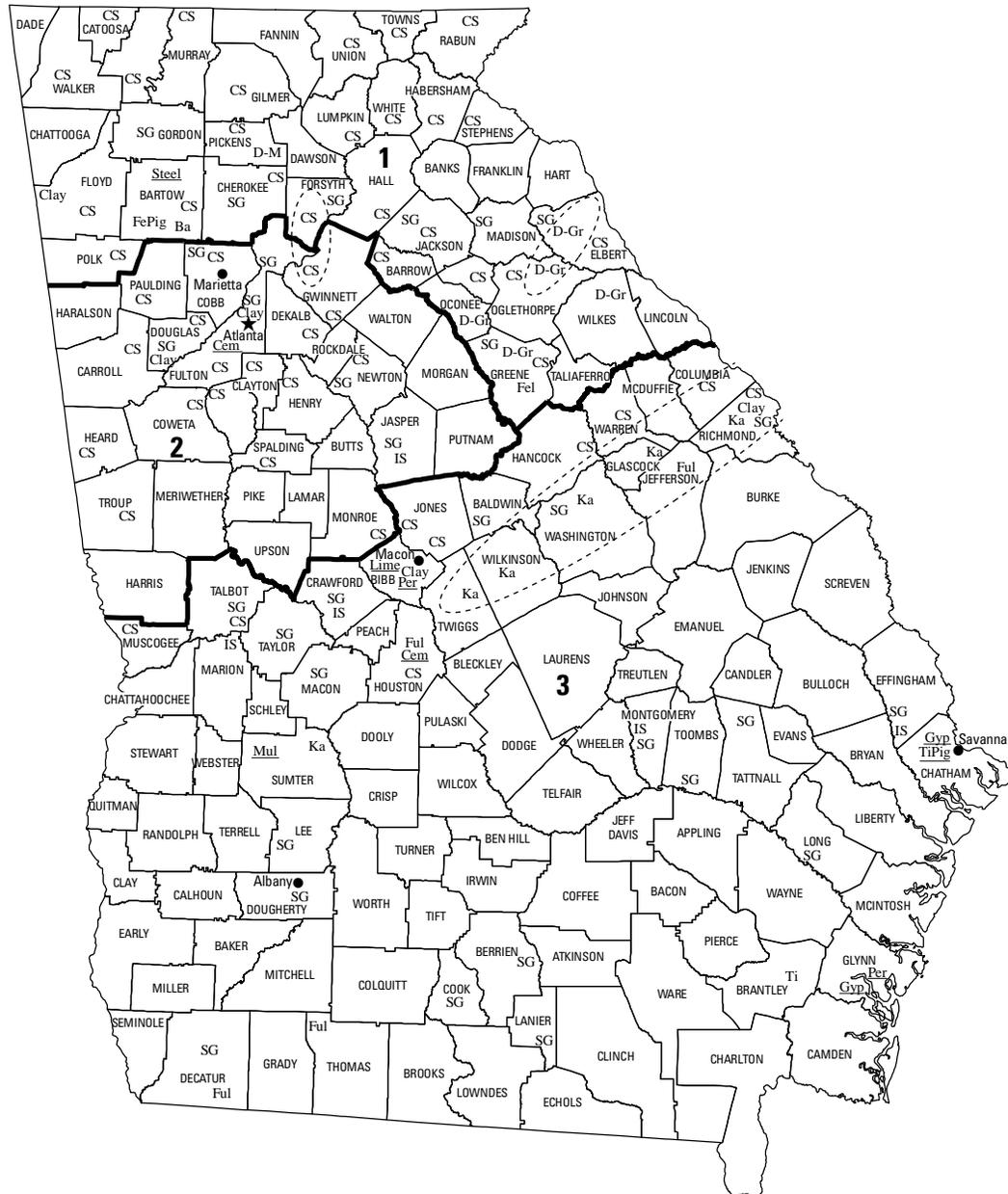




2006 Minerals Yearbook

GEORGIA

GEORGIA



LEGEND

- County boundary
- ★ Capital
- City
- 1 — Crushed stone/sand and gravel district boundary

MINERAL SYMBOLS (Major producing areas)

- Ba Barite
- Cem Cement plant
- Clay Common clay
- CS Crushed stone
- D-G Dimension granite
- D-M Dimension marble
- Fel Feldspar
- FePig Iron oxide pigments
- Ful Fuller's earth
- Gem Gemstones
- Gyp Gypsum plant
- IS Industrial sand
- Ka Kaolin
- Lime Lime plant
- Mica Mica
- Mul Synthetic mullite plant
- Per Perlite plant
- SG Construction sand and gravel
- Steel Steel plant
- Ti Titanium minerals
- TiPig Titanium dioxide pigment plant
- Concentration of mineral operations

0 25 50 100 Kilometers



Albers equal area projection

Source: Georgia Department of Natural Resources, Environmental Protection Division/U.S. Geological Survey (2006).

THE MINERAL INDUSTRY OF GEORGIA

In 2006, Georgia's nonfuel raw mineral production¹ was valued at \$2.08 billion, based upon annual U.S. Geological Survey data. This was a \$310 million, or 17.5%, increase in the State's total nonfuel mineral value of \$1.77 billion for 2005, which followed a 2.2% decrease from 2004 to 2005. For the second consecutive year, Georgia ranked ninth among the 50 States in total nonfuel raw mineral production value and accounted for more than 3% of the U.S. total.

Georgia continued to be by far the leading clay-producing State in the Nation in 2006, accounting for slightly more than 22% of total U.S. clay production (all kinds) and producing more than twice the quantity of clay as the next highest producing State. Kaolin clay remained the State's foremost nonfuel raw mineral commodity, accounting for more than 45% of Georgia's total nonfuel mineral production value and, of that, nearly 93% of its total clay value. Crushed stone was second, accounting for more than 39% of the State's nonfuel mineral value, followed by cement (masonry and portland), construction sand and gravel, and fuller's earth.

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 2006 USGS mineral production data published in this chapter are those available as of March 2008. 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>.

In 2006, increases in value of \$185 million in crushed stone, \$120 million in kaolin, and more than \$20 million in cement (the majority of which was in masonry cement) accounted for the largest increases in the values of Georgia's nonfuel minerals for the year. The unit values of each of these mineral commodities also significantly increased. Crushed stone production was up by 13%, while its value rose by 29%; the value of kaolin rose by nearly 15%, despite a 4% decrease the quantity produced; and a small net decrease in cement production resulted in the commodity's large increase in value. Smaller yet significant increases also took place in the values of construction sand and gravel, feldspar, industrial sand and gravel, and lime. The largest decrease took place in the production and the value of fuller's earth clay; a 15% decrease in production resulted in an \$18 million, or 22%, decrease in value from that of 2005 (table 1).

In 2006, Georgia continued to lead the Nation in the quantities of kaolin, fuller's earth clay, and iron oxide pigments produced (descending order of value). It remained second of two barite producing States, fifth in feldspar and crude mica, and eighth in masonry cement. While the State rose to fourth from sixth in crushed stone production, it decreased to fifth from second in the production of dimension stone and to fifth from fourth in common clay production. Additionally, Georgia was a significant producer of construction sand and gravel and industrial sand and gravel.

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

(Thousand metric tons and thousand dollars unless otherwise specified)

Mineral	2004		2005		2006	
	Quantity	Value	Quantity	Value	Quantity	Value
Clays:						
Common	1,550	8,710	1,530	8,730	1,510	9,150
Fuller's earth	1,400	142,000	874 ^r	82,600 ^r	747	64,300
Kaolin	6,780	898,000	7,190	825,000	6,920	945,000
Gemstones, natural	NA	9	NA	9	NA	9
Sand and gravel:						
Construction	9,270	39,400	11,100	68,300	10,900	71,000
Industrial	665	13,400	689	15,000	973	17,400
Stone:						
Crushed	79,700	548,000	80,700 ^r	631,000 ^r	90,800	816,000
Dimension	146	22,100	111 ^r	21,000	81	19,100
Combined values of barite, cement, feldspar, iron oxide pigments (crude), lime, mica (crude)	XX	134,000	XX	115,000	XX	140,000
Total	XX	1,810,000	XX	1,770,000 ^r	XX	2,080,000

^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 KIND¹

Kind	2005			2006		
	Number of quarries	Quantity (thousand metric tons)	Value (thousands)	Number of quarries	Quantity (thousand metric tons)	Value (thousands)
Limestone	16	9,310 ^r	\$78,100 ^r	17	11,300	\$107,000
Marble	6	1,740	19,100 ^r	5	4,130	50,600
Granite	54	67,600 ^r	518,000 ^r	54	73,000	637,000
Quartzite	2	2,110	16,100	2	2,400	21,400
Total	XX	80,700 ^r	631,000 ^r	XX	90,800	816,000

^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 2006, BY USE¹

(Thousand metric tons and thousand dollars)

Use	Quantity	Value
Construction:		
Coarse aggregate (+1½ inch):		
Riprap and jetty stone	W	W
Filter stone	W	W
Other coarse aggregate	1,730	20,700
Total	2,460	27,300
Coarse aggregate, graded:		
Concrete aggregate, coarse	W	W
Railroad ballast	W	W
Other graded coarse aggregate	15,400	152,000
Total	17,000	165,000
Fine aggregate (-¾ inch):		
Stone sand, concrete	W	W
Screening, undesignated	W	W
Other fine aggregate	9,130	78,500
Total	10,300	88,000
Coarse and fine aggregates:		
Graded road base or subbase	W	W
Terrazzo and exposed aggregate	W	W
Crusher run or fill or waste	595	2,680
Other coarse and fine aggregates	14,200	96,500
Total	15,500	107,000
Agricultural:		
Limestone	(2)	(2)
Other agricultural uses	(2)	(2)
Chemical and metallurgical, cement manufacture	(2)	(2)
Special:		
Mine dusting or acid water treatment	(2)	(2)
Asphalt fillers or extenders	(2)	(2)
Other fillers or extenders	(2)	(2)
Other miscellaneous uses and specified uses not listed	156	1,400
Unspecified: ³		
Reported	37,900	340,000
Estimated	5,100	46,000
Total	43,100	385,000
Grand total	90,800	816,000

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.

²Withheld to avoid disclosing company proprietary data; included in "Grand total."

³Reported and estimated production without a breakdown by end use.

TABLE 4
 GEORGIA: CRUSHED STONE SOLD OR USED BY PRODUCERS IN 2006, 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	659	6,370	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
Agricultural ⁶	W	W	--	--	--	--
Chemical and metallurgical ⁷	--	--	--	--	W	W
Special ⁸	W	W	--	--	W	W
Other miscellaneous uses	--	--	--	--	156	1,400
Unspecified: ⁹						
Reported	14,100	127,000	8,620	77,100	15,200	136,000
Estimated	4,200	38,000	900	8,000	--	--
Total	31,800	303,000	38,500	334,000	20,500	179,000

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 filter stone, riprap and jetty stone, and other coarse aggregate.

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

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

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

⁶Includes agricultural limestone and other agricultural uses.

⁷Includes cement manufacture.

⁸Includes mine dusting or acid water treatment, asphalt fillers or extenders, and other fillers or extenders.

TABLE 5
 GEORGIA: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 2006,
 BY MAJOR USE CATEGORY¹

Use	Quantity	Value (thousands)	Unit value
	(thousand metric tons)		
Concrete aggregate (including concrete sand)	3,510	\$20,200	\$5.76
Concrete products (blocks, bricks, pipe, decorative, etc.) ²	683	3,780	5.53
Asphaltic concrete aggregates and other bituminous mixtures	W	W	W
Fill	33	156	4.73
Other miscellaneous uses ³	46	363	7.83
Unspecified: ⁴			
Reported	3,530	27,800	7.88
Estimated	3,080	18,700	6.06
Total or average	10,900	71,000	6.53

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

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

²Includes plaster and gunite sands.

³Includes filtration.

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

TABLE 6
 GEORGIA: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 2006, 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	488	3,770	351	2,820	3,350	17,400
Asphaltic concrete aggregates and other bituminous mixtures	W	W	--	--	W	W
Fill	--	--	--	--	33	156
Other miscellaneous uses ³	36	316	--	--	10	46
Unspecified: ⁴						
Reported	2,520	22,000	--	--	883	5,060
Estimated	67	407	177	1,080	2,830	17,200
Total	3,110	26,500	528	3,890	7,110	39,900
	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	132	758				
Estimated	--	--				
Total	132	758				

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.

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