

# THE MINERAL INDUSTRY OF MASSACHUSETTS

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 Commonwealth of Massachusetts, Executive Office of Environmental Affairs, for collecting information on all nonfuel minerals.

In 1996, for the second consecutive year, Massachusetts ranked 39th in the Nation in total nonfuel mineral production value,<sup>1</sup> according to the U.S. Geological Survey (USGS). The estimated value for 1996 was \$191 million, about a \$1 million increase from that of 1995. This followed about a 7% increase from 1994 to 1995 (based on final 1995 data). The State accounted for about 0.5% of the U.S. total nonfuel mineral production value.

The leading mineral commodities by value in Massachusetts were construction sand and gravel and crushed stone, respectively. Dimension stone was third. The increases in construction sand and gravel and dimension stone values in 1996 a little more than compensated for a 17% decrease in crushed stone value. Additionally, lime and gemstone values showed small increases and peat decreased a small amount. In 1995, all three leading mineral commodities had gained in value, especially construction sand and gravel and dimension

stone. Based on USGS estimates of quantities of dimension stone produced in the United States during 1995, Massachusetts increased in rank from fifth to fourth.

<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 1996 USGS mineral production data published in this chapter are estimates as of February 1997. For 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 # 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. This telephone listing may also be retrieved over the Internet at <http://minerals.er.usgs.gov/minerals/contacts/comdir.html>

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

(Thousand metric tons and thousand dollars unless otherwise specified)

Mineral	1994		1995		1996 p/	
	Quantity	Value	Quantity	Value	Quantity	Value
Clays	W	W	31	W	31	W
Sand and gravel (construction)	12,300	60,000	11,700	67,500	13,500	81,000
Stone:						
Crushed	10,400 3/	96,800 3/	11,100	97,400	9,200	80,500
Dimension metric tons	57,300	9,600	77,600	14,600	121,000	18,800
Combined value of clays (common), gemstones, lime, peat, stone [crushed dolomite and limestone (1994)], and values indicated by symbol W	XX	11,100	XX	10,700	XX	10,800
Total	XX	178,000	XX	190,000	XX	191,000

p/ Preliminary. W Withheld to avoid disclosing company proprietary data; value included with "Combined value" 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/ Excludes certain stones; kind and value included with "Combined value" data.

TABLE 2  
 MASSACHUSETTS: CRUSHED STONE 1/ SOLD OR USED  
 BY PRODUCERS IN 1995, BY USE 2/

Use	Quantity (thousand metric tons)	Value (thousands)	Unit value
Coarse aggregate (+1 1/2 inch):			
Riprap and jetty stone	57	\$440	\$7.72
Other coarse aggregate 3/	334	3,220	9.65
Coarse aggregate, graded:			
Concrete aggregate, coarse	502	3,090	6.16
Bituminous aggregate, coarse	1,610	12,300	7.65
Bituminous surface-treatment aggregate	773	7,780	10.07
Railroad ballast	451	2,690	5.95
Other graded coarse aggregate	W	W	11.79
Fine aggregate (-3/8 inch):			
Stone sand, concrete	112	736	6.57
Screening, undesignated	549	2,960	5.39
Other fine aggregate 4/	469	4,000	8.53
Coarse and fine aggregates:			
Graded road base or subbase	201	1,480	7.38
Crusher run or fill or waste	514	3,760	7.31
Other coarse and fine aggregates	W	W	13.21
Other construction materials 5/	1,610	19,100	11.87
Agricultural:			
Agricultural limestone	(6/)	(6/)	17.33
Poultry grit and mineral food	(6/)	(6/)	17.33
Chemical and metallurgical:			
Cement manufacture	(6/)	(6/)	1.08
Lime manufacture	(6/)	(6/)	6.92
Special:			
Asphalt fillers or extenders	(7/)	3	22.04
Other fillers or extenders	(6/)	(6/)	56.98
Unspecified: 8/			
Actual	130	1,130	8.66
Estimated	3,280	26,700	8.13
Total	11,100	97,400	8.77

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

1/ Includes dolomite, granite, limestone, limestone-dolomite, miscellaneous stone, and traprock.

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

3/ Includes filter stone and macadam.

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

5/ Includes building products.

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

7/ Less than 1/2 unit.

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

TABLE 3  
 MASSACHUSETTS: CRUSHED STONE SOLD OR USED BY PRODUCERS IN 1995, BY KIND 1/

Kind	1994				1995			
	Number of quarries	Quantity (thousand metric tons)	Value (thousands)	Unit value	Number of quarries	Quantity (thousand metric tons)	Value (thousands)	Unit value
Limestone	4 r/	1,660 r/	\$18,500 r/	\$11.19 r/	4	2,020	\$21,800	\$10.80
Limestone-dolomite	(2/)	(2/)	(2/)	(2/)	1	W	W	8.04
Dolomite	(2/)	(2/)	(2/)	(2/)	1	W	W	1.08
Granite	9 r/	2,890 r/	29,600 r/	10.23 r/	10	3,430	31,400	9.15
Traprock	20	5,860	48,700	8.31	16	5,450	42,500	7.78
Miscellaneous stone	--	--	--	--	2	W	W	9.20
Total	XX	10,400 r/	96,800 r/	9.30 r/	XX	11,100	97,400	8.77

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

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

2/ Excludes dolomite and limestone-dolomite from State total to avoid disclosing company proprietary data.

TABLE 4  
 MASSACHUSETTS: CRUSHED STONE SOLD OR USED BY PRODUCERS IN 1995,  
 BY USE AND DISTRICT 1/

(Thousand metric tons and thousand dollars)

Use	District 1		District 2		District 3	
	Quantity	Value	Quantity	Value	Quantity	Value
<b>Construction aggregates:</b>						
Coarse aggregate (+1 1/2 inch) 2/	57	450	W	W	W	W
Coarse aggregate, graded 3/	W	W	W	W	W	W
Fine aggregate (-3/8 inch) 4/	W	W	43	138	W	W
Coarse and fine aggregate 5/	W	W	W	W	727	6,320
Other construction materials 6/	1,480	10,800	1,010	5,820	3,860	38,000
Agricultural 7/	(8/)	(8/)	--	--	--	--
Chemical and metallurgical 9/	(8/)	(8/)	--	--	--	--
Special 10/	(8/)	(8/)	(11/)	3	--	--
Unspecified: 12/						
Actual	--	--	--	--	130	1,130
Estimated	1,530	13,100	664	5,570	1,090	8,060
Total	3,590	32,400	1,710	11,500	5,810	53,500

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

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

2/ Includes filter stone, macadam, riprap and jetty stone, and other coarse aggregate.

3/ Includes concrete aggregate (coarse), bituminous aggregate (coarse), bituminous surface-treatment aggregate, railroad ballast, and other graded coarse aggregate.

4/ Includes stone sand (concrete), stone sand (bituminous mix or seal), screening (undesignated), and other fine aggregate.

5/ Includes graded road base or subbase, crusher run (select material or fill), and other coarse and fine aggregates.

6/ Includes building products.

7/ Includes agricultural limestone and building products, poultry grit, and mineral food.

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

9/ Includes cement and lime manufacture.

10/ Includes asphalt fillers or extenders and other fillers or extenders.

11/ Less than 1/2 unit.

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