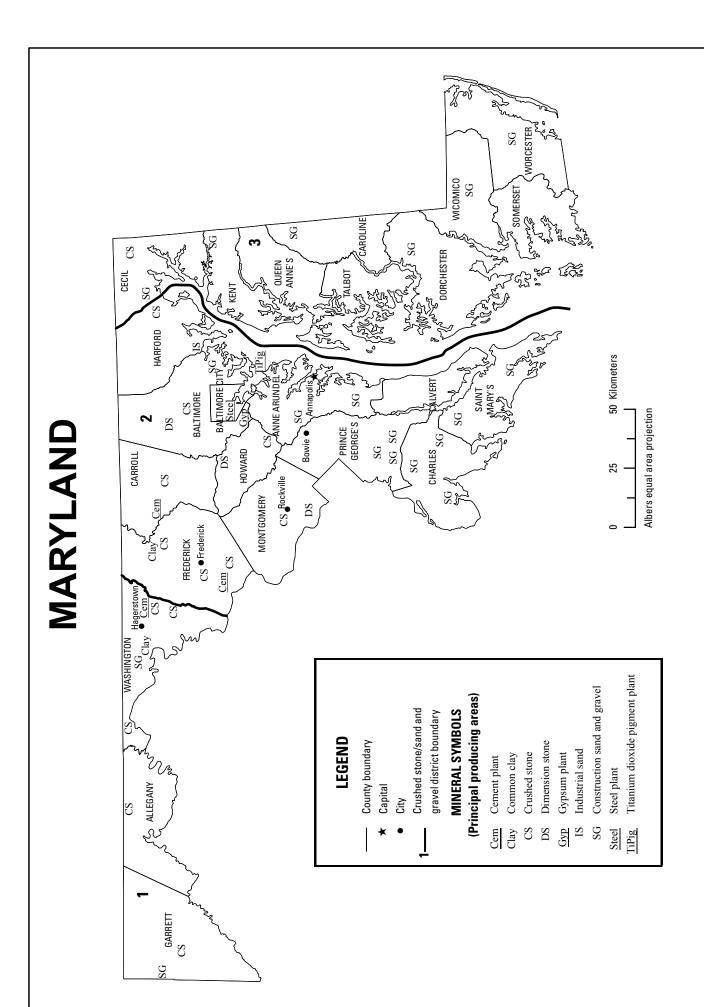


# 2008 Minerals Yearbook

## **MARYLAND**



Source: Maryland Department of the Environment/U.S. Geological Survey (2008).

## 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 2008, Maryland's nonfuel raw mineral production¹ was valued at \$353 million, based upon annual U.S. Geological Survey (USGS) data. This was a decrease of \$319 million, or almost 48%, from the State's total of \$672 million in 2007, which followed a \$10 million, or 1.5%, increase from \$662 million in 2006. The State, which from 2005-07 had ranked 33d, ranked 36th among the 50 States in total nonfuel raw mineral production value. Because data for portland and masonry cement, common clays, and industrial sand and gravel are withheld (company proprietary data), the actual total value for the State is higher than that reported in table 1.

Crushed stone, construction sand and gravel, and dimension stone, based upon value, were Maryland's leading nonfuel raw mineral commodities, the first two of which accounted for approximately 99% of the State's publishable total nonfuel mineral production value. In 2008, the production value of construction sand and gravel increased by \$3 million dollars, though production was down just over 3%, or 400,000 metric tons, from that of 2007. The quantity of crushed stone produced was down by more than 6 million metric tons and the production value was down by about \$57 million. These decreases, in addition to the withholding of certain mineral commodities, accounted for the significant decrease between the State's total mineral production value from 2007 to 2008 (table 1).

All nonfuel mineral commodities mined in Maryland were industrial minerals. All metal production, especially that of raw steel, consisted of the processing and refining of materials received from other domestic and foreign sources. One company produced titanium dioxide pigment at a plant between the cities of Baltimore and Annapolis.

 ${\bf TABLE~1} \\ {\bf NONFUEL~RAW~MINERAL~PRODUCTION~IN~MARYLAND^{1,2}} \\$ 

(Thousand metric tons and thousand dollars)

| Mineral            | 200            | 2006                 |                     |                      | 2008     |         |
|--------------------|----------------|----------------------|---------------------|----------------------|----------|---------|
|                    | Quantity       | Value                | Quantity            | Value                | Quantity | Value   |
| Cement:            |                |                      |                     |                      |          |         |
| Masonry            | W              | W                    | W                   | W                    | W        | W       |
| Portland           | 2,650          | 237,000 <sup>e</sup> | 3,000               | 265,000 <sup>e</sup> | W        | W       |
| Clays, common      | 286            | 851                  | 173                 | W                    | W        | W       |
| Gemstones, natural | NA             | 1                    | NA                  | 1                    | NA       | 1       |
| Sand and gravel:   |                |                      |                     |                      |          |         |
| Construction       | 11,900         | 96,700               | 12,400 <sup>r</sup> | 123,000 <sup>r</sup> | 12,000   | 126,000 |
| Industrial         | <del></del>    |                      |                     |                      | W        | W       |
| Stone:             |                |                      |                     |                      |          |         |
| Crushed            | 33,100         | 327,000 <sup>r</sup> | 31,100 <sup>r</sup> | 282,000 <sup>r</sup> | 24,800   | 225,000 |
| Dimension          | 5 <sup>r</sup> | 873 <sup>r</sup>     | 17 <sup>r</sup>     | 2,680 <sup>r</sup>   | 8        | 1,740   |
| Total              | XX             | 662,000 <sup>r</sup> | XX                  | 672,000 <sup>r</sup> | XX       | 353,000 |

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

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<sup>&</sup>lt;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 2008 USGS mineral production data published in this chapter are those available as of July 2010. 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.

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

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

 $\label{eq:table 2} {\sf MARYLAND: CRUSHED STONE SOLD OR USED, BY TYPE}^1$ 

|                        |                | 2007                |                      |          | 2008         |             |  |  |  |
|------------------------|----------------|---------------------|----------------------|----------|--------------|-------------|--|--|--|
|                        | Number         | Quantity            |                      | Number   | Quantity     |             |  |  |  |
|                        | of             | (thousand           | Value                | of       | (thousand    | Value       |  |  |  |
| Type                   | quarries       | metric tons)        | (thousands)          | quarries | metric tons) | (thousands) |  |  |  |
| Limestone <sup>2</sup> | 20             | 19,700 <sup>r</sup> | \$157,000 °          | 16       | 15,500       | \$131,000   |  |  |  |
| Granite                | 4              | 6,610 <sup>r</sup>  | 66,900 <sup>r</sup>  | 3        | 4,400        | 40,600      |  |  |  |
| Traprock               | 3 <sup>r</sup> | 4,040 <sup>r</sup>  | 46,500 <sup>r</sup>  | 3        | 4,100        | 45,300      |  |  |  |
| Sandstone & Quartzite  | 2              | 152                 | 1,710                | 4        | 153          | 1,810       |  |  |  |
| Miscellaneous stone    | 3 <sup>r</sup> | 569 <sup>r</sup>    | 9,790 <sup>r</sup>   | 3        | 676          | 6,510       |  |  |  |
| Total                  | XX             | 31,100 <sup>r</sup> | 282,000 <sup>r</sup> | XX       | 24,800       | 225,000     |  |  |  |

<sup>&</sup>lt;sup>r</sup>Revised. XX Not applicable.

 ${\it TABLE~3}$  MARYLAND: CRUSHED STONE SOLD OR USED BY PRODUCERS IN 2008, BY USE  $^1$ 

### (Thousand metric tons and thousand dollars)

| Use                                    | Quantity | Value   |
|--|----------|---------|
| Construction:                          |          |         |
| Coarse aggregate (+1½ inch):           |          |         |
| Riprap and jetty stone                 | W        | W       |
| Other coarse aggregate                 | 849      | 9,730   |
| Coarse aggregate, graded:              |          |         |
| Concrete aggregate, coarse             | W        | W       |
| Bituminous aggregate, coarse           | W        | W       |
| Bituminous surface-treatment aggregate | W        | W       |
| Railroad ballast                       | W        | W       |
| Other graded coarse aggregate          | 3,620    | 38,600  |
| Fine aggregate (-3/8 inch):            |          |         |
| Stone sand, concrete                   | W        | W       |
| Stone sand, bituminous mix or seal     | W        | W       |
| Screening, undesignated                | W        | W       |
| Other fine aggregate                   | 1,150    | 8,100   |
| Coarse and fine aggregates:            |          |         |
| Graded road base or subbase            | W        | W       |
| Crusher run or fill or waste           | W        | W       |
| Other coarse and fine aggregates       | 3,220    | 27,400  |
| Other construction materials           | 154      | 1,600   |
| Agricultural, limestone                | W        | W       |
| Chemical and metallurgical:            |          |         |
| Cement manufacture                     | W        | W       |
| Sulfur oxide removal                   | W        | W       |
| Special:                               |          |         |
| Asphalt fillers or extenders           | W        | W       |
| Other fillers or extenders             | W        | W       |
| Unspecified: <sup>2</sup>              |          |         |
| Reported                               | 2,670    | 36,000  |
| Estimated                              | 4,200    | 38,000  |
| Total                                  | 24,800   | 225,000 |

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

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

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

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

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

## TABLE 4 MARYLAND: CRUSHED STONE SOLD OR USED BY PRODUCERS IN 2008, BY USE AND DISTRICT $^{\rm I}$

#### (Thousand metric tons and thousand dollars)

|  | Distri      | District 1 |          | District 2 |          | District 3 |  |
|--|-------------|------------|----------|------------|----------|------------|--|
| Use                                      | Quantity    | Value      | Quantity | Value      | Quantity | Value      |  |
| Construction:                            |             |            |          |            |          |            |  |
| Coarse aggregate (+1½ inch) <sup>2</sup> | W           | W          | 926      | 10,200     | W        | W          |  |
| Coarse aggregate, graded <sup>3</sup>    | W           | W          | 7,340    | 59,200     | W        | W          |  |
| Fine aggregate (-3/8 inch) <sup>4</sup>  | W           | W          | 1,460    | 12,500     | W        | W          |  |
| Coarse and fine aggregate <sup>5</sup>   | W           | W          | 2,700    | 25,100     | W        | W          |  |
| Other construction materials             | 3           | 36         | 151      | 1,570      |          |            |  |
| Agricultural <sup>6</sup>                |             |            | W        | W          |          |            |  |
| Chemical and metallurgical <sup>7</sup>  | W           | W          | W        | W          |          |            |  |
| Special <sup>8</sup>                     |             |            | W        | W          | W        | W          |  |
| Unspecified: <sup>9</sup>                | <del></del> |            |          |            |          |            |  |
| Reported                                 | 1,410       | 16,400     | 1,170    | 18,800     | 93       | 868        |  |
| Estimated                                | 536         | 5,000      | 3,500    | 32,000     | 110      | 1,000      |  |
| Total                                    | 3,310       | 29,400     | 17,600   | 162,000    | 3,960    | 34,000     |  |

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

TABLE 5 MARYLAND: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 2008, BY MAJOR USE CATEGORY  $^{1,2}$ 

|   | Quantity     |             | -       |
|---|--------------|-------------|---------|
|   | (thousand    | Value       | Unit    |
| Use   | metric tons) | (thousands) | value   |
| Concrete aggregate and concrete products              | 6,010        | \$69,700    | \$11.61 |
| Plaster and gunite sands                              | 30           | 330         | 11.00   |
| Asphaltic concrete aggregates and road base materials | 62           | 459         | 7.40    |
| Road and other stabilization (cement )                | 24           | 312         | 13.00   |
| Road and other stabilization (lime)                   | 40           | 612         | 15.30   |
| Fill <sup>3</sup>                                     | 1,060        | 3,960       | 3.74    |
| Unspecified: <sup>4</sup>                             |              |             |         |
| Reported  | 120          | 1,650       | 13.75   |
| Estimated   | 4,700        | 49,000      | 10.42   |
| Total or average                                      | 12,000       | 126,000     | 10.46   |

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

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

<sup>&</sup>lt;sup>2</sup>Includes riprap and jetty stone and other coarse aggregate.

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

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

<sup>&</sup>lt;sup>5</sup>Includes crusher run or fill or waste, graded road base or subbase, and other coarse and fine aggregates.

<sup>&</sup>lt;sup>6</sup>Includes limestone.

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

<sup>&</sup>lt;sup>8</sup>Includes asphalt fillers or extenders and other fillers or extenders.

<sup>&</sup>lt;sup>9</sup>Reported and estimated production without a breakdown by end use.

<sup>&</sup>lt;sup>2</sup>Includes production from District of Columbia sales yard.

<sup>&</sup>lt;sup>3</sup>Includes golf course and snow and ice control.

<sup>&</sup>lt;sup>4</sup>Reported and estimated production without a breakdown by end use.

 ${\it TABLE~6}\\ {\it MARYLAND}^1: CONSTRUCTION~SAND~AND~GRAVEL~SOLD~OR~USED~IN~2008,~BY~USE~AND~DISTRICT^{2,3}$ 

#### (Thousand metric tons and thousand dollars)

|  | Districts 1 and 2 |        | District 3 |        | Unspecified districts |       |
|--|-------------------|--------|------------|--------|-----------------------|-------|
| Use  | Quantity          | Value  | Quantity   | Value  | Quantity              | Value |
| Concrete aggregate and concrete products <sup>4</sup>              | 4,730             | 57,900 | 1,280      | 11,600 | 29                    | 555   |
| Asphaltic concrete aggregates and road base materials <sup>5</sup> | W                 | W      | W          | W      |                       |       |
| Fill <sup>6</sup>  | 830               | 3,750  | 353        | 1,590  |                       |       |
| Unspecified: <sup>7</sup>  |                   |        |            |        |                       |       |
| Reported   | 105               | 1,350  | 16         | 304    |                       |       |
| Estimated  | 910               | 9,500  | 3,800      | 39,500 |                       |       |
| Total  | 6,570             | 72,500 | 5,440      | 52,900 | 29                    | 555   |

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

<sup>&</sup>lt;sup>1</sup>Includes production from District of Columbia sales yard.

<sup>&</sup>lt;sup>2</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>&</sup>lt;sup>3</sup>Specified districts are combined to avoid disclosing company proprietary data.

<sup>&</sup>lt;sup>4</sup>Includes plaster and gunite sands.

<sup>&</sup>lt;sup>5</sup>Includes road and other stabilization (cement and lime)

<sup>&</sup>lt;sup>6</sup>Includes golf course and snow and ice control.

<sup>&</sup>lt;sup>7</sup>Reported and estimated production without a breakdown by end use.