THE MINERAL INDUSTRY OF MASSACHUSETTS

This chapter has been prepared under a Memorandum of Understanding between the U.S. Geological Survey and the Massachusetts Executive Office of Environmental Affairs for collecting information on all nonfuel minerals.

In 1999, the preliminary estimated value[1] of nonfuel mineral production for Massachusetts was $204 million, according to the U.S. Geological Survey (USGS). No change in value occurred from that of 1998,[2] following a 5.7% increase in 1998 from 1997. The leading mineral commodities by value were crushed stone, construction sand and gravel, and dimension stone. (All mineral commodity listings are by descending order of value or magnitude of change in value.) In 1999, increases in the values of crushed stone and construction sand gravel of more than $5 million and $2 million, respectively, offset nearly an $8 million decrease in the value of dimension stone. In 1998, most nonfuel minerals increased in value, led by a $6.5 million increase in construction sand and gravel and a $5.6 million increase in crushed stone (table 1). Based upon USGS estimates of the quantities of dimension stone produced in the United States in 1999, Massachusetts decreased to fifth from third.

[1]The terms "nonfuel mineral production" and related "values" encompass variations in meaning, depending upon 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 1999 USGS mineral production data published in this chapter are preliminary estimates as of May 2000, and are expected to change. For some mineral commodities, such as, 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 URL 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 URL http://minerals.usgs.gov/minerals; facsimile copies may be obtained from MINES FaxBack.

[2]Values, percentage calculations, and rankings for 1998 may vary from the Minerals Yearbook, Area Reports: Domestic 1998, Volume II, owing to the revision of preliminary 1998 to final 1998 data. Data for 1999 are preliminary and are expected to change; related rankings may also be subject to change.

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

(Thousand metric tons and thousand dollars unless otherwise specified)

Mineral	1997		1998		1999 p/	
	Quantity	Value	Quantity	Value	Quantity	Value
Gemstones	NA	1	NA	1	NA	1
Sand and gravel: Construction	13,500	71,500	14,000	78,000	14,100	80,200
Stone:						
Crushed	12,200 3/	91,300 3/	12,800	96,900	13,100	102,000
Dimension metric tons	101,000	18,100	85,800	17,600	70,400	16,900
Combined values of clays (common), lime, peat (1997), sand and gravel (industrial), stone [crushed miscellaneous (1997)]	XX	11,700	XX	12,000	XX	11,900
Total	XX	193,000	XX	204,000	XX	211,000

p/ Preliminary. NA Not available. XX Not applicable.
1/ Production as measured by mine shipments, sales, or marketable production (including consumption by producers).
2/ Data are rounded to no more than three significant digits; may not add to totals shown.
3/ Excludes certain stones; kind and value included with "Combined values" data.

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

Kind	1997 Number of quarries	1997 Quantity (thousand metric tons)	1997 Value (thousands)	1997 Unit value	1998 Number of quarries	1998 Quantity (thousand metric tons)	1998 Value (thousands)	1998 Unit value
Limestone 2/	7	2,050	$22,200	$10.83	7	2,170	$21,000	$9.67
Granite	9	3,190	20,000	6.27	8	3,140	22,800	7.27
Traprock	17	7,000	49,100	7.02	18	7,230	51,400	7.12
Miscellaneous stone	1	W	W	W	3	228	1,610	7.06
Total or average	XX	12,200	91,300	7.46	XX	12,800	96,900	7.59

W Withheld to avoid disclosing company proprietary data. XX Not applicable.
1/ Data are rounded to no more than three significant digits, except unit value; may not add to totals shown.
2/ Includes limestone-dolomite, reported with no distinction between the two.

TABLE 3
MASSACHUSETTS: CRUSHED STONE SOLD OR USED
BY PRODUCERS IN 1998, BY USE 1/ 2/

Use	Quantity (thousand metric tons)	Value (thousands)	Unit value
Coarse aggregate (+1 1/2 inch):			
Macadam	W	W	$8.43
Riprap and jetty stone	41	$350	8.54
Filter stone	11	118	10.73
Other coarse aggregates	85	878	10.33
Coarse aggregate, graded:			
Concrete aggregate, coarse	736	5,950	8.09
Bituminous aggregate, coarse	1,700	10,700	6.32
Bituminous surface-treatment aggregate	84	977	11.63
Railroad ballast	414	2,840	6.87
Other graded coarse aggregate	9	80	8.89
Fine aggregate (-3/8 inch):			
Stone sand, concrete	92	605	6.58
Stone sand, bituminous mix or seal	W	W	4.59
Other fine aggregate	445	1,890	4.26
Coarse and fine aggregates:			
Graded road base or subbase	309	2,720	8.81
Unpaved road surfacing	353	1,900	5.39
Crusher run or fill or waste	443	3,170	7.16
Other coarse and fine aggregates	W	W	3.15
Other construction materials	31	148	4.77
Agricultural:			
Agricultural limestone	W	W	13.85
Poultry grit and mineral food	W	W	13.85
Chemical and metallurgical: Lime manufacture	W	W	W
Special: Other fillers or extenders	W	W	W
Other miscellaneous uses:			
Building products	W	W	16.44
Other specified uses not listed	102	1,590	15.54
Unspecified: 3/			
Actual	4,590	35,700	7.78
Estimated	2,830	19,900	7.02
Total or average	12,800	96,900	7.59

W Withheld to avoid disclosing company proprietary data; included in "Total."
1/ Data are rounded to no more than three significant digits, except unit value; may not add to totals shown.
2/ Includes granite, limestone, miscellaneous stone, and traprock.
3/ Reported and estimated production without a breakdown by end use.

TABLE 4
MASSACHUSETTS: CRUSHED STONE SOLD OR USED BY PRODUCERS IN 1998,
BY USE AND DISTRICT 1/

(Thousand metric tons and thousand dollars)

Use	District 1		District 2		District 3	
	Quantity	Value	Quantity	Value	Quantity	Value
Construction aggregates:						
Coarse aggregate (+1 1/2 inch) 2/	W	W	67	683	W	W
Coarse aggregate, graded 3/	W	W	1,290	7,680	W	W
Fine aggregate (-3/8 inch) 4/	W	W	273	1,230	W	W
Coarse and fine aggregate 5/	W	W	412	2,740	W	W
Other construction materials	1,710	11,700	29	142	1,060	951
Agricultural 6/	(7/)	(7/)	--	--	--	--
Chemical and metallurgical 8/	(7/)	(7/)	--	--	--	--
Special 9/	(7/)	(7/)	--	--	--	--
Other miscellaneous uses	--	--	21	253	--	--
Unspecified: 10/						
Actual	--	--	478	3,970	4,100	31,700
Estimated	1,620	11,600	318	2,280	896	6,000
Total	3,820	30,700	2,890	19,000	6,070	47,200

W Withheld to avoid disclosing company proprietary data; included with "Other construction materials." -- Zero.
1/ Data are rounded to no more than 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), and other fine aggregate.
5/ Includes crusher run (select material or fill), graded road base or subbase, unpaved road surfacing, and other coarse and fine aggregates.
6/ Includes agricultural limestone and poultry grit and mineral food.
7/ Withheld to avoid disclosing company proprietary data; included in "Total."
8/ Includes lime manufacture.
9/ Includes other fillers or extenders.
10/ Reported and estimated production without a breakdown by end use.

TABLE 5
MASSACHUSETTS: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 1998,
BY MAJOR USE CATEGORY 1/

Use	Quantity (thousand metric tons)	Value (thousands)	Unit value
Concrete aggregate	2,720	$17,900	$6.59
Plaster and gunite sands	54	573	10.61
Concrete products (blocks, bricks, pipe, decorative, etc.)	70	412	5.89
Asphaltic concrete aggregates and other bituminous mixtures	357	3,230	9.06
Road base and coverings 2/	1,070	5,260	4.93
Fill	2,060	5,970	2.89
Snow and ice control	347	1,630	4.71
Filtration	18	52	2.89
Unspecified: 3/			
Actual	1,450	3,930	2.71
Estimated	5,880	39,000	6.63
Total or average	14,000	78,000	5.56

1/ Data are rounded to no more than three significant digits, except unit value; may not add to totals shown.
2/ Includes road and other stabilization (lime).
3/ Reported and estimated production without a breakdown by end use.

TABLE 6
MASSACHUSETTS: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 1998,
BY USE AND DISTRICT 1/

(Thousand metric tons and thousand dollars)

Use	District 1		District 2		District 3	
	Quantity	Value	Quantity	Value	Quantity	Value
Concrete aggregate and concrete products 2/	W	W	W	W	1,810	13,200
Asphaltic concrete aggregates and other bituminous mixtures	W	W	W	W	--	--
Road base and coverings 3/	162	689	400	1,850	505	2,720
Fill	311	513	711	1,840	1,040	3,620
Snow and ice control	29	142	236	982	83	510
Filtration	--	--	18	52	--	--
Unspecified 4/	1,260	5,810	1,730	6,050	4,340	31,100
Total	2,490	12,300	3,760	14,500	7,780	51,100

W Withheld to avoid disclosing company proprietary data; included in "Total." -- Zero.
1/ Data are rounded to no more than three significant digits; may not add to totals shown.
2/ Includes plaster and gunite sands.
3/ Includes road and other stabilization (lime).
4/ Reported and estimated production without a breakdown by end use.