

# THE MINERAL INDUSTRY OF NEBRASKA

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

In 1994, for the 3d consecutive year, Nebraska ranked 42d among the 50 States in nonfuel mineral value,<sup>1</sup> according to the U.S. Bureau of Mines (USBM). The estimated value for 1994 was \$129 million, a more than 2% increase compared with that of 1993. This followed a 10% gain in value from 1992 to 1993. The State accounted for a little less than 0.5% of the U.S. total value. Based on estimated values, crushed stone overtook construction sand and gravel in 1994 as Nebraska's leading nonfuel mineral produced from the State's mines. These two mineral commodities accounted, respectively, for 33% and nearly 32% of the State's total nonfuel mineral value. The increased value of crushed stone the past 2 years, as well as a modest increase in construction sand and gravel in 1993, accounted for most of the State's rising percentages. Compared with that of 1993, the values of portland cement, crushed stone, masonry cement, and industrial sand and gravel increased. Decreases occurred in construction sand and gravel, common clays, lime, and gemstones.

Based on USBM estimates of the quantities of minerals produced in the United States during 1994, Nebraska mines were significant producers of construction sand and gravel and crushed stone, while similar production of portland cement was achieved at the State's only cement manufacturing plant in Louisville in eastern Nebraska. Most nonfuel minerals produced in Nebraska were basic construction materials, and production continued to reflect

construction trends in the State. Industrial sand was used for glass production and other miscellaneous applications. Uranium production in Nebraska is not included in USBM statistics because it is a fuel mineral. Metal production in the State, mostly raw steel, was not processed from ores mined in the State but from materials received from other domestic and foreign sources.

According to the Nebraska Geological Survey (NGS), the Nebraska's Conservation and Survey Division (CSD), of which NGS is a part, has been very active for the past several years, conducting studies of the State's geology and mineral resources. In 1994, CSD published the results of many of these studies and a variety of mining- and mineral-related publications, including directories of Nebraska mines and mineral operations. Some pertinent examples of these are as follows: *Mineral Facts for Nebraska*; *Nebraska Mineral Operations Review, 1993*; *GIS Data Base and Assessment of the Physical Natural Resources of the Cedar River Basin, Nebraska*; and, *Directory of Quarries, Pits and Mines in Nebraska*. Information concerning these and other similar geologic publications are available from the office of the State geologist, cited above.

<sup>1</sup>The term value, referring throughout this document to that of nonfuel minerals, here addresses the total monetary value as represented by either mine shipments, mineral commodity sales, or marketable production as is applicable to the individual mineral commodities.

TABLE 1  
NONFUEL RAW MINERAL PRODUCTION IN NEBRASKA<sup>1</sup>

Mineral	1992		1993		1994 <sup>p</sup>	
	Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)
Clays thousand metric tons	183	\$879	192	\$932	202	\$843
Gemstones	NA	645	NA	W	NA	W
Lime thousand metric tons	26	1,741	24	1,233	12	617
Sand and gravel (construction) do.	11,980	38,108	<sup>e</sup> 12,900	<sup>e</sup> 41,900	12,400	40,900
Stone (crushed) do.	<sup>e</sup> 5,352	<sup>e</sup> 29,100	6,763	38,871	<sup>e</sup> 7,200	<sup>e</sup> 42,500
Combined value of cement, sand and gravel (industrial), and values indicated by symbol W	XX	44,317	XX	43,240	XX	44,000
Total	XX	114,790	XX	126,176	XX	<sup>2</sup> 129,000

<sup>e</sup>Estimated. <sup>p</sup>Preliminary. NA Not available. W Withheld to avoid disclosing company proprietary data, value included with "Combined value" data.

XX Not applicable.

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

<sup>2</sup>Data do not add to total shown because of independent rounding.

TABLE 2  
NEBRASKA: CRUSHED STONE<sup>1</sup> SOLD OR USED BY PRODUCERS IN 1993, BY USE

Use	Quantity (thousand metric tons)	Value (thousands)	Unit value
Coarse aggregate (+1 1/2 inch):			
Riprap and jetty stone	162	\$1,397	\$8.62
Coarse and fine aggregate:			
Unpaved road surfacing	692	4,772	6.90
Crusher run or fill or waste	311	1,797	5.78
Other construction materials <sup>2</sup>	1,394	9,155	6.57
Other specified uses not listed <sup>3</sup>	610	2,333	3.82
Unspecified: <sup>4</sup>			
Actual	<u>3,593</u>	<u>19,416</u>	<u>5.40</u>
Total <sup>5</sup>	6,763	38,871	5.75
Total <sup>6 7</sup>	7,455	38,871	5.21

<sup>1</sup>Includes limestone.

<sup>2</sup>Includes other coarse aggregate, concrete aggregates (coarse), bituminous aggregate (coarse), other graded coarse aggregate, screening (undesignated), other fine aggregate, graded road base or subbase, and other coarse or fine aggregates.

<sup>3</sup>Includes agricultural limestone, other agricultural uses, cement manufacture, and asphalt fillers or extenders.

<sup>4</sup>Includes production reported without a breakdown by use.

<sup>5</sup>Data may not add to totals shown because of independent rounding.

<sup>6</sup>One short ton is equal to 907 kilograms or 2,000 pounds. To convert metric tons to short tons, divide metric tons by 0.907185.

<sup>7</sup>Total shown in thousand short tons and thousand dollars.

TABLE 3  
NEBRASKA: CRUSHED STONE SOLD OR USED, BY KIND

Kind	Number of quarries	Quantity (thousand metric tons)	Value (thousands)	Unit value	Number of quarries	Quantity (thousand metric tons)	Value (thousands)	Unit value
Limestone	<u>13</u>	<u>4,410</u>	<u>\$23,328</u>	<u>\$5.29</u>	<u>14</u>	<u>6,763</u>	<u>\$38,871</u>	<u>\$5.75</u>
Total	XX	4,410	23,328	5.29	XX	6,763	38,871	5.75
Total <sup>1 2</sup>	XX	4,861	23,328	4.80	XX	7,455	38,871	5.21

XX Not applicable.

<sup>1</sup>One short ton is equal to 907 kilograms or 2,000 pounds. To convert metric tons to short tons, divide metric tons by 0.907185.

<sup>2</sup>Total shown in thousand short tons and thousand dollars.