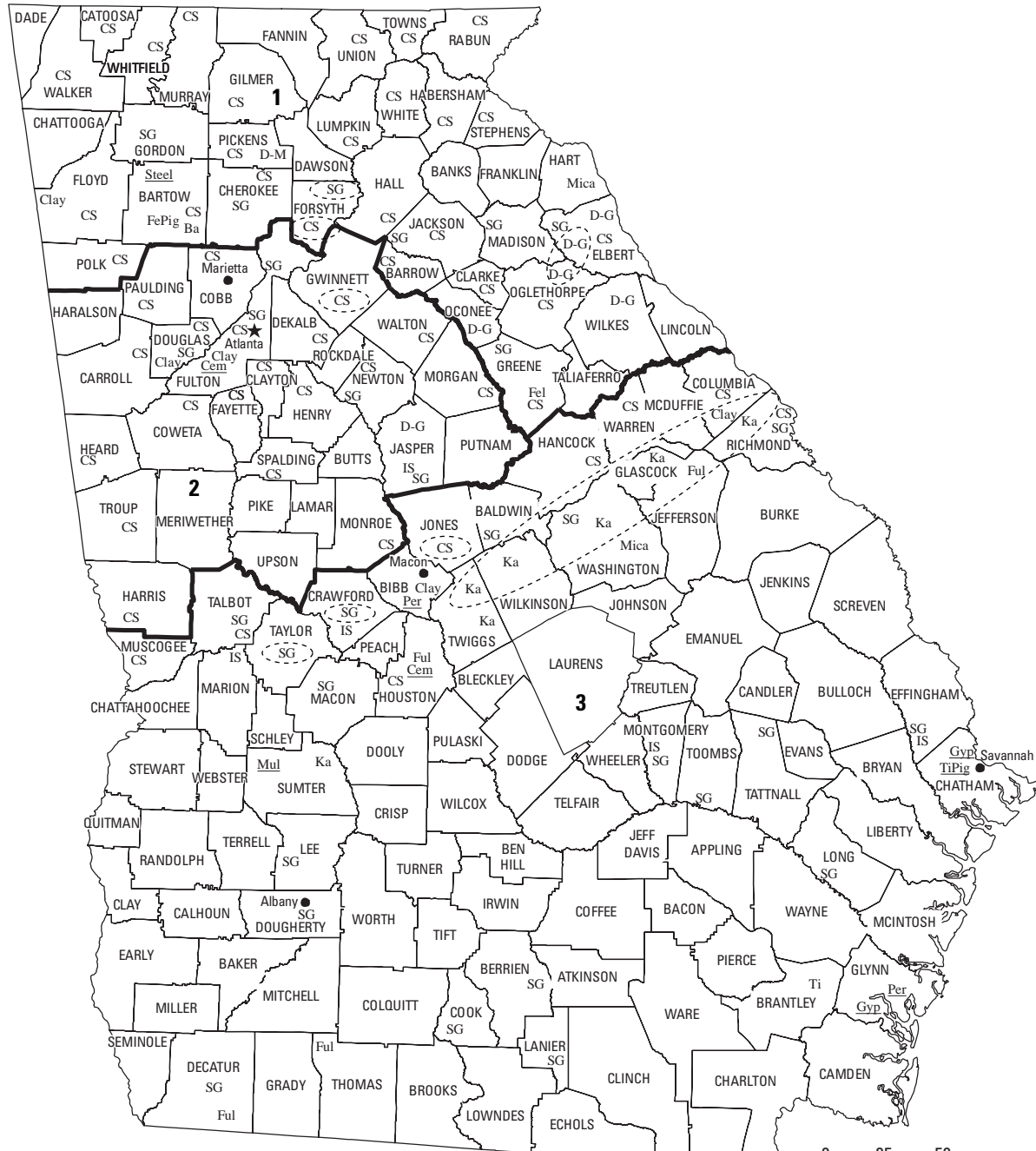




2007 Minerals Yearbook

GEORGIA [ADVANCE RELEASE]

GEORGIA



0 25 50 100 Kilometers

Albers equal area projection

LEGEND		
—	County boundary	
★	Capital	
●	City	
1	Crushed stone/sand gravel district	
MINERAL SYMBOLS (Major producing areas)		
Ba	Barite	Clay
Cem	Cement plant	CS
		D-G
		D-M
		Fel
		FelPig
		Ful
		Gyp
		IS
		Ka
		Common clay
		Crushed stone
		Dimension granite
		Dimension marble
		Feldspar
		Iron oxide pigments
		Fuller's earth
		Gypsum plant
		Industrial sand
		Kaolin
		Mica
		Mica
		<u>Mul</u>
		Synthetic mullite plant
		<u>Per</u>
		Perlite plant
		SG
		Construction sand and gravel
		<u>Steel</u>
		Steel plant
		Ti
		Titanium minerals
		<u>TiPig</u>
		Titanium dioxide pigment plant
		(Dashed oval)
		Concentration of mineral operations

Source: Georgia Department of Natural Resources, Environmental Protection Division/U.S. Geological Survey (2007).

THE MINERAL INDUSTRY OF GEORGIA

In 2007, Georgia's nonfuel raw mineral production¹ was valued at \$2.06 billion, based upon annual U.S. Geological Survey data. From the State's \$2.07 billion industry in 2006, this represents a \$10 million, or 0.5%, decrease in the State's total nonfuel mineral value, after a 17% increase from 2005 to 2006 (from \$1.77 billion to \$2.07 billion). Georgia ranked 10th among the 50 States in total nonfuel raw mineral production value and accounted for 3.0% of the U.S. total, though for the previous 2 years the State ranked 9th.

Georgia continued to be the leading clay-producing State in the United States in 2007, accounting for 23.6% of the Nation's total clay production (all kinds) and producing greater than twice the amount of clay as the next highest clay-producing State. Accounting for 45% of Georgia's total nonfuel mineral production value and more than 92% of its total clay value, kaolin clay remains the State's principal nonfuel raw mineral commodity. The second most valuable mineral commodity in the State is crushed stone, accounting for more than 39% of Georgia's nonfuel mineral value, followed by portland cement, fuller's earth, construction sand and gravel, and masonry cement, in descending order.

In 2007, increases in value of \$23 million in cement (the majority of which was in masonry cement), \$9 million in crushed stone, and \$3.4 million in fuller's earth characterized the largest increases in the values of Georgia's nonfuel mineral commodities for the year. The large increase in the value of cement coincided with a small rise in production; similarly,

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 applicable to the individual mineral commodity.

All 2007 USGS mineral production data published in this chapter are those available as of June 2009. 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>.

the rise in fuller's earth value corresponded to a small, 1.2%, increase in production. Whereas significant growth took place in the value of crushed stone, production declined by 11%, which resulted in a 13.7% increase in the unit value of crushed stone. Georgia's mineral industry in 2006 recorded increases in value of \$171 million in crushed stone, \$120 million in kaolin, and more than \$20 million in cement (the majority of which was in masonry cement), accounting for the largest increases in the values of the State's nonfuel minerals for that year. In 2007, smaller, yet significant, increases also took place in the values of lime, industrial sand and gravel, feldspar, and mica (listed in descending order). The decrease in Georgia's total nonfuel raw mineral value was owing to decreases in the value of kaolin, construction sand and gravel, dimension stone, and common clay. A 2.2% drop in value took place for kaolin, the State's most valuable commodity, comprising a \$21 million decline in value. The values of construction sand and gravel, dimension stone, and common clay decreased by \$5.2 million, \$4.5 million, and \$1 million, respectively. Construction sand and gravel production was down 4.9% and its value decreased by 7.5%; the value of dimension stone declined by greater than 23%, whereas its production increased by nearly 4%; and the value of common clay decreased by 11.4% with a more than 10% decrease in production (table 1).

By yearend 2007, Georgia continued to lead the Nation in the production of kaolin, fuller's earth, and iron oxide pigments (listed in descending order of value). It remained second of two barite-producing States, fifth in dimension stone and feldspar, and eighth in masonry cement. The State rose to third from fifth in mica, and to fourth from fifth in common clay, despite a drop from fourth to fifth in crushed stone. Additionally, Georgia was a significant producer of industrial sand and gravel, accounting for 3.5% of the total U.S. production of the commodity, as well as construction sand and gravel and portland cement.

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

(Thousand metric tons and thousand dollars)

Mineral	2005		2006		2007	
	Quantity	Value	Quantity	Value	Quantity	Value
Clays:						
Common	1,530	8,730	1,510	9,150	1,350	8,110
Fuller's earth	874	82,600	747	64,300	756	67,700
Kaolin	7,190	825,000	6,920	945,000	6,570	924,000
Gemstones, natural	NA	9	NA	9	NA	9
Sand and gravel:						
Construction	11,100	68,300	10,700 ^r	69,000 ^r	10,200	63,800
Industrial	689	15,000	973	17,400	1,040	18,100
Stone:						
Crushed	80,700	631,000	89,000 ^r	802,000 ^r	79,200	811,000
Dimension	111	21,000	81	19,100	84	14,600
Combined values of barite, cement, feldspar, iron oxide pigments (crude), lime, mica (crude)	XX	115,000	XX	140,000	XX	148,000
Total	XX	1,770,000	XX	2,070,000 ^r	XX	2,060,000

^rRevised. 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
GEORGIA: CRUSHED STONE SOLD OR USED, BY TYPE¹

(Thousand metric tons and thousand dollars)

Type	2006			2007		
	Number of quarries	Quantity (thousand metric tons)	Value (thousands)	Number of quarries	Quantity (thousand metric tons)	Value (thousands)
Limestone	17	11,500 ^r	\$110,000 ^r	18	10,700	\$116,000
Marble	4 ^r	1,530 ^r	27,800 ^r	4	1,320	22,900
Granite	55 ^r	73,500 ^r	642,000 ^r	59	66,400	664,000
Quartzite	2	2,400	21,400	3	771	8,450
Total	XX	89,000 ^r	802,000 ^r	XX	79,200	811,000

^rRevised. XX Not applicable.

¹Data 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 2007, BY USE¹

(Thousand metric tons and thousand dollars)

Use	Quantity	Value
Construction:		
Coarse aggregate (+1½ inch):		
Riprap and jetty stone	W	W
Other coarse aggregate	1,120	15,900
Coarse aggregate, graded:		
Concrete aggregate, coarse	W	W
Railroad ballast	W	W
Other graded coarse aggregate	12,400	141,000
Fine aggregate (¾ inch):		
Stone sand, concrete	W	W
Other fine aggregate	8,690	92,700
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	12,600	97,700
Other construction materials	91	809
Agricultural:		
Limestone	W	W
Other agricultural uses	80	1,680
Chemical and metallurgical, cement manufacture	W	W
Special:		
Asphalt fillers or extenders	W	W
Other fillers or extenders	1,180	26,000
Other miscellaneous uses and specified uses not listed	342	4,870
Unspecified:²		
Reported	34,300	343,000
Estimated	3,200	33,000
Total	79,200	811,000

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

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

²Reported and estimated production without a breakdown by end use.

TABLE 4
 GEORGIA: CRUSHED STONE SOLD OR USED BY PRODUCERS IN 2007, BY USE AND DISTRICT¹

(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	W	W	W	W	W	W
Coarse aggregate, graded ³	W	W	W	W	W	W
Fine aggregate (¾ inch) ⁴	W	W	W	W	W	W
Coarse and fine aggregates ⁵	W	W	W	W	W	W
Other construction materials	--	--	91	809	--	--
Agricultural ⁶	W	W	--	--	--	--
Chemical and metallurgical ⁷	--	--	--	--	W	W
Special ⁸	W	W	--	--	--	--
Other miscellaneous uses	342	4,870	--	--	--	--
Unspecified:⁹						
Reported	11,600	116,000	7,250	73,100	15,500	154,000
Estimated	1,600	16,000	1,100	11,000	531	5,400
Total	25,400	278,000	33,200	334,000	20,700	199,000

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 riprap and jetty stone and other coarse aggregate.

³Includes concrete aggregate (coarse), railroad ballast, and other graded coarse aggregate.

⁴Includes stone sand (concrete) and other fine aggregate.

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

⁶Includes agricultural limestone and other agricultural uses.

⁷Includes cement manufacture.

⁸Includes asphalt fillers or extenders and other fillers or extenders.

⁹Reported and estimated production without a breakdown by end use.

TABLE 5
 GEORGIA: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 2007,
 BY MAJOR USE CATEGORY¹

Use	Quantity	Value (thousands)	Unit value
	(thousand metric tons)		
Concrete aggregate (including concrete sand)	5,660	\$32,500	\$5.75
Concrete products (blocks, bricks, pipe, decorative, etc.) ²	459	2,520	5.48
Asphaltic concrete aggregates and road base materials	18	102	5.65
Fill	83	367	4.40
Other miscellaneous uses ³	2	18	9.91
Unspecified:⁴			
Reported	2,860	21,700	7.61
Estimated	1,070	6,540	6.10
Total or average	10,200	63,800	6.28

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

²Includes plaster and gunite sands.

³Includes filtration and golf course.

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

TABLE 6
 GEORGIA: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 2007, BY USE AND DISTRICT¹

(Thousand metric tons and thousand dollars)

Use	District 1		District 2		District 3	
	Quantity	Value	Quantity	Value	Quantity	Value
Concrete aggregates and concrete products ²	W	W	W	W	5,670	31,800
Asphaltic concrete aggregates and other bituminous mixtures	W	W	--	--	W	W
Fill	2	8	--	--	82	359
Other miscellaneous uses ³	178	1,210	277	2,060	16	86
Unspecified: ⁴						
Reported	1,970	16,300	--	--	716	4,340
Estimated	322	2,330	182	1,030	567	3,190
Total	2,470	19,900	459	3,090	7,050	39,800
	Unspecified district					
	Quantity	Value				
Concrete aggregates and concrete products ²	--	--				
Asphaltic concrete aggregates and other bituminous mixtures	--	--				
Fill	--	--				
Other miscellaneous uses ³	--	--				
Unspecified: ⁴						
Reported	167	1,070				
Estimated	--	--				
Total	167	1,070				

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

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

²Includes plaster and gunite sands.

³Includes filtration and golf course.

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