

MASSACHUSETTS

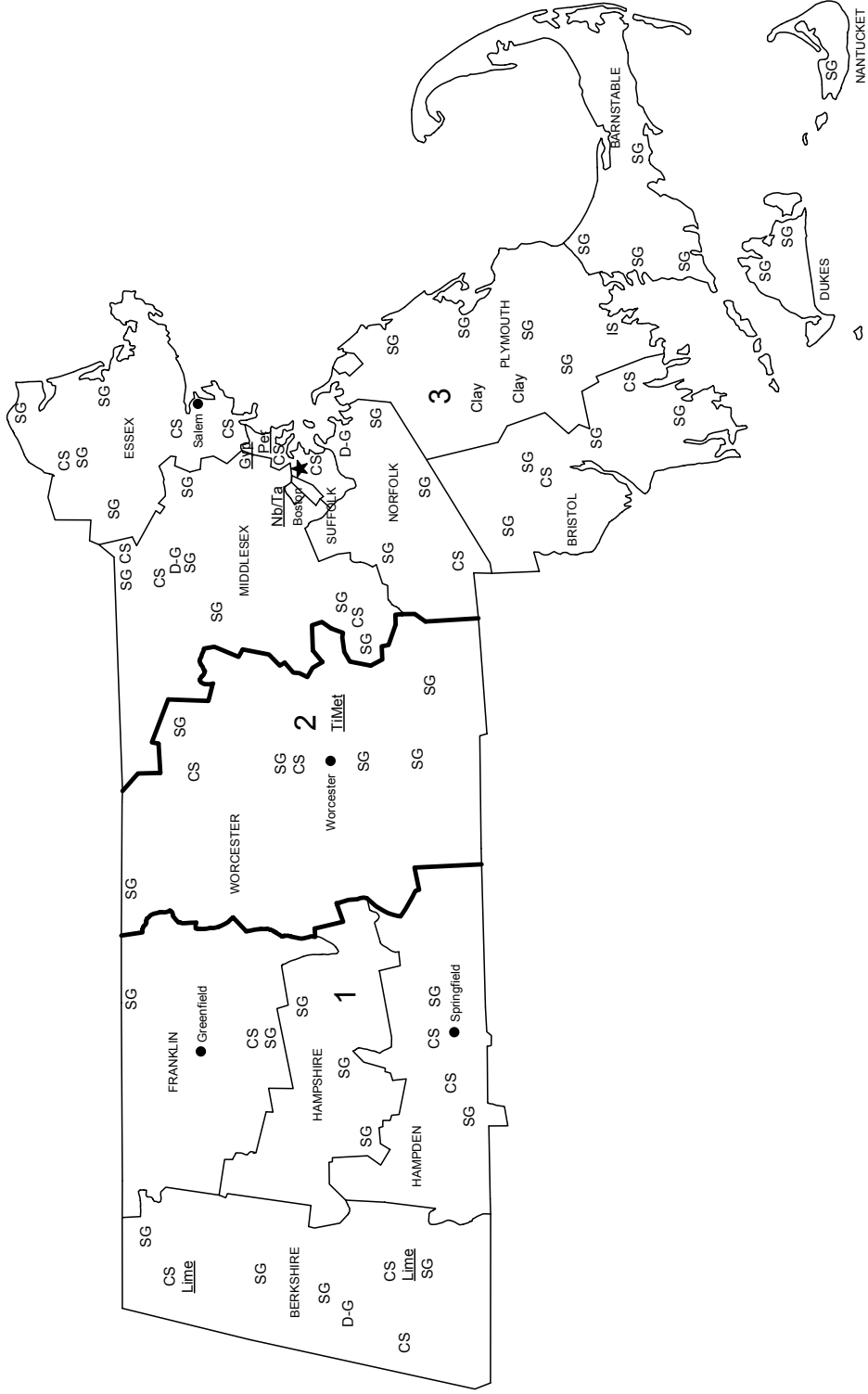
LEGEND

- 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 Lime plant
- Nb/Ta Columbium/tantalum plant
- Per Perlite 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, Office of the State Geologist, for collecting information on all nonfuel minerals.

In 2003, the estimated value¹ of nonfuel mineral production for Massachusetts was \$186 million, based upon preliminary U.S. Geological Survey (USGS) data. This was about a 4% decrease from that of 2002² and followed a 12.2% decrease in 2002 from 2001.

¹The terms “nonfuel mineral production” and related “values” encompass variations in meaning, depending upon the 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 2003 USGS mineral production data published in this chapter are preliminary estimates as of July 2004 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 USGS Mineral Industry Surveys and USGS Minerals Yearbook chapters—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 2002 may differ from the Minerals Yearbook, Area Reports: Domestic 2002, Volume II, owing to the revision of preliminary 2002 to final 2002 data. Data for 2003 are preliminary and are expected to change; related rankings also may change.

Massachusetts' leading nonfuel mineral commodities by value were crushed stone, construction sand and gravel, and lime, the former two commodities accounting for about 94% of the State's total value. (The actual totals for 2001-03 are higher than those shown in table 1; lime data have been withheld in order to protect company proprietary data.) In 2003, the production and values of crushed stone and construction sand and gravel, as well as the value of dimension stone (production unchanged), had small decreases, resulting in the State's decrease for the year. While lime production held even in 2003 with that of 2002, the commodity's value increased by about \$3 million. Common clays and gemstones were unchanged.

In 2002, decreases of \$14 million each in crushed stone and construction sand and gravel accounted for nearly all of the State's decrease in nonfuel mineral production value. While lime production and value were up slightly, dimension stone was nearly the same as in 2001; common clays and gemstones were unchanged (table 1).

Based upon USGS data of the quantities produced in the United States in 2003, Massachusetts continued to be fifth among those States producing dimension stone. Additionally, the State's quarries and sand pits produced significant quantities of crushed stone and construction sand and gravel.

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

(Thousand metric tons and thousand dollars)

Mineral	2001		2002		2003 ^P	
	Quantity	Value	Quantity	Value	Quantity	Value
Clays, common	36 ^e	321 ^e	36	321	36	321
Gemstones	NA	1	NA	1	NA	1
Lime	W	(3)	W	(3)	W	(3)
Sand and gravel, construction	14,000	89,300	12,200	75,300	11,400	70,700
Stone:						
Crushed	14,500	121,000	13,800	107,000	13,200	104,000
Dimension	81	11,400	81	11,300	81	10,500
Total	XX	221,000	XX	194,000	XX	186,000

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

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

²Data are rounded to 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	2001				2002			
	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	1,060	\$19,600	\$18.50	3	977	\$13,400	\$13.74
Dolomite	1	W	W	3.87	1	W	W	4.46
Granite	9	5,130	38,000	7.40	9	5,350	36,600	6.83
Traprock	20	7,810	60,000	7.68	18	6,970	54,200	7.77
Miscellaneous stone	2	W	W	8.60	2	W	W	8.56
Total or average	XX	14,500	121,000	8.34	XX	13,800	107,000	7.80

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 2002, BY USE¹

Use	Quantity (thousand metric tons)	Value (thousands)	Unit value
Construction:			
Coarse aggregate (+1 1/2 inch):			
Macadam	W	W	\$9.01
Riprap and jetty stone	W	W	10.87
Filter stone	W	W	8.50
Other coarse aggregates	36	\$344	9.56
Total or average	169	1,560	9.24
Coarse aggregate, graded:			
Bituminous aggregate, coarse	W	W	9.67
Bituminous surface-treatment aggregate	W	W	10.63
Railroad ballast	W	W	9.55
Other graded coarse aggregates	179	1,820	10.14
Total or average	846	8,540	10.10
Fine aggregate (-3/8 inch):			
Stone sand, concrete	W	W	9.66
Screening, undesignated	W	W	9.85
Total or average	29	280	9.66
Coarse and fine aggregates:			
Graded road base or subbase	W	W	9.14
Unpaved road surfacing	W	W	9.87
Crusher run or fill or waste	637	6,060	9.51
Total or average	857	8,110	9.47
Other construction materials ²	106	1,290	12.13
Agricultural:			
Agricultural limestone	W	W	5.44
Poultry grit and mineral food	W	W	16.04
Total or average	88	568	6.45
Chemical and metallurgical:			
Lime manufacture	W	W	7.63
Dead burned dolomite	W	W	4.41
Total or average	462	3,500	7.57
Special:			
Whiting or whiting substitute	W	W	12.13
Other fillers or extenders	W	W	59.23
Total or average	92	5,040	54.86
Unspecified:³			
Reported	7,410	53,300	7.19
Estimated	3,700	25,000	6.80
Total or average	11,100	78,500	7.06
Grand total or average	13,800	107,000	7.80

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

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

²Includes building products.

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

TABLE 4
 MASSACHUSETTS: CRUSHED STONE SOLD OR USED BY PRODUCERS IN 2002, 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	W	W
Coarse aggregate, graded ³	W	W	W	W	W	W
Fine aggregate (-3/8 inch) ⁴	W	W	W	W	--	--
Coarse and fine aggregates ⁵	--	--	W	W	W	W
Other construction materials ⁶	106	1,290	--	--	--	--
Agricultural ⁷	W	W	--	--	--	--
Chemical and metallurgical ⁸	W	W	--	--	--	--
Special ⁹	W	W	--	--	--	--
Unspecified: ¹⁰						
Reported	1,510	11,300	345	2,740	5,560	39,200
Estimated	280	2,100	660	5,000	2,800	18,000
Total	2,550	24,000	2,340	20,300	8,880	63,100

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, filter 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 screening (undesignated).

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

⁶Includes building products.

⁷Includes agricultural limestone and poultry grit and mineral food.

⁸Includes lime manufacture and dead-burned dolomite.

⁹Includes whitening or whitening substitute and other fillers or extenders.

¹⁰Reported and estimated production without a breakdown by end use.

TABLE 5
 MASSACHUSETTS: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 2002,
 BY MAJOR USE CATEGORY¹

Use	Quantity (thousand metric tons)	Value (thousands)	Unit value
Concrete aggregate (including concrete sand)	3,070	\$20,800	\$6.79
Plaster and gunite sands	63	652	10.35
Concrete products (blocks, bricks, pipe, decorative, etc.)	91	757	8.32
Asphaltic concrete aggregates and other bituminous mixtures	157	1,190	7.58
Road base and coverings	399	2,510	6.29
Fill	993	2,730	2.75
Snow and ice control	314	1,990	6.32
Other miscellaneous uses ²	171	617	3.61
Unspecified: ³			
Reported	1,100	4,580	4.16
Estimated	5,800	39,000	6.77
Total or average	12,200	75,300	6.18

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

²Includes filtration.

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

TABLE 6
 MASSACHUSETTS: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 2002, BY USE AND DISTRICT¹

(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	1,720	13,600
Asphaltic concrete aggregates and road base materials	190	1,350	179	838	187	1,510
Fill	267	743	447	1,080	278	904
Snow and ice control	55	274	66	608	194	1,100
Other miscellaneous uses ³	301	2,490	1,230	6,400	145	414
Unspecified: ⁴						
Reported	702	3,060	227	727	172	796
Estimated	1,100	6,200	580	4,000	4,100	29,000
Total or average	2,640	14,100	2,730	13,700	6,820	47,600

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.

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