



The Economic Contributions of U.S. Mining in 2010

September 2012

A report prepared by the
National Mining Association



TABLE OF CONTENTS

Executive Summary	E-1
I. Overview of U.S. Mining.....	1
II. Economic Contributions of U.S. Mining.....	2
A. National Results	3
B. Contribution by Mining Segment	3
C. Tax Payments of U.S. Mining	4
D. Contribution of U.S. Mining by State	5
III. Overview of U.S. Coal Mining	11
IV. Overview of U.S. Metal Ore Mining	16
V. Overview of U.S. Non-Metallic Mineral Mining.....	21
VI. Methodology	26
A. Derivation on Direct Impacts	26
B. Adjustments to IMPLAN Model.....	26
Appendix A. NAICS Definition of U.S. Mining.....	28
Appendix B. The IMPLAN Model.....	29
Appendix C. Additional Detail by State.....	30

EXECUTIVE SUMMARY

There are more than 15,000 operations that mine for coal, metal ores and non-metallic minerals in the United States, according to the Mine Safety and Health Administration. The products produced by these mines provide the energy resources and raw materials required by the rest of the economy. The ability of the U.S. economy to compete internationally depends on the availability of such inputs.

U.S. mining has a broad impact on the national economy. Mining provides jobs, pays salaries and generates value in all 50 states.

Overall, mining jobs were up in 2010 as compared to 2008. We estimate that U.S. mining in 2010 directly and indirectly generated more than 1.98 million U.S. jobs, \$119 billion in U.S. labor income, \$225 billion in contribution to U.S. gross domestic product (GDP, or “value added”) and nearly \$50 billion in federal, state and local taxes. Most striking, is that during a time of great economic turmoil in the U.S., domestic mining added jobs and increased its contribution to the overall wealth of the nation. For some states, that contribution was substantial.

This report quantifies the economic contributions of domestic coal, metal ores and non-metallic minerals mining to the U.S. economy.

Table E-1. Economic Contribution of U.S. Mining, 2010

Item	Direct	Indirect and Induced	Total
Employment	627,650	1,353,405	1,981,055
Labor Income (billions of dollars)	\$48.0	\$71.3	\$119.3
Contribution to GDP (billions of dollars)	\$101.2	\$124.2	\$225.4
Taxes Paid (billions of dollars)			\$49.8

Source: Calculations based on IMPLAN modeling system (2010 database)

The direct effects of U.S. mining include the economic activity of mine operators, companies providing support to mine operators and transportation companies that carry mine output to purchasers. Indirect effects include the U.S. economic activity of suppliers, including suppliers of capital goods for mining operations. Induced effects measure the U.S. economic impact of spending of payrolls resulting from direct and indirect activity.

This analysis does not include the economic or employee benefits of coal and uranium-based electricity generation or the manufacturing and other end-users of metal and non-metal minerals. According to the Edison Electric Institute, U.S. electricity generation directly employed more than 500,000 people in 2010, with coal and uranium responsible for nearly 65 percent of total electricity generation that year. The U.S. Geological Survey estimates that mineral commodities were transformed into \$2.1 trillion worth of goods and services in 2010.

Table E-2. Total Direct, Indirect and Induced Contributions of U.S. Mining by State, 2010

State	Employment		Labor Income		Contribution to GDP		Taxes Paid (\$ Millions)	
	Number	Percent of State Total	(\$ Millions)	Percent of State Total	(\$ Millions)	Percent of State Total	State & Local	Federal
Alabama	56,050	2.2%	\$3,331	3.0%	\$6,289	3.6%	\$622	\$766
Alaska	9,480	2.1%	626	2.4%	1,547	3.8%	188	\$163
Arizona	69,684	2.2%	4,179	2.8%	10,610	4.2%	1,076	\$1,250
Arkansas	17,610	1.1%	865	1.4%	1,680	1.7%	125	\$205
California	110,310	0.6%	7,207	0.6%	12,799	0.7%	1,123	\$1,607
Colorado	46,260	1.5%	3,120	1.8%	6,343	2.4%	586	\$762
Connecticut	11,600	0.5%	853	0.6%	1,492	0.6%	115	\$211
Delaware	2,546	0.5%	151	0.5%	286	0.7%	23	\$34
District of Columbia	3,000	0.3%	367	0.4%	524	0.5%	48	\$48
Florida	76,480	0.8%	3,979	0.9%	7,212	1.0%	434	\$959
Georgia	56,940	1.1%	3,035	1.2%	5,343	1.3%	346	\$673
Hawaii	5,660	0.7%	333	0.8%	601	0.9%	42	\$69
Idaho	13,480	1.5%	677	2.0%	1,411	2.6%	115	\$170
Illinois	68,500	0.9%	4,400	1.1%	7,932	1.2%	700	\$778
Indiana	56,930	1.6%	3,346	2.1%	6,234	2.4%	660	\$780
Iowa	20,440	1.0%	1,028	1.2%	1,862	1.4%	127	\$228
Kansas	16,150	0.9%	841	1.0%	1,546	1.2%	116	\$188
Kentucky	108,120	4.6%	6,457	6.3%	12,057	7.3%	1,422	\$1,570
Louisiana	20,710	0.8%	1,111	0.9%	2,461	1.3%	206	\$273
Maine	4,980	0.6%	224	0.7%	379	0.8%	31	\$47
Maryland	22,680	0.7%	1,450	0.7%	2,568	0.9%	244	\$340
Massachusetts	21,130	0.5%	1,483	0.6%	2,539	0.6%	200	\$338
Michigan	44,530	0.9%	2,504	1.0%	4,374	1.1%	362	\$564
Minnesota	52,630	1.5%	3,112	1.8%	5,598	2.0%	520	\$745
Mississippi	9,510	0.6%	465	0.8%	755	0.8%	65	\$92
Missouri	49,290	1.4%	2,659	1.7%	5,080	2.0%	356	\$623
Montana	20,630	3.3%	1,165	4.9%	2,626	6.7%	257	\$326
Nebraska	13,920	1.1%	751	1.4%	1,102	1.3%	74	\$133
Nevada	51,040	3.4%	3,359	4.9%	8,572	7.5%	644	\$959
New Hampshire	5,590	0.7%	307	0.8%	652	0.7%	37	\$71
New Jersey	27,240	0.6%	1,943	0.6%	3,403	0.7%	272	\$445
New Mexico	25,260	2.4%	1,396	3.0%	2,640	3.7%	256	\$322
New York	61,725	0.6%	4,504	0.6%	7,900	0.7%	787	\$1,050
North Carolina	37,740	0.7%	1,940	0.8%	3,449	0.9%	262	\$424
North Dakota	9,660	1.9%	600	2.7%	1,039	3.0%	157	\$134
Ohio	64,090	1.0%	3,525	1.2%	6,264	1.3%	589	\$780
Oklahoma	19,180	0.9%	969	1.0%	1,809	1.1%	126	\$217
Oregon	17,650	0.8%	890	0.9%	1,538	1.0%	128	\$204
Pennsylvania	115,250	1.6%	7,027	1.9%	12,845	2.2%	1,270	\$1,701
Rhode Island	3,030	0.5%	172	0.6%	282	0.6%	22	\$39
South Carolina	18,220	0.7%	865	0.9%	1,582	1.0%	93	\$201
South Dakota	5,600	1.0%	280	1.2%	504	1.5%	32	\$62
Tennessee	36,200	1.0%	2,011	1.2%	3,694	1.4%	241	\$452
Texas	124,890	0.9%	7,625	1.0%	14,403	1.1%	1,033	\$1,707
Utah	40,850	2.5%	2,194	3.2%	4,605	4.2%	460	\$553
Vermont	5,270	1.3%	257	1.5%	462	1.7%	32	\$58
Virginia	74,870	1.6%	5,276	1.9%	9,803	2.3%	1,021	\$1,266
Washington	31,410	0.8%	1,873	0.9%	3,461	1.0%	210	\$447
West Virginia	117,330	12.9%	7,552	19.0%	14,396	22.8%	2,051	\$1,892
Wisconsin	29,310	0.9%	1,513	1.0%	2,629	1.1%	202	\$343
Wyoming	50,400	13.0%	3,499	19.5%	6,266	20.7%	656	\$861
Total Operations	1,981,055	1.1%	119,296	1.3%	\$225,449	1.5%	\$20,764	\$28,131

I. Overview of U.S. Mining

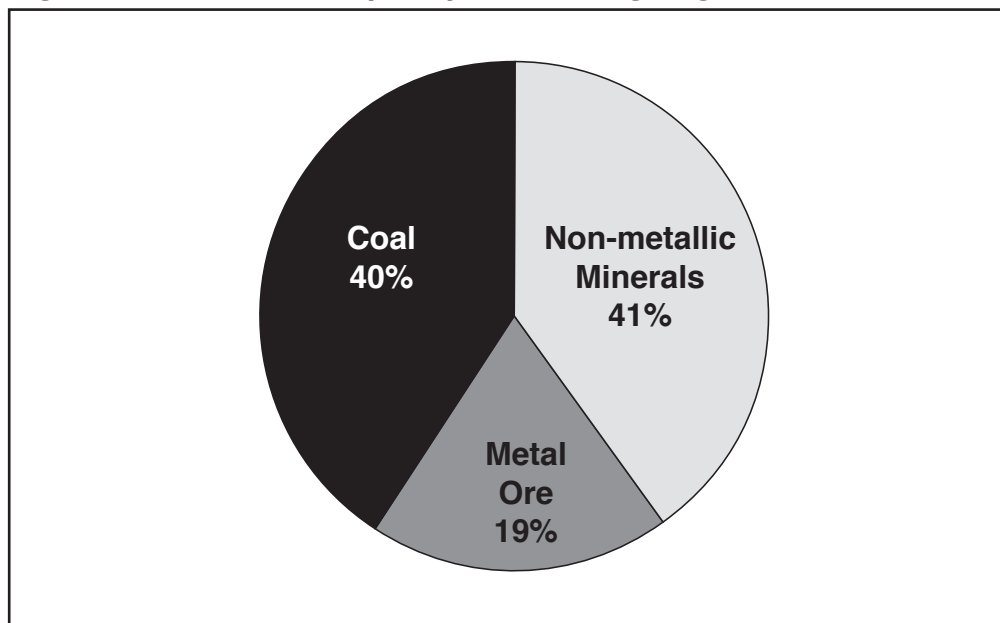
U.S. mining provides raw materials that are used throughout the economy. Coal and uranium provide key sources of energy to utilities. Metal ores provide manufacturers with vital inputs. Sand, stone and gravel pulled from quarries across the country provide the foundation for new construction. Industrial minerals are important components of a variety of products, from pharmaceuticals to automobiles.

This report quantifies the economic contributions of domestic mining to the U.S. economy, which includes activities associated with the mining of coal, metal ores and non-metallic minerals. Oil and gas extraction is not included as part of U.S. mining.

For the purposes of this study, we have divided U.S. mining into three primary segments: (1) coal, (2) metal ore and (3) non-metallic minerals.¹ Overall, these segments contribute more than \$225 billion in 2010 to U.S. gross domestic product (GDP), or the total value of output in the U.S. economy.²

In terms of the direct contribution of the different segments, coal mining accounted for 40 percent of the total value of U.S. mining output in 2010. Non-metallic mineral mining comprised 41 percent and metal ore mining 19 percent (see figure 1).

Figure 1. Economic Output by U.S. Mining Segment, 2010



The federal government generally relies on the North American Industry Classification System (NAICS) to classify industries. Appendix A shows the classification of U.S. mining in terms of NAICS codes.

The primary metals manufacturing industry is the largest “downstream” purchaser of mining output, spending nearly \$16 billion in 2010 on raw materials produced by mining. (see Table 1).

¹ The industry for the purposes of this report excludes oil and gas extraction.

² The direct impact of the industry presented in the next section also includes support activities and the transportation of mining output to purchasers.

**Table 1. Largest Industries Purchasing Mining Output, 2010
(millions of dollars)**

Rank	Purchasing Industry	Value of Mining Output
1	Primary Metals Manufacturing	\$15,974
2	Construction	9,421
3	Non-metallic Mineral Products Manufacturing	5,857
4	Utilities	5,761
5	Chemical Products Manufacturing	5,319

Source: BEA, Industry Economic Accounts, Annual I-O Table, http://www.bea.gov/industry/io_annual.htm accessed August 2012.

The utilities industry is the largest “upstream” supplier of U.S. mining operations, which paid \$3.6 billion for utilities in 2010 (see Table 2).

**Table 2. Largest Industries Supplying Mining Output, 2010
(millions of dollars)**

Rank	Supplying Industry	Value of Mining Output
1	Utilities	\$3,554
2	Rail Transportation	2,605
3	Computer Systems Design and Related Services	2,547
4	Management of Companies and Enterprises	2,007
5	Truck Transportation	

Source: BEA, Industry Economic Accounts, Annual I-O Table, http://www.bea.gov/industry/io_annual.htm accessed August 2012.

Utilities are both downstream purchasers of mining output (coal) to produce electricity and upstream suppliers of electricity to mines.

II. Economic Contributions of U.S. Mining

The economic contribution of U.S. mining to the domestic economy includes its direct impact plus the economic activity of other industries that supply the mining industry. To quantify these linkages, we rely on the IMPLAN model, an input-output (I-O) model based on federal government data.³

- **Direct contributions:** activities directly attributable to mining, such as the employees and output of mining companies. These effects include the transportation of mine output from the mine to the purchaser.
- **Indirect contribution:** activities of upstream suppliers to mining, including contractors and other companies providing inputs to mining companies. Indirect effects also include the activity of suppliers to these companies.

³ The IMPLAN model is based on input-output (I-O) tables that map the flow of value along the supply chain for different industries in the economy. For example, for the mining industry these tables provide the value of inputs purchased from other industries in producing mine output. The supplying industries also purchase inputs from other industries to deliver their products to the mining industry. See Appendix B for a description of the model.

- Induced contribution: spending by mining and supplier employees. Employees throughout the supply chain receive incomes associated with the direct and indirect activities, a portion of which is consumed. This consumption causes additional economic activity attributable to U.S. mining.

We have made adjustments to the output of the IMPLAN model to provide a more complete and accurate description of the overall contribution of U.S. mining. First, because the IMPLAN model excludes capital expenditures (such as spending on trucks), we have separately calculated the activity attributable to capital spending by the mining sector. This detail is only available on a national basis. Second, we have also included the economic activity attributable to the transportation of mining output to the industry's customers, in addition to upstream impacts.

See Section VI for a more detailed description of our methodology.

A. National Results

U.S. mining directly and indirectly generated just over 1.98 million full-time and part-time jobs in 2010, including employees and the self-employed.

- U.S. mining accounted for more than 627,000 jobs.
- Employees in other industries indirectly attributable to or induced by U.S. mining were more than 1.35 million.

Total U.S. labor income associated with U.S. mining amounted to more than \$119 billion in 2010, which includes wages and salaries, other employee benefits and proprietors' income.

The contribution to GDP attributable to U.S. mining from direct, indirect and induced activity was \$225 billion. U.S. mining directly and indirectly generated nearly \$50 billion in tax payments to federal, state and local governments.

Most striking, is that during a time of great economic turmoil in the U.S., domestic mining added jobs and increased its contribution to the overall wealth of the nation. For some states, that contribution was substantial.

B. Contribution by Mining Segment

U.S. mining can be divided into three primary segments: coal, metal ores, and non-metallic minerals. The direct contributions include the operations of the mine, support activities and transportation of output from the mine.

The coal segment of U.S. mining accounted for 766,350 jobs, \$49.5 billion in labor income and \$90 billion in contribution to GDP (see Table 3). Average wages and salaries in coal mining operations (excluding support activities and transportation) were approximately \$77,466 in 2010.⁴ Overall, coal mining, including transportation of coal products and mining support activities allocated to coal mining,

⁴ Average wage and salary data from Bureau of Labor Statistics, Quarterly Census Employment and Wages, 2008. Labor income as presented in Table 3 results reflects total employee compensation (including benefits) and self-employment income for mining, support activities, and transportation attributable to mining output.

were responsible for approximately 39 percent of U.S. mining's total employment contribution, 41 percent of total labor income and 40 percent of total contribution to GDP.⁵

The metal ore mining segment of U.S. mining directly accounted for 256,420 jobs, \$17 billion in labor compensation and \$42.2 billion in contribution to GDP. Average wages and salaries in the metal ore mining sector were \$81,344. Total contribution attributable to metal ore mining represented 13 percent of total employment, 14 percent of labor income and 19 percent of total contribution to GDP.

The non-metallic mineral mining segment of U.S. mining directly accounted for 958,280 jobs, \$52.8 billion in labor compensation and \$93.2 billion in contribution to GDP. Average wages and salaries in the non-metallic mining sector were \$52,892. Non-metallic mineral mining represented 48 percent of mining employment, 44 percent of labor income and 41 percent of contribution to GDP.⁶

Table 3. Economic Contribution of U.S. Mining Operations by Segment

Sector	Coal Mining	Metal Ore Mining	Non-metallic Mineral Mining	Total
Employment				
Direct	211,410	73,620	342,620	627,650
Indirect & Induced	554,940	182,800	615,660	1,353,405
Total	766,350	256,420	958,280	1,981,055
Labor Income (\$billions)				
Direct	\$20.2	\$6.8	\$21.0	\$48.0
Indirect & Induced	\$29.3	\$10.2	\$31.7	\$71.3
Total	\$49.5	\$17.0	\$52.8	\$119.3
Contribution to GDP (\$billions)				
Direct	\$39.9	\$22.8	\$38.5	\$101.2
Indirect & Induced	\$50.1	\$19.3	\$54.8	\$124.2
Total	\$90.0	\$42.2	\$93.2	\$225.4

C. Tax Payments of U.S. Mining

The economic activity attributable to U.S. mining is subject to taxation at the federal, state and local levels. These taxes take a variety of forms, including income taxes on company profits and employee wages, property taxes on equipment and structures and excise taxes on output. Table 4 provides detail on the type of taxes collected in economic activity attributable to U.S. mining. Mining activity generated \$28.5 billion in federal taxes and another \$21.3 billion in state and local taxes, for a total of \$49.8 billion in 2010.

5 Data derived from IMPLAN model, which is based on data from the U.S. Bureau of Economic Analysis.

6 The transport of mining products, included in the figures above, represent a significant portion of these impacts. Transportation of mining output, for instance, is responsible for 253,660 direct transportation jobs and also contributes to labor income and GDP. These amounts have been distributed to coal, metal ore, and non-metallic mineral mining in Table 3.

**Table 4. Tax Payments Attributable to U.S. Mining Economic Activity, 2010
(millions of dollars)**

	Tax Category	Direct	Indirect and Induced	Total
Federal	Corporate Income Taxes	3,021	3,019	6,039
	Personal Taxes	3,016	4,495	7,511
	Indirect Business Taxes	1,249	1,271	2,519
	Social Insurance Contributions	4,887	7,498	12,385
	Federal Total	12,172	16,282	28,455
State & Local	Corporate Income Taxes	554	553	1,107
	Personal Taxes	1,250	1,864	3,114
	Indirect Business Taxes	8,337	8,484	16,821
	Social Insurance Contributions	102	160	262
	State & Local Total	10,244	11,060	21,304
Federal, State & Local Total		22,416	27,343	49,759

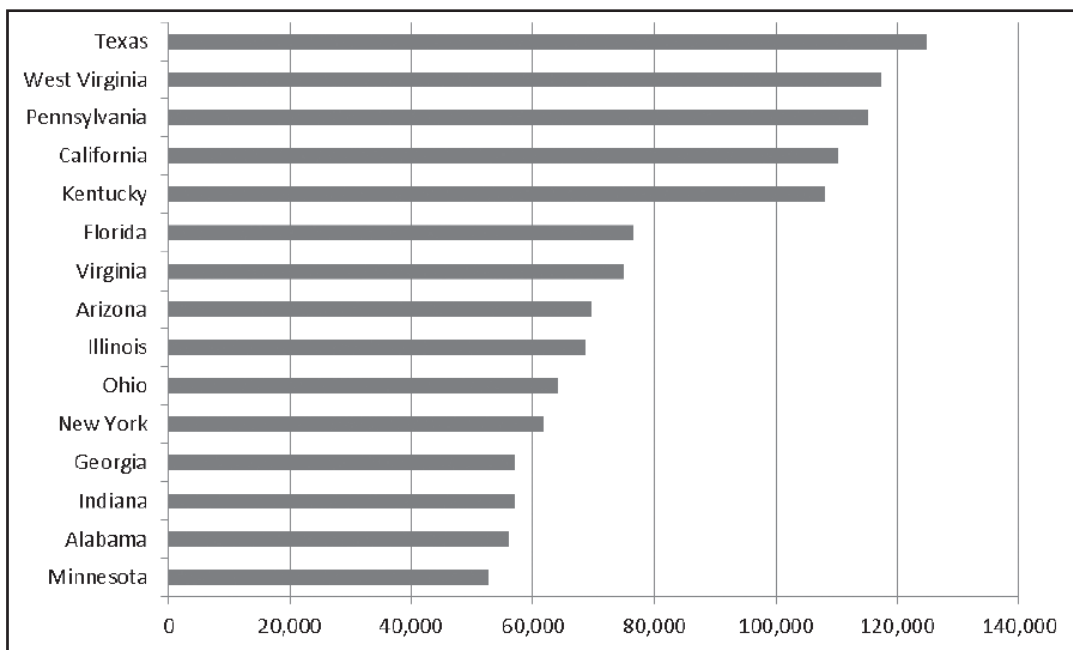
D. Contribution of U.S. Mining by State

U.S. mining generates economic activity in all 50 states and the District of Columbia. The five states in which mining accounts for the largest share of total state employment are Wyoming (13%), West Virginia (12.9%), Kentucky (4.6%), Nevada (3.4%) and Montana (3.3%).

The states with the largest employment attributable to mining are Texas (124,890), West Virginia (117,330), Pennsylvania (115,250), California (110,310) and Kentucky (108,120). (see Figure 2).

Detail on the overall contribution of U.S. mining in each of the 50 states and the District of Columbia is shown in Table 5 (overall), Table 6 (employment detail), Table 7 (contribution to GDP detail), Table 8 (labor income detail), and Table 9 (taxes detail). Overall mining sector results for coal, metal and non-metallic mining follow, and Appendix C has additional detail.

**Figure 2. Total Direct and Indirect Employees Attributed to Mining
(15 Largest States)**



Calculations based on IMPLAN modeling system (2010 database).

Table 5. Mining and the U.S. Economy by State, 2010

State	Employment		Labor Income		Contribution to GDP		Taxes Paid (\$millions)	
	Number	Percent of State Total	(\$millions)	Percent of State Total	(\$millions)	Percent of State Total	State & Local	Federal
Alabama	56,050	2.2%	\$3,331	3.0%	\$6,289	3.6%	\$622	\$766
Alaska	9,480	2.1%	626	2.4%	1,547	3.8%	188	\$163
Arizona	69,684	2.2%	4,179	2.8%	10,610	4.2%	1,076	\$1,250
Arkansas	17,610	1.1%	865	1.4%	1,680	1.7%	125	\$205
California	110,310	0.6%	7,207	0.6%	12,799	0.7%	1,123	\$1,607
Colorado	46,260	1.5%	3,120	1.8%	6,343	2.4%	586	\$762
Connecticut	11,600	0.5%	853	0.6%	1,492	0.6%	115	\$211
Delaware	2,546	0.5%	151	0.5%	286	0.7%	23	\$34
District of Columbia	3,000	0.3%	367	0.4%	524	0.5%	48	\$48
Florida	76,480	0.8%	3,979	0.9%	7,212	1.0%	434	\$959
Georgia	56,940	1.1%	3,035	1.2%	5,343	1.3%	346	\$673
Hawaii	5,660	0.7%	333	0.8%	601	0.9%	42	\$69
Idaho	13,480	1.5%	677	2.0%	1,411	2.6%	115	\$170
Illinois	68,500	0.9%	4,400	1.1%	7,932	1.2%	700	\$778
Indiana	56,930	1.6%	3,346	2.1%	6,234	2.4%	660	\$780
Iowa	20,440	1.0%	1,028	1.2%	1,862	1.4%	127	\$228
Kansas	16,150	0.9%	841	1.0%	1,546	1.2%	116	\$188
Kentucky	108,120	4.6%	6,457	6.3%	12,057	7.3%	1,422	\$1,570
Louisiana	20,710	0.8%	1,111	0.9%	2,461	1.3%	206	\$273
Maine	4,980	0.6%	224	0.7%	379	0.8%	31	\$47
Maryland	22,680	0.7%	1,450	0.7%	2,568	0.9%	244	\$340
Massachusetts	21,130	0.5%	1,483	0.6%	2,539	0.6%	200	\$338
Michigan	44,530	0.9%	2,504	1.0%	4,374	1.1%	362	\$564
Minnesota	52,630	1.5%	3,112	1.8%	5,598	2.0%	520	\$745
Mississippi	9,510	0.6%	465	0.8%	755	0.8%	65	\$92
Missouri	49,290	1.4%	2,659	1.7%	5,080	2.0%	356	\$623
Montana	20,630	3.3%	1,165	4.9%	2,626	6.7%	257	\$326
Nebraska	13,920	1.1%	751	1.4%	1,102	1.3%	74	\$133
Nevada	51,040	3.4%	3,359	4.9%	8,572	7.5%	644	\$959
New Hampshire	5,590	0.7%	307	0.8%	652	0.7%	37	\$71
New Jersey	27,240	0.6%	1,943	0.6%	3,403	0.7%	272	\$445
New Mexico	25,260	2.4%	1,396	3.0%	2,640	3.7%	256	\$322
New York	61,725	0.6%	4,504	0.6%	7,900	0.7%	787	\$1,050
North Carolina	37,740	0.7%	1,940	0.8%	3,449	0.9%	262	\$424
North Dakota	9,660	1.9%	600	2.7%	1,039	3.0%	157	\$134
Ohio	64,090	1.0%	3,525	1.2%	6,264	1.3%	589	\$780
Oklahoma	19,180	0.9%	969	1.0%	1,809	1.1%	126	\$217
Oregon	17,650	0.8%	890	0.9%	1,538	1.0%	128	\$204
Pennsylvania	115,250	1.6%	7,027	1.9%	12,845	2.2%	1,270	\$1,701
Rhode Island	3,030	0.5%	172	0.6%	282	0.6%	22	\$39
South Carolina	18,220	0.7%	865	0.9%	1,582	1.0%	93	\$201
South Dakota	5,600	1.0%	280	1.2%	504	1.5%	32	\$62
Tennessee	36,200	1.0%	2,011	1.2%	3,694	1.4%	241	\$452
Texas	124,890	0.9%	7,625	1.0%	14,403	1.1%	1,033	\$1,707
Utah	40,850	2.5%	2,194	3.2%	4,605	4.2%	460	\$553
Vermont	5,270	1.3%	257	1.5%	462	1.7%	32	\$58
Virginia	74,870	1.6%	5,276	1.9%	9,803	2.3%	1,021	\$1,266
Washington	31,410	0.8%	1,873	0.9%	3,461	1.0%	210	\$447
West Virginia	117,330	12.9%	7,552	19.0%	14,396	22.8%	2,051	\$1,892
Wisconsin	29,310	0.9%	1,513	1.0%	2,629	1.1%	202	\$343
Wyoming	50,400	13.0%	3,499	19.5%	6,266	20.7%	656	\$861
Total Operations	1,981,055	1.1%	119,296	1.3%	\$225,449	1.5%	\$20,764	\$28,131

Table 6. U.S. Mining Employment by State, 2010

State	Direct Effects				Indirect and Induced	Total Contribution
	Mine Workers	Support Activities	Transportation	Total Direct		
Alabama	11,410	120	8,380	19,910	36,140	56,050
Alaska	2,990	120	1,170	4,280	5,200	9,480
Arizona	15,860	330	5,730	21,920	47,760	69,680
Arkansas	3,590	10	2,910	6,510	11,100	17,610
California	10,510	90	9,410	20,010	90,300	110,310
Colorado	9,190	310	6,070	15,570	30,690	46,260
Connecticut	1,020	10	1,020	2,050	9,550	11,600
Delaware	100	0	350	460	2,090	2,550
District of Columbia	0	0	0	0	3,000	3,000
Florida	7,950	110	10,320	18,380	58,100	76,480
Georgia	8,760	1,840	7,330	17,930	39,010	56,940
Hawaii	470	0	1,070	1,540	4,120	5,660
Idaho	3,350	210	2,080	5,640	7,840	13,480
Illinois	9,830	300	7,730	17,860	50,640	68,500
Indiana	10,310	160	8,210	18,680	38,250	56,930
Iowa	3,690	40	3,390	7,120	13,320	20,440
Kansas	3,140	10	2,100	5,250	10,900	16,150
Kentucky	27,410	1,660	15,530	44,600	63,520	108,120
Louisiana	3,470	90	1,810	5,370	15,340	20,710
Maine	870	10	440	1,320	3,660	4,980
Maryland	3,240	340	1,770	5,350	17,330	22,680
Massachusetts	1,390	310	1,500	3,200	17,930	21,130
Michigan	4,900	50	6,540	11,490	33,040	44,530
Minnesota	8,540	420	8,250	17,210	35,420	52,630
Mississippi	1,540	0	820	2,360	7,150	9,510
Missouri	7,640	190	9,020	16,850	32,440	49,290
Montana	5,200	260	3,440	8,900	11,730	20,630
Nebraska	2,320	10	1,800	4,130	9,790	13,920
Nevada	13,950	1,490	5,280	20,720	30,320	51,040
New Hampshire	770	10	710	1,490	4,100	5,590
New Jersey	1,500	60	2,950	4,510	22,730	27,240
New Mexico	5,700	200	5,130	11,030	14,230	25,260
New York	5,120	40	7,060	12,220	49,500	61,720
North Carolina	5,870	30	4,330	10,230	27,510	37,740
North Dakota	2,140	30	1,550	3,720	5,940	9,660
Ohio	10,610	750	6,720	18,080	46,010	64,090
Oklahoma	3,490	120	2,490	6,100	13,080	19,180
Oregon	2,300	110	2,420	4,830	12,820	17,650
Pennsylvania	22,910	870	15,190	38,970	76,280	115,250
Rhode Island	210	10	340	560	2,470	3,030
South Carolina	2,850	20	1,980	4,850	13,370	18,220
South Dakota	1,460	30	750	2,240	3,360	5,600
Tennessee	6,540	540	3,790	10,870	25,330	36,200
Texas	19,810	300	13,230	33,340	91,550	124,890
Utah	9,540	500	4,090	14,130	26,720	40,850
Vermont	1,110	0	960	2,070	3,200	5,270
Virginia	13,170	590	10,340	24,100	50,770	74,870
Washington	6,440	200	2,770	9,410	22,000	31,410
West Virginia	37,220	1,330	17,070	55,620	61,710	117,330
Wisconsin	4,400	140	3,540	8,080	21,230	29,310
Wyoming	13,450	360	12,780	26,590	23,810	50,400
Total Operations	359,250	14,730	253,660	627,650	1,353,400	1,981,050

Table 7. U.S. Mining Labor Income by State, 2010 (millions of dollars)

State	Direct Contribution to Labor Income	Indirect and Induced	Total Contribution	Total Contribution as a % of State Total Labor Income
Alabama	\$1,731	\$1,600	\$3,331	2.95%
Alaska	312	314	626	2.39%
Arizona	1,817	2,362	4,179	2.79%
Arkansas	382	483	865	1.39%
California	1,244	5,963	7,207	0.62%
Colorado	1,457	1,662	3,120	1.94%
Connecticut	151	702	853	0.60%
Delaware	28	123	151	0.53%
District of Columbia	1	366	367	0.41%
Florida	1,156	2,822	3,979	0.92%
Georgia	1,041	1,993	3,035	1.19%
Hawaii	107	227	333	0.80%
Idaho	352	325	677	1.98%
Illinois	1,395	3,005	4,400	1.09%
Indiana	1,657	1,689	3,346	2.11%
Iowa	425	603	1,028	1.22%
Kansas	321	520	841	1.04%
Kentucky	3,696	2,761	6,457	6.26%
Louisiana	394	717	1,111	0.93%
Maine	53	171	224	0.69%
Maryland	366	1,084	1,450	0.75%
Massachusetts	197	1,286	1,483	0.57%
Michigan	808	1,696	2,504	1.02%
Minnesota	1,297	1,816	3,112	1.82%
Mississippi	152	313	465	0.79%
Missouri	1,090	1,569	2,659	1.68%
Montana	700	464	1,165	4.93%
Nebraska	368	383	751	1.40%
Nevada	1,842	1,517	3,359	4.94%
New Hampshire	82	225	307	0.76%
New Jersey	358	1,585	1,943	0.63%
New Mexico	793	603	1,396	2.98%
New York	812	3,692	4,504	0.62%
North Carolina	541	1,399	1,940	0.80%
North Dakota	344	256	600	2.70%
Ohio	1,280	2,245	3,525	1.19%
Oklahoma	344	626	969	1.01%
Oregon	260	629	890	0.91%
Pennsylvania	2,892	4,135	7,027	1.90%
Rhode Island	27	145	172	0.63%
South Carolina	268	596	865	0.85%
South Dakota	133	147	280	1.24%
Tennessee	711	1,300	2,011	1.22%
Texas	2,420	5,206	7,625	1.00%
Utah	1,071	1,123	2,194	3.19%
Vermont	116	142	257	1.48%
Virginia	2,425	2,851	5,276	1.92%
Washington	574	1,300	1,873	0.91%
West Virginia	4,973	2,579	7,552	19.03%
Wisconsin	519	994	1,513	1.01%
Wyoming	2,552	947	3,499	19.52%
Total Operations	48,037	71,260	119,296	1.32%

Table 8. U.S. Mining Contribution to GDP by State, 2010 (millions of dollars)

State	Direct Contribution to GDP	Indirect and Induced	Total Contribution	Total Contribution as a % of State GDP
Alabama	\$3,589	\$2,699	\$6,289	3.60%
Alaska	947	600	1,547	3.76%
Arizona	6,477	4,133	10,610	4.18%
Arkansas	862	818	1,680	1.74%
California	2,257	10,542	12,799	0.67%
Colorado	3,369	2,974	6,343	2.36%
Connecticut	266	1,226	1,492	0.65%
Delaware	49	204	253	0.58%
District of Columbia	4	520	524	0.45%
Florida	2,222	4,990	7,212	1.01%
Georgia	1,808	3,535	5,343	1.25%
Hawaii	201	399	601	0.91%
Idaho	829	583	1,411	2.64%
Illinois	2,773	5,159	7,932	1.22%
Indiana	3,318	2,916	6,234	2.44%
Iowa	817	1,045	1,862	1.36%
Kansas	638	909	1,546	1.18%
Kentucky	7,361	4,696	12,057	7.29%
Louisiana	1,086	1,375	2,461	1.28%
Maine	92	287	379	0.76%
Maryland	757	1,811	2,568	0.87%
Massachusetts	374	2,164	2,539	0.62%
Michigan	1,409	2,965	4,374	1.11%
Minnesota	2,382	3,216	5,598	1.99%
Mississippi	225	530	755	0.83%
Missouri	2,425	2,655	5,080	2.02%
Montana	1,743	883	2,626	6.67%
Nebraska	459	644	1,102	1.31%
Nevada	5,685	2,887	8,572	7.47%
New Hampshire	136	515	652	0.70%
New Jersey	612	2,790	3,403	0.68%
New Mexico	1,617	1,023	2,640	3.69%
New York	1,534	6,366	7,900	0.69%
North Carolina	1,013	2,436	3,449	0.88%
North Dakota	610	429	1,039	2.98%
Ohio	2,465	3,799	6,264	1.35%
Oklahoma	699	1,110	1,809	1.14%
Oregon	461	1,077	1,538	0.99%
Pennsylvania	5,836	7,010	12,845	2.20%
Rhode Island	40	242	282	0.60%
South Carolina	552	1,030	1,582	0.98%
South Dakota	257	247	504	1.48%
Tennessee	1,505	2,189	3,694	1.41%
Texas	5,021	9,382	14,403	1.12%
Utah	2,694	1,911	4,605	4.22%
Vermont	221	241	462	1.70%
Virginia	4,934	4,868	9,803	2.34%
Washington	1,196	2,266	3,461	1.04%
West Virginia	9,942	4,454	14,396	22.80%
Wisconsin	918	1,711	2,629	1.09%
Wyoming	4,528	1,739	6,266	20.74%
Total Operations	101,214	124,202	225,416	1.55%

Table 9. Contribution of U.S. Mining to Taxes by State, 2010 (millions of dollars)

State	Direct Tax Contribution	Indirect and Induced	Total Contribution	Total State and Local Taxes Only
Alabama	\$817	\$571	\$1,388	\$622
Alaska	\$215	\$136	\$351	\$188
Arizona	\$1,287	\$1,039	\$2,326	\$1,076
Arkansas	\$152	\$178	\$330	\$125
California	\$427	\$2,303	\$2,730	\$1,123
Colorado	\$713	\$635	\$1,348	\$568
Connecticut	\$48	\$277	\$326	\$115
Delaware	\$9	\$48	\$57	\$23
District of Columbia	\$70	\$26	\$96	\$48
Florida	\$360	\$1,033	\$1,393	\$434
Georgia	\$315	\$704	\$1,019	\$346
Hawaii	\$32	\$80	\$111	\$42
Idaho	\$159	\$126	\$285	\$115
Illinois	\$632	\$846	\$1,478	\$700
Indiana	\$805	\$636	\$1,440	\$660
Iowa	\$137	\$218	\$355	\$127
Kansas	\$113	\$191	\$304	\$116
Kentucky	\$1,963	\$1,029	\$2,992	\$1,422
Louisiana	\$211	\$268	\$479	\$206
Maine	\$16	\$63	\$78	\$31
Maryland	\$170	\$414	\$584	\$244
Massachusetts	\$66	\$472	\$538	\$200
Michigan	\$282	\$645	\$926	\$362
Minnesota	\$478	\$787	\$1,265	\$520
Mississippi	\$48	\$109	\$157	\$65
Missouri	\$416	\$563	\$979	\$356
Montana	\$380	\$203	\$583	\$257
Nebraska	\$74	\$133	\$207	\$74
Nevada	\$1,034	\$569	\$1,603	\$644
New Hampshire	\$25	\$83	\$108	\$37
New Jersey	\$113	\$604	\$717	\$272
New Mexico	\$355	\$223	\$578	\$256
New York	\$308	\$1,529	\$1,837	\$787
North Carolina	\$176	\$510	\$686	\$262
North Dakota	\$183	\$108	\$291	\$157
Ohio	\$554	\$815	\$1,369	\$589
Oklahoma	\$118	\$225	\$343	\$126
Oregon	\$85	\$247	\$332	\$128
Pennsylvania	\$1,400	\$1,571	\$2,971	\$1,270
Rhode Island	\$7	\$54	\$61	\$22
South Carolina	\$88	\$206	\$294	\$93
South Dakota	\$44	\$50	\$94	\$32
Tennessee	\$270	\$423	\$693	\$241
Texas	\$986	\$1,754	\$2,740	\$1,033
Utah	\$596	\$416	\$1,013	\$460
Vermont	\$38	\$52	\$90	\$32
Virginia	\$1,232	\$1,055	\$2,287	\$1,021
Washington	\$210	\$448	\$657	\$210
West Virginia	\$2,901	\$1,042	\$3,943	\$2,051
Wisconsin	\$168	\$377	\$545	\$202
Wyoming	\$1,131	\$385	\$1,517	\$656
Total Operations	\$22,416	\$27,343	\$49,759	\$20,748

III. Overview of U.S. Coal Mining

U.S. coal mining accounted for more than 766,000 total and 211,000 direct jobs in 2010. Based on Bureau of Labor Statistics data, average coal mining wages and salaries were \$77,466, 66 percent higher than the combined average of all private sector jobs (\$46,751). Coal mining activity generated \$39.9 billion in direct GDP and \$90 billion in total contribution to GDP, as well as \$20.2 billion in direct labor income and \$49.5 in total labor income.

Coal generated nearly 45 percent of the electricity generated in 2010, and coal consumed for generating electricity accounted for nearly 93 percent of domestic coal production.⁷

The states with the largest direct employment from coal in 2010 were West Virginia, Kentucky, Pennsylvania, Wyoming, and Virginia.

States with the largest direct contribution to GDP from coal were West Virginia, Kentucky, Pennsylvania, Virginia, and Wyoming.

States with the largest contribution to labor income were West Virginia, Kentucky, Pennsylvania, Virginia and Wyoming.

⁷ Energy Information Administration, Short Term Energy Outlook, August 2012.

Table 10. Coal Mining and the U.S. Economy by State, 2010

State	Employment		Labor Income		Contribution to GDP	
	Number	Percent of State Total	(\$millions)	Percent of State Total	(\$millions)	Percent of State Total
Alabama	31,820	1.27%	\$2,044	1.81%	\$3,741	2.14%
Alaska	1,310	0.29%	81	0.31%	139	0.34%
Arizona	7,630	0.24%	456	0.30%	998	0.39%
Arkansas	2,750	0.18%	136	0.22%	230	0.24%
California	31,750	0.16%	2,231	0.19%	3,893	0.20%
Colorado	19,000	0.61%	1,304	0.76%	2,424	0.90%
Connecticut	3,480	0.16%	268	0.19%	457	0.20%
Delaware	840	0.16%	54	0.19%	87	0.20%
District of Columbia	1,370	0.16%	167	0.19%	231	0.20%
Florida	15,840	0.16%	841	0.19%	1,484	0.21%
Georgia	8,800	0.17%	516	0.21%	946	0.22%
Hawaii	1,310	0.16%	78	0.19%	132	0.20%
Idaho	1,410	0.16%	64	0.19%	106	0.20%
Illinois	31,180	0.43%	2,074	0.51%	3,705	0.57%
Indiana	30,410	0.86%	1,964	1.25%	3,649	1.43%
Iowa	3,140	0.16%	161	0.19%	272	0.20%
Kansas	3,460	0.19%	193	0.24%	340	0.26%
Kentucky	89,350	3.83%	5,509	5.34%	10,251	6.20%
Louisiana	5,950	0.23%	364	0.30%	649	0.34%
Maine	1,250	0.16%	61	0.19%	100	0.20%
Maryland	9,210	0.27%	615	0.31%	1,076	0.36%
Massachusetts	6,530	0.16%	495	0.19%	811	0.20%
Michigan	8,190	0.16%	473	0.19%	813	0.21%
Minnesota	6,220	0.18%	392	0.23%	701	0.25%
Mississippi	3,490	0.23%	181	0.31%	314	0.34%
Missouri	6,680	0.19%	372	0.23%	639	0.25%
Montana	5,670	0.90%	315	1.33%	589	1.50%
Nebraska	4,450	0.36%	208	0.19%	167	0.20%
Nevada	2,370	0.16%	129	0.19%	228	0.20%
New Hampshire	1,290	0.16%	77	0.19%	186	0.20%
New Jersey	7,880	0.16%	582	0.19%	999	0.20%
New Mexico	7,270	0.68%	437	0.93%	800	1.12%
New York	17,400	0.16%	1,365	0.19%	2,294	0.20%
North Carolina	9,160	0.18%	505	0.21%	870	0.22%
North Dakota	6,510	1.28%	426	1.91%	779	2.24%
Ohio	27,540	0.43%	1,606	0.54%	2,881	0.62%
Oklahoma	4,670	0.22%	259	0.27%	463	0.29%
Oregon	3,530	0.16%	185	0.19%	309	0.20%
Pennsylvania	62,990	0.88%	4,085	1.10%	7,362	1.26%
Rhode Island	930	0.16%	57	0.19%	93	0.20%
South Carolina	4,060	0.17%	196	0.19%	321	0.20%
South Dakota	930	0.17%	45	0.19%	68	0.20%
Tennessee	8,450	0.24%	460	0.28%	807	0.31%
Texas	44,470	0.31%	2,967	0.39%	5,422	0.42%
Utah	14,250	0.88%	801	1.16%	1,474	1.35%
Vermont	660	0.16%	33	0.19%	54	0.20%
Virginia	45,210	0.95%	3,440	1.25%	6,356	1.52%
Washington	6,340	0.17%	415	0.20%	714	0.21%
West Virginia	111,190	12.23%	7,237	18.24%	13,791	21.84%
Wisconsin	5,710	0.17%	292	0.19%	479	0.20%
Wyoming	31,050	8.02%	2,250	12.56%	4,285	14.18%
Total Operations	766,350	0.44%	49,466	0.55%	89,979	0.62%

Table 10a. Coal Mining Employment by State, 2010

State	Direct Effects			Total Direct	Indirect and Induced	Total Contribution
	Mine Workers	Support Activities	Transportation			
Alabama	5,830	60	4,920	10,810	21,010	31,820
Alaska	130	10	190	330	980	1,310
Arizona	610	10	250	870	6,760	7,630
Arkansas	110	0	40	150	2,600	2,750
California	50	0	120	170	31,580	31,750
Colorado	3,320	110	2,140	5,570	13,430	19,000
Connecticut	20	0	0	20	3,460	3,480
Delaware	0	0	0	0	840	840
District of Columbia	0	0	0	0	1,370	1,370
Florida	90	0	50	140	15,700	15,840
Georgia	130	30	0	160	8,640	8,800
Hawaii	0	0	0	0	1,310	1,310
Idaho	10	0	0	10	1,400	1,410
Illinois	5,180	160	2,460	7,800	23,380	31,180
Indiana	5,820	90	3,470	9,380	21,030	30,410
Iowa	20	0	0	20	3,120	3,140
Kansas	160	0	90	250	3,210	3,460
Kentucky	24,150	1,460	11,860	37,470	51,880	89,350
Louisiana	450	10	270	730	5,220	5,950
Maine	0	0	0	0	1,250	1,250
Maryland	1,620	170	110	1,900	7,310	9,210
Massachusetts	10	0	0	10	6,520	6,530
Michigan	60	0	10	70	8,120	8,190
Minnesota	210	10	0	220	6,000	6,220
Mississippi	250	0	210	460	3,030	3,490
Missouri	240	10	180	430	6,250	6,680
Montana	1,340	70	780	2,190	3,480	5,670
Nebraska	970	0	0	970	3,480	4,450
Nevada	10	0	0	10	2,360	2,370
New Hampshire	0	0	0	0	1,290	1,290
New Jersey	30	0	0	30	7,850	7,880
New Mexico	1,650	60	880	2,590	4,680	7,270
New York	30	0	0	30	17,370	17,400
North Carolina	170	0	310	480	8,680	9,160
North Dakota	1,440	20	1,030	2,490	4,020	6,510
Ohio	4,940	350	1,760	7,050	20,490	27,540
Oklahoma	270	10	250	530	4,140	4,670
Oregon	30	0	0	30	3,500	3,530
Pennsylvania	13,090	500	7,110	20,700	42,290	62,990
Rhode Island	0	0	0	0	930	930
South Carolina	90	0	0	90	3,970	4,060
South Dakota	20	0	0	20	910	930
Tennessee	1,340	110	80	1,530	6,920	8,450
Texas	4,800	70	3,070	7,940	36,530	44,470
Utah	3,050	160	1,280	4,490	9,760	14,250
Vermont	0	0	0	0	660	660
Virginia	8,670	390	5,150	14,210	31,000	45,210
Washington	90	0	60	150	6,190	6,340
West Virginia	35,970	1,290	15,930	53,190	58,000	111,190
Wisconsin	100	0	0	100	5,610	5,710
Wyoming	8,960	240	6,420	15,620	15,430	31,050
Total Operations	135,530	5,400	70,480	211,410	554,940	766,350

Table 10b. Coal Mining Labor Income by State, 2010 (millions of dollars)

State	Direct Contribution to Labor Income	Indirect and Induced	Total Contribution	Total Contribution as a % of State Total Labor Income
Alabama	1,127	917	2,044	1.81%
Alaska	18	63	81	0.31%
Arizona	101	355	456	0.30%
Arkansas	13	124	136	0.22%
California	14	2,217	2,231	0.19%
Colorado	587	717	1,304	0.76%
Connecticut	0	268	268	0.19%
Delaware	0	54	54	0.19%
District of Columbia	0	167	167	0.19%
Florida	15	826	841	0.19%
Georgia	17	499	516	0.21%
Hawaii	0	78	78	0.19%
Idaho	0	64	64	0.19%
Illinois	686	1,389	2,074	0.51%
Indiana	1,053	911	1,964	1.25%
Iowa	2	159	161	0.19%
Kansas	27	166	193	0.24%
Kentucky	3,285	2,224	5,509	5.34%
Louisiana	87	277	364	0.30%
Maine	0	61	61	0.19%
Maryland	149	465	615	0.31%
Massachusetts	0	495	495	0.19%
Michigan	7	466	473	0.19%
Minnesota	41	351	392	0.23%
Mississippi	46	135	181	0.31%
Missouri	43	330	372	0.23%
Montana	182	132	315	1.33%
Nebraska	107	101	208	0.19%
Nevada	1	128	129	0.19%
New Hampshire	0	77	77	0.19%
New Jersey	3	579	582	0.19%
New Mexico	236	202	437	0.93%
New York	3	1,363	1,365	0.19%
North Carolina	29	476	505	0.21%
North Dakota	257	169	426	1.91%
Ohio	603	1,003	1,606	0.54%
Oklahoma	49	210	259	0.27%
Oregon	0	185	185	0.19%
Pennsylvania	1,823	2,262	4,085	1.10%
Rhode Island	0	57	57	0.19%
South Carolina	5	191	196	0.19%
South Dakota	2	43	45	0.19%
Tennessee	85	375	460	0.28%
Texas	844	2,123	2,967	0.39%
Utah	397	405	801	1.16%
Vermont	0	33	33	0.19%
Virginia	1,747	1,693	3,440	1.25%
Washington	14	401	415	0.20%
West Virginia	4,827	2,410	7,237	18.24%
Wisconsin	9	283	292	0.19%
Wyoming	1,635	615	2,250	12.56%
Total Operations	20,174	29,292	49,466	0.55%

Table 10c. Coal Mining Contribution to GDP by State, 2010 (millions of dollars)

State	Direct Contribution to GDP	Indirect and Induced	Total Contribution	Total Contribution as a % of State GDP
Alabama	2,206	1,535	3,741	2.14%
Alaska	35	105	139	0.34%
Arizona	302	696	998	0.39%
Arkansas	27	202	230	0.24%
California	62	3,831	3,893	0.20%
Colorado	1,187	1,237	2,424	0.90%
Connecticut	0	457	457	0.20%
Delaware	0	87	87	0.20%
District of Columbia	0	231	231	0.20%
Florida	43	1,441	1,484	0.21%
Georgia	65	881	946	0.22%
Hawaii	0	132	132	0.20%
Idaho	0	106	106	0.20%
Illinois	1,363	2,341	3,705	0.57%
Indiana	2,093	1,555	3,649	1.43%
Iowa	0	272	272	0.20%
Kansas	55	284	340	0.26%
Kentucky	6,484	3,767	10,251	6.20%
Louisiana	177	473	649	0.34%
Maine	0	100	100	0.20%
Maryland	315	760	1,076	0.36%
Massachusetts	0	811	811	0.20%
Michigan	22	792	813	0.21%
Minnesota	93	607	701	0.25%
Mississippi	92	222	314	0.34%
Missouri	87	552	639	0.25%
Montana	355	234	589	1.50%
Nebraska	0	167	167	0.20%
Nevada	0	228	228	0.20%
New Hampshire	0	186	186	0.20%
New Jersey	0	999	999	0.20%
New Mexico	464	337	800	1.12%
New York	0	2,294	2,294	0.20%
North Carolina	55	814	870	0.22%
North Dakota	500	279	779	2.24%
Ohio	1,208	1,673	2,881	0.62%
Oklahoma	97	366	463	0.29%
Oregon	0	309	309	0.20%
Pennsylvania	3,573	3,790	7,362	1.26%
Rhode Island	0	93	93	0.20%
South Carolina	0	321	321	0.20%
South Dakota	0	68	68	0.20%
Tennessee	181	626	807	0.31%
Texas	1,671	3,751	5,422	0.42%
Utah	786	688	1,474	1.35%
Vermont	0	54	54	0.20%
Virginia	3,477	2,879	6,356	1.52%
Washington	34	680	714	0.21%
West Virginia	9,630	4,161	13,791	21.84%
Wisconsin	0	479	479	0.20%
Wyoming	3,160	1,125	4,285	14.18%
Total Operations	39,898	50,081	89,979	1.55%

IV. Overview of U.S. Metal Ore Mining

U.S. metal mining accounted for 256,420 total and 73,620 direct jobs in 2010. Based on Bureau of Labor Statistics data, the average wages and salaries in metal mining in 2010 were \$81,344, 74 percent higher than the combined average of all private sector jobs (\$46,751).

U.S. metal mines directly contributed \$22.8 billion to U.S. GDP during 2010. That contribution generated a total of \$42.2 billion in economic output in the United States in 2010. Metal ore mining generated \$6.8 billion in direct labor income and \$17 billion in total.

The states with the largest direct employment from metal ore mining in 2010 were Nevada, Arizona, Minnesota, Utah and Montana.

States with the largest direct contribution to GDP from metal ore mining were Arizona, Nevada, Minnesota, Colorado and Utah.

States with the largest contribution to labor income were Nevada, Arizona, Minnesota, Colorado and Michigan.

Table 11. Metal Mining and the U.S. Economy by State, 2010

State	Employment		Labor Income		Contribution to GDP	
	Number	Percent of State Total	(\$millions)	Percent of State Total	(\$millions)	Percent of State Total
Alabama	1,160	0.05%	\$69	0.06%	\$131	0.1%
Alaska	5,920	1.31%	418	1.60%	1,187	2.9%
Arizona	42,870	1.35%	2,715	1.81%	7,857	3.1%
Arkansas	1,860	0.12%	118	0.19%	326	0.3%
California	10,430	0.05%	788	0.07%	1,659	0.1%
Colorado	9,750	0.31%	823	0.48%	2,245	0.8%
Connecticut	860	0.04%	76	0.05%	148	0.1%
Delaware	720	0.14%	38	0.05%	38	0.1%
District of Columbia	340	0.04%	47	0.05%	75	0.1%
Florida	5,300	0.05%	323	0.07%	690	0.1%
Georgia	2,060	0.04%	136	0.05%	275	0.1%
Hawaii	330	0.04%	22	0.05%	43	0.1%
Idaho	4,240	0.49%	264	0.77%	742	1.4%
Illinois	2,960	0.04%	221	0.05%	434	0.1%
Indiana	1,400	0.04%	83	0.05%	165	0.1%
Iowa	800	0.04%	48	0.05%	88	0.1%
Kansas	720	0.04%	43	0.05%	85	0.1%
Kentucky	920	0.04%	55	0.05%	107	0.1%
Louisiana	3,680	0.15%	163	0.26%	859	0.4%
Maine	310	0.04%	17	0.05%	32	0.1%
Maryland	1,340	0.04%	103	0.05%	191	0.1%
Massachusetts	1,630	0.04%	140	0.05%	263	0.1%
Michigan	13,840	0.27%	823	0.34%	1,508	0.4%
Minnesota	30,910	0.90%	1,863	1.09%	3,455	1.2%
Mississippi	590	0.04%	31	0.05%	59	0.1%
Missouri	5,310	0.15%	349	0.22%	929	0.4%
Montana	8,150	1.30%	514	2.18%	1,484	3.8%
Nebraska	480	0.04%	29	0.05%	54	0.1%
Nevada	38,690	2.60%	2,696	3.96%	7,426	6.5%
New Hampshire	320	0.04%	22	0.05%	60	0.1%
New Jersey	1,950	0.04%	163	0.05%	324	0.1%
New Mexico	3,930	0.37%	239	0.51%	681	1.0%
New York	5,170	0.05%	451	0.07%	1,037	0.1%
North Carolina	2,410	0.05%	147	0.06%	285	0.1%
North Dakota	200	0.04%	12	0.05%	22	0.1%
Ohio	2,550	0.04%	157	0.05%	300	0.1%
Oklahoma	850	0.04%	51	0.05%	102	0.1%
Oregon	1,020	0.05%	60	0.06%	121	0.1%
Pennsylvania	2,890	0.04%	200	0.05%	382	0.1%
Rhode Island	230	0.04%	16	0.05%	30	0.1%
South Carolina	1,310	0.05%	74	0.07%	162	0.1%
South Dakota	680	0.12%	42	0.19%	111	0.3%
Tennessee	3,960	0.11%	232	0.14%	554	0.2%
Texas	10,780	0.08%	813	0.11%	1,991	0.2%
Utah	11,600	0.72%	689	1.00%	1,969	1.8%
Vermont	170	0.04%	9	0.05%	18	0.1%
Virginia	2,710	0.06%	219	0.08%	474	0.1%
Washington	4,190	0.11%	311	0.15%	768	0.2%
West Virginia	430	0.05%	25	0.06%	48	0.1%
Wisconsin	1,360	0.04%	80	0.05%	156	0.1%
Wyoming	150	0.04%	10	0.05%	20	0.1%
Total Operations	256,430	0.15%	17,036	0.19%	42,172	0.3%

Table 11a. Metal Mining Employment by State, 2010

State	Direct Effects				Indirect and Induced	Total Contribution
	Mine Workers	Support Activities	Transportation	Total Direct		
Alabama	40	0	40	80	1,080	1,160
Alaska	2,160	80	750	2,990	2,930	5,920
Arizona	11,340	240	2,570	14,150	28,720	42,870
Arkansas	550	0	30	580	1,280	1,860
California	820	10	350	1,180	9,250	10,430
Colorado	2,050	70	890	3,010	6,740	9,750
Connecticut	0	0	0	0	860	860
Delaware	50	0	350	400	320	720
District of Columbia	0	0	0	0	340	340
Florida	180	0	290	470	4,830	5,300
Georgia	0	0	0	0	2,060	2,060
Hawaii	0	0	0	0	330	330
Idaho	1,340	80	430	1,850	2,390	4,240
Illinois	30	0	10	40	2,920	2,960
Indiana	0	0	0	0	1,400	1,400
Iowa	30	0	0	30	770	800
Kansas	0	0	0	0	720	720
Kentucky	0	0	0	0	920	920
Louisiana	680	20	30	730	2,950	3,680
Maine	0	0	0	0	310	310
Maryland	0	0	0	0	1,340	1,340
Massachusetts	0	0	0	0	1,630	1,630
Michigan	1,740	20	2,900	4,660	9,180	13,840
Minnesota	5,490	270	6,320	12,080	18,830	30,910
Mississippi	0	0	0	0	590	590
Missouri	890	20	300	1,210	4,100	5,310
Montana	2,310	110	1,100	3,520	4,630	8,150
Nebraska	0	0	0	0	480	480
Nevada	11,750	1,260	3,610	16,620	22,070	38,690
New Hampshire	0	0	0	0	320	320
New Jersey	0	0	0	0	1,950	1,950
New Mexico	1,120	40	440	1,600	2,330	3,930
New York	100	0	40	140	5,020	5,160
North Carolina	20	0	150	170	2,240	2,410
North Dakota	0	0	0	0	200	200
Ohio	0	0	0	0	2,550	2,550
Oklahoma	0	0	0	0	850	850
Oregon	70	0	10	80	940	1,020
Pennsylvania	10	0	30	40	2,850	2,890
Rhode Island	0	0	0	0	230	230
South Carolina	110	0	40	150	1,160	1,310
South Dakota	200	0	50	250	430	680
Tennessee	770	60	190	1,020	2,940	3,960
Texas	1,540	30	180	1,750	9,030	10,780
Utah	2,810	150	510	3,470	8,130	11,600
Vermont	0	0	0	0	170	170
Virginia	180	10	90	280	2,430	2,710
Washington	750	20	260	1,030	3,160	4,190
West Virginia	20	0	20	40	390	430
Wisconsin	0	0	0	0	1,360	1,360
Wyoming	0	0	0	0	150	150
Total Operations	49,150	2,490	21,980	73,620	182,800	256,420

Table 11b. Metal Mining Labor Income by State, 2010 (millions of dollars)

State	Direct Contribution to Labor Income	Indirect and Induced	Total Contribution	Total Contribution as a % of State Total Labor Income
Alabama	5	64	69	0.1%
Alaska	244	174	418	1.6%
Arizona	1,301	1,414	2,715	1.8%
Arkansas	59	60	118	0.2%
California	91	698	788	0.1%
Colorado	443	379	823	0.5%
Connecticut	0	76	76	0.1%
Delaware	23	15	38	0.1%
District of Columbia	0	47	47	0.1%
Florida	51	273	323	0.1%
Georgia	0	136	136	0.1%
Hawaii	0	22	22	0.1%
Idaho	162	103	264	0.8%
Illinois	3	218	221	0.1%
Indiana	0	83	83	0.1%
Iowa	3	45	48	0.1%
Kansas	0	43	43	0.1%
Kentucky	0	55	55	0.1%
Louisiana	74	89	163	0.3%
Maine	0	17	17	0.1%
Maryland	0	103	103	0.1%
Massachusetts	0	140	140	0.1%
Michigan	369	454	823	0.3%
Minnesota	943	920	1,863	1.1%
Mississippi	0	31	31	0.1%
Missouri	133	216	349	0.2%
Montana	319	195	514	2.2%
Nebraska	0	29	29	0.1%
Nevada	1,588	1,109	2,696	4.0%
New Hampshire	0	22	22	0.1%
New Jersey	0	163	163	0.1%
New Mexico	132	106	239	0.5%
New York	22	429	451	0.1%
North Carolina	10	136	147	0.1%
North Dakota	0	12	12	0.1%
Ohio	0	157	157	0.1%
Oklahoma	0	51	51	0.1%
Oregon	4	55	60	0.1%
Pennsylvania	2	198	200	0.1%
Rhode Island	0	16	16	0.1%
South Carolina	13	61	74	0.1%
South Dakota	22	20	42	0.2%
Tennessee	68	164	232	0.1%
Texas	235	578	813	0.1%
Utah	335	354	689	1.0%
Vermont	0	9	9	0.1%
Virginia	44	175	219	0.1%
Washington	113	197	311	0.2%
West Virginia	3	22	25	0.1%
Wisconsin	0	80	80	0.1%
Wyoming	0	10	10	0.1%
Total Operations	6,815	10,221	17,036	0.2%

Table 11c. Metal Mining Contribution to GDP by State, 2010 (millions of dollars)

State	Direct Contribution to GDP	Indirect and Induced	Total Contribution	Total Contribution as a % of State GDP
Alabama	12	119	131	0.1%
Alaska	826	361	1,187	2.9%
Arizona	5,475	2,382	7,857	3.1%
Arkansas	215	111	326	0.3%
California	286	1,373	1,659	0.1%
Colorado	1,494	751	2,245	0.8%
Connecticut	0	148	148	0.1%
Delaware	30	24	54	0.1%
District of Columbia	0	75	75	0.1%
Florida	152	538	690	0.1%
Georgia	0	275	275	0.1%
Hawaii	0	43	43	0.1%
Idaho	535	207	742	1.4%
Illinois	10	424	434	0.1%
Indiana	0	165	165	0.1%
Iowa	0	88	88	0.1%
Kansas	0	85	85	0.1%
Kentucky	0	107	107	0.1%
Louisiana	563	296	859	0.4%
Maine	0	32	32	0.1%
Maryland	0	191	191	0.1%
Massachusetts	0	263	263	0.1%
Michigan	679	830	1,508	0.4%
Minnesota	1,801	1,654	3,455	1.2%
Mississippi	0	59	59	0.1%
Missouri	555	374	929	0.4%
Montana	1,080	403	1,484	3.8%
Nebraska	0	54	54	0.1%
Nevada	5,264	2,162	7,426	6.5%
New Hampshire	0	60	60	0.1%
New Jersey	0	324	324	0.1%
New Mexico	493	189	681	1.0%
New York	212	825	1,037	0.1%
North Carolina	19	267	285	0.1%
North Dakota	0	22	22	0.1%
Ohio	0	300	300	0.1%
Oklahoma	0	102	102	0.1%
Oregon	15	106	121	0.1%
Pennsylvania	3	379	382	0.1%
Rhode Island	0	30	30	0.1%
South Carolina	45	117	162	0.1%
South Dakota	73	38	111	0.3%
Tennessee	266	288	554	0.2%
Texas	827	1,164	1,991	0.2%
Utah	1,371	598	1,969	1.8%
Vermont	0	18	18	0.1%
Virginia	148	326	474	0.1%
Washington	396	372	768	0.2%
West Virginia	5	43	48	0.1%
Wisconsin	0	156	156	0.1%
Wyoming	0	20	20	0.1%
Total Operations	22,849	19,339	42,188	0.3%

V. Overview of U.S. Non-Metallic Mineral Mining

U.S. non-metallic mineral mining accounted for 958,280 total and 342,620 direct jobs in 2010. Based on Bureau of Labor Statistics data, the average wages and salaries in non-metallic mineral mining in 2010 were \$54,974, 18 percent higher than the combined average of all private sector jobs (\$46,751).

U.S. non-metallic mineral mines directly contributed \$38.5 billion to U.S. GDP during 2010. That contribution generated a total of \$93.2 billion in economic output in the United States in 2010. Non-metallic mineral mining generated \$21 billion in direct labor income and \$52.8 billion in total.

The states with the largest direct employment from non-metallic mineral mining in 2010 were Texas, Pennsylvania, California, Georgia and Florida.

States with the largest direct contribution to GDP from non-metallic mineral mining were Texas, Pennsylvania, Florida, California and Missouri.

States with the largest contribution to labor income from non-metallic mineral mining were Texas, California, Florida, Pennsylvania, Georgia.

Table 12. Non-metallic Mineral Mining and the U.S. Economy by State, 2010

State	Employment		Labor Income		Contribution to GDP	
	Number	Percent of State Total	(\$millions)	Percent of State Total	(\$millions)	Percent of State Total
Alabama	23,070	0.05%	\$1,219	1.08%	\$2,417	1.4%
Alaska	2,250	1.31%	128	0.49%	220	0.5%
Arizona	19,180	1.35%	1,009	0.67%	1,755	0.7%
Arkansas	13,000	0.12%	611	0.98%	1,125	1.2%
California	68,130	0.05%	4,187	0.36%	7,247	0.4%
Colorado	17,510	0.31%	993	0.58%	1,675	0.6%
Connecticut	7,260	0.04%	509	0.36%	887	0.4%
Delaware	990	0.14%	60	0.25%	112	0.3%
District of Columbia	1,290	0.04%	152	0.17%	218	0.2%
Florida	55,340	0.05%	2,814	0.65%	5,038	0.7%
Georgia	46,080	0.04%	2,384	0.94%	4,122	1.0%
Hawaii	4,020	0.04%	233	0.56%	426	0.6%
Idaho	7,830	0.49%	348	1.02%	563	1.1%
Illinois	34,360	0.04%	2,104	0.52%	3,793	0.6%
Indiana	25,120	0.04%	1,298	0.83%	2,420	0.9%
Iowa	16,500	0.04%	819	0.97%	1,501	1.1%
Kansas	11,970	0.04%	605	0.75%	1,122	0.9%
Kentucky	17,850	0.04%	893	0.87%	1,699	1.0%
Louisiana	11,080	0.15%	583	0.49%	953	0.5%
Maine	3,420	0.04%	145	0.45%	247	0.5%
Maryland	12,130	0.04%	732	0.38%	1,301	0.4%
Massachusetts	12,970	0.04%	849	0.32%	1,464	0.4%
Michigan	22,500	0.27%	1,208	0.49%	2,052	0.5%
Minnesota	15,500	0.90%	858	0.50%	1,442	0.5%
Mississippi	5,430	0.04%	253	0.43%	383	0.4%
Missouri	37,300	0.15%	1,938	1.22%	3,512	1.4%
Montana	6,810	1.30%	336	1.42%	553	1.4%
Nebraska	8,990	0.04%	515	0.96%	881	1.0%
Nevada	9,980	2.60%	534	0.78%	917	0.8%
New Hampshire	3,980	0.04%	209	0.52%	406	0.4%
New Jersey	17,410	0.04%	1,198	0.39%	2,079	0.4%
New Mexico	14,060	0.37%	720	1.53%	1,159	1.6%
New York	39,160	0.05%	2,688	0.37%	4,569	0.4%
North Carolina	26,170	0.05%	1,289	0.53%	2,294	0.6%
North Dakota	2,950	0.04%	163	0.73%	238	0.7%
Ohio	34,000	0.04%	1,761	0.60%	3,084	0.7%
Oklahoma	13,660	0.04%	659	0.69%	1,243	0.8%
Oregon	13,100	0.05%	645	0.66%	1,107	0.7%
Pennsylvania	49,370	0.04%	2,742	0.74%	5,101	0.9%
Rhode Island	1,870	0.04%	99	0.33%	159	0.3%
South Carolina	12,850	0.05%	595	0.59%	1,099	0.7%
South Dakota	3,990	0.12%	193	0.86%	326	1.0%
Tennessee	23,790	0.11%	1,319	0.80%	2,333	0.9%
Texas	69,640	0.08%	3,845	0.50%	6,990	0.5%
Utah	15,000	0.72%	703	1.02%	1,162	1.1%
Vermont	4,440	0.04%	215	1.24%	391	1.4%
Virginia	26,950	0.06%	1,617	0.59%	2,973	0.7%
Washington	20,880	0.11%	1,147	0.55%	1,979	0.6%
West Virginia	5,710	0.05%	290	0.73%	557	0.9%
Wisconsin	22,240	0.04%	1,141	0.76%	1,994	0.8%
Wyoming	19,200	0.04%	1,239	6.91%	1,962	6.5%
Total Operations	958,280	0.15%	52,794	0.59%	93,249	0.6%

Table 12a. Non-metallic Mineral Mining Employment by State, 2010

State	Direct Effects				Indirect and Induced	Total Contribution
	Mine Workers	Support Activities	Transportation	Total Direct		
Alabama	5,540	60	3,420	9,020	14,050	23,070
Alaska	700	30	230	960	1,290	2,250
Arizona	3,910	80	2,910	6,900	12,280	19,180
Arkansas	2,930	10	2,840	5,780	7,220	13,000
California	9,640	80	8,940	18,660	49,470	68,130
Colorado	3,820	130	3,040	6,990	10,520	17,510
Connecticut	1,000	10	1,020	2,030	5,230	7,260
Delaware	60	0	0	60	930	990
District of Columbia	0	0	0	0	1,290	1,290
Florida	7,680	110	9,980	17,770	37,570	55,340
Georgia	8,630	1,810	7,330	17,770	28,310	46,080
Hawaii	470	0	1,070	1,540	2,480	4,020
Idaho	2,000	130	1,650	3,780	4,050	7,830
Illinois	4,620	140	5,260	10,020	24,340	34,360
Indiana	4,490	70	4,740	9,300	15,820	25,120
Iowa	3,640	40	3,390	7,070	9,430	16,500
Kansas	2,980	10	2,010	5,000	6,970	11,970
Kentucky	3,260	200	3,670	7,130	10,720	17,850
Louisiana	2,340	60	1,510	3,910	7,170	11,080
Maine	870	10	440	1,320	2,100	3,420
Maryland	1,620	170	1,660	3,450	8,680	12,130
Massachusetts	1,380	310	1,500	3,190	9,780	12,970
Michigan	3,100	30	3,630	6,760	15,740	22,500
Minnesota	2,840	140	1,930	4,910	10,590	15,500
Mississippi	1,290	0	610	1,900	3,530	5,430
Missouri	6,510	160	8,540	15,210	22,090	37,300
Montana	1,550	80	1,560	3,190	3,620	6,810
Nebraska	1,350	10	1,800	3,160	5,830	8,990
Nevada	2,190	230	1,670	4,090	5,890	9,980
New Hampshire	770	10	710	1,490	2,490	3,980
New Jersey	1,470	60	2,950	4,480	12,930	17,410
New Mexico	2,930	100	3,810	6,840	7,220	14,060
New York	4,990	40	7,020	12,050	27,110	39,160
North Carolina	5,680	30	3,870	9,580	16,590	26,170
North Dakota	700	10	520	1,230	1,720	2,950
Ohio	5,670	400	4,960	11,030	22,970	34,000
Oklahoma	3,220	110	2,240	5,570	8,090	13,660
Oregon	2,200	110	2,410	4,720	8,380	13,100
Pennsylvania	9,810	370	8,050	18,230	31,140	49,370
Rhode Island	210	10	340	560	1,310	1,870
South Carolina	2,650	20	1,940	4,610	8,240	12,850
South Dakota	1,240	30	700	1,970	2,020	3,990
Tennessee	4,430	370	3,520	8,320	15,470	23,790
Texas	13,470	200	9,980	23,650	45,990	69,640
Utah	3,680	190	2,300	6,170	8,830	15,000
Vermont	1,110	0	960	2,070	2,370	4,440
Virginia	4,320	190	5,100	9,610	17,340	26,950
Washington	5,600	180	2,450	8,230	12,650	20,880
West Virginia	1,230	40	1,120	2,390	3,320	5,710
Wisconsin	4,300	140	3,540	7,980	14,260	22,240
Wyoming	4,490	120	6,360	10,970	8,230	19,200
Total Operations	174,580	6,840	161,200	342,620	615,660	958,280

Table 12b. Non-metallic Mineral Mining Labor Income by State, 2010 (millions of dollars)

State	Direct Contribution to Labor Income	Indirect and Induced	Total Contribution	Total Contribution as a % of State Total Labor Income
Alabama	599	620	1,219	1.1%
Alaska	51	77	128	0.5%
Arizona	415	594	1,009	0.7%
Arkansas	311	300	611	1.0%
California	1,139	3,048	4,187	0.4%
Colorado	427	566	993	0.6%
Connecticut	151	359	509	0.4%
Delaware	5	55	60	0.3%
District of Columbia	1	151	152	0.2%
Florida	1,091	1,724	2,814	0.7%
Georgia	1,024	1,359	2,384	0.9%
Hawaii	107	126	233	0.6%
Idaho	191	158	348	1.0%
Illinois	706	1,398	2,104	0.5%
Indiana	604	695	1,298	0.8%
Iowa	420	399	819	1.0%
Kansas	294	311	605	0.7%
Kentucky	411	482	893	0.9%
Louisiana	233	350	583	0.5%
Maine	53	93	145	0.4%
Maryland	217	515	732	0.4%
Massachusetts	197	652	849	0.3%
Michigan	432	776	1,208	0.5%
Minnesota	312	545	858	0.5%
Mississippi	106	147	253	0.4%
Missouri	914	1,024	1,938	1.2%
Montana	199	137	336	1.4%
Nebraska	261	254	515	1.0%
Nevada	254	280	534	0.8%
New Hampshire	82	127	209	0.5%
New Jersey	356	842	1,198	0.4%
New Mexico	425	295	720	1.5%
New York	787	1,900	2,688	0.4%
North Carolina	502	787	1,289	0.5%
North Dakota	87	75	163	0.7%
Ohio	677	1,084	1,761	0.6%
Oklahoma	295	364	659	0.7%
Oregon	256	389	645	0.7%
Pennsylvania	1,067	1,675	2,742	0.7%
Rhode Island	27	72	99	0.3%
South Carolina	251	344	595	0.6%
South Dakota	110	84	193	0.9%
Tennessee	558	761	1,319	0.8%
Texas	1,340	2,504	3,845	0.5%
Utah	339	365	703	1.0%
Vermont	116	100	215	1.2%
Virginia	634	983	1,617	0.6%
Washington	446	702	1,147	0.6%
West Virginia	144	146	290	0.7%
Wisconsin	510	631	1,141	0.8%
Wyoming	917	322	1,239	6.9%
Total Operations	21,048	31,746	52,794	0.6%

Table 12c. Non-metallic Mineral Mining Contribution to GDP by State, 2010 (millions of dollars)

State	Direct Contribution to GDP	Indirect and Induced	Total Contribution	Total Contribution as a % of State GDP
Alabama	1,371	1,046	2,417	1.4%
Alaska	86	134	220	0.5%
Arizona	700	1,055	1,755	0.7%
Arkansas	620	505	1,125	1.2%
California	1,908	5,338	7,247	0.4%
Colorado	688	986	1,675	0.6%
Connecticut	266	621	887	0.4%
Delaware	20	92	112	0.3%
District of Columbia	4	214	218	0.2%
Florida	2,028	3,011	5,038	0.7%
Georgia	1,743	2,379	4,122	1.0%
Hawaii	201	225	426	0.6%
Idaho	294	270	563	1.1%
Illinois	1,399	2,394	3,793	0.6%
Indiana	1,224	1,195	2,420	0.9%
Iowa	817	684	1,501	1.1%
Kansas	583	539	1,122	0.9%
Kentucky	877	822	1,699	1.0%
Louisiana	347	606	953	0.5%
Maine	92	155	247	0.5%
Maryland	442	860	1,301	0.4%
Massachusetts	374	1,090	1,464	0.4%
Michigan	709	1,344	2,052	0.5%
Minnesota	488	954	1,442	0.5%
Mississippi	133	249	383	0.4%
Missouri	1,783	1,729	3,512	1.4%
Montana	307	246	553	1.4%
Nebraska	459	422	881	1.0%
Nevada	421	497	917	0.8%
New Hampshire	136	269	406	0.4%
New Jersey	612	1,467	2,079	0.4%
New Mexico	661	498	1,159	1.6%
New York	1,322	3,247	4,569	0.4%
North Carolina	939	1,355	2,294	0.6%
North Dakota	111	127	238	0.7%
Ohio	1,257	1,827	3,084	0.7%
Oklahoma	602	641	1,243	0.8%
Oregon	445	662	1,107	0.7%
Pennsylvania	2,260	2,841	5,101	0.9%
Rhode Island	40	119	159	0.3%
South Carolina	507	592	1,099	0.7%
South Dakota	185	141	326	1.0%
Tennessee	1,058	1,275	2,333	0.9%
Texas	2,523	4,467	6,990	0.5%
Utah	536	625	1,162	1.1%
Vermont	221	169	391	1.4%
Virginia	1,309	1,664	2,973	0.7%
Washington	766	1,214	1,979	0.6%
West Virginia	308	249	557	0.9%
Wisconsin	918	1,076	1,994	0.8%
Wyoming	1,368	594	1,962	6.5%
Total Operations	38,468	54,781	93,249	0.6%

VI. Methodology

To evaluate the overall economic contribution of U.S. mining in 2012, we followed two general steps: first, derive the direct impacts of mining; and second, adjust the IMPLAN model to capture a more complete estimate of the overall impact.

A. Derivation on Direct Impacts

As described in the report, the IMPLAN model produces economic multipliers to calculate the overall economic contribution of U.S. mining in terms of the direct, indirect and induced impacts. For U.S. mining, the codes in the IMPLAN model align with the NAICS codes presented in the report for the definition of the U.S. mining industry (see Appendix D).

The IMPLAN model relies on employment data from the U.S. Bureau of Economic Analysis (BEA). However, the Mine Safety and Health Administration (MSHA) also collects information on mining industry employment. We believe that the MSHA data more accurately reflect the true direct employment situation of the mining industry. We have applied IMPLAN multipliers to the MSHA data to derive indirect and induced impacts. We have rounded employment data to the nearest 10 employees.

The BEA classifies contractor activity closely related to mining, such as contract blasting and drilling, in the “Support Activities for Mining” sector (NAICS 213113, 213114, and 213115). These codes also include some activity completed by the mine operator on a fee or contract basis. More generalized services that could be offered to a variety of industries are classified in the industry code associated with the activity, such as Construction (NAICS 23). The IMPLAN model does not break the Support Activities for Mining sector into the coal, metal and non-metallic minerals segments. We allocated the overall activity to the segments based on national estimates from MSHA and the direct employment of mine workers in each segment.

Data on the contribution to GDP, labor income, and taxes paid by state are derived from the IMPLAN model multipliers applied to MSHA data.

B. Adjustments to IMPLAN Model

Economic multipliers are designed to measure the overall change in production that would result from a marginal increase in a particular industry. For example, an output multiplier converts a \$1 million increase in output of the mining sector into the total change in output throughout the supply chain. Because some suppliers to U.S. mining rely on mining for inputs, a marginal change in the mining sector could lead to an additional change in mining activity attributable to the goods mining provides its suppliers throughout the economy, e.g., metals used in manufacture of mining equipment. While this impact is appropriate to include when modeling a marginal change, when evaluating the overall impact of the industry, these indirect, own-industry impacts should be excluded to prevent double-counting. Therefore, we have adjusted the IMPLAN model results to exclude any indirect or induced effects taking place in the mining industry.

I-O models capture the upstream relationships, but certain downstream impacts are not reflected in the economic multipliers. Some of these effects, such as the transportation of mine output to the purchaser, could be attributable to U.S. mining. To capture the economic activity associated with the transportation of mining output, we have relied on sector-specific transportation margins in the IMPLAN model. Based on these margins, we have estimated the direct, indirect, and induced

economic activity associated with this activity at a state level. In our view, the transportation jobs attributed to metals mining were overstated in the analysis for 2008 and we have made the appropriate adjustments to derive that data

Because IMPLAN state models capture only the indirect and induced effects within each state, the indirect and induced effects crossing state borders (“cross-state spillover effects”) are not captured by the IMPLAN state models. As such, if not adjusted, the state-level indirect and induced impacts calculated by the IMPLAN state models would not add up to the overall impact captured by the national model, which includes the cross-state effects. We allocated the cross-state indirect and induced employment, labor income, and contribution to GDP effects across the 50 states and the District of Columbia in proportion to each state’s share of the total national employment, labor income, and contribution to GDP by industry. The state level indirect and induced effects reported throughout this study include such allocation of the cross-state spillover effects.

Appendix A. NAICS Definition of U.S. Mining

Mining Division	Detail	NAICS Code	Description
Coal	Bituminous Coal and Lignite Surface Mining Bituminous Coal Underground Mining Anthracite Mining	212111 212112 212113	This segment includes establishments engaged in: (1) mining bituminous coal, anthracite, and lignite by underground mining, auger mining, strip mining, culm bank mining, and other surface mining; (2) developing coal mine sites; and (3) beneficiating (i.e., preparing) coal.
Metal Ore Mining	Iron Ore Mining Copper Ore Mining Silver Ore Mining Lead Ore and Zinc Ore Mining Copper Ore and Nickel Ore Mining Uranium-Radium-Vanadium Ore Mining All Other Metal Ore Mining	212210 212221 212222 212231 212234 212291 212299	This segment includes establishments primarily engaged in developing mine sites or mining metallic minerals, and establishments primarily engaged in ore dressing and beneficiating operations, such as crushing, grinding, washing, etc. Beneficiating may be performed at mills operated in conjunction with the mines served or at mills operated separately.
Non-metallic Mineral Mining and Quarrying	Dimension Stone Mining/Quarrying Crushed/Broken Limestone Mining/Quarrying Crushed/Broken Granite Mining/Quarrying Other Crushed, Broken Stone Mining/Quarry Construction Sand and Gravel Mining Industrial Sand Mining Kaolin and Ball Clay Mining Clay, Ceramic, Refractory Minerals Mining Potash, Soda, and Borate Mineral Mining Phosphate Rock Mining Other Chemical and Fertilizer Mineral Mining All Other Non-metallic Mineral Mining	212311 212312 212313 212319 212321 212321 212324 212325 212392 212392 212393 212399	This segment includes establishments primarily engaged in developing mine sites, or in mining or quarrying non-metallic minerals (except fuels). Also included are certain well and brine operations, and preparation plants primarily engaged in beneficiating non-metallic minerals.
Support Activities for Coal, Metal, and Non-metallic Mining	Support Activities for Coal Mining Support Activities for Metal Mining Support Activities for Non-metallic Minerals Mining	213113 213114 213115	This segment includes establishments primarily engaged in providing support activities for coal, metal, and non-metallic mining (except site preparation and related construction activities) on a contract or fee basis. Exploration for coal is included in this industry. Contract activities can be performed in-house by mining operators.

Source: Census Bureau, North American Industry Classification System (NAICS)

Appendix B: The IMPLAN Model

IMPLAN is a well-known modeling system developed by the Minnesota IMPLAN Group for estimating economic impacts and is similar to the Regional Input-Output Modeling System developed by the U.S. Department of Commerce. The model is primarily based on government data sources. It can address a wide range of impact topics in a given region (county, state, or the country as a whole).

IMPLAN is built around an “input-output” table that relates the purchases that each industry has made from other industries to the value of the output of each industry. To meet the demand for goods and services from an industry, purchases are made in other industries according to the patterns recorded in the input-output table. These purchases in turn spark still more purchases by the industry’s suppliers, and so on. Meanwhile, employees and business owners make personal purchases out of the additional income that is generated by this process, further increasing demand that ripples through the economy. Multipliers describe these iterations. The Type I multiplier measures the direct and indirect effects of a change in economic activity. It captures the inter-industry effects only, i.e., industries buying from local industries. The SAM (Social Accounting Matrix) multiplier captures the direct and indirect effects. In addition, it also reflects induced effects (i.e., changes in spending from households as income increases or decreases due to the changes in production).

Appendix C. Additional Detail by State

Mining in Alabama, 2010

Measure	Coal Mining	Metal Mining	Non-Metallic Mining	All Mining
Contribution to GDP (\$millions)				
Direct	\$2,206	\$12	\$1,371	\$3,589
Indirect and Induced	\$1,535	\$119	\$1,046	\$2,700
Total	\$3,741	\$131	\$2,417	\$6,289
Employment				
Direct				
Mine Workers	5,830	40	5,540	11,410
Support Activities	60	0	60	120
Transportation	4,920	40	3,420	8,380
Total Direct	10,810	80	9,020	19,910
Indirect and Induced	21,010	1,080	14,050	36,140
Total	31,820	1,160	23,070	56,050
Labor Income (\$millions)				
Direct	\$1,127	\$5	\$599	\$1,731
Indirect and Induced	\$917	\$64	\$620	\$1,601
Total	\$2,044	\$69	\$1,219	\$3,332
Average State Labor Income				
Mining Direct	\$105,784	\$62,500	\$66,408	\$86,941
State Average, All Industries	\$44,981	\$44,981	\$44,981	\$44,981
Tax Contributions (\$millions)				
Overall	\$937	\$24	\$427	\$1,388
State and Local Only	\$467	\$11	\$144	\$622

Source: NMA calculations based on IMPLAN modeling system (2010 database).

NA - not applicable. Data may not add to totals due to independent rounding.

Mining in Alaska, 2010

Measure	Coal Mining	Metal Mining	Non-Metallic Mining	All Mining
Contribution to GDP (\$millions)				
Direct	\$35	\$826	\$86	\$947
Indirect and Induced	\$105	\$361	\$134	\$600
Total	\$140	\$1,187	\$220	\$1,547
Employment				
Direct				
Mine Workers	130	2,160	700	2,990
Support Activities	10	80	30	120
Transportation	190	750	230	1,170
Total Direct	330	2,990	960	4,280
Indirect and Induced	980	2,930	1,290	5,200
Total	1,310	5,920	2,250	9,480
Labor Income (\$millions)				
Direct	\$18	\$244	\$51	\$313
Indirect and Induced	\$63	\$174	\$77	\$314
Total	\$81	\$418	\$128	\$627
Average State Labor Income				
Mining Direct	\$53,758	\$81,605	\$53,125	\$73,070
State Average, All Industries	\$57,689	\$57,689	\$57,689	\$57,689
Tax Contributions (\$millions)				
Overall	\$33	\$273	\$45	\$351
State and Local Only	\$16	\$154	\$18	\$188

Source: NMA calculations based on IMPLAN modeling system (2010 database).

NA - not applicable. Data may not add to totals due to independent rounding.

Mining in Arizona, 2010

Measure	Coal Mining	Metal Mining	Non-Metallic Mining	All Mining
Contribution to GDP (\$millions)				
Direct	\$302	\$5,475	\$700	\$6,477
Indirect and Induced	\$696	\$2,382	\$1,055	\$4,133
Total	\$998	\$7,857	\$1,755	\$10,610
Employment				
Direct				
Mine Workers	610	11,340	3,910	15,860
Support Activities	10	240	80	330
Transportation	250	2,570	2,910	5,730
Total Direct	870	14,150	6,900	21,920
Indirect and Induced	6,764	28,720	12,280	47,764
Total	7,634	42,870	19,180	69,684
Labor Income (\$millions)				
Direct	\$101	\$1,301	\$415	\$1,817
Indirect and Induced	\$355	\$1,414	\$594	\$2,363
Total	\$456	\$2,715	\$1,009	\$4,180
Average State Labor Income				
Mining Direct	\$116,092	\$91,943	\$60,145	\$82,892
State Average, All Industries	\$47,249	\$47,249	\$47,249	\$47,249
Tax Contributions (\$millions)				
Overall	\$302	\$1,630	\$394	\$2,326
State and Local Only	\$146	\$785	\$145	\$1,076

Source: NMA calculations based on IMPLAN modeling system (2010 database).

NA - not applicable. Data may not add to totals due to independent rounding.

Mining in Arkansas, 2010

Measure	Coal Mining	Metal Mining	Non-Metallic Mining	All Mining
Contribution to GDP (\$millions)				
Direct	\$27	\$215	\$620	\$862
Indirect and Induced	\$202	\$111	\$505	\$818
Total	\$229	\$326	\$1,125	\$1,680
Employment				
Direct				
Mine Workers	110	550	2,930	3,590
Support Activities	0	0	10	10
Transportation	40	30	2,840	2,910
Total Direct	150	580	5,780	6,510
Indirect and Induced	2,600	1,280	7,220	11,100
Total	2,750	1,860	13,000	17,610
Labor Income (\$millions)				
Direct	\$13	\$59	\$311	\$383
Indirect and Induced	\$124	\$60	\$300	\$484
Total	\$137	\$119	\$611	\$867
Average State Labor Income				
Mining Direct	\$86,667	\$101,724	\$53,806	\$58,833
State Average, All Industries	\$40,275	\$40,275	\$40,275	\$40,275
Tax Contributions (\$millions)				
Overall	\$53	\$64	\$213	\$330
State and Local Only	\$23	\$30	\$72	\$125

Source: NMA calculations based on IMPLAN modeling system (2010 database).

NA - not applicable. Data may not add to totals due to independent rounding.

Mining in California, 2010

Measure	Coal Mining	Metal Mining	Non-Metallic Mining	All Mining
Contribution to GDP (\$millions)				
Direct	\$62	\$286	\$1,908	\$2,256
Indirect and Induced	\$3,831	\$1,373	\$5,338	\$10,542
Total	\$3,893	\$1,659	\$7,246	\$12,798
Employment				
Direct				
Mine Workers	50	820	9,640	10,510
Support Activities	0	10	80	90
Transportation	120	350	8,940	9,410
Total Direct	170	1,180	18,660	20,010
Indirect and Induced	31,580	9,250	49,470	90,300
Total	31,750	10,430	68,130	110,310
Labor Income (\$millions)				
Direct	\$14	\$91	\$1,139	\$1,244
Indirect and Induced	\$2,217	\$698	\$3,048	\$5,963
Total	\$2,231	\$789	\$4,187	\$7,207
Average State Labor Income				
Mining Direct	\$82,353	\$77,119	\$61,040	\$62,169
State Average, All Industries	\$58,881	\$58,881	\$58,881	\$58,881
Tax Contributions (\$millions)				
Overall	\$892	\$330	\$1,508	\$2,730
State and Local Only	\$394	\$156	\$573	\$1,123

Source: NMA calculations based on IMPLAN modeling system (2010 database).

NA - not applicable. Data may not add to totals due to independent rounding.

Mining in Colorado, 2010

Measure	Coal Mining	Metal Mining	Non-Metallic Mining	All Mining
Contribution to GDP (\$millions)				
Direct	\$1,187	\$1,494	\$688	\$3,369
Indirect and Induced	\$1,237	\$751	\$986	\$2,974
Total	\$2,424	\$2,245	\$1,674	\$6,343
Employment				
Direct				
Mine Workers	3,320	2,050	3,820	9,190
Support Activities	110	70	130	310
Transportation	2,140	890	3,040	6,070
Total Direct	5,570	3,010	6,990	15,570
Indirect and Induced	13,430	6,740	10,520	30,690
Total	19,000	9,750	17,510	46,260
Labor Income (\$millions)				
Direct	\$587	\$443	\$427	\$1,457
Indirect and Induced	\$717	\$379	\$566	\$1,662
Total	\$1,304	\$822	\$993	\$3,119
Average State Labor Income				
Mining Direct	\$105,386	\$147,326	\$61,087	\$93,606
State Average, All Industries	\$51,340	\$51,340	\$51,340	\$51,340
Tax Contributions (\$millions)				
Overall	\$585	\$433	\$330	\$1,348
State and Local Only	\$270	\$187	\$111	\$568

Source: NMA calculations based on IMPLAN modeling system (2010 database).

NA - not applicable. Data may not add to totals due to independent rounding.

Mining in Connecticut, 2010

Measure	Coal Mining	Metal Mining	Non-Metallic Mining	All Mining
Contribution to GDP (\$millions)				
Direct	\$0	\$0	\$266	\$266
Indirect and Induced	\$457	\$148	\$621	\$1,226
Total	\$457	\$148	\$887	\$1,492
Employment				
Direct				
Mine Workers	20	0	1,000	1,020
Support Activities	0	0	10	10
Transportation	0	0	1,020	1,020
Total Direct	20	0	2,030	2,050
Indirect and Induced	3,460	860	5,230	9,550
Total	3,480	860	7,260	11,600
Labor Income (\$millions)				
Direct	\$2	\$0	\$151	\$153
Indirect and Induced	\$268	\$76	\$358	\$702
Total	\$270	\$76	\$509	\$855
Average State Labor Income				
Mining Direct	\$91,000	NA	\$74,384	\$74,546
State Average, All Industries	\$65,578	\$65,578	\$65,578	\$65,578
Tax Contributions (\$millions)				
Overall	\$109	\$30	\$187	\$326
State and Local Only	\$42	\$12	\$61	\$115

Source: NMA calculations based on IMPLAN modeling system (2010 database).

NA - not applicable. Data may not add to totals due to independent rounding.

Mining in Delaware, 2010

Measure	Coal Mining	Metal Mining	Non-Metallic Mining	All Mining
Contribution to GDP (\$millions)				
Direct	\$0	\$30	\$20	\$50
Indirect and Induced	\$87	\$24	\$92	\$203
Total	\$87	\$54	\$112	\$253
Employment				
Direct				
Mine Workers	0	50	60	110
Support Activities	0	0	0	0
Transportation	0	350	0	350
Total Direct	0	400	60	460
Indirect and Induced	840	320	930	2,090
Total	840	720	990	2,550
Labor Income (\$millions)				
Direct	\$0	\$23	\$5	\$28
Indirect and Induced	\$54	\$15	\$55	\$124
Total	\$54	\$38	\$60	\$152
Average State Labor Income				
Mining Direct	NA	\$57,500	\$78,256	\$60,870
State Average, All Industries	\$53,499	\$53,499	\$53,499	\$53,499
Tax Contributions (\$millions)				
Overall	\$19	\$16	\$22	\$57
State and Local Only	\$8	\$6	\$9	\$23

Source: NMA calculations based on IMPLAN modeling system (2010 database).

NA - not applicable. Data may not add to totals due to independent rounding.

Mining in District of Columbia, 2010

Measure	Coal Mining	Metal Mining	Non-Metallic Mining	All Mining
Contribution to GDP (\$millions)				
Direct	\$0	\$0	\$4	\$4
Indirect and Induced	\$231	\$75	\$214	\$520
Total	\$231	\$75	\$218	\$524
Employment				
Direct				
Mine Workers	0	0	0	0
Support Activities	0	0	0	0
Transportation	0	0	0	0
Total Direct	0	0	0	0
Indirect and Induced	1,370	340	1,290	3,000
Total	1,370	340	1,290	3,000
Labor Income (\$millions)				
Direct	\$0	\$0	\$1	\$1
Indirect and Induced	\$167	\$47	\$151	\$365
Total	\$167	\$47	\$152	\$366
Average State Labor Income				
Mining Direct	NA	NA	NA	NA
State Average, All Industries	\$102,615	\$102,615	\$102,615	\$102,615
Tax Contributions (\$millions)				
Overall	\$46	\$13	\$37	\$96
State and Local Only	\$24	\$7	\$17	\$48

Source: NMA calculations based on IMPLAN modeling system (2010 database).

NA - not applicable. Data may not add to totals due to independent rounding.

Mining in Florida, 2010

Measure	Coal Mining	Metal Mining	Non-Metallic Mining	All Mining
Contribution to GDP (\$millions)				
Direct	\$43	\$152	\$2,028	\$2,223
Indirect and Induced	\$1,441	\$538	\$3,011	\$4,990
Total	\$1,484	\$690	\$5,039	\$7,213
Employment				
Direct				
Mine Workers	90	180	7,680	7,950
Support Activities	0	0	110	110
Transportation	50	290	9,980	10,320
Total Direct	140	470	17,770	18,380
Indirect and Induced	15,700	4,830	37,570	58,100
Total	15,840	5,300	55,340	76,480
Labor Income (\$millions)				
Direct	\$15	\$51	\$1,091	\$1,157
Indirect and Induced	\$826	\$273	\$1,724	\$2,823
Total	\$841	\$324	\$2,815	\$3,980
Average State Labor Income				
Mining Direct	\$107,143	\$108,511	\$61,396	\$62,949
State Average, All Industries	\$44,189	\$44,189	\$44,189	\$44,189
Tax Contributions (\$millions)				
Overall	\$321	\$126	\$946	\$1,393
State and Local Only	\$110	\$48	\$276	\$434

Source: NMA calculations based on IMPLAN modeling system (2010 database).

NA - not applicable. Data may not add to totals due to independent rounding.

Mining in Georgia, 2010

Measure	Coal Mining	Metal Mining	Non-Metallic Mining	All Mining
Contribution to GDP (\$millions)				
Direct	\$65	\$0	\$1,743	\$1,808
Indirect and Induced	\$881	\$275	\$2,379	\$3,535
Total	\$946	\$275	\$4,122	\$5,343
Employment				
Direct				
Mine Workers	130	0	8,630	8,760
Support Activities	30	0	1,810	1,840
Transportation	0	0	7,330	7,330
Total Direct	160	0	17,770	17,930
Indirect and Induced	8,640	2,060	28,310	39,010
Total	8,800	2,060	46,080	56,940
Labor Income (\$millions)				
Direct	\$17	\$0	\$1,024	\$1,041
Indirect and Induced	\$499	\$136	\$1,359	\$1,994
Total	\$516	\$136	\$2,383	\$3,035
Average State Labor Income				
Mining Direct	\$108,226	NA	\$57,625	\$58,059
State Average, All Industries	\$48,851	\$48,851	\$48,851	\$48,851
Tax Contributions (\$millions)				
Overall	\$195	\$46	\$778	\$1,019
State and Local Only	\$78	\$20	\$248	\$346

Source: NMA calculations based on IMPLAN modeling system (2010 database).

NA - not applicable. Data may not add to totals due to independent rounding.

Mining in Hawaii, 2010

Measure	Coal Mining	Metal Mining	Non-Metallic Mining	All Mining
Contribution to GDP (\$millions)				
Direct	\$0	\$0	\$201	\$201
Indirect and Induced	\$132	\$43	\$225	\$400
Total	\$132	\$43	\$426	\$601
Employment				
Direct				
Mine Workers	0	0	470	470
Support Activities	0	0	0	0
Transportation	0	0	1,070	1,070
Total Direct	0	0	1,540	1,540
Indirect and Induced	1,310	330	2,480	4,120
Total	1,310	330	4,020	5,660
Labor Income (\$millions)				
Direct	\$0	\$0	\$107	\$107
Indirect and Induced	\$77	\$22	\$126	\$225
Total	\$77	\$22	\$233	\$332
Average State Labor Income				
Mining Direct	NA	NA	\$69,481	\$69,481
State Average, All Industries	\$50,158	\$50,158	\$50,158	\$50,158
Tax Contributions (\$millions)				
Overall	\$28	\$7	\$76	\$111
State and Local Only	\$12	\$3	\$27	\$42

Source: NMA calculations based on IMPLAN modeling system (2010 database).

NA - not applicable. Data may not add to totals due to independent rounding.

Mining in Idaho, 2010

Measure	Coal Mining	Metal Mining	Non-Metallic Mining	All Mining
Contribution to GDP (\$millions)				
Direct	\$0	\$535	\$294	\$829
Indirect and Induced	\$106	\$207	\$270	\$583
Total	\$106	\$742	\$564	\$1,412
Employment				
Direct				
Mine Workers	10	1,340	2,000	3,350
Support Activities	0	80	130	210
Transportation	0	430	1,650	2,080
Total Direct	10	1,850	3,780	5,640
Indirect and Induced	1,400	2,390	4,050	7,840
Total	1,410	4,240	7,830	13,480
Labor Income (\$millions)				
Direct	\$0	\$162	\$191	\$353
Indirect and Induced	\$63	\$103	\$158	\$324
Total	\$63	\$265	\$349	\$677
Average State Labor Income				
Mining Direct	NA	\$87,568	\$50,529	\$62,589
State Average, All Industries	\$39,110	\$39,110	\$39,110	\$39,110
Tax Contributions (\$millions)				
Overall	\$24	\$147	\$114	\$285
State and Local Only	\$10	\$66	\$39	\$115

Source: NMA calculations based on IMPLAN modeling system (2010 database).

NA - not applicable. Data may not add to totals due to independent rounding.

Mining in Illinois, 2010

Measure	Coal Mining	Metal Mining	Non-Metallic Mining	All Mining
Contribution to GDP (\$millions)				
Direct	\$1,363	\$10	\$1,399	\$2,772
Indirect and Induced	\$2,341	\$424	\$2,394	\$5,159
Total	\$3,704	\$434	\$3,793	\$7,931
Employment				
Direct				
Mine Workers	5,180	30	4,620	9,830
Support Activities	160	0	140	300
Transportation	2,460	10	5,260	7,730
Total Direct	7,800	40	10,020	17,860
Indirect and Induced	23,380	2,920	24,340	50,640
Total	31,180	2,960	34,360	68,500
Labor Income (\$millions)				
Direct	\$686	\$3	\$706	\$1,395
Indirect and Induced	\$1,389	\$218	\$1,398	\$3,005
Total	\$2,075	\$221	\$2,104	\$4,400
Average State Labor Income				
Mining Direct	\$87,949	\$75,000	\$70,459	\$78,108
State Average, All Industries	\$55,654	\$55,654	\$55,654	\$55,654
Tax Contributions (\$millions)				
Overall	\$908	\$80	\$490	\$1,478
State and Local Only	\$414	\$35	\$251	\$700

Source: NMA calculations based on IMPLAN modeling system (2010 database).

NA - not applicable. Data may not add to totals due to independent rounding.

Mining in Indiana, 2010

Measure	Coal Mining	Metal Mining	Non-Metallic Mining	All Mining
Contribution to GDP (\$millions)				
Direct	\$2,093	\$0	\$1,224	\$3,317
Indirect and Induced	\$1,555	\$165	\$1,195	\$2,915
Total	\$3,648	\$165	\$2,419	\$6,232
Employment				
Direct				
Mine Workers	5,820	0	4,490	10,310
Support Activities	90	0	70	160
Transportation	3,470	0	4,740	8,210
Total Direct	9,380	0	9,300	18,680
Indirect and Induced	21,030	1,400	15,820	38,250
Total	30,410	1,400	25,120	56,930
Labor Income (\$millions)				
Direct	\$1,053	\$0	\$604	\$1,657
Indirect and Induced	\$911	\$83	\$695	\$1,689
Total	\$1,964	\$83	\$1,299	\$3,346
Average State Labor Income				
Mining Direct	\$112,260	NA	\$64,946	\$88,704
State Average, All Industries	\$45,015	\$45,015	\$45,015	\$45,015
Tax Contributions (\$millions)				
Overall	\$951	\$30	\$459	\$1,440
State and Local Only	\$487	\$14	\$159	\$660

Source: NMA calculations based on IMPLAN modeling system (2010 database).

NA - not applicable. Data may not add to totals due to independent rounding.

Mining in Iowa, 2010

Measure	Coal Mining	Metal Mining	Non-Metallic Mining	All Mining
Contribution to GDP (\$millions)				
Direct	\$0	\$0	\$817	\$817
Indirect and Induced	\$272	\$88	\$684	\$1,044
Total	\$272	\$88	\$1,501	\$1,861
Employment				
Direct				
Mine Workers	20	30	3,640	3,690
Support Activities	0	0	40	40
Transportation	0	0	3,390	3,390
Total Direct	20	30	7,070	7,120
Indirect and Induced	3,120	770	9,430	13,320
Total	3,140	800	16,500	20,440
Labor Income (\$millions)				
Direct	\$2	\$3	\$420	\$425
Indirect and Induced	\$159	\$45	\$399	\$603
Total	\$161	\$48	\$819	\$1,028
Average State Labor Income				
Mining Direct	\$88,594	\$97,100	\$59,406	\$59,679
State Average, All Industries	\$43,029	\$43,029	\$43,029	\$43,029
Tax Contributions (\$millions)				
Overall	\$58	\$16	\$281	\$355
State and Local Only	\$24	\$7	\$96	\$127

Source: NMA calculations based on IMPLAN modeling system (2010 database).

NA - not applicable. Data may not add to totals due to independent rounding.

Mining in Kansas, 2010

Measure	Coal Mining	Metal Mining	Non-Metallic Mining	All Mining
Contribution to GDP (\$millions)				
Direct	\$55	\$0	\$583	\$638
Indirect and Induced	\$284	\$85	\$539	\$908
Total	\$339	\$85	\$1,122	\$1,546
Employment				
Direct				
Mine Workers	160	0	2,980	3,140
Support Activities	0	0	10	10
Transportation	90	0	2,010	2,100
Total Direct	250	0	5,000	5,250
Indirect and Induced	3,210	720	6,970	10,900
Total	3,460	720	11,970	16,150
Labor Income (\$millions)				
Direct	\$27	\$0	\$294	\$321
Indirect and Induced	\$166	\$43	\$311	\$520
Total	\$193	\$43	\$605	\$841
Average State Labor Income				
Mining Direct	\$106,864	NA	\$58,800	\$61,089
State Average, All Industries	\$44,570	\$44,570	\$44,570	\$44,570
Tax Contributions (\$millions)				
Overall	\$77	\$15	\$212	\$304
State and Local Only	\$34	\$7	\$75	\$116

Source: NMA calculations based on IMPLAN modeling system (2010 database).

NA - not applicable. Data may not add to totals due to independent rounding.

Mining in Kentucky, 2010

Measure	Coal Mining	Metal Mining	Non-Metallic Mining	All Mining
Contribution to GDP (\$millions)				
Direct	\$6,484	\$0	\$877	\$7,361
Indirect and Induced	\$3,767	\$107	\$822	\$4,696
Total	\$10,251	\$107	\$1,699	\$12,057
Employment				
Direct				
Mine Workers	24,150	0	3,260	27,410
Support Activities	1,460	0	200	1,660
Transportation	11,860	0	3,670	15,530
Total Direct	37,470	0	7,130	44,600
Indirect and Induced	51,880	920	10,720	63,520
Total	89,350	920	17,850	108,120
Labor Income (\$millions)				
Direct	\$3,285	\$0	\$411	\$3,696
Indirect and Induced	\$2,224	\$55	\$482	\$2,761
Total	\$5,509	\$55	\$893	\$6,457
Average State Labor Income				
Mining Direct	\$87,677	NA	\$57,644	\$82,876
State Average, All Industries	\$44,256	\$44,256	\$44,256	\$44,256
Tax Contributions (\$millions)				
Overall	\$2,658	\$21	\$313	\$2,992
State and Local Only	\$1,304	\$10	\$108	\$1,422

Source: NMA calculations based on IMPLAN modeling system (2010 database).

NA - not applicable. Data may not add to totals due to independent rounding.

Mining in Louisiana, 2010

Measure	Coal Mining	Metal Mining	Non-Metallic Mining	All Mining
Contribution to GDP (\$millions)				
Direct	\$177	\$563	\$347	\$1,087
Indirect and Induced	\$473	\$296	\$606	\$1,375
Total	\$650	\$859	\$953	\$2,462
Employment				
Direct				
Mine Workers	450	680	2,340	3,470
Support Activities	10	20	60	90
Transportation	270	30	1,510	1,810
Total Direct	730	730	3,910	5,370
Indirect and Induced	5,220	2,950	7,170	15,340
Total	5,950	3,680	11,080	20,710
Labor Income (\$millions)				
Direct	\$87	\$74	\$233	\$394
Indirect and Induced	\$277	\$89	\$350	\$716
Total	\$364	\$163	\$583	\$1,110
Average State Labor Income				
Mining Direct	\$118,953	\$101,311	\$59,591	\$73,332
State Average, All Industries	\$47,025	\$47,025	\$47,025	\$47,025
Tax Contributions (\$millions)				
Overall	\$143	\$158	\$178	\$479
State and Local Only	\$67	\$75	\$64	\$206

Source: NMA calculations based on IMPLAN modeling system (2010 database).

NA - not applicable. Data may not add to totals due to independent rounding.

Mining in Maine, 2010

Measure	Coal Mining	Metal Mining	Non-Metallic Mining	All Mining
Contribution to GDP (\$millions)				
Direct	\$0	\$0	\$92	\$92
Indirect and Induced	\$100	\$32	\$155	\$287
Total	\$100	\$32	\$247	\$379
Employment				
Direct				
Mine Workers	0	0	870	870
Support Activities	0	0	10	10
Transportation	0	0	440	440
Total Direct	0	0	1,320	1,320
Indirect and Induced	1,250	310	2,100	3,660
Total	1,250	310	3,420	4,980
Labor Income (\$millions)				
Direct	\$0	\$0	\$53	\$53
Indirect and Induced	\$61	\$17	\$93	\$171
Total	\$61	\$17	\$146	\$224
Average State Labor Income				
Mining Direct	NA	NA	\$40,152	\$40,152
State Average, All Industries	\$41,073	\$41,073	\$41,073	\$41,073
Tax Contributions (\$millions)				
Overall	\$23	\$6	\$49	\$78
State and Local Only	\$10	\$3	\$18	\$31

Source: NMA calculations based on IMPLAN modeling system (2010 database).

NA - not applicable. Data may not add to totals due to independent rounding.

Mining in Maryland, 2010

Measure	Coal Mining	Metal Mining	Non-Metallic Mining	All Mining
Contribution to GDP (\$millions)				
Direct	\$315	\$0	\$442	\$757
Indirect and Induced	\$760	\$191	\$860	\$1,811
Total	\$1,075	\$191	\$1,302	\$2,568
Employment				
Direct				
Mine Workers	1,620	0	1,620	3,240
Support Activities	170	0	170	340
Transportation	110	0	1,660	1,770
Total Direct	1,900	0	3,450	5,350
Indirect and Induced	7,310	1,340	8,680	17,330
Total	9,210	1,340	12,130	22,680
Labor Income (\$millions)				
Direct	\$149	\$0	\$217	\$366
Indirect and Induced	\$465	\$103	\$515	\$1,083
Total	\$614	\$103	\$732	\$1,449
Average State Labor Income				
Mining Direct	\$78,421	NA	\$62,899	\$68,411
State Average, All Industries	\$57,455	\$57,455	\$57,455	\$57,455
Tax Contributions (\$millions)				
Overall	\$278	\$39	\$267	\$584
State and Local Only	\$131	\$18	\$95	\$244

Source: NMA calculations based on IMPLAN modeling system (2010 database).

NA - not applicable. Data may not add to totals due to independent rounding.

Mining in Massachusetts, 2010

Measure	Coal Mining	Metal Mining	Non-Metallic Mining	All Mining
Contribution to GDP (\$millions)				
Direct	\$0	\$0	\$374	\$374
Indirect and Induced	\$811	\$263	\$1,090	\$2,164
Total	\$811	\$263	\$1,464	\$2,538
Employment				
Direct				
Mine Workers	10	0	1,380	1,390
Support Activities	0	0	310	310
Transportation	0	0	1,500	1,500
Total Direct	10	0	3,190	3,200
Indirect and Induced	6,520	1,630	9,780	17,930
Total	6,530	1,630	12,970	21,130
Labor Income (\$millions)				
Direct	\$0	\$0	\$197	\$197
Indirect and Induced	\$495	\$140	\$652	\$1,287
Total	\$495	\$140	\$849	\$1,484
Average State Labor Income				
Mining Direct	NA	NA	\$61,755	\$61,563
State Average, All Industries	\$63,562	\$63,562	\$63,562	\$63,562
Tax Contributions (\$millions)				
Overall	\$187	\$51	\$300	\$538
State and Local Only	\$75	\$22	\$103	\$200

Source: NMA calculations based on IMPLAN modeling system (2010 database).

NA - not applicable. Data may not add to totals due to independent rounding.

Mining in Michigan, 2010

Measure	Coal Mining	Metal Mining	Non-Metallic Mining	All Mining
Contribution to GDP (\$millions)				
Direct	\$22	\$679	\$709	\$1,410
Indirect and Induced	\$792	\$830	\$1,344	\$2,966
Total	\$814	\$1,509	\$2,053	\$4,376
Employment				
Direct				
Mine Workers	60	1,740	3,100	4,900
Support Activities	0	20	30	50
Transportation	10	2,900	3,630	6,540
Total Direct	70	4,660	6,760	11,490
Indirect and Induced	8,120	9,180	15,740	33,040
Total	8,190	13,840	22,500	44,530
Labor Income (\$millions)				
Direct	\$7	\$369	\$432	\$808
Indirect and Induced	\$466	\$454	\$776	\$1,696
Total	\$473	\$823	\$1,208	\$2,504
Average State Labor Income				
Mining Direct	\$99,286	\$79,185	\$63,905	\$70,318
State Average, All Industries	\$48,247	\$48,247	\$48,247	\$48,247
Tax Contributions (\$millions)				
Overall	\$179	\$333	\$414	\$926
State and Local Only	\$74	\$144	\$144	\$362

Source: NMA calculations based on IMPLAN modeling system (2010 database).

NA - not applicable. Data may not add to totals due to independent rounding.

Mining in Minnesota, 2010

Measure	Coal Mining	Metal Mining	Non-Metallic Mining	All Mining
Contribution to GDP (\$millions)				
Direct	\$93	\$1,801	\$488	\$2,382
Indirect and Induced	\$607	\$1,654	\$954	\$3,215
Total	\$700	\$3,455	\$1,442	\$5,597
Employment				
Direct				
Mine Workers	210	5,490	2,840	8,540
Support Activities	10	270	140	420
Transportation	1	6,320	1,930	8,251
Total Direct	221	12,080	4,910	17,211
Indirect and Induced	6,000	18,830	10,590	35,420
Total	6,221	30,910	15,500	52,631
Labor Income (\$millions)				
Direct	\$41	\$943	\$312	\$1,296
Indirect and Induced	\$351	\$920	\$545	\$1,816
Total	\$392	\$1,863	\$857	\$3,112
Average State Labor Income				
Mining Direct	\$185,520	\$78,063	\$63,544	\$75,301
State Average, All Industries	\$50,042	\$50,042	\$50,042	\$50,042
Tax Contributions (\$millions)				
Overall	\$165	\$799	\$301	\$1,265
State and Local Only	\$73	\$342	\$105	\$520

Source: NMA calculations based on IMPLAN modeling system (2010 database).

NA - not applicable. Data may not add to totals due to independent rounding.

Mining in Mississippi, 2010

Measure	Coal Mining	Metal Mining	Non-Metallic Mining	All Mining
Contribution to GDP (\$millions)				
Direct	\$92	\$0	\$133	\$225
Indirect and Induced	\$222	\$59	\$249	\$530
Total	\$314	\$59	\$382	\$755
Employment				
Direct				
Mine Workers	250	0	1,290	1,540
Support Activities	0	0	0	0
Transportation	210	0	610	820
Total Direct	460	0	1,900	2,360
Indirect and Induced	3,030	590	3,530	7,150
Total	3,490	590	5,430	9,510
Labor Income (\$millions)				
Direct	\$46	\$0	\$106	\$152
Indirect and Induced	\$135	\$31	\$147	\$313
Total	\$181	\$31	\$253	\$465
Average State Labor Income				
Mining Direct	\$99,630	NA	\$55,789	\$64,335
State Average, All Industries	\$39,286	\$39,286	\$39,286	\$39,286
Tax Contributions (\$millions)				
Overall	\$70	\$11	\$76	\$157
State and Local Only	\$32	\$5	\$28	\$65

Source: NMA calculations based on IMPLAN modeling system (2010 database).

NA - not applicable. Data may not add to totals due to independent rounding.

Mining in Missouri, 2010

Measure	Coal Mining	Metal Mining	Non-Metallic Mining	All Mining
Contribution to GDP (\$millions)				
Direct	\$87	\$555	\$1,783	\$2,425
Indirect and Induced	\$552	\$374	\$1,729	\$2,655
Total	\$639	\$929	\$3,512	\$5,080
Employment				
Direct				
Mine Workers	240	890	6,510	7,640
Support Activities	10	20	160	190
Transportation	180	300	8,540	9,020
Total Direct	430	1,210	15,210	16,850
Indirect and Induced	6,250	4,100	22,090	32,440
Total	6,680	5,310	37,300	49,290
Labor Income (\$millions)				
Direct	\$43	\$133	\$914	\$1,090
Indirect and Induced	\$330	\$216	\$1,024	\$1,570
Total	\$372	\$349	\$1,938	\$2,659
Average State Labor Income				
Mining Direct	\$98,884	\$109,917	\$60,092	\$64,660
State Average, All Industries	\$45,188	\$45,188	\$45,188	\$45,188
Tax Contributions (\$millions)				
Overall	\$143	\$186	\$650	\$979
State and Local Only	\$60	\$85	\$211	\$356

Source: NMA calculations based on IMPLAN modeling system (2010 database).

NA - not applicable. Data may not add to totals due to independent rounding.

Mining in Montana, 2010

Measure	Coal Mining	Metal Mining	Non-Metallic Mining	All Mining
Contribution to GDP (\$millions)				
Direct	\$355	\$1,080	\$307	\$1,742
Indirect and Induced	\$234	\$403	\$246	\$883
Total	\$589	\$1,483	\$553	\$2,625
Employment				
Direct				
Mine Workers	1,340	2,310	1,550	5,200
Support Activities	70	110	80	260
Transportation	780	1,100	1,560	3,440
Total Direct	2,190	3,520	3,190	8,900
Indirect and Induced	3,480	4,630	3,620	11,730
Total	5,670	8,150	6,810	20,630
Labor Income (\$millions)				
Direct	\$182	\$319	\$199	\$700
Indirect and Induced	\$132	\$195	\$137	\$464
Total	\$315	\$514	\$336	\$1,165
Average State Labor Income				
Mining Direct	\$83,251	\$90,625	\$62,382	\$78,688
State Average, All Industries	\$37,545	\$37,545	\$37,545	\$37,545
Tax Contributions (\$millions)				
Overall	\$157	\$309	\$117	\$583
State and Local Only	\$76	\$140	\$41	\$257

Source: NMA calculations based on IMPLAN modeling system (2010 database).

NA - not applicable. Data may not add to totals due to independent rounding.

Mining in Nebraska, 2010

Measure	Coal Mining	Metal Mining	Non-Metallic Mining	All Mining
Contribution to GDP (\$millions)				
Direct	\$0	\$0	\$459	\$459
Indirect and Induced	\$167	\$54	\$422	\$643
Total	\$167	\$54	\$881	\$1,102
Employment				
Direct				
Mine Workers	970	0	1,350	2,320
Support Activities	0	0	10	10
Transportation	0	0	1,800	1,800
Total Direct	970	0	3,160	4,130
Indirect and Induced	3,480	480	5,830	9,790
Total	4,450	480	8,990	13,920
Labor Income (\$millions)				
Direct	\$107	\$0	\$261	\$368
Indirect and Induced	\$101	\$29	\$254	\$384
Total	\$208	\$29	\$515	\$752
Average State Labor Income				
Mining Direct	\$109,835	NA	\$82,595	\$88,993
State Average, All Industries	\$43,858	\$43,858	\$43,858	\$43,858
Tax Contributions (\$millions)				
Overall	\$36	\$10	\$161	\$207
State and Local Only	\$15	\$4	\$55	\$74

Source: NMA calculations based on IMPLAN modeling system (2010 database).

NA - not applicable. Data may not add to totals due to independent rounding.

Mining in Nevada, 2010

Measure	Coal Mining	Metal Mining	Non-Metallic Mining	All Mining
Contribution to GDP (\$millions)				
Direct	\$0	\$5,264	\$421	\$5,685
Indirect and Induced	\$228	\$2,162	\$497	\$2,887
Total	\$228	\$7,426	\$918	\$8,572
Employment				
Direct				
Mine Workers	10	11,750	2,190	13,950
Support Activities	0	1,260	230	1,490
Transportation	0	3,610	1,670	5,280
Total Direct	10	16,620	4,090	20,720
Indirect and Induced	2,360	22,070	5,890	30,320
Total	2,370	38,690	9,980	51,040
Labor Income (\$millions)				
Direct	\$1	\$1,588	\$254	\$1,843
Indirect and Induced	\$128	\$1,109	\$280	\$1,517
Total	\$129	\$2,697	\$534	\$3,360
Average State Labor Income				
Mining Direct	\$88,500	\$95,548	\$62,103	\$88,942
State Average, All Industries	\$45,750	\$45,750	\$45,750	\$45,750
Tax Contributions (\$millions)				
Overall	\$50	\$1,417	\$136	\$1,603
State and Local Only	\$20	\$583	\$41	\$644

Source: NMA calculations based on IMPLAN modeling system (2010 database).

NA - not applicable. Data may not add to totals due to independent rounding.

Mining in New Hampshire, 2010

Measure	Coal Mining	Metal Mining	Non-Metallic Mining	All Mining
Contribution to GDP (\$millions)				
Direct	\$0	\$0	\$136	\$136
Indirect and Induced	\$186	\$60	\$269	\$515
Total	\$186	\$60	\$405	\$651
Employment				
Direct				
Mine Workers	0	0	770	770
Support Activities	0	0	10	10
Transportation	0	0	710	710
Total Direct	0	0	1,490	1,490
Indirect and Induced	1,290	320	2,490	4,100
Total	1,290	320	3,980	5,590
Labor Income (\$millions)				
Direct	\$0	\$0	\$82	\$82
Indirect and Induced	\$75	\$22	\$127	\$224
Total	\$75	\$22	\$209	\$306
Average State Labor Income				
Mining Direct	NA	NA	\$55,034	\$55,034
State Average, All Industries	\$49,552	\$49,552	\$49,552	\$49,552
Tax Contributions (\$millions)				
Overall	\$29	\$8	\$71	\$108
State and Local Only	\$11	\$3	\$23	\$37

Source: NMA calculations based on IMPLAN modeling system (2010 database).

NA - not applicable. Data may not add to totals due to independent rounding.

Mining in New Jersey, 2010

Measure	Coal Mining	Metal Mining	Non-Metallic Mining	All Mining
Contribution to GDP (\$millions)				
Direct	\$0	\$0	\$612	\$612
Indirect and Induced	\$999	\$324	\$1,467	\$2,790
Total	\$999	\$324	\$2,079	\$3,402
Employment				
Direct				
Mine Workers	30	0	1,470	1,500
Support Activities	0	0	60	60
Transportation	0	0	2,950	2,950
Total Direct	30	0	4,480	4,510
Indirect and Induced	7,850	1,950	12,930	22,730
Total	7,880	1,950	17,410	27,240
Labor Income (\$millions)				
Direct	\$3	\$0	\$356	\$359
Indirect and Induced	\$579	\$163	\$842	\$1,584
Total	\$582	\$163	\$1,198	\$1,943
Average State Labor Income				
Mining Direct	\$91,000	NA	\$79,464	\$79,541
State Average, All Industries	\$62,227	\$62,227	\$62,227	\$62,227
Tax Contributions (\$millions)				
Overall	\$240	\$37	\$440	\$717
State and Local Only	\$96	\$28	\$148	\$272

Source: NMA calculations based on IMPLAN modeling system (2010 database).

NA - not applicable. Data may not add to totals due to independent rounding.

Mining in New Mexico, 2010

Measure	Coal Mining	Metal Mining	Non-Metallic Mining	All Mining
Contribution to GDP (\$millions)				
Direct	\$464	\$493	\$661	\$1,618
Indirect and Induced	\$337	\$189	\$498	\$1,024
Total	\$801	\$682	\$1,159	\$2,642
Employment				
Direct				
Mine Workers	1,650	1,120	2,930	5,700
Support Activities	60	40	100	200
Transportation	880	440	3,810	5,130
Total Direct	2,590	1,600	6,840	11,030
Indirect and Induced	4,680	2,330	7,220	14,230
Total	7,270	3,930	14,060	25,260
Labor Income (\$millions)				
Direct	\$236	\$132	\$425	\$793
Indirect and Induced	\$203	\$106	\$295	\$604
Total	\$438	\$238	\$720	\$1,396
Average State Labor Income				
Mining Direct	\$90,981	\$82,500	\$62,135	\$71,862
State Average, All Industries	\$44,145	\$44,145	\$44,145	\$44,145
Tax Contributions (\$millions)				
Overall	\$205	\$140	\$233	\$578
State and Local Only	\$105	\$69	\$82	\$256

Source: NMA calculations based on IMPLAN modeling system (2010 database).

NA - not applicable. Data may not add to totals due to independent rounding.

Mining in New York, 2010

Measure	Coal Mining	Metal Mining	Non-Metallic Mining	All Mining
Contribution to GDP (\$millions)				
Direct	\$0	\$212	\$1,322	\$1,534
Indirect and Induced	\$2,294	\$825	\$3,247	\$6,366
Total	\$2,294	\$1,037	\$4,569	\$7,900
Employment				
Direct				
Mine Workers	30	100	4,990	5,120
Support Activities	0	0	40	40
Transportation	0	40	7,020	7,060
Total Direct	30	140	12,050	12,220
Indirect and Induced	17,370	5,020	27,110	49,500
Total	17,400	5,160	39,160	61,720
Labor Income (\$millions)				
Direct	\$3	\$22	\$787	\$812
Indirect and Induced	\$1,363	\$429	\$1,900	\$3,692
Total	\$1,366	\$451	\$2,687	\$4,504
Average State Labor Income				
Mining Direct	\$91,000	\$155,714	\$65,311	\$66,410
State Average, All Industries	\$65,865	\$65,865	\$65,865	\$65,865
Tax Contributions (\$millions)				
Overall	\$589	\$226	\$1,022	\$1,837
State and Local Only	\$270	\$113	\$404	\$787

Source: NMA calculations based on IMPLAN modeling system (2010 database).

NA - not applicable. Data may not add to totals due to independent rounding.

Mining in North Carolina, 2010

Measure	Coal Mining	Metal Mining	Non-Metallic Mining	All Mining
Contribution to GDP (\$millions)				
Direct	\$55	\$19	\$939	\$1,013
Indirect and Induced	\$814	\$267	\$1,355	\$2,436
Total	\$869	\$286	\$2,294	\$3,449
Employment				
Direct				
Mine Workers	170	20	5,680	5,870
Support Activities	0	0	30	30
Transportation	310	150	3,870	4,330
Total Direct	480	170	9,580	10,230
Indirect and Induced	8,680	2,240	16,590	27,510
Total	9,160	2,410	26,170	37,740
Labor Income (\$millions)				
Direct	\$29	\$10	\$502	\$541
Indirect and Induced	\$476	\$136	\$787	\$1,399
Total	\$505	\$146	\$1,289	\$1,940
Average State Labor Income				
Mining Direct	\$60,146	\$58,824	\$52,401	\$52,871
State Average, All Industries	\$46,604	\$46,604	\$46,604	\$46,604
Tax Contributions (\$millions)				
Overall	\$191	\$53	\$442	\$686
State and Local Only	\$82	\$24	\$156	\$262

Source: NMA calculations based on IMPLAN modeling system (2010 database).

NA - not applicable. Data may not add to totals due to independent rounding.

Mining in North Dakota, 2010

Measure	Coal Mining	Metal Mining	Non-Metallic Mining	All Mining
Contribution to GDP (\$millions)				
Direct	\$500	\$0	\$111	\$611
Indirect and Induced	\$279	\$22	\$127	\$428
Total	\$779	\$22	\$238	\$1,039
Employment				
Direct				
Mine Workers	1,440	0	700	2,140
Support Activities	20	0	10	30
Transportation	1,030	0	520	1,550
Total Direct	2,490	0	1,230	3,720
Indirect and Induced	4,020	200	1,720	5,940
Total	6,510	200	2,950	9,660
Labor Income (\$millions)				
Direct	\$257	\$0	\$87	\$344
Indirect and Induced	\$170	\$12	\$75	\$257
Total	\$427	\$12	\$162	\$601
Average State Labor Income				
Mining Direct	\$103,060	NA	\$70,732	\$92,371
State Average, All Industries	\$43,863	\$43,863	\$43,863	\$43,863
Tax Contributions (\$millions)				
Overall	\$228	\$5	\$58	\$291
State and Local Only	\$130	\$3	\$24	\$157

Source: NMA calculations based on IMPLAN modeling system (2010 database).

NA - not applicable. Data may not add to totals due to independent rounding.

Mining in Ohio, 2010

Measure	Coal Mining	Metal Mining	Non-Metallic Mining	All Mining
Contribution to GDP (\$millions)				
Direct	\$1,208	\$0	\$1,257	\$2,465
Indirect and Induced	\$1,673	\$300	\$1,827	\$3,800
Total	\$2,881	\$300	\$3,084	\$6,265
Employment				
Direct				
Mine Workers	4,940	0	5,670	10,610
Support Activities	350	0	400	750
Transportation	1,760	0	4,960	6,720
Total Direct	7,050	0	11,030	18,080
Indirect and Induced	20,490	2,550	22,970	46,010
Total	27,540	2,550	34,000	64,090
Labor Income (\$millions)				
Direct	\$603	\$0	\$677	\$1,280
Indirect and Induced	\$1,003	\$157	\$1,084	\$2,244
Total	\$1,606	\$157	\$1,761	\$3,524
Average State Labor Income				
Mining Direct	\$85,560	NA	\$61,378	\$70,808
State Average, All Industries	\$45,916	\$45,916	\$45,916	\$45,916
Tax Contributions (\$millions)				
Overall	\$713	\$56	\$600	\$1,369
State and Local Only	\$347	\$26	\$216	\$589

Source: NMA calculations based on IMPLAN modeling system (2010 database).

NA - not applicable. Data may not add to totals due to independent rounding.

Mining in Oklahoma, 2010

Measure	Coal Mining	Metal Mining	Non-Metallic Mining	All Mining
Contribution to GDP (\$millions)				
Direct	\$97	\$0	\$602	\$699
Indirect and Induced	\$366	\$102	\$641	\$1,109
Total	\$463	\$102	\$1,243	\$1,808
Employment				
Direct				
Mine Workers	270	0	3,220	3,490
Support Activities	10	0	110	120
Transportation	250	0	2,240	2,490
Total Direct	530	0	5,570	6,100
Indirect and Induced	4,140	850	8,090	13,080
Total	4,670	850	13,660	19,180
Labor Income (\$millions)				
Direct	\$49	\$0	\$295	\$344
Indirect and Induced	\$210	\$51	\$364	\$625
Total	\$259	\$51	\$659	\$969
Average State Labor Income				
Mining Direct	\$92,698	NA	\$52,962	\$56,415
State Average, All Industries	\$44,486	\$44,486	\$44,486	\$44,486
Tax Contributions (\$millions)				
Overall	\$102	\$18	\$223	\$343
State and Local Only	\$44	\$8	\$74	\$126

Source: NMA calculations based on IMPLAN modeling system (2010 database).

NA - not applicable. Data may not add to totals due to independent rounding.

Mining in Oregon, 2010

Measure	Coal Mining	Metal Mining	Non-Metallic Mining	All Mining
Contribution to GDP (\$millions)				
Direct	\$0	\$15	\$445	\$460
Indirect and Induced	\$309	\$106	\$662	\$1,077
Total	\$309	\$121	\$1,107	\$1,537
Employment				
Direct				
Mine Workers	30	70	2,200	2,300
Support Activities	0	0	110	110
Transportation	0	10	2,410	2,420
Total Direct	30	80	4,720	4,830
Indirect and Induced	3,500	940	8,380	12,820
Total	3,530	1,020	13,100	17,650
Labor Income (\$millions)				
Direct	\$0	\$4	\$256	\$260
Indirect and Induced	\$185	\$55	\$389	\$629
Total	\$185	\$59	\$645	\$889
Average State Labor Income				
Mining Direct	NA	\$50,000	\$54,237	\$53,830
State Average, All Industries	\$44,837	\$44,837	\$44,837	\$44,837
Tax Contributions (\$millions)				
Overall	\$76	\$25	\$231	\$332
State and Local Only	\$33	\$12	\$83	\$128

Source: NMA calculations based on IMPLAN modeling system (2010 database).

NA - not applicable. Data may not add to totals due to independent rounding.

Mining in Pennsylvania, 2010

Measure	Coal Mining	Metal Mining	Non-Metallic Mining	All Mining
Contribution to GDP (\$millions)				
Direct	\$3,573	\$3	\$2,260	\$5,836
Indirect and Induced	\$3,790	\$379	\$2,841	\$7,010
Total	\$7,363	\$382	\$5,101	\$12,846
Employment				
Direct				
Mine Workers	13,090	10	9,810	22,910
Support Activities	500	0	370	870
Transportation	7,110	30	8,050	15,190
Total Direct	20,700	40	18,230	38,970
Indirect and Induced	42,290	2,850	31,140	76,280
Total	62,990	2,890	49,370	115,250
Labor Income (\$millions)				
Direct	\$1,823	\$2	\$1,067	\$2,892
Indirect and Induced	\$2,262	\$198	\$1,675	\$4,135
Total	\$4,085	\$200	\$2,742	\$7,027
Average State Labor Income				
Mining Direct	\$88,071	\$50,000	\$58,530	\$74,213
State Average, All Industries	\$51,946	\$51,946	\$51,946	\$51,946
Tax Contributions (\$millions)				
Overall	\$1,896	\$74	\$1,001	\$2,971
State and Local Only	\$897	\$33	\$340	\$1,270

Source: NMA calculations based on IMPLAN modeling system (2010 database).

NA - not applicable. Data may not add to totals due to independent rounding.

Mining in Rhode Island, 2010

Measure	Coal Mining	Metal Mining	Non-Metallic Mining	All Mining
Contribution to GDP (\$millions)				
Direct	\$0	\$0	\$40	\$40
Indirect and Induced	\$93	\$30	\$119	\$242
Total	\$93	\$30	\$159	\$282
Employment				
Direct				
Mine Workers	0	0	210	210
Support Activities	0	0	10	10
Transportation	0	0	340	340
Total Direct	0	0	560	560
Indirect and Induced	930	230	1,310	2,470
Total	930	230	1,870	3,030
Labor Income (\$millions)				
Direct	\$0	\$0	\$27	\$27
Indirect and Induced	\$56	\$16	\$72	\$144
Total	\$56	\$16	\$99	\$171
Average State Labor Income				
Mining Direct	NA	NA	\$48,214	\$48,214
State Average, All Industries	\$51,572	\$51,572	\$51,572	\$51,572
Tax Contributions (\$millions)				
Overall	\$22	\$6	\$33	\$61
State and Local Only	\$8	\$3	\$11	\$22

Source: NMA calculations based on IMPLAN modeling system (2010 database).

NA - not applicable. Data may not add to totals due to independent rounding.

Mining in South Carolina, 2010

Measure	Coal Mining	Metal Mining	Non-Metallic Mining	All Mining
Contribution to GDP (\$millions)				
Direct	\$0	\$45	\$507	\$552
Indirect and Induced	\$321	\$117	\$592	\$1,030
Total	\$321	\$162	\$1,099	\$1,582
Employment				
Direct				
Mine Workers	90	110	2,650	2,850
Support Activities	0	0	20	20
Transportation	0	40	1,940	1,980
Total Direct	90	150	4,610	4,850
Indirect and Induced	3,970	1,160	8,240	13,370
Total	4,060	1,310	12,850	18,220
Labor Income (\$millions)				
Direct	\$5	\$13	\$251	\$269
Indirect and Induced	\$191	\$61	\$344	\$596
Total	\$196	\$74	\$595	\$865
Average State Labor Income				
Mining Direct	\$51,111	\$86,667	\$54,447	\$55,381
State Average, All Industries	\$41,469	\$41,469	\$41,469	\$41,469
Tax Contributions (\$millions)				
Overall	\$66	\$29	\$199	\$294
State and Local Only	\$24	\$11	\$58	\$93

Source: NMA calculations based on IMPLAN modeling system (2010 database).

NA - not applicable. Data may not add to totals due to independent rounding.

Mining in South Dakota, 2010

Measure	Coal Mining	Metal Mining	Non-Metallic Mining	All Mining
Contribution to GDP (\$millions)				
Direct	\$0	\$73	\$185	\$258
Indirect and Induced	\$68	\$38	\$141	\$247
Total	\$68	\$111	\$326	\$505
Employment				
Direct				
Mine Workers	20	200	1,240	1,460
Support Activities	0	0	30	30
Transportation	0	50	700	750
Total Direct	20	250	1,970	2,240
Indirect and Induced	910	430	2,020	3,360
Total	930	680	3,990	5,600
Labor Income (\$millions)				
Direct	\$2	\$22	\$110	\$134
Indirect and Induced	\$43	\$20	\$84	\$147
Total	\$45	\$42	\$194	\$281
Average State Labor Income				
Mining Direct	\$110,000	\$88,000	\$55,838	\$59,911
State Average, All Industries	\$40,599	\$40,599	\$40,599	\$40,599
Tax Contributions (\$millions)				
Overall	\$14	\$20	\$60	\$94
State and Local Only	\$5	\$9	\$18	\$32

Source: NMA calculations based on IMPLAN modeling system (2010 database).

NA - not applicable. Data may not add to totals due to independent rounding.

Mining in Tennessee, 2010

Measure	Coal Mining	Metal Mining	Non-Metallic Mining	All Mining
Contribution to GDP (\$millions)				
Direct	\$181	\$266	\$1,058	\$1,505
Indirect and Induced	\$626	\$288	\$1,275	\$2,189
Total	\$807	\$554	\$2,333	\$3,694
Employment				
Direct				
Mine Workers	1,340	770	4,430	6,540
Support Activities	110	60	370	540
Transportation	80	190	3,520	3,790
Total Direct	1,530	1,020	8,320	10,870
Indirect and Induced	6,920	2,940	15,470	25,330
Total	8,450	3,960	23,790	36,200
Labor Income (\$millions)				
Direct	\$85	\$68	\$558	\$711
Indirect and Induced	\$375	\$164	\$761	\$1,300
Total	\$460	\$232	\$1,319	\$2,011
Average State Labor Income				
Mining Direct	\$55,647	\$66,667	\$67,067	\$65,422
State Average, All Industries	\$46,908	\$46,908	\$46,908	\$46,908
Tax Contributions (\$millions)				
Overall	\$175	\$103	\$415	\$693
State and Local Only	\$73	\$45	\$123	\$241

Source: NMA calculations based on IMPLAN modeling system (2010 database).

NA - not applicable. Data may not add to totals due to independent rounding.

Mining in Texas, 2010

Measure	Coal Mining	Metal Mining	Non-Metallic Mining	All Mining
Contribution to GDP (\$millions)				
Direct	\$1,671	\$827	\$2,523	\$5,021
Indirect and Induced	\$3,751	\$1,164	\$4,467	\$9,382
Total	\$5,422	\$1,991	\$6,990	\$14,403
Employment				
Direct				
Mine Workers	4,800	1,540	13,470	19,810
Support Activities	70	30	200	300
Transportation	3,070	180	9,980	13,230
Total Direct	7,940	1,750	23,650	33,340
Indirect and Induced	36,530	9,030	45,990	91,550
Total	44,470	10,780	69,640	124,890
Labor Income (\$millions)				
Direct	\$844	\$235	\$1,340	\$2,419
Indirect and Induced	\$2,123	\$578	\$2,504	\$5,205
Total	\$2,967	\$813	\$3,844	\$7,624
Average State Labor Income				
Mining Direct	\$106,327	\$134,286	\$56,660	\$72,563
State Average, All Industries	\$53,849	\$53,849	\$53,849	\$53,849
Tax Contributions (\$millions)				
Overall	\$1,171	\$346	\$1,223	\$2,740
State and Local Only	\$506	\$146	\$381	\$1,033

Source: NMA calculations based on IMPLAN modeling system (2010 database).

NA - not applicable. Data may not add to totals due to independent rounding.

Mining in Utah, 2010

Measure	Coal Mining	Metal Mining	Non-Metallic Mining	All Mining
Contribution to GDP (\$millions)				
Direct	\$786	\$1,371	\$536	\$2,693
Indirect and Induced	\$688	\$598	\$625	\$1,911
Total	\$1,474	\$1,969	\$1,161	\$4,604
Employment				
Direct				
Mine Workers	3,050	2,810	3,680	9,540
Support Activities	160	150	190	500
Transportation	1,280	510	2,300	4,090
Total Direct	4,490	3,470	6,170	14,130
Indirect and Induced	9,760	8,130	8,830	26,720
Total	14,250	11,600	15,000	40,850
Labor Income (\$millions)				
Direct	\$397	\$335	\$339	\$1,071
Indirect and Induced	\$405	\$354	\$365	\$1,124
Total	\$801	\$689	\$704	\$2,194
Average State Labor Income				
Mining Direct	\$88,403	\$96,542	\$54,943	\$75,791
State Average, All Industries	\$42,522	\$42,522	\$42,522	\$42,522
Tax Contributions (\$millions)				
Overall	\$372	\$407	\$234	\$1,013
State and Local Only	\$183	\$194	\$83	\$460

Source: NMA calculations based on IMPLAN modeling system (2010 database).

NA - not applicable. Data may not add to totals due to independent rounding.

Mining in Vermont, 2010

Measure	Coal Mining	Metal Mining	Non-Metallic Mining	All Mining
Contribution to GDP (\$millions)				
Direct	\$0	\$0	\$221	\$221
Indirect and Induced	\$54	\$18	\$169	\$241
Total	\$54	\$18	\$390	\$462
Employment				
Direct				
Mine Workers	0	0	1,110	1,110
Support Activities	0	0	0	0
Transportation	0	0	960	960
Total Direct	0	0	2,070	2,070
Indirect and Induced	660	170	2,370	3,200
Total	660	170	4,440	5,270
Labor Income (\$millions)				
Direct	\$0	\$0	\$116	\$116
Indirect and Induced	\$32	\$9	\$100	\$141
Total	\$32	\$9	\$216	\$257
Average State Labor Income				
Mining Direct	NA	NA	\$56,039	\$56,039
State Average, All Industries	\$41,499	\$41,499	\$41,499	\$41,499
Tax Contributions (\$millions)				
Overall	\$12	\$3	\$75	\$90
State and Local Only	\$5	\$2	\$25	\$32

Source: NMA calculations based on IMPLAN modeling system (2010 database).

NA - not applicable. Data may not add to totals due to independent rounding.

Mining in Virginia, 2010

Measure	Coal Mining	Metal Mining	Non-Metallic Mining	All Mining
Contribution to GDP (\$millions)				
Direct	\$3,477	\$148	\$1,309	\$4,934
Indirect and Induced	\$2,879	\$326	\$1,664	\$4,869
Total	\$6,356	\$474	\$2,973	\$9,803
Employment				
Direct				
Mine Workers	8,670	180	4,320	13,170
Support Activities	390	10	190	590
Transportation	5,150	90	5,100	10,340
Total Direct	14,210	280	9,610	24,100
Indirect and Induced	31,000	2,430	17,340	50,770
Total	45,210	2,710	26,950	74,870
Labor Income (\$millions)				
Direct	\$1,747	\$44	\$634	\$2,425
Indirect and Induced	\$1,693	\$175	\$983	\$2,851
Total	\$3,440	\$219	\$1,617	\$5,276
Average State Labor Income				
Mining Direct	\$122,954	\$157,143	\$65,973	\$100,629
State Average, All Industries	\$57,761	\$57,761	\$57,761	\$57,761
Tax Contributions (\$millions)				
Overall	\$1,635	\$89	\$563	\$2,287
State and Local Only	\$798	\$38	\$185	\$1,021

Source: NMA calculations based on IMPLAN modeling system (2010 database).

NA - not applicable. Data may not add to totals due to independent rounding.

Mining in Washington, 2010

Measure	Coal Mining	Metal Mining	Non-Metallic Mining	All Mining
Contribution to GDP (\$millions)				
Direct	\$34	\$396	\$766	\$1,196
Indirect and Induced	\$680	\$372	\$1,214	\$2,266
Total	\$714	\$768	\$1,980	\$3,462
Employment				
Direct				
Mine Workers	90	750	5,600	6,440
Support Activities	0	20	180	200
Transportation	60	260	2,450	2,770
Total Direct	150	1,030	8,230	9,410
Indirect and Induced	6,190	3,160	12,650	22,000
Total	6,340	4,190	20,880	31,410
Labor Income (\$millions)				
Direct	\$14	\$113	\$446	\$573
Indirect and Induced	\$401	\$197	\$702	\$1,300
Total	\$415	\$310	\$1,148	\$1,873
Average State Labor Income				
Mining Direct	\$95,867	\$109,709	\$54,192	\$60,933
State Average, All Industries	\$54,675	\$54,675	\$54,675	\$54,675
Tax Contributions (\$millions)				
Overall	\$146	\$140	\$371	\$657
State and Local Only	\$49	\$57	\$104	\$210

Source: NMA calculations based on IMPLAN modeling system (2010 database).

NA - not applicable. Data may not add to totals due to independent rounding.

Mining in West Virginia, 2010

Measure	Coal Mining	Metal Mining	Non-Metallic Mining	All Mining
Contribution to GDP (\$millions)				
Direct	\$9,630	\$5	\$308	\$9,943
Indirect and Induced	\$4,161	\$43	\$249	\$4,453
Total	\$13,791	\$48	\$557	\$14,396
Employment				
Direct				
Mine Workers	35,970	20	1,230	37,220
Support Activities	1,290	0	40	1,330
Transportation	15,930	20	1,120	17,070
Total Direct	53,190	40	2,390	55,620
Indirect and Induced	58,000	390	3,320	61,710
Total	111,190	430	5,710	117,330
Labor Income (\$millions)				
Direct	\$4,827	\$3	\$144	\$4,974
Indirect and Induced	\$2,409	\$22	\$146	\$2,577
Total	\$7,236	\$25	\$290	\$7,551
Average State Labor Income				
Mining Direct	\$90,745	\$75,000	\$60,251	\$89,424
State Average, All Industries	\$43,627	\$43,627	\$43,627	\$43,627
Tax Contributions (\$millions)				
Overall	\$3,826	\$10	\$107	\$3,943
State and Local Only	\$2,007	\$5	\$39	\$2,051

Source: NMA calculations based on IMPLAN modeling system (2010 database).

NA - not applicable. Data may not add to totals due to independent rounding.

Mining in Wisconsin, 2010

Measure	Coal Mining	Metal Mining	Non-Metallic Mining	All Mining
Contribution to GDP (\$millions)				
Direct	\$0	\$0	\$918	\$918
Indirect and Induced	\$479	\$156	\$1,076	\$1,711
Total	\$479	\$156	\$1,994	\$2,629
Employment				
Direct				
Mine Workers	100	0	4,300	4,400
Support Activities	0	0	140	140
Transportation	0	0	3,540	3,540
Total Direct	100	0	7,980	8,080
Indirect and Induced	5,610	1,360	14,260	21,230
Total	5,710	1,360	22,240	29,310
Labor Income (\$millions)				
Direct	\$9	\$0	\$510	\$519
Indirect and Induced	\$283	\$80	\$631	\$994
Total	\$292	\$80	\$1,141	\$1,513
Average State Labor Income				
Mining Direct	\$88,600	NA	\$63,910	\$64,215
State Average, All Industries	\$43,760	\$43,760	\$43,760	\$43,760
Tax Contributions (\$millions)				
Overall	\$110	\$30	\$405	\$545
State and Local Only	\$46	\$14	\$142	\$202

Source: NMA calculations based on IMPLAN modeling system (2010 database).

NA - not applicable. Data may not add to totals due to independent rounding.

Mining in Wyoming, 2010

Measure	Coal Mining	Metal Mining	Non-Metallic Mining	All Mining
Contribution to GDP (\$millions)				
Direct	\$3,160	\$0	\$1,368	\$4,528
Indirect and Induced	\$1,125	\$20	\$594	\$1,739
Total	\$4,285	\$20	\$1,962	\$6,267
Employment				
Direct				
Mine Workers	8,960	0	4,490	13,450
Support Activities	240	0	120	360
Transportation	6,420	0	6,360	12,780
Total Direct	15,620	0	10,970	26,590
Indirect and Induced	15,430	150	8,230	23,810
Total	31,050	150	19,200	50,400
Labor Income (\$millions)				
Direct	\$1,635	\$0	\$917	\$2,552
Indirect and Induced	\$615	\$10	\$322	\$947
Total	\$2,250	\$10	\$1,239	\$3,499
Average State Labor Income				
Mining Direct	\$104,673	NA	\$83,592	\$95,976
State Average, All Industries	\$46,277	\$46,277	\$46,277	\$46,277
Tax Contributions (\$millions)				
Overall	\$1,115	\$4	\$398	\$1,517
State and Local Only	\$538	\$1	\$117	\$656

Source: NMA calculations based on IMPLAN modeling system (2010 database).

NA - not applicable. Data may not add to totals due to independent rounding.

National Mining Association
101 Constitution Avenue, NW
Suite 500 East
Washington, D.C. 20001
(202) 463-2600 | www.nma.org