## THE MINERAL INDUSTRY OF RHODE ISLAND

This chapter has been prepared under a Memorandum of Understanding between the U.S. Geological Survey and the University of Rhode Island Department of Geology, Office of the State Geologist, for collecting information on all nonfuel minerals.

In 1998, the preliminary estimated value<sup>1</sup> of nonfuel mineral production for Rhode Island was \$27.8 million, according to

<sup>1</sup>The 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 1998 USGS mineral production data published in this chapter are preliminary estimates as of February 1999 and are expected to change. 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. A telephone listing for the specialists may be retrieved over the Internet at 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 http://minerals.usgs.gov/minerals; facsimile copies may be obtained from MINES FaxBack.

the U.S. Geological Survey. This was about a 2% increase from that of 1997, and followed an 18.3% increase in value from 1996 to 1997. In 1998, the State's increase resulted from an increase in the value of crushed stone (table 1). A similar increase in the value of industrial sand and gravel would have further raised Rhode Island's total nonfuel mineral value, but that data were withheld to avoid disclosing company proprietary information. While the value of construction sand and gravel, Rhode Island's leading nonfuel mineral commodity, decreased slightly for the year, gemstones again remained unchanged. In 1997, all nonfuel minerals increased in value except gemstones.

TABLE 1 NONFUEL RAW MINERAL PRODUCTION IN RHODE ISLAND 1/2/

(Thousand metric tons and thousand dollars unless otherwise specified)

	1990	1996		1997		1998 p/	
Mineral	Ouantity	Value	Ouantity	Value	Ouantity	Value	
Gemstones	NA	1	NA	1	NA	1	
Sand and gravel: Construction	1,990	13,300	1,960	15,700	2,070	17,000	
Stone: Crushed	1,440	9,680	1,830	11,500	1,800	10,800	
Total 3/	XX	23,000	XX	27,200	XX	27,800	

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

TABLE 2 RHODE ISLAND: CRUSHED STONE SOLD OR USED, BY KIND 1/

		1996			1997			
Kind	Number of quarries	Ouantity (thousand metric tons)	Value (thousands)	Unit value	Number of quarries	Ouantity (thousand metric tons)	Value (thousands)	Unit value
Limestone	1	W	W	W	1	W	W	W
Granite	5	948	\$6,680	\$7.05	5	1,300	\$8,210	\$6.31
Traprock	2	W	W	W	2	W	W	W
Total	XX	1,440	9,680	6.74	XX	1,830	11,500	6.30

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

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<sup>&</sup>lt;sup>2</sup>Values, percentage calculations, and rankings for 1997 may vary from the *Minerals Yearbook, Area Reports: Domestic 1997, Volume II*, owing to the revision of preliminary 1997 to final 1997 data. Data for 1998 are preliminary and expected to change, while related rankings may also be subject to change.

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

<sup>2/</sup> Data are rounded to three significant digits; may not add to totals shown.

<sup>3/</sup> Partial total, excludes values which must be concealed to avoid disclosing company proprietary data.

<sup>1/</sup> Data are rounded to three significant digits; may not add to totals shown.

## TABLE 3 RHODE ISLAND: CRUSHED STONE SOLD OR USED BY PRODUCERS IN 1997, BY USE 1/2/3/

	Ouantity (thousand	Value	Unit
Use	metric tons)	(thousands)	value
Coarse aggregate (+1 1/2 inch):	=		
Filter stone	_ 7	\$38	\$5.43
Other coarse aggregate 4/	_ 3	11	3.67
Coarse aggregate, graded:	_		
Bituminous surface-treatment aggregate	78	430	5.51
Other graded coarse aggregate 5/	79	666	8.43
Fine aggregate (-3/8 inch): Other fine aggregate 6/	119	735	6.18
Coarse and fine aggregates:	<u>-</u> _		
Unpaved road surfacing	38	212	5.58
Crusher run or fill or waste	17	158	9.29
Other coarse and fine aggregates 7/	56	359	6.41
Agricultural limestone	W	W	12.17
Other miscellaneous uses: Other specified uses not listed	W	W	12.17
Unspecified: 8/	<u>-</u>		
Actual	W	W	6.20
Estimated	677	4,200	6.20
Total	1,830	11,500	6.30

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

- 1/To avoid disclosing company proprietary data, district tables were not produced for 1997.
- 2/ Includes granite, limestone, and traprock.
- 3/ Data are rounded to three significant digits, except unit value; may not add to totals shown.
- 4/ Includes riprap and jetty stone.
- 5/ Includes bituminous aggregate (coarse) and concrete aggregate (coarse).
- 6/ Includes stone sand (concrete), stone sand (bituminous mix or seal), and screening (undesignated).
- 7/ Includes graded road base or subbase.
- 8/ Includes reported and estimated production without a breakdown by end use.

TABLE 4 RHODE ISLAND: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 1997, BY MAJOR USE CATEGORY 1/2/

	Ouantity (thousand	Value	Value
Use	metric tons)	(thousands)	per ton
Concrete aggregate and concrete products 3/	740	\$6,580	\$8.89
Asphaltic concrete aggregates and other bituminous mixtures	411	3,730	9.09
Road base and coverings	117	807	6.90
Fill	156	905	5.80
Snow and ice control	17	146	8.59
Railroad ballast	W	W	W
Unspecified:	_		
Actual	W	W	W
Estimated	446	2,650	5.95
Total or average	1,960	15,700	7.99

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

- 1/ To avoid disclosing company proprietary data, no district tables were produced in 1997.
  2/ Data are rounded to three significant digits, except value per ton; may not add to totals shown.
- 3/ Includes plaster and gunite sands.

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