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.

Massachusetts ranked 40th in the Nation in total nonfuel mineral value¹ in 1994, down from 39th in 1993, according to the U.S. Bureau of Mines (USBM). The estimated value for 1994 was \$157 million, about a 2% decrease from that of 1993. This followed a nearly 9% increase in 1993 compared with that of 1992. The State accounted for about 0.5% of the U.S. total value. The leading and second-leading mineral commodities in the State, based both on quantities produced and value, were crushed stone and construction sand and gravel, respectively. In 1994, increased values for construction sand and gravel and lime did not quite compensate for decreases in the values of crushed stone and dimension stone, resulting in a net decrease for the year. The increase in the value of dimension stone in 1993 was mostly responsible for the notable increase in value as measured against that of 1992, while a smaller increase in

construction sand and gravel contributed to the State's rising mineral value that year.

Based on USBM estimates of the quantities produced in the United States during 1994, Massachusetts dropped from third to fourth in the production of dimension stone. While not ranking among the top 10 States, Massachusetts' quarries produced significant quantities of crushed stone and construction sand and gravel, while similar production of lime was achieved in manufacturing plants within the State. No metal mining occurred in the State of Massachusetts.

TABLE 1
NONFUEL RAW MINERAL PRODUCTION IN MASSACHUSETTS¹

	1	1992		1993		1994 ^p	
Mineral	Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)	
Gemstones	NA	\$1	NA	W	NA	W	
Sand and gravel:							
Construction thousand metric tons	10,916	48,671	e10,800	°51,300	11,600	\$56,000	
Industrial do.	8	151	2	42	W	W	
Stone:							
Crushed do.	e9,435	e77,200	² 9,455	² 76,267	^{e 2} 8,500	e ² 69,000	
Dimension metric tons	°59,725	e9,292	152,536	21,323	W	W	
Combined value of clays (common), lime, peat, stone [crushed dolomite and miscellaneous							
(1993-94)], and values indicated by symbol W	XX	12,086	XX	11,280	XX	32,000	
Total	XX	147,401	XX	160,212	XX	³ 157,000	

Estimated. Preliminary. NA Not available. W Withheld to avoid disclosing company proprietary data; value included with "Combined value" data. XX Not applicable.

¹The term value in this document refers to the monetary value of nonfuel minerals as represented by either mine shipments, mineral commodity sales, or marketable production as is applicable to the individual mineral commodities.

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

²Excludes certain stones; kind and value included with "Combined value" data.

³Data do not add to total shown because of independent rounding.

TABLE 2
MASSACHUSETTS¹: CRUSHED STONE² SOLD OR USED BY PRODUCERS IN 1993, BY USE

Use	Quantity (thousand metric tons)	Value (thousands)	Unit value	
Coarse aggregate (+1 1/2 inch): Riprap and jetty stone ³	915	\$8,720	\$9.53	
Coarse aggregate, graded:				
Bituminous aggregate, coarse	1,716	12,107	7.06	
Other graded coarse aggregate ⁴	3,790	28,572	7.54	
Fine aggregate (-3/8 inch): Stone sand, concrete ⁵	802	6,597	8.23	
Coarse and fine aggregates:				
Crusher run or fill or waste	207	1,777	8.58	
Other construction materials ⁶	711	4,648	6.54	
Agricultural:				
Agricultural limestone	W	W	17.56	
Poultry grit and mineral food	W	W	17.56	
Chemical and metallurgical:				
Lime manufacture	W	W	7.15	
Special:				
Other fillers or extenders	W	W	55.22	
Other specified uses not listed	W	W	7.64	
Unspecified: ⁷				
Actual	W	W	10.20	
Estimated	W	<u>W</u>	7.04	
Total ⁸	9,455	76,267	8.07	
Total ^{9 10}	10,422	76,267	7.32	

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

TABLE 3
MASSACHUSETTS: CRUSHED STONE SOLD OR USED, BY KIND

Kind		1991				1993			
	Number of quarries	Quantity (thousand metric tons)	Value (thousands)	Unit value	Number of quarries	Quantity (thousand metric tons)	Value (thousands)	Unit value	
Limestone	2	W	W	\$13.23	4	795	\$10,479	\$13.18	
Dolomite	1	W	W	13.41	(1)	(1)	(¹)	(¹)	
Granite	^r 4	^r 1,614	r\$14,245	r8.83	3	940	9,887	10.52	
Traprock	-r18	r3,622	r20,881	^r 5.77	20	7,719	55,902	7.24	
Miscellaneous stone	1	W	W	5.39	(¹)	(¹)	(1)	(¹)	
Total ²	XX	6,469	51,362	7.94	XX	9,455	76,267	8.07	
Total ^{3 4}	XX	7,131	51,362	7.20	XX	10,422	76,267	7.32	

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

To avoid disclosing company proprietary data; "District tables were not produced for 1993."

²Includes granite, limestone, and traprock; excludes dolomite and miscellaneous stone from State total to avoid disclosing company proprietary data.

³Includes macadam, filter stone, and other coarse aggregate.

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

⁵Includes stone sand (bituminous mix or seal), screening (undesignated), and other fine aggregates.

⁶Includes graded road base or subbase, terrazzo and exposed aggregates and other coarse and fine aggregates.

⁷Includes production reported without a breakdown by use and estimates for nonrespondents.

⁸Data may not add to totals shown because of independent rounding.

One short ton is equal to 907 kilograms or 2,000 pounds. To convert metric tons to short tons, divide metric tons by 0.907185.

¹⁰Total shown in thousand short tons and thousand dollars.

¹Excludes dolomite and miscellaneous stone from State total to avoid disclosing company proprietary data.

²Data may not add to totals shown because of independent rounding.

³One short ton is equal to 907 kilograms or 2,000 pounds. To convert metric tons to short tons, divide metric tons by 0.907185.

⁴Total shown in thousand short tons and thousand dollars.