501	5,482	3,236	69.4
Colorado	5,605	56	-	1	2,040	4,595	33	-	1	1,224	7,702	5,852	31.6
Idaho	-	275	-	-	-	-	140	-	-	-	275	140	96.1
Montana	w	37	-	3	1,397	w	35	-	5	1,425	w	w	-2.4
Nevada	1,114	35	-	-	-	1,141	34	-	-	-	1,149	1,175	-2.3
New Mexico	w	1	-	-	6,635	w	3	-	-	6,384	w	w	5.8
Utah	3,941	40	-	-	470	3,082	50	-	-	503	4,451	3,634	22.5
Wyoming	3,329	70	-	s	2,523	2,999	116	-	s	2,651	5,922	5,766	2.7
Pacific	1,314	240	-	96	210	1,414	207	-	106	196	1,860	1,923	-3.2
Alaska	w	-	-	96	210	w	-	-	106	196	w	w	-4.7

Census Division and State	2015					2014					Total		
	Electric Power ¹	Other Industrial	Coke	Commercial and Institutional	Producer and Distributor	Electric Power ¹	Other Industrial	Coke	Commercial and Institutional	Producer and Distributor	2015	2014	Percent Change
California	s	213	-	-	-	s	150	-	-	-	213	150	42.0
Hawaii	w	18	-	-	-	w	43	-	-	-	w	w	-43.9
Oregon	w	3	-	-	-	w	5	-	-	-	w	w	7.6
Washington	w	6	-	-	-	w	9	-	-	-	w	w	-16.5
U.S. Total	195,906	4,382	2,236	394	35,871	151,792	4,196	2,640	449	38,894	238,789	197,971	20.6

¹ The electric power sector (electric utilities and independent power producers) comprises electricity-only and combined-heat-and-power(CHP) plants whose primary business is to sell electricity, or electricity and heat, to the public (i.e. NAICS 22 plants).

- = No data reported.

w = Data withheld to avoid disclosure.

s = Absolute percentage less than 0.05 or value is less than 0.5 of the table metric.

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

Source: U.S. Energy Information Administration Form EIA-923, 'Power Plant Operations Report,' Form EIA-3, 'Quarterly Survey of Non-Electric Sector Coal Data,' Form EIA-7A, 'Annual Survey of Coal Production and Preparation,' and Form EIA-8A, 'Annual Survey of Coal Stocks and Coal Exports.' Prior to third quarter 2014, coke plant data was collected under Form EIA-5, 'Quarterly Coal Consumption and Quality Report - Coke Plants.'

Average Mine Sales Price

Table 28. Average Sales Price of Coal by State and Mine Type, 2015 and 2014

(dollars per short ton)

Coal-Producing State	2015			2014			Percent Change		
	Underground	Surface	Total	Underground	Surface	Total	Underground	Surface	Total
Alabama	84.59	82.39	84.05	89.68	79.42	87.17	-5.7	3.7	-3.6
Alaska	-	w	w	-	w	w	-	w	w
Arizona	-	w	w	-	w	w	-	w	w
Arkansas	w	-	w	w	-	w	w	-	w
Colorado	34.32	40.35	36.12	37.28	43.01	38.64	-7.9	-6.2	-6.5
Illinois	40.48	44.39	40.77	47.29	45.29	47.11	-14.4	-2.0	-13.5
Indiana	49.05	43.70	46.12	49.52	47.47	48.41	-1.0	-7.9	-4.7
Kansas	-	w	w	-	w	w	-	w	w
Kentucky Total	55.29	54.34	55.01	57.12	58.74	57.62	-3.2	-7.5	-4.5
Kentucky (East)	63.44	58.03	60.84	70.93	63.10	66.97	-10.6	-8.0	-9.2
Kentucky (West)	51.15	43.58	50.10	50.29	45.21	49.58	1.7	-3.6	1.1
Louisiana	-	w	w	-	w	w	-	w	w
Maryland	w	w	53.01	w	w	50.62	w	w	4.7
Mississippi	-	w	w	-	w	w	-	w	w
Missouri	-	w	w	-	w	w	-	w	w
Montana	w	w	17.44	w	w	17.22	w	w	1.3
New Mexico	w	w	37.43	w	w	40.28	w	w	-7.1
North Dakota	-	17.71	17.71	-	17.99	17.99	-	-1.6	-1.6
Ohio	47.47	48.72	47.84	50.61	47.10	49.54	-6.2	3.4	-3.4
Oklahoma	w	w	43.46	w	w	44.98	w	w	-3.4
Pennsylvania Total	56.43	68.19	57.73	61.60	63.36	61.82	-8.4	7.6	-6.6
Pennsylvania (Anthracite)	58.53	99.15	97.91	70.00	91.79	90.98	-16.4	8.0	7.6
Pennsylvania (Bituminous)	56.42	53.67	56.21	61.59	55.08	60.93	-8.4	-2.6	-7.8
Tennessee	w	w	66.18	w	w	67.96	w	w	-2.6
Texas	-	22.69	22.69	-	18.20	18.20	-	24.7	24.7
Utah	w	w	34.53	w	w	35.59	w	w	-3.0
Virginia	63.39	62.24	63.04	78.78	77.46	78.44	-19.5	-19.7	-19.6
West Virginia Total	61.30	56.83	60.31	67.55	60.69	65.67	-9.3	-6.4	-8.2
West Virginia (Northern)	w	w	54.82	w	w	59.31	w	w	-7.6
West Virginia (Southern)	w	w	66.02	w	w	70.54	w	w	-6.4
Wyoming	w	w	13.92	w	w	14.05	w	w	-0.9
U.S. Total	52.20	21.47	31.83	56.97	22.83	34.83	-8.4	-6.0	-8.6

- = No data reported.

w = Data withheld to avoid disclosure.

Note: An average sales price is calculated by dividing the total free on board (f.o.b) rail/barge value of the coal sold by the total coal sold. Excludes mines producing less than 25,000 short tons, which are not required to provide data. Excludes silt, culm, refuse bank, slurry dam, and dredge operations. Totals may not equal sum of components because of independent rounding.

Source: U.S. Energy Information Administration Form EIA-7A, 'Annual Survey of Coal Production and Preparation.'

Table 29. Average Sales Price of Coal by State and Underground Mining Method, 2015

(dollars per short ton)

Coal-Producing State	Continuous ¹	Conventional and Other ²	Longwall ³	Total
Alabama	87.26	-	84.48	84.59
Arkansas	w	-	-	w
Colorado	w	-	w	34.32
Illinois	35.73	w	42.92	w
Indiana	49.05	-	-	49.05
Kentucky Total	w	w	-	55.29
Kentucky (East)	w	w	-	63.44
Kentucky (West)	51.15	-	-	51.15
Maryland	w	-	-	w
Montana	-	-	w	w
New Mexico	-	-	w	w
Ohio	w	-	w	47.47
Oklahoma	w	-	-	w
Pennsylvania Total	61.92	-	55.03	56.43
Pennsylvania (Anthracite)	58.53	-	-	58.53
Pennsylvania (Bituminous)	61.94	-	55.03	56.42
Tennessee	w	-	-	w
Utah	w	-	34.12	w
Virginia	w	-	w	63.39
West Virginia Total	72.88	-	55.53	61.30
West Virginia (Northern)	67.82	-	w	w
West Virginia (Southern)	73.62	-	w	w
Wyoming	-	-	w	w
U.S. Total	56.06	w	49.75	w

1 Mines that produce greater than 50 percent of their coal by continuous mining methods.

2 Mines that produce greater than 50 percent of their coal by conventional mining methods or mines that produce coal using shortwall, scoop loading, hand loading, or other methods or a 50/50 percent continuous/conventional split in mining method.

3 Mines that have any production from longwall mining method. A typical longwall mining operation uses 80 percent longwall and 20 percent continuous mining.

- = No data reported.

w = Data withheld to avoid disclosure.

Note: An average sales price is calculated by dividing the total free on board (f.o.b) rail/barge value of the coal sold by the total coal sold. Excludes mines producing less than 25,000 short tons, which are not required to provide data. Excludes silt, culm, refuse bank, slurry dam, and dredge operations. Totals may not equal sum of components because of independent rounding.

Source: U.S. Energy Information Administration Form EIA-7A, 'Annual Survey of Coal Production and Preparation.'

Table 30. Average Sales Price of Coal by State, County, and Number of Mines, 2015

Coal-Producing State and County	Number of Mines	Sales (thousand short tons)	Average Sales Price (dollars per short ton)
Alabama	31	13,660	84.05
Bibb	1	w	w
Franklin	2	w	w
Jefferson	11	7,143	80.69
Shelby	2	w	w
Tuscaloosa	3	w	w
Walker	10	3,131	89.25
Winston	2	w	w
Alaska	1	w	w
Denali	1	w	w
Arizona	1	w	w
Navajo	1	w	w
Arkansas	1	w	w
Sebastian	1	w	w
Colorado	9	19,254	36.12
Delta	1	w	w
Gunnison	1	w	w
La Plata	1	w	w
Moffat	2	w	w
Montrose	1	w	w
Rio Blanco	2	w	w
Routt	1	w	w
Illinois	22	57,040	40.77
Franklin	1	w	w
Gallatin	1	w	w
Hamilton	1	w	w
Jackson	1	w	w
Macoupin	1	w	w
Montgomery	1	w	w
Perry	3	w	w
Randolph	4	2,954	38.35
Saline	4	11,483	44.32
Sangamon	1	w	w
Wabash	1	w	w
Washington	1	w	w
White	1	w	w
Williamson	1	w	w
Indiana	23	34,744	46.12
Clay	1	w	w
Daviess	1	w	w
Dubois	2	w	w
Gibson	5	10,341	51.09
Greene	1	w	w
Knox	4	6,360	45.28
Pike	3	w	w
Sullivan	2	w	w
Warrick	4	4,314	42.28
Kansas	1	w	w
Linn	1	w	w
Kentucky	145	59,691	55.01
Bell	10	1,317	57.81
Breathitt	2	w	w
Daviess	1	w	w
Floyd	12	2,401	62.06
Harlan	15	3,301	63.58
Hopkins	2	w	w
Johnson	3	w	w
Knott	6	2,676	49.12

Coal-Producing State and County	Number of Mines	Sales (thousand short tons)	Average Sales Price (dollars per short ton)
Knox	6	411	105.47
Lawrence	2	w	w
Leslie	5	1,322	56.97
Letcher	8	545	58.95
Magoffin	2	w	w
Martin	4	1,407	56.16
Mclean	1	w	w
Muhlenberg	3	w	w
Ohio	6	6,641	45.12
Perry	16	6,302	59.23
Pike	30	6,254	61.77
Union	1	w	w
Webster	2	w	w
Whitley	8	454	126.29
Louisiana	2	w	w
De Soto	1	w	w
Natchitoches	1	w	w
Maryland	13	1,981	53.01
Allegany	8	1,144	41.70
Garrett	5	836	68.47
Mississippi	2	w	w
Choctaw	1	w	w
Kemper	1	w	w
Missouri	1	w	w
Bates	1	w	w
Montana	6	42,204	17.44
Big Horn	3	w	w
Musselshell	1	w	w
Richland	1	w	w
Rosebud	1	w	w
New Mexico	3	w	w
Mckinley	1	w	w
San Juan	2	w	w
North Dakota	4	28,873	17.71
Mclean	1	w	w
Mercer	2	w	w
Oliver	1	w	w
Ohio	21	16,535	47.84
Belmont	2	w	w
Carroll	1	w	w
Harrison	4	2,723	54.22
Jackson	1	w	w
Jefferson	3	w	w
Monroe	1	w	w
Noble	1	w	w
Perry	3	w	w
Stark	1	w	w
Tuscarawas	3	w	w
Vinton	1	w	w
Oklahoma	3	w	w
Le Flore	2	w	w
Nowata	1	w	w
Pennsylvania	110	49,490	57.73
Armstrong	6	1,251	61.22
Beaver	1	w	w
Bedford	1	w	w
Butler	1	w	w
Cambria	4	787	63.15
Carbon	1	w	w
Clearfield	16	1,839	68.65
Columbia	2	w	w
Dauphin	1	w	w

Coal-Producing State and County	Number of Mines	Sales (thousand short tons)	Average Sales Price (dollars per short ton)
Greene	7	28,490	53.87
Indiana	12	2,056	64.54
Jefferson	6	798	54.83
Luzerne	6	413	114.35
Lycoming	1	w	w
Mercer	1	w	w
Northumberland	6	219	59.06
Schuylkill	19	1,002	97.46
Somerset	13	2,124	69.49
Washington	4	w	w
Westmoreland	2	w	w
Tennessee	7	905	66.18
Campbell	1	w	w
Claiborne	6	837	66.22
Texas	14	36,580	22.69
Atascosa	1	w	w
Freestone	1	w	w
Harrison	2	w	w
Hopkins	1	w	w
Lee	1	w	w
Leon	1	w	w
Limestone	1	w	w
Maverick	1	w	w
Panola	2	w	w
Robertson	1	w	w
Rusk	2	w	w
Utah	8	14,400	34.53
Carbon	4	7,017	36.73
Emery	2	w	w
Kane	1	w	w
Sevier	1	w	w
Virginia	53	13,901	63.04
Buchanan	23	7,070	59.27
Dickenson	11	3,605	71.80
Russell	2	w	w
Tazewell	4	757	54.96
Wise	13	2,178	66.79
West Virginia	130	88,468	60.31
Barbour	1	w	w
Boone	16	5,258	59.65
Fayette	6	2,735	73.88
Grant	1	w	w
Greenbrier	7	922	87.55
Harrison	1	w	w
Kanawha	12	6,258	54.50
Logan	20	10,209	60.68
Marion	4	13,523	52.50
Marshall	2	w	w
Mcdowell	21	2,513	88.41
Mercer	1	w	w
Mingo	6	3,816	61.35
Monongalia	3	w	w
Nicholas	1	w	w
Ohio	1	w	w
Raleigh	12	5,528	79.18
Taylor	1	w	w
Tucker	1	w	w
Upshur	1	w	w
Wayne	1	w	w
Webster	5	1,669	64.09
Wyoming	6	4,335	68.49
Wyoming	16	375,786	13.92

Coal-Producing State and County	Number of Mines	Sales (thousand short tons)	Average Sales Price (dollars per short ton)
Campbell	11	328,148	12.80
Converse	1	w	w
Lincoln	1	w	w
Sweetwater	3	w	w
U.S. Total	627	888,611	31.83

- = No data reported.

w = Data withheld to avoid disclosure.

Note: An average sales price is calculated by dividing the total free on board (f.o.b) rail/barge value of the coal sold by the total coal sold. Excludes mines producing less than 25,000 short tons, which are not required to provide data. Excludes silt, culm, refuse bank, slurry dam, and dredge operations. Totals may not equal sum of components because of independent rounding.

Source: U.S. Energy Information Administration Form EIA-7A, 'Annual Survey of Coal Production and Preparation.'

Table 31. Average Sales Price of Coal by State and Coal Rank, 2015

(dollars per short ton)

Coal-Producing State	Bituminous	Subbituminous	Lignite	Anthracite	Total
Alabama	84.05	-	-	-	84.05
Alaska	-	w	-	-	w
Arizona	w	-	-	-	w
Arkansas	w	-	-	-	w
Colorado	w	w	-	-	36.12
Illinois	40.77	-	-	-	40.77
Indiana	46.12	-	-	-	46.12
Kansas	w	-	-	-	w
Kentucky Total	55.01	-	-	-	55.01
Kentucky (East)	60.84	-	-	-	60.84
Kentucky (West)	50.10	-	-	-	50.10
Louisiana	-	-	w	-	w
Maryland	53.01	-	-	-	53.01
Mississippi	-	-	w	-	w
Missouri	w	-	-	-	w
Montana	w	16.42	w	-	17.44
New Mexico	w	w	-	-	37.43
North Dakota	-	-	17.71	-	17.71
Ohio	47.84	-	-	-	47.84
Oklahoma	w	-	-	-	w
Pennsylvania Total	56.21	-	-	97.91	57.73
Pennsylvania (Anthracite)	-	-	-	97.91	97.91
Pennsylvania (Bituminous)	56.21	-	-	-	56.21
Tennessee	66.18	-	-	-	66.18
Texas	-	-	22.69	-	22.69
Utah	34.53	-	-	-	34.53
Virginia	63.04	-	-	-	63.04
West Virginia Total	60.31	-	-	-	60.31
West Virginia (Northern)	54.82	-	-	-	54.82
West Virginia (Southern)	66.02	-	-	-	66.02
Wyoming	w	w	-	-	13.92
U.S. Total	51.57	14.63	22.36	97.91	31.83

-- No data reported.

w = Data withheld to avoid disclosure.

Note: An average sales price is calculated by dividing the total free on board (f.o.b) rail/barge value of the coal sold by the total coal sold. Excludes mines producing less than 25,000 short tons, which are not required to provide data. Excludes silt, culm, refuse bank, slurry dam, and dredge operations. Totals may not equal sum of components because of independent rounding.

Source: U.S. Energy Information Administration Form EIA-7A, 'Annual Survey of Coal Production and Preparation.'

Table 32. Average Sales Price of Coal by Mine Production Range and Mine Type, 2015

(dollars per short ton)

Mine Production Range (thousand short tons)	Underground	Surface	Total
Over 1,000	49.42	17.99	27.96
Over 500 to 1,000	62.01	53.33	57.87
Over 200 to 500	67.69	56.16	62.35
Over 100 to 200	71.12	58.03	63.43
Over 50 to 100	63.99	68.65	67.11
50 or Under	75.38	57.93	63.24
U.S. Total	52.20	21.47	31.83

Note: An average sales price is calculated by dividing the total free on board (f.o.b) rail/barge value of the coal sold by the total coal sold. Excludes mines producing less than 25,000 short tons, which are not required to provide data. Excludes silt, culm, refuse bank, slurry dam, and dredge operations. Totals may not equal sum of components because of independent rounding.

Source: U.S. Energy Information Administration Form EIA-7A, 'Annual Survey of Coal Production and Preparation.'

Table 33. Average Sales Price of U.S. Coal by State and Disposition, 2015

(dollars per short ton)

Coal-Producing State	Open Market ¹	Captive ²	Total ³
Alabama	w	w	84.05
Alaska	w	-	w
Arizona	w	-	w
Arkansas	w	-	w
Colorado	31.28	43.30	36.12
Illinois	w	w	40.77
Indiana	47.08	44.56	46.12
Kansas	w	-	w
Kentucky Total	54.61	58.41	55.01
Kentucky (East)	60.56	58.41	60.84
Kentucky (West)	50.10	-	50.10
Louisiana	w	-	w
Maryland	48.34	-	53.01
Mississippi	w	w	w
Missouri	w	-	w
Montana	w	w	17.44
New Mexico	w	w	w
North Dakota	w	w	17.71
Ohio	w	w	47.84
Oklahoma	w	-	w
Pennsylvania Total	w	w	57.73
Pennsylvania (Anthracite)	w	w	97.91
Pennsylvania (Bituminous)	w	w	56.21
Tennessee	66.18	-	66.18
Texas	35.71	18.51	22.69
Utah	w	w	34.53
Virginia	w	w	63.04
West Virginia Total	59.98	56.42	60.31
West Virginia (Northern)	w	w	54.82
West Virginia (Southern)	w	w	66.02
Wyoming	w	w	13.92
U.S. Total	32.71	22.76	31.83

1 Open market includes coal sold on the open market to other coal companies or consumers; excludes exports.

2 Captive includes all coal used by the producing company or sold to affiliated or parent companies; excludes exports.

3 Total includes price of coal sold on the open market, captive market and exported by coal mines. Excludes price of coal exported by coal brokers, coal traders and coal terminals.

- = No data reported.

w = Data withheld to avoid disclosure.

Note: An average sales price is calculated by dividing the total free on board (f.o.b) rail/barge value of the coal sold by the total coal sold. Excludes mines producing less than 25,000 short tons, which are not required to provide data. Excludes silt, culm, refuse bank, slurry dam, and dredge operations. Totals may not equal sum of components because of independent rounding.

Source: U.S. Energy Information Administration Form EIA-7A, 'Annual Survey of Coal Production and Preparation.'

Average Consumer Prices

Table 34. Average Price of Coal Delivered to End Use Sector by Census Division and State, 2015 and 2014

(dollars per short ton)

Census Division and State	2015				2014				Annual Percent Change			
	Electric Power ¹	Other Industrial	Commercial and Institutional	Coke	Electric Power ¹	Other Industrial	Commercial and Institutional	Coke	Electric Power ¹	Other Industrial	Commercial and Institutional	Coke
New England	79.72	w	-	-	80.10	w	-	-	s	-4.37	-	-
Connecticut	w	-	-	-	w	-	-	-	2.72	-	-	-
Maine	w	w	-	-	w	w	-	-	-7.01	-2.44	-	-
Massachusetts	w	w	-	-	w	w	-	-	-7.95	-4.91	-	-
New Hampshire	97.56	-	-	-	108.29	-	-	-	-9.91	-	-	-
Rhode Island	-	-	-	-	w	-	-	-	w	-	-	-
Middle Atlantic	52.28	86.62	w	117.09	56.87	87.51	w	114.37	-8.07	-1.02	-14.23	2.38
New Jersey	w	-	-	-	w	-	-	-	-2.81	-	-	-
New York	w	106.02	w	-	w	107.79	w	-	-10.41	-1.64	-6.61	-
Pennsylvania	50.76	78.86	w	117.09	54.94	80.12	w	114.37	-7.61	-1.57	-14.60	2.38
East North Central	43.73	72.12	125.16	83.21	46.81	75.08	134.65	86.87	-6.58	-3.94	-7.05	-4.21
Illinois	w	45.96	w	56.48	w	47.16	w	57.88	-3.21	-2.54	-4.07	-2.42
Indiana	w	87.71	130.64	w	w	93.26	142.85	72.25	-8.86	-5.95	-8.55	w
Michigan	w	83.60	w	w	w	92.29	w	w	-9.24	-9.42	-10.62	-1.05
Ohio	w	87.17	118.44	115.19	w	85.62	123.25	115.57	-4.09	1.81	-3.90	s
Wisconsin	40.26	88.00	-	128.25	41.97	88.84	-	151.89	-4.07	-0.95	-	-15.56
West North Central	28.77	36.99	-	77.62	29.78	36.67	-	80.64	-3.39	0.87	-	-3.75
Iowa	28.32	45.98	-	w	28.82	47.26	-	w	-1.73	-2.71	-	-5.62
Kansas	29.22	w	-	-	31.01	w	-	-	-5.77	-33.91	-	-
Minnesota	33.64	54.98	-	w	34.71	61.49	-	w	-3.08	-10.59	-	-3.32
Missouri	33.38	61.58	-	w	35.19	60.07	-	w	-5.14	2.51	-	-3.49
Nebraska	22.73	30.80	-	-	23.64	32.93	-	-	-3.85	-6.47	-	-
North Dakota	20.71	w	-	56.11	20.26	w	-	53.93	2.22	20.55	-	4.04
South Dakota	36.72	w	-	-	34.75	w	-	-	5.67	-2.05	-	-
South Atlantic	68.92	92.17	w	109.10	72.56	97.26	w	116.46	-5.02	-5.23	-13.73	-6.32
Delaware	w	-	-	-	w	-	-	-	-1.33	-	-	-
District of Columbia	-	-	-	w	-	-	-	w	-	-	-	3.19
Florida	w	102.07	-	-	w	111.06	-	-	-7.47	-8.09	-	-
Georgia	58.56	103.49	-	-	62.02	110.61	-	w	-5.58	-6.44	-	w
Maryland	72.26	w	-	-	74.28	w	-	w	-2.72	s	-	w
North Carolina	86.30	102.16	-	w	88.73	103.52	-	w	-2.74	-1.31	-	-8.80
South Carolina	88.48	99.81	-	-	90.77	107.72	-	-	-2.52	-7.34	-	-
Virginia	w	90.51	w	88.12	w	99.73	w	89.84	-10.40	-9.24	-14.09	-1.91
West Virginia	w	99.33	w	-	58.45	93.11	w	-	w	6.68	-12.24	-
East South Central	w	97.28	w	102.09	w	96.76	w	104.27	-7.92	0.54	-3.39	-2.09
Alabama	49.35	103.23	w	-	54.97	96.80	w	-	-10.22	6.64	-3.39	-
Kentucky	49.01	94.83	-	w	53.18	95.05	-	w	-7.84	s	-	1.52
Mississippi	w	w	-	-	w	w	-	-	-20.38	-4.56	-	-
Tennessee	52.01	95.23	-	w	51.19	97.66	-	w	1.60	-2.49	-	-4.90
West South Central	33.06	74.00	-	w	33.26	76.67	-	w	-0.60	-3.48	-	1.94
Arkansas	w	w	-	-	w	w	-	-	-6.69	-3.50	-	-
Louisiana	w	w	-	-	w	w	-	-	9.11	-26.59	-	-
Oklahoma	w	w	-	-	w	66.44	-	-	s	w	-	-
Texas	30.55	85.55	-	w	30.69	80.74	-	w	s	5.96	-	1.94
Mountain	35.13	55.18	-	w	39.42	55.58	-	w	-10.88	-0.72	-	-0.63
Arizona	39.61	w	-	-	40.81	w	-	-	-2.94	1.15	-	-
Colorado	34.62	63.93	-	w	36.94	65.54	-	w	-6.28	-2.46	-	-3.03
Idaho	-	70.39	-	-	-	69.10	-	w	-	1.87	-	w
Montana	w	38.57	-	w	w	40.55	-	-	-2.72	-4.88	-	w
Nevada	w	72.12	-	-	w	72.53	-	-	-5.46	-0.57	-	-
New Mexico	42.33	w	-	-	67.86	w	-	-	-37.62	-7.15	-	-
Utah	42.37	52.85	-	-	46.49	53.44	-	-	-8.86	-1.10	-	-
Wyoming	w	43.76	-	w	w	45.49	-	w	3.22	-3.80	-	-1.76
Pacific	42.64	83.02	-	76.54	43.52	85.75	-	73.75	-2.02	-3.18	-	3.78
Alaska	47.16	-	-	76.54	-	-	-	73.75	-	-	-	3.78

Census Division and State	2015				2014				Annual Percent Change			
	Electric Power ¹	Other Industrial	Coke	Commercial and Institutional	Electric Power ¹	Other Industrial	Coke	Commercial and Institutional	Electric Power ¹	Other Industrial	Coke	Commercial and Institutional
California	-	82.75	-	-	w	84.52	-	-	w	-2.09	-	-
Hawaii	w	w	-	-	w	w	-	-	-4.31	6.85	-	-
Oregon	41.12	w	-	-	42.62	w	-	-	-3.52	1.65	-	-
Washington	w	w	-	-	w	w	-	-	0.79	-2.75	-	-
U.S. Total	42.58	65.44	118.69	85.70	45.66	68.20	131.41	87.87	-6.75	-4.05	-9.68	-2.47

¹ The electric power sector (electric utilities and independent power producers) comprises electricity-only and combined-heat-and-power(CHP) plants whose primary business is to sell electricity, or electricity and heat, to the public (i.e. NAICS 22 plants).

- = No data reported.

w = Data withheld to avoid disclosure.

s = Value is less than 0.5 of the table metric, but value is included in any associated total.

Source: U.S. Energy Information Administration Form EIA-923, 'Power Plant Operations Report,' and Form EIA-3, 'Quarterly Survey of Non-Electric Sector Coal Data.' Prior to third quarter 2014, coke plant data was collected under Form EIA-5, 'Quarterly Coal Consumption and Quality Report - Coke Plants.'