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# The Mineral Industry of Nebraska

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# 2012–2013 Minerals Yearbook

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**NEBRASKA [ADVANCE RELEASE]**

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# THE MINERAL INDUSTRY OF NEBRASKA

This chapter has been prepared under a Memorandum of Understanding between the U.S. Geological Survey and the Nebraska Geological Survey, at the University of Nebraska-Lincoln, for collecting information on all nonfuel minerals.

In 2013, the value of the nonfuel mineral production<sup>1</sup> in the State of Nebraska was \$166 million,<sup>2</sup> 0.2% of the total U.S. nonfuel mineral production, ranking it 39th in the country. In 2012, the corresponding value was \$160 million,<sup>2</sup> 0.2% of the Nation's total nonfuel mineral production, ranking it 36th among the 50 States. In 2013, on a per capita basis, nonfuel mineral production in Nebraska in 2013 had a value of \$89 compared with the national average of \$238. In 2012, the per capita value was \$86 compared with the national average of \$241.

The value of nonfuel mineral production in Nebraska for the years 2006 through 2013 was as follows (in millions of dollars): \$130<sup>2</sup> (2006), \$147<sup>2</sup> (2007), \$153<sup>2</sup> (2008), \$248 (2009), \$225 (2010), \$146<sup>2</sup> (2011), \$160<sup>2</sup> (2012), and \$166<sup>2</sup> (2013).

In 2013, there were 760 employees in nonfuel mineral mines in Nebraska and 163 in mills and preparation plants. In 2012, the corresponding numbers were 815 in nonfuel mineral mines and 174 in mills and preparation plants (U.S. Mine Safety and Health Administration, 2013, p. 12; 2014, p. 12). In 2013, the average annual wage in Nebraska for all mining was \$51,070 compared with \$39,354 for all industries. In 2012, the corresponding figures were \$48,296 and \$38,660, respectively (National Mining Association, unpub. data, February 4, 2016).

In 2012–13, the leading publishable mineral commodities in Nebraska, in descending order of production value, were construction sand and gravel and crushed stone. Production values for common clay, industrial sand and gravel, lime, and portland cement were withheld at the State level to prevent disclosing company proprietary data.

Nebraska had one active, integrated cement plant of the 103 plants active in the United States in 2013 and 106 plants active in 2012. Production of the Nebraska plant, combined with that of the four additional plants in neighboring States of Iowa and South Dakota, increased about 1% in 2013; the U.S. total cement production increased about 3.5% in 2013.

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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 over the Internet at <http://minerals.usgs.gov/minerals>.

<sup>2</sup>Partial total; excludes values that must be withheld to avoid disclosing company proprietary data.

One lime plant was active in Nebraska. It did not sell lime but rather produced high-calcium quicklime for internal consumption in the processing of sugar beets to produce sugar. In the Midwest,<sup>3</sup> 6.7 million metric tons (Mt) of quicklime was produced in 2013, an increase of almost 2% from 2012; production in the United States as a whole increased slightly more than 2% to 16.9 Mt in 2013.

One industrial sand company was operating in Nebraska in 2012 and 2013, which had opened in 2008, and produced proppant sand used in hydraulic fracturing. The Nebraska company produced three grades of finished sand and shipped it via train from Nebraska to Pennsylvania (Progressive Railroading, 2012).

Two companies produced common clay from five pits for the production of bricks. Nebraska's production, combined with that from neighboring States North Dakota and South Dakota, increased by almost 3% while the U.S. total decreased by more than 7% in 2013.

Nebraska's official gemstone, blue chalcedony or blue agate, was used in jewelry and was mined in the northwestern part of the State from silt and claystone deposits (State of Nebraska, 2016). No metals were mined in Nebraska, but Nebraska had one active steel plant.

## References Cited

- Progressive Railroading, 2012, Preferred Sands provides unit train service to Pennsylvania; Musket proposes pipeline-by-rail facility in Colorado: Rail News—Rail Industry Trends, January 12. (Accessed February 25, 2016, at [http://www.progressiverailroading.com/rail\\_industry\\_trends/news/Preferred-Sands-provides-unit-train-service-to-Pennsylvania-Musket-proposes-pipelinebyrail-facility-in-Colorado--29476](http://www.progressiverailroading.com/rail_industry_trends/news/Preferred-Sands-provides-unit-train-service-to-Pennsylvania-Musket-proposes-pipelinebyrail-facility-in-Colorado--29476).)
- State of Nebraska, 2016, State gemstone: Nebraska Secretary of State Web site. (Accessed February 29, 2016, at <http://www.sos.ne.gov/symbols/gem.html>.)
- U.S. Mine Safety and Health Administration, [2013], Mine injury and worktime, quarterly, January–December 2012, Final, closeout edition, 33 p. (Accessed February 8, 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 on February 8, 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).)

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<sup>3</sup>Region includes Indiana, Iowa, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin.

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

(Thousand metric tons and thousand dollars)

Mineral	2011		2012		2013	
	Quantity	Value	Quantity	Value	Quantity	Value
Gemstones, natural	NA	4	NA	4	NA	4
Sand and gravel, construction	13,000 <sup>r</sup>	76,300 <sup>r</sup>	12,900	84,800	13,200	89,100
Stone, crushed	7,420 <sup>r</sup>	70,000 <sup>r</sup>	6,650	75,600	6,590	77,000
Combined values of cement, clays (common), lime, sand and gravel [industrial]	XX	W	XX	W	XX	W
Total	XX	146,000 <sup>r</sup>	XX	160,000	XX	166,000

<sup>r</sup>Revised. NA Not available. W Withheld to avoid disclosing company proprietary data; excluded from "Total." 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  
NEBRASKA: 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>	8	6,550	\$72,300	\$11.05	8	6,480	\$73,600	\$11.35
Sandstone and quartzite <sup>3</sup>	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
Miscellaneous stone	2	99	3,260	33.03	2	107	3,460	32.18
Total or average	XX	6,650	75,600	11.37	XX	6,590	77,000	11.69

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

<sup>4</sup>Withheld to avoid disclosing company proprietary data; included with "Miscellaneous stone."

TABLE 3  
NEBRASKA: 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
Construction:						
Coarse aggregate (+1½ inch):						
Riprap and jetty stone	W	W	W	--	--	--
Unspecified coarse aggregate	12	\$167	\$13.95	15	\$206	\$ 14.05
Coarse aggregate, graded:						
Concrete aggregate, coarse	--	--	--	W	W	W
Bituminous aggregate, coarse	--	--	--	W	W	W
Unspecified graded coarse aggregate	--	--	--	95	1,340	14.03
Fine aggregate (-¾ inch):						
Screening, undesignated	55	340	6.18	56	341	6.14
Unspecified fine aggregate	2	28	14.07	--	--	--
Coarse and fine aggregates:						
Graded road base or subbase	--	--	--	W	W	W
Unpaved road surface	72	963	13.37	--	--	--
Crusher run or fill or waste	W	W	W	--	--	--
Unspecified coarse and fine aggregates	--	--	--	W	W	W
Agricultural:						
Agricultural Limestone	W	W	W	W	W	W
Unspecified and other agricultural uses	W	W	W	W	W	W
Chemical and metallurgical:						
Cement manufacture	1,050	9,980	9.52	W	W	W
Other miscellaneous uses and specified uses not listed						
Unspecified: <sup>2</sup>						
Reported	4,040	45,100	11.15	W	W	W
Estimated	1,350	18,300	13.56	263	5,180	19.69
Total or average	6,650	75,600	11.37	6,590	77,000	11.69

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  
NEBRASKA: 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>	--	--	--	--	13	172
Coarse aggregate, graded	--	--	--	--	--	--
Fine aggregate (-¾ inch) <sup>3</sup>	--	--	--	--	57	368
Coarse and fine aggregates <sup>4</sup>	--	--	--	--	72	965
Agricultural <sup>5</sup>	--	--	--	--	W	W
Chemical and metallurgical <sup>6</sup>	--	--	--	--	1,050	9,980
Special	--	--	--	--	--	--
Other miscellaneous uses and specified uses not listed	--	--	--	--	--	--
Unspecified: <sup>7</sup>						
Reported	--	--	--	--	4,040	45,100
Estimated	--	--	63	587	1,290	17,700
Total	--	--	63	587	6,580	75,000

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 riprap and jetty stone and unspecified coarse aggregate.

<sup>3</sup>Includes screening (undesignated) and unspecified fine aggregate.

<sup>4</sup>Includes unpaved road surface and crusher run.

<sup>5</sup>Includes agricultural limestone and other agricultural uses.

<sup>6</sup>Includes cement manufacture.

<sup>7</sup>Reported and estimated production without a breakdown by end use.

TABLE 5  
NEBRASKA: 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>	--	--	--	--	15	206
Coarse aggregate, graded <sup>3</sup>	--	--	--	--	W	W
Fine aggregate (-¾ inch) <sup>4</sup>	--	--	--	--	56	341
Coarse and fine aggregates <sup>5</sup>	8	77	--	--	W	W
Agricultural <sup>6</sup>	--	--	--	--	W	W
Chemical and metallurgical <sup>7</sup>	--	--	--	--	W	W
Special	--	--	--	--	--	--
Other miscellaneous uses and specified uses not listed	--	--	--	--	--	--
Unspecified: <sup>8</sup>						
Reported	--	--	--	--	W	W
Estimated	--	--	68	749	195	4,440
Total	8	77	68	749	6,510	76,200

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 riprap and jetty 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 screening (undesignated) and unspecified fine aggregate.

<sup>5</sup>Includes unpaved road surface and crusher run.

<sup>6</sup>Includes agricultural limestone and other agricultural uses.

<sup>7</sup>Includes cement manufacture.

<sup>8</sup>Reported and estimated production without a breakdown by end use.

TABLE 6  
NEBRASKA: 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)	2,500	\$13,700	\$5.48
Plaster and gunite sands	114	512	4.49
Concrete products (blocks, bricks, pipes, decorative, and so forth)	167	850	5.09
Asphaltic concrete aggregates and other bituminous mixtures	368	3,450	9.38
Road base and coverings <sup>2</sup>	1,970	16,900	8.58
Fill	447	1,310	2.93
Snow and ice control	61	417	6.84
Other miscellaneous uses <sup>3</sup>	33	317	9.61
Unspecified: <sup>4</sup>			
Reported	469	2,510	5.35
Estimated	6,740	44,800	6.65
Total or average	12,900	84,800	6.57

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

<sup>2</sup>Includes road and other stabilization (cement and lime).

<sup>3</sup>Includes filtration.

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

TABLE 7  
NEBRASKA: 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)	2,990	\$17,300	\$5.78
Plaster and gunite sands and concrete products	191	826	\$4.32
Asphaltic concrete aggregates and other bituminous mixtures	474	4,480	9.45
Road base and coverings <sup>2</sup>	1,480	11,900	8.03
Fill	263	909	3.46
Snow and ice control	33	299	9.06
Filtration	9	104	11.56
Other miscellaneous uses	22	249	11.32
Unspecified: <sup>3</sup>			
Reported	404	2,640	6.52
Estimated	7,320	50,500	6.90
Total or average	13,200	89,100	6.76

<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 road and other stabilization (cement and lime).

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



TABLE 8  
NEBRASKA: 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 (including concrete sand)	W	W	832	4,790	W	W
Concrete products (blocks, bricks, pipes, decorative, and so forth) <sup>2</sup>	W	W	W	W	W	W
Asphaltic concrete aggregates and road base materials <sup>3</sup>	1,040	8,610	935	8,040	364	3,730
Fill	55	168	290	936	102	210
Snow and ice control	W	W	W	W	1	10
Other miscellaneous uses <sup>4</sup>	6	32	9	97	18	188
Unspecified: <sup>5</sup>						
Reported	78	475	5	48	386	1,990
Estimated	1,890	12,600	2,990	19,800	1,870	12,400
Total	3,430	23,600	5,090	34,000	4,350	27,300

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

<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 road and other stabilization (cement and lime).

<sup>4</sup>Includes filtration.

<sup>5</sup>Reported and estimated production without a breakdown by end use.

TABLE 9  
NEBRASKA: 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 (including concrete sand)	W	W	1,470	8,770	W	W
Concrete products (blocks, bricks, pipes, decorative, and so forth) <sup>2</sup>	W	W	W	W	W	W
Asphaltic concrete aggregates and road base materials <sup>3</sup>	553	3,340	1,090	9,700	308	3,310
Fill	45	157	190	664	27	87
Snow and ice control	W	W	W	W	1	13
Filtration	--	--	7	87	2	17
Other miscellaneous uses	1	14	5	70	16	166
Unspecified: <sup>4</sup>						
Reported	57	501	79	746	268	1,390
Estimated	2,020	15,800	2,910	18,900	2,390	15,800
Total	2,970	21,300	5,780	39,100	4,430	28,700

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 road and other stabilization (cement and lime).

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