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# 2009 Minerals Yearbook

## GEORGIA

U.S. Department of the Interior
U.S. Geological Survey

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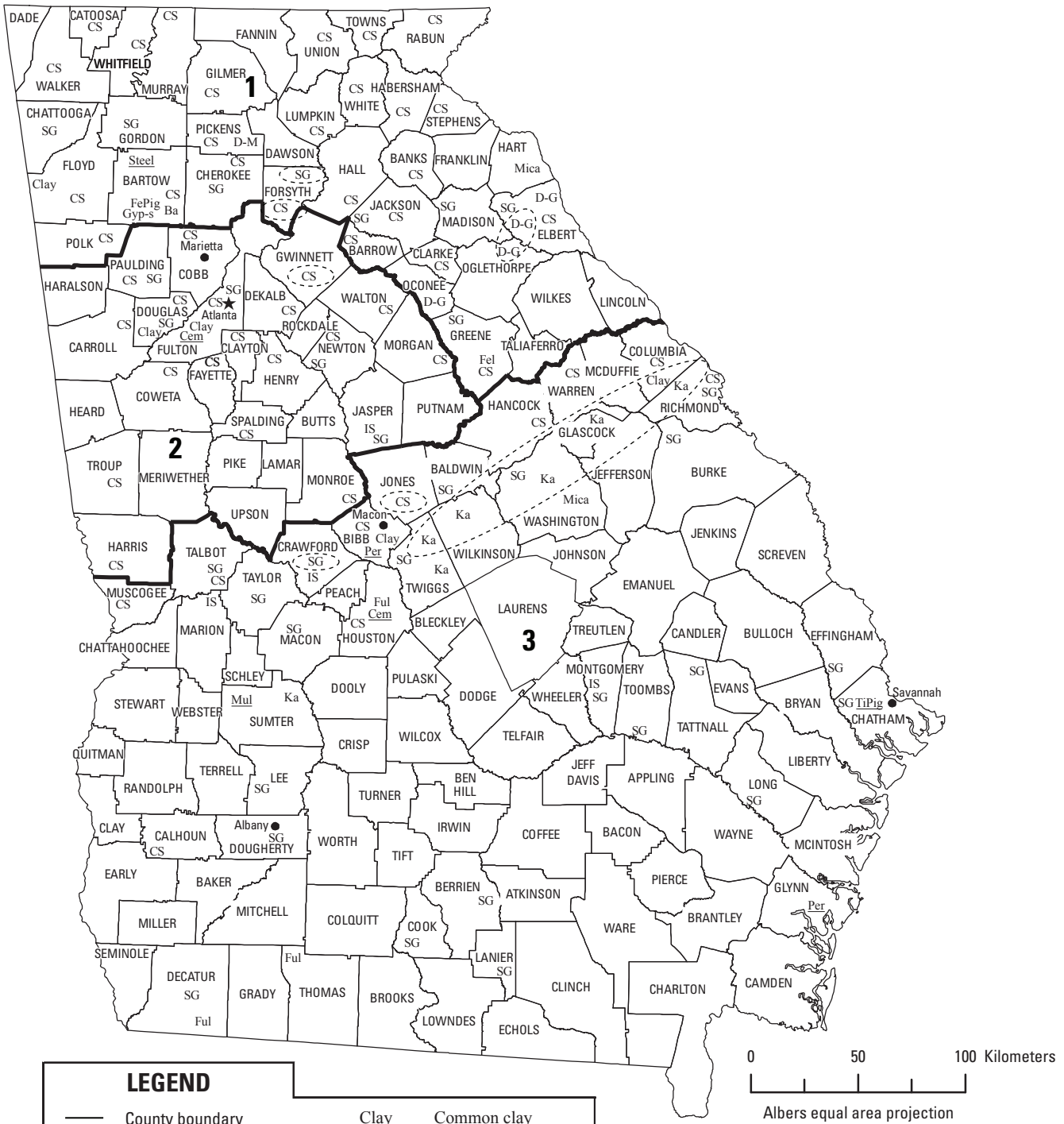


## LEGEND

| | | | | | |
|---|---|---|---|---|---|
| —— | County boundary | Clay | Common clay | | |
| ★ | Capital | CS | Crushed stone | Mica | Mica |
| • | City | D-G | Dimension granite | Mul | Synthetic mullite plant |
| 1—— | Crushed stone/sand gravel district | D-M | Dimension marble | Per | Perlite plant |
| | | Fel | Feldspar | SG | Construction sand and gravel |
| | | FePig | Iron oxide pigments | Steel | Steel plant |
| **MINERAL SYMBOLS** | | Ful | Fuller's earth | TiPig | Titanium dioxide pigment plant |
| **(Principal producing areas)** | | Gyp-s | Synthetic gypsum | | |
| Ba | Barite | IS | Industrial sand | | Concentration of mineral operations |
| Cem | Cement plant | Ka | Kaolin | | |

**Source: Georgia Department of Natural Resources, Environmental Protection Division/U.S. Geological Survey (2009).**

# The Mineral Industry of Georgia

In 2009, Georgia's nonfuel raw mineral production[1] was valued at $1.4 billion, based upon annual U.S. Geological Survey data (USGS). This was a $378 million, or a 21%, decrease from the State's total of about $1.8 billion in 2008, which then had decreased by $274 million, or 13% from that of 2007. The State remained 14th in rank among the 50 States in total nonfuel raw mineral production value and accounted for 2.4% of the U.S. total. Yet, per capita, the State ranked 22d in the Nation in its mineral industry's nonfuel mineral production; with a population of about 9.8 million, the value of production was about $144 per capita.

Georgia continued to be the leading clay-producing State in the United States in 2009, accounting for 23% of the Nation's total clay (all kinds) production. Kaolin clay, by value, remained Georgia's leading nonfuel mineral commodity, followed by crushed stone. The combined value of these two leading mineral commodities accounted for 86% of the State's total nonfuel mineral production value. Georgia's decrease in total nonfuel mineral production value was the result of decreases in the majority of the State's mineral commodity values, the largest decrease being that of kaolin clay, down by $179 million followed by crushed stone, down by $148 million. Moderate decreases in production value took place for cement (masonry and portland, withheld—company proprietary data) and construction sand and gravel, down by $9.2 million. Decreases in the production value took place for common clays, down by $2.1 million; industrial sand and gravel, down by $1.4 million; and dimension stone, down by $1.2 million. Decreases in the production value also took place for crude mica and fuller's earth clay. Smaller, yet significant, decrease in the production value also took place for iron oxide pigments. A moderate increase in the production value of lime coincided with a moderate increase in lime production. A smaller, yet significant, increase in the production value also took place for feldspar, despite a decrease in the quantity produced. The production value of barite and natural gemstone remained the same as that of 2008.

In 2009, Georgia continued to lead the Nation in the quantities of kaolin and iron oxide pigments produced (descending order of value). It remained second of two barite-producing States, third in crude mica, fourth in dimension stone, fifth in common clays, and sixth in crushed stone. The State rose to seventh from eighth in masonry cement and decreased to sixth from fifth in feldspar. Additionally, Georgia was a significant producer of industrial sand and gravel, accounting for 3.2% of the total U.S. production of the commodity.

[1]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.

TABLE 1
NONFUEL RAW MINERAL PRODUCTION IN GEORGIA[1, 2]

(Thousand metric tons and thousand dollars)

| Mineral | 2007 | | 2008 | | 2009 | |
|---|---|---|---|---|---|---|
| | Quantity | Value | Quantity | Value | Quantity | Value |
| Barite | W | W | 7 | 1,350 | 7 | 1,350 |
| Clays: | | | | | | |
| Common | 1,350 | 8,110 | 952 | 6,020 | 631 | 3,870 |
| Fuller's earth | 758 | 67,700 | 646 r, 3 | 51,800 r, 3 | W | W |
| Kaolin | 6,570 | 924,000 | 6,290 | 872,000 | 4,970 | 693,000 |
| Gemstones, natural | NA | 9 | NA | 74 | NA | 74 |
| Sand and gravel: | | | | | | |
| Construction | 10,200 | 63,800 | 7,360 r | 40,300 r | 5,260 | 31,100 |
| Industrial | 1,040 | 18,100 | 841 | 20,700 | 775 | 19,300 |
| Stone: | | | | | | |
| Crushed | 80,100 | 815,000 | 61,900 | 666,000 | 45,100 | 518,000 |
| Dimension | 162 | 18,900 | 169 | 18,200 | 153 | 16,900 |
| Combined values of cement, clays [fuller's earth (2008)], feldspar, iron oxide pigments (crude), lime, mica (crude), and values indicated by symbol W | XX | 148,000 | XX | 114,000 | XX | 128,000 |
| Total | XX | 2,060,000 | XX | 1,790,000 r | XX | 1,410,000 |

rRevised. NA Not available. W Withheld to avoid disclosing company proprietary data. Withheld values included in "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]Excludes attapulgite; included in "Combined values."

TABLE 2
GEORGIA: CRUSHED STONE SOLD OR USED, BY TYPE[1]

(Thousand metric tons and thousand dollars)

| Type | 2008 Number of quarries | 2008 Quantity (thousand metric tons) | 2008 Value (thousands) | 2009 Number of quarries | 2009 Quantity (thousand metric tons) | 2009 Value (thousands) |
|---|---|---|---|---|---|---|
| Limestone | 17 r | 6,980 r | $77,800 r | 14 | 5,100 | 59,700 |
| Marble | 3 | 1,160 | 32,200 | 3 | 1,050 | 31,800 |
| Granite | 62 r | 53,200 r | 549,000 | 63 | 38,100 | 417,000 |
| Sandstone & quartzite | -- r | -- r | -- r | -- | -- | -- |
| Slate | -- r | -- r | -- r | -- | -- | -- |
| Miscellaneous stone | 3 | 583 | 6,620 | 3 | 855 | 9,060 |
| Total | XX | 61,900 | 666,000 | XX | 45,100 | 518,000 |

rRevised. XX Not applicable. -- Zero.
[1]Data are rounded to no more than three significant digits; may not add to totals shown.

TABLE 3
GEORGIA: CRUSHED STONE SOLD OR USED BY PRODUCERS
IN 2009, BY USE[1]

(Thousand metric tons and thousand dollars)

| Use | Quantity | Value |
|---|---|---|
| Construction: | | |
| Coarse aggregate (+1½ inch): | | |
| Riprap and jetty stone | 85 | 709 |
| Filter stone | W | W |
| Other coarse aggregate | 812 | 10,400 |
| Coarse aggregate, graded: | | |
| Concrete aggregate, coarse | 894 | 5,140 |
| Bituminous aggregate, coarse | W | W |
| Railroad ballast | W | W |
| Other graded coarse aggregate | 8,040 | 103,000 |
| Fine aggregate (-⅜ inch): | | |
| Stone sand, concrete | W | W |
| Stone sand, bituminous mix or seal | W | W |
| Screening, undesignated | 934 | 8,650 |
| Other fine aggregate | 7,160 | 86,200 |
| Coarse and fine aggregates: | | |
| Graded road base or subbase | W | W |
| Unpaved road surfacing | W | W |
| Terrazzo and exposed aggregate | W | W |
| Crusher run or fill or waste | W | W |
| Other coarse and fine aggregates | 9,970 | 101,000 |
| Agricultural, limestone | W | W |
| Chemical and metallurgical, lime manufacture | W | W |
| Special: | | |
| Mine dusting or acid water treatment | W | W |
| Asphalt fillers or extenders | W | W |
| Other fillers or extenders | 848 | 27,400 |
| Unspecified:[2] | | |
| Reported | 8,320 | 94,500 |
| Estimated | 3,950 | 45,600 |
| Total | 45,100 | 518,000 |

W Withheld to avoid disclosing company proprietary data; included in "Total."
[1]Data are rounded to no more than three significant digits; may not add to totals shown.
[2]Reported and estimated production without a breakdown by end use.

TABLE 4
GEORGIA: CRUSHED STONE SOLD OR USED BY PRODUCERS IN 2009, 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 (+1½ inch)[2] | 439 | 4,360 | W | W | W | W |
| Coarse aggregate, graded[3] | W | W | W | W | W | W |
| Fine aggregate (-⅜ inch)[4] | W | W | W | W | W | W |
| Coarse and fine aggregates[5] | W | W | W | W | W | W |
| Agricultural[6] | W | W | -- | -- | -- | -- |
| Chemical and metallurgical[7] | -- | -- | -- | -- | W | W |
| Special[8] | W | W | -- | -- | W | W |
| Unspecified:[9] | | | | | | |
| Reported | 3,110 | 34,600 | 3,700 | 42,200 | 1,510 | 17,700 |
| Estimated | 1,160 | 19,100 | -- | -- | 2,790 | 26,500 |
| Total | 11,300 | 152,000 | 15,300 | 173,000 | 18,400 | 192,000 |

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, riprap and jetty stone, and other coarse aggregate.
[3]Includes bituminous aggregate (coarse), concrete aggregate (coarse), railroad ballast, and other graded coarse aggregate.
[4]Includes stone sand (concrete), stone sand (bituminous mix or seal), screening (undesignated), and other fine aggregate.
[5]Includes crusher run or fill or waste, graded road base or subbase, terrazzo and exposed aggregate, unpaved road surfacing, and other coarse and fine aggregates.
[6]Includes limestone.
[7]Includes lime manufacture.
[8]Includes asphalt fillers or extenders, mine dusting or acid water treatment, and other fillers or extenders.
[9]Reported and estimated production without a breakdown by end use.

TABLE 5
GEORGIA: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 2009,
BY MAJOR USE CATEGORY[1]

| Use | Quantity (thousand metric tons) | Value (thousands) | Unit value |
|---|---|---|---|
| Concrete aggregate (including concrete sand) | 2,676 | $15,524 | $5.80 |
| Plaster and gunite sands | 219 | 1,183 | 5.40 |
| Concrete products (blocks, bricks, pipe, decorative, etc.) | W | W | 5.93 |
| Road base and coverings | W | W | 4.22 |
| Fill | 27 | 94 | 3.48 |
| Other miscellaneous uses[2] | 77 | 407 | 5.29 |
| Unspecified:[3] | | | |
| Reported | 1,377 | 8,459 | 6.14 |
| Estimated | 885 | 5,394 | 6.09 |
| Total or average | 5,261 | 31,061 | 5.90 |

W Withheld to avoid disclosing company proprietary data; included in "Other miscellaneous uses."
[1]Data are rounded to no more than three significant digits; may not add to totals shown.
[2]Includes filtration.
[3]Reported and estimated production without a breakdown by end use.

TABLE 6
GEORGIA: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 2009, BY USE AND DISTRICT[1]

(Thousand metric tons and thousand dollars)

| Use | District 1 | | District 2 | | District 3 | | Unspecified district | |
|---|---|---|---|---|---|---|---|---|
| | Quantity | Value | Quantity | Value | Quantity | Value | Quantity | Value |
| Concrete aggregates and concrete products[2] | W | W | [3] | [3] | W | W | -- | -- |
| Road base and coverings | W | W | -- | -- | -- | -- | -- | -- |
| Fill | W | W | -- | -- | W | W | -- | -- |
| Other miscellaneous uses[4] | 113 | 686 | -- | -- | 2,850 | 16,200 | -- | -- |
| Unspecified:[5] | | | | | | | | |
| Reported | 810 | 4,690 | -- | -- | 525 | 3,470 | 42 | 299 |
| Estimated | 144 | 889 | [3] | [3] | 494 | 2,980 | -- | -- |
| Total | 1,070 | 6,260 | 283 | 1,860 | 3,870 | 22,600 | 42 | 299 |

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

[4]Includes filtration.

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