



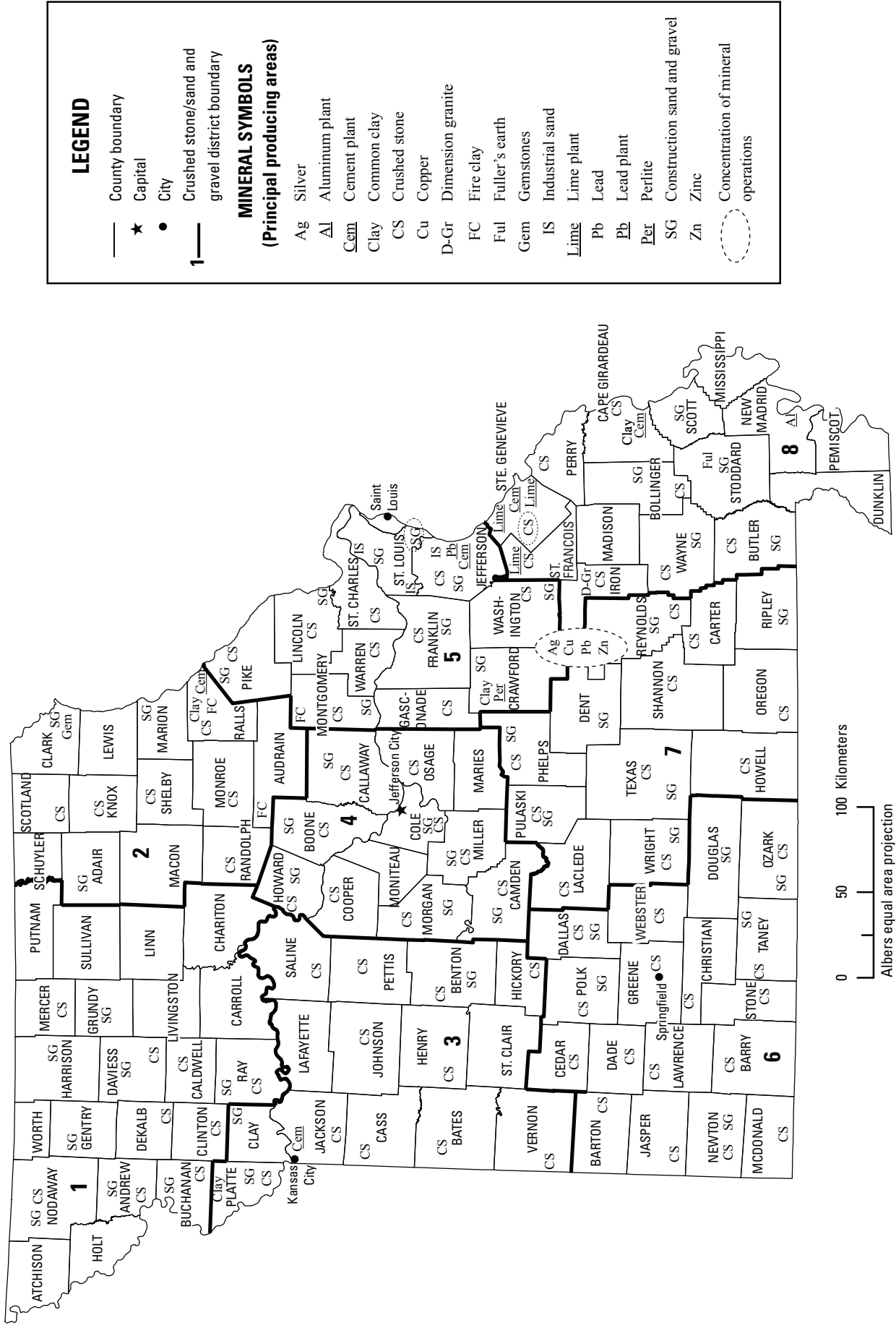
# 2012–2013 Minerals Yearbook

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**MISSOURI [ADVANCE RELEASE]**

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# MISSOURI



# THE MINERAL INDUSTRY OF MISSOURI

This chapter has been prepared under a Memorandum of Understanding between the U.S. Geological Survey and the Missouri Department of Natural Resources, Division of Geology and Land Survey for collecting information on all nonfuel minerals.

In 2013, the value of the nonfuel mineral production<sup>1</sup> in the State of Missouri was \$2.41 billion, 3.2% of the total U.S. nonfuel mineral production, ranking it 10th in the Nation. In 2012, the corresponding value was \$2.28 billion, 3.0% of the U.S. total nonfuel mineral production, again ranking it 10th among the 50 States. In 2013, on a per capita basis, nonfuel mineral production in Missouri had a value of \$398 compared with the national average of \$238. In 2012, the per capita value was \$377 compared with the national average of \$241.

The value of nonfuel mineral production in Missouri for the years 2006 through 2013 was as follows (in billions of dollars): \$2.01 (2006), \$2.28 (2007), \$2.06 (2008), \$1.84 (2009), \$2.01 (2010), \$ 2.20 (2011), \$2.28 (2012), and \$2.41 (2013).

In 2013, there was an average of 2,560 employees in nonfuel mineral mines in Missouri and there were 2,657 employees in mills and preparation plants. In 2012, the corresponding numbers were 2,613 in nonfuel mineral mines and 2,358 in mills and preparation plants (U.S. Mine Safety and Health Administration, 2013, p. 11; 2014, p. 11). In 2013, the average annual wage in Missouri for all mining was \$66,810 compared with \$43,441 for all industries. In 2012, the corresponding figures were \$69,210 and \$43,134, respectively (National Mining Association, unpub. data, February 4, 2016).

In 2013 and 2012, on the basis of production quantity, Missouri was ranked first in the production of fire clays, lead, lime, montmorillonite, and tripoli out of 3, 3, 33, 10, and 3 producing States, respectively. The State was third in the production of crushed stone, portland cement, and zinc out of 50, 34, and 4 producing States, respectively. In 2013 and 2012, Missouri also produced common clays, construction and industrial sand and gravel, copper ore, dimension stone, masonry cement, natural gemstones, and silver.

## Commodity Review

The following information has been extracted from the U.S. Geological Survey (USGS) and other sources. Non-USGS data may differ from USGS data, which are based on company responses to USGS surveys and estimation for nonrespondents. The USGS withheld some data to avoid disclosing company proprietary data.

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<sup>1</sup>The terms “nonfuel mineral production” and related “values” encompass variations in meaning, depending upon the mineral products. Production may be measured by mine shipments, mineral commodity sales, or marketable production (including consumption by producers) as is applicable to the individual mineral commodity.

All USGS mineral production data published in this chapter are those available as of February 2016. Data in this report are rounded to three significant digits and percentages are calculated from unrounded data. All USGS Mineral Industry Surveys and USGS Minerals Yearbook chapters—mineral commodity, State, and country—can be retrieved at <http://minerals.usgs.gov/minerals>.

## Metals

Mineral industry activity with respect to metals was as follows:

**Lead.**—Lead was mined in the Viburnum Trend in southeast Missouri (Iron, Reynolds, and Washington Counties) by the Doe Run Co. Some of the concentrates were processed at the company’s primary smelter in Herculaneum, MO; others were exported directly to customers. The facility closed at yearend 2013. Doe Run operated a secondary lead refinery in Boss, MO, which produced refined lead primarily from scrapped lead-acid batteries.

## Industrial Minerals

**Cement.**—In September 2012, LaFarge sold its Sugar Creek plant to Eagle Materials, along with its ready-mix concrete and aggregate operations in Kansas City, MO (Fox, 2012).

**Sand and Gravel, Construction.**—In 2013, there were 81 active construction sand and gravel operations, including 28 dredging operations. In 2012, there were 78 operations with 28 dredging operations.

**Stone, Crushed.**—In 2013, there were 200 active crushed stone operations with 209 quarries and 195 processing plants. In 2012, there were 201 operations, 205 quarries, and 197 processing plants. Most of the rock mined was limestone and dolomite, but granite and traprock were also produced. Specialty Granules, Inc. (Hagerstown, MD; formerly ISP Minerals Inc.) and CertainTeed Corp. (Valley Forge, PA) produced crushed rhyolite-trachyte roofing granules from their mines and processing facilities in Iron and Wayne Counties, respectively. Graniteville Quarry LLC (Ironton, MO) produced crushed granite in Iron County. Dillon Llewellyn LLC and Iron Mountain Trap Rock Co. (Maryland Heights, MO; a subsidiary of Fred Weber, Inc.) produced a dark-colored, crushed rhyolite in Iron and St. Francois Counties, respectively.

## References Cited

- Fox, Jeff, 2012, Sugar Creek Lafarge plant sold to Eagle Materials: The Examiner [Independence, MO], September 27. (Accessed June 9, 2016, at <http://www.examiner.net/article/20120927/NEWS/309279937>.)
- U.S. Mine Safety and Health Administration, [2013], Mine injury and worktime, quarterly, January–December 2012, Final, closeout edition, 33 p. (Accessed February 4, 2016, at [http://arlweb.msha.gov/Stats/Part50/WQ/MasterFiles/MIWQ%20Master\\_20125.pdf](http://arlweb.msha.gov/Stats/Part50/WQ/MasterFiles/MIWQ%20Master_20125.pdf).)
- U.S. Mine Safety and Health Administration, [2014], Mine injury and worktime, quarterly, January–December 2013, Final, closeout edition, 34 p. (Accessed February 4, 2016, at [http://arlweb.msha.gov/Stats/Part50/WQ/MasterFiles/MIWQ%20Master\\_20135.pdf](http://arlweb.msha.gov/Stats/Part50/WQ/MasterFiles/MIWQ%20Master_20135.pdf).)

TABLE 1  
NONFUEL MINERAL PRODUCTION IN MISSOURI<sup>1,2</sup>

(Thousand metric tons and thousand dollars)

Mineral	2011		2012		2013	
	Quantity	Value	Quantity	Value	Quantity	Value
Cement, portland	7,050	559,000 <sup>e</sup>	7,950	635,000 <sup>e</sup>	8,220	703,000 <sup>e</sup>
Clays, common	431	3,370	409	3,190	344	1,660
Sand and gravel:						
Construction	9,340 <sup>r</sup>	64,800 <sup>r</sup>	9,310	62,500	12,300	85,000
Industrial	1,970	101,000	1,390	76,000	1,990	127,000
Stone, crushed	64,100 <sup>r</sup>	566,000 <sup>r</sup>	66,600	593,000	68,000	594,000
Combined values of cement (masonry), clays (fire and fuller's earth), copper, gemstones (natural), lead, lime, silver, stone (dimension), tripoli, and zinc	XX	903,000 <sup>r</sup>	XX	913,000	XX	895,000
Total	XX	2,200,000	XX	2,280,000	XX	2,410,000

<sup>e</sup>Estimated. <sup>r</sup>Revised. XX Not applicable.

<sup>1</sup>Production as measured by mine shipments, sales, or marketable production (including consumption by producers).

<sup>2</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

TABLE 2  
MISSOURI: CRUSHED STONE SOLD OR USED IN THE UNITED STATES, BY TYPE<sup>1</sup>

Type	2012				2013			
	Number of quarries	Quantity (thousand metric tons)	Value (thousands)	Unit value	Number of quarries	Quantity (thousand metric tons)	Value (thousands)	Unit value
Limestone <sup>2</sup>	177	61,400	\$479,000	\$7.80	181	63,100	\$487,000	\$7.72
Dolomite	19	1,860	15,500	8.35	19	1,700	13,800	8.15
Marble	1	21	188	9.11	1	4	35	8.82
Granite	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)
Traprock	1	1,130	10,200	9.11	1	995	9,060	9.11
Sandstone and quartzite <sup>4</sup>	2	839	9,230	11.00	2	912	9,990	10.96
Miscellaneous stone	5	1,330	79,300	59.78	5	1,290	74,400	57.50
Total or average	XX	66,600	593,000	8.91	XX	68,000	594,000	8.74

XX Not applicable.

<sup>1</sup>Data are rounded to no more than three significant digits, except unit value; may not add to totals shown.

<sup>2</sup>Includes limestone-dolomite reported with no distinction between the two kinds of stone.

<sup>3</sup>Withheld to avoid disclosing company proprietary data; included with "Miscellaneous stone."

<sup>4</sup>Includes sandstone-quartzite reported with no distinction between the two kinds of stone.

TABLE 3  
MISSOURI: CRUSHED STONE SOLD OR USED BY PRODUCERS, BY USE<sup>1</sup>

Use	2012			2013		
	Quantity (thousand metric tons)	Value (thousands)	Unit value	Quantity (thousand metric tons)	Value (thousands)	Unit value
<b>Construction:</b>						
Coarse aggregate (+1½ inch):						
Macadam	W	W	W	W	W	W
Riprap and jetty stone	3,660	\$29,200	\$7.97	2,710	\$17,900	\$6.61
Filter stone	363	2,160	5.96	135	1,300	9.63
Unspecified coarse aggregate	207	1,630	7.85	293	3,190	10.89
Coarse aggregate, graded:						
Concrete aggregate, coarse	1,360	12,300	9.02	1,690	14,000	8.28
Bituminous aggregate, coarse	728	6,710	9.21	360	2,740	7.59
Bituminous surface-treatment aggregate	67	385	5.74	W	W	W
Railroad ballast	518	3,720	7.18	14	73	5.28
Unspecified graded coarse aggregate	167	1,380	8.29	1,320	14,800	11.22
Fine aggregate (-¾ inch):						
Stone sand, concrete	141	1,450	10.29	11	74	6.68
Stone sand, bituminous mix or seal	87	854	9.82	32	270	8.49
Screening, undesignated	474	1,640	3.47	324	1,440	4.43
Unspecified fine aggregate	291	2,290	7.87	354	3,410	9.64
Coarse and fine aggregates:						
Graded road base or subbase	3,190	18,300	5.72	3,710	19,900	5.37
Unpaved road surface	693	5,080	7.33	495	2,780	5.60
Terrazzo and exposed aggregate	W	W	W	W	W	W
Crusher run or fill or waste	407	2,880	7.07	595	4,020	6.75
Roofing granules	W	W	W	W	W	W
Unspecified coarse and fine aggregates	276	2,030	7.35	1,550	16,200	10.44
Unspecified and other construction materials	194	1,280	6.58	99	836	8.46
<b>Agricultural:</b>						
Agricultural Limestone	878	4,530	5.16	874	5,230	5.98
Poultry grit and mineral food	--	--	--	8	41	5.15
Unspecified and other agricultural uses	--	--	--	W	W	W
<b>Chemical and metallurgical:</b>						
Cement manufacture	6,970	28,200	4.04	8,570	41,400	4.83
Lime manufacture	W	W	W	W	W	W
Flux stone	W	W	W	--	--	--
Chemical Stone	W	W	W	--	--	--
Sulfur oxide removal	206	1,590	7.72	--	--	--
<b>Special:</b>						
Asphalt fillers or extenders	85	425	5.00	98	493	5.00
Other miscellaneous uses and specified uses not listed	828	9,130	11.02	901	9,930	11.02
<b>Unspecified:<sup>2</sup></b>						
Reported	8,470	75,600	8.94	12,800	116,000	9.01
Estimated	34,200	298,000	8.70	28,900	255,000	8.83
Total or average	66,600	593,000	8.91	68,000	594,000	8.74

W Withheld to avoid disclosing company proprietary data; included in "Total." -- Zero.

<sup>1</sup>Data are rounded to no more than three significant digits, except unit value; may not add to totals shown.

<sup>2</sup>Reported and estimated production without a breakdown by end use.

TABLE 4  
MISSOURI: CRUSHED STONE SOLD OR USED BY PRODUCERS IN 2012, BY USE AND DISTRICT<sup>1</sup>

(Thousand metric tons and thousand dollars)

Use	District 1		District 2		District 3	
	Quantity	Value	Quantity	Value	Quantity	Value
Construction:						
Coarse aggregate (+1½ inch) <sup>2</sup>	W	W	W	W	W	W
Coarse aggregate, graded <sup>3</sup>	--	--	W	W	123	1,340
Fine aggregate (-¾ inch) <sup>4</sup>	--	--	W	W	45	360
Coarse and fine aggregates <sup>5</sup>	--	--	W	W	198	1,480
Other construction materials	--	--	--	--	--	--
Agricultural <sup>6</sup>	W	W	W	W	--	--
Chemical and metallurgical <sup>7</sup>	--	--	--	--	W	W
Special <sup>8</sup>	--	--	--	--	--	--
Other miscellaneous uses and specified uses not listed <sup>9</sup>	--	--	--	--	--	--
Unspecified: <sup>10</sup>						
Reported	8	72	--	--	4,270	38,800
Estimated	1,800	16,200	2,640	17,200	4,530	34,900
Total	1,880	16,600	2,810	18,100	9,290	78,700
Use	District 4		District 5		District 6	
	Quantity	Value	Quantity	Value	Quantity	Value
Construction:						
Coarse aggregate (+1½ inch) <sup>2</sup>	W	W	283	2,020	67	709
Coarse aggregate, graded <sup>3</sup>	105	982	W	W	W	W
Fine aggregate (-¾ inch) <sup>4</sup>	W	W	W	W	519	4,470
Coarse and fine aggregates <sup>5</sup>	W	W	745	4,870	1,020	7,420
Other construction materials	--	--	36	332	W	W
Agricultural <sup>6</sup>	W	W	W	W	W	W
Chemical and metallurgical <sup>7</sup>	--	--	W	W	--	--
Special <sup>8</sup>	--	--	--	--	--	--
Other miscellaneous uses and specified uses not listed <sup>9</sup>	--	--	828	9,130	--	--
Unspecified: <sup>10</sup>						
Reported	833	7,580	2,650	24,100	699	6,360
Estimated	4,160	37,900	3,920	33,700	4,460	40,400
Total	5,510	49,200	10,900	85,400	7,590	67,300
Use	District 7		District 8		Unspecified districts	
	Quantity	Value	Quantity	Value	Quantity	Value
Construction:						
Coarse aggregate (+1½ inch) <sup>2</sup>	W	W	W	W	--	--
Coarse aggregate, graded <sup>3</sup>	W	W	1,530	10,800	--	--
Fine aggregate (-¾ inch) <sup>4</sup>	W	W	W	W	--	--
Coarse and fine aggregates <sup>5</sup>	W	W	2,660	84,700	--	--
Other construction materials	--	--	113	560	--	--
Agricultural <sup>6</sup>	W	W	W	W	--	--
Chemical and metallurgical <sup>7</sup>	--	--	6,820	31,000	--	--
Special <sup>8</sup>	--	--	85	425	--	--
Other miscellaneous uses and specified uses not listed <sup>9</sup>	--	--	--	--	--	--
Unspecified: <sup>10</sup>						
Reported	--	--	--	--	--	--
Estimated	853	7,770	10,600	92,900	1,280	15,100
Total	1,230	10,400	26,100	252,000	1,280	15,100

W Withheld to avoid disclosing company proprietary data; included in "Total." -- Zero.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to tables shown.

<sup>2</sup>Includes macadam, riprap and jetty stone, filter stone, and unspecified coarse aggregate.

<sup>3</sup>Includes concrete aggregate (coarse), bituminous aggregate (coarse), bituminous surface-treatment aggregate, railroad ballast, and unspecified graded coarse aggregate.

<sup>4</sup>Includes stone sand (concrete), stone sand (bituminous mix or seal), screening (undesignated), and unspecified fine aggregate.

<sup>5</sup>Includes graded road base or subbase, unpaved road surface, terrazzo and exposed aggregate, crusher run, and unspecified coarse and fine aggregates.

<sup>6</sup>Includes agricultural limestone.

<sup>7</sup>Includes cement manufacture, lime manufacture, flux stone, chemical stone, and sulfur oxide removal.

<sup>8</sup>Includes asphalt fillers or extenders and roofing granules.

<sup>9</sup>Includes drain fields, waste material, lightweight aggregate (slate), pipe bedding, refractory stone (including ganister), and other miscellaneous uses.

<sup>10</sup>Reported and estimated production without a breakdown by end use.

TABLE 5  
MISSOURI: CRUSHED STONE SOLD OR USED BY PRODUCERS IN 2013, BY USE AND DISTRICT<sup>1</sup>

(Thousand metric tons and thousand dollars)

Use	District 1		District 2		District 3	
	Quantity	Value	Quantity	Value	Quantity	Value
Construction:						
Coarse aggregate (+1½ inch) <sup>2</sup>	--	--	W	W	W	W
Coarse aggregate, graded <sup>3</sup>	--	--	W	W	W	W
Fine aggregate (-¾ inch) <sup>4</sup>	--	--	W	W	66	451
Coarse and fine aggregates <sup>5</sup>	--	--	W	W	373	2,770
Other construction materials	--	--	--	--	--	--
Agricultural <sup>6</sup>	W	W	W	W	W	W
Chemical and metallurgical <sup>7</sup>	--	--	W	W	1,810	8,000
Special <sup>8</sup>	--	--	--	--	--	--
Other miscellaneous uses and specified uses not listed <sup>9</sup>	--	--	--	--	--	--
Unspecified: <sup>10</sup>						
Reported	W	W	W	W	3,800	34,800
Estimated	1,580	13,600	901	7,950	1,590	14,000
Total	1,810	15,000	2,030	14,700	8,710	70,100
Use	District 4		District 5		District 6	
	Quantity	Value	Quantity	Value	Quantity	Value
Construction:						
Coarse aggregate (+1½ inch) <sup>2</sup>	W	W	134	1,290	68	748
Coarse aggregate, graded <sup>3</sup>	W	W	123	958	W	W
Fine aggregate (-¾ inch) <sup>4</sup>	W	W	56	386	298	2,450
Coarse and fine aggregates <sup>5</sup>	W	W	1,220	8,790	997	6,560
Other construction materials	--	--	--	--	60	521
Agricultural <sup>6</sup>	W	W	W	W	W	W
Chemical and metallurgical <sup>7</sup>	--	--	--	--	--	--
Special <sup>8</sup>	--	--	--	--	--	--
Other miscellaneous uses and specified uses not listed <sup>9</sup>	--	--	W	W	--	--
Unspecified: <sup>10</sup>						
Reported	W	W	3,200	29,300	195	1,750
Estimated	2,630	23,200	6,000	40,600	5,400	47,300
Total	5,190	44,200	11,600	91,300	7,780	66,800
Use	District 7		District 8		Unspecified districts	
	Quantity	Value	Quantity	Value	Quantity	Value
Construction:						
Coarse aggregate (+1½ inch) <sup>2</sup>	36	330	W	W	27	395
Coarse aggregate, graded <sup>3</sup>	W	W	520	3,240	372	4,420
Fine aggregate (-¾ inch) <sup>4</sup>	W	W	146	488	44	614
Coarse and fine aggregates <sup>5</sup>	W	W	W	W	593	7,360
Other construction materials	39	315	--	--	--	--
Agricultural <sup>6</sup>	W	W	W	W	131	1,490
Chemical and metallurgical <sup>7</sup>	--	--	7,510	41,400	--	--
Special <sup>8</sup>	--	--	98	493	--	--
Other miscellaneous uses and specified uses not listed <sup>9</sup>	--	--	--	--	--	--
Unspecified: <sup>10</sup>						
Reported	--	--	4,520	40,700	--	--
Estimated	731	6,440	10,000	101,000	91	805
Total	1,150	9,450	28,400	267,000	1,260	15,100

W Withheld to avoid disclosing company proprietary data; included in "Total." -- Zero.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>Includes macadam, riprap and jetty stone, filter stone, and other coarse aggregates.

<sup>3</sup>Includes concrete aggregate (coarse), bituminous aggregate (coarse), bituminous surface-treatment aggregate, railroad ballast, and unspecified graded coarse aggregate.

<sup>4</sup>Includes stone sand (concrete), stone sand (bituminous mix or seal), screening (undesignated), and unspecified fine aggregate.

<sup>5</sup>Includes graded road base or subbase, unpaved road surface, terrazzo and exposed aggregate, crusher run, and unspecified coarse and fine aggregates.

<sup>6</sup>Includes agricultural limestone.

<sup>7</sup>Includes cement manufacture, lime manufacture, flux stone, chemical stone, and sulfur oxide removal.

<sup>8</sup>Includes asphalt fillers or extenders and roofing granules.

<sup>9</sup>Includes drain fields, waste material, lightweight aggregate (slate), pipe bedding, refractory stone (including ganister), and other miscellaneous uses.

<sup>10</sup>Reported and estimated production without a breakdown by end use.

TABLE 6  
 MISSOURI: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 2012,  
 BY MAJOR USE CATEGORY<sup>1</sup>

Use	Quantity (thousand metric tons)	Value (thousands)	Unit value
Concrete aggregate (including concrete sand)	3,020	\$20,400	\$6.76
Plaster and gunite sands	50	\$403	\$8.06
Concrete products (blocks, bricks, pipe, decorative, and so forth)	60	701	11.68
Asphaltic concrete aggregates and other bituminous mixtures	207	1,030	4.98
Road base coverings	69	367	5.32
Fill	236	1,060	4.49
Other miscellaneous uses <sup>2</sup>	674	5,310	7.88
Unspecified: <sup>3</sup>			
Reported	85	776	9.13
Estimated	4,910	32,500	6.62
Total or average	9,310	62,500	6.71

<sup>1</sup>Data are rounded to no more than three significant digits, except unit value; may not add to totals shown.

<sup>2</sup>Includes roofing granules, and snow and ice control.

<sup>3</sup>Reported and estimated production without a breakdown by end use.

TABLE 7  
 MISSOURI: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 2013,  
 BY MAJOR USE CATEGORY<sup>1</sup>

Use	Quantity (thousand metric tons)	Value (thousands)	Unit value
Concrete aggregate (including concrete sand) <sup>2</sup>	2,420	\$16,400	\$6.76
Concrete products (blocks, bricks, pipe, decorative, and so forth)	88	881	10.01
Asphaltic concrete aggregates and other bituminous mixtures	8	61	7.63
Road base coverings	75	811	10.81
Fill	51	279	5.47
Other miscellaneous uses <sup>3</sup>	40	594	14.85
Unspecified: <sup>4</sup>			
Reported	746	4,740	6.35
Estimated	8,890	61,300	6.89
Total or average	12,300	85,000	6.90

<sup>1</sup>Data are rounded to no more than three significant digits, except unit value; may not add to totals shown.

<sup>2</sup>Includes plaster and gunite sands.

<sup>3</sup>Includes golf course, roofing granules, and snow and ice control.

<sup>4</sup>Reported and estimated production without a breakdown by end use.



TABLE 8  
MISSOURI: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 2012, BY USE AND DISTRICT<sup>1</sup>

(Thousand metric tons and thousand dollars)

Use	District 1		District 2		District 3	
	Quantity	Value	Quantity	Value	Quantity	Value
Concrete aggregate and concrete products <sup>2</sup>	W	W	W	W	W	W
Asphaltic concrete aggregates and road base materials	W	W	4	36	--	--
Fill	2	11	W	W	W	W
Other miscellaneous uses <sup>3</sup>	142	932	--	--	--	--
Unspecified: <sup>4</sup>						
Reported	--	--	23	228	27	135
Estimated	575	3,940	188	1,290	1,010	6,920
Total	753	5,110	290	2,210	1,670	11,400
Use	District 4		District 5		District 6	
	Quantity	Value	Quantity	Value	Quantity	Value
Concrete aggregate and concrete products <sup>2</sup>	W	W	W	W	W	W
Asphaltic concrete aggregates and road base materials	W	W	W	W	--	--
Fill	18	88	4	24	--	--
Other miscellaneous uses <sup>3</sup>	W	W	W	W	W	W
Unspecified: <sup>4</sup>						
Reported	--	--	21	277	--	--
Estimated	90	615	2,350	15,000	181	1,240
Total	1,130	7,980	4,190	27,500	194	1,360
Use	District 7		District 8			
	Quantity	Value	Quantity	Value		
Concrete aggregate and concrete products <sup>2</sup>	W	W	W	W		
Asphaltic concrete aggregates and road base materials	W	W	W	W		
Fill	1	3	20	84		
Other miscellaneous uses <sup>3</sup>	W	W	--	--		
Unspecified: <sup>4</sup>						
Reported	(5)	1	14	135		
Estimated	402	2,720	111	759		
Total	508	3,680	579	3,360		

W Withheld to avoid disclosing company proprietary data; included in "Total." -- Zero.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>Includes plaster and gunite sands.

<sup>3</sup>Includes roofing granules, and snow and ice control.

<sup>4</sup>Reported and estimated production without a breakdown by end use.

<sup>5</sup>Less than 1/2 unit.

TABLE 9  
MISSOURI: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 2013, BY USE AND DISTRICT<sup>1</sup>

(Thousand metric tons and thousand dollars)

Use	District 1		District 2		District 3	
	Quantity	Value	Quantity	Value	Quantity	Value
Concrete aggregate and concrete products <sup>2</sup>	--	--	W	W	--	--
Asphaltic concrete aggregates and road base materials	--	--	4	23	--	--
Fill	--	--	W	W	--	--
Other miscellaneous uses <sup>3</sup>	--	--	--	--	--	--
Unspecified: <sup>4</sup>						
Reported	--	--	2	42	--	--
Estimated	644	4,510	199	1,420	1,970	13,800
Total	644	4,510	267	2,050	1,970	13,800
Use	District 4		District 5		District 6	
	Quantity	Value	Quantity	Value	Quantity	Value
Concrete aggregate and concrete products <sup>2</sup>	W	W	W	W	W	W
Asphaltic concrete aggregates and road base materials	W	W	W	W	--	--
Fill	(5)	2	11	87	--	--
Other miscellaneous uses <sup>3</sup>	W	W	W	W	W	W
Unspecified: <sup>4</sup>						
Reported	--	--	58	371	--	--
Estimated	2,020	13,600	3,250	22,300	164	1,170
Total	2,040	13,800	5,460	37,700	173	1,270
Use	District 7		District 8 and unspecified districts			
	Quantity	Value	Quantity	Value		
Concrete aggregate and concrete products <sup>2</sup>	W	W	W	W		
Asphaltic concrete aggregates and road base materials	W	W	W	W		
Fill	16	81	17	76		
Other miscellaneous uses <sup>3</sup>	--	--	--	--		
Unspecified: <sup>4</sup>						
Reported	--	--	685	4,330		
Estimated	534	3,640	118	843		
Total	579	4,180	1,190	7,700		

W Withheld to avoid disclosing company proprietary data; included in "Total." -- Zero.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>Includes plaster and gunite sands.

<sup>3</sup>Includes golf course, roofing granules, and snow and ice control.

<sup>4</sup>Reported and estimated production without a breakdown by end use.

<sup>5</sup>Less than ½ unit.