

MASSACHUSETTS

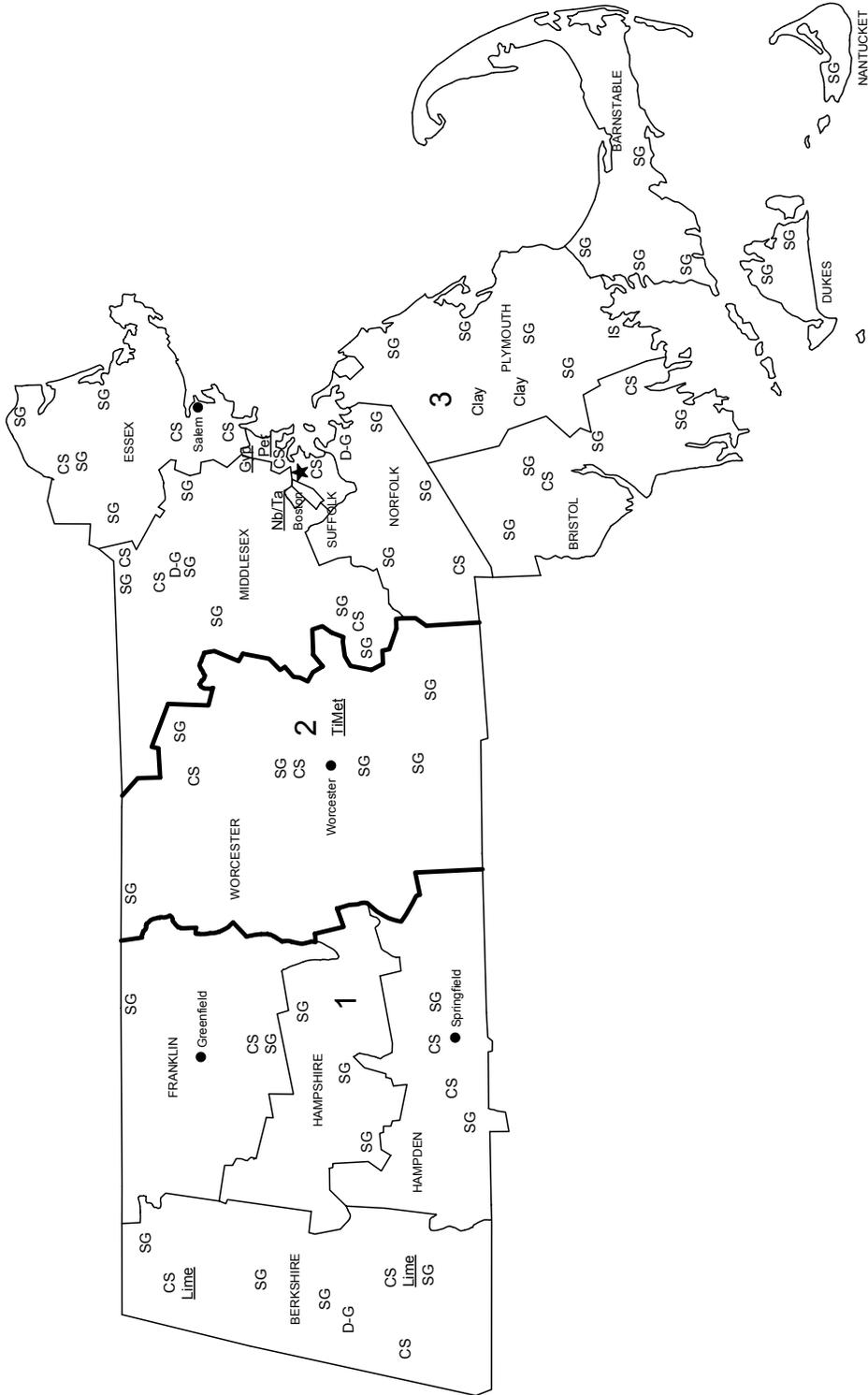
LEGEND

- County boundary
- ★ Capital
- City
- 1 — Crushed stone/sand and gravel districts

MINERAL SYMBOLS (Major producing areas)

- Clay
- CS Crushed stone
- D-G Dimension granite
- GYP Gypsum plant
- IS Industrial sand
- Lime
- Nb/Ta Columbium/tantalum plant
- Per Perite plant
- SG Construction sand and gravel
- TiMet Titanium metal plant

0 20 Kilometers



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 2002, the estimated value¹ of nonfuel mineral production for Massachusetts was \$235 million, based upon preliminary U.S. Geological Survey (USGS) data. This was about a 6% increase from that of 2001² and followed a 10.5% increase in 2001 from 2000.

Massachusetts' leading nonfuel mineral commodities by value were crushed stone, construction sand and gravel, and dimension stone. In 2002, the increased values for crushed stone and construction sand and gravel accounted for all of the State's increase in nonfuel mineral production value. These increases more than offset relatively small decreases that occurred in dimension stone and lime (table 1). Based upon USGS data of the quantities produced in the United States in 2002, Massachusetts rose to fifth from sixth among those States producing dimension stone.

In 2001, increases of \$17 million in crushed stone and \$9 million in construction sand and gravel accounted for all of the State's increase in nonfuel mineral production value. Dimension stone was down by \$5.4 million, and lime was down by slightly more than \$1 million, although production was up slightly (table 1).

¹The 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 2002 USGS mineral production data published in this chapter are preliminary estimates as of July 2003 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. Specialist contact information may be retrieved over the Internet at URL <http://minerals.usgs.gov/minerals/contacts/comdir.html>; alternatively, specialists' names and telephone numbers may be obtained by calling USGS information at (703) 648-4000 or by calling the USGS Earth Science Information Center at 1-888-ASK-USGS (275-8747). All Mineral Industry Surveys—mineral commodity, State, and country—also may be retrieved over the Internet at URL <http://minerals.usgs.gov/minerals>.

²Values, percentage calculations, and rankings for 2001 may differ from the Minerals Yearbook, Area Reports: Domestic 2001, Volume II, owing to the revision of preliminary 2001 to final 2001 data. Data for 2002 are preliminary and are expected to change; related rankings may also change.

TABLE 1
NONFUEL RAW MINERAL PRODUCTION IN MASSACHUSETTS^{1,2}

(Thousand metric tons and thousand dollars unless otherwise specified)

Mineral	2000		2001		2002 ^P	
	Quantity	Value	Quantity	Value	Quantity	Value
Clays, common e/	36	321	36	321	36	321
Gemstones	NA	1	NA	1	NA	1
Lime	W	(3)	W	(3)	W	(3)
Sand and gravel, construction	13,200	80,100	14,000	89,300	14,600	94,900
Stone:						
Crushed	13,400	103,000	14,500	121,000	15,200	129,000
Dimension metric tons	69,600	16,800	81,400	11,400	81,300	10,600
Total	XX	200,000	XX	221,000	XX	235,000

^eEstimated. ^PPreliminary. NA Not available. W Withheld to avoid disclosing company proprietary data.

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

²Data are rounded to no more than three significant digits; may not add to totals shown.

³Value excluded to avoid disclosing company proprietary data.

TABLE 2
 MASSACHUSETTS: CRUSHED STONE SOLD OR USED, BY KIND¹

Kind	2000				2001			
	Number of quarries	Quantity (thousand metric tons)	Value (thousands)	Unit value	Number of quarries	Quantity (thousand metric tons)	Value (thousands)	Unit value
Limestone ²	3 ^r	879	\$12,600	\$14.31	3	1,060	\$19,600	\$18.50
Dolomite	1	W	W	4.35	1	W	W	3.87
Granite	9 ^r	4,750 ^r	33,900 ^r	7.14 ^r	9	5,130	38,000	7.40
Traprock	21 ^r	7,390 ^r	53,900 ^r	7.29 ^r	20	7,810	60,000	7.68
Miscellaneous stone	2 ^r	W	W	8.21 ^r	2	W	W	8.60
Total or average	XX	13,400	103,000	7.69	XX	14,500	121,000	8.34

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

¹Data are rounded to no more than three significant digits, except unit value; may not add to totals shown.

²Includes limestone-dolomite reported with no distinction between the two.

TABLE 3
 MASSACHUSETTS: CRUSHED STONE SOLD OR USED BY PRODUCERS IN 2001, BY USE¹

Use	Quantity (thousand metric tons)	Value (thousands)	Unit value
Construction:			
Coarse aggregate (+1 1/2 inch):			
Macadam	W	W	\$8.57
Riprap and jetty stone	W	W	10.83
Other coarse aggregates	252	\$2,360	9.35
Coarse aggregate, graded:			
Bituminous aggregate, coarse	W	W	10.33
Bituminous surface-treatment aggregate	W	W	12.85
Railroad ballast	W	W	10.20
Other graded coarse aggregates	1,760	19,700	11.23
Fine aggregate (-3/8 inch):			
Stone sand, concrete	W	W	7.61
Other fine aggregates	40	312	7.80
Coarse and fine aggregates:			
Graded road base or subbase	(2)	(2)	7.99
Unpaved road surfacing	(2)	(2)	11.30
Crusher run or fill or waste	767	5,120	6.67
Other construction materials	82	760	9.27
Agricultural:			
Agricultural limestone	(2)	(2)	5.93
Poultry grit and mineral food	(2)	(2)	15.76
Chemical and metallurgical:			
Lime manufacture	(2)	(2)	6.85
Dead burned dolomite	(2)	(2)	3.64
Special:			
Whiting or whiting substitute	(2)	(2)	11.83
Other fillers or extenders	(2)	(2)	60.63
Unspecified:³			
Reported	7,110	50,800	7.15
Estimated	3,300	22,000	6.76
Total or average	14,500	121,000	8.34

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

¹Data are rounded to no more than three significant digits, except unit value; may not add to totals shown.

²Withheld to avoid disclosing company proprietary data; included in "Total."

³Reported and estimated production without a breakdown by end use.

TABLE 4
 MASSACHUSETTS: CRUSHED STONE SOLD OR USED BY PRODUCERS IN 2001, BY USE AND DISTRICT¹

(Thousand metric tons and thousand dollars)

Use	District 1		District 2		District 3	
	Quantity	Value	Quantity	Value	Quantity	Value
Construction:						
Coarse aggregate (+1 1/2 inch) ²	--	--	W	W	W	W
Coarse aggregate, graded ³	--	--	W	W	W	W
Fine aggregate (-3/8 inch) ⁴	W	W	29	242	W	W
Coarse and fine aggregates ⁵	--	--	W	W	W	W
Other construction materials	82	760	--	--	--	--
Agricultural ⁶	W	W	--	--	--	--
Chemical and metallurgical ⁷	W	W	--	--	--	--
Special ⁸	W	W	--	--	--	--
Unspecified: ⁹						
Reported	1,500	11,200	327	2,600	5,290	37,000
Estimated	290	2,200	870	6,200	2,200	14,000
Total	2,710	30,500	2,500	21,100	9,250	68,900

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

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes macadam, riprap and jetty stone, and other coarse aggregates.

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

⁴Includes stone sand (concrete) and other fine aggregates.

⁵Includes crusher run (select material or fill), graded road base or subbase, and unpaved road surfacing.

⁶Includes agricultural limestone and poultry grit and mineral food.

⁷Includes lime manufacture and dead-burned dolomite.

⁸Includes whiting or whiting substitute and other fillers or extenders.

⁹Reported and estimated production without a breakdown by end use.

TABLE 5
 MASSACHUSETTS: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 2001, BY MAJOR USE CATEGORY¹

Use	Quantity (thousand metric tons)	Value (thousands)	Unit value
Concrete aggregates (including concrete sand)	2,420	\$17,400	\$7.21
Plaster and gunite sands	75	636	8.48
Concrete products (blocks, bricks, pipe, decorative, etc.)	64	444	6.94
Asphaltic concrete aggregates and other bituminous mixtures	254	1,920	7.57
Road base and coverings	701	4,600	6.56
Fill	744	2,610	3.50
Snow and ice control	310	1,830	5.91
Filtration	24	176	7.33
Other miscellaneous uses	641	4,570	7.14
Unspecified: ²			
Reported	1,440	6,590	4.58
Estimated	7,300	48,000	6.60
Total or average	14,000	89,300	6.37

¹Data are rounded to no more than three significant digits, except unit value; may not add to totals shown.

²Reported and estimated production without a breakdown by end use.

TABLE 6
 MASSACHUSETTS: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 2001, BY USE AND DISTRICT¹

(Thousand metric tons and thousand dollars)

Use	District 1		District 2		District 3	
	Quantity	Value	Quantity	Value	Quantity	Value
Concrete aggregates and concrete products ²	W	W	W	W	1,460	11,900
Asphaltic concrete aggregates and road base materials	424	2,470	323	2,530	207	1,520
Fill	184	596	301	1,160	259	855
Other miscellaneous uses ³	373	2,780	1,550	9,480	150	950
Unspecified: ⁴						
Reported	399	1,690	388	1,840	652	3,070
Estimated	1,200	6,200	960	6,000	5,200	36,000
Total or average	2,590	13,800	3,520	21,000	7,900	54,500

W Withheld to avoid disclosing company proprietary data; included in "Other miscellaneous uses."

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes plaster and gunite sands.

³Includes filtration and snow and ice control.

⁴Reported and estimated production without a breakdown by end use.