



*Independent Statistics & Analysis*  
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# Annual Coal Report 2012

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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, "Coal Production and Preparation Report." Consumption and stocks are based on various other EIA survey forms.

This report is the 37<sup>th</sup> 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 2012 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.

**Contents**

Contacts ..... iii

Preface ..... iv

Executive Summary ..... vii

Coal Production ..... 1

Productive Capacity ..... 17

Recoverable Reserves ..... 21

Employment..... 26

Productivity..... 32

Domestic Markets..... 41

Average Mine Sales Price..... 47

Average Consumer Prices ..... 57

## Tables

|  |    |
|--|----|
| 1. Coal production and number of mines by State and mine type, 2012 and 2011.....  | 2  |
| 2. Coal production and number of mine by State, county, and mine type, 2012 .....  | 5  |
| 3. Underground coal production by State and mining method, 2012 .....  | 9  |
| 4. Coal production by coalbed thickness and mine type, 2012.....   | 10 |
| 5. Coal production and coalbed thickness by major coalbeds and mine type, 2012 .....   | 11 |
| 6. Coal production and number of mines by State and coal rank, 2012 .....  | 12 |
| 7. Coal production by State, mine type, and union status, 2012 .....   | 13 |
| 8. Coal disposition by State, 2012 .....   | 14 |
| 9. Major U.S. coal mines, 2012.....  | 15 |
| 10. Major U.S. coal producers, 2012 .....  | 16 |
| 11. Productive capacity of coal mines by State, 2012 and 2011.....   | 18 |
| 12. Capacity utilization of coal mines by State, 2012 and 2011.....  | 19 |
| 13. Productive capacity and capacity utilization of underground coal mines by State and mining method, 2012 .....                            | 20 |
| 14. Recoverable coal reserves and average recovery percentage at producing mines by State, 2012 and 2011 .....                               | 22 |
| 15. Recoverable coal reserves at producing mines, estimated recoverable reserves, and demonstrated reserve base by mining method, 2012 ..... | 23 |
| 16. Recoverable coal reserves and average recovery percentage at producing underground coal mines by State and mining method, 2012 .....     | 24 |
| 17. Recoverable coal reserves and average recovery percentage at producing U.S. mines by mine production range and mine type, 2012 .....     | 25 |
| 18. Average number of employees by State and mine type, 2012 and 2011 .....  | 27 |
| 19. Average number of employees at underground and surface mines by State and mine production range, 2012.....                               | 28 |
| 20. Average number of employees at underground and surface mines by State and union status, 2012.....  | 31 |
| 21. Coal mining productivity by State and mine type, 2012 and 2011 .....   | 33 |
| 22. Underground coal mining productivity by State and mining method, 2012.....   | 36 |
| 23. Coal mining productivity by State, mine type, and mine production range, 2012 .....  | 37 |
| 24. Coal mining productivity by State, mine type, and union status, 2012 .....   | 40 |
| 25. Coal consumers in the manufacturing and coke sectors, 2012 .....   | 42 |
| 26. U.S. coal consumption by end use sector, census division, and State, 2012 and 2011 .....   | 43 |
| 27. Year-end coal stocks by sector, census division, and State, 2012 and 2011.....   | 45 |
| 28. Average sales price of coal by State and mine type, 2012 and 2011 .....  | 48 |
| 29. Average sales price of coal by State and underground mining method, 2012 .....   | 49 |
| 30. Average sales price of coal by State, county, and number of mines, 2012.....   | 50 |
| 31. Average sales price of coal by State and coal rank, 2012 .....   | 54 |
| 32. Average sales price of coal by mine production range and mine type, 2012 .....   | 55 |
| 33. Average sales price of U.S. coal by State and disposition, 2012 .....  | 56 |
| 34. Average price of coal delivered to end use sector by census division and State, 2012 and 2011 .....                                      | 58 |

## Executive Summary

### Production

U.S. coal production declined in 2012 to the lowest level in almost two decades. Production fell from 2011 by 7.2 percent, or 79.2 million short tons, to end the year with a total of 1,016.5 million short tons. The number of producing mines in the United States dropped by 7.3 percent from 2011.

Regional coal production followed the same pattern in 2012 as in 2011, with both the Appalachian and Western regions showing declines in their production totals, while the Interior region experienced an increase. Appalachian coal production decreased by 44.1 million short tons, or 13.1 percent (the largest percentage decline of any region), to a total of 291.9 million short tons. West Virginia, the largest coal-producing state in the Appalachian Region, had a decline in coal production of 14.2 million short tons, with more than 97 percent of the decrease occurring in the southern portion of the state. The largest tonnage decline in the region was in Eastern Kentucky, which fell 19.1 million short tons in 2012.

Coal production in 2012 in the Interior region increased for the third year in a row to a level of 180.0 million short tons, an increase of 9.6 million short tons, or 5.7 percent. Illinois, the largest coal-producing state in the Interior region, had an increase in production of 10.7 million short tons, or 28.4 percent, to 48.5 million short tons. This production level has not been seen in Illinois since the mid-1990s.

Coal production in the Western region decreased in 2012 to end the year at 543.2 million short tons, a drop of 44.4 million short tons. Wyoming, the largest coal-producing state in the region, as well as in the entire United States, had a decline in its production level in 2012 of 37.2 million short tons to end the year at 401.4 million short tons. This was the lowest production level in Wyoming since 2004. Montana had a decrease in coal production of 5.3 million short tons to 36.7 million short tons, a level not seen in more than 10 years.

### Productive Capacity

In 2012, productive capacity of U.S. coal mines decreased by 3.5 percent to 1,284.4 million short tons, a decline of 46.2 million short tons. Noticeable decreases in productive capacity occurred in several states: Kentucky

(12.7 percent), Virginia (10.0 percent), Alabama (9.8 percent), West Virginia (9.0 percent), and Pennsylvania (6.8 percent). Illinois, on the other hand, had a large increase in productive capacity of 27.3 percent in 2012, mostly from underground mines.

Capacity utilization at underground mines decreased slightly in 2012, while the surface mine capacity utilization rate dropped by 4.6 percentage points to a level of 78.7 percent.

### Employment and Productivity

In 2012, the average number of employees at U.S. coal mines fell by 1.9 percent, or 1,773 employees, to a total of 89,838 employees. While the average number of employees at underground mines increased 0.1 percent in 2012, the average number of employees at surface mines decreased 4.8 percent. Kentucky had the largest decline in the average number of employees for the year, dropping by 2,283 employees. With fewer employees at mines in the United States in 2012, and a decrease in production, there was a slight decrease in productivity. The average production per employee hour decreased by 0.2 percent to a level of 5.19 short tons per employee hour.

### Consumption

In 2012, U.S. coal consumption declined by 11.3 percent, or 113.8 million short tons, to a total of 889.2 million short tons, the lowest level since 1988. Electric power sector (the largest consuming sector) coal consumption decreased by 108.9 million short tons to 823.6 million short tons, a level not seen in 20 years. Coal consumption in the other industrial, coke, and commercial and institutional sectors decreased by a combined 4.8 million short tons, or 6.9 percent.

### Stocks

U.S. coal stocks ended 2012 at 238.9 million short tons, an increase of 3.0 percent. While there was very little change in coal stocks held by the other industrial, coke, and commercial and institutional sectors, the electric power sector had an increase of 12.7 million short tons to 185.1 million short tons at the end of 2012. Coal stocks held by producers and distributors decreased during the year by 5.7 million short tons to 46.2 million

short tons.

## Sales Price

The total average sales price of coal in 2012 was \$39.95 per short ton, a decrease of 2.6 percent from 2011. The average sales price of coal from surface mines declined by 2.1 percent to a level of \$26.43 per short ton. The average sales price of coal from underground mines declined by 5.6 percent to a level of \$66.56 per short ton. Noteworthy changes in 2012 average sales price of coal include:

- Average sales price in Virginia (\$109.40 per short ton) decreased by 19.1 percent
- Average sales price in Pennsylvania (\$72.92 per short ton) decreased by 8.2 percent
- Average sales price in Montana (\$18.11 per short ton) increased by 13.1 percent





# Coal Production

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**Table 1. Coal Production and Number of Mines by State and Mine Type, 2012 and 2011**

(thousand short tons)

| Coal-Producing State and Region <sup>1</sup> | 2012            |               | 2011            |                | Percent Change  |              |
|--|-----------------|---------------|-----------------|----------------|-----------------|--------------|
|  | Number of Mines | Production    | Number of Mines | Production     | Number of Mines | Production   |
| <b>Alabama</b>                               | <b>46</b>       | <b>19,321</b> | <b>52</b>       | <b>19,071</b>  | <b>-11.5</b>    | <b>1.3</b>   |
| Underground                                  | 8               | 12,570        | 9               | 10,879         | -11.1           | 15.5         |
| Surface                                      | 38              | 6,752         | 43              | 8,192          | -11.6           | -17.6        |
| <b>Alaska</b>                                | <b>1</b>        | <b>2,052</b>  | <b>1</b>        | <b>2,149</b>   | -               | <b>-4.5</b>  |
| Surface                                      | 1               | 2,052         | 1               | 2,149          | -               | -4.5         |
| <b>Arizona</b>                               | <b>1</b>        | <b>7,493</b>  | <b>1</b>        | <b>8,111</b>   | -               | <b>-7.6</b>  |
| Surface                                      | 1               | 7,493         | 1               | 8,111          | -               | -7.6         |
| <b>Arkansas</b>                              | <b>2</b>        | <b>98</b>     | <b>2</b>        | <b>133</b>     | -               | <b>-26.4</b> |
| Underground                                  | 1               | 96            | 1               | 127            | -               | -24.0        |
| Surface                                      | 1               | 2             | 1               | 7              | -               | -71.4        |
| <b>Colorado</b>                              | <b>12</b>       | <b>28,566</b> | <b>10</b>       | <b>26,890</b>  | <b>20.0</b>     | <b>6.2</b>   |
| Underground                                  | 9               | 23,646        | 7               | 21,508         | 28.6            | 9.9          |
| Surface                                      | 3               | 4,920         | 3               | 5,382          | -               | -8.6         |
| <b>Illinois</b>                              | <b>24</b>       | <b>48,486</b> | <b>24</b>       | <b>37,770</b>  | -               | <b>28.4</b>  |
| Underground                                  | 15              | 42,837        | 15              | 32,717         | -               | 30.9         |
| Surface                                      | 9               | 5,649         | 9               | 5,053          | -               | 11.8         |
| <b>Indiana</b>                               | <b>29</b>       | <b>36,720</b> | <b>28</b>       | <b>37,426</b>  | <b>3.6</b>      | <b>-1.9</b>  |
| Underground                                  | 9               | 15,565        | 8               | 16,469         | 12.5            | -5.5         |
| Surface                                      | 20              | 21,156        | 20              | 20,957         | -               | 1.0          |
| <b>Kansas</b>                                | <b>1</b>        | <b>16</b>     | <b>1</b>        | <b>37</b>      | -               | <b>-57.4</b> |
| Surface                                      | 1               | 16            | 1               | 37             | -               | -57.4        |
| <b>Kentucky Total</b>                        | <b>357</b>      | <b>90,862</b> | <b>400</b>      | <b>108,766</b> | <b>-10.8</b>    | <b>-16.5</b> |
| Underground                                  | 150             | 58,198        | 169             | 65,248         | -11.2           | -10.8        |
| Surface                                      | 207             | 32,664        | 231             | 43,518         | -10.4           | -24.9        |
| <b>Kentucky (East)</b>                       | <b>330</b>      | <b>48,798</b> | <b>375</b>      | <b>67,930</b>  | <b>-12.0</b>    | <b>-28.2</b> |
| Underground                                  | 137             | 24,100        | 156             | 33,345         | -12.2           | -27.7        |
| Surface                                      | 193             | 24,698        | 219             | 34,585         | -11.9           | -28.6        |
| <b>Kentucky (West)</b>                       | <b>27</b>       | <b>42,063</b> | <b>25</b>       | <b>40,836</b>  | <b>8.0</b>      | <b>3.0</b>   |
| Underground                                  | 13              | 34,098        | 13              | 31,903         | -               | 6.9          |
| Surface                                      | 14              | 7,966         | 12              | 8,933          | 16.7            | -10.8        |
| <b>Louisiana</b>                             | <b>2</b>        | <b>3,971</b>  | <b>1</b>        | <b>3,865</b>   | <b>100.0</b>    | <b>2.8</b>   |
| Surface                                      | 2               | 3,971         | 1               | 3,865          | 100.0           | 2.8          |
| <b>Maryland</b>                              | <b>21</b>       | <b>2,283</b>  | <b>22</b>       | <b>2,937</b>   | <b>-4.6</b>     | <b>-22.3</b> |
| Underground                                  | 3               | 797           | 3               | 873            | -               | -8.6         |
| Surface                                      | 18              | 1,486         | 19              | 2,064          | -5.3            | -28.0        |
| <b>Mississippi</b>                           | <b>1</b>        | <b>2,953</b>  | <b>1</b>        | <b>2,747</b>   | -               | <b>7.5</b>   |
| Surface                                      | 1               | 2,953         | 1               | 2,747          | -               | 7.5          |
| <b>Missouri</b>                              | <b>2</b>        | <b>422</b>    | <b>2</b>        | <b>465</b>     | -               | <b>-9.3</b>  |
| Surface                                      | 2               | 422           | 2               | 465            | -               | -9.3         |
| <b>Montana</b>                               | <b>6</b>        | <b>36,694</b> | <b>6</b>        | <b>42,008</b>  | -               | <b>-12.7</b> |
| Underground                                  | 1               | 5,708         | 1               | 5,136          | -               | 11.1         |
| Surface                                      | 5               | 30,986        | 5               | 36,873         | -               | -16.0        |
| <b>New Mexico</b>                            | <b>4</b>        | <b>22,452</b> | <b>4</b>        | <b>21,922</b>  | -               | <b>2.4</b>   |
| Underground                                  | 1               | 4,960         | 1               | 3,983          | -               | 24.5         |
| Surface                                      | 3               | 17,492        | 3               | 17,939         | -               | -2.5         |
| <b>North Dakota</b>                          | <b>4</b>        | <b>27,529</b> | <b>4</b>        | <b>28,231</b>  | -               | <b>-2.5</b>  |
| Surface                                      | 4               | 27,529        | 4               | 28,231         | -               | -2.5         |
| <b>Ohio</b>                                  | <b>39</b>       | <b>26,328</b> | <b>46</b>       | <b>28,166</b>  | <b>-15.2</b>    | <b>-6.5</b>  |
| Underground                                  | 10              | 18,125        | 10              | 18,972         | -               | -4.5         |
| Surface                                      | 29              | 8,203         | 36              | 9,194          | -19.4           | -10.8        |
| <b>Oklahoma</b>                              | <b>7</b>        | <b>1,054</b>  | <b>6</b>        | <b>1,145</b>   | <b>16.7</b>     | <b>-7.9</b>  |
| Underground                                  | 1               | 349           | 1               | 408            | -               | -14.4        |
| Surface                                      | 6               | 704           | 5               | 736            | 20.0            | -4.3         |
| <b>Pennsylvania Total</b>                    | <b>235</b>      | <b>54,719</b> | <b>242</b>      | <b>59,182</b>  | <b>-2.9</b>     | <b>-7.5</b>  |
| Underground                                  | 49              | 45,041        | 48              | 47,317         | 2.1             | -4.8         |
| Surface                                      | 186             | 9,677         | 194             | 11,865         | -4.1            | -18.4        |
| <b>Pennsylvania (Anthracite)</b>             | <b>65</b>       | <b>2,335</b>  | <b>60</b>       | <b>2,131</b>   | <b>8.3</b>      | <b>9.6</b>   |
| Underground                                  | 11              | 120           | 10              | 166            | 10.0            | -27.9        |

| Coal-Producing State and Region <sup>1</sup> | 2012            |                  | 2011            |                  | Percent Change  |              |
|--|-----------------|------------------|-----------------|------------------|-----------------|--------------|
|  | Number of Mines | Production       | Number of Mines | Production       | Number of Mines | Production   |
| Surface                                      | 54              | 2,215            | 50              | 1,965            | 8.0             | 12.7         |
| <b>Pennsylvania (Bituminous)</b>             | <b>170</b>      | <b>52,384</b>    | <b>182</b>      | <b>57,051</b>    | <b>-6.6</b>     | <b>-8.2</b>  |
| Underground                                  | 38              | 44,922           | 38              | 47,151           | -               | -4.7         |
| Surface                                      | 132             | 7,463            | 144             | 9,900            | -8.3            | -24.6        |
| <b>Tennessee</b>                             | <b>14</b>       | <b>1,090</b>     | <b>21</b>       | <b>1,547</b>     | <b>-33.3</b>    | <b>-29.5</b> |
| Underground                                  | 5               | 573              | 6               | 423              | -16.7           | 35.6         |
| Surface                                      | 9               | 517              | 15              | 1,124            | -40.0           | -54.0        |
| <b>Texas</b>                                 | <b>12</b>       | <b>44,178</b>    | <b>13</b>       | <b>45,904</b>    | <b>-7.7</b>     | <b>-3.8</b>  |
| Surface                                      | 12              | 44,178           | 13              | 45,904           | -7.7            | -3.8         |
| <b>Utah</b>                                  | <b>9</b>        | <b>17,016</b>    | <b>8</b>        | <b>19,648</b>    | <b>12.5</b>     | <b>-13.4</b> |
| Underground                                  | 8               | 16,446           | 8               | 19,648           | -               | -16.3        |
| Surface                                      | 1               | 570              | -               | -                | -               | -            |
| <b>Virginia</b>                              | <b>96</b>       | <b>18,965</b>    | <b>110</b>      | <b>22,523</b>    | <b>-12.7</b>    | <b>-15.8</b> |
| Underground                                  | 57              | 12,370           | 61              | 15,461           | -6.6            | -20.0        |
| Surface                                      | 39              | 6,595            | 49              | 7,061            | -20.4           | -6.6         |
| <b>West Virginia Total</b>                   | <b>264</b>      | <b>120,425</b>   | <b>273</b>      | <b>134,662</b>   | <b>-3.3</b>     | <b>-10.6</b> |
| Underground                                  | 160             | 80,469           | 159             | 83,395           | 0.6             | -3.5         |
| Surface                                      | 104             | 39,956           | 114             | 51,267           | -8.8            | -22.1        |
| <b>West Virginia (Northern)</b>              | <b>38</b>       | <b>41,489</b>    | <b>38</b>       | <b>41,849</b>    | <b>-</b>        | <b>-0.9</b>  |
| Underground                                  | 22              | 39,445           | 21              | 38,590           | 4.8             | 2.2          |
| Surface                                      | 16              | 2,045            | 17              | 3,259            | -5.9            | -37.3        |
| <b>West Virginia (Southern)</b>              | <b>226</b>      | <b>78,935</b>    | <b>235</b>      | <b>92,813</b>    | <b>-3.8</b>     | <b>-15.0</b> |
| Underground                                  | 138             | 41,024           | 138             | 44,805           | -               | -8.4         |
| Surface                                      | 88              | 37,911           | 97              | 48,008           | -9.3            | -21.0        |
| <b>Wyoming</b>                               | <b>18</b>       | <b>401,442</b>   | <b>18</b>       | <b>438,673</b>   | <b>-</b>        | <b>-8.5</b>  |
| Underground                                  | 1               | 4,637            | 1               | 3,043            | -               | 52.4         |
| Surface                                      | 17              | 396,805          | 17              | 435,630          | -               | -8.9         |
| <b>Appalachia Total</b>                      | <b>1,045</b>    | <b>291,929</b>   | <b>1,141</b>    | <b>336,017</b>   | <b>-8.4</b>     | <b>-13.1</b> |
| Underground                                  | 429             | 194,045          | 452             | 210,664          | -5.1            | -7.9         |
| Surface                                      | 616             | 97,884           | 689             | 125,353          | -10.6           | -21.9        |
| <b>Appalachia Central</b>                    | <b>666</b>      | <b>147,789</b>   | <b>741</b>      | <b>184,813</b>   | <b>-10.1</b>    | <b>-20.0</b> |
| Underground                                  | 337             | 78,067           | 361             | 94,034           | -6.7            | -17.0        |
| Surface                                      | 329             | 69,722           | 380             | 90,779           | -13.4           | -23.2        |
| <b>Appalachia Northern</b>                   | <b>333</b>      | <b>124,819</b>   | <b>348</b>      | <b>132,133</b>   | <b>-4.3</b>     | <b>-5.5</b>  |
| Underground                                  | 84              | 103,409          | 82              | 105,751          | 2.4             | -2.2         |
| Surface                                      | 249             | 21,411           | 266             | 26,382           | -6.4            | -18.8        |
| <b>Appalachia Southern</b>                   | <b>46</b>       | <b>19,321</b>    | <b>52</b>       | <b>19,071</b>    | <b>-11.5</b>    | <b>1.3</b>   |
| Underground                                  | 8               | 12,570           | 9               | 10,879           | -11.1           | 15.5         |
| Surface                                      | 38              | 6,752            | 43              | 8,192            | -11.6           | -17.6        |
| <b>Interior Basin Total</b>                  | <b>107</b>      | <b>179,961</b>   | <b>103</b>      | <b>170,327</b>   | <b>3.9</b>      | <b>5.7</b>   |
| Underground                                  | 39              | 92,945           | 38              | 81,624           | 2.6             | 13.9         |
| Surface                                      | 68              | 87,017           | 65              | 88,703           | 4.6             | -1.9         |
| <b>Illinois Basin</b>                        | <b>80</b>       | <b>127,270</b>   | <b>77</b>       | <b>116,032</b>   | <b>3.9</b>      | <b>9.7</b>   |
| Underground                                  | 37              | 92,499           | 36              | 81,089           | 2.8             | 14.1         |
| Surface                                      | 43              | 34,771           | 41              | 34,943           | 4.9             | -0.5         |
| <b>Interior</b>                              | <b>27</b>       | <b>52,692</b>    | <b>26</b>       | <b>54,295</b>    | <b>3.9</b>      | <b>-3.0</b>  |
| Underground                                  | 2               | 446              | 2               | 535              | -               | -16.7        |
| Surface                                      | 25              | 52,246           | 24              | 53,760           | 4.2             | -2.8         |
| <b>Western Total</b>                         | <b>55</b>       | <b>543,244</b>   | <b>52</b>       | <b>587,633</b>   | <b>5.8</b>      | <b>-7.6</b>  |
| Underground                                  | 20              | 55,396           | 18              | 53,317           | 11.1            | 3.9          |
| Surface                                      | 35              | 487,847          | 34              | 534,316          | 2.9             | -8.7         |
| <b>Powder River Basin</b>                    | <b>16</b>       | <b>419,066</b>   | <b>16</b>       | <b>462,600</b>   | <b>-</b>        | <b>-9.4</b>  |
| Surface                                      | 16              | 419,066          | 16              | 462,600          | -               | -9.4         |
| <b>Uinta Region</b>                          | <b>16</b>       | <b>43,950</b>    | <b>15</b>       | <b>45,542</b>    | <b>6.7</b>      | <b>-3.5</b>  |
| Underground                                  | 14              | 39,384           | 13              | 40,520           | 7.7             | -2.8         |
| Surface                                      | 2               | 4,567            | 2               | 5,022            | -               | -9.1         |
| <b>Western</b>                               | <b>23</b>       | <b>80,228</b>    | <b>21</b>       | <b>79,491</b>    | <b>9.5</b>      | <b>0.9</b>   |
| Underground                                  | 6               | 16,013           | 5               | 12,798           | 20.0            | 25.1         |
| Surface                                      | 17              | 64,215           | 16              | 66,693           | 6.3             | -3.7         |
| <b>East of Mississippi River</b>             | <b>1,126</b>    | <b>422,152</b>   | <b>1,219</b>    | <b>454,796</b>   | <b>-7.6</b>     | <b>-7.2</b>  |
| <b>West of Mississippi River</b>             | <b>81</b>       | <b>592,983</b>   | <b>77</b>       | <b>639,181</b>   | <b>5.2</b>      | <b>-7.2</b>  |
| <b>U.S. Subtotal</b>                         | <b>1,207</b>    | <b>1,015,135</b> | <b>1,296</b>    | <b>1,093,977</b> | <b>-6.9</b>     | <b>-7.2</b>  |

| Coal-Producing State and Region <sup>1</sup> | 2012            |                  | 2011            |                  | Percent Change  |             |
|--|-----------------|------------------|-----------------|------------------|-----------------|-------------|
|  | Number of Mines | Production       | Number of Mines | Production       | Number of Mines | Production  |
| Refuse Recovery                              | 22              | 1,324            | 29              | 1,650            | -24.1           | -19.8       |
| <b>U.S. Total</b>                            | <b>1,229</b>    | <b>1,016,458</b> | <b>1,325</b>    | <b>1,095,628</b> | <b>-7.3</b>     | <b>-7.2</b> |

<sup>1</sup> For a definition of coal producing regions, see the Glossary.

- = 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 2. Coal Production and Number of Mines by State, County, and Mine Type, 2012**

(thousand short tons)

| Coal-Producing State and County | Underground     |               | Surface         |               | Total           |               |
|---------------------------------|-----------------|---------------|-----------------|---------------|-----------------|---------------|
|                                 | Number of Mines | Production    | Number of Mines | Production    | Number of Mines | Production    |
| <b>Alabama</b>                  | <b>8</b>        | <b>12,570</b> | <b>38</b>       | <b>6,752</b>  | <b>46</b>       | <b>19,321</b> |
| Bibb                            | -               | -             | 2               | 119           | 2               | 119           |
| Blount                          | -               | -             | 2               | 236           | 2               | 236           |
| Fayette                         | 1               | 2,249         | -               | -             | 1               | 2,249         |
| Franklin                        | -               | -             | 2               | 137           | 2               | 137           |
| Jackson                         | -               | -             | 3               | 152           | 3               | 152           |
| Jefferson                       | 3               | 3,589         | 9               | 1,106         | 12              | 4,695         |
| Marion                          | -               | -             | 1               | 105           | 1               | 105           |
| Shelby                          | 1               | 20            | -               | -             | 1               | 20            |
| Tuscaloosa                      | 2               | 6,668         | 5               | 1,968         | 7               | 8,636         |
| Walker                          | 1               | 43            | 12              | 2,301         | 13              | 2,344         |
| Winston                         | -               | -             | 2               | 627           | 2               | 627           |
| <b>Alaska</b>                   | <b>-</b>        | <b>-</b>      | <b>1</b>        | <b>2,052</b>  | <b>1</b>        | <b>2,052</b>  |
| Yukon-Koyukuk                   | -               | -             | 1               | 2,052         | 1               | 2,052         |
| <b>Arizona</b>                  | <b>-</b>        | <b>-</b>      | <b>1</b>        | <b>7,493</b>  | <b>1</b>        | <b>7,493</b>  |
| Navajo                          | -               | -             | 1               | 7,493         | 1               | 7,493         |
| <b>Arkansas</b>                 | <b>1</b>        | <b>96</b>     | <b>1</b>        | <b>2</b>      | <b>2</b>        | <b>98</b>     |
| Sebastian                       | 1               | 96            | 1               | 2             | 2               | 98            |
| <b>Colorado</b>                 | <b>9</b>        | <b>23,646</b> | <b>3</b>        | <b>4,920</b>  | <b>12</b>       | <b>28,566</b> |
| Delta                           | 1               | 3,430         | -               | -             | 1               | 3,430         |
| Gunnison                        | 2               | 9,810         | -               | -             | 2               | 9,810         |
| La Plata                        | 1               | 639           | -               | -             | 1               | 639           |
| Las Animas                      | 2               | 69            | -               | -             | 2               | 69            |
| Moffat                          | -               | -             | 2               | 4,567         | 2               | 4,567         |
| Montrose                        | -               | -             | 1               | 353           | 1               | 353           |
| Rio Blanco                      | 1               | 1,673         | -               | -             | 1               | 1,673         |
| Routt                           | 2               | 8,024         | -               | -             | 2               | 8,024         |
| <b>Illinois</b>                 | <b>15</b>       | <b>42,837</b> | <b>9</b>        | <b>5,649</b>  | <b>24</b>       | <b>48,486</b> |
| Franklin                        | 1               | 4,690         | -               | -             | 1               | 4,690         |
| Gallatin                        | -               | -             | 1               | 1,997         | 1               | 1,997         |
| Jackson                         | -               | -             | 1               | 92            | 1               | 92            |
| Macoupin                        | 2               | 2,513         | -               | -             | 2               | 2,513         |
| Mcdonough                       | -               | -             | 1               | 184           | 1               | 184           |
| Montgomery                      | 1               | 2,365         | -               | -             | 1               | 2,365         |
| Perry                           | 2               | 2,838         | 2               | 716           | 4               | 3,554         |
| Randolph                        | 1               | 2,766         | 2               | 597           | 3               | 3,363         |
| Saline                          | 4               | 12,828        | 1               | 625           | 5               | 13,453        |
| Sangamon                        | 1               | 2,108         | -               | -             | 1               | 2,108         |
| Wabash                          | -               | -             | 1               | 1,439         | 1               | 1,439         |
| Washington                      | 1               | 2,819         | -               | -             | 1               | 2,819         |
| White                           | 1               | 2,380         | -               | -             | 1               | 2,380         |
| Williamson                      | 1               | 7,528         | -               | -             | 1               | 7,528         |
| <b>Indiana</b>                  | <b>9</b>        | <b>15,565</b> | <b>20</b>       | <b>21,156</b> | <b>29</b>       | <b>36,720</b> |
| Daviess                         | -               | -             | 3               | 2,283         | 3               | 2,283         |
| Dubois                          | -               | -             | 1               | 867           | 1               | 867           |
| Gibson                          | 2               | 6,188         | 2               | 3,014         | 4               | 9,202         |
| Knox                            | 4               | 4,289         | 2               | 455           | 6               | 4,744         |
| Pike                            | 1               | 2,072         | 6               | 2,086         | 7               | 4,159         |
| Sullivan                        | 2               | 3,015         | 1               | 8,071         | 3               | 11,086        |
| Vigo                            | -               | -             | 1               | 41            | 1               | 41            |
| Warrick                         | -               | -             | 4               | 4,338         | 4               | 4,338         |
| <b>Kansas</b>                   | <b>-</b>        | <b>-</b>      | <b>1</b>        | <b>16</b>     | <b>1</b>        | <b>16</b>     |
| Bourbon                         | -               | -             | 1               | 16            | 1               | 16            |
| <b>Kentucky</b>                 | <b>150</b>      | <b>58,198</b> | <b>207</b>      | <b>32,664</b> | <b>357</b>      | <b>90,862</b> |
| Bell                            | 5               | 731           | 11              | 499           | 16              | 1,230         |
| Breathitt                       | 1               | 256           | 2               | 31            | 3               | 288           |
| Christian                       | -               | -             | 1               | 11            | 1               | 11            |
| Clay                            | -               | -             | 7               | 294           | 7               | 294           |

| Coal-Producing State and County | Underground     |               | Surface         |               | Total           |               |
|---------------------------------|-----------------|---------------|-----------------|---------------|-----------------|---------------|
|                                 | Number of Mines | Production    | Number of Mines | Production    | Number of Mines | Production    |
| Daviess                         | -               | -             | 2               | 395           | 2               | 395           |
| Elliott                         | -               | -             | 1               | 2             | 1               | 2             |
| Floyd                           | 12              | 1,205         | 12              | 1,544         | 24              | 2,749         |
| Harlan                          | 27              | 5,064         | 18              | 1,931         | 45              | 6,995         |
| Henderson                       | 1               | 505           | 3               | 1,124         | 4               | 1,629         |
| Hopkins                         | 4               | 12,315        | -               | -             | 4               | 12,315        |
| Johnson                         | -               | -             | 7               | 336           | 7               | 336           |
| Knott                           | 10              | 1,452         | 7               | 938           | 17              | 2,390         |
| Knox                            | 3               | 64            | 8               | 562           | 11              | 625           |
| Laurel                          | -               | -             | 2               | 13            | 2               | 13            |
| Lawrence                        | 1               | 71            | 6               | 144           | 7               | 215           |
| Leslie                          | 5               | 1,348         | 11              | 1,752         | 16              | 3,100         |
| Letcher                         | 16              | 1,936         | 15              | 917           | 31              | 2,853         |
| Magoffin                        | 1               | 67            | 6               | 1,947         | 7               | 2,013         |
| Martin                          | 8               | 2,622         | 7               | 755           | 15              | 3,377         |
| Mccreary                        | -               | -             | 1               | 32            | 1               | 32            |
| Muhlenberg                      | 2               | 3,810         | 2               | 1,008         | 4               | 4,817         |
| Ohio                            | 2               | 1,850         | 4               | 5,361         | 6               | 7,211         |
| Owsley                          | -               | -             | 3               | 27            | 3               | 27            |
| Perry                           | 7               | 3,017         | 19              | 6,227         | 26              | 9,244         |
| Pike                            | 40              | 6,168         | 41              | 6,489         | 81              | 12,657        |
| Rockcastle                      | -               | -             | 1               | 5             | 1               | 5             |
| Union                           | 3               | 13,475        | -               | -             | 3               | 13,475        |
| Webster                         | 1               | 2,144         | 2               | 67            | 3               | 2,211         |
| Whitley                         | 1               | 100           | 7               | 208           | 8               | 308           |
| Wolfe                           | -               | -             | 1               | 46            | 1               | 46            |
| <b>Louisiana</b>                | -               | -             | <b>2</b>        | <b>3,971</b>  | <b>2</b>        | <b>3,971</b>  |
| De Soto                         | -               | -             | 1               | 3,867         | 1               | 3,867         |
| Natchitoches                    | -               | -             | 1               | 105           | 1               | 105           |
| <b>Maryland</b>                 | <b>3</b>        | <b>797</b>    | <b>18</b>       | <b>1,486</b>  | <b>21</b>       | <b>2,283</b>  |
| Allegany                        | 1               | 444           | 11              | 1,033         | 12              | 1,477         |
| Garrett                         | 2               | 353           | 7               | 453           | 9               | 806           |
| <b>Mississippi</b>              | -               | -             | <b>1</b>        | <b>2,953</b>  | <b>1</b>        | <b>2,953</b>  |
| Choctaw                         | -               | -             | 1               | 2,953         | 1               | 2,953         |
| <b>Missouri</b>                 | -               | -             | <b>2</b>        | <b>422</b>    | <b>2</b>        | <b>422</b>    |
| Bates                           | -               | -             | 2               | 422           | 2               | 422           |
| <b>Montana</b>                  | <b>1</b>        | <b>5,708</b>  | <b>5</b>        | <b>30,986</b> | <b>6</b>        | <b>36,694</b> |
| Bighorn                         | -               | -             | 3               | 22,672        | 3               | 22,672        |
| Musselshell                     | 1               | 5,708         | -               | -             | 1               | 5,708         |
| Richland                        | -               | -             | 1               | 296           | 1               | 296           |
| Rosebud                         | -               | -             | 1               | 8,018         | 1               | 8,018         |
| <b>New Mexico</b>               | <b>1</b>        | <b>4,960</b>  | <b>3</b>        | <b>17,492</b> | <b>4</b>        | <b>22,452</b> |
| Mckinley                        | -               | -             | 2               | 9,872         | 2               | 9,872         |
| San Juan                        | 1               | 4,960         | 1               | 7,619         | 2               | 12,580        |
| <b>North Dakota</b>             | -               | -             | <b>4</b>        | <b>27,529</b> | <b>4</b>        | <b>27,529</b> |
| Mclean                          | -               | -             | 1               | 7,915         | 1               | 7,915         |
| Mercer                          | -               | -             | 2               | 15,289        | 2               | 15,289        |
| Oliver                          | -               | -             | 1               | 4,325         | 1               | 4,325         |
| <b>Ohio</b>                     | <b>10</b>       | <b>18,125</b> | <b>29</b>       | <b>8,203</b>  | <b>39</b>       | <b>26,328</b> |
| Belmont                         | 1               | 5,768         | 1               | 830           | 2               | 6,598         |
| Carroll                         | 1               | 147           | 1               | 2             | 2               | 149           |
| Columbiana                      | -               | -             | 2               | 124           | 2               | 124           |
| Harrison                        | 2               | 1,166         | 5               | 2,136         | 7               | 3,303         |
| Jackson                         | -               | -             | 1               | 130           | 1               | 130           |
| Jefferson                       | 2               | 481           | 5               | 1,223         | 7               | 1,704         |
| Mahoning                        | -               | -             | 1               | 4             | 1               | 4             |
| Monroe                          | 1               | 8,447         | -               | -             | 1               | 8,447         |
| Muskingum                       | -               | -             | 1               | 374           | 1               | 374           |
| Noble                           | -               | -             | 2               | 723           | 2               | 723           |
| Perry                           | 2               | 1,658         | 1               | 835           | 3               | 2,492         |
| Stark                           | -               | -             | 2               | 375           | 2               | 375           |
| Tuscarawas                      | 1               | 458           | 5               | 516           | 6               | 974           |
| Vinton                          | -               | -             | 2               | 930           | 2               | 930           |
| <b>Oklahoma</b>                 | <b>1</b>        | <b>349</b>    | <b>6</b>        | <b>704</b>    | <b>7</b>        | <b>1,054</b>  |

| Coal-Producing State and County | Underground     |               | Surface         |               | Total           |                |
|---------------------------------|-----------------|---------------|-----------------|---------------|-----------------|----------------|
|                                 | Number of Mines | Production    | Number of Mines | Production    | Number of Mines | Production     |
| Craig                           | -               | -             | 2               | 48            | 2               | 48             |
| Haskell                         | -               | -             | 1               | 219           | 1               | 219            |
| Le Flore                        | 1               | 349           | 1               | 180           | 2               | 530            |
| Nowata                          | -               | -             | 1               | 254           | 1               | 254            |
| Okmulgee                        | -               | -             | 1               | 3             | 1               | 3              |
| <b>Pennsylvania</b>             | <b>49</b>       | <b>45,041</b> | <b>186</b>      | <b>9,677</b>  | <b>235</b>      | <b>54,719</b>  |
| Allegheny                       | -               | -             | 3               | 17            | 3               | 17             |
| Armstrong                       | 8               | 2,316         | 6               | 212           | 14              | 2,528          |
| Beaver                          | 1               | 232           | -               | -             | 1               | 232            |
| Bedford                         | -               | -             | 2               | 115           | 2               | 115            |
| Blair                           | -               | -             | 1               | 31            | 1               | 31             |
| Butler                          | -               | -             | 2               | 233           | 2               | 233            |
| Cambria                         | 2               | 867           | 8               | 467           | 10              | 1,333          |
| Cameron                         | -               | -             | 1               | 14            | 1               | 14             |
| Centre                          | -               | -             | 1               | 148           | 1               | 148            |
| Clarion                         | -               | -             | 3               | 193           | 3               | 193            |
| Clearfield                      | 3               | 1,473         | 40              | 2,015         | 43              | 3,488          |
| Columbia                        | -               | -             | 4               | 105           | 4               | 105            |
| Dauphin                         | 1               | 6             | -               | -             | 1               | 6              |
| Elk                             | -               | -             | 5               | 138           | 5               | 138            |
| Fayette                         | -               | -             | 8               | 106           | 8               | 106            |
| Greene                          | 5               | 25,659        | 1               | 14            | 6               | 25,673         |
| Indiana                         | 9               | 2,280         | 14              | 339           | 23              | 2,619          |
| Jefferson                       | 1               | 55            | 9               | 783           | 10              | 837            |
| Lackawanna                      | -               | -             | 2               | 19            | 2               | 19             |
| Luzerne                         | -               | -             | 6               | 411           | 6               | 411            |
| Lycoming                        | -               | -             | 1               | 216           | 1               | 216            |
| Mercer                          | -               | -             | 1               | 9             | 1               | 9              |
| Northumberland                  | 3               | 49            | 8               | 252           | 11              | 301            |
| Schuylkill                      | 7               | 66            | 34              | 1,428         | 41              | 1,494          |
| Somerset                        | 8               | 2,580         | 13              | 1,526         | 21              | 4,106          |
| Venango                         | -               | -             | 2               | 58            | 2               | 58             |
| Washington                      | 1               | 9,459         | 3               | 618           | 4               | 10,078         |
| Westmoreland                    | -               | -             | 8               | 210           | 8               | 210            |
| <b>Tennessee</b>                | <b>5</b>        | <b>573</b>    | <b>9</b>        | <b>517</b>    | <b>14</b>       | <b>1,090</b>   |
| Anderson                        | -               | -             | 2               | 23            | 2               | 23             |
| Campbell                        | 2               | 72            | 4               | 228           | 6               | 300            |
| Claiborne                       | 3               | 501           | 3               | 266           | 6               | 767            |
| <b>Texas</b>                    | <b>-</b>        | <b>-</b>      | <b>12</b>       | <b>44,178</b> | <b>12</b>       | <b>44,178</b>  |
| Atascosa                        | -               | -             | 1               | 3,308         | 1               | 3,308          |
| Freestone                       | -               | -             | 1               | 3,006         | 1               | 3,006          |
| Harrison                        | -               | -             | 1               | 4,252         | 1               | 4,252          |
| Hopkins                         | -               | -             | 1               | 863           | 1               | 863            |
| Lee                             | -               | -             | 1               | 7,760         | 1               | 7,760          |
| Leon                            | -               | -             | 1               | 4,228         | 1               | 4,228          |
| Limestone                       | -               | -             | 1               | 8,236         | 1               | 8,236          |
| Panola                          | -               | -             | 2               | 6,692         | 2               | 6,692          |
| Robertson                       | -               | -             | 1               | 1,357         | 1               | 1,357          |
| Rusk                            | -               | -             | 1               | 3,061         | 1               | 3,061          |
| Titus                           | -               | -             | 1               | 1,413         | 1               | 1,413          |
| <b>Utah</b>                     | <b>8</b>        | <b>16,446</b> | <b>1</b>        | <b>570</b>    | <b>9</b>        | <b>17,016</b>  |
| Carbon                          | 5               | 6,503         | -               | -             | 5               | 6,503          |
| Emery                           | 2               | 4,292         | -               | -             | 2               | 4,292          |
| Kane                            | -               | -             | 1               | 570           | 1               | 570            |
| Sevier                          | 1               | 5,650         | -               | -             | 1               | 5,650          |
| <b>Virginia</b>                 | <b>57</b>       | <b>12,370</b> | <b>39</b>       | <b>6,595</b>  | <b>96</b>       | <b>18,965</b>  |
| Buchanan                        | 24              | 5,292         | 12              | 1,891         | 36              | 7,184          |
| Dickenson                       | 11              | 2,886         | 3               | 526           | 14              | 3,412          |
| Giles                           | -               | -             | 1               | 175           | 1               | 175            |
| Lee                             | 1               | 153           | 3               | 124           | 4               | 276            |
| Russell                         | 4               | 641           | 2               | 85            | 6               | 726            |
| Tazewell                        | 1               | 471           | 2               | 940           | 3               | 1,410          |
| Wise                            | 16              | 2,928         | 16              | 2,854         | 32              | 5,782          |
| <b>West Virginia</b>            | <b>160</b>      | <b>80,469</b> | <b>104</b>      | <b>39,956</b> | <b>264</b>      | <b>120,425</b> |



| Coal-Producing State and County | Underground     |                | Surface         |                | Total           |                  |
|---------------------------------|-----------------|----------------|-----------------|----------------|-----------------|------------------|
|                                 | Number of Mines | Production     | Number of Mines | Production     | Number of Mines | Production       |
| Barbour                         | 1               | 1,128          | -               | -              | 1               | 1,128            |
| Boone                           | 22              | 6,571          | 9               | 9,896          | 31              | 16,467           |
| Brooke                          | -               | -              | 1               | 280            | 1               | 280              |
| Clay                            | 1               | 92             | 1               | 953            | 2               | 1,045            |
| Fayette                         | 5               | 1,548          | 5               | 3,793          | 10              | 5,341            |
| Grant                           | 1               | 133            | -               | -              | 1               | 133              |
| Greenbrier                      | 4               | 774            | 3               | 454            | 7               | 1,228            |
| Harrison                        | 2               | 374            | 2               | 13             | 4               | 387              |
| Kanawha                         | 12              | 6,105          | 11              | 2,634          | 23              | 8,739            |
| Lincoln                         | 2               | 1,174          | -               | -              | 2               | 1,174            |
| Logan                           | 12              | 6,066          | 13              | 9,048          | 25              | 15,114           |
| Marion                          | 3               | 11,024         | 1               | 38             | 4               | 11,062           |
| Marshall                        | 2               | 14,717         | 2               | 3              | 4               | 14,720           |
| Mcdowell                        | 30              | 2,881          | 14              | 1,353          | 44              | 4,234            |
| Mercer                          | -               | -              | 1               | 147            | 1               | 147              |
| Mineral                         | -               | -              | 2               | 57             | 2               | 57               |
| Mingo                           | 15              | 2,824          | 13              | 3,935          | 28              | 6,759            |
| Monongalia                      | 3               | 5,409          | 3               | 296            | 6               | 5,706            |
| Nicholas                        | 5               | 1,138          | 6               | 1,144          | 11              | 2,282            |
| Ohio                            | 1               | 2,001          | -               | -              | 1               | 2,001            |
| Preston                         | 1               | 5              | -               | -              | 1               | 5                |
| Raleigh                         | 12              | 4,040          | 6               | 2,821          | 18              | 6,860            |
| Randolph                        | 1               | 443            | -               | -              | 1               | 443              |
| Taylor                          | 1               | 101            | 1               | 14             | 2               | 115              |
| Tucker                          | 1               | 2,285          | 1               | 112            | 2               | 2,397            |
| Upshur                          | 1               | 376            | 1               | 34             | 2               | 410              |
| Wayne                           | 4               | 3,622          | 3               | 744            | 7               | 4,366            |
| Webster                         | 4               | 1,450          | 2               | 1,197          | 6               | 2,647            |
| Wyoming                         | 14              | 4,190          | 3               | 990            | 17              | 5,179            |
| <b>Wyoming</b>                  | <b>1</b>        | <b>4,637</b>   | <b>17</b>       | <b>396,805</b> | <b>18</b>       | <b>401,442</b>   |
| Campbell                        | -               | -              | 11              | 354,060        | 11              | 354,060          |
| Carbon                          | -               | -              | 1               | 1              | 1               | 1                |
| Converse                        | -               | -              | 1               | 34,316         | 1               | 34,316           |
| Hot Springs                     | -               | -              | 1               | 24             | 1               | 24               |
| Lincoln                         | -               | -              | 1               | 4,645          | 1               | 4,645            |
| Sweetwater                      | 1               | 4,637          | 2               | 3,759          | 3               | 8,396            |
| <b>U.S. Subtotal</b>            | <b>488</b>      | <b>342,387</b> | <b>719</b>      | <b>672,748</b> | <b>1,207</b>    | <b>1,015,135</b> |
| <b>Refuse Recovery</b>          | <b>-</b>        | <b>-</b>       | <b>-</b>        | <b>-</b>       | <b>22</b>       | <b>1,324</b>     |
| <b>U.S. Total</b>               | <b>488</b>      | <b>342,387</b> | <b>719</b>      | <b>672,748</b> | <b>1,229</b>    | <b>1,016,458</b> |

- = 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, 2012**

(thousand short tons)

| Coal-Producing State and Region <sup>1</sup> | Continuous <sup>2</sup> | Conventional and Other <sup>3</sup> | Longwall <sup>4</sup> | Total          |
|--|-------------------------|-------------------------------------|-----------------------|----------------|
| Alabama                                      | 139                     | 20                                  | 12,410                | 12,570         |
| Arkansas                                     | 96                      | -                                   | -                     | 96             |
| Colorado                                     | 757                     | -                                   | 22,889                | 23,646         |
| Illinois                                     | 18,969                  | -                                   | 23,868                | 42,837         |
| Indiana                                      | 15,565                  | -                                   | -                     | 15,565         |
| <b>Kentucky Total</b>                        | <b>56,179</b>           | <b>2,018</b>                        | -                     | <b>58,198</b>  |
| Kentucky (East)                              | 22,090                  | 2,010                               | -                     | 24,100         |
| Kentucky (West)                              | 34,089                  | 9                                   | -                     | 34,098         |
| Maryland                                     | 797                     | -                                   | -                     | 797            |
| Montana                                      | -                       | -                                   | 5,708                 | 5,708          |
| New Mexico                                   | -                       | -                                   | 4,960                 | 4,960          |
| Ohio   | 3,903                   | 7                                   | 14,214                | 18,125         |
| Oklahoma                                     | 349                     | -                                   | -                     | 349            |
| <b>Pennsylvania Total</b>                    | <b>11,367</b>           | <b>52</b>                           | <b>33,623</b>         | <b>45,041</b>  |
| Pennsylvania (Anthracite)                    | 68                      | 52                                  | -                     | 120            |
| Pennsylvania (Bituminous)                    | 11,298                  | -                                   | 33,623                | 44,922         |
| Tennessee                                    | 559                     | 14                                  | -                     | 573            |
| Utah   | 1,512                   | -                                   | 14,934                | 16,446         |
| Virginia                                     | 8,749                   | 115                                 | 3,506                 | 12,370         |
| <b>West Virginia Total</b>                   | <b>37,920</b>           | <b>645</b>                          | <b>41,904</b>         | <b>80,469</b>  |
| West Virginia (Northern)                     | 5,517                   | 20                                  | 33,908                | 39,445         |
| West Virginia (Southern)                     | 32,403                  | 625                                 | 7,996                 | 41,024         |
| Wyoming                                      | -                       | -                                   | 4,637                 | 4,637          |
| <b>Appalachia Total</b>                      | <b>85,525</b>           | <b>2,862</b>                        | <b>105,658</b>        | <b>194,045</b> |
| Appalachia Central                           | 63,802                  | 2,763                               | 11,502                | 78,067         |
| Appalachia Northern                          | 21,584                  | 79                                  | 81,746                | 103,409        |
| Appalachia Southern                          | 139                     | 20                                  | 12,410                | 12,570         |
| <b>Interior Basin Total</b>                  | <b>69,068</b>           | <b>9</b>                            | <b>23,868</b>         | <b>92,945</b>  |
| Illinois Basin                               | 68,623                  | 9                                   | 23,868                | 92,499         |
| Interior                                     | 446                     | -                                   | -                     | 446            |
| <b>Western Total</b>                         | <b>2,269</b>            | -                                   | <b>53,127</b>         | <b>55,396</b>  |
| Uinta Region                                 | 1,561                   | -                                   | 37,823                | 39,384         |
| Western                                      | 708                     | -                                   | 15,305                | 16,013         |
| <b>East of Mississippi River</b>             | <b>154,147</b>          | <b>2,871</b>                        | <b>129,526</b>        | <b>286,545</b> |
| <b>West of Mississippi River</b>             | <b>2,715</b>            | -                                   | <b>53,127</b>         | <b>55,842</b>  |
| <b>U.S. Total</b>                            | <b>156,862</b>          | <b>2,871</b>                        | <b>182,653</b>        | <b>342,387</b> |

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, 'Coal Production and Preparation Report,' 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, 2012**

(thousand short tons)

| <b>Coal Thickness (inches)</b> | <b>Underground</b> | <b>Surface</b> | <b>Total</b>     |
|--------------------------------|--------------------|----------------|------------------|
| Under 7                        | -                  | 17             | 17               |
| 7 - Under 13                   | -                  | 2,108          | 2,108            |
| 13 - Under 19                  | 429                | 6,688          | 7,117            |
| 19 - Under 25                  | 111                | 14,107         | 14,217           |
| 25 - Under 31                  | 4,147              | 12,913         | 17,060           |
| 31 - Under 37                  | 15,128             | 19,022         | 34,150           |
| 37 - Under 43                  | 23,868             | 17,285         | 41,153           |
| 43 - Under 49                  | 26,035             | 15,597         | 41,632           |
| 49 - Under 55                  | 18,909             | 22,544         | 41,453           |
| 55 - Under 61                  | 36,946             | 11,285         | 48,231           |
| 61 - Under 67                  | 43,146             | 15,074         | 58,220           |
| 67 - Under 73                  | 40,983             | 8,783          | 49,766           |
| 73 - Under 79                  | 32,914             | 10,193         | 43,107           |
| 79 - Under 85                  | 27,011             | 3,554          | 30,565           |
| 85 - Under 91                  | 11,997             | 8,459          | 20,456           |
| 91 - Under 97                  | 6,329              | 2,411          | 8,740            |
| 97 - Under 103                 | 5,923              | 5,187          | 11,110           |
| 103 - Under 109                | 5,940              | 12,864         | 18,804           |
| 109 - Under 115                | 1,820              | 2,487          | 4,307            |
| 115 - 120                      | 16,425             | 1,045          | 17,470           |
| Over 120                       | 23,530             | 479,095        | 502,626          |
| <b>Unknown *</b>               | <b>797</b>         | <b>2,030</b>   | <b>4,151</b>     |
| <b>U.S. Total</b>              | <b>342,387</b>     | <b>672,748</b> | <b>1,016,458</b> |

\* 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, 'Coal Production and Preparation Report,' 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, 2012**

| Coalbed ID Number <sup>1</sup><br>Coalbed Name | Production (thousand short tons) |                |                  | Thickness (inches)   |           |            |     |
|--|----------------------------------|----------------|------------------|----------------------|-----------|------------|-----|
|  | Underground                      | Surface        | Total            | Average <sup>2</sup> | Low       | High       |     |
| 1699   | Wyodak                           | -              | 351,188          | 351,188              | 778       | 160        | 913 |
| 0036   | Pittsburgh                       | 52,476         | 3,871            | 56,348               | 74        | 18         | 138 |
| 0489   | No. 9                            | 42,193         | 12,181           | 54,374               | 61        | 24         | 74  |
| 0484   | Herrin (Illinois No. 6)          | 48,526         | 1,910            | 50,436               | 71        | 46         | 89  |
| 0212   | Pittsburgh                       | 27,355         | 76               | 27,431               | 75        | 27         | 98  |
| 1701   | Smith                            | -              | 23,847           | 23,847               | 822       | 745        | 912 |
| 1696   | Anderson-Dietz 1-Dietz 2         | -              | 18,992           | 18,992               | 932       | 660        | 960 |
| 0084   | Lower Kittanning                 | 8,196          | 7,268            | 15,464               | 54        | 12         | 210 |
| 1569   | Beulah-Zap                       | -              | 15,196           | 15,196               | 196       | 114        | 210 |
| 0111   | Coalburg                         | 1,778          | 12,675           | 14,453               | 72        | 8          | 130 |
| 1787   | Roland                           | -              | 13,341           | 13,341               | 464       | 384        | 495 |
| 1570   | Hagel                            | -              | 10,942           | 10,942               | 137       | 135        | 144 |
| 0151   | Upper Elkhorn No. 3              | 8,339          | 2,143            | 10,482               | 44        | 8          | 120 |
| 0280   | Blue Creek                       | 9,852          | 472              | 10,324               | 56        | 10         | 76  |
| 1808   | Rosebud                          | -              | 9,511            | 9,511                | 262       | 186        | 276 |
| 0103   | Stockton-Lewiston                | 3,606          | 5,734            | 9,340                | 66        | 12         | 125 |
| 0344   | Pocahontas No. 3                 | 8,946          | -                | 8,946                | 60        | 34         | 84  |
| 1488   | Fruitland No. 8                  | 4,960          | 3,353            | 8,313                | 148       | 64         | 162 |
| 0121   | Winifrede                        | 4,025          | 4,191            | 8,216                | 58        | 12         | 110 |
| 0168   | Lower Elkhorn                    | 6,337          | 1,830            | 8,167                | 45        | 16         | 77  |
| 1750   | Wadge                            | 8,024          | -                | 8,024                | 118       | 100        | 118 |
| 0135   | Hazard No. 4                     | 3,265          | 4,065            | 7,330                | 42        | 8          | 78  |
| 0176   | Eagle                            | 5,720          | 1,477            | 7,196                | 40        | 19         | 52  |
| 1756   | E                                | 6,852          | -                | 6,852                | 120       | 120        | 120 |
| 0071   | Upper Freeport                   | 5,384          | 1,162            | 6,546                | 61        | 11         | 124 |
| <b>Major Coalbeds Total</b>                    | <b>255,836</b>                   | <b>505,423</b> | <b>761,260</b>   | <b>454</b>           | <b>8</b>  | <b>960</b> |     |
| <b>Other Coalbeds</b>                          | <b>85,753</b>                    | <b>165,294</b> | <b>251,048</b>   | <b>86</b>            | <b>4</b>  | <b>960</b> |     |
| <b>Unknown *</b>                               | <b>797</b>                       | <b>2,030</b>   | <b>4,151</b>     | <b>NA</b>            | <b>NA</b> | <b>NA</b>  |     |
| <b>U.S. Total</b>                              | <b>342,387</b>                   | <b>672,748</b> | <b>1,016,458</b> | <b>362</b>           | <b>-</b>  | <b>960</b> |     |

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, 'Coal Production and Preparation Report,' 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, 2012**

(thousand short tons)

| Coal-Producing State and Region <sup>1</sup> | 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                                      | 46              | 19,321         | -               | -              | -               | -             | -               | -            | 46              | 19,321           |
| Alaska                                       | -               | -              | 1               | 2,052          | -               | -             | -               | -            | 1               | 2,052            |
| Arizona                                      | 1               | 7,493          | -               | -              | -               | -             | -               | -            | 1               | 7,493            |
| Arkansas                                     | 2               | 98             | -               | -              | -               | -             | -               | -            | 2               | 98               |
| Colorado                                     | 9               | 20,569         | 3               | 7,997          | -               | -             | -               | -            | 12              | 28,566           |
| Illinois                                     | 24              | 48,486         | -               | -              | -               | -             | -               | -            | 24              | 48,486           |
| Indiana                                      | 29              | 36,720         | -               | -              | -               | -             | -               | -            | 29              | 36,720           |
| Kansas                                       | 1               | 16             | -               | -              | -               | -             | -               | -            | 1               | 16               |
| <b>Kentucky Total</b>                        | <b>357</b>      | <b>90,862</b>  | -               | -              | -               | -             | -               | -            | <b>357</b>      | <b>90,862</b>    |
| Kentucky (East)                              | 330             | 48,798         | -               | -              | -               | -             | -               | -            | 330             | 48,798           |
| Kentucky (West)                              | 27              | 42,063         | -               | -              | -               | -             | -               | -            | 27              | 42,063           |
| Louisiana                                    | -               | -              | -               | -              | 2               | 3,971         | -               | -            | 2               | 3,971            |
| Maryland                                     | 21              | 2,283          | -               | -              | -               | -             | -               | -            | 21              | 2,283            |
| Mississippi                                  | -               | -              | -               | -              | 1               | 2,953         | -               | -            | 1               | 2,953            |
| Missouri                                     | 2               | 422            | -               | -              | -               | -             | -               | -            | 2               | 422              |
| Montana                                      | 1               | 5,708          | 4               | 30,690         | 1               | 296           | -               | -            | 6               | 36,694           |
| New Mexico                                   | 3               | 14,833         | 1               | 7,619          | -               | -             | -               | -            | 4               | 22,452           |
| North Dakota                                 | -               | -              | -               | -              | 4               | 27,529        | -               | -            | 4               | 27,529           |
| Ohio   | 39              | 26,328         | -               | -              | -               | -             | -               | -            | 39              | 26,328           |
| Oklahoma                                     | 7               | 1,054          | -               | -              | -               | -             | -               | -            | 7               | 1,054            |
| <b>Pennsylvania Total</b>                    | <b>170</b>      | <b>52,384</b>  | -               | -              | -               | -             | <b>65</b>       | <b>2,335</b> | <b>235</b>      | <b>54,719</b>    |
| Pennsylvania (Anthracite)                    | -               | -              | -               | -              | -               | -             | 65              | 2,335        | 65              | 2,335            |
| Pennsylvania (Bituminous)                    | 170             | 52,384         | -               | -              | -               | -             | -               | -            | 170             | 52,384           |
| Tennessee                                    | 14              | 1,090          | -               | -              | -               | -             | -               | -            | 14              | 1,090            |
| Texas  | -               | -              | -               | -              | 12              | 44,178        | -               | -            | 12              | 44,178           |
| Utah   | 9               | 17,016         | -               | -              | -               | -             | -               | -            | 9               | 17,016           |
| Virginia                                     | 96              | 18,965         | -               | -              | -               | -             | -               | -            | 96              | 18,965           |
| <b>West Virginia Total</b>                   | <b>264</b>      | <b>120,425</b> | -               | -              | -               | -             | -               | -            | <b>264</b>      | <b>120,425</b>   |
| West Virginia (Northern)                     | 38              | 41,489         | -               | -              | -               | -             | -               | -            | 38              | 41,489           |
| West Virginia (Southern)                     | 226             | 78,935         | -               | -              | -               | -             | -               | -            | 226             | 78,935           |
| Wyoming                                      | -               | -              | 18              | 401,442        | -               | -             | -               | -            | 18              | 401,442          |
| <b>Appalachia Total</b>                      | <b>980</b>      | <b>289,595</b> | -               | -              | -               | -             | <b>65</b>       | <b>2,335</b> | <b>1,045</b>    | <b>291,929</b>   |
| Appalachia Central                           | 666             | 147,789        | -               | -              | -               | -             | -               | -            | 666             | 147,789          |
| Appalachia Northern                          | 268             | 122,485        | -               | -              | -               | -             | 65              | 2,335        | 333             | 124,819          |
| Appalachia Southern                          | 46              | 19,321         | -               | -              | -               | -             | -               | -            | 46              | 19,321           |
| <b>Interior Basin Total</b>                  | <b>92</b>       | <b>128,859</b> | -               | -              | <b>15</b>       | <b>51,102</b> | -               | -            | <b>107</b>      | <b>179,961</b>   |
| Illinois Basin                               | 80              | 127,270        | -               | -              | -               | -             | -               | -            | 80              | 127,270          |
| Interior                                     | 12              | 1,590          | -               | -              | 15              | 51,102        | -               | -            | 27              | 52,692           |
| <b>Western Total</b>                         | <b>23</b>       | <b>65,619</b>  | <b>27</b>       | <b>449,800</b> | <b>5</b>        | <b>27,825</b> | -               | -            | <b>55</b>       | <b>543,244</b>   |
| Powder River Basin                           | -               | -              | 16              | 419,066        | -               | -             | -               | -            | 16              | 419,066          |
| Uinta Region                                 | 13              | 35,953         | 3               | 7,997          | -               | -             | -               | -            | 16              | 43,950           |
| Western                                      | 10              | 29,666         | 8               | 22,737         | 5               | 27,825        | -               | -            | 23              | 80,228           |
| <b>East of Mississippi River</b>             | <b>1,060</b>    | <b>416,865</b> | -               | -              | <b>1</b>        | <b>2,953</b>  | <b>65</b>       | <b>2,335</b> | <b>1,126</b>    | <b>422,152</b>   |
| <b>West of Mississippi River</b>             | <b>35</b>       | <b>67,208</b>  | <b>27</b>       | <b>449,800</b> | <b>19</b>       | <b>75,974</b> | -               | -            | <b>81</b>       | <b>592,983</b>   |
| <b>U.S. Subtotal</b>                         | <b>1,095</b>    | <b>484,073</b> | <b>27</b>       | <b>449,800</b> | <b>20</b>       | <b>78,927</b> | <b>65</b>       | <b>2,335</b> | <b>1,207</b>    | <b>1,015,135</b> |
| <b>Refuse Recovery</b>                       | <b>19</b>       | <b>1,290</b>   | -               | -              | -               | -             | <b>3</b>        | <b>33</b>    | <b>22</b>       | <b>1,324</b>     |
| <b>U.S. Total</b>                            | <b>1,114</b>    | <b>485,363</b> | <b>27</b>       | <b>449,800</b> | <b>20</b>       | <b>78,927</b> | <b>68</b>       | <b>2,368</b> | <b>1,229</b>    | <b>1,016,458</b> |

<sup>1</sup> 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, 'Coal Production and Preparation Report,' 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, 2012**

(thousand short tons)

| Coal-Producing State and Region <sup>1</sup> | Union         |               | Nonunion       |                | Total          |                |
|--|---------------|---------------|----------------|----------------|----------------|----------------|
|  | Underground   | Surface       | Underground    | Surface        | Underground    | Surface        |
| Alabama                                      | 12,410        | -             | 139            | 6,669          | 12,549         | 6,669          |
| Alaska                                       | -             | 2,052         | -              | -              | -              | 2,052          |
| Arizona                                      | -             | 7,493         | -              | -              | -              | 7,493          |
| Arkansas                                     | -             | -             | 96             | -              | 96             | -              |
| Colorado                                     | 1,673         | 2,655         | 21,955         | 2,265          | 23,628         | 4,920          |
| Illinois                                     | 2,897         | -             | 39,939         | 5,649          | 42,837         | 5,649          |
| Indiana                                      | -             | -             | 15,558         | 21,156         | 15,558         | 21,156         |
| <b>Kentucky Total</b>                        | <b>3,951</b>  | <b>552</b>    | <b>53,891</b>  | <b>31,507</b>  | <b>57,842</b>  | <b>32,059</b>  |
| Kentucky (East)                              | -             | 552           | 23,753         | 23,572         | 23,753         | 24,124         |
| Kentucky (West)                              | 3,951         | -             | 30,138         | 7,935          | 34,089         | 7,935          |
| Louisiana                                    | -             | -             | -              | 3,971          | -              | 3,971          |
| Maryland                                     | -             | -             | 797            | 1,425          | 797            | 1,425          |
| Mississippi                                  | -             | -             | -              | 2,953          | -              | 2,953          |
| Missouri                                     | -             | -             | -              | 422            | -              | 422            |
| Montana                                      | -             | 13,787        | 5,708          | 17,199         | 5,708          | 30,986         |
| New Mexico                                   | 4,960         | 7,619         | -              | 9,872          | 4,960          | 17,492         |
| North Dakota                                 | -             | 6,639         | -              | 20,890         | -              | 27,529         |
| Ohio   | 5,768         | -             | 12,350         | 8,119          | 18,117         | 8,119          |
| Oklahoma                                     | -             | -             | 349            | 696            | 349            | 696            |
| <b>Pennsylvania Total</b>                    | <b>14,041</b> | <b>691</b>    | <b>30,920</b>  | <b>8,039</b>   | <b>44,961</b>  | <b>8,730</b>   |
| Pennsylvania (Anthracite)                    | -             | 529           | 39             | 1,335          | 39             | 1,864          |
| Pennsylvania (Bituminous)                    | 14,041        | 162           | 30,881         | 6,704          | 44,922         | 6,865          |
| Tennessee                                    | -             | -             | 559            | 479            | 559            | 479            |
| Texas  | -             | 31,032        | -              | 13,146         | -              | 44,178         |
| Utah   | 3,295         | -             | 13,151         | 570            | 16,446         | 570            |
| Virginia                                     | 838           | -             | 11,418         | 6,578          | 12,256         | 6,578          |
| <b>West Virginia Total</b>                   | <b>33,469</b> | <b>6,430</b>  | <b>46,821</b>  | <b>33,382</b>  | <b>80,289</b>  | <b>39,812</b>  |
| West Virginia (Northern)                     | 29,623        | -             | 9,802          | 1,997          | 39,425         | 1,997          |
| West Virginia (Southern)                     | 3,845         | 6,430         | 37,019         | 31,385         | 40,865         | 37,815         |
| Wyoming                                      | 4,637         | 5,532         | -              | 391,248        | 4,637          | 396,780        |
| <b>Appalachia Total</b>                      | <b>66,526</b> | <b>7,673</b>  | <b>126,757</b> | <b>88,262</b>  | <b>193,282</b> | <b>95,935</b>  |
| Appalachia Central                           | 4,683         | 6,982         | 72,749         | 62,014         | 77,432         | 68,996         |
| Appalachia Northern                          | 49,432        | 691           | 53,869         | 19,580         | 103,301        | 20,270         |
| Appalachia Southern                          | 12,410        | -             | 139            | 6,669          | 12,549         | 6,669          |
| <b>Interior Basin Total</b>                  | <b>6,848</b>  | <b>31,032</b> | <b>86,081</b>  | <b>55,927</b>  | <b>92,929</b>  | <b>86,960</b>  |
| Illinois Basin                               | 6,848         | -             | 85,635         | 34,740         | 92,483         | 34,740         |
| Interior                                     | -             | 31,032        | 446            | 21,188         | 446            | 52,220         |
| <b>Western Total</b>                         | <b>14,565</b> | <b>45,778</b> | <b>40,813</b>  | <b>442,045</b> | <b>55,378</b>  | <b>487,823</b> |
| Powder River Basin                           | -             | 13,490        | -              | 405,576        | -              | 419,066        |
| Uinta Region                                 | 4,968         | 2,301         | 34,415         | 2,265          | 39,384         | 4,567          |
| Western                                      | 9,597         | 29,986        | 6,398          | 34,204         | 15,995         | 64,190         |
| <b>East of Mississippi River</b>             | <b>73,374</b> | <b>7,673</b>  | <b>212,392</b> | <b>125,955</b> | <b>285,765</b> | <b>133,628</b> |
| <b>West of Mississippi River</b>             | <b>14,565</b> | <b>76,810</b> | <b>41,259</b>  | <b>460,280</b> | <b>55,824</b>  | <b>537,090</b> |
| <b>U.S. Subtotal</b>                         | <b>87,939</b> | <b>84,483</b> | <b>253,651</b> | <b>586,234</b> | <b>341,589</b> | <b>670,718</b> |
| <b>Unknown *</b>                             | <b>-</b>      | <b>-</b>      | <b>-</b>       | <b>-</b>       | <b>797</b>     | <b>2,030</b>   |
| <b>U.S. Total</b>                            | <b>87,939</b> | <b>84,483</b> | <b>253,651</b> | <b>586,234</b> | <b>342,387</b> | <b>672,748</b> |

<sup>1</sup> 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, 'Coal Production and Preparation Report,' 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, 2012**

(thousand short tons)

| Coal-Producing State       | Open Market Sales <sup>1</sup> | Captive Sales / Transactions <sup>2</sup> | Exports <sup>3</sup> | Total            |
|----------------------------|--------------------------------|---|----------------------|------------------|
| Alabama                    | 8,688                          | -   | 10,333               | 19,021           |
| Alaska                     | w                              | -   | 968                  | w                |
| Arizona                    | w                              | -   | -                    | w                |
| Arkansas                   | w                              | -   | -                    | w                |
| Colorado                   | 20,836                         | 4,552                                     | 3,468                | 28,856           |
| Illinois                   | 29,252                         | 5,113                                     | 12,341               | 46,705           |
| Indiana                    | 17,127                         | 18,404                                    | 375                  | 35,906           |
| <b>Kentucky Total</b>      | <b>76,602</b>                  | <b>6,884</b>                              | <b>5,668</b>         | <b>89,154</b>    |
| Kentucky (East)            | 37,324                         | 6,884                                     | 3,588                | 47,796           |
| Kentucky (West)            | 39,277                         | -   | 2,081                | 41,358           |
| Louisiana                  | w                              | -   | -                    | w                |
| Maryland                   | 2,024                          | -   | 262                  | 2,286            |
| Mississippi                | w                              | -   | -                    | w                |
| Missouri                   | w                              | -   | -                    | w                |
| Montana                    | w                              | w   | -                    | 36,823           |
| New Mexico                 | w                              | w   | -                    | 22,881           |
| North Dakota               | w                              | w   | -                    | 27,799           |
| Ohio                       | w                              | w   | -                    | 26,617           |
| Oklahoma                   | 1,071                          | -   | -                    | 1,071            |
| <b>Pennsylvania Total</b>  | <b>27,907</b>                  | <b>14,680</b>                             | <b>11,705</b>        | <b>54,293</b>    |
| Pennsylvania (Anthracite)  | 1,665                          | 702                                       | 149                  | 2,516            |
| Pennsylvania (Bituminous)  | 26,243                         | 13,977                                    | 11,556               | 51,776           |
| Tennessee                  | 1,048                          | -   | -                    | 1,048            |
| Texas                      | w                              | w   | -                    | 40,317           |
| Utah                       | w                              | w   | 953                  | 16,903           |
| Virginia                   | 6,359                          | 3,604                                     | 8,893                | 18,855           |
| <b>West Virginia Total</b> | <b>66,758</b>                  | <b>25,483</b>                             | <b>28,792</b>        | <b>121,033</b>   |
| West Virginia (Northern)   | 33,666                         | 2,256                                     | 5,476                | 41,399           |
| West Virginia (Southern)   | 33,092                         | 23,227                                    | 23,316               | 79,635           |
| Wyoming                    | 232,921                        | 167,104                                   | 1,196                | 401,221          |
| <b>U.S. Subtotal</b>       | <b>618,028</b>                 | <b>305,165</b>                            | <b>84,954</b>        | <b>1,008,147</b> |
| Other Exports *            | -                              | -   | 40,792               | 40,792           |
| <b>U.S. Total **</b>       | <b>618,028</b>                 | <b>305,165</b>                            | <b>125,746</b>       | <b>1,048,939</b> |

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

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

<sup>3</sup> 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.

w = Data withheld to avoid disclosure.

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

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

**Table 9. Major U.S. Coal Mines, 2012**

| Rank | Mine Name / Company  | Mine Type   | State         | Production (short tons) |
|------|--|-------------|---------------|-------------------------|
| 1    | North Antelope Rochelle Mine / Peabody Powder River Mining L | Surface     | Wyoming       | 107,639,188             |
| 2    | Black Thunder / Thunder Basin Coal Company Llc               | Surface     | Wyoming       | 93,082,919              |
| 3    | Cordero Mine / Cordero Mining Llc                            | Surface     | Wyoming       | 39,204,736              |
| 4    | Antelope Coal Mine / Antelope Coal Llc                       | Surface     | Wyoming       | 34,316,314              |
| 5    | Belle Ayr Mine / Alpha Coal West, Inc.                       | Surface     | Wyoming       | 24,227,846              |
| 6    | Eagle Butte Mine / Alpha Coal West, Inc.                     | Surface     | Wyoming       | 22,466,733              |
| 7    | Buckskin Mine / Kiewit Mining Group Inc.                     | Surface     | Wyoming       | 18,058,827              |
| 8    | Spring Creek Coal Company / Spring Creek Coal Llc            | Surface     | Montana       | 17,199,485              |
| 9    | Caballo Mine / Peabody Caballo Mining, Llc                   | Surface     | Wyoming       | 16,841,183              |
| 10   | Rawhide Mine / Peabody Caballo Mining, Llc                   | Surface     | Wyoming       | 14,721,376              |
| 11   | Freedom Mine / The Coteau Properties Company                 | Surface     | North Dakota  | 12,974,746              |
| 12   | Bailey Mine / Consol Pennsylvania Coal Compa                 | Underground | Pennsylvania  | 10,122,862              |
| 13   | Enlow Fork Mine / Consol Pennsylvania Coal Compa             | Underground | Pennsylvania  | 9,459,485               |
| 14   | Mcelroy Mine / Mcelroy Coal Company                          | Underground | West Virginia | 9,400,485               |
| 15   | River View Mine / River View Coal Llc                        | Underground | Kentucky      | 8,622,321               |
| 16   | El Segundo / Peabody New Mexico Services Di                  | Surface     | New Mexico    | 8,566,613               |
| 17   | Century Mine / American Energy Corporation                   | Underground | Ohio          | 8,446,709               |
| 18   | Kosse Strip / Luminant Mining Company Llc                    | Surface     | Texas         | 8,236,336               |
| 19   | Bear Run Mine / Peabody Bear Run Mining Llc                  | Surface     | Indiana       | 8,070,882               |
| 20   | Rosebud Mine&crusher/Conveyor / Western Energy Company       | Surface     | Montana       | 8,018,098               |
| 21   | Foidel Creek Mine / Peabody Twentymile Mining Llc            | Underground | Colorado      | 7,974,732               |
| 22   | Falkirk Mine / Falkirk Mining Company                        | Surface     | North Dakota  | 7,914,827               |
| 23   | Three Oaks / Luminant Mining Company Llc                     | Surface     | Texas         | 7,760,301               |
| 24   | Navajo Mine / Bhp Navajo Coal Company                        | Surface     | New Mexico    | 7,619,428               |
| 25   | Coal Creek Mine / Thunder Basin Coal Company Llc             | Surface     | Wyoming       | 7,564,231               |
| 26   | Mach #1 Mine / Mach Mining Llc                               | Underground | Illinois      | 7,528,061               |
| 27   | Kayenta Mine / Peabody Western Coal Company                  | Surface     | Arizona       | 7,493,276               |
| 28   | West Elk Mine / Mountain Coal Company, L.L.C.                | Underground | Colorado      | 6,852,136               |
| 29   | Cumberland Mine / Cumberland Coal Resources Lp               | Underground | Pennsylvania  | 6,425,363               |
| 30   | Dry Fork Mine / Western Fuels-Wyoming Inc                    | Surface     | Wyoming       | 6,006,787               |
| 31   | Loveridge #22 / Consolidation Coal Company                   | Underground | West Virginia | 5,869,454               |
| 32   | Powhatan No. 6 Mine / The Ohio Valley Coal Company           | Underground | Ohio          | 5,767,737               |
| 33   | Bull Mountains Mine No 1 / Signal Peak Energy Llc            | Underground | Montana       | 5,707,633               |
| 34   | Sufco / Canyon Fuel Company Llc                              | Underground | Utah          | 5,650,446               |
| 35   | The American Coal Company New / The American Coal Company    | Underground | Illinois      | 5,641,788               |
| 36   | Shoemaker Mine / Consolidation Coal Company                  | Underground | West Virginia | 5,316,374               |
| 37   | Cardinal / Warrior Coal Llc                                  | Underground | Kentucky      | 5,236,375               |
| 38   | Robinson Run No 95 / Consolidation Coal Company              | Underground | West Virginia | 4,992,046               |
| 39   | San Juan Mine 1 / San Juan Coal Company                      | Underground | New Mexico    | 4,960,375               |
| 40   | No 7 Mine / Jim Walter Resources Inc                         | Underground | Alabama       | 4,764,268               |
| 41   | Mc#1 Mine / M-Class Mining Llc                               | Underground | Illinois      | 4,690,260               |
| 42   | Kemmerer Mine / Westmoreland Kemmerer Inc                    | Surface     | Wyoming       | 4,644,628               |
| 43   | Bridger Underground Coal Mine / Bridger Coal Company         | Underground | Wyoming       | 4,636,557               |
| 44   | Emerald Mine No 1 / Emerald Coal Resources Lp                | Underground | Pennsylvania  | 4,384,253               |
| 45   | Center Mine / Bni Coal Ltd                                   | Surface     | North Dakota  | 4,324,815               |
| 46   | Beckville Strip / Luminant Mining Company Llc                | Surface     | Texas         | 4,307,301               |
| 47   | South Hallsville No 1 Mine / The Sabine Mining Company       | Surface     | Texas         | 4,252,226               |
| 48   | Wyodak Mine / Wyodak Resources Development C                 | Surface     | Wyoming       | 4,245,981               |
| 49   | Jewett Mine / Texas Westmoreland Coal Co.                    | Surface     | Texas         | 4,227,779               |
| 50   | Federal No 2 / Eastern Associated Coal Llc                   | Underground | West Virginia | 4,044,937               |
|      | <b>Subtotal</b>  |             |               | <b>650,481,519</b>      |
|      | <b>All Other Mines</b>                                       |             |               | <b>365,976,899</b>      |
|      | <b>U.S. Total</b>  |             |               | <b>1,016,458,418</b>    |

Note: Major mines are mines that produced more than 4 million short tons in 2012. Company listed indicates the firm operating the mine.

Source: U.S. Energy Information Administration Form EIA-7A, 'Coal Production and Preparation Report,' 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, 2012**

| <b>Rank</b> | <b>Controlling Company Name</b>         | <b>Production (thousand short tons)</b> | <b>Percent of Total Production</b> |
|-------------|---|---|------------------------------------|
| 1           | Peabody Energy Corp                     | 192,563                                 | 18.9                               |
| 2           | Arch Coal Inc                           | 136,992                                 | 13.5                               |
| 3           | Alpha Natural Resources LLC             | 104,306                                 | 10.3                               |
| 4           | Cloud Peak Energy                       | 90,721                                  | 8.9                                |
| 5           | CONSOL Energy Inc                       | 55,752                                  | 5.5                                |
| 6           | Alliance Resource Operating Partners LP | 35,406                                  | 3.5                                |
| 7           | Energy Future Holdings Corp             | 31,032                                  | 3.1                                |
| 8           | Murray Energy Corp                      | 29,216                                  | 2.9                                |
| 9           | NACCO Industries Inc                    | 28,207                                  | 2.8                                |
| 10          | Patriot Coal Corp                       | 23,946                                  | 2.4                                |
| 11          | Peter Kiewit Sons Inc                   | 22,725                                  | 2.2                                |
| 12          | Westmoreland Coal Co                    | 22,215                                  | 2.2                                |
| 13          | BHP Billiton Ltd                        | 12,580                                  | 1.2                                |
| 14          | Walter Energy Inc                       | 11,220                                  | 1.1                                |
| 15          | Cline Group (The)                       | 9,230                                   | 0.9                                |
| 16          | PacifiCorp                              | 8,819                                   | 0.9                                |
| 17          | James River Coal Co                     | 8,774                                   | 0.9                                |
| 18          | Armstrong Energy Inc                    | 8,769                                   | 0.9                                |
| 19          | Western Fuels Association Inc           | 8,442                                   | 0.8                                |
| 20          | Rosebud Mining Co                       | 7,767                                   | 0.8                                |
| 21          | Coalfield Transport Inc                 | 7,056                                   | 0.7                                |
| 22          | Oxford Resource Partners LP             | 6,086                                   | 0.6                                |
| 23          | Cliffs Natural Resources Inc            | 6,068                                   | 0.6                                |
| 24          | Boich Group LLC                         | 5,708                                   | 0.6                                |
| 25          | Ambre Energy North America              | 5,630                                   | 0.6                                |
|             | <b>Subtotal</b>                         | <b>879,229</b>                          | <b>86.5</b>                        |
|             | <b>All Other Coal Producers</b>         | <b>137,230</b>                          | <b>13.5</b>                        |
|             | <b>U.S. Total</b>                       | <b>1,016,458</b>                        | <b>100.0</b>                       |

Note: The listed companies each produced more than 5 million short tons of coal in 2012. 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: Velocity Suite, Ventyx 2013 and U.S. Department of Labor, Mine Safety and Health Administration Form 7000-2, 'Quarterly Mine Employment and Coal Production Report.'

# Productive Capacity

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**Table 11. Productive Capacity of Coal Mines by State, 2012 and 2011**

(thousand short tons)

| Coal-Producing State       | 2012           |                |                  | 2011           |                |                  | Percent Change |              |              |
|----------------------------|----------------|----------------|------------------|----------------|----------------|------------------|----------------|--------------|--------------|
|                            | Underground    | Surface        | Total            | Underground    | Surface        | Total            | Underground    | Surface      | Total        |
| Alabama                    | 14,594         | 7,967          | 22,561           | 16,102         | 8,911          | 25,013           | -9.4           | -10.6        | -9.8         |
| Alaska                     | -              | w              | w                | -              | w              | w                | -              | w            | w            |
| Arizona                    | -              | w              | w                | -              | w              | w                | -              | w            | w            |
| Arkansas                   | w              | -              | w                | w              | -              | w                | w              | -            | w            |
| Colorado                   | w              | w              | 37,270           | w              | w              | 36,009           | w              | w            | 3.5          |
| Illinois                   | 60,317         | 9,840          | 70,157           | 45,613         | 9,495          | 55,108           | 32.2           | 3.6          | 27.3         |
| Indiana                    | 16,445         | 28,488         | 44,933           | 19,388         | 27,185         | 46,573           | -15.2          | 4.8          | -3.5         |
| Kansas                     | -              | -              | -                | -              | w              | w                | -              | w            | w            |
| <b>Kentucky Total</b>      | <b>74,602</b>  | <b>52,062</b>  | <b>126,664</b>   | <b>83,553</b>  | <b>61,539</b>  | <b>145,092</b>   | <b>-10.7</b>   | <b>-15.4</b> | <b>-12.7</b> |
| Kentucky (East)            | 30,656         | 36,261         | 66,917           | 41,203         | 45,084         | 86,287           | -25.6          | -19.6        | -22.4        |
| Kentucky (West)            | 43,945         | 15,801         | 59,747           | 42,350         | 16,455         | 58,805           | 3.8            | -4.0         | 1.6          |
| Louisiana                  | -              | w              | w                | -              | w              | w                | -              | w            | w            |
| Maryland                   | w              | w              | 3,282            | w              | w              | 3,682            | w              | w            | -10.9        |
| Mississippi                | -              | w              | w                | -              | w              | w                | -              | w            | w            |
| Missouri                   | -              | w              | w                | -              | w              | w                | -              | w            | w            |
| Montana                    | w              | w              | 55,600           | w              | w              | 57,615           | w              | w            | -3.5         |
| New Mexico                 | w              | w              | 26,572           | w              | w              | 26,950           | w              | w            | -1.4         |
| North Dakota               | -              | 32,900         | 32,900           | -              | 32,900         | 32,900           | -              | -            | -            |
| Ohio                       | 21,811         | 24,383         | 46,193           | 19,924         | 22,342         | 42,266           | 9.5            | 9.1          | 9.3          |
| Oklahoma                   | w              | w              | 1,223            | w              | w              | 1,355            | w              | w            | -9.7         |
| <b>Pennsylvania Total</b>  | <b>51,383</b>  | <b>12,481</b>  | <b>63,864</b>    | <b>53,582</b>  | <b>14,936</b>  | <b>68,518</b>    | <b>-4.1</b>    | <b>-16.4</b> | <b>-6.8</b>  |
| Pennsylvania (Anthracite)  | 126            | 3,620          | 3,745            | w              | w              | 3,571            | w              | w            | 4.9          |
| Pennsylvania (Bituminous)  | 51,257         | 8,861          | 60,118           | w              | w              | 64,948           | w              | w            | -7.4         |
| Tennessee                  | w              | w              | 1,252            | 495            | 1,513          | 2,009            | w              | w            | -37.7        |
| Texas                      | -              | 47,050         | 47,050           | -              | 49,676         | 49,676           | -              | -5.3         | -5.3         |
| Utah                       | w              | w              | 24,854           | 23,000         | -              | 23,000           | w              | w            | 8.1          |
| Virginia                   | 14,164         | 8,853          | 23,017           | 16,409         | 9,158          | 25,567           | -13.7          | -3.3         | -10.0        |
| <b>West Virginia Total</b> | <b>98,387</b>  | <b>51,542</b>  | <b>149,929</b>   | <b>104,421</b> | <b>60,246</b>  | <b>164,667</b>   | <b>-5.8</b>    | <b>-14.4</b> | <b>-9.0</b>  |
| West Virginia (Northern)   | 44,148         | 3,660          | 47,808           | 42,628         | 5,153          | 47,782           | 3.6            | -29.0        | 0.1          |
| West Virginia (Southern)   | 54,240         | 47,881         | 102,121          | 61,793         | 55,093         | 116,886          | -12.2          | -13.1        | -12.6        |
| Wyoming                    | w              | w              | 487,065          | w              | w              | 504,435          | w              | w            | -3.4         |
| <b>U.S. Total</b>          | <b>431,888</b> | <b>852,481</b> | <b>1,284,369</b> | <b>435,160</b> | <b>895,408</b> | <b>1,330,567</b> | <b>-0.8</b>    | <b>-4.8</b>  | <b>-3.5</b>  |

s = Absolute percentage less than 0.05.

- = No data reported.

w = Data withheld to avoid disclosure.

Note: Productive capacity is the maximum amount of coal that can be produced annually as reported by mining companies on Form EIA-7A, 'Coal Production and Preparation Report.' 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, 'Coal Production and Preparation Report.'

**Table 12. Capacity Utilization of Coal Mines by State, 2012 and 2011**

(percent)

| Coal-Producing State       | 2012         |              |              | 2011         |              |              |
|----------------------------|--------------|--------------|--------------|--------------|--------------|--------------|
|                            | Underground  | Surface      | Total        | Underground  | Surface      | Total        |
| Alabama                    | 85.99        | 83.96        | 85.28        | 67.52        | 90.91        | 75.85        |
| Alaska                     | -            | w            | w            | -            | w            | w            |
| Arizona                    | -            | w            | w            | -            | w            | w            |
| Arkansas                   | w            | -            | w            | w            | -            | w            |
| Colorado                   | w            | w            | 76.65        | w            | w            | 74.63        |
| Illinois                   | 71.02        | 57.41        | 69.11        | 71.73        | 53.22        | 68.54        |
| Indiana                    | 94.65        | 74.26        | 81.72        | 84.94        | 77.09        | 80.36        |
| Kansas                     | -            | -            | -            | -            | w            | w            |
| <b>Kentucky Total</b>      | <b>77.53</b> | <b>61.58</b> | <b>70.98</b> | <b>77.70</b> | <b>69.36</b> | <b>74.16</b> |
| Kentucky (East)            | 77.48        | 66.53        | 71.55        | 80.12        | 74.89        | 77.39        |
| Kentucky (West)            | 77.57        | 50.22        | 70.34        | 75.33        | 54.20        | 69.42        |
| Louisiana                  | -            | w            | w            | -            | w            | w            |
| Maryland                   | w            | w            | 67.72        | w            | w            | 77.78        |
| Mississippi                | -            | w            | w            | -            | w            | w            |
| Missouri                   | -            | w            | w            | -            | w            | w            |
| Montana                    | w            | w            | 66.00        | w            | w            | 72.91        |
| New Mexico                 | w            | w            | 84.49        | w            | w            | 81.34        |
| North Dakota               | -            | 83.67        | 83.67        | -            | 85.81        | 85.81        |
| Ohio                       | 83.07        | 33.30        | 56.80        | 95.22        | 40.79        | 66.45        |
| Oklahoma                   | w            | w            | 85.51        | w            | w            | 84.25        |
| <b>Pennsylvania Total</b>  | <b>87.59</b> | <b>72.11</b> | <b>84.57</b> | <b>88.24</b> | <b>74.47</b> | <b>85.23</b> |
| Pennsylvania (Anthracite)  | 68.83        | 58.99        | 59.32        | w            | w            | 57.22        |
| Pennsylvania (Bituminous)  | 87.64        | 77.48        | 86.14        | w            | w            | 86.77        |
| Tennessee                  | w            | w            | 82.88        | 84.93        | 71.56        | 74.86        |
| Texas                      | -            | 93.90        | 93.90        | -            | 92.41        | 92.41        |
| Utah                       | w            | w            | 68.46        | 85.43        | -            | 85.43        |
| Virginia                   | 86.53        | 74.30        | 81.83        | 93.79        | 75.43        | 87.21        |
| <b>West Virginia Total</b> | <b>81.63</b> | <b>77.24</b> | <b>80.12</b> | <b>79.69</b> | <b>84.58</b> | <b>81.48</b> |
| West Virginia (Northern)   | 89.30        | 54.55        | 86.64        | 90.46        | 61.12        | 87.30        |
| West Virginia (Southern)   | 75.39        | 78.98        | 77.07        | 72.26        | 86.78        | 79.10        |
| Wyoming                    | w            | w            | 82.42        | w            | w            | 86.96        |
| <b>U.S. Total</b>          | <b>79.11</b> | <b>78.71</b> | <b>78.85</b> | <b>79.27</b> | <b>83.32</b> | <b>81.99</b> |

- = No data reported.

w = Data withheld to avoid disclosure.

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, 'Coal Production and Preparation Report,' 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, 2012**

(thousand short tons)

| Coal-Producing State       | Continuous <sup>1</sup> |                              | Conventional and Other <sup>2</sup> |                              | Longwall <sup>3</sup> |                              | Total               |                              |
|----------------------------|-------------------------|------------------------------|-------------------------------------|------------------------------|-----------------------|------------------------------|---------------------|------------------------------|
|                            | Productive Capacity     | Capacity Utilization Percent | Productive Capacity                 | Capacity Utilization Percent | Productive Capacity   | Capacity Utilization Percent | Productive Capacity | Capacity Utilization Percent |
| Alabama                    | w                       | w                            | -                                   | -                            | w                     | w                            | 14,594              | 85.99                        |
| Arkansas                   | w                       | w                            | -                                   | -                            | -                     | -                            | w                   | w                            |
| Colorado                   | w                       | w                            | -                                   | -                            | w                     | w                            | w                   | w                            |
| Illinois                   | 24,811                  | 76.45                        | -                                   | -                            | 35,506                | 67.22                        | 60,317              | 71.02                        |
| Indiana                    | 16,445                  | 94.65                        | -                                   | -                            | -                     | -                            | 16,445              | 94.65                        |
| <b>Kentucky Total</b>      | <b>w</b>                | <b>w</b>                     | <b>w</b>                            | <b>w</b>                     | <b>-</b>              | <b>-</b>                     | <b>74,602</b>       | <b>77.53</b>                 |
| Kentucky (East)            | w                       | w                            | w                                   | w                            | -                     | -                            | 30,656              | 77.48                        |
| Kentucky (West)            | 43,945                  | 77.57                        | -                                   | -                            | -                     | -                            | 43,945              | 77.57                        |
| Maryland                   | w                       | w                            | -                                   | -                            | -                     | -                            | w                   | w                            |
| Montana                    | -                       | -                            | -                                   | -                            | w                     | w                            | w                   | w                            |
| New Mexico                 | -                       | -                            | -                                   | -                            | w                     | w                            | w                   | w                            |
| Ohio                       | w                       | w                            | -                                   | -                            | w                     | w                            | 21,811              | 83.07                        |
| Oklahoma                   | w                       | w                            | -                                   | -                            | -                     | -                            | w                   | w                            |
| <b>Pennsylvania Total</b>  | <b>15,829</b>           | <b>71.81</b>                 | <b>w</b>                            | <b>w</b>                     | <b>w</b>              | <b>w</b>                     | <b>51,383</b>       | <b>87.59</b>                 |
| Pennsylvania (Anthracite)  | w                       | w                            | w                                   | w                            | -                     | -                            | 126                 | 68.83                        |
| Pennsylvania (Bituminous)  | w                       | w                            | -                                   | -                            | w                     | w                            | 51,257              | 87.64                        |
| Tennessee                  | w                       | w                            | -                                   | -                            | -                     | -                            | w                   | w                            |
| Utah                       | w                       | w                            | -                                   | -                            | w                     | w                            | w                   | w                            |
| Virginia                   | w                       | w                            | -                                   | -                            | w                     | w                            | 14,164              | 86.53                        |
| <b>West Virginia Total</b> | <b>50,463</b>           | <b>75.14</b>                 | <b>w</b>                            | <b>w</b>                     | <b>w</b>              | <b>w</b>                     | <b>98,387</b>       | <b>81.63</b>                 |
| West Virginia (Northern)   | 6,970                   | 79.15                        | -                                   | -                            | 37,178                | 91.21                        | 44,148              | 89.30                        |
| West Virginia (Southern)   | 43,493                  | 74.50                        | w                                   | w                            | w                     | w                            | 54,240              | 75.39                        |
| Wyoming                    | -                       | -                            | -                                   | -                            | w                     | w                            | w                   | w                            |
| <b>U.S. Total</b>          | <b>202,305</b>          | <b>77.54</b>                 | <b>2,860</b>                        | <b>75.89</b>                 | <b>226,722</b>        | <b>80.56</b>                 | <b>431,888</b>      | <b>79.11</b>                 |

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

<sup>2</sup> 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.

<sup>3</sup> 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.

w = Data withheld to avoid disclosure.

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, 'Coal Production and Preparation Report,' 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

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**Table 14. Recoverable Coal Reserves and Average Recovery Percentage at Producing Mines by State, 2012 and 2011**

(million short tons)

| Coal-Producing State       | 2012                      |                             | 2011                      |                             | Percent Change Recoverable Coal Reserves |
|----------------------------|---------------------------|-----------------------------|---------------------------|-----------------------------|--|
|                            | Recoverable Coal Reserves | Average Recovery Percentage | Recoverable Coal Reserves | Average Recovery Percentage |  |
| Alabama                    | 265                       | 53.63                       | 306                       | 55.39                       | -13.2                                    |
| Alaska                     | w                         | w                           | w                         | w                           | w  |
| Arizona                    | w                         | w                           | w                         | w                           | w  |
| Arkansas                   | w                         | w                           | w                         | w                           | w  |
| Colorado                   | 300                       | 69.62                       | 225                       | 68.47                       | 33.5                                     |
| Illinois                   | 2,215                     | 58.06                       | 2,311                     | 61.23                       | -4.1                                     |
| Indiana                    | 600                       | 68.59                       | 654                       | 66.42                       | -8.3                                     |
| Kansas                     | -                         | -                           | w                         | w                           | w  |
| <b>Kentucky Total</b>      | <b>1,263</b>              | <b>57.70</b>                | <b>1,419</b>              | <b>54.84</b>                | <b>-11.0</b>                             |
| Kentucky (East)            | 644                       | 55.25                       | 734                       | 52.90                       | -12.2                                    |
| Kentucky (West)            | 619                       | 60.26                       | 686                       | 56.91                       | -9.8                                     |
| Louisiana                  | w                         | w                           | w                         | w                           | w  |
| Maryland                   | 34                        | 74.89                       | 36                        | 71.17                       | -6.9                                     |
| Mississippi                | w                         | w                           | w                         | w                           | w  |
| Missouri                   | w                         | w                           | w                         | w                           | w  |
| Montana                    | 960                       | 85.97                       | 846                       | 88.15                       | 13.5                                     |
| New Mexico                 | 497                       | 90.58                       | 518                       | 88.14                       | -4.1                                     |
| North Dakota               | 1,128                     | 90.38                       | 1,183                     | 90.42                       | -4.7                                     |
| Ohio                       | 235                       | 68.57                       | 258                       | 64.02                       | -8.9                                     |
| Oklahoma                   | 11                        | 64.34                       | 11                        | 64.54                       | 0.6                                      |
| <b>Pennsylvania Total</b>  | <b>554</b>                | <b>62.80</b>                | <b>615</b>                | <b>63.22</b>                | <b>-9.9</b>                              |
| Pennsylvania (Anthracite)  | 131                       | 40.81                       | 128                       | 38.84                       | 2.2                                      |
| Pennsylvania (Bituminous)  | 423                       | 69.59                       | 487                       | 69.62                       | -13.0                                    |
| Tennessee                  | 4                         | 57.27                       | 8                         | 59.63                       | -50.4                                    |
| Texas                      | 751                       | 93.45                       | 736                       | 93.37                       | 2.1                                      |
| Utah                       | 199                       | 63.82                       | 201                       | 55.40                       | -0.9                                     |
| Virginia                   | 283                       | 57.06                       | 348                       | 54.07                       | -18.8                                    |
| <b>West Virginia Total</b> | <b>1,842</b>              | <b>57.27</b>                | <b>2,076</b>              | <b>55.36</b>                | <b>-11.2</b>                             |
| West Virginia (Northern)   | 480                       | 59.99                       | 483                       | 62.45                       | -0.6                                     |
| West Virginia (Southern)   | 1,362                     | 56.31                       | 1,593                     | 53.21                       | -14.5                                    |
| Wyoming                    | 6,932                     | 91.92                       | 6,898                     | 91.23                       | 0.5                                      |
| <b>U.S. Total</b>          | <b>18,664</b>             | <b>77.99</b>                | <b>19,223</b>             | <b>76.73</b>                | <b>-2.9</b>                              |

-- No data reported.

w = Data withheld to avoid disclosure.

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, 'Coal Production and Preparation Report,' 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 by Mining Method, 2012**

(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                    | 209                                     | 425                            | 844                       | 56                                      | 2,230                          | 3,130                     | 265                                     | 2,655                          | 3,974                     |
| Alaska                     | -                                       | 2,335                          | 5,423                     | w                                       | 487                            | 672                       | w                                       | 2,821                          | 6,094                     |
| Arizona                    | -                                       | -                              | -                         | w                                       | -                              | -                         | w                                       | -                              | -                         |
| Arkansas                   | w                                       | 127                            | 272                       | -                                       | 101                            | 144                       | w                                       | 228                            | 416                       |
| Colorado                   | w                                       | 5,811                          | 11,073                    | w                                       | 3,744                          | 4,759                     | 300                                     | 9,555                          | 15,832                    |
| Georgia                    | -                                       | 1                              | 2                         | -                                       | 1                              | 2                         | -                                       | 2                              | 4                         |
| Idaho                      | -                                       | 2                              | 4                         | -                                       | -                              | -                         | -                                       | 2                              | 4                         |
| Illinois                   | w                                       | 27,792                         | 87,493                    | w                                       | 10,044                         | 16,502                    | 2,215                                   | 37,835                         | 103,995                   |
| Indiana                    | 252                                     | 3,544                          | 8,556                     | 348                                     | 318                            | 544                       | 600                                     | 3,862                          | 9,100                     |
| Iowa                       | -                                       | 807                            | 1,732                     | -                                       | 320                            | 457                       | -                                       | 1,127                          | 2,189                     |
| Kansas                     | -                                       | -                              | -                         | -                                       | 680                            | 971                       | -                                       | 680                            | 971                       |
| <b>Kentucky Total</b>      | <b>1,071</b>                            | <b>6,947</b>                   | <b>16,130</b>             | <b>192</b>                              | <b>7,266</b>                   | <b>12,583</b>             | <b>1,263</b>                            | <b>14,213</b>                  | <b>28,713</b>             |
| Kentucky (East)            | w                                       | 360                            | 644                       | w                                       | 5,030                          | 9,008                     | 644                                     | 5,390                          | 9,652                     |
| Kentucky (West)            | w                                       | 6,587                          | 15,486                    | w                                       | 2,236                          | 3,574                     | 619                                     | 8,823                          | 19,061                    |
| Louisiana                  | -                                       | -                              | -                         | w                                       | 288                            | 388                       | w                                       | 288                            | 388                       |
| Maryland                   | w                                       | 309                            | 564                       | w                                       | 33                             | 48                        | 34                                      | 342                            | 612                       |
| Michigan                   | -                                       | 55                             | 123                       | -                                       | 3                              | 5                         | -                                       | 58                             | 128                       |
| Mississippi                | -                                       | -                              | -                         | w                                       | -                              | -                         | w                                       | -                              | -                         |
| Missouri                   | -                                       | 689                            | 1,479                     | w                                       | 3,155                          | 4,507                     | w                                       | 3,844                          | 5,986                     |
| Montana                    | w                                       | 35,906                         | 70,925                    | w                                       | 38,738                         | 47,927                    | 960                                     | 74,644                         | 118,851                   |
| New Mexico                 | w                                       | 2,763                          | 6,073                     | w                                       | 4,075                          | 5,819                     | 497                                     | 6,838                          | 11,892                    |
| North Carolina             | -                                       | 5                              | 11                        | -                                       | -                              | -                         | -                                       | 5                              | 11                        |
| North Dakota               | -                                       | -                              | -                         | 1,128                                   | 6,711                          | 8,797                     | 1,128                                   | 6,711                          | 8,797                     |
| Ohio                       | w                                       | 7,614                          | 17,306                    | w                                       | 3,717                          | 5,679                     | 235                                     | 11,331                         | 22,985                    |
| Oklahoma                   | w                                       | 571                            | 1,225                     | w                                       | 221                            | 315                       | 11                                      | 791                            | 1,540                     |
| Oregon                     | -                                       | 6                              | 15                        | -                                       | 2                              | 3                         | -                                       | 9                              | 17                        |
| <b>Pennsylvania Total</b>  | <b>355</b>                              | <b>10,337</b>                  | <b>22,522</b>             | <b>199</b>                              | <b>985</b>                     | <b>4,155</b>              | <b>554</b>                              | <b>11,322</b>                  | <b>26,677</b>             |
| Pennsylvania (Anthracite)  | w                                       | 340                            | 3,841                     | w                                       | 418                            | 3,341                     | 131                                     | 758                            | 7,183                     |
| Pennsylvania (Bituminous)  | w                                       | 9,997                          | 18,681                    | w                                       | 567                            | 814                       | 423                                     | 10,564                         | 19,495                    |
| South Dakota               | -                                       | -                              | -                         | -                                       | 277                            | 366                       | -                                       | 277                            | 366                       |
| Tennessee                  | w                                       | 274                            | 500                       | w                                       | 171                            | 253                       | 4                                       | 445                            | 753                       |
| Texas                      | -                                       | -                              | -                         | 751                                     | 9,252                          | 12,019                    | 751                                     | 9,252                          | 12,019                    |
| Utah                       | w                                       | 2,365                          | 4,825                     | w                                       | 211                            | 267                       | 199                                     | 2,576                          | 5,091                     |
| Virginia                   | 234                                     | 517                            | 920                       | 49                                      | 312                            | 488                       | 283                                     | 829                            | 1,408                     |
| Washington                 | -                                       | 674                            | 1,332                     | -                                       | 6                              | 8                         | -                                       | 681                            | 1,340                     |
| <b>West Virginia Total</b> | <b>1,337</b>                            | <b>14,949</b>                  | <b>28,010</b>             | <b>505</b>                              | <b>2,064</b>                   | <b>3,271</b>              | <b>1,842</b>                            | <b>17,013</b>                  | <b>31,281</b>             |
| West Virginia (Northern)   | w                                       | NA                             | NA                        | w                                       | NA                             | NA                        | 480                                     | NA                             | NA                        |
| West Virginia (Southern)   | w                                       | NA                             | NA                        | w                                       | NA                             | NA                        | 1,362                                   | NA                             | NA                        |
| Wyoming                    | w                                       | 22,926                         | 42,456                    | w                                       | 14,487                         | 17,495                    | 6,932                                   | 37,413                         | 59,951                    |
| <b>U.S. Total</b>          | <b>6,656</b>                            | <b>147,750</b>                 | <b>329,814</b>            | <b>12,008</b>                           | <b>109,898</b>                 | <b>151,571</b>            | <b>18,664</b>                           | <b>257,648</b>                 | <b>481,385</b>            |

- = No data reported.

w = Data withheld to avoid disclosure.

NA = Not Available.

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, 2013.' 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, 2012. 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, 'Coal Production and Preparation Report,' 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, 2012**

(million short tons)

| Coal-Producing State       | Continuous <sup>1</sup>                      |                             | Conventional and Other <sup>2</sup>          |                             | Longwall <sup>3</sup>                        |                             | 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                    | w  | w                           | -  | -                           | w  | w                           | 209  | 45.95                       |
| Arkansas                   | w  | w                           | -  | -                           | -  | -                           | w  | w                           |
| Colorado                   | w  | w                           | -  | -                           | w  | w                           | w  | w                           |
| Illinois                   | 486  | 51.46                       | -  | -                           | w  | w                           | w  | w                           |
| Indiana                    | 252  | 54.72                       | -  | -                           | -  | -                           | 252  | 54.72                       |
| <b>Kentucky Total</b>      | <b>w</b>                                     | <b>w</b>                    | <b>w</b>                                     | <b>w</b>                    | <b>-</b>                                     | <b>-</b>                    | <b>1,071</b>                                 | <b>52.78</b>                |
| Kentucky (East)            | w  | w                           | w  | w                           | -  | -                           | w  | w                           |
| Kentucky (West)            | w  | w                           | -  | -                           | -  | -                           | w  | w                           |
| Maryland                   | w  | w                           | -  | -                           | -  | -                           | w  | w                           |
| Montana                    | -  | -                           | -  | -                           | w  | w                           | w  | w                           |
| New Mexico                 | -  | -                           | -  | -                           | w  | w                           | w  | w                           |
| Ohio                       | w  | w                           | -  | -                           | w  | w                           | w  | w                           |
| Oklahoma                   | w  | w                           | -  | -                           | -  | -                           | w  | w                           |
| <b>Pennsylvania Total</b>  | <b>130</b>                                   | <b>56.98</b>                | <b>w</b>                                     | <b>w</b>                    | <b>w</b>                                     | <b>w</b>                    | <b>355</b>                                   | <b>65.82</b>                |
| Pennsylvania (Anthracite)  | w  | w                           | w  | w                           | -  | -                           | w  | w                           |
| Pennsylvania (Bituminous)  | w  | w                           | -  | -                           | w  | w                           | w  | w                           |
| Tennessee                  | w  | w                           | -  | -                           | -  | -                           | w  | w                           |
| Utah                       | w  | w                           | -  | -                           | w  | w                           | w  | w                           |
| Virginia                   | w  | w                           | -  | -                           | w  | w                           | 234  | 51.98                       |
| <b>West Virginia Total</b> | <b>784</b>                                   | <b>47.56</b>                | <b>w</b>                                     | <b>w</b>                    | <b>w</b>                                     | <b>w</b>                    | <b>1,337</b>                                 | <b>50.97</b>                |
| West Virginia (Northern)   | 113  | 51.41                       | -  | -                           | w  | w                           | w  | w                           |
| West Virginia (Southern)   | 671  | 46.92                       | w  | w                           | w  | w                           | w  | w                           |
| Wyoming                    | -  | -                           | -  | -                           | w  | w                           | w  | w                           |
| <b>U.S. Total</b>          | <b>3,125</b>                                 | <b>52.33</b>                | <b>26</b>                                    | <b>44.13</b>                | <b>3,505</b>                                 | <b>59.53</b>                | <b>6,656</b>                                 | <b>56.09</b>                |

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.

w = Data withheld to avoid disclosure.

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, 'Coal Production and Preparation Report,' 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, 2012**

(million short tons)

| Mine Production Range<br>(thousand short tons) | Underground               |                             | Surface                   |                             | Total                     |                             |
|--|---------------------------|-----------------------------|---------------------------|-----------------------------|---------------------------|-----------------------------|
|  | Recoverable Coal Reserves | Average Recovery Percentage | Recoverable Coal Reserves | Average Recovery Percentage | Recoverable Coal Reserves | Average Recovery Percentage |
| Over 1,000                                     | 4,874                     | 57.96                       | 11,153                    | 91.28                       | 16,028                    | 81.15                       |
| Over 500 to 1,000                              | 531                       | 47.14                       | 226                       | 81.90                       | 757                       | 57.49                       |
| Over 200 to 500                                | 604                       | 52.72                       | 333                       | 69.16                       | 938                       | 58.57                       |
| Over 100 to 200                                | 320                       | 50.82                       | 183                       | 74.25                       | 503                       | 59.32                       |
| Over 50 to 100                                 | 147                       | 52.96                       | 62                        | 83.82                       | 209                       | 62.08                       |
| Over 10 to 50                                  | 178                       | 55.14                       | 51                        | 73.87                       | 229                       | 59.30                       |
| 10 or Under                                    | -                         | 38.00                       | -                         | 60.47                       | -                         | 50.90                       |
| <b>U.S. Total</b>                              | <b>6,656</b>              | <b>56.09</b>                | <b>12,008</b>             | <b>90.12</b>                | <b>18,664</b>             | <b>77.99</b>                |

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

# Employment

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**Table 18. Average Number of Employees by State and Mine Type, 2012 and 2011**

| Coal-Producing State and Region <sup>1</sup> | 2012          |               |               | 2011          |               |               | Percent Change |              |              |
|--|---------------|---------------|---------------|---------------|---------------|---------------|----------------|--------------|--------------|
|  | Underground   | Surface       | Total         | Underground   | Surface       | Total         | Underground    | Surface      | Total        |
| Alabama                                      | 3,190         | 1,851         | 5,041         | 3,138         | 1,618         | 4,756         | 1.7            | 14.4         | 6.0          |
| Alaska                                       | -             | 143           | 143           | -             | 136           | 136           | -              | 5.1          | 5.1          |
| Arizona                                      | -             | 432           | 432           | -             | 419           | 419           | -              | 3.1          | 3.1          |
| Arkansas                                     | 70            | 3             | 73            | 67            | 3             | 70            | 4.5            | -            | 4.3          |
| Colorado                                     | 2,032         | 473           | 2,505         | 1,927         | 478           | 2,405         | 5.4            | -1.0         | 4.2          |
| Illinois                                     | 3,938         | 574           | 4,512         | 3,563         | 542           | 4,105         | 10.5           | 5.9          | 9.9          |
| Indiana                                      | 2,054         | 1,881         | 3,935         | 1,880         | 1,660         | 3,540         | 9.3            | 13.3         | 11.2         |
| Kansas                                       | -             | 6             | 6             | -             | 8             | 8             | -              | -25.0        | -25.0        |
| <b>Kentucky Total</b>                        | <b>11,181</b> | <b>5,170</b>  | <b>16,351</b> | <b>12,071</b> | <b>6,563</b>  | <b>18,634</b> | <b>-7.4</b>    | <b>-21.2</b> | <b>-12.3</b> |
| Kentucky (East)                              | 7,335         | 4,512         | 11,847        | 8,455         | 5,826         | 14,281        | -13.2          | -22.6        | -17.0        |
| Kentucky (West)                              | 3,846         | 658           | 4,504         | 3,616         | 737           | 4,353         | 6.4            | -10.7        | 3.5          |
| Louisiana                                    | -             | 270           | 270           | -             | 259           | 259           | -              | 4.2          | 4.2          |
| Maryland                                     | 213           | 263           | 476           | 188           | 300           | 488           | 13.3           | -12.3        | -2.5         |
| Mississippi                                  | -             | 211           | 211           | -             | 224           | 224           | -              | -5.8         | -5.8         |
| Missouri                                     | -             | 32            | 32            | -             | 26            | 26            | -              | 23.1         | 23.1         |
| Montana                                      | 320           | 913           | 1,233         | 296           | 955           | 1,251         | 8.1            | -4.4         | -1.4         |
| New Mexico                                   | 435           | 856           | 1,291         | 464           | 828           | 1,292         | -6.3           | 3.4          | -0.1         |
| North Dakota                                 | -             | 1,228         | 1,228         | -             | 1,169         | 1,169         | -              | 5.0          | 5.0          |
| Ohio   | 1,969         | 1,222         | 3,191         | 1,909         | 1,097         | 3,006         | 3.1            | 11.4         | 6.2          |
| Oklahoma                                     | 55            | 144           | 199           | 49            | 135           | 184           | 12.2           | 6.7          | 8.2          |
| <b>Pennsylvania Total</b>                    | <b>6,120</b>  | <b>2,807</b>  | <b>8,927</b>  | <b>5,892</b>  | <b>2,773</b>  | <b>8,665</b>  | <b>3.9</b>     | <b>1.2</b>   | <b>3.0</b>   |
| Pennsylvania (Anthracite)                    | 128           | 1,018         | 1,146         | 150           | 802           | 952           | -14.7          | 26.9         | 20.4         |
| Pennsylvania (Bituminous)                    | 5,992         | 1,789         | 7,781         | 5,742         | 1,971         | 7,713         | 4.4            | -9.2         | 0.9          |
| Tennessee                                    | 175           | 188           | 363           | 179           | 326           | 505           | -2.2           | -42.3        | -28.1        |
| Texas  | -             | 2,918         | 2,918         | -             | 2,936         | 2,936         | -              | -0.6         | -0.6         |
| Utah   | 1,576         | 35            | 1,611         | 1,779         | 18            | 1,797         | -11.4          | 94.4         | -10.4        |
| Virginia                                     | 3,763         | 1,235         | 4,998         | 3,796         | 1,465         | 5,261         | -0.9           | -15.7        | -5.0         |
| <b>West Virginia Total</b>                   | <b>17,085</b> | <b>5,701</b>  | <b>22,786</b> | <b>16,963</b> | <b>6,344</b>  | <b>23,307</b> | <b>0.7</b>     | <b>-10.1</b> | <b>-2.2</b>  |
| West Virginia (Northern)                     | 5,590         | 301           | 5,891         | 5,238         | 408           | 5,646         | 6.7            | -26.2        | 4.3          |
| West Virginia (Southern)                     | 11,495        | 5,400         | 16,895        | 11,725        | 5,936         | 17,661        | -2.0           | -9.0         | -4.3         |
| Wyoming                                      | 250           | 6,754         | 7,004         | 234           | 6,805         | 7,039         | 6.8            | -0.7         | -0.5         |
| <b>Appalachia Total</b>                      | <b>39,850</b> | <b>17,779</b> | <b>57,629</b> | <b>40,520</b> | <b>19,749</b> | <b>60,269</b> | <b>-1.7</b>    | <b>-10.0</b> | <b>-4.4</b>  |
| Appalachia Central                           | 22,768        | 11,335        | 34,103        | 24,154        | 13,552        | 37,706        | -5.7           | -16.4        | -9.6         |
| Appalachia Northern                          | 13,892        | 4,593         | 18,485        | 13,227        | 4,578         | 17,805        | 5.0            | 0.3          | 3.8          |
| Appalachia Southern                          | 3,190         | 1,851         | 5,041         | 3,139         | 1,619         | 4,758         | 1.6            | 14.3         | 5.9          |
| <b>Interior Basin Total</b>                  | <b>9,963</b>  | <b>6,697</b>  | <b>16,660</b> | <b>9,175</b>  | <b>6,530</b>  | <b>15,705</b> | <b>8.6</b>     | <b>2.6</b>   | <b>6.1</b>   |
| Illinois Basin                               | 9,838         | 3,113         | 12,951        | 9,059         | 2,939         | 11,998        | 8.6            | 5.9          | 7.9          |
| Interior                                     | 125           | 3,584         | 3,709         | 116           | 3,591         | 3,707         | 7.8            | -0.2         | 0.1          |
| <b>Western Total</b>                         | <b>4,613</b>  | <b>10,834</b> | <b>15,447</b> | <b>4,700</b>  | <b>10,808</b> | <b>15,508</b> | <b>-1.9</b>    | <b>0.2</b>   | <b>-0.4</b>  |
| Powder River Basin                           | -             | 6,983         | 6,983         | -             | 7,041         | 7,041         | -              | -0.8         | -0.8         |
| Uinta Region                                 | 3,315         | 456           | 3,771         | 3,429         | 469           | 3,898         | -3.3           | -2.8         | -3.3         |
| Western                                      | 1,298         | 3,395         | 4,693         | 1,271         | 3,298         | 4,569         | 2.1            | 2.9          | 2.7          |
| <b>East of Mississippi River</b>             | <b>49,688</b> | <b>21,103</b> | <b>70,791</b> | <b>49,579</b> | <b>22,912</b> | <b>72,491</b> | <b>0.2</b>     | <b>-7.9</b>  | <b>-2.3</b>  |
| <b>West of Mississippi River</b>             | <b>4,738</b>  | <b>14,207</b> | <b>18,945</b> | <b>4,816</b>  | <b>14,175</b> | <b>18,991</b> | <b>-1.6</b>    | <b>0.2</b>   | <b>-0.2</b>  |
| <b>U.S. Subtotal</b>                         | <b>54,426</b> | <b>35,310</b> | <b>89,736</b> | <b>54,395</b> | <b>37,087</b> | <b>91,482</b> | <b>0.1</b>     | <b>-4.8</b>  | <b>-1.9</b>  |
| <b>Refuse Recovery</b>                       | <b>-</b>      | <b>-</b>      | <b>102</b>    | <b>-</b>      | <b>-</b>      | <b>129</b>    | <b>-</b>       | <b>-</b>     | <b>-20.9</b> |
| <b>U.S. Total</b>                            | <b>54,426</b> | <b>35,310</b> | <b>89,838</b> | <b>54,395</b> | <b>37,087</b> | <b>91,611</b> | <b>0.1</b>     | <b>-4.8</b>  | <b>-1.9</b>  |

<sup>1</sup> 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, 2012**

| Coal-Producing State, Region <sup>1</sup><br>and Mine Type | Mine Production Range (thousand short tons) |                       |                     |                     |                    |                   |                  | Zero <sup>2</sup> | Total Number<br>of Employees |
|--|---|-----------------------|---------------------|---------------------|--------------------|-------------------|------------------|-------------------|------------------------------|
|  | Above 1,000                                 | Above 500<br>to 1,000 | Above 200<br>to 500 | Above 100<br>to 200 | Above 50<br>to 100 | Above 10<br>to 50 | Above 0<br>to 10 |                   |                              |
| <b>Alabama</b>   | <b>3,415</b>                                | <b>97</b>             | <b>655</b>          | <b>317</b>          | <b>160</b>         | <b>224</b>        | <b>54</b>        | <b>105</b>        | <b>5,041</b>                 |
| Underground  | 2,981                                       | -                     | -                   | -                   | 36                 | 88                | -                | 81                | 3,190                        |
| Surface  | 434   | 97                    | 655                 | 317                 | 124                | 136               | 54               | 24                | 1,851                        |
| <b>Alaska</b>  | <b>143</b>                                  | -                     | -                   | -                   | -                  | -                 | -                | -                 | <b>143</b>                   |
| Surface  | 143   | -                     | -                   | -                   | -                  | -                 | -                | -                 | 143                          |
| <b>Arizona</b>   | <b>432</b>                                  | -                     | -                   | -                   | -                  | -                 | -                | -                 | <b>432</b>                   |
| Surface  | 432   | -                     | -                   | -                   | -                  | -                 | -                | -                 | 432                          |
| <b>Arkansas</b>  | -   | -                     | -                   | -                   | <b>70</b>          | -                 | <b>3</b>         | -                 | <b>73</b>                    |
| Underground  | -   | -                     | -                   | -                   | 70                 | -                 | -                | -                 | 70                           |
| Surface  | -   | -                     | -                   | -                   | -                  | -                 | 3                | -                 | 3                            |
| <b>Colorado</b>  | <b>2,161</b>                                | <b>81</b>             | <b>27</b>           | -                   | <b>96</b>          | <b>58</b>         | -                | <b>82</b>         | <b>2,505</b>                 |
| Underground  | 1,715                                       | 81                    | -                   | -                   | 96                 | 58                | -                | 82                | 2,032                        |
| Surface  | 446   | -                     | 27                  | -                   | -                  | -                 | -                | -                 | 473                          |
| <b>Illinois</b>  | <b>3,781</b>                                | <b>351</b>            | <b>115</b>          | <b>46</b>           | <b>31</b>          | -                 | -                | <b>188</b>        | <b>4,512</b>                 |
| Underground  | 3,498                                       | 261                   | 76                  | -                   | 12                 | -                 | -                | 91                | 3,938                        |
| Surface  | 283   | 90                    | 39                  | 46                  | 19                 | -                 | -                | 97                | 574                          |
| <b>Indiana</b>   | <b>2,904</b>                                | <b>468</b>            | <b>222</b>          | <b>107</b>          | <b>57</b>          | <b>7</b>          | <b>63</b>        | <b>94</b>         | <b>3,935</b>                 |
| Underground  | 1,619                                       | 173                   | 95                  | 45                  | -                  | -                 | 63               | 59                | 2,054                        |
| Surface  | 1,285                                       | 295                   | 127                 | 62                  | 57                 | 7                 | -                | 35                | 1,881                        |
| <b>Kansas</b>  | -   | -                     | -                   | -                   | -                  | <b>6</b>          | -                | -                 | <b>6</b>                     |
| Surface  | -   | -                     | -                   | -                   | -                  | 6                 | -                | -                 | 6                            |
| <b>Kentucky Total</b>                                      | <b>4,243</b>                                | <b>2,088</b>          | <b>3,522</b>        | <b>1,575</b>        | <b>1,397</b>       | <b>1,061</b>      | <b>484</b>       | <b>1,930</b>      | <b>16,351</b>                |
| Underground  | 3,749                                       | 1,365                 | 2,187               | 1,021               | 872                | 570               | 172              | 1,198             | 11,181                       |
| Surface  | 494   | 723                   | 1,335               | 554                 | 525                | 491               | 312              | 732               | 5,170                        |
| <b>Kentucky (East)</b>                                     | <b>687</b>                                  | <b>1,668</b>          | <b>3,444</b>        | <b>1,564</b>        | <b>1,392</b>       | <b>1,026</b>      | <b>455</b>       | <b>1,560</b>      | <b>11,847</b>                |
| Underground  | 506   | 1,047                 | 2,187               | 1,021               | 872                | 570               | 143              | 942               | 7,335                        |
| Surface  | 181   | 621                   | 1,257               | 543                 | 520                | 456               | 312              | 618               | 4,512                        |
| <b>Kentucky (West)</b>                                     | <b>3,556</b>                                | <b>420</b>            | <b>78</b>           | <b>11</b>           | <b>5</b>           | <b>35</b>         | <b>29</b>        | <b>370</b>        | <b>4,504</b>                 |
| Underground  | 3,243                                       | 318                   | -                   | -                   | -                  | -                 | 29               | 256               | 3,846                        |
| Surface  | 313   | 102                   | 78                  | 11                  | 5                  | 35                | -                | 114               | 658                          |
| <b>Louisiana</b>   | <b>260</b>                                  | -                     | -                   | <b>10</b>           | -                  | -                 | -                | -                 | <b>270</b>                   |
| Surface  | 260   | -                     | -                   | 10                  | -                  | -                 | -                | -                 | 270                          |
| <b>Maryland</b>  | -   | -                     | <b>204</b>          | <b>122</b>          | <b>59</b>          | <b>32</b>         | <b>15</b>        | <b>44</b>         | <b>476</b>                   |
| Underground  | -   | -                     | 144                 | 27                  | -                  | -                 | -                | 42                | 213                          |
| Surface  | -   | -                     | 60                  | 95                  | 59                 | 32                | 15               | 2                 | 263                          |
| <b>Mississippi</b>   | <b>211</b>                                  | -                     | -                   | -                   | -                  | -                 | -                | -                 | <b>211</b>                   |
| Surface  | 211   | -                     | -                   | -                   | -                  | -                 | -                | -                 | 211                          |
| <b>Missouri</b>  | -   | -                     | <b>18</b>           | -                   | <b>14</b>          | -                 | -                | -                 | <b>32</b>                    |
| Surface  | -   | -                     | 18                  | -                   | 14                 | -                 | -                | -                 | 32                           |
| <b>Montana</b>   | <b>1,219</b>                                | -                     | <b>14</b>           | -                   | -                  | -                 | -                | -                 | <b>1,233</b>                 |
| Underground  | 320   | -                     | -                   | -                   | -                  | -                 | -                | -                 | 320                          |
| Surface  | 899   | -                     | 14                  | -                   | -                  | -                 | -                | -                 | 913                          |
| <b>New Mexico</b>  | <b>1,291</b>                                | -                     | -                   | -                   | -                  | -                 | -                | -                 | <b>1,291</b>                 |
| Underground  | 435   | -                     | -                   | -                   | -                  | -                 | -                | -                 | 435                          |
| Surface  | 856   | -                     | -                   | -                   | -                  | -                 | -                | -                 | 856                          |
| <b>North Dakota</b>  | <b>1,228</b>                                | -                     | -                   | -                   | -                  | -                 | -                | -                 | <b>1,228</b>                 |
| Surface  | 1,228                                       | -                     | -                   | -                   | -                  | -                 | -                | -                 | 1,228                        |
| <b>Ohio</b>  | <b>1,691</b>                                | <b>646</b>            | <b>463</b>          | <b>131</b>          | <b>42</b>          | <b>54</b>         | <b>37</b>        | <b>127</b>        | <b>3,191</b>                 |
| Underground  | 1,560                                       | 167                   | 131                 | 46                  | -                  | -                 | 18               | 47                | 1,969                        |
| Surface  | 131   | 479                   | 332                 | 85                  | 42                 | 54                | 19               | 80                | 1,222                        |
| <b>Oklahoma</b>  | -   | -                     | <b>134</b>          | <b>30</b>           | -                  | <b>18</b>         | <b>17</b>        | -                 | <b>199</b>                   |
| Underground  | -   | -                     | 55                  | -                   | -                  | -                 | -                | -                 | 55                           |
| Surface  | -   | -                     | 79                  | 30                  | -                  | 18                | 17               | -                 | 144                          |
| <b>Pennsylvania Total</b>                                  | <b>3,997</b>                                | <b>483</b>            | <b>1,693</b>        | <b>707</b>          | <b>348</b>         | <b>600</b>        | <b>241</b>       | <b>715</b>        | <b>8,927</b>                 |
| Underground  | 3,997                                       | 483                   | 921                 | 220                 | 80                 | 88                | 33               | 225               | 6,120                        |
| Surface  | -   | -                     | 772                 | 487                 | 268                | 512               | 208              | 490               | 2,807                        |
| <b>Pennsylvania (Anthracite)</b>                           | -   | -                     | <b>84</b>           | <b>135</b>          | <b>99</b>          | <b>266</b>        | <b>107</b>       | <b>409</b>        | <b>1,146</b>                 |
| Underground  | -   | -                     | -                   | -                   | -                  | 56                | 33               | 36                | 128                          |
| Surface  | -   | -                     | 84                  | 135                 | 99                 | 210               | 74               | 373               | 1,018                        |

| Coal-Producing State, Region <sup>1</sup><br>and Mine Type | Mine Production Range (thousand short tons) |                       |                     |                     |                    |                   |                  |                   | Total Number<br>of Employees |
|--|---|-----------------------|---------------------|---------------------|--------------------|-------------------|------------------|-------------------|------------------------------|
|  | Above 1,000                                 | Above 500<br>to 1,000 | Above 200<br>to 500 | Above 100<br>to 200 | Above 50<br>to 100 | Above 10<br>to 50 | Above 0<br>to 10 | Zero <sup>2</sup> |                              |
| <b>Pennsylvania (Bituminous)</b>                           | <b>3,997</b>                                | <b>483</b>            | <b>1,609</b>        | <b>572</b>          | <b>249</b>         | <b>334</b>        | <b>134</b>       | <b>306</b>        | <b>7,781</b>                 |
| Underground  | 3,997                                       | 483                   | 921                 | 220                 | 80                 | 32                | -                | 189               | 5,992                        |
| Surface  | -   | -                     | 688                 | 352                 | 169                | 302               | 134              | 117               | 1,789                        |
| <b>Tennessee</b>   | <b>-</b>                                    | <b>-</b>              | <b>74</b>           | <b>76</b>           | <b>58</b>          | <b>73</b>         | <b>45</b>        | <b>33</b>         | <b>363</b>                   |
| Underground  | -   | -                     | 74                  | -                   | 41                 | 16                | 27               | 17                | 175                          |
| Surface  | -   | -                     | -                   | 76                  | 17                 | 57                | 18               | 16                | 188                          |
| <b>Texas</b>   | <b>2,779</b>                                | <b>139</b>            | <b>-</b>            | <b>-</b>            | <b>-</b>           | <b>-</b>          | <b>-</b>         | <b>-</b>          | <b>2,918</b>                 |
| Surface  | 2,779                                       | 139                   | -                   | -                   | -                  | -                 | -                | -                 | 2,918                        |
| <b>Utah</b>  | <b>1,319</b>                                | <b>92</b>             | <b>101</b>          | <b>-</b>            | <b>-</b>           | <b>-</b>          | <b>-</b>         | <b>89</b>         | <b>1,611</b>                 |
| Underground  | 1,319                                       | 67                    | 101                 | -                   | -                  | -                 | -                | 89                | 1,576                        |
| Surface  | -   | 25                    | -                   | -                   | -                  | -                 | -                | -                 | 35                           |
| <b>Virginia</b>  | <b>716</b>                                  | <b>727</b>            | <b>1,809</b>        | <b>462</b>          | <b>393</b>         | <b>264</b>        | <b>73</b>        | <b>504</b>        | <b>4,998</b>                 |
| Underground  | 716   | 541                   | 1,265               | 341                 | 215                | 189               | 64               | 388               | 3,763                        |
| Surface  | -   | 186                   | 544                 | 121                 | 178                | 75                | 9                | 116               | 1,235                        |
| <b>West Virginia Total</b>                                 | <b>8,760</b>                                | <b>3,268</b>          | <b>4,612</b>        | <b>2,425</b>        | <b>630</b>         | <b>604</b>        | <b>293</b>       | <b>2,128</b>      | <b>22,786</b>                |
| Underground  | 7,097                                       | 1,758                 | 3,408               | 2,089               | 509                | 473               | 209              | 1,489             | 17,085                       |
| Surface  | 1,663                                       | 1,510                 | 1,204               | 336                 | 121                | 131               | 84               | 639               | 5,701                        |
| <b>West Virginia (Northern)</b>                            | <b>4,702</b>                                | <b>81</b>             | <b>464</b>          | <b>309</b>          | <b>10</b>          | <b>53</b>         | <b>38</b>        | <b>234</b>        | <b>5,891</b>                 |
| Underground  | 4,702                                       | -                     | 377                 | 267                 | -                  | 24                | 23               | 197               | 5,590                        |
| Surface  | -   | 81                    | 87                  | 42                  | 10                 | 29                | 15               | 37                | 301                          |
| <b>West Virginia (Southern)</b>                            | <b>4,058</b>                                | <b>3,187</b>          | <b>4,148</b>        | <b>2,116</b>        | <b>620</b>         | <b>551</b>        | <b>255</b>       | <b>1,894</b>      | <b>16,895</b>                |
| Underground  | 2,395                                       | 1,758                 | 3,031               | 1,822               | 509                | 449               | 186              | 1,292             | 11,495                       |
| Surface  | 1,663                                       | 1,429                 | 1,117               | 294                 | 111                | 102               | 69               | 602               | 5,400                        |
| <b>Wyoming</b>   | <b>6,797</b>                                | <b>192</b>            | <b>-</b>            | <b>-</b>            | <b>-</b>           | <b>3</b>          | <b>1</b>         | <b>11</b>         | <b>7,004</b>                 |
| Underground  | 250   | -                     | -                   | -                   | -                  | -                 | -                | -                 | 250                          |
| Surface  | 6,547                                       | 192                   | -                   | -                   | -                  | 3                 | 1                | 11                | 6,754                        |
| <b>Appalachia Total</b>                                    | <b>19,266</b>                               | <b>6,889</b>          | <b>12,954</b>       | <b>5,804</b>        | <b>3,082</b>       | <b>2,877</b>      | <b>1,213</b>     | <b>5,216</b>      | <b>57,629</b>                |
| Underground  | 16,857                                      | 3,996                 | 8,130               | 3,744               | 1,753              | 1,424             | 494              | 3,231             | 39,850                       |
| Surface  | 2,409                                       | 2,893                 | 4,824               | 2,060               | 1,329              | 1,453             | 719              | 1,985             | 17,779                       |
| <b>Appalachia Central</b>                                  | <b>5,461</b>                                | <b>5,582</b>          | <b>9,475</b>        | <b>4,218</b>        | <b>2,463</b>       | <b>1,914</b>      | <b>828</b>       | <b>3,991</b>      | <b>34,103</b>                |
| Underground  | 3,617                                       | 3,346                 | 6,557               | 3,184               | 1,637              | 1,224             | 420              | 2,639             | 22,768                       |
| Surface  | 1,844                                       | 2,236                 | 2,918               | 1,034               | 826                | 690               | 408              | 1,352             | 11,335                       |
| <b>Appalachia Northern</b>                                 | <b>10,390</b>                               | <b>1,210</b>          | <b>2,824</b>        | <b>1,269</b>        | <b>459</b>         | <b>739</b>        | <b>331</b>       | <b>1,120</b>      | <b>18,485</b>                |
| Underground  | 10,259                                      | 650                   | 1,573               | 560                 | 80                 | 112               | 74               | 511               | 13,892                       |
| Surface  | 131   | 560                   | 1,251               | 709                 | 379                | 627               | 257              | 609               | 4,593                        |
| <b>Appalachia Southern</b>                                 | <b>3,415</b>                                | <b>97</b>             | <b>655</b>          | <b>317</b>          | <b>160</b>         | <b>224</b>        | <b>54</b>        | <b>105</b>        | <b>5,041</b>                 |
| Underground  | 2,981                                       | -                     | -                   | -                   | 36                 | 88                | -                | 81                | 3,190                        |
| Surface  | 434   | 97                    | 655                 | 317                 | 124                | 136               | 54               | 24                | 1,851                        |
| <b>Interior Basin Total</b>                                | <b>13,491</b>                               | <b>1,378</b>          | <b>567</b>          | <b>204</b>          | <b>177</b>         | <b>66</b>         | <b>112</b>       | <b>652</b>        | <b>16,660</b>                |
| Underground  | 8,360                                       | 752                   | 226                 | 45                  | 82                 | -                 | 92               | 406               | 9,963                        |
| Surface  | 5,131                                       | 626                   | 341                 | 159                 | 95                 | 66                | 20               | 246               | 6,697                        |
| <b>Illinois Basin</b>                                      | <b>10,241</b>                               | <b>1,239</b>          | <b>415</b>          | <b>164</b>          | <b>93</b>          | <b>42</b>         | <b>92</b>        | <b>652</b>        | <b>12,951</b>                |
| Underground  | 8,360                                       | 752                   | 171                 | 45                  | 12                 | -                 | 92               | 406               | 9,838                        |
| Surface  | 1,881                                       | 487                   | 244                 | 119                 | 81                 | 42                | -                | 246               | 3,113                        |
| <b>Interior</b>  | <b>3,250</b>                                | <b>139</b>            | <b>152</b>          | <b>40</b>           | <b>84</b>          | <b>24</b>         | <b>20</b>        | <b>-</b>          | <b>3,709</b>                 |
| Underground  | -   | -                     | 55                  | -                   | 70                 | -                 | -                | -                 | 125                          |
| Surface  | 3,250                                       | 139                   | 97                  | 40                  | 14                 | 24                | 20               | -                 | 3,584                        |
| <b>Western Total</b>                                       | <b>14,590</b>                               | <b>365</b>            | <b>142</b>          | <b>-</b>            | <b>96</b>          | <b>61</b>         | <b>1</b>         | <b>182</b>        | <b>15,447</b>                |
| Underground  | 4,039                                       | 148                   | 101                 | -                   | 96                 | 58                | -                | 171               | 4,613                        |
| Surface  | 10,551                                      | 217                   | 41                  | -                   | -                  | 3                 | 1                | 11                | 10,834                       |
| <b>Powder River Basin</b>                                  | <b>6,972</b>                                | <b>-</b>              | <b>-</b>            | <b>-</b>            | <b>-</b>           | <b>-</b>          | <b>-</b>         | <b>11</b>         | <b>6,983</b>                 |
| Surface  | 6,972                                       | -                     | -                   | -                   | -                  | -                 | -                | 11                | 6,983                        |
| <b>Uinta Region</b>  | <b>3,480</b>                                | <b>67</b>             | <b>101</b>          | <b>-</b>            | <b>-</b>           | <b>19</b>         | <b>-</b>         | <b>94</b>         | <b>3,771</b>                 |
| Underground  | 3,034                                       | 67                    | 101                 | -                   | -                  | 19                | -                | 94                | 3,315                        |
| Surface  | 446   | -                     | -                   | -                   | -                  | -                 | -                | -                 | 456                          |
| <b>Western</b>   | <b>4,138</b>                                | <b>298</b>            | <b>41</b>           | <b>-</b>            | <b>96</b>          | <b>42</b>         | <b>1</b>         | <b>77</b>         | <b>4,693</b>                 |
| Underground  | 1,005                                       | 81                    | -                   | -                   | 96                 | 39                | -                | 77                | 1,298                        |
| Surface  | 3,133                                       | 217                   | 41                  | -                   | -                  | 3                 | 1                | -                 | 3,395                        |
| <b>East of Mississippi River</b>                           | <b>29,718</b>                               | <b>8,128</b>          | <b>13,369</b>       | <b>5,968</b>        | <b>3,175</b>       | <b>2,919</b>      | <b>1,305</b>     | <b>5,868</b>      | <b>70,791</b>                |
| Underground  | 25,217                                      | 4,748                 | 8,301               | 3,789               | 1,765              | 1,424             | 586              | 3,637             | 49,688                       |
| Surface  | 4,501                                       | 3,380                 | 5,068               | 2,179               | 1,410              | 1,495             | 719              | 2,231             | 21,103                       |
| <b>West of Mississippi River</b>                           | <b>17,629</b>                               | <b>504</b>            | <b>294</b>          | <b>40</b>           | <b>180</b>         | <b>85</b>         | <b>21</b>        | <b>182</b>        | <b>18,945</b>                |
| Underground  | 4,039                                       | 148                   | 156                 | -                   | 166                | 58                | -                | 171               | 4,738                        |

| Coal-Producing State, Region <sup>1</sup><br>and Mine Type | Mine Production Range (thousand short tons) |                       |                     |                     |                    |                   |                  | Zero <sup>2</sup> | Total Number<br>of Employees |
|--|---|-----------------------|---------------------|---------------------|--------------------|-------------------|------------------|-------------------|------------------------------|
|  | Above 1,000                                 | Above 500<br>to 1,000 | Above 200<br>to 500 | Above 100<br>to 200 | Above 50<br>to 100 | Above 10<br>to 50 | Above 0<br>to 10 |                   |                              |
| Surface  | 13,590                                      | 356                   | 138                 | 40                  | 14                 | 27                | 21               | 11                | 14,207                       |
| <b>U.S. Subtotal</b>                                       | <b>47,347</b>                               | <b>8,632</b>          | <b>13,663</b>       | <b>6,008</b>        | <b>3,355</b>       | <b>3,004</b>      | <b>1,326</b>     | <b>6,050</b>      | <b>89,736</b>                |
| Underground  | 29,256                                      | 4,896                 | 8,457               | 3,789               | 1,931              | 1,482             | 586              | 3,808             | 54,426                       |
| Surface  | 18,091                                      | 3,736                 | 5,206               | 2,219               | 1,424              | 1,522             | 740              | 2,242             | 35,310                       |
| <b>Refuse Recovery</b>                                     | <b>-</b>                                    | <b>7</b>              | <b>-</b>            | <b>23</b>           | <b>12</b>          | <b>28</b>         | <b>32</b>        | <b>-</b>          | <b>102</b>                   |
| <b>U.S. Total</b>  | <b>47,347</b>                               | <b>8,639</b>          | <b>13,663</b>       | <b>6,031</b>        | <b>3,367</b>       | <b>3,032</b>      | <b>1,358</b>     | <b>6,050</b>      | <b>89,838</b>                |

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.'<sup>1</sup>

**Table 20. Average Number of Employees at Underground and Surface Mines by State and Union Status, 2012**

| Coal-Producing State and Region <sup>1</sup> | Union         |              | Nonunion      |               |
|--|---------------|--------------|---------------|---------------|
|  | Underground   | Surface      | Underground   | Surface       |
| Alabama                                      | 3,044         | 70           | 89            | 1,677         |
| Alaska                                       | -             | 143          | -             | -             |
| Arizona                                      | -             | 432          | -             | -             |
| Arkansas                                     | -             | -            | 70            | -             |
| Colorado                                     | 174           | 212          | 1,858         | 261           |
| Illinois                                     | 647           | 58           | 3,291         | 534           |
| Indiana                                      | -             | -            | 2,054         | 1,868         |
| <b>Kentucky Total</b>                        | <b>564</b>    | <b>93</b>    | <b>10,122</b> | <b>4,595</b>  |
| Kentucky (East)                              | 48            | 93           | 6,821         | 3,943         |
| Kentucky (West)                              | 516           | -            | 3,301         | 652           |
| Louisiana                                    | -             | -            | -             | 270           |
| Maryland                                     | -             | -            | 213           | 237           |
| Mississippi                                  | -             | -            | -             | 211           |
| Missouri                                     | -             | -            | -             | 32            |
| Montana                                      | -             | 653          | 320           | 260           |
| New Mexico                                   | 435           | 435          | -             | 421           |
| North Dakota                                 | -             | 292          | -             | 936           |
| Ohio   | 645           | -            | 1,306         | 1,184         |
| Oklahoma                                     | -             | -            | 55            | 127           |
| <b>Pennsylvania Total</b>                    | <b>1,972</b>  | <b>340</b>   | <b>4,042</b>  | <b>2,133</b>  |
| Pennsylvania (Anthracite)                    | -             | 275          | 92            | 650           |
| Pennsylvania (Bituminous)                    | 1,972         | 65           | 3,950         | 1,483         |
| Tennessee                                    | -             | -            | 148           | 130           |
| Texas  | -             | 1,874        | -             | 1,044         |
| Utah   | 330           | -            | 1,246         | 25            |
| Virginia                                     | 358           | 12           | 3,237         | 1,194         |
| <b>West Virginia Total</b>                   | <b>4,747</b>  | <b>931</b>   | <b>12,004</b> | <b>4,652</b>  |
| West Virginia (Northern)                     | 3,557         | -            | 1,986         | 280           |
| West Virginia (Southern)                     | 1,190         | 931          | 10,018        | 4,372         |
| Wyoming                                      | 250           | 472          | -             | 6,278         |
| <b>Appalachia Total</b>                      | <b>10,814</b> | <b>1,446</b> | <b>27,860</b> | <b>15,150</b> |
| Appalachia Central                           | 1,596         | 1,036        | 20,224        | 9,639         |
| Appalachia Northern                          | 6,174         | 340          | 7,547         | 3,834         |
| Appalachia Southern                          | 3,044         | 70           | 89            | 1,677         |
| <b>Interior Basin Total</b>                  | <b>1,163</b>  | <b>1,932</b> | <b>8,771</b>  | <b>4,738</b>  |
| Illinois Basin                               | 1,163         | 58           | 8,646         | 3,054         |
| Interior                                     | -             | 1,874        | 125           | 1,684         |
| <b>Western Total</b>                         | <b>1,189</b>  | <b>2,639</b> | <b>3,424</b>  | <b>8,181</b>  |
| Powder River Basin                           | -             | 639          | -             | 6,344         |
| Uinta Region                                 | 504           | 185          | 2,811         | 261           |
| Western                                      | 685           | 1,815        | 613           | 1,576         |
| <b>East of Mississippi River</b>             | <b>11,977</b> | <b>1,504</b> | <b>36,506</b> | <b>18,415</b> |
| <b>West of Mississippi River</b>             | <b>1,189</b>  | <b>4,513</b> | <b>3,549</b>  | <b>9,654</b>  |
| <b>U.S. Total</b>                            | <b>13,166</b> | <b>6,017</b> | <b>40,055</b> | <b>28,069</b> |

<sup>1</sup> 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, 'Coal Production and Preparation Report,' and U.S. Department of Labor, Mine Safety and Health Administration Form 7000-2, 'Quarterly Mine Employment and Coal Production Report.'



# Productivity

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**Table 21. Coal Productivity by State and Mine Type, 2012 and 2011**

| Coal-Producing State, Region <sup>1</sup><br>and Mine Type | Number of Mining Operations <sup>2</sup> |            |                | Number of Employees <sup>3</sup> |               |                | Average Production per Employee Hour<br>(short tons) <sup>4</sup> |              |                |
|--|--|------------|----------------|----------------------------------|---------------|----------------|---|--------------|----------------|
|  | 2012                                     | 2011       | Percent Change | 2012                             | 2011          | Percent Change | 2012  | 2011         | Percent Change |
| <b>Alabama</b>   | <b>54</b>                                | <b>62</b>  | <b>-12.9</b>   | <b>5,041</b>                     | <b>4,756</b>  | <b>6.0</b>     | <b>1.68</b>   | <b>1.66</b>  | <b>0.7</b>     |
| Underground  | 11                                       | 12         | -8.3           | 3,190                            | 3,138         | 1.7            | 1.64  | 1.45         | 13.2           |
| Surface  | 43                                       | 50         | -14.0          | 1,851                            | 1,618         | 14.4           | 1.75  | 2.08         | -15.8          |
| <b>Alaska</b>  | <b>1</b>                                 | <b>1</b>   | <b>-</b>       | <b>143</b>                       | <b>136</b>    | <b>5.1</b>     | <b>5.98</b>   | <b>6.48</b>  | <b>-7.7</b>    |
| Surface  | 1  | 1          | -              | 143                              | 136           | 5.1            | 5.98  | 6.48         | -7.7           |
| <b>Arizona</b>   | <b>1</b>                                 | <b>1</b>   | <b>-</b>       | <b>432</b>                       | <b>419</b>    | <b>3.1</b>     | <b>7.38</b>   | <b>8.44</b>  | <b>-12.6</b>   |
| Surface  | 1  | 1          | -              | 432                              | 419           | 3.1            | 7.38  | 8.44         | -12.6          |
| <b>Arkansas</b>  | <b>2</b>                                 | <b>2</b>   | <b>-</b>       | <b>73</b>                        | <b>70</b>     | <b>4.3</b>     | <b>0.58</b>   | <b>0.70</b>  | <b>-16.5</b>   |
| Underground  | 1  | 1          | -              | 70                               | 67            | 4.5            | 0.59  | 0.68         | -13.5          |
| Surface  | 1  | 1          | -              | 3                                | 3             | -              | 0.37  | 1.32         | -71.9          |
| <b>Colorado</b>  | <b>14</b>                                | <b>12</b>  | <b>16.7</b>    | <b>2,505</b>                     | <b>2,405</b>  | <b>4.2</b>     | <b>5.79</b>   | <b>5.48</b>  | <b>5.7</b>     |
| Underground  | 11                                       | 9          | 22.2           | 2,032                            | 1,927         | 5.4            | 5.93  | 5.42         | 9.3            |
| Surface  | 3  | 3          | -              | 473                              | 478           | -1.0           | 5.21  | 5.69         | -8.5           |
| <b>Illinois</b>  | <b>34</b>                                | <b>35</b>  | <b>-2.9</b>    | <b>4,512</b>                     | <b>4,105</b>  | <b>9.9</b>     | <b>4.76</b>   | <b>4.03</b>  | <b>18.1</b>    |
| Underground  | 21                                       | 22         | -4.5           | 3,938                            | 3,563         | 10.5           | 4.83  | 4.03         | 19.8           |
| Surface  | 13                                       | 13         | -              | 574                              | 542           | 5.9            | 4.31  | 4.03         | 6.9            |
| <b>Indiana</b>   | <b>39</b>                                | <b>38</b>  | <b>2.6</b>     | <b>3,935</b>                     | <b>3,540</b>  | <b>11.2</b>    | <b>4.19</b>   | <b>4.25</b>  | <b>-1.3</b>    |
| Underground  | 13                                       | 12         | 8.3            | 2,054                            | 1,880         | 9.3            | 3.23  | 3.43         | -6.0           |
| Surface  | 26                                       | 26         | -              | 1,881                            | 1,660         | 13.3           | 5.37  | 5.22         | 2.8            |
| <b>Kansas</b>  | <b>1</b>                                 | <b>1</b>   | <b>-</b>       | <b>6</b>                         | <b>8</b>      | <b>-25.0</b>   | <b>0.99</b>   | <b>1.98</b>  | <b>-49.8</b>   |
| Surface  | 1  | 1          | -              | 6                                | 8             | -25.0          | 0.99  | 1.98         | -49.8          |
| <b>Kentucky Total</b>                                      | <b>484</b>                               | <b>540</b> | <b>-10.4</b>   | <b>16,351</b>                    | <b>18,634</b> | <b>-12.3</b>   | <b>2.56</b>   | <b>2.48</b>  | <b>3.2</b>     |
| Underground  | 213                                      | 237        | -10.1          | 11,181                           | 12,071        | -7.4           | 2.37  | 2.27         | 4.4            |
| Surface  | 271                                      | 303        | -10.6          | 5,170                            | 6,563         | -21.2          | 2.97  | 2.86         | 3.7            |
| <b>Kentucky (East)</b>                                     | <b>443</b>                               | <b>500</b> | <b>-11.4</b>   | <b>11,847</b>                    | <b>14,281</b> | <b>-17.0</b>   | <b>1.99</b>   | <b>2.05</b>  | <b>-3.1</b>    |
| Underground  | 192                                      | 216        | -11.1          | 7,335                            | 8,455         | -13.2          | 1.61  | 1.69         | -4.7           |
| Surface  | 251                                      | 284        | -11.6          | 4,512                            | 5,826         | -22.6          | 2.58  | 2.58         | -0.1           |
| <b>Kentucky (West)</b>                                     | <b>41</b>                                | <b>40</b>  | <b>2.5</b>     | <b>4,504</b>                     | <b>4,353</b>  | <b>3.5</b>     | <b>3.82</b>   | <b>3.77</b>  | <b>1.2</b>     |
| Underground  | 21                                       | 21         | -              | 3,846                            | 3,616         | 6.4            | 3.55  | 3.53         | 0.5            |
| Surface  | 20                                       | 19         | 5.3            | 658                              | 737           | -10.7          | 5.59  | 4.96         | 12.7           |
| <b>Louisiana</b>   | <b>2</b>                                 | <b>1</b>   | <b>100.0</b>   | <b>270</b>                       | <b>259</b>    | <b>4.2</b>     | <b>6.86</b>   | <b>7.06</b>  | <b>-2.9</b>    |
| Surface  | 2  | 1          | 100.0          | 270                              | 259           | 4.2            | 6.86  | 7.06         | -2.9           |
| <b>Maryland</b>  | <b>23</b>                                | <b>24</b>  | <b>-4.2</b>    | <b>476</b>                       | <b>488</b>    | <b>-2.5</b>    | <b>2.28</b>   | <b>2.66</b>  | <b>-14.4</b>   |
| Underground  | 4  | 4          | -              | 213                              | 188           | 13.3           | 1.80  | 2.11         | -14.7          |
| Surface  | 19                                       | 20         | -5.0           | 263                              | 300           | -12.3          | 2.66  | 2.99         | -11.2          |
| <b>Mississippi</b>   | <b>1</b>                                 | <b>1</b>   | <b>-</b>       | <b>211</b>                       | <b>224</b>    | <b>-5.8</b>    | <b>6.73</b>   | <b>6.14</b>  | <b>9.6</b>     |
| Surface  | 1  | 1          | -              | 211                              | 224           | -5.8           | 6.73  | 6.14         | 9.6            |
| <b>Missouri</b>  | <b>2</b>                                 | <b>2</b>   | <b>-</b>       | <b>32</b>                        | <b>26</b>     | <b>23.1</b>    | <b>6.73</b>   | <b>6.86</b>  | <b>-1.8</b>    |
| Surface  | 2  | 2          | -              | 32                               | 26            | 23.1           | 6.73  | 6.86         | -1.8           |
| <b>Montana</b>   | <b>6</b>                                 | <b>6</b>   | <b>-</b>       | <b>1,233</b>                     | <b>1,251</b>  | <b>-1.4</b>    | <b>14.46</b>  | <b>16.37</b> | <b>-11.7</b>   |
| Underground  | 1  | 1          | -              | 320                              | 296           | 8.1            | 7.47  | 7.23         | 3.4            |
| Surface  | 5  | 5          | -              | 913                              | 955           | -4.4           | 17.47   | 19.87        | -12.1          |
| <b>New Mexico</b>  | <b>4</b>                                 | <b>6</b>   | <b>-33.3</b>   | <b>1,291</b>                     | <b>1,292</b>  | <b>-0.1</b>    | <b>8.14</b>   | <b>8.38</b>  | <b>-2.8</b>    |
| Underground  | 1  | 3          | -66.7          | 435                              | 464           | -6.3           | 5.19  | 4.43         | 17.2           |
| Surface  | 3  | 3          | -              | 856                              | 828           | 3.4            | 9.70  | 10.44        | -7.1           |
| <b>North Dakota</b>  | <b>4</b>                                 | <b>5</b>   | <b>-20.0</b>   | <b>1,228</b>                     | <b>1,169</b>  | <b>5.0</b>     | <b>11.57</b>  | <b>12.10</b> | <b>-4.4</b>    |
| Surface  | 4  | 5          | -20.0          | 1,228                            | 1,169         | 5.0            | 11.57   | 12.10        | -4.4           |
| <b>Ohio</b>  | <b>51</b>                                | <b>60</b>  | <b>-15.0</b>   | <b>3,191</b>                     | <b>3,006</b>  | <b>6.2</b>     | <b>3.69</b>   | <b>3.90</b>  | <b>-5.5</b>    |
| Underground  | 14                                       | 16         | -12.5          | 1,969                            | 1,909         | 3.1            | 4.01  | 4.25         | -5.7           |
| Surface  | 37                                       | 44         | -15.9          | 1,222                            | 1,097         | 11.4           | 3.13  | 3.33         | -6.1           |
| <b>Oklahoma</b>  | <b>7</b>                                 | <b>6</b>   | <b>16.7</b>    | <b>199</b>                       | <b>184</b>    | <b>8.2</b>     | <b>2.21</b>   | <b>2.44</b>  | <b>-9.3</b>    |
| Underground  | 1  | 1          | -              | 55                               | 49            | 12.2           | 2.37  | 3.07         | -23.0          |
| Surface  | 6  | 5          | 20.0           | 144                              | 135           | 6.7            | 2.14  | 2.19         | -2.1           |
| <b>Pennsylvania Total</b>                                  | <b>328</b>                               | <b>335</b> | <b>-2.1</b>    | <b>8,927</b>                     | <b>8,665</b>  | <b>3.0</b>     | <b>2.81</b>   | <b>3.01</b>  | <b>-6.8</b>    |
| Underground  | 81                                       | 81         | -              | 6,120                            | 5,892         | 3.9            | 3.22  | 3.44         | -6.4           |
| Surface  | 247                                      | 254        | -2.8           | 2,807                            | 2,773         | 1.2            | 1.75  | 2.01         | -12.6          |
| <b>Pennsylvania (Anthracite)</b>                           | <b>113</b>                               | <b>105</b> | <b>7.6</b>     | <b>1,146</b>                     | <b>952</b>    | <b>20.4</b>    | <b>1.02</b>   | <b>1.11</b>  | <b>-7.9</b>    |
| Underground  | 23                                       | 22         | 4.5            | 128                              | 150           | -14.7          | 0.50  | 0.63         | -19.7          |
| Surface  | 90                                       | 83         | 8.4            | 1,018                            | 802           | 26.9           | 1.08  | 1.18         | -8.9           |

| Coal-Producing State, Region <sup>1</sup><br>and Mine Type | Number of Mining Operations <sup>2</sup> |              |                   | Number of Employees <sup>3</sup> |               |                   | Average Production per Employee Hour<br>(short tons) <sup>4</sup> |              |                   |
|--|--|--------------|-------------------|----------------------------------|---------------|-------------------|---|--------------|-------------------|
|  | 2012                                     | 2011         | Percent<br>Change | 2012                             | 2011          | Percent<br>Change | 2012  | 2011         | Percent<br>Change |
| <b>Pennsylvania (Bituminous)</b>                           | <b>215</b>                               | <b>230</b>   | <b>-6.5</b>       | <b>7,781</b>                     | <b>7,713</b>  | <b>0.9</b>        | <b>3.04</b>   | <b>3.22</b>  | <b>-5.4</b>       |
| Underground  | 58                                       | 59           | -1.7              | 5,992                            | 5,742         | 4.4               | 3.27  | 3.50         | -6.5              |
| Surface  | 157                                      | 171          | -8.2              | 1,789                            | 1,971         | -9.2              | 2.16  | 2.33         | -7.5              |
| <b>Tennessee</b>   | <b>20</b>                                | <b>30</b>    | <b>-33.3</b>      | <b>363</b>                       | <b>505</b>    | <b>-28.1</b>      | <b>1.58</b>   | <b>1.44</b>  | <b>9.4</b>        |
| Underground  | 7  | 10           | -30.0             | 175                              | 179           | -2.2              | 1.63  | 1.16         | 40.8              |
| Surface  | 13                                       | 20           | -35.0             | 188                              | 326           | -42.3             | 1.53  | 1.59         | -4.0              |
| <b>Texas</b>   | <b>12</b>                                | <b>13</b>    | <b>-7.7</b>       | <b>2,918</b>                     | <b>2,936</b>  | <b>-0.6</b>       | <b>6.93</b>   | <b>7.25</b>  | <b>-4.4</b>       |
| Surface  | 12                                       | 13           | -7.7              | 2,918                            | 2,936         | -0.6              | 6.93  | 7.25         | -4.4              |
| <b>Utah</b>  | <b>16</b>                                | <b>15</b>    | <b>6.7</b>        | <b>1,611</b>                     | <b>1,797</b>  | <b>-10.4</b>      | <b>5.08</b>   | <b>5.12</b>  | <b>-0.7</b>       |
| Underground  | 14                                       | 13           | 7.7               | 1,576                            | 1,779         | -11.4             | 5.04  | 5.17         | -2.5              |
| Surface  | 2  | 2            | -                 | 35                               | 18            | 94.4              | 6.54  | -            | -                 |
| <b>Virginia</b>  | <b>137</b>                               | <b>152</b>   | <b>-9.9</b>       | <b>4,998</b>                     | <b>5,261</b>  | <b>-5.0</b>       | <b>1.74</b>   | <b>1.81</b>  | <b>-3.7</b>       |
| Underground  | 79                                       | 83           | -4.8              | 3,763                            | 3,796         | -0.9              | 1.51  | 1.71         | -11.6             |
| Surface  | 58                                       | 69           | -15.9             | 1,235                            | 1,465         | -15.7             | 2.44  | 2.08         | 17.6              |
| <b>West Virginia Total</b>                                 | <b>388</b>                               | <b>402</b>   | <b>-3.5</b>       | <b>22,786</b>                    | <b>23,307</b> | <b>-2.2</b>       | <b>2.38</b>   | <b>2.45</b>  | <b>-2.8</b>       |
| Underground  | 227                                      | 229          | -0.9              | 17,085                           | 16,963        | 0.7               | 2.15  | 2.10         | 2.3               |
| Surface  | 161                                      | 173          | -6.9              | 5,701                            | 6,344         | -10.1             | 3.04  | 3.36         | -9.5              |
| <b>West Virginia (Northern)</b>                            | <b>52</b>                                | <b>52</b>    | <b>-</b>          | <b>5,891</b>                     | <b>5,646</b>  | <b>4.3</b>        | <b>3.17</b>   | <b>3.23</b>  | <b>-1.6</b>       |
| Underground  | 31                                       | 29           | 6.9               | 5,590                            | 5,238         | 6.7               | 3.17  | 3.20         | -1.0              |
| Surface  | 21                                       | 23           | -8.7              | 301                              | 408           | -26.2             | 3.22  | 3.52         | -8.3              |
| <b>West Virginia (Southern)</b>                            | <b>336</b>                               | <b>350</b>   | <b>-4.0</b>       | <b>16,895</b>                    | <b>17,661</b> | <b>-4.3</b>       | <b>2.10</b>   | <b>2.21</b>  | <b>-4.8</b>       |
| Underground  | 196                                      | 200          | -2.0              | 11,495                           | 11,725        | -2.0              | 1.64  | 1.62         | 1.3               |
| Surface  | 140                                      | 150          | -6.7              | 5,400                            | 5,936         | -9.0              | 3.03  | 3.35         | -9.4              |
| <b>Wyoming</b>   | <b>19</b>                                | <b>18</b>    | <b>5.6</b>        | <b>7,004</b>                     | <b>7,039</b>  | <b>-0.5</b>       | <b>27.74</b>  | <b>29.34</b> | <b>-5.5</b>       |
| Underground  | 1  | 1            | -                 | 250                              | 234           | 6.8               | 7.81  | 5.36         | 45.5              |
| Surface  | 18                                       | 17           | 5.9               | 6,754                            | 6,805         | -0.7              | 28.59   | 30.29        | -5.6              |
| <b>Appalachia Total</b>                                    | <b>1,444</b>                             | <b>1,565</b> | <b>-7.7</b>       | <b>57,629</b>                    | <b>60,269</b> | <b>-4.4</b>       | <b>2.32</b>   | <b>2.38</b>  | <b>-2.6</b>       |
| Underground  | 615                                      | 651          | -5.5              | 39,850                           | 40,520        | -1.7              | 2.22  | 2.22         | -0.1              |
| Surface  | 829                                      | 914          | -9.3              | 17,779                           | 19,749        | -10.0             | 2.56  | 2.72         | -6.1              |
| <b>Appalachia Central</b>                                  | <b>936</b>                               | <b>1,030</b> | <b>-9.1</b>       | <b>34,103</b>                    | <b>37,706</b> | <b>-9.6</b>       | <b>2.01</b>   | <b>2.08</b>  | <b>-3.7</b>       |
| Underground  | 474                                      | 508          | -6.7              | 22,768                           | 24,154        | -5.7              | 1.61  | 1.65         | -2.8              |
| Surface  | 462                                      | 522          | -11.5             | 11,335                           | 13,552        | -16.4             | 2.77  | 2.85         | -2.7              |
| <b>Appalachia Northern</b>                                 | <b>454</b>                               | <b>471</b>   | <b>-3.6</b>       | <b>18,485</b>                    | <b>17,805</b> | <b>3.8</b>        | <b>3.07</b>   | <b>3.23</b>  | <b>-5.0</b>       |
| Underground  | 130                                      | 130          | -                 | 13,892                           | 13,227        | 5.0               | 3.30  | 3.45         | -4.4              |
| Surface  | 324                                      | 341          | -5.0              | 4,593                            | 4,578         | 0.3               | 2.30  | 2.57         | -10.5             |
| <b>Appalachia Southern</b>                                 | <b>54</b>                                | <b>64</b>    | <b>-15.6</b>      | <b>5,041</b>                     | <b>4,758</b>  | <b>5.9</b>        | <b>1.68</b>   | <b>1.66</b>  | <b>0.7</b>        |
| Underground  | 11                                       | 13           | -15.4             | 3,190                            | 3,139         | 1.6               | 1.64  | 1.45         | 13.3              |
| Surface  | 43                                       | 51           | -15.7             | 1,851                            | 1,619         | 14.3              | 1.75  | 2.08         | -15.7             |
| <b>Interior Basin Total</b>                                | <b>141</b>                               | <b>139</b>   | <b>1.4</b>        | <b>16,660</b>                    | <b>15,705</b> | <b>6.1</b>        | <b>4.73</b>   | <b>4.59</b>  | <b>2.9</b>        |
| Underground  | 57                                       | 57           | -                 | 9,963                            | 9,175         | 8.6               | 3.94  | 3.67         | 7.4               |
| Surface  | 84                                       | 82           | 2.4               | 6,697                            | 6,530         | 2.6               | 6.01  | 5.98         | 0.4               |
| <b>Illinois Basin</b>                                      | <b>114</b>                               | <b>113</b>   | <b>0.9</b>        | <b>12,951</b>                    | <b>11,998</b> | <b>7.9</b>        | <b>4.25</b>   | <b>4.00</b>  | <b>6.2</b>        |
| Underground  | 55                                       | 55           | -                 | 9,838                            | 9,059         | 8.6               | 3.97  | 3.70         | 7.5               |
| Surface  | 59                                       | 58           | 1.7               | 3,113                            | 2,939         | 5.9               | 5.20  | 4.94         | 5.4               |
| <b>Interior</b>  | <b>27</b>                                | <b>26</b>    | <b>3.8</b>        | <b>3,709</b>                     | <b>3,707</b>  | <b>0.1</b>        | <b>6.50</b>   | <b>6.73</b>  | <b>-3.4</b>       |
| Underground  | 2  | 2            | -                 | 125                              | 116           | 7.8               | 1.43  | 1.68         | -14.6             |
| Surface  | 25                                       | 24           | 4.2               | 3,584                            | 3,591         | -0.2              | 6.70  | 6.93         | -3.4              |
| <b>Western Total</b>                                       | <b>65</b>                                | <b>64</b>    | <b>1.6</b>        | <b>15,447</b>                    | <b>15,508</b> | <b>-0.4</b>       | <b>17.09</b>  | <b>18.07</b> | <b>-5.5</b>       |
| Underground  | 28                                       | 27           | 3.7               | 4,613                            | 4,700         | -1.9              | 5.79  | 5.36         | 8.0               |
| Surface  | 37                                       | 37           | -                 | 10,834                           | 10,808        | 0.2               | 21.95   | 23.67        | -7.3              |
| <b>Powder River Basin</b>                                  | <b>17</b>                                | <b>16</b>    | <b>6.3</b>        | <b>6,983</b>                     | <b>7,041</b>  | <b>-0.8</b>       | <b>29.35</b>  | <b>31.33</b> | <b>-6.3</b>       |
| Surface  | 17                                       | 16           | 6.3               | 6,983                            | 7,041         | -0.8              | 29.35   | 31.33        | -6.3              |
| <b>Uinta Region</b>  | <b>24</b>                                | <b>23</b>    | <b>4.3</b>        | <b>3,771</b>                     | <b>3,898</b>  | <b>-3.3</b>       | <b>5.67</b>   | <b>5.61</b>  | <b>1.0</b>        |
| Underground  | 21                                       | 19           | 10.5              | 3,315                            | 3,429         | -3.3              | 5.75  | 5.64         | 1.9               |
| Surface  | 3  | 4            | -25.0             | 456                              | 469           | -2.8              | 5.01  | 5.37         | -6.7              |
| <b>Western</b>   | <b>24</b>                                | <b>25</b>    | <b>-4.0</b>       | <b>4,693</b>                     | <b>4,569</b>  | <b>2.7</b>        | <b>8.22</b>   | <b>8.25</b>  | <b>-0.3</b>       |
| Underground  | 7  | 8            | -12.5             | 1,298                            | 1,271         | 2.1               | 5.89  | 4.63         | 27.1              |
| Surface  | 17                                       | 17           | -                 | 3,395                            | 3,298         | 2.9               | 9.13  | 9.71         | -6.0              |
| <b>East of Mississippi River</b>                           | <b>1,559</b>                             | <b>1,679</b> | <b>-7.1</b>       | <b>70,791</b>                    | <b>72,491</b> | <b>-2.3</b>       | <b>2.70</b>   | <b>2.67</b>  | <b>1.3</b>        |
| Underground  | 670                                      | 706          | -5.1              | 49,688                           | 49,579        | 0.2               | 2.58  | 2.49         | 3.6               |
| Surface  | 889                                      | 973          | -8.6              | 21,103                           | 22,912        | -7.9              | 2.99  | 3.04         | -1.9              |
| <b>West of Mississippi River</b>                           | <b>91</b>                                | <b>89</b>    | <b>2.2</b>        | <b>18,945</b>                    | <b>18,991</b> | <b>-0.2</b>       | <b>15.03</b>  | <b>15.93</b> | <b>-5.7</b>       |
| Underground  | 30                                       | 29           | 3.4               | 4,738                            | 4,816         | -1.6              | 5.65  | 5.25         | 7.7               |

| Coal-Producing State, Region <sup>1</sup><br>and Mine Type | Number of Mining Operations <sup>2</sup> |              |                   | Number of Employees <sup>3</sup> |               |                   | Average Production per Employee Hour<br>(short tons) <sup>4</sup> |             |                   |
|--|--|--------------|-------------------|----------------------------------|---------------|-------------------|---|-------------|-------------------|
|  | 2012                                     | 2011         | Percent<br>Change | 2012                             | 2011          | Percent<br>Change | 2012  | 2011        | Percent<br>Change |
| Surface  | 61                                       | 60           | 1.7               | 14,207                           | 14,175        | 0.2               | 18.15   | 19.59       | -7.3              |
| <b>U.S. Subtotal</b>                                       | <b>1,650</b>                             | <b>1,768</b> | <b>-6.7</b>       | <b>89,736</b>                    | <b>91,482</b> | <b>-1.9</b>       | <b>5.19</b>   | <b>5.19</b> | <b>-0.1</b>       |
| Underground  | 700                                      | 735          | -4.8              | 54,426                           | 54,395        | 0.1               | 2.84  | 2.72        | 4.4               |
| Surface  | 950                                      | 1,033        | -8.0              | 35,310                           | 37,087        | -4.8              | 8.97  | 8.97        | -                 |
| <b>Refuse Recovery</b>                                     | <b>45</b>                                | <b>29</b>    | <b>55.2</b>       | <b>102</b>                       | <b>129</b>    | <b>-20.9</b>      | <b>6.97</b>   | <b>7.35</b> | <b>-5.2</b>       |
| <b>U.S. Total</b>  | <b>1,695</b>                             | <b>1,797</b> | <b>-5.7</b>       | <b>89,838</b>                    | <b>91,611</b> | <b>-1.9</b>       | <b>5.19</b>   | <b>5.19</b> | <b>-0.2</b>       |

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.

\* Absolute percentage less than 0.05.

- = 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, 'Coal Production and Preparation Report,' 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, 2012**

(short tons produced per employee hour)

| Coal-Producing State, Region <sup>1</sup> and Mine Type | Continuous <sup>2</sup> | Conventional and Other <sup>3</sup> | Longwall <sup>4</sup> | Total       |
|---|-------------------------|-------------------------------------|-----------------------|-------------|
| Alabama   | 0.71                    | -                                   | 1.69                  | 1.66        |
| Arkansas  | 0.59                    | -                                   | -                     | 0.59        |
| Colorado  | 1.90                    | -                                   | 6.38                  | 5.93        |
| Illinois  | 3.65                    | -                                   | 6.60                  | 4.86        |
| Indiana   | 3.25                    | -                                   | -                     | 3.25        |
| <b>Kentucky Total</b>                                   | <b>2.43</b>             | <b>1.77</b>                         | -                     | <b>2.39</b> |
| Kentucky (East)   | 1.61                    | 1.77                                | -                     | 1.62        |
| Kentucky (West)   | 3.61                    | -                                   | -                     | 3.56        |
| Maryland  | 1.80                    | -                                   | -                     | 1.80        |
| Montana   | -                       | -                                   | 7.47                  | 7.47        |
| New Mexico  | -                       | -                                   | 5.19                  | 5.19        |
| Ohio  | 2.44                    | -                                   | 4.96                  | 4.02        |
| Oklahoma  | 2.37                    | -                                   | -                     | 2.37        |
| <b>Pennsylvania Total</b>                               | <b>2.25</b>             | <b>0.92</b>                         | <b>3.79</b>           | <b>3.23</b> |
| Pennsylvania (Anthracite)                               | 0.40                    | 0.92                                | -                     | 0.45        |
| Pennsylvania (Bituminous)                               | 2.32                    | -                                   | 3.79                  | 3.27        |
| Tennessee   | 1.90                    | -                                   | -                     | 1.90        |
| Utah  | 4.16                    | -                                   | 5.15                  | 5.04        |
| Virginia  | 1.32                    | -                                   | 2.50                  | 1.52        |
| <b>West Virginia Total</b>                              | <b>1.62</b>             | <b>1.28</b>                         | <b>3.15</b>           | <b>2.16</b> |
| West Virginia (Northern)                                | 1.88                    | -                                   | 3.58                  | 3.18        |
| West Virginia (Southern)                                | 1.59                    | 1.28                                | 2.09                  | 1.65        |
| Wyoming   | -                       | -                                   | 7.81                  | 7.81        |
| <b>Appalachia Total</b>                                 | <b>1.67</b>             | <b>1.62</b>                         | <b>3.13</b>           | <b>2.23</b> |
| Appalachia Central                                      | 1.56                    | 1.63                                | 2.20                  | 1.62        |
| Appalachia Northern                                     | 2.15                    | 0.92                                | 3.86                  | 3.30        |
| Appalachia Southern                                     | 0.71                    | -                                   | 1.69                  | 1.66        |
| <b>Interior Basin Total</b>                             | <b>3.50</b>             | -                                   | <b>6.60</b>           | <b>3.96</b> |
| Illinois Basin  | 3.53                    | -                                   | 6.60                  | 3.99        |
| Interior  | 1.43                    | -                                   | -                     | 1.43        |
| <b>Western Total</b>                                    | <b>2.98</b>             | -                                   | <b>6.04</b>           | <b>5.79</b> |
| Uinta Region  | 3.88                    | -                                   | 5.87                  | 5.75        |
| Western   | 1.96                    | -                                   | 6.49                  | 5.89        |
| <b>East of Mississippi River</b>                        | <b>2.18</b>             | <b>1.62</b>                         | <b>3.46</b>           | <b>2.60</b> |
| <b>West of Mississippi River</b>                        | <b>2.53</b>             | -                                   | <b>6.04</b>           | <b>5.65</b> |
| <b>U.S. Total</b>                                       | <b>2.19</b>             | <b>1.62</b>                         | <b>3.95</b>           | <b>2.86</b> |

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, 'Coal Production and Preparation Report,' 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, 2012**

(short tons produced per employee hour)

| Coal-Producing State, Region <sup>1</sup><br>and Mine Type | Mine Production Range (thousand short tons) |                       |                     |                     |                    |                   |             | Total <sup>2</sup> |
|--|---|-----------------------|---------------------|---------------------|--------------------|-------------------|-------------|--------------------|
|  | Above 1,000                                 | Above 500<br>to 1,000 | Above 200<br>to 500 | Above 100<br>to 200 | Above 50<br>to 100 | Above 10<br>to 50 | 10 or Under |                    |
| <b>Alabama</b>   | <b>1.69</b>                                 | <b>2.50</b>           | <b>1.95</b>         | <b>1.72</b>         | <b>1.83</b>        | <b>0.69</b>       | <b>0.55</b> | <b>1.68</b>        |
| Underground  | 1.73  | -                     | -                   | -                   | 1.08               | 0.31              | -           | 1.64               |
| Surface  | 1.36  | 2.50                  | 1.95                | 1.72                | 2.11               | 1.19              | 0.55        | 1.75               |
| <b>Alaska</b>  | <b>5.98</b>                                 | -                     | -                   | -                   | -                  | -                 | -           | <b>5.98</b>        |
| Surface  | 5.98  | -                     | -                   | -                   | -                  | -                 | -           | 5.98               |
| <b>Arizona</b>   | <b>7.38</b>                                 | -                     | -                   | -                   | -                  | -                 | -           | <b>7.38</b>        |
| Surface  | 7.38  | -                     | -                   | -                   | -                  | -                 | -           | 7.38               |
| <b>Arkansas</b>  | -   | -                     | -                   | -                   | <b>0.59</b>        | -                 | <b>0.37</b> | <b>0.58</b>        |
| Underground  | -   | -                     | -                   | -                   | 0.59               | -                 | -           | 0.59               |
| Surface  | -   | -                     | -                   | -                   | -                  | -                 | 0.37        | 0.37               |
| <b>Colorado</b>  | <b>6.19</b>                                 | <b>3.16</b>           | <b>6.73</b>         | -                   | <b>0.48</b>        | <b>0.96</b>       | -           | <b>5.79</b>        |
| Underground  | 6.46  | 3.16                  | -                   | -                   | 0.48               | 0.96              | -           | 5.93               |
| Surface  | 5.12  | -                     | 6.73                | -                   | -                  | -                 | -           | 5.21               |
| <b>Illinois</b>  | <b>5.07</b>                                 | <b>3.89</b>           | <b>3.92</b>         | <b>4.17</b>         | <b>2.43</b>        | -                 | -           | <b>4.76</b>        |
| Underground  | 5.08  | 3.30                  | -                   | -                   | -                  | -                 | -           | 4.83               |
| Surface  | 4.94  | 5.39                  | 5.61                | 4.17                | 2.91               | -                 | -           | 4.31               |
| <b>Indiana</b>   | <b>4.49</b>                                 | <b>4.10</b>           | <b>4.57</b>         | <b>2.39</b>         | <b>1.41</b>        | <b>3.28</b>       | <b>0.6</b>  | <b>4.19</b>        |
| Underground  | 3.58  | 2.19                  | 3.11                | -                   | -                  | -                 | 0.6         | 3.23               |
| Surface  | 5.86  | 5.11                  | 5.59                | 3.11                | 1.41               | 3.28              | -           | 5.37               |
| <b>Kansas</b>  | -   | -                     | -                   | -                   | -                  | <b>0.99</b>       | -           | <b>0.99</b>        |
| Surface  | -   | -                     | -                   | -                   | -                  | 0.99              | -           | 0.99               |
| <b>Kentucky Total</b>                                      | <b>3.96</b>                                 | <b>2.92</b>           | <b>2.53</b>         | <b>2.13</b>         | <b>1.74</b>        | <b>1.55</b>       | <b>0.82</b> | <b>2.56</b>        |
| Underground  | 3.69  | 2.37                  | 1.87                | 1.70                | 1.70               | 1.22              | 0.65        | 2.37               |
| Surface  | 6.06  | 3.91                  | 3.52                | 2.91                | 1.82               | 1.83              | 0.89        | 2.97               |
| <b>Kentucky (East)</b>                                     | <b>2.75</b>                                 | <b>2.75</b>           | <b>2.49</b>         | <b>2.12</b>         | <b>1.72</b>        | <b>1.47</b>       | <b>0.86</b> | <b>1.99</b>        |
| Underground  | 2.07  | 2.30                  | 1.87                | 1.70                | 1.70               | 1.22              | 0.76        | 1.61               |
| Surface  | 4.55  | 3.42                  | 3.47                | 2.87                | 1.76               | 1.68              | 0.89        | 2.58               |
| <b>Kentucky (West)</b>                                     | <b>4.19</b>                                 | <b>3.59</b>           | <b>4.43</b>         | <b>5.63</b>         | <b>8.78</b>        | <b>4.87</b>       | <b>0.35</b> | <b>3.82</b>        |
| Underground  | 3.93  | 2.57                  | -                   | -                   | -                  | -                 | 0.35        | 3.55               |
| Surface  | 6.95  | 7.91                  | 4.43                | 5.63                | 8.78               | 4.87              | -           | 5.59               |
| <b>Louisiana</b>   | <b>6.92</b>                                 | -                     | -                   | <b>5.12</b>         | -                  | -                 | -           | <b>6.86</b>        |
| Surface  | 6.92  | -                     | -                   | 5.12                | -                  | -                 | -           | 6.86               |
| <b>Maryland</b>  | -   | -                     | <b>2.76</b>         | <b>2.56</b>         | <b>2.23</b>        | <b>2.28</b>       | <b>0.71</b> | <b>2.28</b>        |
| Underground  | -   | -                     | 2.28                | 2.26                | -                  | -                 | -           | 1.80               |
| Surface  | -   | -                     | 3.75                | 2.64                | 2.23               | 2.28              | 0.71        | 2.66               |
| <b>Mississippi</b>   | <b>6.73</b>                                 | -                     | -                   | -                   | -                  | -                 | -           | <b>6.73</b>        |
| Surface  | 6.73  | -                     | -                   | -                   | -                  | -                 | -           | 6.73               |
| <b>Missouri</b>  | -   | -                     | <b>7.61</b>         | -                   | <b>4.33</b>        | -                 | -           | <b>6.73</b>        |
| Surface  | -   | -                     | 7.61                | -                   | 4.33               | -                 | -           | 6.73               |
| <b>Montana</b>   | <b>14.50</b>                                | -                     | <b>10.85</b>        | -                   | -                  | -                 | -           | <b>14.46</b>       |
| Underground  | 7.47  | -                     | -                   | -                   | -                  | -                 | -           | 7.47               |
| Surface  | 17.57                                       | -                     | 10.85               | -                   | -                  | -                 | -           | 17.47              |
| <b>New Mexico</b>  | <b>8.14</b>                                 | -                     | -                   | -                   | -                  | -                 | -           | <b>8.14</b>        |
| Underground  | 5.19  | -                     | -                   | -                   | -                  | -                 | -           | 5.19               |
| Surface  | 9.70  | -                     | -                   | -                   | -                  | -                 | -           | 9.70               |
| <b>North Dakota</b>  | <b>11.57</b>                                | -                     | -                   | -                   | -                  | -                 | -           | <b>11.57</b>       |
| Surface  | 11.57                                       | -                     | -                   | -                   | -                  | -                 | -           | 11.57              |
| <b>Ohio</b>  | <b>4.51</b>                                 | <b>3.12</b>           | <b>3.21</b>         | <b>1.73</b>         | <b>1.39</b>        | <b>3.14</b>       | <b>0.65</b> | <b>3.69</b>        |
| Underground  | 4.53  | 1.64                  | 3.33                | 1.37                | -                  | -                 | 0.41        | 4.01               |
| Surface  | 4.27  | 3.65                  | 3.17                | 1.95                | 1.39               | 3.14              | 0.85        | 3.13               |
| <b>Oklahoma</b>  | -   | -                     | <b>2.39</b>         | <b>2.14</b>         | -                  | <b>1.26</b>       | <b>0.60</b> | <b>2.21</b>        |
| Underground  | -   | -                     | 2.37                | -                   | -                  | -                 | -           | 2.37               |
| Surface  | -   | -                     | 2.40                | 2.14                | -                  | 1.26              | 0.60        | 2.14               |
| <b>Pennsylvania Total</b>                                  | <b>3.82</b>                                 | <b>2.95</b>           | <b>2.49</b>         | <b>2.16</b>         | <b>2.13</b>        | <b>1.64</b>       | <b>1.05</b> | <b>2.81</b>        |
| Underground  | 3.82  | 2.95                  | 2.61                | 1.27                | 1.47               | 0.74              | 0.72        | 3.22               |
| Surface  | -   | -                     | 2.33                | 2.60                | 2.35               | 1.81              | 1.11        | 1.75               |
| <b>Pennsylvania (Anthracite)</b>                           | -   | -                     | <b>2.81</b>         | <b>1.99</b>         | <b>1.57</b>        | <b>1.43</b>       | <b>0.73</b> | <b>1.02</b>        |
| Underground  | -   | -                     | -                   | -                   | -                  | 0.78              | 0.72        | 0.50               |

| Coal-Producing State, Region <sup>1</sup><br>and Mine Type | Mine Production Range (thousand short tons) |                       |                     |                     |                    |                   |             | Total <sup>2</sup> |
|--|---|-----------------------|---------------------|---------------------|--------------------|-------------------|-------------|--------------------|
|  | Above 1,000                                 | Above 500<br>to 1,000 | Above 200<br>to 500 | Above 100<br>to 200 | Above 50<br>to 100 | Above 10<br>to 50 | 10 or Under |                    |
| Surface  | -   | -                     | 2.81                | 1.99                | 1.57               | 1.62              | 0.74        | 1.08               |
| <b>Pennsylvania (Bituminous)</b>                           | <b>3.82</b>                                 | <b>2.95</b>           | <b>2.47</b>         | <b>2.20</b>         | <b>2.35</b>        | <b>1.80</b>       | <b>1.44</b> | <b>3.04</b>        |
| Underground  | 3.82  | 2.95                  | 2.61                | 1.27                | 1.47               | 0.67              | -           | 3.27               |
| Surface  | -   | -                     | 2.25                | 2.81                | 2.81               | 1.94              | 1.44        | 2.16               |
| <b>Tennessee</b>   | <b>-</b>                                    | <b>-</b>              | <b>2.58</b>         | <b>1.73</b>         | <b>1.40</b>        | <b>2.05</b>       | <b>0.28</b> | <b>1.58</b>        |
| Underground  | -   | -                     | 2.58                | -                   | 1.20               | 1.16              | 0.25        | 1.63               |
| Surface  | -   | -                     | -                   | 1.73                | 1.68               | 2.54              | 0.38        | 1.53               |
| <b>Texas</b>   | <b>7.11</b>                                 | <b>3.11</b>           | <b>-</b>            | <b>-</b>            | <b>-</b>           | <b>-</b>          | <b>-</b>    | <b>6.93</b>        |
| Surface  | 7.11  | 3.11                  | -                   | -                   | -                  | -                 | -           | 6.93               |
| <b>Utah</b>  | <b>5.41</b>                                 | <b>7.41</b>           | <b>2.62</b>         | <b>-</b>            | <b>-</b>           | <b>-</b>          | <b>-</b>    | <b>5.08</b>        |
| Underground  | 5.41  | 6.94                  | 2.62                | -                   | -                  | -                 | -           | 5.04               |
| Surface  | -   | 8.41                  | -                   | -                   | -                  | -                 | -           | 6.54               |
| <b>Virginia</b>  | <b>2.50</b>                                 | <b>1.93</b>           | <b>2.00</b>         | <b>2.03</b>         | <b>1.52</b>        | <b>1.08</b>       | <b>0.53</b> | <b>1.74</b>        |
| Underground  | 2.50  | 1.70                  | 1.58                | 1.50                | 1.24               | 1.14              | 0.57        | 1.51               |
| Surface  | -   | 2.49                  | 2.99                | 3.38                | 1.99               | 0.87              | 0.38        | 2.44               |
| <b>West Virginia Total</b>                                 | <b>3.26</b>                                 | <b>2.82</b>           | <b>2.07</b>         | <b>1.52</b>         | <b>1.63</b>        | <b>1.36</b>       | <b>0.31</b> | <b>2.38</b>        |
| Underground  | 3.11  | 2.17                  | 1.71                | 1.37                | 1.41               | 1.14              | 0.22        | 2.15               |
| Surface  | 3.81  | 3.57                  | 3.12                | 2.39                | 2.25               | 2.03              | 0.52        | 3.04               |
| <b>West Virginia (Northern)</b>                            | <b>3.47</b>                                 | <b>5.12</b>           | <b>2.24</b>         | <b>1.51</b>         | <b>6.73</b>        | <b>2.75</b>       | <b>0.56</b> | <b>3.17</b>        |
| Underground  | 3.47  | -                     | 2.16                | 1.09                | -                  | 1.61              | 0.30        | 3.17               |
| Surface  | -   | 5.12                  | 2.56                | 3.92                | 6.73               | 2.88              | 1.13        | 3.22               |
| <b>West Virginia (Southern)</b>                            | <b>3.02</b>                                 | <b>2.76</b>           | <b>2.05</b>         | <b>1.52</b>         | <b>1.57</b>        | <b>1.25</b>       | <b>0.27</b> | <b>2.10</b>        |
| Underground  | 2.42  | 2.17                  | 1.65                | 1.40                | 1.41               | 1.13              | 0.21        | 1.64               |
| Surface  | 3.81  | 3.49                  | 3.16                | 2.21                | 2.05               | 1.74              | 0.42        | 3.03               |
| <b>Wyoming</b>   | <b>28.51</b>                                | <b>2.24</b>           | <b>-</b>            | <b>-</b>            | <b>-</b>           | <b>4.11</b>       | <b>0.62</b> | <b>27.74</b>       |
| Underground  | 7.81  | -                     | -                   | -                   | -                  | -                 | -           | 7.81               |
| Surface  | 29.42                                       | 2.24                  | -                   | -                   | -                  | 4.11              | 0.62        | 28.59              |
| <b>Appalachia Total</b>                                    | <b>3.16</b>                                 | <b>2.74</b>           | <b>2.27</b>         | <b>1.85</b>         | <b>1.73</b>        | <b>1.43</b>       | <b>0.67</b> | <b>2.32</b>        |
| Underground  | 3.10  | 2.21                  | 1.88                | 1.47                | 1.51               | 1.04              | 0.40        | 2.22               |
| Surface  | 3.56  | 3.44                  | 2.92                | 2.52                | 2.00               | 1.77              | 0.86        | 2.56               |
| <b>Appalachia Central</b>                                  | <b>2.93</b>                                 | <b>2.65</b>           | <b>2.21</b>         | <b>1.81</b>         | <b>1.64</b>        | <b>1.36</b>       | <b>0.54</b> | <b>2.01</b>        |
| Underground  | 2.39  | 2.13                  | 1.72                | 1.51                | 1.53               | 1.17              | 0.38        | 1.61               |
| Surface  | 3.88  | 3.37                  | 3.27                | 2.66                | 1.85               | 1.66              | 0.73        | 2.77               |
| <b>Appalachia Northern</b>                                 | <b>3.78</b>                                 | <b>3.19</b>           | <b>2.59</b>         | <b>2.02</b>         | <b>2.15</b>        | <b>1.78</b>       | <b>0.93</b> | <b>3.07</b>        |
| Underground  | 3.77  | 2.62                  | 2.54                | 1.26                | 1.47               | 0.77              | 0.53        | 3.30               |
| Surface  | 4.27  | 3.88                  | 2.65                | 2.59                | 2.31               | 1.95              | 1.05        | 2.30               |
| <b>Appalachia Southern</b>                                 | <b>1.69</b>                                 | <b>2.50</b>           | <b>1.95</b>         | <b>1.72</b>         | <b>1.83</b>        | <b>0.69</b>       | <b>0.55</b> | <b>1.68</b>        |
| Underground  | 1.73  | -                     | -                   | -                   | 1.08               | 0.31              | -           | 1.64               |
| Surface  | 1.36  | 2.50                  | 1.95                | 1.72                | 2.11               | 1.19              | 0.55        | 1.75               |
| <b>Interior Basin Total</b>                                | <b>5.15</b>                                 | <b>3.80</b>           | <b>3.97</b>         | <b>3.12</b>         | <b>1.45</b>        | <b>2.74</b>       | <b>0.15</b> | <b>4.73</b>        |
| Underground  | 4.32  | 2.71                  | 2.47                | -                   | 0.57               | -                 | 0.11        | 3.94               |
| Surface  | 6.65  | 5.13                  | 4.72                | 3.42                | 2.62               | 2.74              | 0.53        | 6.01               |
| <b>Illinois Basin</b>                                      | <b>4.59</b>                                 | <b>3.87</b>           | <b>4.42</b>         | <b>3.31</b>         | <b>2.24</b>        | <b>4.44</b>       | <b>0.11</b> | <b>4.25</b>        |
| Underground  | 4.32  | 2.71                  | 2.53                | -                   | -                  | -                 | 0.11        | 3.97               |
| Surface  | 5.91  | 5.62                  | 5.26                | 3.79                | 2.36               | 4.44              | -           | 5.20               |
| <b>Interior</b>  | <b>7.07</b>                                 | <b>3.11</b>           | <b>3.00</b>         | <b>2.72</b>         | <b>0.93</b>        | <b>1.18</b>       | <b>0.53</b> | <b>6.50</b>        |
| Underground  | -   | -                     | 2.37                | -                   | 0.59               | -                 | -           | 1.43               |
| Surface  | 7.07  | 3.11                  | 3.39                | 2.72                | 4.33               | 1.18              | 0.53        | 6.70               |
| <b>Western Total</b>                                       | <b>17.81</b>                                | <b>3.82</b>           | <b>4.22</b>         | <b>-</b>            | <b>0.48</b>        | <b>1.21</b>       | <b>0.62</b> | <b>17.09</b>       |
| Underground  | 6.17  | 4.73                  | 2.62                | -                   | 0.48               | 0.96              | -           | 5.79               |
| Surface  | 22.45                                       | 3.15                  | 8.14                | -                   | -                  | 4.11              | 0.62        | 21.95              |
| <b>Powder River Basin</b>                                  | <b>29.39</b>                                | <b>-</b>              | <b>-</b>            | <b>-</b>            | <b>-</b>           | <b>-</b>          | <b>-</b>    | <b>29.35</b>       |
| Surface  | 29.39                                       | -                     | -                   | -                   | -                  | -                 | -           | 29.35              |
| <b>Uinta Region</b>  | <b>5.89</b>                                 | <b>6.94</b>           | <b>2.62</b>         | <b>-</b>            | <b>-</b>           | <b>1.34</b>       | <b>-</b>    | <b>5.67</b>        |
| Underground  | 6.00  | 6.94                  | 2.62                | -                   | -                  | 1.34              | -           | 5.75               |
| Surface  | 5.12  | -                     | -                   | -                   | -                  | -                 | -           | 5.01               |
| <b>Western</b>   | <b>8.80</b>                                 | <b>3.15</b>           | <b>8.14</b>         | <b>-</b>            | <b>0.48</b>        | <b>1.08</b>       | <b>0.62</b> | <b>8.22</b>        |
| Underground  | 6.62  | 3.16                  | -                   | -                   | 0.48               | 0.55              | -           | 5.89               |
| Surface  | 9.57  | 3.15                  | 8.14                | -                   | -                  | 4.11              | 0.62        | 9.13               |
| <b>East of Mississippi River</b>                           | <b>3.68</b>                                 | <b>2.91</b>           | <b>2.33</b>         | <b>1.87</b>         | <b>1.74</b>        | <b>1.46</b>       | <b>0.61</b> | <b>2.70</b>        |
| Underground  | 3.52  | 2.29                  | 1.89                | 1.47                | 1.51               | 1.04              | 0.34        | 2.58               |
| Surface  | 4.62  | 3.75                  | 3.04                | 2.57                | 2.02               | 1.82              | 0.86        | 2.99               |
| <b>West of Mississippi River</b>                           | <b>15.88</b>                                | <b>3.64</b>           | <b>3.51</b>         | <b>2.72</b>         | <b>0.77</b>        | <b>1.19</b>       | <b>0.54</b> | <b>15.03</b>       |

| Coal-Producing State, Region <sup>1</sup><br>and Mine Type | Mine Production Range (thousand short tons) |                       |                     |                     |                    |                   |             | Total <sup>2</sup> |
|--|---|-----------------------|---------------------|---------------------|--------------------|-------------------|-------------|--------------------|
|  | Above 1,000                                 | Above 500<br>to 1,000 | Above 200<br>to 500 | Above 100<br>to 200 | Above 50<br>to 100 | Above 10<br>to 50 | 10 or Under |                    |
| Underground  | 6.17  | 4.73                  | 2.51                | -                   | 0.55               | 0.96              | -           | 5.65               |
| Surface  | 18.84                                       | 3.13                  | 4.57                | 2.72                | 4.33               | 1.48              | 0.54        | 18.15              |
| <b>U.S. Subtotal</b>                                       | <b>7.92</b>                                 | <b>2.95</b>           | <b>2.36</b>         | <b>1.88</b>         | <b>1.70</b>        | <b>1.45</b>       | <b>0.61</b> | <b>5.19</b>        |
| Underground  | 3.85  | 2.37                  | 1.90                | 1.47                | 1.43               | 1.04              | 0.34        | 2.84               |
| Surface  | 15.04                                       | 3.69                  | 3.08                | 2.57                | 2.03               | 1.82              | 0.85        | 8.97               |
| <b>Refuse Recovery</b>                                     | -   | <b>40.24</b>          | -                   | <b>6.22</b>         | <b>3.66</b>        | <b>2.82</b>       | <b>1.96</b> | <b>6.97</b>        |
| <b>U.S. Total</b>  | <b>7.92</b>                                 | <b>2.98</b>           | <b>2.36</b>         | <b>1.90</b>         | <b>1.70</b>        | <b>1.47</b>       | <b>0.64</b> | <b>5.19</b>        |

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: 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, 'Coal Production and Preparation Report,' 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, 2012**

(short tons produced per employee hour)

| Coal-Producing State and Region <sup>1</sup> | Union       |             | Nonunion    |              |
|--|-------------|-------------|-------------|--------------|
|  | Underground | Surface     | Underground | Surface      |
| Alabama                                      | 1.69        | -           | 0.66        | 1.80         |
| Alaska                                       | -           | 5.98        | -           | -            |
| Arizona                                      | -           | 7.38        | -           | -            |
| Arkansas                                     | -           | -           | 0.59        | -            |
| Colorado                                     | 4.90        | 6.09        | 6.02        | 4.45         |
| Illinois                                     | 2.09        | -           | 5.34        | 4.70         |
| Indiana                                      | -           | -           | 3.23        | 5.41         |
| <b>Kentucky Total</b>                        | <b>3.02</b> | <b>2.45</b> | <b>2.36</b> | <b>3.06</b>  |
| Kentucky (East)                              | -           | 2.45        | 1.64        | 2.65         |
| Kentucky (West)                              | 3.27        | -           | 3.60        | 5.58         |
| Louisiana                                    | -           | -           | -           | 6.86         |
| Maryland                                     | -           | -           | 1.80        | 2.80         |
| Mississippi                                  | -           | -           | -           | 6.73         |
| Missouri                                     | -           | -           | -           | 6.73         |
| Montana                                      | -           | 11.20       | 7.47        | 31.69        |
| New Mexico                                   | 5.19        | 8.35        | -           | 11.08        |
| North Dakota                                 | -           | 12.27       | -           | 11.36        |
| Ohio   | 3.95        | -           | 4.06        | 3.14         |
| Oklahoma                                     | -           | -           | 2.37        | 2.21         |
| <b>Pennsylvania Total</b>                    | <b>3.28</b> | <b>1.00</b> | <b>3.25</b> | <b>1.90</b>  |
| Pennsylvania (Anthracite)                    | -           | 0.96        | 0.47        | 1.13         |
| Pennsylvania (Bituminous)                    | 3.28        | 1.21        | 3.31        | 2.24         |
| Tennessee                                    | -           | -           | 1.90        | 1.65         |
| Texas  | -           | 7.61        | -           | 5.74         |
| Utah   | 5.10        | -           | 5.03        | 8.41         |
| Virginia                                     | 1.05        | -           | 1.60        | 2.52         |
| <b>West Virginia Total</b>                   | <b>3.11</b> | <b>2.89</b> | <b>1.78</b> | <b>3.10</b>  |
| West Virginia (Northern)                     | 3.61        | -           | 2.33        | 3.27         |
| West Virginia (Southern)                     | 1.50        | 2.89        | 1.67        | 3.09         |
| Wyoming                                      | 7.81        | 5.88        | -           | 30.25        |
| <b>Appalachian Total</b>                     | <b>2.69</b> | <b>2.39</b> | <b>2.06</b> | <b>2.62</b>  |
| Appalachia Central                           | 1.35        | 2.81        | 1.65        | 2.83         |
| Appalachia Northern                          | 3.55        | 1.00        | 3.13        | 2.46         |
| Appalachia Southern                          | 1.69        | -           | 0.66        | 1.80         |
| <b>Interior Basin Total</b>                  | <b>2.64</b> | <b>7.41</b> | <b>4.10</b> | <b>5.47</b>  |
| Illinois Basin                               | 2.64        | -           | 4.14        | 5.32         |
| Interior                                     | -           | 7.61        | 1.43        | 5.74         |
| <b>Western Total</b>                         | <b>5.74</b> | <b>8.45</b> | <b>5.81</b> | <b>26.34</b> |
| Powder River Basin                           | -           | 11.21       | -           | 31.02        |
| Uinta Region                                 | 5.04        | 6.00        | 5.87        | 4.45         |
| Western                                      | 6.20        | 7.82        | 5.48        | 10.70        |
| <b>East of Mississippi River</b>             | <b>2.68</b> | <b>2.31</b> | <b>2.59</b> | <b>3.10</b>  |
| <b>West of Mississippi River</b>             | <b>5.74</b> | <b>8.09</b> | <b>5.62</b> | <b>22.98</b> |
| <b>U.S. Total</b>                            | <b>2.94</b> | <b>6.59</b> | <b>2.84</b> | <b>9.66</b>  |

<sup>1</sup> 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, 'Coal Production and Preparation Report,' and U.S. Department of Labor, Mine Safety and Health Administration Form 7000-2, 'Quarterly Mine Employment and Coal Production Report.'

# Domestic Markets

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**Table 25. Coal Consumers in the Manufacturing and Coke Sectors, 2012**

| Company Name                               | Plant Location                         |
|--|--|
| <b>Top Ten Manufacturers</b>               |  |
| American Crystal Sugar Co                  | MN, ND                                 |
| Archer Daniels Midland                     | IA, IL, MN, ND, NE                     |
| Carmeuse Lime Stone Inc                    | AL, IL, IN, KY, MI, OH, PA, TN, VA, WI |
| Cemex Inc                                  | AL, CA, CO, FL, GA, KY, OH, TN, TX     |
| Dakota Gasification Company                | ND                                     |
| Eastman Chemical Company                   | TN                                     |
| Georgia-Pacific LLC                        | AL, GA, OK, VA, WI                     |
| Holcim (US) Inc                            | AL, CO, MD, MO, MT, OK, SC, TX, UT     |
| NewPage Corporation                        | MD, MI, WI                             |
| U S Steel Corporation                      | AL, IN, MI, MN                         |
| <b>Other Major Manufacturers</b>           |  |
| Ash Grove Cement Co                        | AR, KS, MT, NE, OR, UT                 |
| 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, NY, OH, TN                 |
| Catalyst Paper Company                     | AZ                                     |
| Celanese Acetate/Celco Plant               | VA                                     |
| Cliffs Natural Resources Silver Bay Pwr Co | MN                                     |
| Domtar Industries Inc                      | AR, WI                                 |
| Doyon Utilities                            | AK                                     |
| FMC Corporation                            | WY                                     |
| GCC America                                | CO, NM, SD                             |
| Graymont Western US Inc                    | MT, NV, UT, WA, WI                     |
| Ingredion Incorporated                     | IL, NC                                 |
| Lafarge North America                      | IA, IL, MI, NY, OK, 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                                 |
| Mittal Steel USA                           | IN                                     |
| PH Glatfelter CO                           | OH                                     |
| PPG Industries Inc                         | WV                                     |
| RED-Rochester LLC                          | NY                                     |
| RockTenn CP LLC                            | FL, VA                                 |
| Searles Valley Minerals                    | CA                                     |
| Solvay Chemicals Inc                       | WY                                     |
| TATA Chemicals Ltd                         | WY                                     |
| Tate and Lyle Ingredients Americas Inc     | IL, IN, TN                             |
| Western Sugar Cooperative                  | CO, MT, NE, WY                         |
| <b>Top Ten Coke Producers</b>              |  |
| AK Steel Corp                              | OH                                     |
| DTE Energy Services                        | MI, PA                                 |
| Drummond Company Inc                       | AL                                     |
| Erie Coke Corp                             | PA                                     |
| 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 manufactures 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, Manufactures: Form EIA-3, 'Quarterly Coal Consumption and Quality Report, Manufacturing and Transformation/Processing Coal Plants and Commercial and Institutional Coal Users' and Coke Plants: 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, 2012 and 2011**

(thousand short tons)

| Census Division and State | 2012                        |                  |               |                              | 2011                        |                  |               |                              | Total          |                | Percent Change |
|---------------------------|-----------------------------|------------------|---------------|------------------------------|-----------------------------|------------------|---------------|------------------------------|----------------|----------------|----------------|
|                           | Electric Power <sup>1</sup> | Other Industrial | Coke          | Commercial and Institutional | Electric Power <sup>1</sup> | Other Industrial | Coke          | Commercial and Institutional | 2012           | 2011           |                |
| <b>New England</b>        | <b>1,920</b>                | <b>81</b>        | -             | -                            | <b>3,025</b>                | w                | -             | -                            | <b>2,001</b>   | <b>w</b>       | <b>w</b>       |
| Connecticut               | 415                         | -                | -             | -                            | 325                         | -                | -             | -                            | 415            | 325            | 27.5           |
| Maine                     | 32                          | w                | -             | -                            | 38                          | w                | -             | -                            | w              | w              | -16.4          |
| Massachusetts             | 954                         | w                | -             | -                            | 1,763                       | w                | -             | -                            | w              | w              | -44.4          |
| New Hampshire             | 520                         | -                | -             | -                            | 898                         | -                | -             | -                            | 520            | 898            | -42.2          |
| <b>Middle Atlantic</b>    | <b>44,838</b>               | <b>2,440</b>     | <b>w</b>      | <b>w</b>                     | <b>53,970</b>               | <b>2,926</b>     | <b>w</b>      | <b>w</b>                     | <b>52,750</b>  | <b>62,401</b>  | <b>-15.5</b>   |
| New Jersey                | 1,007                       | -                | -             | -                            | 1,976                       | -                | -             | -                            | 1,007          | 1,976          | -49.0          |
| New York                  | 2,228                       | 748              | w             | -                            | 4,591                       | 809              | w             | w                            | w              | 5,605          | w              |
| Pennsylvania              | 41,602                      | 1,692            | w             | 131                          | 47,403                      | 2,117            | w             | 170                          | w              | w              | -11.3          |
| <b>East North Central</b> | <b>181,275</b>              | <b>8,906</b>     | <b>12,125</b> | <b>578</b>                   | <b>209,673</b>              | <b>10,950</b>    | <b>11,673</b> | <b>907</b>                   | <b>202,884</b> | <b>233,203</b> | <b>-13.0</b>   |
| Illinois                  | 48,509                      | 3,165            | w             | 129                          | 53,682                      | 3,437            | w             | 151                          | w              | w              | -9.3           |
| Indiana                   | 46,696                      | 1,974            | w             | w                            | 52,704                      | 3,298            | w             | 301                          | 54,571         | w              | w              |
| Michigan                  | 29,669                      | 1,051            | w             | w                            | 32,335                      | 1,141            | w             | w                            | 32,050         | 35,143         | -8.8           |
| Ohio                      | 37,119                      | 1,327            | 3,593         | 131                          | 48,140                      | 1,532            | 2,925         | 193                          | 42,170         | 52,790         | -20.1          |
| Wisconsin                 | 19,283                      | 1,388            | -             | 30                           | 22,812                      | 1,541            | -             | 99                           | 20,701         | 24,453         | -15.3          |
| <b>West North Central</b> | <b>133,859</b>              | <b>13,373</b>    | -             | <b>382</b>                   | <b>145,208</b>              | <b>13,169</b>    | -             | <b>493</b>                   | <b>147,615</b> | <b>158,870</b> | <b>-7.1</b>    |
| Iowa                      | 20,747                      | 3,345            | -             | w                            | 22,677                      | 3,542            | -             | w                            | w              | w              | -8.2           |
| Kansas                    | 17,759                      | w                | -             | -                            | 20,129                      | w                | -             | -                            | w              | w              | -11.8          |
| Minnesota                 | 13,384                      | w                | -             | w                            | 16,515                      | w                | -             | w                            | 14,518         | 17,846         | -18.7          |
| Missouri                  | 42,340                      | 1,014            | -             | w                            | 46,353                      | 554              | -             | w                            | w              | w              | -7.6           |
| Nebraska                  | 14,884                      | 1,038            | -             | -                            | 15,711                      | 1,039            | -             | -                            | 15,922         | 16,750         | -4.9           |
| North Dakota              | 22,795                      | w                | -             | 73                           | 22,056                      | w                | -             | 89                           | w              | w              | 2.9            |
| South Dakota              | 1,950                       | w                | -             | w                            | 1,768                       | w                | -             | w                            | 2,155          | 1,956          | 10.2           |
| <b>South Atlantic</b>     | <b>116,981</b>              | <b>5,862</b>     | <b>w</b>      | <b>203</b>                   | <b>140,609</b>              | <b>6,620</b>     | <b>w</b>      | <b>286</b>                   | <b>w</b>       | <b>w</b>       | <b>-16.8</b>   |
| Delaware                  | 682                         | -                | -             | -                            | 717                         | -                | -             | -                            | 682            | 717            | -4.9           |
| District of Columbia      | -                           | -                | -             | w                            | -                           | -                | -             | w                            | w              | w              | -0.7           |
| Florida                   | 19,932                      | 502              | -             | -                            | 22,805                      | 489              | -             | -                            | 20,433         | 23,294         | -12.3          |
| Georgia                   | 20,836                      | 853              | -             | w                            | 28,894                      | 1,160            | -             | w                            | w              | w              | -27.8          |
| Maryland                  | 6,930                       | 906              | -             | w                            | 8,917                       | 951              | -             | w                            | w              | w              | -20.6          |
| North Carolina            | 20,876                      | 661              | -             | w                            | 24,591                      | 764              | -             | 163                          | w              | 25,518         | w              |
| South Carolina            | 11,658                      | 506              | -             | -                            | 13,970                      | 911              | -             | -                            | 12,164         | 14,881         | -18.3          |
| Virginia                  | 6,497                       | 1,437            | w             | w                            | 8,799                       | 1,443            | w             | 90                           | 9,020          | w              | w              |
| West Virginia             | 29,571                      | 998              | w             | -                            | 31,917                      | 902              | w             | -                            | w              | w              | -8.8           |
| <b>East South Central</b> | <b>84,705</b>               | <b>5,007</b>     | <b>w</b>      | <b>94</b>                    | <b>96,864</b>               | <b>5,300</b>     | <b>w</b>      | <b>115</b>                   | <b>w</b>       | <b>w</b>       | <b>-12.4</b>   |
| Alabama                   | 23,020                      | 1,322            | w             | -                            | 28,151                      | 1,268            | w             | -                            | w              | w              | -16.9          |
| Kentucky                  | 38,978                      | 1,118            | -             | 31                           | 42,543                      | 1,336            | w             | 45                           | 40,128         | w              | w              |
| Mississippi               | 5,240                       | w                | -             | -                            | 6,203                       | w                | -             | -                            | w              | w              | -15.3          |
| Tennessee                 | 17,466                      | 2,453            | -             | w                            | 19,967                      | 2,578            | -             | 70                           | w              | 22,615         | w              |
| <b>West South Central</b> | <b>147,392</b>              | <b>1,917</b>     | -             | <b>w</b>                     | <b>165,584</b>              | <b>1,893</b>     | -             | <b>w</b>                     | <b>w</b>       | <b>w</b>       | <b>-10.9</b>   |
| Arkansas                  | 17,023                      | w                | -             | -                            | 17,465                      | w                | -             | -                            | w              | w              | -2.7           |
| Louisiana                 | 14,746                      | w                | -             | -                            | 16,713                      | w                | -             | -                            | w              | w              | -11.3          |
| Oklahoma                  | 18,317                      | w                | -             | -                            | 21,307                      | w                | -             | -                            | w              | w              | -13.6          |
| Texas                     | 97,305                      | 947              | -             | w                            | 110,098                     | 956              | -             | w                            | w              | w              | -11.5          |
| <b>Mountain</b>           | <b>106,776</b>              | <b>3,694</b>     | -             | <b>w</b>                     | <b>110,197</b>              | <b>3,522</b>     | -             | <b>w</b>                     | <b>w</b>       | <b>w</b>       | <b>-3.0</b>    |
| Arizona                   | 21,461                      | w                | -             | -                            | 23,217                      | 503              | -             | -                            | w              | 23,719         | w              |
| Colorado                  | 19,199                      | 281              | -             | w                            | 18,744                      | w                | -             | w                            | w              | 19,032         | w              |
| Idaho                     | -                           | 248              | -             | w                            | -                           | 382              | -             | w                            | w              | w              | -35.0          |
| Montana                   | 9,057                       | 238              | -             | w                            | 9,758                       | w                | -             | w                            | w              | 9,848          | w              |
| Nevada                    | 2,258                       | 299              | -             | -                            | 2,863                       | w                | -             | -                            | 2,556          | w              | w              |
| New Mexico                | 14,452                      | w                | -             | -                            | 15,496                      | w                | -             | -                            | w              | w              | -6.7           |
| Utah                      | 14,084                      | w                | -             | -                            | 15,005                      | w                | -             | -                            | w              | w              | -5.9           |
| Wyoming                   | 26,265                      | 1,581            | -             | w                            | 25,114                      | 1,675            | -             | w                            | w              | w              | 3.9            |
| <b>Pacific</b>            | <b>5,805</b>                | <b>1,558</b>     | -             | <b>w</b>                     | <b>7,355</b>                | <b>1,773</b>     | -             | <b>w</b>                     | <b>w</b>       | <b>w</b>       | <b>-18.3</b>   |
| Alaska                    | 427                         | 1                | -             | w                            | 409                         | 5                | -             | w                            | w              | w              | -0.4           |
| California                | 539                         | 1,323            | -             | -                            | 812                         | 1,536            | -             | -                            | 1,863          | 2,347          | -20.6          |
| Hawaii                    | 753                         | w                | -             | -                            | 724                         | w                | -             | -                            | w              | w              | 2.6            |
| Oregon                    | 1,583                       | w                | -             | -                            | 1,985                       | w                | -             | -                            | w              | w              | -19.8          |

| Census Division<br>and State | 2012                           |                     |               |                                    | 2011                           |                     |               |                                    | Total          |                  | Percent<br>Change |
|------------------------------|--------------------------------|---------------------|---------------|------------------------------------|--------------------------------|---------------------|---------------|------------------------------------|----------------|------------------|-------------------|
|                              | Electric<br>Power <sup>1</sup> | Other<br>Industrial | Coke          | Commercial<br>and<br>Institutional | Electric<br>Power <sup>1</sup> | Other<br>Industrial | Coke          | Commercial<br>and<br>Institutional | 2012           | 2011             |                   |
| Washington                   | 2,502                          | w                   | -             | -                                  | 3,425                          | w                   | -             | -                                  | w              | w                | -25.7             |
| <b>U.S. Total</b>            | <b>823,551</b>                 | <b>42,838</b>       | <b>20,751</b> | <b>2,045</b>                       | <b>932,484</b>                 | <b>46,238</b>       | <b>21,434</b> | <b>2,793</b>                       | <b>889,185</b> | <b>1,002,948</b> | <b>-11.3</b>      |

<sup>1</sup> 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.

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 Coal Consumption and Quality Report, Manufacturing and Transformation/Processing Coal Plants and Commercial and Institutional Coal Users,' Form EIA-5, 'Quarterly Coal Consumption and Quality Report, Coke Plants,' and Form EIA-7A, 'Coal Production and Preparation Report.'

**Table 27. Year-End Coal Stocks by Sector, Census Division, and State, 2012 and 2011**

(thousand short tons)

| Census Division and State | 2012                        |                  |              |                              |                          | 2011                        |                  |              |                              |                          | Total         |               |                |
|---------------------------|-----------------------------|------------------|--------------|------------------------------|--------------------------|-----------------------------|------------------|--------------|------------------------------|--------------------------|---------------|---------------|----------------|
|                           | Electric Power <sup>1</sup> | Other Industrial | Coke         | Commercial and Institutional | Producer and Distributor | Electric Power <sup>1</sup> | Other Industrial | Coke         | Commercial and Institutional | Producer and Distributor | 2012          | 2011          | Percent Change |
| <b>New England</b>        | <b>1,030</b>                | <b>13</b>        | -            | -                            | -                        | <b>1,389</b>                | w                | -            | -                            | -                        | <b>1,042</b>  | w             | w              |
| Connecticut               | 180                         | -                | -            | -                            | -                        | 205                         | -                | -            | -                            | -                        | 180           | 205           | -12.0          |
| Maine                     | -                           | w                | -            | -                            | -                        | -                           | w                | -            | -                            | -                        | w             | w             | -55.3          |
| Massachusetts             | 512                         | w                | -            | -                            | -                        | 675                         | w                | -            | -                            | -                        | w             | w             | -24.1          |
| New Hampshire             | 337                         | -                | -            | -                            | -                        | 509                         | -                | -            | -                            | -                        | 337           | 509           | -33.7          |
| <b>Middle Atlantic</b>    | <b>7,553</b>                | <b>251</b>       | <b>w</b>     | <b>w</b>                     | <b>2,747</b>             | <b>7,800</b>                | <b>256</b>       | <b>w</b>     | <b>w</b>                     | <b>2,156</b>             | <b>11,315</b> | <b>10,898</b> | <b>3.8</b>     |
| New Jersey                | 926                         | -                | -            | -                            | -                        | 871                         | -                | -            | -                            | -                        | 926           | 871           | 6.4            |
| New York                  | 556                         | 81               | w            | -                            | -                        | 898                         | 102              | w            | -                            | -                        | w             | w             | -35.6          |
| Pennsylvania              | 6,070                       | 171              | w            | 56                           | 2,747                    | 6,031                       | 154              | w            | 46                           | 2,156                    | w             | w             | 8.1            |
| <b>East North Central</b> | <b>36,139</b>               | <b>926</b>       | <b>1,496</b> | <b>191</b>                   | <b>7,827</b>             | <b>37,262</b>               | <b>873</b>       | <b>1,681</b> | <b>229</b>                   | <b>5,954</b>             | <b>46,579</b> | <b>46,000</b> | <b>1.3</b>     |
| Illinois                  | 8,931                       | 179              | w            | 44                           | 3,707                    | 8,905                       | 166              | w            | 42                           | 2,802                    | w             | w             | 7.6            |
| Indiana                   | 9,127                       | 152              | w            | w                            | 2,174                    | 9,094                       | 257              | w            | 79                           | 1,429                    | 12,009        | w             | w              |
| Michigan                  | 6,729                       | 320              | w            | w                            | 261                      | 6,512                       | 203              | w            | w                            | 293                      | 7,785         | 7,564         | 2.9            |
| Ohio                      | 6,340                       | 86               | 321          | 30                           | 873                      | 7,331                       | 104              | 423          | 36                           | 690                      | 7,650         | 8,584         | -10.9          |
| Wisconsin                 | 5,012                       | 189              | -            | 5                            | 812                      | 5,420                       | 143              | -            | 5                            | 739                      | 6,018         | 6,307         | -4.6           |
| <b>West North Central</b> | <b>30,554</b>               | <b>1,168</b>     | -            | <b>86</b>                    | <b>1,905</b>             | <b>28,544</b>               | <b>975</b>       | -            | <b>97</b>                    | <b>2,129</b>             | <b>33,712</b> | <b>31,745</b> | <b>6.2</b>     |
| Iowa                      | 8,580                       | 448              | -            | w                            | 131                      | 7,199                       | 349              | -            | w                            | 134                      | w             | w             | 19.0           |
| Kansas                    | 3,741                       | w                | -            | -                            | -                        | 3,669                       | w                | -            | -                            | -                        | w             | w             | 1.7            |
| Minnesota                 | 2,691                       | w                | -            | w                            | 130                      | 3,247                       | w                | -            | w                            | 147                      | 3,126         | 3,652         | -14.4          |
| Missouri                  | 10,230                      | 60               | -            | w                            | 1                        | 8,210                       | 62               | -            | w                            | 1                        | w             | w             | 24.4           |
| Nebraska                  | 3,321                       | 146              | -            | -                            | -                        | 3,607                       | 97               | -            | -                            | -                        | 3,467         | 3,703         | -6.4           |
| North Dakota              | 1,712                       | w                | -            | 10                           | 1,643                    | 2,270                       | w                | -            | 10                           | 1,847                    | w             | w             | -17.7          |
| South Dakota              | 281                         | w                | -            | -                            | -                        | 343                         | w                | -            | w                            | -                        | w             | 373           | w              |
| <b>South Atlantic</b>     | <b>38,859</b>               | <b>528</b>       | <b>w</b>     | <b>101</b>                   | <b>13,653</b>            | <b>36,920</b>               | <b>693</b>       | <b>w</b>     | <b>91</b>                    | <b>17,182</b>            | <b>w</b>      | <b>w</b>      | <b>-3.2</b>    |
| Delaware                  | 185                         | -                | -            | -                            | -                        | 168                         | -                | -            | -                            | -                        | 185           | 168           | 10.5           |
| District of Columbia      | -                           | -                | -            | w                            | -                        | -                           | -                | -            | w                            | -                        | w             | w             | 49.6           |
| Florida                   | 5,963                       | 72               | -            | -                            | 25                       | 6,374                       | 91               | -            | -                            | -                        | 6,061         | 6,465         | -6.3           |
| Georgia                   | 9,970                       | 127              | -            | w                            | -                        | 7,885                       | 133              | -            | w                            | -                        | w             | w             | 25.9           |
| Maryland                  | 1,544                       | 17               | -            | w                            | 537                      | 1,860                       | 47               | -            | w                            | 1,015                    | w             | w             | -27.9          |
| North Carolina            | 7,164                       | 28               | -            | w                            | -                        | 6,642                       | 42               | -            | 37                           | -                        | w             | 6,721         | w              |
| South Carolina            | 6,271                       | 108              | -            | -                            | 23                       | 6,527                       | 167              | -            | -                            | -                        | 6,402         | 6,694         | -4.4           |
| Virginia                  | 2,118                       | 99               | -            | w                            | 2,903                    | 2,480                       | 161              | -            | 35                           | 4,329                    | w             | 7,004         | w              |
| West Virginia             | 5,643                       | 77               | w            | -                            | 10,164                   | 4,985                       | 52               | w            | -                            | 11,838                   | w             | w             | -5.8           |
| <b>East South Central</b> | <b>19,657</b>               | <b>315</b>       | <b>w</b>     | <b>15</b>                    | <b>6,440</b>             | <b>17,185</b>               | <b>432</b>       | <b>w</b>     | <b>25</b>                    | <b>9,198</b>             | <b>w</b>      | <b>w</b>      | <b>-1.4</b>    |
| Alabama                   | 6,123                       | 115              | w            | -                            | 1,180                    | 4,499                       | 255              | w            | -                            | 1,414                    | w             | w             | 20.0           |
| Kentucky                  | 8,417                       | 54               | -            | 9                            | 4,583                    | 7,357                       | 58               | -            | 19                           | 6,994                    | 13,062        | 14,428        | -9.5           |
| Mississippi               | 1,964                       | w                | -            | -                            | 656                      | 1,450                       | w                | -            | -                            | 768                      | w             | w             | 18.2           |
| Tennessee                 | 3,153                       | 140              | -            | w                            | 22                       | 3,879                       | 115              | -            | 6                            | 22                       | w             | 4,022         | w              |
| <b>West South Central</b> | <b>28,807</b>               | <b>380</b>       | -            | <b>w</b>                     | <b>1,674</b>             | <b>22,910</b>               | <b>348</b>       | -            | <b>w</b>                     | <b>1,715</b>             | <b>w</b>      | <b>w</b>      | <b>23.6</b>    |
| Arkansas                  | 4,181                       | w                | -            | -                            | 10                       | 3,590                       | w                | -            | -                            | 1                        | w             | w             | 15.8           |
| Louisiana                 | 3,342                       | w                | -            | -                            | 327                      | 2,331                       | w                | -            | -                            | 812                      | w             | w             | 15.6           |
| Oklahoma                  | 4,739                       | w                | -            | -                            | -                        | 3,872                       | w                | -            | -                            | -                        | w             | w             | 22.1           |
| Texas                     | 16,545                      | 177              | -            | w                            | 1,338                    | 13,117                      | 112              | -            | w                            | 902                      | w             | w             | 27.8           |
| <b>Mountain</b>           | <b>20,385</b>               | <b>678</b>       | -            | <b>w</b>                     | <b>11,741</b>            | <b>18,543</b>               | <b>609</b>       | -            | <b>w</b>                     | <b>13,401</b>            | <b>w</b>      | <b>w</b>      | <b>0.8</b>     |
| Arizona                   | 4,235                       | w                | -            | -                            | 1,367                    | 2,750                       | 98               | -            | -                            | 1,332                    | w             | 4,181         | w              |
| Colorado                  | 4,131                       | 63               | -            | -                            | 1,742                    | 4,342                       | w                | -            | -                            | 2,339                    | 5,937         | w             | w              |
| Idaho                     | -                           | 311              | -            | w                            | -                        | -                           | 253              | -            | -                            | -                        | w             | 254           | w              |
| Montana                   | 1,010                       | 41               | -            | w                            | 312                      | 1,005                       | w                | -            | w                            | 421                      | w             | 1,442         | w              |
| Nevada                    | 1,292                       | 28               | -            | -                            | -                        | 1,360                       | w                | -            | -                            | -                        | 1,320         | w             | w              |
| New Mexico                | 1,018                       | w                | -            | -                            | 3,783                    | 864                         | w                | -            | -                            | 4,022                    | w             | w             | -1.7           |
| Utah                      | 4,737                       | w                | -            | -                            | 2,284                    | 4,947                       | w                | -            | -                            | 3,126                    | w             | w             | -12.8          |
| Wyoming                   | 3,962                       | 138              | -            | -                            | 2,253                    | 3,275                       | 53               | -            | -                            | 2,161                    | 6,353         | 5,490         | 15.7           |
| <b>Pacific</b>            | <b>2,132</b>                | <b>217</b>       | -            | <b>w</b>                     | <b>169</b>               | <b>1,833</b>                | <b>248</b>       | -            | <b>w</b>                     | <b>160</b>               | <b>w</b>      | <b>w</b>      | <b>12.4</b>    |
| Alaska                    | 499                         | -                | -            | w                            | 169                      | 344                         | -                | -            | w                            | 160                      | w             | w             | 29.1           |
| California                | 28                          | 136              | -            | -                            | -                        | 96                          | 152              | -            | -                            | -                        | 164           | 248           | -33.9          |
| Hawaii                    | 52                          | w                | -            | -                            | -                        | 146                         | w                | -            | -                            | -                        | w             | w             | -47.9          |
| Oregon                    | 931                         | w                | -            | -                            | -                        | 686                         | w                | -            | -                            | -                        | w             | w             | 35.3           |

| Census Division and State | 2012                        |                  |              |                              |                          | 2011                        |                  |              |                              |                          | Total          |                | Percent Change |
|---------------------------|-----------------------------|------------------|--------------|------------------------------|--------------------------|-----------------------------|------------------|--------------|------------------------------|--------------------------|----------------|----------------|----------------|
|                           | Electric Power <sup>1</sup> | Other Industrial | Coke         | Commercial and Institutional | Producer and Distributor | Electric Power <sup>1</sup> | Other Industrial | Coke         | Commercial and Institutional | Producer and Distributor | 2012           | 2011           |                |
| Washington                | 621                         | w                | -            | -                            | -                        | 560                         | w                | -            | -                            | -                        | w              | w              | 11.1           |
| <b>U.S. Total</b>         | <b>185,116</b>              | <b>4,475</b>     | <b>2,522</b> | <b>583</b>                   | <b>46,157</b>            | <b>172,387</b>              | <b>4,455</b>     | <b>2,610</b> | <b>603</b>                   | <b>51,897</b>            | <b>238,854</b> | <b>231,951</b> | <b>3.0</b>     |

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.

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 Coal Consumption and Quality Report, Manufacturing and Transformation/Processing Coal Plants and Commercial and Institutional Coal Users,' Form EIA-5, 'Quarterly Coal Consumption and Quality Report, Coke Plants,' Form EIA-7A, 'Coal Production and Preparation Report,' and Form EIA-8A, 'Coal Stocks Report.'

# Average Mine Sales Price

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**Table 28. Average Sales Price of Coal by State and Mine Type, 2012 and 2011**

(dollars per short ton)

| Coal-Producing State       | 2012         |              |              | 2011         |              |              | Percent Change |              |             |
|----------------------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------|--------------|-------------|
|                            | Underground  | Surface      | Total        | Underground  | Surface      | Total        | Underground    | Surface      | Total       |
| Alabama                    | 107.73       | 104.51       | 106.57       | 100.17       | 108.71       | 102.69       | 7.6            | -3.9         | 3.8         |
| Alaska                     | -            | w            | w            | -            | w            | w            | -              | w            | w           |
| Arizona                    | -            | w            | w            | -            | w            | w            | -              | w            | w           |
| Arkansas                   | w            | -            | w            | w            | -            | w            | w              | -            | w           |
| Colorado                   | w            | w            | 37.54        | w            | w            | 39.88        | w              | w            | -5.9        |
| Illinois                   | 54.18        | 45.12        | 53.08        | 51.43        | 46.60        | 50.80        | 5.4            | -3.2         | 4.5         |
| Indiana                    | 52.94        | 51.33        | 52.01        | 51.77        | 44.91        | 47.96        | 2.3            | 14.3         | 8.4         |
| Kansas                     | -            | -            | -            | -            | w            | w            | -              | w            | w           |
| <b>Kentucky Total</b>      | <b>62.24</b> | <b>64.70</b> | <b>63.12</b> | <b>63.38</b> | <b>64.01</b> | <b>63.63</b> | <b>-1.8</b>    | <b>1.1</b>   | <b>-0.8</b> |
| Kentucky (East)            | 79.23        | 72.04        | 75.62        | 78.63        | 70.86        | 74.70        | 0.8            | 1.7          | 1.2         |
| Kentucky (West)            | 50.18        | 42.14        | 48.67        | 47.87        | 38.93        | 45.89        | 4.8            | 8.3          | 6.1         |
| Louisiana                  | -            | w            | w            | -            | w            | w            | -              | w            | w           |
| Maryland                   | w            | w            | 55.67        | w            | w            | 49.37        | w              | w            | 12.8        |
| Mississippi                | -            | w            | w            | -            | w            | w            | -              | w            | w           |
| Missouri                   | -            | w            | w            | -            | w            | w            | -              | w            | w           |
| Montana                    | w            | w            | 18.11        | w            | w            | 16.02        | w              | w            | 13.1        |
| New Mexico                 | w            | w            | 36.74        | w            | w            | 34.22        | w              | w            | 7.4         |
| North Dakota               | -            | 17.40        | 17.40        | -            | 15.72        | 15.72        | -              | 10.7         | 10.7        |
| Ohio                       | 49.39        | 44.28        | 47.80        | 47.86        | 43.41        | 46.39        | 3.2            | 2.0          | 3.0         |
| Oklahoma                   | w            | w            | 59.63        | w            | w            | 70.39        | w              | w            | -15.3       |
| <b>Pennsylvania Total</b>  | <b>72.69</b> | <b>74.04</b> | <b>72.92</b> | <b>78.67</b> | <b>82.89</b> | <b>79.47</b> | <b>-7.6</b>    | <b>-10.7</b> | <b>-8.2</b> |
| Pennsylvania (Anthracite)  | 82.71        | 80.10        | 80.21        | w            | w            | 75.70        | w              | w            | 6.0         |
| Pennsylvania (Bituminous)  | 72.67        | 71.88        | 72.57        | w            | w            | 79.61        | w              | w            | -8.8        |
| Tennessee                  | w            | w            | 73.51        | 66.27        | 77.27        | 74.24        | w              | w            | -1.0        |
| Texas                      | -            | 19.09        | 19.09        | -            | 19.32        | 19.32        | -              | -1.2         | -1.2        |
| Utah                       | w            | w            | 34.92        | 33.80        | -            | 33.80        | w              | w            | 3.3         |
| Virginia                   | 114.91       | 98.84        | 109.40       | 145.87       | 111.15       | 135.14       | -21.2          | -11.1        | -19.1       |
| <b>West Virginia Total</b> | <b>86.02</b> | <b>73.60</b> | <b>81.80</b> | <b>89.40</b> | <b>77.39</b> | <b>84.81</b> | <b>-3.8</b>    | <b>-4.9</b>  | <b>-3.6</b> |
| West Virginia (Northern)   | 63.39        | 62.42        | 63.34        | 60.91        | 65.74        | 61.27        | 4.1            | -5.1         | 3.4         |
| West Virginia (Southern)   | 107.76       | 74.25        | 91.40        | 114.25       | 78.15        | 95.44        | -5.7           | -5.0         | -4.2        |
| Wyoming                    | w            | w            | 14.24        | w            | w            | 13.56        | w              | w            | 5.0         |
| <b>U.S. Total</b>          | <b>66.56</b> | <b>26.43</b> | <b>39.95</b> | <b>70.47</b> | <b>27.00</b> | <b>41.01</b> | <b>-5.6</b>    | <b>-2.1</b>  | <b>-2.6</b> |

- = 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, 'Coal Production and Preparation Report.'

**Table 29. Average Sales Price of Coal by State and Underground Mining Method, 2012**

(dollars per short ton)

| Coal-Producing State       | Continuous <sup>1</sup> | Conventional and Other <sup>2</sup> | Longwall <sup>3</sup> | Total        |
|----------------------------|-------------------------|-------------------------------------|-----------------------|--------------|
| Alabama                    | w                       | -                                   | w                     | 107.73       |
| Arkansas                   | w                       | -                                   | -                     | w            |
| Colorado                   | w                       | -                                   | 37.18                 | w            |
| Illinois                   | 48.08                   | -                                   | 59.51                 | 54.18        |
| Indiana                    | 52.94                   | -                                   | -                     | 52.94        |
| <b>Kentucky Total</b>      | <b>w</b>                | <b>w</b>                            | <b>-</b>              | <b>62.24</b> |
| Kentucky (East)            | w                       | w                                   | -                     | 79.23        |
| Kentucky (West)            | 50.18                   | -                                   | -                     | 50.18        |
| Maryland                   | w                       | -                                   | -                     | w            |
| Montana                    | -                       | -                                   | w                     | w            |
| New Mexico                 | -                       | -                                   | w                     | w            |
| Ohio                       | w                       | -                                   | w                     | 49.39        |
| Oklahoma                   | w                       | -                                   | -                     | w            |
| <b>Pennsylvania Total</b>  | <b>94.53</b>            | <b>w</b>                            | <b>65.01</b>          | <b>w</b>     |
| Pennsylvania (Anthracite)  | w                       | w                                   | -                     | 82.71        |
| Pennsylvania (Bituminous)  | w                       | -                                   | w                     | 72.67        |
| Tennessee                  | w                       | -                                   | -                     | w            |
| Utah                       | w                       | -                                   | 34.99                 | w            |
| Virginia                   | w                       | -                                   | w                     | 114.91       |
| <b>West Virginia Total</b> | <b>105.42</b>           | <b>w</b>                            | <b>68.09</b>          | <b>w</b>     |
| West Virginia (Northern)   | 93.94                   | -                                   | 58.51                 | 63.39        |
| West Virginia (Southern)   | 107.35                  | w                                   | 106.77                | w            |
| Wyoming                    | -                       | -                                   | w                     | w            |
| <b>U.S. Total</b>          | <b>74.36</b>            | <b>90.02</b>                        | <b>59.59</b>          | <b>66.56</b> |

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, 'Coal Production and Preparation Report.'

**Table 30. Average Sales Price of Coal by State, County, and Number of Mines, 2012**

| Coal-Producing State and County | Number of Mines | Sales<br>(thousand short tons) | Average Sales Price<br>(dollars per short ton) |
|---------------------------------|-----------------|--------------------------------|--|
| <b>Alabama</b>                  | <b>39</b>       | <b>19,021</b>                  | <b>106.57</b>                                  |
| Bibb                            | 1               | w                              | w  |
| Blount                          | 2               | w                              | w  |
| Fayette                         | 1               | w                              | w  |
| Franklin                        | 1               | w                              | w  |
| Jackson                         | 2               | w                              | w  |
| Jefferson                       | 11              | 4,298                          | 146.04   |
| Marion                          | 1               | w                              | w  |
| Tuscaloosa                      | 7               | 8,599                          | 111.55   |
| Walker                          | 11              | 2,370                          | 81.88  |
| Winston                         | 2               | w                              | w  |
| <b>Alaska</b>                   | <b>1</b>        | <b>w</b>                       | <b>w</b>                                       |
| Yukon-Koyukuk                   | 1               | w                              | w  |
| <b>Arizona</b>                  | <b>1</b>        | <b>w</b>                       | <b>w</b>                                       |
| Navajo                          | 1               | w                              | w  |
| <b>Arkansas</b>                 | <b>1</b>        | <b>w</b>                       | <b>w</b>                                       |
| Sebastian                       | 1               | w                              | w  |
| <b>Colorado</b>                 | <b>12</b>       | <b>28,856</b>                  | <b>37.54</b>                                   |
| Delta                           | 1               | w                              | w  |
| Gunnison                        | 2               | w                              | w  |
| La Plata                        | 1               | w                              | w  |
| Las Animas                      | 2               | w                              | w  |
| Moffat                          | 2               | w                              | w  |
| Montrose                        | 1               | w                              | w  |
| Rio Blanco                      | 1               | w                              | w  |
| Routt                           | 2               | w                              | w  |
| <b>Illinois</b>                 | <b>24</b>       | <b>46,705</b>                  | <b>53.08</b>                                   |
| Franklin                        | 1               | w                              | w  |
| Gallatin                        | 1               | w                              | w  |
| Jackson                         | 1               | w                              | w  |
| Macoupin                        | 2               | w                              | w  |
| Mcdonough                       | 1               | w                              | w  |
| Montgomery                      | 1               | w                              | w  |
| Perry                           | 4               | 3,577                          | 41.11  |
| Randolph                        | 3               | w                              | w  |
| Saline                          | 5               | 12,168                         | 59.75  |
| Sangamon                        | 1               | w                              | w  |
| Wabash                          | 1               | w                              | w  |
| Washington                      | 1               | w                              | w  |
| White                           | 1               | w                              | w  |
| Williamson                      | 1               | w                              | w  |
| <b>Indiana</b>                  | <b>29</b>       | <b>35,906</b>                  | <b>52.01</b>                                   |
| Daviess                         | 3               | w                              | w  |
| Dubois                          | 1               | w                              | w  |
| Gibson                          | 4               | 9,320                          | 53.07  |
| Knox                            | 6               | 4,543                          | 57.22  |
| Pike                            | 7               | 3,938                          | 43.88  |
| Sullivan                        | 3               | w                              | w  |
| Vigo                            | 1               | w                              | w  |
| Warrick                         | 4               | w                              | w  |
| <b>Kentucky</b>                 | <b>253</b>      | <b>89,154</b>                  | <b>63.12</b>                                   |
| Bell                            | 13              | 1,169                          | 72.96  |
| Breathitt                       | 1               | w                              | w  |
| Clay                            | 1               | w                              | w  |
| Daviess                         | 2               | w                              | w  |
| Floyd                           | 15              | 2,767                          | 64.58  |
| Harlan                          | 35              | 6,851                          | 70.53  |
| Henderson                       | 4               | 1,623                          | 45.19  |
| Hopkins                         | 4               | 12,404                         | 50.15  |
| Johnson                         | 3               | w                              | w  |

| Coal-Producing State and County | Number of Mines | Sales<br>(thousand short tons) | Average Sales Price<br>(dollars per short ton) |
|---------------------------------|-----------------|--------------------------------|--|
| Knott                           | 11              | 2,435                          | 72.36  |
| Knox                            | 8               | 459                            | 110.61   |
| Lawrence                        | 3               | w                              | w  |
| Leslie                          | 12              | 2,994                          | 78.02  |
| Letcher                         | 17              | 2,708                          | 85.72  |
| Magoffin                        | 6               | 1,996                          | 70.82  |
| Martin                          | 14              | 3,468                          | 71.79  |
| Mccreary                        | 1               | w                              | w  |
| Muhlenberg                      | 4               | 4,689                          | 48.44  |
| Ohio                            | 5               | 7,114                          | 42.52  |
| Perry                           | 23              | 9,348                          | 72.98  |
| Pike                            | 61              | 12,194                         | 81.27  |
| Union                           | 3               | w                              | w  |
| Webster                         | 2               | w                              | w  |
| Whitley                         | 4               | 265                            | 138.34   |
| Wolfe                           | 1               | w                              | w  |
| <b>Louisiana</b>                | <b>2</b>        | <b>w</b>                       | <b>w</b>                                       |
| De Soto                         | 1               | w                              | w  |
| Natchitoches                    | 1               | w                              | w  |
| <b>Maryland</b>                 | <b>15</b>       | <b>2,286</b>                   | <b>55.67</b>                                   |
| Allegany                        | 9               | 1,558                          | 46.65  |
| Garrett                         | 6               | 728                            | 75.00  |
| <b>Mississippi</b>              | <b>1</b>        | <b>w</b>                       | <b>w</b>                                       |
| Choctaw                         | 1               | w                              | w  |
| <b>Missouri</b>                 | <b>2</b>        | <b>w</b>                       | <b>w</b>                                       |
| Bates                           | 2               | w                              | w  |
| <b>Montana</b>                  | <b>6</b>        | <b>36,823</b>                  | <b>18.11</b>                                   |
| Bighorn                         | 3               | w                              | w  |
| Musselshell                     | 1               | w                              | w  |
| Richland                        | 1               | w                              | w  |
| Rosebud                         | 1               | w                              | w  |
| <b>New Mexico</b>               | <b>4</b>        | <b>22,881</b>                  | <b>36.74</b>                                   |
| Mckinley                        | 2               | w                              | w  |
| San Juan                        | 2               | w                              | w  |
| <b>North Dakota</b>             | <b>4</b>        | <b>27,799</b>                  | <b>17.40</b>                                   |
| Mclean                          | 1               | w                              | w  |
| Mercer                          | 2               | w                              | w  |
| Oliver                          | 1               | w                              | w  |
| <b>Ohio</b>                     | <b>28</b>       | <b>26,617</b>                  | <b>47.80</b>                                   |
| Belmont                         | 2               | w                              | w  |
| Carroll                         | 1               | w                              | w  |
| Columbiana                      | 1               | w                              | w  |
| Harrison                        | 5               | 3,349                          | 49.05  |
| Jackson                         | 1               | w                              | w  |
| Jefferson                       | 5               | 1,663                          | 53.13  |
| Monroe                          | 1               | w                              | w  |
| Muskingum                       | 1               | w                              | w  |
| Noble                           | 2               | w                              | w  |
| Perry                           | 3               | w                              | w  |
| Stark                           | 1               | w                              | w  |
| Tuscarawas                      | 3               | w                              | w  |
| Vinton                          | 2               | w                              | w  |
| <b>Oklahoma</b>                 | <b>5</b>        | <b>1,071</b>                   | <b>59.63</b>                                   |
| Craig                           | 1               | w                              | w  |
| Haskell                         | 1               | w                              | w  |
| Le Flore                        | 2               | w                              | w  |
| Nowata                          | 1               | w                              | w  |
| <b>Pennsylvania</b>             | <b>137</b>      | <b>54,293</b>                  | <b>72.92</b>                                   |
| Armstrong                       | 10              | 2,611                          | 55.23  |
| Beaver                          | 1               | w                              | w  |
| Bedford                         | 1               | w                              | w  |
| Blair                           | 1               | w                              | w  |
| Butler                          | 2               | w                              | w  |
| Cambria                         | 6               | 1,287                          | 97.69  |
| Centre                          | 1               | w                              | w  |

| Coal-Producing State and County | Number of Mines | Sales<br>(thousand short tons) | Average Sales Price<br>(dollars per short ton) |
|---------------------------------|-----------------|--------------------------------|--|
| Clarion                         | 1               | w                              | w  |
| Clearfield                      | 20              | 3,279                          | 89.07  |
| Columbia                        | 2               | w                              | w  |
| Elk                             | 3               | w                              | w  |
| Fayette                         | 1               | w                              | w  |
| Greene                          | 5               | 25,391                         | 63.72  |
| Indiana                         | 12              | 2,699                          | 94.36  |
| Jefferson                       | 7               | 810                            | 57.78  |
| Lackawanna                      | 1               | w                              | w  |
| Luzerne                         | 5               | 660                            | 69.61  |
| Lycoming                        | 1               | w                              | w  |
| Northumberland                  | 6               | 300                            | 66.78  |
| Schuylkill                      | 26              | 1,433                          | 80.90  |
| Somerset                        | 18              | 4,096                          | 125.39   |
| Venango                         | 1               | w                              | w  |
| Washington                      | 4               | w                              | w  |
| Westmoreland                    | 2               | w                              | w  |
| <b>Tennessee</b>                | <b>8</b>        | <b>1,048</b>                   | <b>73.51</b>                                   |
| Campbell                        | 3               | w                              | w  |
| Claiborne                       | 5               | 767                            | 75.20  |
| <b>Texas</b>                    | <b>12</b>       | <b>40,317</b>                  | <b>19.09</b>                                   |
| Atascosa                        | 1               | w                              | w  |
| Freestone                       | 1               | w                              | w  |
| Harrison                        | 1               | w                              | w  |
| Hopkins                         | 1               | w                              | w  |
| Lee                             | 1               | w                              | w  |
| Leon                            | 1               | w                              | w  |
| Limestone                       | 1               | w                              | w  |
| Panola                          | 2               | w                              | w  |
| Robertson                       | 1               | w                              | w  |
| Rusk                            | 1               | w                              | w  |
| Titus                           | 1               | w                              | w  |
| <b>Utah</b>                     | <b>9</b>        | <b>16,903</b>                  | <b>34.92</b>                                   |
| Carbon                          | 5               | 6,241                          | 37.65  |
| Emery                           | 2               | w                              | w  |
| Kane                            | 1               | w                              | w  |
| Sevier                          | 1               | w                              | w  |
| <b>Virginia</b>                 | <b>79</b>       | <b>18,855</b>                  | <b>109.40</b>                                  |
| Buchanan                        | 26              | 6,951                          | 129.60   |
| Dickenson                       | 13              | 3,464                          | 124.11   |
| Giles                           | 1               | w                              | w  |
| Lee                             | 3               | w                              | w  |
| Russell                         | 5               | 789                            | 98.30  |
| Tazewell                        | 3               | w                              | w  |
| Wise                            | 28              | 5,792                          | 84.44  |
| <b>West Virginia</b>            | <b>224</b>      | <b>121,033</b>                 | <b>81.80</b>                                   |
| Barbour                         | 1               | w                              | w  |
| Boone                           | 26              | 16,435                         | 84.44  |
| Brooke                          | 1               | w                              | w  |
| Clay                            | 2               | w                              | w  |
| Fayette                         | 9               | 5,674                          | 99.47  |
| Grant                           | 1               | w                              | w  |
| Greenbrier                      | 7               | 1,217                          | 143.12   |
| Harrison                        | 1               | w                              | w  |
| Kanawha                         | 19              | 8,600                          | 81.03  |
| Lincoln                         | 2               | w                              | w  |
| Logan                           | 23              | 15,448                         | 76.55  |
| Marion                          | 4               | 11,217                         | 57.52  |
| Marshall                        | 2               | w                              | w  |
| Mcdowell                        | 36              | 3,934                          | 122.38   |
| Mercer                          | 1               | w                              | w  |
| Mineral                         | 1               | w                              | w  |
| Mingo                           | 25              | 6,934                          | 75.99  |
| Monongalia                      | 6               | 5,736                          | 63.83  |
| Nicholas                        | 9               | 2,455                          | 85.21  |

| Coal-Producing State and County | Number of Mines | Sales<br>(thousand short tons) | Average Sales Price<br>(dollars per short ton) |
|---------------------------------|-----------------|--------------------------------|--|
| Ohio                            | 1               | w                              | w  |
| Raleigh                         | 17              | 6,724                          | 136.09   |
| Randolph                        | 1               | w                              | w  |
| Taylor                          | 1               | w                              | w  |
| Tucker                          | 2               | w                              | w  |
| Upshur                          | 2               | w                              | w  |
| Wayne                           | 7               | 4,412                          | 71.96  |
| Webster                         | 5               | 2,801                          | 79.82  |
| Wyoming                         | 12              | 5,189                          | 119.77   |
| <b>Wyoming</b>                  | <b>16</b>       | <b>401,221</b>                 | <b>14.24</b>                                   |
| Campbell                        | 11              | 353,807                        | 13.35  |
| Converse                        | 1               | w                              | w  |
| Lincoln                         | 1               | w                              | w  |
| Sweetwater                      | 3               | w                              | w  |
| <b>U.S. Total</b>               | <b>912</b>      | <b>1,008,147</b>               | <b>39.95</b>                                   |

- = 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, 'Coal Production and Preparation Report.'

**Table 31. Average Sales Price of Coal by State and Coal Rank, 2012**

(dollars per short ton)

| Coal-Producing State       | Bituminous   | Subbituminous | Lignite      | Anthracite   | Total        |
|----------------------------|--------------|---------------|--------------|--------------|--------------|
| Alabama                    | 106.57       | -             | -            | -            | 106.57       |
| Alaska                     | -            | w             | -            | -            | w            |
| Arizona                    | w            | -             | -            | -            | w            |
| Arkansas                   | w            | -             | -            | -            | w            |
| Colorado                   | w            | w             | -            | -            | 37.54        |
| Illinois                   | 53.08        | -             | -            | -            | 53.08        |
| Indiana                    | 52.01        | -             | -            | -            | 52.01        |
| <b>Kentucky Total</b>      | <b>63.12</b> | -             | -            | -            | <b>63.12</b> |
| Kentucky (East)            | 75.62        | -             | -            | -            | 75.62        |
| Kentucky (West)            | 48.67        | -             | -            | -            | 48.67        |
| Louisiana                  | -            | -             | w            | -            | w            |
| Maryland                   | 55.67        | -             | -            | -            | 55.67        |
| Mississippi                | -            | -             | w            | -            | w            |
| Missouri                   | w            | -             | -            | -            | w            |
| Montana                    | w            | 17.60         | w            | -            | 18.11        |
| New Mexico                 | w            | w             | -            | -            | 36.74        |
| North Dakota               | -            | -             | 17.40        | -            | 17.40        |
| Ohio                       | 47.80        | -             | -            | -            | 47.80        |
| Oklahoma                   | 59.63        | -             | -            | -            | 59.63        |
| <b>Pennsylvania Total</b>  | <b>72.57</b> | -             | -            | <b>80.21</b> | <b>72.92</b> |
| Pennsylvania (Anthracite)  | -            | -             | -            | 80.21        | 80.21        |
| Pennsylvania (Bituminous)  | 72.57        | -             | -            | -            | 72.57        |
| Tennessee                  | 73.51        | -             | -            | -            | 73.51        |
| Texas                      | -            | -             | 19.09        | -            | 19.09        |
| Utah                       | 34.92        | -             | -            | -            | 34.92        |
| Virginia                   | 109.40       | -             | -            | -            | 109.40       |
| <b>West Virginia Total</b> | <b>81.80</b> | -             | -            | -            | <b>81.80</b> |
| West Virginia (Northern)   | 63.34        | -             | -            | -            | 63.34        |
| West Virginia (Southern)   | 91.40        | -             | -            | -            | 91.40        |
| Wyoming                    | -            | 14.24         | -            | -            | 14.24        |
| <b>U.S. Total</b>          | <b>66.04</b> | <b>15.34</b>  | <b>19.60</b> | <b>80.21</b> | <b>39.95</b> |

- = 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, 'Coal Production and Preparation Report.'

**Table 32. Average Sales Price of Coal by Mine Production Range and Mine Type, 2012**

(dollars per short ton)

| <b>Mine Production Range (thousand short tons)</b> | <b>Underground</b> | <b>Surface</b> | <b>Total</b> |
|--|--------------------|----------------|--------------|
| Over 1,000   | 58.86              | 19.50          | 31.70        |
| Over 500 to 1,000                                  | 84.65              | 66.80          | 74.74        |
| Over 200 to 500                                    | 95.31              | 73.29          | 84.14        |
| Over 100 to 200                                    | 98.00              | 68.97          | 82.69        |
| Over 50 to 100                                     | 81.53              | 75.99          | 78.61        |
| 50 or Under  | 92.87              | 63.12          | 73.78        |
| <b>U.S. Total</b>                                  | <b>66.56</b>       | <b>26.43</b>   | <b>39.95</b> |

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, 'Coal Production and Preparation Report.'



**Table 33. Average Sales Price of U.S. Coal by State and Disposition, 2012**

(dollars per short ton)

| Coal-Producing State       | Open Market <sup>1</sup> | Captive <sup>2</sup> | Total <sup>3</sup> |
|----------------------------|--------------------------|----------------------|--------------------|
| Alabama                    | 85.06                    | -                    | 106.57             |
| Alaska                     | w                        | -                    | w                  |
| Arizona                    | w                        | -                    | w                  |
| Arkansas                   | w                        | -                    | w                  |
| Colorado                   | 38.51                    | 43.19                | 37.54              |
| Illinois                   | 49.04                    | 54.71                | 53.08              |
| Indiana                    | 49.16                    | 54.50                | 52.01              |
| <b>Kentucky Total</b>      | <b>61.85</b>             | <b>73.08</b>         | <b>63.12</b>       |
| Kentucky (East)            | 75.80                    | 73.08                | 75.62              |
| Kentucky (West)            | 48.60                    | -                    | 48.67              |
| Louisiana                  | w                        | -                    | w                  |
| Maryland                   | 47.83                    | -                    | 55.67              |
| Mississippi                | w                        | -                    | w                  |
| Missouri                   | w                        | -                    | w                  |
| Montana                    | w                        | w                    | 18.11              |
| New Mexico                 | w                        | w                    | 36.74              |
| North Dakota               | w                        | w                    | 17.40              |
| Ohio                       | w                        | w                    | 47.80              |
| Oklahoma                   | 59.63                    | -                    | 59.63              |
| <b>Pennsylvania Total</b>  | <b>68.54</b>             | <b>67.74</b>         | <b>72.92</b>       |
| Pennsylvania (Anthracite)  | w                        | w                    | 80.21              |
| Pennsylvania (Bituminous)  | w                        | w                    | 72.57              |
| Tennessee                  | 73.51                    | -                    | 73.51              |
| Texas                      | w                        | w                    | 19.09              |
| Utah                       | w                        | w                    | 34.92              |
| Virginia                   | 112.10                   | 98.48                | 109.40             |
| <b>West Virginia Total</b> | <b>73.41</b>             | <b>83.15</b>         | <b>81.80</b>       |
| West Virginia (Northern)   | w                        | w                    | 63.34              |
| West Virginia (Southern)   | w                        | w                    | 91.40              |
| Wyoming                    | 13.81                    | 14.83                | 14.24              |
| <b>U.S. Total</b>          | <b>38.11</b>             | <b>29.90</b>         | <b>39.95</b>       |

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, 'Coal Production and Preparation Report.'

# Average Consumer Prices

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**Table 34. Average Price of Coal Delivered to End Use Sector by Census Division and State, 2012 and 2011**

(dollars per short ton)

| Census Division and State | 2012                        |                  |                              |               | 2011                        |                  |                              |               | Annual Percent Change       |                  |                              |              |
|---------------------------|-----------------------------|------------------|------------------------------|---------------|-----------------------------|------------------|------------------------------|---------------|-----------------------------|------------------|------------------------------|--------------|
|                           | Electric Power <sup>1</sup> | Other Industrial | Commercial and Institutional | Coke          | Electric Power <sup>1</sup> | Other Industrial | Commercial and Institutional | Coke          | Electric Power <sup>1</sup> | Other Industrial | Commercial and Institutional | Coke         |
| <b>New England</b>        | <b>88.32</b>                | <b>165.17</b>    | -                            | -             | <b>87.62</b>                | <b>w</b>         | -                            | -             | <b>0.80</b>                 | <b>w</b>         | -                            | -            |
| Connecticut               | 80.11                       | -                | -                            | -             | 69.29                       | -                | -                            | -             | 15.62                       | -                | -                            | -            |
| Maine                     | 189.84                      | w                | -                            | -             | 162.19                      | w                | -                            | -             | 17.05                       | 13.93            | -                            | -            |
| Massachusetts             | 75.71                       | w                | -                            | -             | 87.17                       | w                | -                            | -             | -13.15                      | s                | -                            | -            |
| New Hampshire             | 105.97                      | -                | -                            | -             | 91.80                       | -                | -                            | -             | 15.44                       | -                | -                            | -            |
| <b>Middle Atlantic</b>    | <b>55.68</b>                | <b>94.12</b>     | <b>w</b>                     | <b>w</b>      | <b>59.55</b>                | <b>88.98</b>     | <b>w</b>                     | <b>w</b>      | <b>-6.50</b>                | <b>5.78</b>      | <b>3.10</b>                  | <b>15.08</b> |
| New Jersey                | 103.50                      | -                | -                            | -             | 105.77                      | -                | -                            | -             | -2.15                       | -                | -                            | -            |
| New York                  | 67.35                       | 114.32           | w                            | -             | 70.84                       | 109.37           | w                            | w             | -4.93                       | 4.53             | 5.70                         | w            |
| Pennsylvania              | 53.86                       | 84.85            | w                            | 152.82        | 56.37                       | 80.81            | w                            | 132.44        | -4.45                       | 5.00             | 3.22                         | 15.39        |
| <b>East North Central</b> | <b>47.54</b>                | <b>80.89</b>     | <b>198.78</b>                | <b>91.96</b>  | <b>46.00</b>                | <b>79.95</b>     | <b>195.13</b>                | <b>99.39</b>  | <b>3.35</b>                 | <b>1.18</b>      | <b>1.87</b>                  | <b>-7.48</b> |
| Illinois                  | 34.27                       | 51.39            | w                            | 62.38         | 30.30                       | 51.04            | w                            | 60.58         | 13.10                       | 0.69             | 10.72                        | 2.97         |
| Indiana                   | 55.91                       | 104.16           | w                            | w             | 52.67                       | 99.12            | w                            | 84.63         | 6.15                        | 5.08             | -4.29                        | w            |
| Michigan                  | 52.98                       | 98.28            | w                            | w             | 51.76                       | 96.52            | w                            | w             | 2.36                        | 1.82             | 10.09                        | -7.21        |
| Ohio                      | 59.54                       | 92.32            | 188.05                       | 132.81        | 57.89                       | 87.44            | 172.35                       | 122.88        | 2.85                        | 5.58             | 9.11                         | 8.08         |
| Wisconsin                 | 42.20                       | 90.49            | -                            | 160.91        | 45.45                       | 82.30            | -                            | 154.49        | -7.15                       | 9.95             | -                            | 4.16         |
| <b>West North Central</b> | <b>28.75</b>                | <b>36.16</b>     | -                            | <b>81.32</b>  | <b>27.33</b>                | <b>36.94</b>     | -                            | <b>79.68</b>  | <b>5.20</b>                 | <b>-2.11</b>     | -                            | <b>2.06</b>  |
| Iowa                      | 25.26                       | 49.57            | -                            | w             | 24.41                       | 50.92            | -                            | w             | 3.48                        | -2.65            | -                            | -2.73        |
| Kansas                    | 31.72                       | w                | -                            | -             | 30.09                       | w                | -                            | -             | 5.42                        | s                | -                            | -            |
| Minnesota                 | 35.18                       | 62.17            | -                            | w             | 34.08                       | 56.05            | -                            | w             | 3.23                        | 10.92            | -                            | -5.91        |
| Missouri                  | 32.65                       | 64.79            | -                            | w             | 30.26                       | 58.51            | -                            | w             | 7.90                        | 10.73            | -                            | 5.79         |
| Nebraska                  | 26.34                       | 34.14            | -                            | -             | 25.66                       | 33.87            | -                            | -             | 2.65                        | 0.80             | -                            | -            |
| North Dakota              | 19.69                       | w                | -                            | 50.05         | 17.72                       | w                | -                            | 47.88         | 11.12                       | -17.15           | -                            | 4.53         |
| South Dakota              | 36.27                       | w                | -                            | -             | 34.41                       | w                | -                            | -             | 5.41                        | 3.75             | -                            | -            |
| <b>South Atlantic</b>     | <b>78.89</b>                | <b>102.15</b>    | <b>w</b>                     | <b>126.75</b> | <b>80.53</b>                | <b>99.50</b>     | <b>w</b>                     | <b>125.14</b> | <b>-2.04</b>                | <b>2.66</b>      | <b>3.98</b>                  | <b>1.29</b>  |
| Delaware                  | 101.22                      | -                | -                            | -             | 101.41                      | -                | -                            | -             | s                           | -                | -                            | -            |
| District of Columbia      | -                           | -                | -                            | w             | -                           | -                | -                            | -             | -                           | -                | -                            | w            |
| Florida                   | 83.69                       | 115.33           | -                            | -             | 84.85                       | 111.28           | -                            | -             | -1.37                       | 3.64             | -                            | -            |
| Georgia                   | 71.30                       | 108.85           | -                            | w             | 79.44                       | 110.26           | -                            | w             | -10.25                      | -1.28            | -                            | 8.98         |
| Maryland                  | 90.02                       | 65.01            | -                            | w             | 91.46                       | 69.22            | -                            | w             | -1.57                       | -6.08            | -                            | 15.92        |
| North Carolina            | 92.78                       | 106.71           | -                            | w             | 88.51                       | 109.26           | -                            | 127.82        | 4.82                        | -2.33            | -                            | w            |
| South Carolina            | 99.07                       | 110.86           | -                            | w             | 95.21                       | 104.33           | -                            | -             | 4.05                        | 6.26             | -                            | w            |
| Virginia                  | 86.69                       | 107.89           | w                            | 100.13        | 88.12                       | 99.80            | w                            | 118.23        | -1.62                       | 8.11             | 6.44                         | -15.31       |
| West Virginia             | 61.22                       | 109.58           | w                            | -             | 59.21                       | 97.34            | w                            | -             | 3.39                        | 12.57            | 3.34                         | -            |
| <b>East South Central</b> | <b>57.23</b>                | <b>105.38</b>    | <b>w</b>                     | <b>121.22</b> | <b>56.77</b>                | <b>95.23</b>     | <b>w</b>                     | <b>112.61</b> | <b>0.81</b>                 | <b>10.66</b>     | <b>8.87</b>                  | <b>7.65</b>  |
| Alabama                   | 62.33                       | 107.13           | w                            | -             | 59.78                       | 89.20            | w                            | -             | 4.27                        | 20.10            | 7.76                         | -            |
| Kentucky                  | 54.83                       | 101.96           | -                            | 114.63        | 53.01                       | 95.47            | w                            | 108.72        | 3.43                        | 6.80             | w                            | 5.44         |
| Mississippi               | 61.16                       | w                | -                            | -             | 59.87                       | w                | -                            | -             | 2.15                        | 0.80             | -                            | -            |
| Tennessee                 | 53.92                       | 106.55           | -                            | w             | 59.41                       | 98.46            | -                            | w             | -9.24                       | 8.22             | -                            | 7.11         |
| <b>West South Central</b> | <b>31.88</b>                | <b>75.54</b>     | -                            | <b>w</b>      | <b>30.47</b>                | <b>74.37</b>     | -                            | <b>w</b>      | <b>4.63</b>                 | <b>1.57</b>      | -                            | <b>11.93</b> |
| Arkansas                  | 38.55                       | w                | -                            | -             | 33.40                       | w                | -                            | -             | 15.42                       | -3.84            | -                            | -            |
| Louisiana                 | 40.65                       | w                | -                            | -             | 39.19                       | w                | -                            | -             | 3.73                        | -26.52           | -                            | -            |
| Oklahoma                  | 34.30                       | w                | -                            | -             | 30.81                       | w                | -                            | -             | 11.33                       | 2.50             | -                            | -            |
| Texas                     | 28.92                       | 82.82            | -                            | w             | 28.68                       | 77.60            | -                            | w             | 0.84                        | 6.73             | -                            | 11.93        |
| <b>Mountain</b>           | <b>34.52</b>                | <b>51.35</b>     | -                            | <b>102.80</b> | <b>33.69</b>                | <b>46.20</b>     | -                            | <b>93.48</b>  | <b>2.46</b>                 | <b>11.15</b>     | -                            | <b>9.97</b>  |
| Arizona                   | 39.85                       | 65.42            | -                            | -             | 38.33                       | 54.78            | -                            | -             | 3.97                        | 19.42            | -                            | -            |
| Colorado                  | 35.00                       | 64.45            | -                            | w             | 33.37                       | w                | -                            | w             | 4.88                        | w                | -                            | 6.02         |
| Idaho                     | -                           | 61.80            | -                            | w             | -                           | 50.76            | -                            | w             | -                           | 21.75            | -                            | -5.30        |
| Montana                   | 23.36                       | 37.92            | -                            | w             | 22.36                       | w                | -                            | w             | 4.47                        | w                | -                            | 7.75         |
| Nevada                    | 51.59                       | 76.26            | -                            | -             | 53.91                       | w                | -                            | -             | -4.30                       | w                | -                            | -            |
| New Mexico                | 39.62                       | w                | -                            | -             | 38.02                       | w                | -                            | -             | 4.21                        | 7.92             | -                            | -            |
| Utah                      | 42.60                       | 61.38            | -                            | -             | 39.04                       | 58.03            | -                            | -             | 9.12                        | 5.77             | -                            | -            |
| Wyoming                   | 25.11                       | 37.33            | -                            | w             | 25.64                       | 35.17            | -                            | w             | -2.07                       | 6.14             | -                            | 10.71        |
| <b>Pacific</b>            | <b>42.72</b>                | <b>82.83</b>     | -                            | <b>61.63</b>  | <b>41.39</b>                | <b>85.58</b>     | -                            | <b>57.98</b>  | <b>3.21</b>                 | <b>-3.21</b>     | -                            | <b>6.30</b>  |
| Alaska                    | -                           | -                | -                            | 61.63         | 27.10                       | -                | -                            | 57.98         | -100.00                     | -                | -                            | 6.30         |
| California                | 79.06                       | 82.15            | -                            | -             | 74.28                       | 84.36            | -                            | -             | 6.44                        | -2.62            | -                            | -            |
| Hawaii                    | 78.07                       | w                | -                            | -             | 68.93                       | w                | -                            | -             | 13.26                       | 20.97            | -                            | -            |
| Oregon                    | 31.67                       | w                | -                            | -             | 30.00                       | w                | -                            | -             | 5.57                        | -4.76            | -                            | -            |

| Census Division and State | 2012                        |                  |               |                              | 2011                        |                  |               |                              | Annual Percent Change       |                  |             |                              |
|---------------------------|-----------------------------|------------------|---------------|------------------------------|-----------------------------|------------------|---------------|------------------------------|-----------------------------|------------------|-------------|------------------------------|
|                           | Electric Power <sup>1</sup> | Other Industrial | Coke          | Commercial and Institutional | Electric Power <sup>1</sup> | Other Industrial | Coke          | Commercial and Institutional | Electric Power <sup>1</sup> | Other Industrial | Coke        | Commercial and Institutional |
| Washington                | 37.14                       | w                | -             | -                            | 36.91                       | w                | -             | -                            | 0.62                        | 10.75            | -           | -                            |
| <b>U.S. Total</b>         | <b>45.77</b>                | <b>70.33</b>     | <b>190.55</b> | <b>90.76</b>                 | <b>46.24</b>                | <b>70.66</b>     | <b>184.44</b> | <b>91.94</b>                 | <b>-1.02</b>                | <b>s</b>         | <b>3.31</b> | <b>-1.28</b>                 |

<sup>1</sup> 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).

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

- = No data reported.

w = Data withheld to avoid disclosure.

Source: U.S. Energy Information Administration Form EIA-923, 'Power Plant Operations Report,' Form EIA-3, 'Quarterly Coal Consumption and Quality Report, Manufacturing and Transformation/Processing Coal Plants and Commercial and Institutional Coal Users,' and Form EIA-5, 'Quarterly Coal Consumption and Quality Report, Coke Plants.'