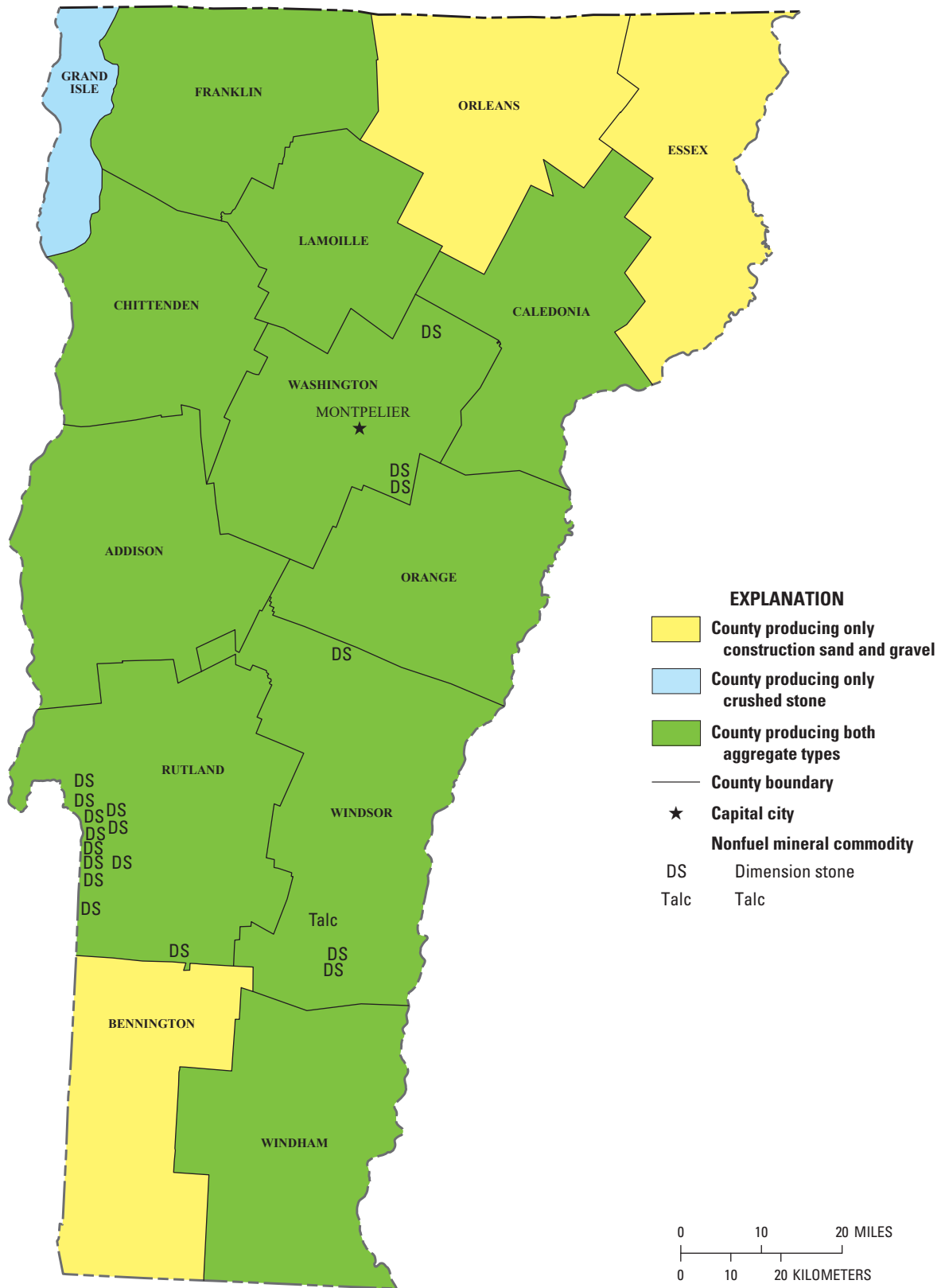




2014 Minerals Yearbook

VERMONT [ADVANCE RELEASE]



Base from U.S. Geological Survey digital data
 Albers Equal-Area Conic projection

Figure 1. Map showing major nonfuel-mineral-producing areas in Vermont in 2014. Sources: Vermont Geological Survey and U.S. Geological Survey.

THE MINERAL INDUSTRY OF VERMONT

By Robert M. Callaghan

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 2014, the partial value of the nonfuel mineral production¹ in the State of Vermont (fig. 1) for the mineral commodities published in this report was \$120 million,² a 4% decrease from the State's nonfuel mineral production partial value of \$126 million² in 2013 for these mineral commodities (table 1). The leading mineral commodity was crushed stone, followed by construction sand and gravel and dimension stone, in decreasing order of value. Talc was produced by just one company (table 3) and was included only in national-level tabulations to avoid disclosing company proprietary data. About 34% of the crushed stone production quantity was limestone or dolomite, 20% was sandstone or quartzite, 6% granite, 3% marble, and the remainder classified as "miscellaneous stone." About 59% of the dimension stone produced in the State was granite. On the basis of quantity, Vermont was ranked first in dimension slate production out of six producing States, and second in dimension marble production out of four producing States. On the basis of total production value of all nonfuel mineral commodities, Vermont ranked 46th and the State had a per capita value of \$191 compared with a national average of \$252. Employment at mines decreased while employment at mills and plants increased (table 2).

Events, Trends, and Issues

With 47 active crushed stone quarries and 43 crushed stone processing plants, and 101 active construction sand and gravel pits and 61 construction sand and gravel processing plants, aggregates were the leading mineral commodity in production quantity and production value in Vermont. Vermont was unusual among the States in that the production value of aggregates continued to increase during and after the recession of 2007–09 (fig. 2), with production value of crushed stone increasing to a new record in 2011 and production value of construction sand and gravel increasing to a new record in 2012. Production values in 2014 were 6% and 18% below those record levels, respectively. Production quantity of crushed stone, however, increased to a new record level, slightly above the previous 2011 production quantity peak. Weather events had much to do with the increased demand for aggregates, especially in 2011 after Hurricane Irene. About 800 kilometers of roads and 34 bridges were damaged, including significant damage to an 11-kilometer

stretch of route 107 (Vermont Office of the Governor, 2011). Another end use for aggregates was in the housing industry. Though not a large industry in Vermont compared to other States, housing unit completions continued to increase modestly, with 1,546 housing unit completions in 2014 compared to 1,499 in 2013 (U.S. Census Bureau, undated). Not all aggregates were for construction purposes; crushed marble produced in Vermont was ground into calcium carbonate additives for use as fillers and pigments and in animal feed supplements.

The dimension stone industry continued to recover after the recession of 2007–09. At the national level, among the types produced in Vermont, the production quantity of dimension slate increased by 26%, granite production increased by 5%, and marble production decreased by 5% (Dolley, 2016). Vermont slate was used in roofing and flagging.

Aggregates by State and End Use

A companion dataset, "Aggregates by State and End Use," replaces the discrete aggregate tables that were included in the individual State chapters prior to 2014 and is available on the State Minerals Statistics and Information web page at <https://minerals.usgs.gov/minerals/pubs/state/>. This dataset is updated annually.

References Cited

- Dolley, T.P., 2016, Stone, dimension [advance release], *in* Metals and minerals: U.S. Geological Survey Minerals Yearbook 2014, v. I, p. 72.1–72.13. (Accessed April 12, 2018, at https://minerals.usgs.gov/minerals/pubs/commodity/stone_dimension/myb1-2014-stond.pdf.)
- U.S. Census Bureau, [undated], Number of new residential housing units by State (total): U.S. Census Bureau, 4 p. (Accessed July 16, 2016, at <http://www.census.gov/construction/bps/xls/annualhistorybystatebystructure.xls>.)
- Vermont Office of the Governor, 2011, VTrans celebrates "last mile" of State highway repairs—Route 107 is open: Vermont.gov press release, December 30. (Accessed April 16, 2018, at <http://www.vermont.gov/portal/government/article.php?news=3317>.)

¹The 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 USGS mineral production data published in this chapter are those available as of June 2017. All USGS Mineral Industry Surveys and USGS Minerals Yearbook chapters—mineral commodity, State, and country—can be retrieved over the internet at <http://minerals.usgs.gov/minerals>.

²Partial total; excludes values that must be withheld to avoid disclosing company proprietary data.

TABLE 1
NONFUEL MINERAL PRODUCTION IN VERMONT^{1,2,3}

(Thousand metric tons and thousand dollars)

Mineral	2012		2013		2014	
	Quantity	Value	Quantity	Value	Quantity	Value
Gemstones, natural ^e	NA	1	NA	1	NA	1
Sand and gravel, construction	4,880 ^r	39,700 ^r	4,850 ^r	36,200 ^r	4,750	32,600
Stone:						
Crushed	6,190	62,200	6,500 ^r	64,100 ^r	6,520	63,400
Dimension	75	24,900	80	25,200	92	24,100
Talc, crude	W	W	W	W	W	W
Total	XX	127,000 ^r	XX	126,000	XX	120,000

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

¹Includes data available through June 2017.

²Production as measured by mine shipments, sales, or marketable production (including consumption by producers).

³Data are rounded to no more than three significant digits; may not add to totals shown.

TABLE 2
MINING ACTIVITY IN VERMONT

Mining activity	2012	2013	2014
State rank ¹	46	45	46
Employment, number: ²			
Nonfuel mineral mines	633	640	610
Mills and plants	326	329	344
Number of nonfuel mineral mines ²	189	202	198
Number of mills and plants ²	22	23	22
Average annual wage, all mining ³	dollars per year	NA	NA
Average annual wage, all industries ³	do.	NA	NA
Per capita value ⁴	dollars per person	203	200
National per capita value ¹	do.	241	236

do. Ditto. NA Not available.

¹Based on unadjusted State total value.

²Source: U.S. Mine Safety and Health Administration.

³Source: National Mining Association.

⁴Based on partial State total value to avoid disclosing company proprietary data.

TABLE 3
STRUCTURE OF THE NONFUEL MINERAL INDUSTRY IN VERMONT

(Nonfuel-mineral-producing companies, not including aggregate producers)

Commodity	Company	County
Gemstones ¹	Various	Various
Stone, dimension	AllStone Corp.	Windsor
Do.	Camara Slate Products	Rutland
Do.	Cormier Construction	Do.
Do.	Greenstone Slate Co.	Do.
Do.	Hammer Sales Inc	Do.
Do.	Hilltop Slate, Inc.	Do.
Do.	John Hadeka Slate Products, Inc.	Do.
Do.	Newmont Slate Co.	Do.
Do.	Quarry Slate Industries, Inc.	Do.
Do.	Rock of Ages Corp.	Washington and Windsor
Do.	Sheldon Slate Products Co., Inc.	Rutland
Do.	Swenson Granite Co.	Washington
Do.	Taran Brothers Slate Co.	Rutland
Do.	Vermont Quarries Corp.	Do.
Do.	Vermont Stone Sales Inc.	Windsor
Do.	Vermont Structural Slate Co.	Rutland
Do.	Western Slate Inc.	Do.
Talc	Imerys Talc America	Windsor

Do. Ditto.

¹Most natural gemstone producers in the United States are small businesses that are widely dispersed and operate independently.

