

THE MINERAL INDUSTRY OF VERMONT

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 Agency of Natural Resources, Division of Geology and Mineral Resources, for collecting information on all nonfuel minerals.

In 1995, Vermont ranked 45th among the 50 States in total nonfuel mineral production value,¹ according to the U.S. Geological Survey (USGS). The State was 44th in 1994. The estimated value for 1995 was \$68 million, a 7% increase from that of 1994. This followed a 20% increase from 1993 to 1994 (based on final data). The State accounted for somewhat less than 0.5% of the U.S. total nonfuel mineral production value. Compared with 1994, the mineral commodity values that increased in 1995 were crushed stone and dimension stone, while construction sand and gravel and talc and pyrophyllite values decreased.

Compared with USGS estimates of the quantities produced in the 50 States during 1995, Vermont remained third in talc and pyrophyllite and fourth in dimension stone. No asbestos production was reported to the USGS in 1995.

The Vermont Geological Survey² reported that the Vermont General Assembly made several changes to the Vermont Land Use and Development Law, ACT 250. Several sections were added to clarify definitions important to the dimension stone industry. The term "slate quarry" was defined as "a quarry pit or hole from which slate has been extracted or removed for the purpose of commercial production of building material, roofing, tile, or other dimensional stone products," and "a slate quarry...inactive since June 1, 1970...shall be deemed to be held in reserve, and shall not be deemed abandoned." Any activities not defined as ancillary to the slate industry may constitute substantial changes from previous legal definitions and be subject to permitting requirements under ACT 250. "Crushing" activities may also constitute substantial changes if they cause significant impact with respect to any of the criteria specified within the subdivisions of the title.

The legislation established a registration program for quarries that were held in reserve. Registration closes January 1, 1997.

A "Special Joint Committee on the Granite Industry" was created to examine the condition of the industry in the State. The Committee studied the factors that might impede or promote the industry's development and was to report to the General Assembly in the 1996 session with any recommendations for legislation or State policies to improve the welfare of Vermont's granite industry.

In January 1995, the New England Governor's Conference released the Report on Construction Aggregate Resources of New England; Vermont was one of six States participating in the study. Vermont's "nonexcluded volume" (reserves) was reported to be 12.2 billion cubic meters (16 billion cubic yards). The State's projected demand for aggregate from 1990 to 2010 was estimated to be 40 million cubic meters (52 million cubic yards).

In industry news, the Lawson Granite Co. and the Aderson Friberg Co. were absorbed by the Rock of Ages Corp. on December 31, 1995.

¹The terms "nonfuel mineral production" and related "values" encompass variations in meaning, depending on 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 1995 USGS mineral production data are estimates, as of Dec. 1995. Construction sand and gravel and crushed stone estimates are updated periodically. To obtain the most current information, please contact the appropriate USGS mineral commodity specialist. Call MINES FaxBack at (703) 648-4999 from a fax machine with a touch-tone handset and request Document No. 1000 for a telephone listing of all mineral commodity specialists or call USGS information at (703) 648-4000 for the specialist's name and number.

²This report includes information provided by the Vermont Geological Survey.

TABLE 1
NONFUEL RAW MINERAL PRODUCTION IN VERMONT^{1 2}

Mineral	1993		1994		1995 ^p	
	Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)
Asbestos metric tons	3,660	\$1,530	1,130	\$920	—	—
Gemstones	NA	1	NA	1	NA	\$1
Sand and gravel (construction) thousand metric tons	^e 3,000	^e 10,400	3,890	14,500	2,900	11,000
Stone:						
Crushed do.	2,520	12,900	4,170	23,700	4,800	27,800
Dimension metric tons	97,400	27,900	^f 78,900	^f \$23,200	102,000	28,900
Total ³	XX	52,700	XX	^f 63,300	XX	67,700

^eEstimated. ^pPreliminary. ^rRevised. NA Not available. XX Not applicable.

^fProduction as measured by mine shipments, sales, or marketable production (including consumption by producers).

³Data are rounded to three significant digits; may not add to totals shown.

⁴Partial total, excludes values that must be concealed to avoid disclosing company proprietary data.

TABLE 2
VERMONT: CRUSHED STONE¹ SOLD OR USED BY PRODUCERS IN 1994, BY USE²

Use	Quantity (thousand metric tons)	Value (thousands)	Unit value
Coarse aggregate (+1 1/2 inch):			
Macadam	17	\$114	\$6.71
Riprap and jetty stone	65	301	4.63
Filter stone	W	W	5.85
Coarse aggregate, graded:			
Concrete aggregate, coarse	143	828	5.79
Bituminous aggregate, coarse	W	W	5.68
Bituminous surface-treatment aggregate	48	286	5.96
Railroad ballast	W	W	5.59
Coarse and fine aggregates:			
Graded road base or subbase	326	1,680	5.14
Unpaved road surfacing	164	1,190	7.27
Crusher run or fill or waste	11	48	4.36
Other construction materials ³	500	2,980	5.95
Unspecified: ⁴			
Actual	944	4,330	4.59
Estimated	1,950	11,900	6.12
Total	4,170	23,700	5.68

W Withheld to avoid disclosing company proprietary data; included with "Other construction materials."

¹Includes dolomite, granite, limestone, marble, quartzite, and slate.

²Data are rounded to three significant digits; may not add to totals shown.

³Includes pipe bedding, stone sand (bituminous mix or seal), and other specified uses not listed.

⁴Includes production reported without a breakdown by end use and estimates for nonrespondents.

TABLE 3
VERMONT: CRUSHED STONE SOLD OR USED, BY KIND¹

Kind	1993				1994			
	Number of quarries	Quantity (thousand metric tons)	Value (thousands)	Unit value	Number of quarries	Quantity (thousand metric tons)	Value (thousands)	Unit value
Limestone	5	1,030	\$6,050	\$5.90	6	1,800	\$11,200	\$6.20
Dolomite	1	W	W	5.71	4	234	1,220	5.22
Marble	2	W	W	6.38	5	839	4,730	5.63
Granite	6	495	1,510	3.04	5	508	2,040	4.02
Quartzite	2	W	W	4.59	2	W	W	5.37
Slate	1	W	W	8.94	1	W	W	9.45
Total	XX	2,520	12,900	5.12	XX	4,170	23,700	5.68

¹Revised. W Withheld to avoid disclosing company proprietary data; included in "Total." XX Not applicable.

²Data are rounded to three significant digits; may not add to totals shown.

TABLE 4
VERMONT: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 1994, BY MAJOR USE CATEGORY¹

Use	Quantity (thousand metric tons)	Value (thousands)	Value per ton
Concrete aggregate ²	588	\$2,710	\$4.61
Concrete products (blocks, bricks, pipe, decorative, etc.)	18	93	5.17
Asphaltic concrete aggregates and other bituminous mixtures	124	464	3.74
Road base and coverings ³	1,260	4,130	3.29
Fill	274	544	1.99
Snow and ice control	288	915	3.18
Filtration	44	277	6.30
Other ⁴	45	213	4.73
Unspecified: ⁵			
Actual	429	2,080	4.85
Estimated	821	3,060	3.72
Total or average	3,890	14,500	3.72

¹Data are rounded to three significant digits; may not add to totals shown.

²Includes plaster and gunite sands.

³Includes road and other stabilization (cement).

⁴Includes railroad ballast.

⁵Includes production reported without a breakdown by end use and estimates for nonrespondents.



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