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 1999, the preliminary estimated value[1] of nonfuel mineral production for New Hampshire was about $64 million, according to the U.S. Geological Survey (USGS). This was a 6% decrease from that of 1998[2] and followed a 38% increase from 1997 to 1998. Because data for crushed limestone, sandstone, and dimension granite have been withheld to protect company proprietary data, the actual total values for 1997-99 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, was New Hampshire's leading nonfuel mineral commodity, accounting for about 59% of its apparent 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 virtually all of New Hampshire's decrease in value. In 1998, crushed stone led the State's mineral commodities with more than a $15 million increase; construction sand and gravel also increased, up $3.6 million, while dimension granite showed a smaller decrease in value.

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. New Hampshire mineral publications that are available are as follows: *Construction Aggregate Resources of New England: An Analysis of Supply and Demand: Boston, MA*, New England Governors' Conference, Inc., 1995 (both full report and executive summary); *New Hampshire Sand and Gravel Resources: Boston, MA*, New England Governors' Conference, Inc., 1993, including three map sheets, scale 1:250,000; *Construction Aggregate Demand in the New England States: Boston, MA*, New England Governors' Conference, Inc., 1992; and *Bibliography and Index of New Hampshire Geology* (selected from publications indexed in GeoRef data base by American Geologic Institute), New Hampshire Department of Environmental Services, Geological Survey, 1991. Additionally, a series of peat resource maps is available.

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.

[1]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 1999 USGS mineral production data published in this chapter are preliminary estimates as of May 2000, 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 for 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.

[2]Values, percentage calculations, and rankings for 1998 may vary from the Minerals Yearbook, Area Reports: Domestic 1998, Volume II, owing to the revision of preliminary 1998 to final 1998 data. Data for 1999 are preliminary and are expected to change; related rankings may also be subject to change.

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

(Thousand metric tons and thousand dollars)

Mineral	1997		1998		1999 p/	
	Quantity	Value	Quantity	Value	Quantity	Value
Gemstones	NA	6	NA	6	NA	6
Sand and gravel: Construction	8,440	36,400	8,590	40,000	7,920	37,600
Stone: Crushed 3/	2,000 r/	12,500 r/	4,190	27,500	3,850	26,000
Total 4/	XX	48,900 r/	XX	67,600	XX	63,600

p/ Preliminary. r/ Revised. 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 certain stones; values that must be concealed to avoid disclosing company proprietary data.
4/ Partial total, excludes values of stone (crushed sandstone and dimension granite) that must be concealed to avoid disclosing company proprietary data.

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

Kind	1997 Number of quarries	1997 Quantity (thousand metric tons)	1997 Value (thousands)	1997 Unit value	1998 Number of quarries	1998 Quantity (thousand metric tons)	1998 Value (thousands)	1998 Unit value
Granite	6 r/	W	W	W	6	2,400	$15,100	$6.31
Sandstone	1	(2/)	(2/)	(2/)	1	(2/)	(2/)	(2/)
Traprock	7 r/	W	W	W	7	1,800	12,500	6.93
Total or average	XX	2,000 r/	$12,500 r/	6.25 r/	XX	4,190	27,500	6.58

r/ Revised. W Withheld to avoid disclosing company proprietary data; included in "Total." XX Not applicable.
1/ Data are rounded to no more than three significant digits; may not add to totals shown.
2/ Excluded from total to avoid disclosing company proprietary data.

TABLE 3
NEW HAMPSHIRE: CRUSHED STONE SOLD OR USED BY PRODUCERS
IN 1998, BY USE 1/ 2/ 3/

Use	Quantity (thousand metric tons)	Value (thousands)	Unit value
Coarse aggregate (+1 1/2 inch):			
Macadam	W	W	$8.33
Riprap and jetty stone	W	W	6.36
Other coarse aggregate	202	$1,520	7.53
Coarse aggregates graded:			
Concrete aggregate, coarse	W	W	8.44
Other graded coarse aggregate	2,020	13,900	6.27
Fine aggregate (-3/8 inch):			
Stone sand, concrete	W	W	7.99
Other fine aggregate	567	3,980	7.03
Coarse and fine aggregates: Other coarse and fine aggregates	(4/)	(4/)	3.84
Unspecified: 5/			
Actual	(4/)	(4/)	6.09
Estimated	158	871	5.51
Total or average	4,190	27,500	6.58

W Withheld to avoid disclosing company proprietary data; included in "Other" category.
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 1998.
4/ Withheld to avoid disclosing company proprietary data; included in "Total."
5/ Reported and estimated production without a breakdown by end use.

TABLE 4
NEW HAMPSHIRE: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 1998,
BY MAJOR USE CATEGORY 1/ 2/

Use	Quantity (thousand metric tons)	Value (thousands)	Unit value
Concrete aggregate 3/	2,340	$14,700	$6.29
Asphaltic concrete aggregates and other bituminous mixtures	474	2,270	4.78
Road base and coverings	1,350	5,290	3.92
Fill	1,010	2,850	2.83
Snow and ice control	93	434	4.67
Other miscellaneous uses 4/	109	703	6.45
Unspecified: 5/			
Actual	1,650	6,420	3.90
Estimated	1,570	7,370	4.69
Total or average	8,590	40,000	4.66

1/ To avoid disclosing company proprietary data, no district tables were produced for 1998.
2/ Data are rounded to no more than three significant digits; may not add to totals shown.
3/ Includes plaster and gunite sands.
4/ Includes filtration and railroad ballast.
5/ Reported and estimated production without a breakdown by end use.