

# THE MINERAL INDUSTRY OF NEW HAMPSHIRE

This chapter has been prepared under a Memorandum of Understanding between the U.S. Geological Survey and the New Hampshire Department of Environmental Services for collecting information on all nonfuel minerals.

In 2000, the estimated value<sup>1</sup> of nonfuel mineral production for New Hampshire was about \$59.2 million, based upon preliminary U.S. Geological Survey (USGS) data. This was about a 5% increase from that of 1999<sup>2</sup> and followed an 11.2% decrease from 1998 to 1999. Because data for crushed sandstone and dimension granite have been withheld to protect company proprietary data, the actual total values for 1998-2000 are higher than (while following the same trend as) those reported in table 1.

Construction sand and gravel, a high-volume, low-value mineral commodity, remained New Hampshire's leading nonfuel mineral commodity in 2000, accounting for 64% of its nonfuel mineral value. Crushed stone was the State's second leading nonfuel mineral. In 1999, the decreased values of these two mineral commodities accounted for all of New Hampshire's decrease in value (table 1). Whereas the quantities of dimension granite produced in both 1999 and 2000 increased by more than 20% and nearly 9%,

<sup>1</sup>The terms "nonfuel mineral production" and related "values" encompass variations in meaning, depending upon the minerals or 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 2000 USGS mineral production data published in this chapter are preliminary estimates as of July 2001 and are expected to change. For some mineral commodities, such as construction sand and gravel, crushed stone, and portland cement, estimates are updated periodically. To obtain the most current information, please contact the appropriate USGS mineral commodity specialist. A telephone listing of the specialists may be retrieved over the Internet at URL <http://minerals.usgs.gov/minerals/contacts/comdir.html>, by using MINES FaxBack at (703) 648-4999 from a fax machine with a touch-tone handset (request Document #1000 for a telephone listing of all mineral commodity specialists), or by calling USGS information at (703) 648-4000 for the specialist's name and number. All Mineral Industry Surveys—mineral commodity, State, and country—also may be retrieved over the Internet at URL <http://minerals.usgs.gov/minerals>; facsimile copies may be obtained from MINES FaxBack.

<sup>2</sup>Values, percentage calculations, and rankings for 1999 may vary from the Minerals Yearbook, Area Reports: Domestic 1999, Volume II, owing to the revision of preliminary 1999 to final 1999 data. Data for 2000 are preliminary and are expected to change; related rankings may also change.

respectively, the mineral commodity's value showed a relatively small increase in 1999 and a slight decrease in 2000.

A variety of geologic maps, as well as publications related to New Hampshire's nonfuel mineral resources and markets, are available for purchase from the State government. Two geologic maps of New Hampshire are available over the Internet: Generalized Bedrock Geologic Map of New Hampshire and Simplified Bedrock Geologic Map of New Hampshire. These maps were adapted from the full-size original 1997 edition of Bedrock Geology Map of New Hampshire, Geologic Map GEO-1, which was produced as a joint project and in cooperation with the USGS. Also in cooperation with the USGS, surficial geologic maps were completed during 1999 and 2000 of the Marlborough 7.5-minute quadrangle (West half of the Marlborough 7.5 x 15-minute quadrangle), Cheshire County, and of the Manchester South quadrangle, Hillsborough and Rockingham Counties. Both maps were produced at a scale of 1:24,000.

Information regarding the cost and ordering procedures for any of the aforementioned publications may be obtained through the Office of the State Geologist or over the Internet at URL <http://www.des.state.nh.us/geo1link.htm>.

## Sources of Information

- Continental Placer, Inc., 1995, Construction aggregate resources of New England—An analysis of supply and demand: Boston, MA, New England Governors' Conference, Inc., Geo-115, 225 p. [Executive summary (Geo-116) available.]
- Eastern Research Group, Inc., 1992, Construction aggregate demand in the New England States: Boston, MA, New England Governors' Conference, Inc., Geo-109, 114 p.
- Koteff, Carl, 1993, New Hampshire sand and gravel resources: Boston, MA, New England Governors' Conference, Inc., Geo-113, 16 p., 3 map sets, scale 1:250,000.
- New Hampshire Department of Environmental Services, Geological Survey, 1991, Bibliography and index of New Hampshire geology (selected from publications indexed in GeoRef data base by American Geologic Institute): Concord, NH, New Hampshire Department of Environmental Services, NHDES-GS-91-1 (Geo-105), 242 p.

TABLE 1  
NONFUEL RAW MINERAL PRODUCTION IN NEW HAMPSHIRE 1/ 2/

(Thousand metric tons and thousand dollars)

Mineral	1998		1999		2000 p/	
	Quantity	Value	Quantity	Value	Quantity	Value
Gemstones	NA	6	NA	6	NA	6
Sand and gravel, construction	8,590	40,000	7,950	36,700	7,970	38,000
Stone, crushed 3/	4,190	27,500	4,290	19,700	4,500	21,200
Combined values of stone (crushed sandstone and dimension granite)	XX	(4/)	XX	(4/)	XX	(4/)
Total 5/	XX	67,600	XX	56,400	XX	59,200

p/ Preliminary. NA Not available. XX Not applicable.

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

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

3/ Excludes values of certain stones that must be concealed to avoid disclosing company proprietary data.

4/ Value withheld to avoid disclosing company proprietary data.

5/ Excludes values withheld to avoid disclosing company proprietary data.

TABLE 2  
NEW HAMPSHIRE: CRUSHED STONE SOLD OR USED, BY KIND 1/

Kind	1998				1999			
	Number of quarries	Quantity (thousand metric tons)	Value (thousands)	Unit value	Number of quarries	Quantity (thousand metric tons)	Value (thousands)	Unit value
Granite	6	2,390 r/	\$15,100	\$6.31	10	2,590	\$9,530	\$3.69
Sandstone	1	(2/)	(2/)	(2/)	1	(2/)	(2/)	(2/)
Traprock	7	1,800	12,500	6.93	7	1,700	10,100	5.96
Total or average	XX	4,190	27,500	6.58	XX	4,290	19,700	4.59

r/ Revised. XX Not applicable.

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

2/ Withheld from total to avoid disclosing company proprietary data.

TABLE 3  
NEW HAMPSHIRE: CRUSHED STONE SOLD OR USED BY PRODUCERS  
IN 1999, BY USE 1/ 2/ 3/

Use	Quantity (thousand metric tons)	Value (thousands)	Unit value
<b>Construction:</b>			
<b>Coarse aggregate (+1 1/2 inch):</b>			
Riprap and jetty stone	1	\$6	\$6.00
Other coarse aggregate	23	114	4.96
Total or average	24	120	5.00
<b>Coarse aggregates graded:</b>			
Bituminous aggregate, coarse	439	1,740	3.96
Other graded coarse aggregate	191	949	4.97
Total or average	630	2,690	4.27
<b>Fine aggregate (-3/8 inch):</b>			
Stone sand, bituminous mix or seal	145	491	3.39
Other fine aggregate	123	604	4.91
Total or average	268	1,100	4.09
<b>Coarse and fine aggregates:</b>			
Graded road base or subbase	665	2,260	3.39
Other coarse and fine aggregates	116	577	4.97
Total or average	781	2,830	3.63
Other construction materials	60	204	3.40
<b>Unspecified: 4/</b>			
Reported	2,430	12,300	5.04
Estimated	90	480	5.28
Total or average	2,520	12,700	5.05
Grand total or average	4,290	19,700	4.59

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

2/ Includes granite and traprock; excludes sandstone from total to avoid disclosing company proprietary data.

3/ To avoid disclosing company proprietary data, no district tables were produced for 1999.

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

TABLE 4  
NEW HAMPSHIRE: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 1999,  
BY MAJOR USE CATEGORY 1/ 2/

Use	Quantity (thousand metric tons)	Value (thousands)	Unit value
Concrete aggregate and concrete products	1,870	\$7,890	\$4.23
Asphaltic concrete aggregates and other bituminous mixtures	387	1,990	5.13
Road base and coverings	1,050	6,450	6.17
Fill	1,160	3,540	3.04
Snow and ice control	33	173	5.24
Other miscellaneous uses 3/	139	1,120	8.03
<b>Unspecified: 4/</b>			
Reported	1,970	8,570	4.34
Estimated	1,300	7,000	5.38
Total or average	7,950	36,700	4.62

1/ To avoid disclosing company proprietary data, no district tables were produced for 1999.

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

3/ Includes filtration and railroad ballast.

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