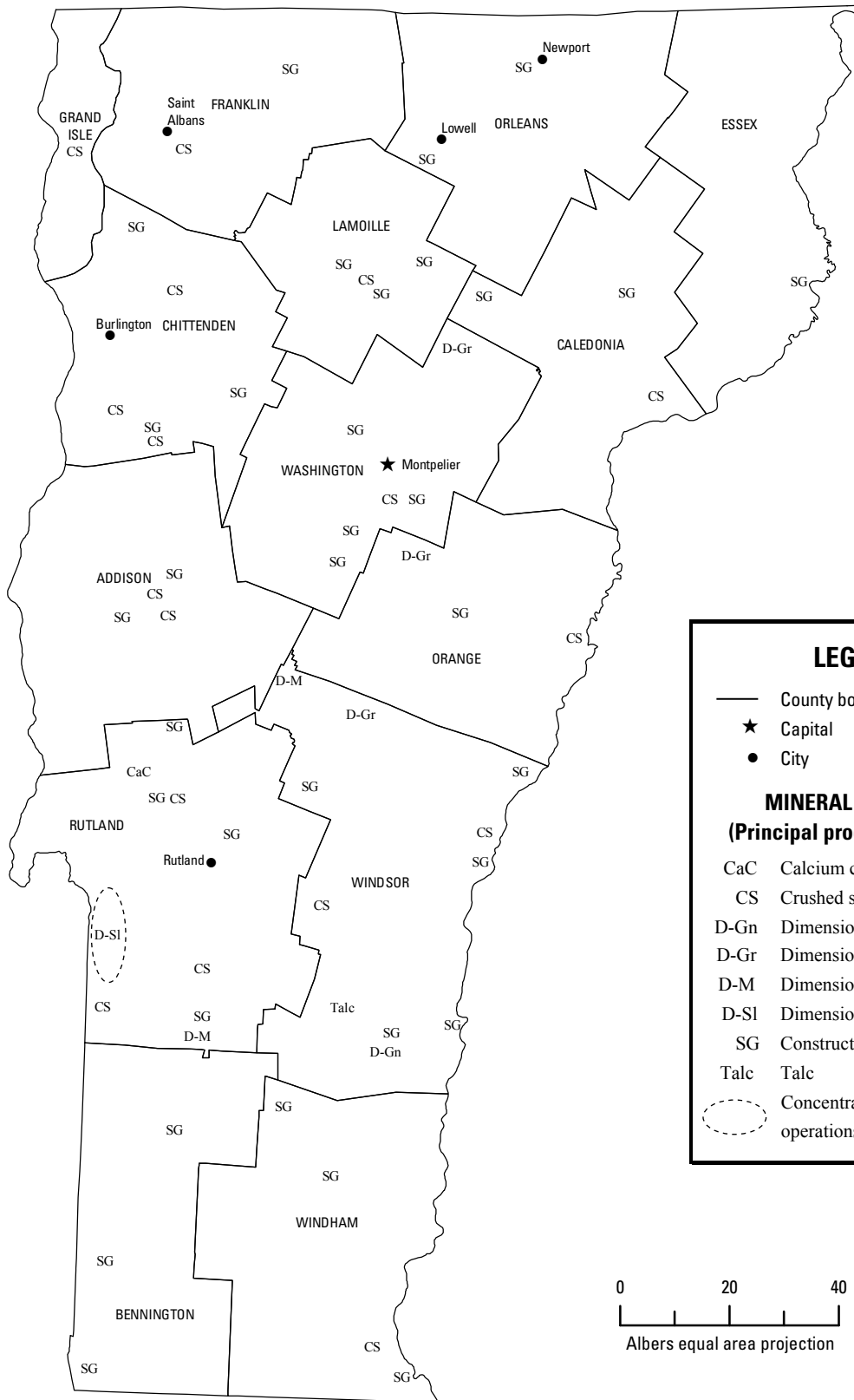




2009 Minerals Yearbook

VERMONT

VERMONT

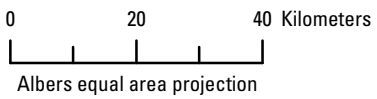


LEGEND

- County boundary
- ★ Capital
- City

**MINERAL SYMBOLS
(Principal producing areas)**

- CaC Calcium carbonate
- CS Crushed stone
- D-Gn Dimension gneiss
- D-Gr Dimension granite
- D-M Dimension marble
- D-Sl Dimension slate
- SG Construction sand and gravel
- Talc Talc
- Concentration of mineral operations



Source: Vermont Geological Survey/U.S. Geological Survey (2009).

THE MINERAL INDUSTRY OF VERMONT

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

In 2009, Vermont's nonfuel raw mineral production¹ was valued at \$122 million, based upon annual U.S. Geological Survey (USGS) data. This represented a \$5 million, or 4%, increase from the State's total nonfuel mineral value of \$117 million for 2008 and 2007. Vermont increased in rank from 46th to 45th among the 50 States in total nonfuel mineral production value, accounting for less than one-quarter of 1% of the total U.S. nonfuel mineral production value.

In 2009, crushed stone, construction sand and gravel, and dimension stone, in descending order of value, were Vermont's

¹ 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 2009 USGS mineral production data published in this chapter are those available as of September 2011. All USGS Mineral Industry Surveys and USGS Minerals Yearbook chapters—mineral commodity, State, and country—can be retrieved over the Internet at URL <http://minerals.usgs.gov/minerals>.

leading nonfuel mineral commodities. Crushed stone and dimension stone accounted for 70% of the State's nonfuel mineral production, down slightly from 71% in 2008. Although production of crushed stone and construction sand and gravel declined by 260,000 metric tons and 490,000 metric tons from 2008 to 2009, both mineral commodities increased in production value by \$7.5 and \$3.1 million, respectively. The production of dimension stone was down 4,000 metric tons from 2008 to 2009, with a loss of \$5.9 million in that mineral commodity's production value.

In 2009, Vermont continued to rank third in the quantity of crude talc produced among the three talc-producing States (actual values withheld—company proprietary data). The State rose in rank to fifth from sixth, though down from third in 2007, in the production of dimension stone, and rose to 39th in 2009 from 43d in 2008 in the production of crushed stone.

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

(Thousand metric tons and thousand dollars unless otherwise specified)

Mineral	2007		2008		2009	
	Quantity	Value	Quantity	Value	Quantity	Value
Gemstones, natural	NA	1	NA	1	NA	1
Sand and gravel, construction	5,310 ^r	35,300 ^r	4,960 ^r	33,600 ^r	4,470	36,700
Stone:						
Crushed	6,460	46,200	5,690 ^r	47,500 ^r	5,430	54,900
Dimension	110	35,700	112	35,900	108	30,000
Talc, crude metric tons	W	W	W	W	W	W
Total	XX	117,000 ^r	XX	117,000 ^r	XX	122,000

^rRevised. NA Not available. W Withheld to avoid disclosing company proprietary data; excluded from "Total." XX Not applicable.

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

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

TABLE 2
VERMONT: CRUSHED STONE SOLD OR USED, BY TYPE¹

Type	2008			2009		
	Number of quarries	Quantity (thousand metric tons)	Value (thousands)	Number of quarries	Quantity (thousand metric tons)	Value (thousands)
Limestone ²	10 ^r	1,970 ^r	\$16,200 ^r	10	1,800	\$17,700
Granite	-- ^r	-- ^r	-- ^r	--	--	--
Marble	-- ^r	-- ^r	-- ^r	--	--	--
Sandstone and quartzite	6	709	6,090	5	897	10,900
Slate	6 ^r	356 ^r	2,900 ^r	6	237	2,330
Miscellaneous stone	22 ^r	2,660 ^r	22,200 ^r	23	2,500	24,000
Total	XX	5,690 ^r	47,500 ^r	XX	5,430	54,900

^rRevised. XX Not applicable. -- Zero.

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

²Includes limestone-dolomite reported with no distinction between the two.

TABLE 3
VERMONT: CRUSHED STONE SOLD OR USED BY PRODUCERS
IN 2009, BY USE¹

(Thousand metric tons and thousand dollars)

Use	Quantity	Value
Construction:		
Coarse aggregate (+1½ inch):		
Riprap and jetty stone	32	378
Filter stone	37	397
Other coarse aggregate	17	149
Coarse aggregate, graded:		
Concrete aggregate, coarse	W	W
Bituminous aggregate, coarse	W	W
Bituminous surface-treatment aggregate	W	W
Railroad ballast	W	W
Other graded coarse aggregate	93	1,220
Fine aggregate (-¾ inch):		
Stone sand, concrete	W	W
Stone sand, bituminous mix or seal	W	W
Screening, undesignated	W	W
Other fine aggregate	3	215
Coarse and fine aggregates:		
Graded road base or subbase	264	2,850
Unpaved road surfacing	192	1,990
Crusher run or fill or waste	W	W
Other coarse and fine aggregates	207	1,460
Other construction materials	11	143
Agricultural, limestone	W	W
Other miscellaneous uses and specified uses not listed	9	103
Unspecified: ²		
Reported	462	5,720
Estimated	3,610	33,400
Total	5,430	54,900

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

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

²Reported and estimated production without a breakdown by end use.

TABLE 4
VERMONT: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 2009,
BY MAJOR USE CATEGORY¹

Use	Quantity (thousand metric tons)	Value (thousands)	Unit value
Concrete aggregate and concrete products ²	196	\$2,040	\$10.42
Asphaltic concrete aggregates and road base materials ³	675	4,860	7.20
Fill	146	642	4.40
Other miscellaneous uses ⁴	242	1,510	6.22
Unspecified: ⁵			
Reported	341	2,780	8.14
Estimated	2,870	24,900	8.67
Total or average	4,470	36,700	8.21

¹Data are rounded to no more than three significant digits, except unit value; may not add to totals shown.

²Includes plaster and gunite sands.

³Includes road and other stabilization (lime).

⁴Includes filtration, snow and ice control, and railroad ballast.

⁵Reported and estimated production without a breakdown by end use.