Table 21. Coal Productivity by State and Mine Type, 2014 and 2013

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]		
	2014	2013	Percent Change	2014	2013	Percent Change	2014	2013	Percent Change
Alabama	**46**	**47**	**-2.1**	**3,694**	**4,212**	**-12.3**	**1.88**	**1.90**	**-1.1**
Underground	13	13	-	2,852	3,077	-7.3	1.84	1.85	-0.6
Surface	33	34	-2.9	842	1,135	-25.8	2.02	2.04	-1.1
Alaska	**1**	**1**	**-**	**120**	**125**	**-4.0**	**5.43**	**5.70**	**-4.8**
Surface	1	1	-	120	125	-4.0	5.43	5.70	-4.8
Arizona	**1**	**1**	**-**	**387**	**405**	**-4.4**	**8.06**	**7.49**	**7.7**
Surface	1	1	-	387	405	-4.4	8.06	7.49	7.7
Arkansas	**2**	**2**	**-**	**84**	**54**	**55.6**	**0.53**	**0.49**	**7.1**
Underground	1	1	-	82	52	57.7	0.49	0.47	4.5
Surface	1	1	-	2	2	-	6.39	1.42	349.0
Colorado	**10**	**11**	**-9.1**	**1,822**	**2,175**	**-16.2**	**6.23**	**5.49**	**13.4**
Underground	6	7	-14.3	1,372	1,705	-19.5	6.15	5.56	10.5
Surface	4	4	-	450	470	-4.3	6.50	5.23	24.3
Illinois	**32**	**33**	**-3.0**	**4,218**	**4,164**	**1.3**	**5.99**	**5.51**	**8.8**
Underground	19	20	-5.0	3,772	3,660	3.1	6.13	5.59	9.7
Surface	13	13	-	446	504	-11.5	4.92	4.93	-0.3
Indiana	**37**	**36**	**2.8**	**3,810**	**3,612**	**5.5**	**4.21**	**4.43**	**-4.9**
Underground	13	12	8.3	2,201	1,986	10.8	3.36	3.48	-3.3
Surface	24	24	-	1,609	1,626	-1.0	5.36	5.58	-3.9
Kansas	**2**	**1**	**100.0**	**10**	**7**	**42.9**	**3.86**	**1.58**	**143.9**
Surface	2	1	100.0	10	7	42.9	3.86	1.58	143.9
Kentucky Total	**356**	**370**	**-3.8**	**11,834**	**12,905**	**-8.3**	**2.80**	**2.76**	**1.4**
Underground	144	151	-4.6	8,191	8,938	-8.4	2.70	2.66	1.3
Surface	212	219	-3.2	3,643	3,967	-8.2	3.06	3.01	1.7
Kentucky (East)	**323**	**333**	**-3.0**	**7,566**	**8,614**	**-12.2**	**2.23**	**2.14**	**4.1**
Underground	123	131	-6.1	4,349	5,144	-15.5	1.89	1.78	5.9
Surface	200	202	-1.0	3,217	3,470	-7.3	2.69	2.66	1.3
Kentucky (West)	**33**	**37**	**-10.8**	**4,268**	**4,291**	**-0.5**	**3.70**	**3.86**	**-4.0**
Underground	21	20	5.0	3,842	3,794	1.3	3.50	3.68	-4.8
Surface	12	17	-29.4	426	497	-14.3	5.73	5.46	4.8
Louisiana	**2**	**2**	**-**	**299**	**280**	**6.8**	**3.96**	**4.56**	**-13.2**
Surface	2	2	-	299	280	6.8	3.96	4.56	-13.2
Maryland	**21**	**22**	**-4.5**	**386**	**405**	**-4.7**	**2.36**	**2.33**	**1.4**
Underground	3	4	-25.0	167	184	-9.2	1.83	1.86	-1.2
Surface	18	18	-	219	221	-0.9	2.82	2.69	4.7
Mississippi	**2**	**2**	**-**	**324**	**309**	**4.9**	**5.71**	**5.57**	**2.5**
Surface	2	2	-	324	309	4.9	5.71	5.57	2.5
Missouri	**1**	**1**	**-**	**20**	**24**	**-16.7**	**7.11**	**6.57**	**8.3**
Surface	1	1	-	20	24	-16.7	7.11	6.57	8.3
Montana	**6**	**6**	**-**	**1,320**	**1,247**	**5.9**	**16.57**	**16.70**	**-0.8**
Underground	1	1	-	324	333	-2.7	10.66	11.83	-9.9
Surface	5	5	-	996	914	9.0	18.81	18.69	0.6
New Mexico	**3**	**4**	**-25.0**	**1,149**	**1,286**	**-10.7**	**9.21**	**8.16**	**12.8**
Underground	1	1	-	488	492	-0.8	8.89	5.89	50.9
Surface	2	3	-33.3	661	794	-16.8	9.43	9.54	-1.2
North Dakota	**5**	**5**	**-**	**1,285**	**1,242**	**3.5**	**11.48**	**11.34**	**1.2**
Surface	5	5	-	1,285	1,242	3.5	11.48	11.34	1.2
Ohio	**38**	**40**	**-5.0**	**2,923**	**3,143**	**-7.0**	**3.38**	**3.48**	**-3.1**
Underground	14	14	-	1,997	2,063	-3.2	3.43	3.66	-6.2
Surface	24	26	-7.7	926	1,080	-14.3	3.25	3.14	3.7
Oklahoma	**6**	**9**	**-33.3**	**179**	**204**	**-12.3**	**1.87**	**2.05**	**-8.8**
Underground	1	2	-50.0	77	79	-2.5	1.91	2.11	-9.3
Surface	5	7	-28.6	102	125	-18.4	1.83	2.01	-8.8
Pennsylvania Total	**300**	**315**	**-4.8**	**7,938**	**8,382**	**-5.3**	**3.52**	**3.01**	**17.2**
Underground	78	82	-4.9	5,821	5,988	-2.8	4.02	3.39	18.8
Surface	222	233	-4.7	2,117	2,394	-11.6	1.93	1.91	1.4

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]		
	2014	2013	Percent Change	2014	2013	Percent Change	2014	2013	Percent Change
Pennsylvania (Anthracite)	**99**	**107**	**-7.5**	**956**	**1,095**	**-12.7**	**0.98**	**1.01**	**-3.2**
Underground	17	22	-22.7	85	129	-34.1	0.60	0.48	25.0
Surface	82	85	-3.5	871	966	-9.8	1.01	1.07	-5.2
Pennsylvania (Bituminous)	**201**	**208**	**-3.4**	**6,982**	**7,287**	**-4.2**	**3.83**	**3.26**	**17.6**
Underground	61	60	1.7	5,736	5,859	-2.1	4.07	3.43	18.4
Surface	140	148	-5.4	1,246	1,428	-12.7	2.58	2.45	5.3
Tennessee	**10**	**14**	**-28.6**	**222**	**297**	**-25.3**	**1.85**	**1.88**	**-1.7**
Underground	4	5	-20.0	158	162	-2.5	1.73	2.06	-16.0
Surface	6	9	-33.3	64	135	-52.6	2.30	1.60	43.3
Texas	**16**	**11**	**45.5**	**2,806**	**2,819**	**-0.5**	**7.22**	**7.08**	**2.0**
Surface	16	11	45.5	2,806	2,819	-0.5	7.22	7.08	2.0
Utah	**17**	**17**	**-**	**1,393**	**1,437**	**-3.1**	**5.97**	**5.69**	**4.9**
Underground	13	14	-7.1	1,330	1,385	-4.0	6.13	5.70	7.5
Surface	4	3	33.3	63	52	21.2	3.32	5.43	-38.8
Virginia	**101**	**118**	**-14.4**	**3,627**	**4,521**	**-19.8**	**1.92**	**1.76**	**9.2**
Underground	56	68	-17.6	2,863	3,428	-16.5	1.79	1.64	8.6
Surface	45	50	-10.0	764	1,093	-30.1	2.43	2.18	11.5
West Virginia Total	**288**	**325**	**-11.4**	**18,330**	**20,281**	**-9.6**	**2.69**	**2.44**	**10.0**
Underground	155	188	-17.6	14,338	15,694	-8.6	2.53	2.24	12.7
Surface	133	137	-2.9	3,992	4,587	-13.0	3.24	3.08	5.1
West Virginia (Northern)	**46**	**46**	**-**	**5,888**	**5,771**	**2.0**	**3.70**	**3.31**	**11.7**
Underground	26	27	-3.7	5,677	5,575	1.8	3.71	3.29	12.7
Surface	20	19	5.3	211	196	7.7	3.30	3.90	-15.4
West Virginia (Southern)	**242**	**279**	**-13.3**	**12,442**	**14,510**	**-14.3**	**2.22**	**2.11**	**5.2**
Underground	129	161	-19.9	8,661	10,119	-14.4	1.75	1.67	4.8
Surface	113	118	-4.2	3,781	4,391	-13.9	3.24	3.05	6.0
Wyoming	**18**	**17**	**5.9**	**6,624**	**6,673**	**-0.7**	**28.62**	**28.21**	**1.5**
Underground	1	1	-	315	278	13.3	4.39	6.72	-34.7
Surface	17	16	6.3	6,309	6,395	-1.3	30.05	29.29	2.6
Appalachia Total	**1,127**	**1,214**	**-7.2**	**44,686**	**49,855**	**-10.4**	**2.66**	**2.44**	**9.1**
Underground	446	505	-11.7	32,545	35,740	-8.9	2.63	2.36	11.5
Surface	681	709	-3.9	12,141	14,115	-14.0	2.75	2.65	3.8
Appalachia Central	**676**	**744**	**-9.1**	**23,857**	**27,942**	**-14.6**	**2.17**	**2.06**	**5.4**
Underground	312	365	-14.5	16,031	18,853	-15.0	1.79	1.70	5.6
Surface	364	379	-4.0	7,826	9,089	-13.9	2.94	2.80	4.9
Appalachia Northern	**405**	**423**	**-4.3**	**17,135**	**17,701**	**-3.2**	**3.53**	**3.18**	**11.1**
Underground	121	127	-4.7	13,662	13,810	-1.1	3.78	3.37	12.1
Surface	284	296	-4.1	3,473	3,891	-10.7	2.45	2.43	1.0
Appalachia Southern	**46**	**47**	**-2.1**	**3,694**	**4,212**	**-12.3**	**1.88**	**1.90**	**-1.1**
Underground	13	13	-	2,852	3,077	-7.3	1.84	1.85	-0.6
Surface	33	34	-2.9	842	1,135	-25.8	2.02	2.04	-1.1
Interior Region Total	**133**	**134**	**-0.7**	**16,018**	**15,764**	**1.6**	**4.98**	**4.95**	**0.6**
Underground	55	55	-	9,974	9,571	4.2	4.37	4.29	1.7
Surface	78	79	-1.3	6,044	6,193	-2.4	6.05	6.03	0.4
Illinois Basin	**102**	**106**	**-3.8**	**12,296**	**12,067**	**1.9**	**4.60**	**4.57**	**0.7**
Underground	53	52	1.9	9,815	9,440	4.0	4.42	4.33	2.0
Surface	49	54	-9.3	2,481	2,627	-5.6	5.34	5.44	-1.8
Other Interior	**31**	**28**	**10.7**	**3,722**	**3,697**	**0.7**	**6.35**	**6.31**	**0.7**
Underground	2	3	-33.3	159	131	21.4	1.26	1.52	-17.5
Surface	29	25	16.0	3,563	3,566	-0.1	6.61	6.51	1.5
Western Region Total	**61**	**62**	**-1.6**	**14,100**	**14,590**	**-3.4**	**18.36**	**17.61**	**4.2**
Underground	22	24	-8.3	3,829	4,193	-8.7	6.71	6.26	7.2
Surface	39	38	2.6	10,271	10,397	-1.2	22.89	22.26	2.8
Powder River Basin	**16**	**16**	**-**	**6,592**	**6,635**	**-0.6**	**30.55**	**30.05**	**1.7**
Surface	16	16	-	6,592	6,635	-0.6	30.55	30.05	1.7
Uinta Basin	**23**	**24**	**-4.2**	**3,016**	**3,436**	**-12.2**	**6.27**	**5.66**	**10.8**
Underground	17	19	-10.5	2,559	2,968	-13.8	6.30	5.76	9.4
Surface	6	5	20.0	457	468	-2.4	6.09	5.00	21.8
Other Western	**22**	**22**	**-**	**4,492**	**4,519**	**-0.6**	**8.91**	**8.70**	**2.5**
Underground	5	5	-	1,270	1,225	3.7	7.50	7.39	1.5

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]		
	2014	2013	Percent Change	2014	2013	Percent Change	2014	2013	Percent Change
Surface	17	17	-	3,222	3,294	-2.2	9.51	9.21	3.3
East of Mississippi River	**1,231**	**1,322**	**-6.9**	**57,306**	**62,231**	**-7.9**	**3.12**	**2.89**	**7.8**
Underground	499	557	-10.4	42,360	45,180	-6.2	3.07	2.80	9.7
Surface	732	765	-4.3	14,946	17,051	-12.3	3.27	3.16	3.6
West of Mississippi River	**90**	**88**	**2.3**	**17,498**	**17,978**	**-2.7**	**15.96**	**15.39**	**3.7**
Underground	24	27	-11.1	3,988	4,324	-7.8	6.47	6.09	6.2
Surface	66	61	8.2	13,510	13,654	-1.1	18.86	18.35	2.7
U.S. Subtotal	**1,321**	**1,410**	**-6.3**	**74,804**	**80,209**	**-6.7**	**5.95**	**5.53**	**7.5**
Underground	523	584	-10.4	46,348	49,504	-6.4	3.35	3.07	9.2
Surface	798	826	-3.4	28,456	30,705	-7.3	10.42	9.69	7.5
Refuse Recovery	**33**	**51**	**-35.3**	**127**	**187**	**-32.1**	**13.21**	**5.94**	**122.5**
U.S. Total	**1,354**	**1,461**	**-7.3**	**74,931**	**80,396**	**-6.8**	**5.96**	**5.54**	**7.6**

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.'