

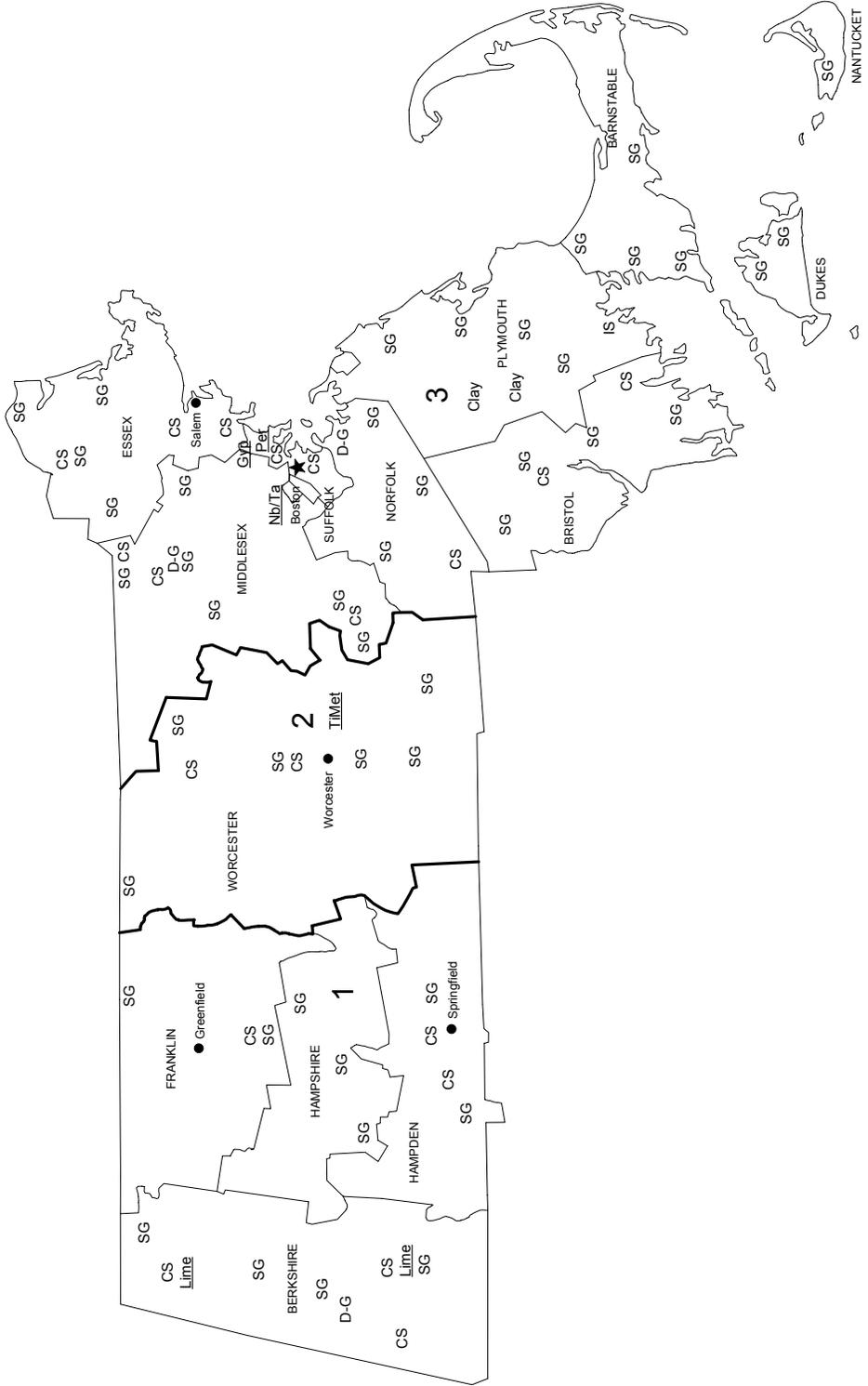
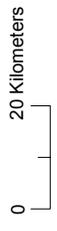
MASSACHUSETTS

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



Source: Massachusetts Executive Office of Environmental Affairs/U.S. Geological Survey (2001)

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 2001, the estimated value¹ of nonfuel mineral production for Massachusetts was \$209 million, based upon preliminary U.S. Geological Survey (USGS) data. This was about a 5%

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 2001 USGS mineral production data published in this chapter are preliminary estimates as of August 2002 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. 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>.

increase from that of 2000² and followed a 3.6% increase in 2000 from 1999.

Massachusetts' leading nonfuel mineral commodities by value were crushed stone, construction sand and gravel, and dimension stone. In 2001, the increased crushed stone and construction sand and gravel values accounted for all of the State's increase in nonfuel mineral production value. These increases more than offset decreases that occurred in dimension stone and lime (table 1). In 2000, increases of \$13.1 million in crushed stone and \$4.9 million in construction sand and gravel (alongside a smaller yet significant increase in lime) accounted for nearly all of the State's increase in nonfuel mineral production value. Only dimension stone was down slightly (table 1). Based upon USGS estimates of the quantities produced in the United States in 2001, Massachusetts continued to be sixth among those States having dimension stone production.

²Values, percentage calculations, and rankings for 2000 may differ from the Minerals Yearbook, Area Reports: Domestic 2000, Volume II, owing to the revision of preliminary 2000 to final 2000 data. Data for 2001 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	1999		2000		2001 p/	
	Quantity	Value	Quantity	Value	Quantity	Value
Clays, common	W	W	36 e/	321 e/	36	321
Gemstones	NA	1	NA	1	NA	1
Sand and gravel, construction	12,700	75,200	13,200	80,100	13,200	81,300
Stone:						
Crushed	11,600	89,900	13,400	103,000	14,000	111,000
Dimension metric tons	70,400	16,900	69,600	16,800	69,000	16,000
Combined values of lime, sand and gravel [industrial (1999)], and values indicated by symbol W	XX	10,800	XX	(3/)	XX	(3/)
Total	XX	193,000	XX	200,000	XX	209,000

e/ Estimated. p/ Preliminary. NA Not available. W Withheld to avoid disclosing company proprietary data; value included with “Combined values” data. 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/ Value excluded to avoid disclosing proprietary data.

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

Kind	1999				2000			
	Number of quarries	Quantity (thousand metric tons)	Value (thousands)	Unit value	Number of quarries	Quantity (thousand metric tons)	Value (thousands)	Unit value
Limestone 2/	4 r/	786 r/	\$7,900 r/	\$10.05 r/	4	879	\$12,600	\$14.31
Dolomite	1	W	W	8.00	1	W	W	4.35
Granite	8 r/	4,270 r/	32,900 r/	7.71 r/	8	5,210	37,500	7.19
Traprock	20 r/	6,220 r/	46,100 r/	7.41 r/	20	6,700	48,600	7.25
Miscellaneous stone	3	W	W	8.34	3	W	W	7.95
Total or average	XX	11,600	89,900	7.73	XX	13,400	103,000	7.69

r/ Revised. W Withheld to avoid disclosing company proprietary data, included in "Total." 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 2000, BY USE 1/ 2/

Use	Quantity (thousand metric tons)	Value (thousands)	Unit value
Construction:			
Coarse aggregate (+1 1/2 inch):			
Macadam	W	W	\$8.52
Riprap and jetty stone	W	W	8.14
Filter stone	W	W	7.63
Other coarse aggregates	165	\$1,520	9.21
Coarse aggregate, graded:			
Concrete aggregate, coarse	693	4,460	6.43
Bituminous aggregate, coarse	1,760	13,000	7.38
Bituminous surface-treatment aggregate	W	W	11.44
Railroad ballast	W	W	9.27
Other graded coarse aggregate	492	5,300	10.78
Fine aggregate (-3/8 inch):			
Stone sand, concrete	214	1,440	6.71
Stone sand, bituminous mix or seal	W	W	5.87
Screening, undesignated	221	1,090	4.91
Other fine aggregate	367	2,330	6.34
Coarse and fine aggregates:			
Graded road base or subbase	496	3,110	6.28
Unpaved road surfacing	W	W	11.08
Crusher run or fill or waste	755	5,100	6.75
Roofing granules	W	W	11.41
Other coarse and fine aggregates	287	1,960	6.82
Other construction materials	420	3,310	7.89
Agricultural:			
Agricultural limestone	W	W	6.63
Poultry grit and mineral food	W	W	16.14
Other agricultural uses	65	465	7.15
Chemical and metallurgical:			
Lime manufacture	(3/)	(3/)	6.83
Flux stone	(3/)	(3/)	4.00
Special:			
Whiting or whiting substitute	(3/)	(3/)	(3/)
Other fillers or extenders	(3/)	(3/)	(3/)
Unspecified: 4/			
Reported	4,160	30,200	7.26
Estimated	2,800	21,000	7.72
Total or average	13,400	103,000	7.69

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

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

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

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

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

TABLE 4
 MASSACHUSETTS: CRUSHED STONE SOLD OR USED BY PRODUCERS IN 2000, 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:						
Coarse aggregate (+1 1/2 inch) 2/	W	W	W	W	W	W
Coarse aggregate, graded 3/	--	--	W	W	W	W
Fine aggregate (-3/8 inch) 4/	W	W	W	W	770	4,590
Coarse and fine aggregate 5/	--	--	W	W	W	W
Other construction materials	63	1,040	111	458	246	1,820
Agricultural 6/	W	W	--	--	--	--
Chemical and metallurgical 7/	W	W	--	--	--	--
Special 8/	W	W	--	--	--	--
Unspecified: 9/						
Reported	1,470	11,200	308	2,380	2,380	16,600
Estimated	310	2,400	820	6,300	1,600	13,000
Total	2,430	23,400	2,420	19,100	8,530	60,200

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 filter stone, macadam, riprap and jetty stone, and other coarse aggregate.

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

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

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

6/ Includes agricultural limestone, poultry grit and mineral food, and other agricultural uses.

7/ Includes flux stone and lime manufacture.

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

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

TABLE 5
 MASSACHUSETTS: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 2000,
 BY MAJOR USE CATEGORY 1/

Use	Quantity	Value	Unit
	(thousand metric tons)	(thousands)	value
Concrete aggregate (including concrete sand)	2,470	\$18,300	\$7.42
Plaster and gunite sands	53	573	10.81
Concrete products (blocks, bricks, pipe, decorative, etc.)	54	332	6.15
Asphaltic concrete aggregates and other bituminous mixtures	197	2,240	11.35
Road base and coverings	1,160	6,560	5.66
Fill	976	3,130	3.21
Snow and ice control	306	1,590	5.18
Roofing granules	2	31	15.50
Filtration	81	606	7.48
Other miscellaneous uses	16	148	9.25
Unspecified: 2/			
Reported	1,760	8,770	4.97
Estimated	6,100	38,000	6.17
Total or average	13,200	80,100	6.07

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

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

TABLE 6
 MASSACHUSETTS: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 2000, 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	1,530	11,600
Asphaltic concrete aggregates and road base materials	633	4,040	438	3,110	285	1,650
Fill	265	742	289	940	422	1,450
Snow and ice control	W	W	W	W	185	873
Other miscellaneous uses 3/	267	2,270	1,000	6,890	--	--
Unspecified: 4/						
Reported	176	769	1,120	6,820	470	1,190
Estimated	1,400	7,300	830	3,600	3,900	27,000
Total	2,760	15,100	3,680	21,300	6,770	43,700

W Withheld to avoid disclosing company proprietary data; included with "Other miscellaneous uses." -- 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 filtration and roofing granules.

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