



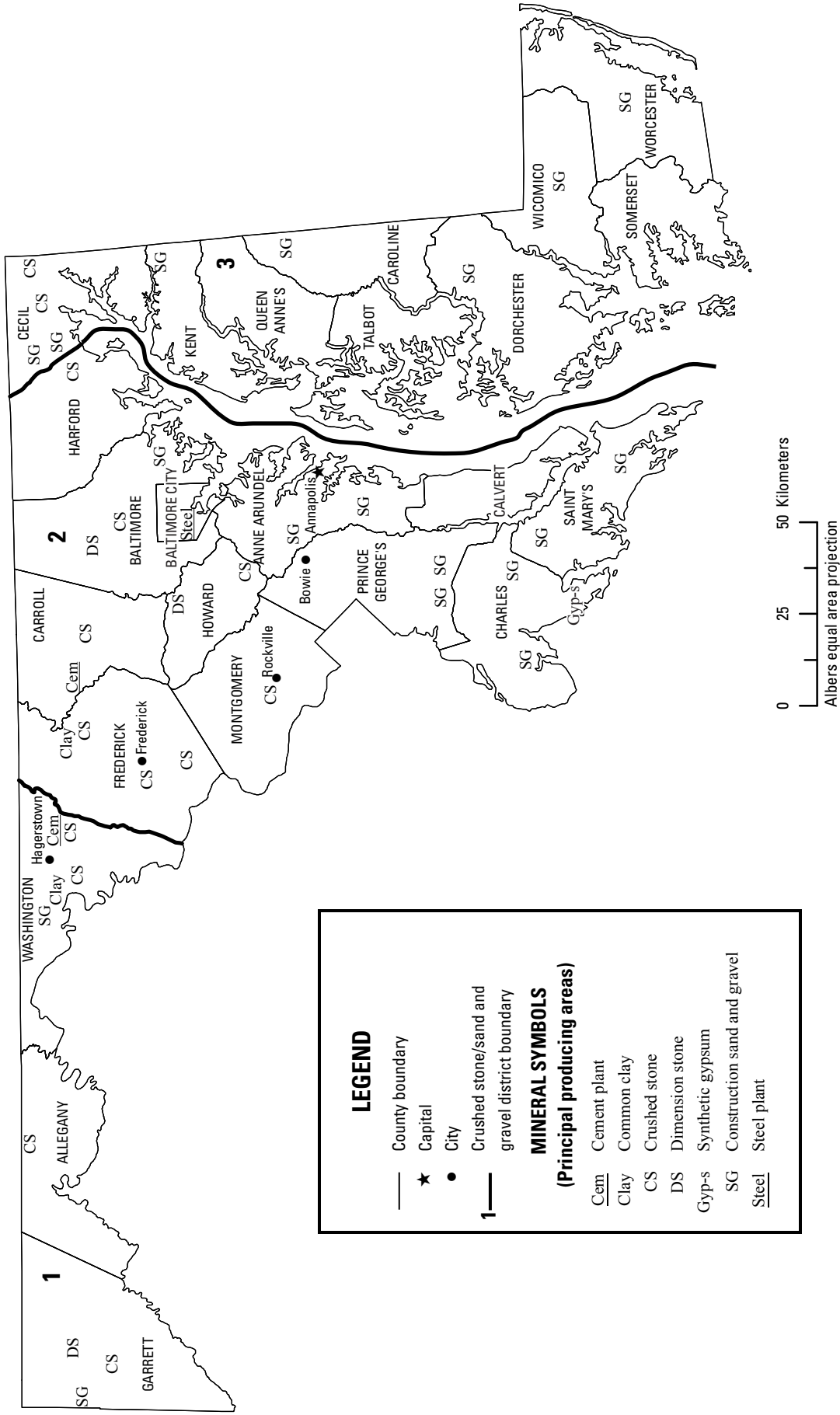
# 2009 Minerals Yearbook

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## MARYLAND

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# THE MINERAL INDUSTRY OF MARYLAND

This chapter has been prepared under a Memorandum of Understanding between the U.S. Geological Survey and the Maryland Department of the Environment, Minerals, Oil, and Gas Division, for collecting information on all nonfuel minerals.

In 2009, Maryland's nonfuel raw mineral production<sup>1</sup> was valued at \$497 million, based upon annual U.S. Geological Survey (USGS) data. This was a decrease of \$145 million, or almost 23%, from the State's total of \$642 million in 2008, which followed a \$30 million, or 4%, decrease from \$672 million in 2007. The State, which had ranked 36th in 2008, rose to 34th among the 50 States in total nonfuel raw mineral production value, accounting for 0.84% of the total United States production value of \$59 billion. Several significant mineral commodities produced in the State—portland and masonry cement, common clays, and dimension stone—have their respective production and production value data withheld to protect company proprietary data.

Crushed stone and construction sand and gravel, based upon production value, were Maryland's leading nonfuel raw mineral

<sup>1</sup>The 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 2009 USGS mineral production data published in this chapter are those available as of September 2011. 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>.

commodities, which accounted for 60% of the State's total nonfuel mineral production value, up slightly from almost 57% in 2008. Production of construction sand and gravel decreased from 12 million metric tons (Mt) in 2008 to less than 8 Mt in 2009, or 34%. The production value of this mineral commodity decreased from \$126 million in 2008 to \$99 million in 2009, or 21%. From 2007 to 2008, production of construction sand and gravel in the State decreased 3%, but the production value rose by almost the same percentage.

The quantity of crushed stone produced in Maryland in 2009 decreased by more than 3.8 Mt, or almost 15%, and the production value was down by about \$37 million, or almost 16%, from that of 2008. The production of crushed stone in 2008 decreased by 8.8 Mt, or 28%, compared with the total of 31 Mt in 2007, and the production value decreased by \$82 million, or 29%, from the total of \$282 million in 2007 (table 1).

All nonfuel mineral commodities mined in Maryland were industrial minerals. All metal production, especially that of raw steel in the Baltimore area, consisted of the processing and refining of materials received from other domestic and foreign sources.

TABLE 1  
NONFUEL RAW MINERAL PRODUCTION IN MARYLAND<sup>1, 2</sup>

(Thousand metric tons and thousand dollars)

Mineral	2007		2008		2009	
	Quantity	Value	Quantity	Value	Quantity	Value
Cement, portland	3,000	265,000 <sup>e</sup>	W	(3)	W	(3)
Clays, common	173	W	W	(3)	W	(3)
Gemstones, natural	NA	1	NA	1	NA	1
Sand and gravel:						
Construction	12,400	123,000	12,000	126,000	7,980	99,200
Industrial	--	--	W	(3)	--	--
Stone:						
Crushed	31,100	282,000	26,100 <sup>f</sup>	237,000 <sup>f</sup>	22,300	200,000
Dimension	17	2,680	W	(3)	W	(3)
Combined values of cement (masonry) and values indicated by footnote 3	XX	W	XX	279,000	XX	198,000
Total	XX	672,000	XX	642,000 <sup>f</sup>	XX	497,000

<sup>e</sup>Estimated. <sup>f</sup>Revised. NA Not available. W Withheld to avoid disclosing company proprietary data; excluded from "Total." XX Not applicable. -- Zero.

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

<sup>2</sup>Data are rounded to three significant digits; may not add to totals shown.

<sup>3</sup>Withheld values included in "Combined values" data.

TABLE 2  
MARYLAND: CRUSHED STONE SOLD OR USED, BY TYPE<sup>1</sup>

Type	2008			2009		
	Number of quarries	Quantity (thousand metric tons)	Value (thousands)	Number of quarries	Quantity (thousand metric tons)	Value (thousands)
Limestone <sup>2</sup>	16	15,500	\$131,000	16	13,100	\$110,000
Granite	4 <sup>r</sup>	5,700 <sup>r</sup>	52,400 <sup>r</sup>	4	5,160	45,500
Traprock	3	4,100	45,300	3	3,250	35,900
Sandstone and quartzite	4	153	1,810	3	93	1,290
Miscellaneous stone	3	676	6,510	3	784	6,930
Total	XX	26,100 <sup>r</sup>	237,000 <sup>r</sup>	XX	22,300	200,000

<sup>r</sup>Revised. XX Not applicable.

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

<sup>2</sup>Includes limestone-dolomite reported with no distinction between the two.

TABLE 3  
MARYLAND: CRUSHED STONE SOLD OR USED BY PRODUCERS IN 2009, BY USE<sup>1</sup>

(Thousand metric tons and thousand dollars)

Use	Quantity	Value
Construction:		
Coarse aggregate (+1½ inch):		
Riprap and jetty stone	69	1,230
Filter stone	W	W
Other coarse aggregate	474	6,220
Coarse aggregate, graded:		
Concrete aggregate, coarse	197	1,920
Bituminous aggregate, coarse	783	9,380
Bituminous surface-treatment aggregate	W	W
Railroad ballast	W	W
Other graded coarse aggregate	3,160	33,500
Fine aggregate (-¾ inch):		
Stone sand, concrete	W	W
Stone sand, bituminous mix or seal	W	W
Screening, undesignated	W	W
Other fine aggregate	1,160	8,350
Coarse and fine aggregates:		
Graded road base or subbase	890	8,140
Unpaved road surfacing	W	W
Crusher run or fill or waste	259	2,490
Roofing granules	W	W
Other coarse and fine aggregates	2,740	23,100
Other construction materials	18	168
Agricultural, limestone	W	W
Chemical and metallurgical:		
Cement manufacture	W	W
Sulfur oxide removal	W	W
Unspecified: <sup>2</sup>		
Reported	995	12,100
Estimated	11,100	87,100
Total	22,300	200,000

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

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

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

TABLE 4  
MARYLAND: CRUSHED STONE SOLD OR USED BY PRODUCERS IN 2009, BY  
USE AND DISTRICT<sup>1</sup>

(Thousand metric tons and thousand dollars)

Use	District 1		District 2		District 3	
	Quantity	Value	Quantity	Value	Quantity	Value
<b>Construction:</b>						
Coarse aggregate (+1½ inch) <sup>2</sup>	W	W	531	7,040	W	W
Coarse aggregate, graded <sup>3</sup>	W	W	3,870	39,700	W	W
Fine aggregate (-¾ inch) <sup>4</sup>	W	W	1,250	9,780	W	W
Coarse and fine aggregate <sup>5</sup>	W	W	2,250	19,500	W	W
Other construction materials	3	33	15	135	--	--
Agricultural <sup>6</sup>	W	W	W	W	--	--
Chemical and metallurgical <sup>7</sup>	W	W	W	W	--	--
Unspecified: <sup>8</sup>						
Reported	932	11,400	--	--	63	770
Estimated	1,170	7,510	7,460	61,400	2,420	18,200
Total	2,710	24,600	15,400	138,000	4,200	37,600

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

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

<sup>2</sup>Includes filter stone, riprap and jetty stone and other coarse aggregate.

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

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

<sup>5</sup>Includes crusher run or fill or waste, graded road base or subbase, roofing granules, unpaved road surfacing, and other coarse and fine aggregates.

<sup>6</sup>Includes limestone.

<sup>7</sup>Includes cement manufacture and sulfur oxide removal.

<sup>8</sup>Reported and estimated production without a breakdown by end use.

TABLE 5  
MARYLAND: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 2009,  
BY MAJOR USE CATEGORY<sup>1</sup>

Use	Quantity (thousand metric tons)	Value (thousands)	Unit value
Concrete aggregate (including concrete sand)	3,060	\$41,800	\$13.65
Concrete products (blocks, bricks, pipe, decorative, etc.) <sup>2</sup>	18	171	9.50
Asphaltic concrete aggregates and other bituminous mixtures	18	172	9.56
Road base and coverings <sup>3</sup>	135	1,410	10.47
Other miscellaneous uses <sup>4</sup>	470	1,780	3.78
Unspecified: <sup>5</sup>			
Reported	514	7,010	13.65
Estimated	3,760	46,800	12.45
Total or average	7,980	99,200	12.43

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

<sup>2</sup>Includes plaster and gunite sands.

<sup>3</sup>Includes road and other stabilization (lime).

<sup>4</sup>Includes golf course, fill, and snow and ice control.

<sup>5</sup>Reported and estimated production without a breakdown by end use.

TABLE 6  
 MARYLAND: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 2009,  
 BY USE AND DISTRICT<sup>1,2</sup>

(Thousand metric tons and thousand dollars)

Use	Districts 1 and 2		District 3	
	Quantity	Value	Quantity	Value
Concrete aggregate and concrete products <sup>3</sup>	2,770	39,800	309	2,190
Asphaltic concrete aggregates and road base materials <sup>4</sup>	W	W	W	W
Other miscellaneous uses <sup>5</sup>	393	2,360	230	1,010
Unspecified: <sup>6</sup>				
Reported	505	6,870	10	147
Estimated	26	324	3,730	46,500
Total	3,700	49,400	4,280	49,800

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

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

<sup>2</sup>Specified districts are combined to avoid disclosing company proprietary data.

<sup>3</sup>Includes plaster and gunite sands.

<sup>4</sup>Includes road and other stabilization (lime).

<sup>5</sup>Includes golf course, fill, and snow and ice control.

<sup>6</sup>Reported and estimated production without a breakdown by end use.