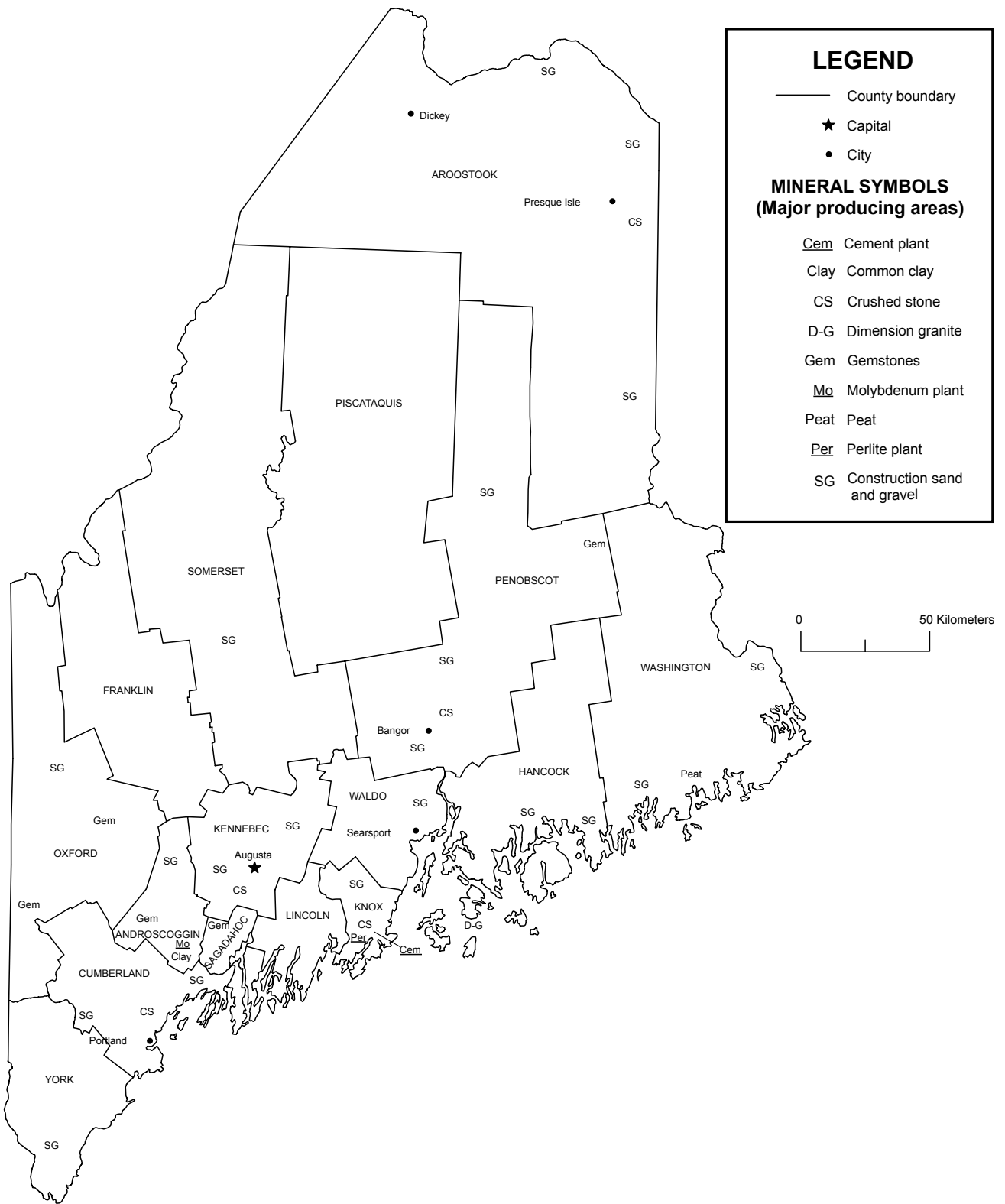


MAINE



Source: Maine Geological Survey/U.S. Geological Survey (2003)

THE MINERAL INDUSTRY OF MAINE

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

In 2003, the estimated value¹ of nonfuel mineral production for Maine was \$100 million, based upon preliminary U.S. Geological Survey (USGS) data. This was a marginal increase from that of 2002² and followed a 2.2% decrease in 2002 from 2001.

The large majority of Maine's nonfuel mineral production resulted from the mining and production of construction minerals and materials—construction sand and gravel, portland cement, crushed stone, and dimension granite (descending order of value). In 2003, construction sand and gravel and crushed stone accounted for about 65% of the State's total nonfuel raw mineral production value. Increased production of crushed stone, value up \$2.6 million, peat, and a small increase in the value of gemstones (descending order of change) offset decreases in construction sand and gravel production, value

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. 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 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.

down \$1.3 million, and cement value (masonry and portland), resulting in the State's increase for the year.

In 2002, portland cement, dimension granite, and gemstones production and values increased, but not by enough to balance out decreases that took place in the production and values of construction sand and gravel, down \$4.5 million, crushed stone, down about \$0.8 million, and peat (table 1). Based upon USGS estimates of the quantities of minerals produced in the United States in 2003, Maine (by value) remained 12th in the production of gemstones.

The Maine Geological Survey provided the following narrative information regarding the State's gemstones industry.³ Several Maine pegmatite deposits were being worked or prospected for gem tourmaline. Tourmaline is the official State Mineral and the most valuable gem that is found in Maine. The elbaite species of tourmaline occurs in Maine in various attractive shades of blue, green, pink, and combinations of these colors. The famous Mt. Mica locality in Paris Hill (discovered in 1820) was reopened in 2003 and is now yielding major tourmaline pockets containing both gem- and specimen-grade crystals. Other tourmaline localities currently under exploration include Mt. Marie Quarry in Paris, Bennett Quarry in Buckfield, the Georgetown Quarry, and several quarries around Noyes Mountain in Greenwood. Gem-quality amethyst has continued to be produced from the Deer Hill quarries in Stow, ME. Other recent gem discoveries in the State have included small sporadic occurrences of aquamarine beryl, garnet, and smoky quartz.

³Woodrow Thompson, Physical Geologist with the Maine Geological Survey, authored the text of the State mineral industry information provided by that agency.

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

(Thousand metric tons and thousand dollars unless otherwise specified)

Mineral	2001		2002		2003 ^p	
	Quantity	Value	Quantity	Value	Quantity	Value
Clays, common	49 ^c	125 ^c	49	125	49	125
Gemstones	NA	245	NA	257	NA	262
Sand and gravel, construction	11,200	44,900	9,680	40,400	9,300	39,100
Stone, crushed	4,210	24,200	4,010	23,400	4,400	26,000
Combined values of cement [masonry (2001-02), portland], peat, stone (dimension granite)	XX	32,600	XX	35,400	XX	34,700
Total	XX	102,000	XX	99,700	XX	100,000

^cEstimated. ^pPreliminary. NA Not available. XX Not applicable.

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.

TABLE 2
MAINE: 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	6	1,440	\$7,960	\$5.53	4	1,390	\$7,550	\$5.42
Granite	4	1,370	7,880	5.74	4	1,360	8,350	6.14
Traprock	1	W	W	6.61	1	W	W	6.61
Quartzite	2	W	W	5.98	2	W	W	6.14
Slate	1	W	W	8.00	1	W	W	9.89
Miscellaneous stone	3	830	4,800	5.78	2	710	4,040	5.68
Total or average	XX	4,210	24,200	5.75	XX	4,010	23,400	5.85

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.

TABLE 3
MAINE: 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):			
Riprap and jetty stone	40	\$266	\$6.65
Filter stone	71	720	10.14
Other coarse aggregates	32	341	10.66
Total or average	143	1,330	9.28
Coarse aggregate, graded, concrete aggregate, coarse	W	W	9.92
Fine aggregate (-3/8 inch):			
Stone sand, concrete	(2)	(2)	4.74
Screening, undesignated	(2)	(2)	3.86
Other fine aggregates	5	26	5.20
Total or average	95	444	4.67
Coarse and fine aggregates, other	1,270	7,510	5.92
Chemical and metallurgical:			
Cement manufacture	(2)	(2)	5.08
Lime manufacture	(2)	(2)	5.08
Total or average	645	3,280	5.08
Unspecified: ³			
Reported	261	1,570	6.00
Estimated	1,600	9,200	5.81
Total or average	1,840	10,700	5.84
Grand total or average	4,010	23,400	5.85

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

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
 MAINE: 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)	727	\$3,570	\$4.91
Concrete products (blocks, bricks, pipe, decorative, etc.)	22	95	4.32
Asphaltic concrete aggregates and other bituminous mixtures	1,340	8,280	6.19
Road base and coverings	1,490	5,560	3.74
Road stabilization (cement)	10	17	1.70
Fill	675	1,980	2.94
Snow and ice control	325	1,420	4.38
Railroad ballast	17	71	4.18
Other miscellaneous uses	131	350	2.67
Unspecified: ²			
Reported	757	2,680	3.53
Estimated	4,200	16,000	3.92
Total or average	9,680	40,400	4.18

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.