

# THE MINERAL INDUSTRY OF HAWAII

In 1998, the preliminary estimated value<sup>1</sup> of nonfuel mineral production for Hawaii was \$85.5 million, according to the U.S. Geological Survey (USGS). This was a 9% decrease

<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, 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 <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.

from that of 1997<sup>2</sup> and followed a 14.8% decrease from 1996 to 1997. Mining in Hawaii consisted mostly of the quarrying of stone to produce crushed stone and the extraction of sand and gravel from open pits for use by the State's construction industry. All of the State's portland cement, albeit from imported clinker, was produced at one grinding plant on the island of Oahu, Honolulu County. Hawaii's decrease in the value of nonfuel mineral production in 1998 is mostly attributable to a 16% decrease in the value of crushed stone. Only portland cement rose in value, increasing by about \$1.4 million. Both crushed stone and portland cement have shown an overall decrease in value since 1992, when they reached individual State highs. In 1992, about 9.5 million metric tons of crushed stone was produced at an estimated value of \$93.5 million and 520,000 tons of portland cement was produced at a value of almost \$54 million.

<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.

TABLE 1  
NONFUEL RAW MINERAL PRODUCTION IN HAWAII 1/ 2/

(Thousand metric tons and thousand dollars unless otherwise specified)

Mineral	1996		1997		1998 p/	
	Quantity	Value	Quantity	Value	Quantity	Value
<b>Cement:</b>						
Masonry	5	500 e/	3	332 e/	3	300
Portland	312	32.000 e/	252	29.600 e/	261	31.000
Gemstones	NA	153	NA	66	NA	33
Sand and gravel: Construction	W	W	378	4.210	378	4.210
Stone: Crushed	6,560	77.500	5,560	59.500	5,000	50.000
Total	XX	110.000 3/	XX	93.700	XX	85.500

e/ Estimated. p/ Preliminary. NA Not available. W Withheld to avoid disclosing company proprietary data. XX Not applicable.

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

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

3/ Partial total excludes values that must be concealed to avoid disclosing company proprietary data.

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

Kind	1996				1997			
	Number of quarries	Quantity (thousand metric tons)	Value (thousands)	Unit value	Number of quarries	Quantity (thousand metric tons)	Value (thousands)	Unit value
Limestone	6	1.030	\$10.500	\$10.22	5	409	\$3.090	\$7.55
Granite	1	W	W	8.30	1	W	W	8.51
Traprock	17	4,220	55.100	13.06	17	3,870	44.400	11.49
Sandstone	1	W	W	10.53	1	W	W	10.78
Volcanic cinder and scoria	2	W	W	2.94	2	W	W	2.37
Miscellaneous stone	1	W	W	11.30	1	W	W	11.56
Total	XX	6,560	77.500	11.82	XX	5,560	59.500	10.71

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

1/ Data are rounded to three significant digits, except unit value; may not add to totals shown.

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

Use	Quantity (thousand metric tons)	Value (thousands)	Unit value
<u>Coarse aggregate (+1 1/2 inch):</u>			
Riprap and jetty stone	35	\$416	\$11.89
Other coarse aggregate 3/	63	658	10.44
<u>Coarse aggregate, graded:</u>			
Concrete aggregate, coarse	767	10,700	13.93
Other graded coarse aggregate 4/	281	3,960	14.09
<u>Fine aggregate (-3/8 inch):</u>			
Stone sand, concrete	338	5,510	16.30
Other fine aggregate 5/	179	2,410	13.45
<u>Coarse and fine aggregates:</u>			
Graded road base or subbase	196	2,040	10.42
Crusher run or fill or waste	760	4,860	6.39
Other coarse and fine aggregates	82	950	11.59
Other construction materials 6/	100	875	8.75
Agricultural limestone	W	W	25.00
Unspecified: Estimated 7/	W	W	9.83
Total	5,560	59,500	10.71

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

1/ Includes granite, limestone, miscellaneous stone, sandstone, traprock, and volcanic cinder and scoria.

2/ Data are rounded to three significant digits, except unit value; may not add to totals shown.

3/ Includes filter stone.

4/ Includes bituminous aggregate (coarse), bituminous surface-treatment aggregate, and railroad ballast.

5/ Includes stone sand (bituminous mix or seal).

6/ Includes unpaved road surfacing.

7/ Includes estimated production without a breakdown by end use.