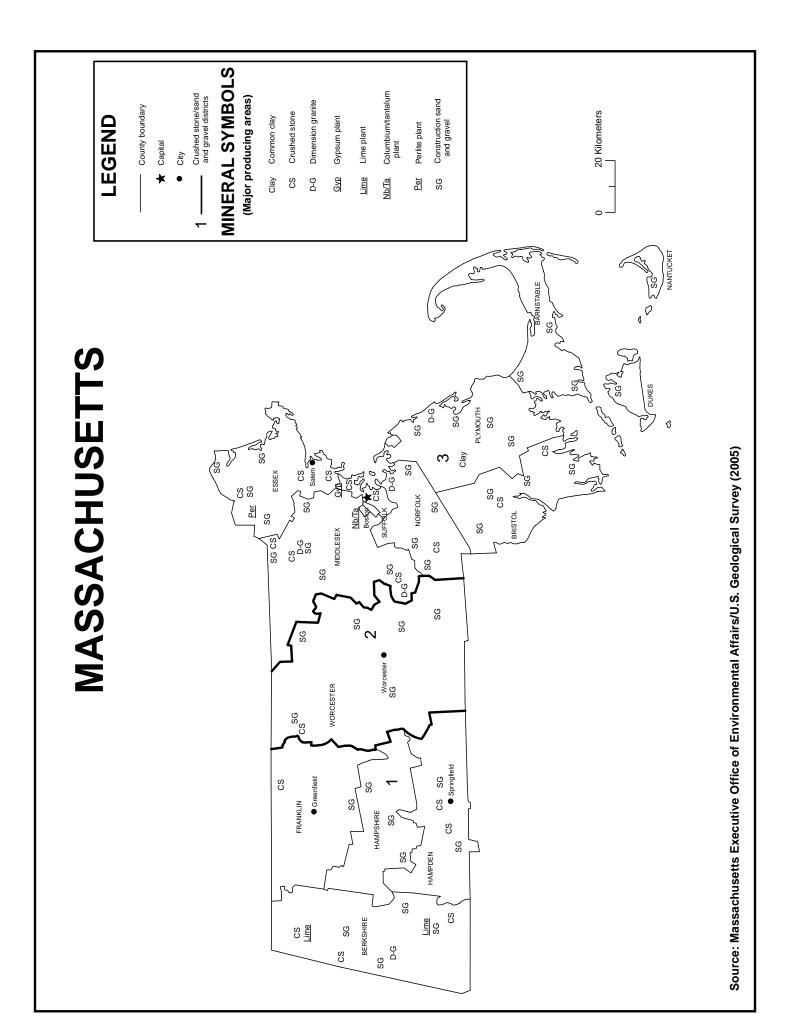


2005 Minerals Yearbook

MASSACHUSETTS



THE MINERAL INDUSTRY OF MASSACHUSETTS

In 2005, Massachusetts nonfuel raw mineral production was valued¹ at \$250 million, an 18.5%, or a \$39 million increase from that of 2004, based upon annual U.S. Geological Survey data. This followed a 3.4% increase in the State's total nonfuel mineral production value for 2004 from that of 2003, which was up 3% from 2002.

Massachusetts leading nonfuel mineral commodities in descending order of value were crushed stone, construction sand and gravel, and lime, the former two commodities accounting for about 95% of the State's total value. Because data for lime and common clays (2004-05) have been withheld, the State's

All 2005 USGS mineral production data published in this chapter are those available as of December 2006. All USGS Mineral Industry Surveys and USGS Minerals Yearbook chapters—mineral commodity, State, and country—can be retrieved over the Internet at URL http://minerals.usgs.gov/minerals.

actual total nonfuel mineral values for 2003-05 are higher than those reported in table 1.

Construction sand and gravel led the State's increase in value moving the commodity significantly closer to being the State's leading nonfuel mineral. A nearly 15% increase in production resulted in a 30%, or \$27 million, increase in value to \$117 million in 2005, bringing the nonfuel mineral commodity to within \$4 million of the total value of crushed stone. With a slight decrease in production, crushed stone value rose by \$12 million to \$121 million (table 1). With the same quantity produced as in 2004, dimension stone value was down slightly and gemstones value was unchanged. With a slight drop in production, the value of lime increased by more than \$1 million. Common clays value was up slightly.

In 2005, the State remained fifth in the quantities of dimension stone produced; additionally, the quarries and sand pits in Massachusetts continued to produce significant quantities of crushed stone and construction sand and gravel when compared with the other producing States.

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

(Thousand metric tons and thousand dollars unless otherwise specified)

	200	2003		ŀ	2005	
Mineral	Quantity	Value	Quantity	Value	Quantity	Value
Clays, common	36	321	36	(3)	37	(3)
Gemstones	NA	1	NA	1	NA	1
Lime	W	(3)	W	(3)	W	(3)
Sand and gravel, construction	12,900	80,800	14,400	90,000	16,500	117,000
Stone:						
Crushed	13,000	111,000	13,700 ^r	109,000	13,200	121,000
Dimension	81	11,300	82	11,600	82	11,500
Total	XX	204,000	XX	211,000	XX	250,000

^rRevised. 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

	2004			2005			
	Number	Quantity		Number	Quantity		
	of	(thousand	Value	of	(thousand	Value	
Kind	quarries	metric tons)	(thousands)	quarries	metric tons)	(thousands)	
Limestone ²	2	983	\$15,300	2	1,000	\$16,000	
Dolomite	1	W	W	1	W	W	
Granite	9	3,830 ^r	29,200 ^r	9	3,850	30,900	
Traprock	18	8,390 ^r	59,700 ^r	18	7,830	68,600	
Miscellaneous stone	1	W	W	1	W	W	
Total	XX	13,700 ^r	109,000	XX	13,200	121,000	

^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; may not add to totals shown.

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

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.

TABLE 3

MASSACHUSETTS: CRUSHED STONE SOLD OR USED BY PRODUCERS IN 2005, BY USE¹

(Thousand metric tons and thousand dollars)

Use	Quantity	Value
Construction:		
Coarse aggregate (+1 ¹ /2 inch):		
Riprap and jetty stone	W	W
Other coarse aggregates	W	W
Coarse aggregate, graded:		
Concrete aggregate, coarse	W	W
Other graded coarse aggregates	W	W
Fine aggregate (-3/8 inch), other fine aggregates	W	W
Coarse and fine aggregates:		
Graded road base or subbase	67	550
Unpaved road surfacing	(2)	(2)
Crusher run or fill or waste	(2)	(2)
Total	375	4,250
Other construction materials ³	98	2,120
Agricultural:		
Agricultural limestone	W	W
Poultry grit and mineral food	W	W
Chemical and metallurgical:		
Lime manufacture	W	W
Dead burned dolomite	W	W
Flux stone	W	W
Special:		
Whiting or whiting substitute	W	W
Other fillers or extenders	W	W
Unspecified: ⁴		
Reported	5,150	47,700
Estimated	6,900	55,000
Total	12,000	103,000
Grand toal	13,200	121,000

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

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

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

³Includes building products.

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

TABLE 4

MASSACHUSETTS: CRUSHED STONE SOLD OR USED BY PRODUCERS IN 2005, BY USE AND DISTRICT¹

	District 1		District 2		District 3	
Use	Quantity	Value	Quantity	Value	Quantity	Value
Construction:						
Coarse aggregate $(+1\frac{1}{2} \text{ inch})^2$	W	W	W	W	W	W
Coarse aggregate, graded ³	W	W	W	W	W	W
Fine aggregate $(-\frac{3}{8} \operatorname{inch})^4$	W	W	W	W	W	W
Coarse and fine aggregates ⁵	W	W	W	W	W	W
Other construction materials ⁶	98	2,120				
Agricultural ⁷	W	W				
Chemical and metallurgical ⁸	W	W				
Special ⁹	W	W				
Unspecified: ¹⁰						
Reported	1,670	13,300	1,160	9,270	2,320	25,200
Estimated	528	4,200	1,000	8,400	5,300	42,000
Total	2,980	31,700	2,210	17,600	8,030	72,100

(Thousand metric tons and thousand dollars)

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

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

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

⁵Includes crusher run or fill or waste, graded road base or subbase, unpaved road surfacing, and other coarse and fine aggregates.

⁶Includes building products.

⁷Includes agricultural limestone and poultry grit and mineral food.

⁸Includes lime manufacture, dead-burned dolomite, and flux stone.

⁹Includes whiting or whiting 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 2005, BY MAJOR USE CATEGORY¹

	Quantity		
	(thousand	Value	Unit
Use	metric tons)	(thousands)	value
Concrete aggregate (including concrete sand)	2,680	\$25,300	\$9.43
Plaster and gunite sands	93	1,060	11.39
Concrete products (blocks, bricks, pipe, decorative, etc.)	45	404	9.03
Asphaltic concrete aggregates and other bituminous mixtures	998	8,150	8.16
Road base and coverings ²	1,580	8,460	5.36
Fill	2,050	9,730	4.75
Snow and ice control	337	2,380	7.05
Other miscellaneous uses ³	423	2,250	5.33
Unspecified: ⁴			
Reported	884	6,860	7.76
Estimated	7,370	52,500	7.13
Total or average	16,500	117,000	7.12

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

²Includes road and other stabilization (lime).

³Includes railroad ballast and filtration.

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

TABLE 6

MASSACHUSETTS: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 2005, BY USE AND DISTRICT¹

(Thousand metric tons and thousand dollars)

Quantity 521 209	Value 5,290 1,920	Quantity 547 1,750	Value 3,330	Quantity 1,750	Value 18,200
209	- ,		- /	1,750	18,200
	1,920	1.750	11 200		
1(7		-,	11,200	622	3,490
467	1,650	391	1,350	1,190	6,730
12	88	122	755	204	1,540
11	84	412	2,170		
649	3,520			235	3,350
1,080	7,510	1,570	10,900	4,720	34,100
2,950	20,100	4,790	29,700	8,720	67,400
	12 11 649 1,080	12 88 11 84 649 3,520 1,080 7,510	12 88 122 11 84 412 649 3,520 1,080 7,510 1,570	12 88 122 755 11 84 412 2,170 649 3,520 1,080 7,510 1,570 10,900	12 88 122 755 204 11 84 412 2,170 649 3,520 235 1,080 7,510 1,570 10,900 4,720

-- Zero.

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

²Includes plaster and gunite sands.

³Includes road and other stabilization (lime).

⁴Includes filtration and railroad ballast.

⁵Reported and estimated production without a breakdown by end use.