



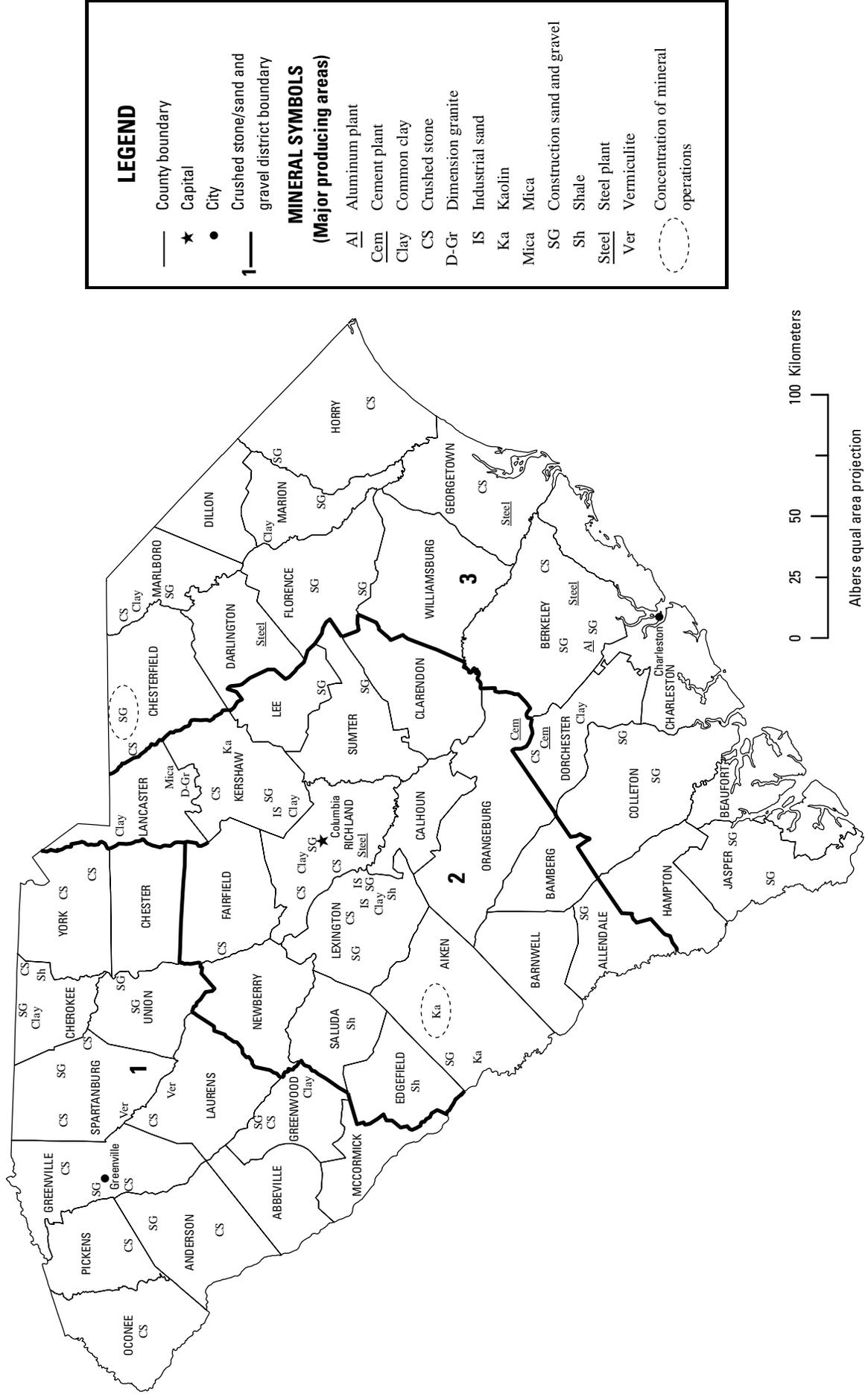
# 2007 Minerals Yearbook

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SOUTH CAROLINA [ADVANCE RELEASE]

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# SOUTH CAROLINA



Source: South Carolina Geological Survey/U.S. Geological Survey (2007).

# THE MINERAL INDUSTRY OF SOUTH CAROLINA

**This chapter has been prepared under a Memorandum of Understanding between the U.S. Geological Survey and the South Carolina Geological Survey for collecting information on all nonfuel minerals.**

In 2007, South Carolina's nonfuel raw mineral production<sup>1</sup> was valued at \$789 million, based upon annual U.S. Geological Survey (USGS) data. This was a \$62 million, or an 8.5%, increase from the State's total nonfuel mineral value of \$727 million in 2006, which was up by \$68 million, or 10.3%, from 2005 to 2006. South Carolina rose to 26th from 29th in rank among the 50 States in total nonfuel mineral production value and accounted for more than 1% of the U.S. total. [Because data for crushed marble (2005), crude mica, and crude vermiculite have been withheld (company proprietary data), the actual total value for the State is somewhat higher than that reported in table 1.]

A large majority of South Carolina's nonfuel mineral production resulted from the mining and production of construction minerals and materials. In 2007, cement (portland and masonry), by value of production, remained the State's leading nonfuel mineral commodity followed by crushed stone and construction sand and gravel. These three mineral commodities accounted for nearly 95% of the State's total nonfuel mineral value, followed, in descending order of value, by industrial sand and gravel, kaolin, crude vermiculite, and common clays.

In 2006, cement led the State's increase in value with an overall increase in the combined values of portland and

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<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 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>.

masonry cement of about \$52 million (portland separately, up by \$61 million). An overall more than 7% increase in cement production helped lead to a more than 14% increase in the combined mineral commodity's value. Despite decreases in the production of crushed stone and construction sand and gravel, the production value of those mineral commodities rose by about \$6 million each. Also up in production and value was vermiculite, the value of which was up by \$1 million. With significant production decreases in common clay and fire clay, each of the clays also were down in value, by a combined \$2.2 million. Mica production and its production value also decreased, slightly (table 1).

In 2007, South Carolina, of two producing States, continued to rank first in the quantities of vermiculite that it produced, and it remained second in the production of kaolin clay, third in masonry cement, fourth in crude mica, and eighth in the production of portland cement. Fire clay production decreased by about 38%, and the State remained fourth of four fire clay-producing States. Even though the production of common clay decreased by nearly 17%, the State increased to eighth from ninth in the national ranking of that mineral commodity. Additionally, the State continued to produce significant quantities of crushed stone, construction sand and gravel, and industrial sand and gravel, as compared with other producing States. Primary aluminum and raw steel also were produced in the State but from raw materials acquired from foreign and other domestic sources. Although primary aluminum production decreased only marginally, South Carolina decreased in rank to seventh from fifth of 11 States in its production in 2007.

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

(Thousand metric tons and thousand dollars)

Mineral	2005		2006		2007	
	Quantity	Value	Quantity	Value	Quantity	Value
Cement:						
Masonry	498	54,300 <sup>e</sup>	575	68,900 <sup>e</sup>	491	60,100 <sup>e</sup>
Portland	3,270	247,000 <sup>e</sup>	3,320	294,000 <sup>e</sup>	3,680	355,000 <sup>e</sup>
Clays:						
Common	1,020	3,610	992	4,250	826	2,610
Fire	54	892	60	348	37	83
Kaolin	287	17,700	294	17,900	297	17,600
Gemstones, natural	NA	1	NA	1	NA	1
Sand and gravel:						
Construction	11,100	45,200	10,900	51,100	10,700	57,000
Industrial	794	19,400	905	21,800	837	22,000
Stone:						
Crushed	33,800 <sup>3</sup>	258,000 <sup>3</sup>	31,200 <sup>r</sup>	268,000 <sup>r</sup>	28,100	274,000
Dimension	9	850	9	850	9	850
Combined values of mica (crude), stone [crushed marble (2005)], vermiculite (crude)	XX	12,600	XX	W	XX	W
Total	XX	659,000	XX	727,000 <sup>r</sup>	XX	789,000

<sup>e</sup>Estimated. <sup>r</sup>Revised. NA Not available. W Withheld to avoid disclosing company proprietary data. XX Not applicable.

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

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

<sup>3</sup>Excludes certain stones; kind and value included with "Combined values" data.

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

Type	2006			2007		
	Number of quarries	Quantity (thousand metric tons)	Value (thousands)	Number of quarries	Quantity (thousand metric tons)	Value (thousands)
Limestone	3	4,110	\$30,800	3	3,360	\$28,400
Calcareous marl	4	2,750	10,500	3	2,820	18,800
Granite	22	23,500	219,000	23	21,300	220,000
Miscellaneous stone	2	778	7,050	1	622	6,840
Total	XX	31,200 <sup>r</sup>	268,000 <sup>r</sup>	XX	28,100	274,000

<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.

TABLE 3  
SOUTH CAROLINA: CRUSHED STONE SOLD OR USED BY PRODUCERS IN 2007, BY USE<sup>1</sup>

(Thousand metric tons and thousand dollars)

Use	Quantity	Value
Construction:		
Coarse aggregate (+1½ inch):		
Macadam	W	W
Riprap and jetty stone	108	1,140
Other coarse aggregate	243	4,680
Coarse aggregate, graded:		
Concrete aggregate, coarse	W	W
Bituminous aggregate, coarse	W	W
Railroad ballast	W	W
Other graded coarse aggregate	3,730	53,600
Fine aggregate (¾ inch):		
Stone sand, bituminous mix or seal	W	W
Screening, undesignated	180	1,450
Other fine aggregate	3,400	36,300
Coarse and fine aggregates:		
Graded road base or subbase	W	W
Crusher run or fill or waste	777	6,310
Other coarse and fine aggregates	3,830	33,100
Chemical and metallurgical, cement manufacture	W	W
Unspecified: <sup>2</sup>		
Reported	10,900	102,000
Estimated	129	1,300
Total	28,100	274,000

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  
SOUTH CAROLINA: CRUSHED STONE SOLD OR USED BY PRODUCERS IN 2007, 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
Construction:						
Coarse aggregate (+1½ inch) <sup>2</sup>	350	4,100	W	W	W	W
Coarse aggregate, graded <sup>3</sup>	W	W	W	W	W	W
Fine aggregate (¾ inch) <sup>4</sup>	W	W	W	W	W	W
Coarse and fine aggregate <sup>5</sup>	W	W	W	W	W	W
Chemical and metallurgical <sup>6</sup>	--	--	W	W	W	W
Unspecified: <sup>7</sup>						
Reported	4,370	41,900	1,400	12,600	5,140	47,100
Estimated	--	--	129	1,300	--	--
Total	11,300	111,000	6,480	61,400	10,300	102,000

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

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

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

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

<sup>6</sup>Includes cement manufacture.

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

TABLE 5  
SOUTH CAROLINA: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 2007,  
BY MAJOR USE CATEGORY<sup>1</sup>

Use	Quantity (thousand metric tons)	Value (thousands)	Unit value
Concrete aggregate (including concrete sand)	4,120	\$23,900	\$5.81
Concrete products (blocks, bricks, pipe, decorative, etc.)	481	3,030	6.29
Asphaltic concrete aggregates and road base materials <sup>2</sup>	341	1,580	4.63
Fill	721	1,850	2.56
Other miscellaneous uses <sup>3</sup>	85	1,490	17.49
Unspecified: <sup>4</sup>			
Reported	2,960	16,300	5.51
Estimated	2,000	8,800	4.40
Total or average	10,700	57,000	5.32

<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 road and other stabilization (cement and lime).

<sup>3</sup>Includes golf course.

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

TABLE 6  
SOUTH CAROLINA: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 2007,  
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
Concrete aggregate and concrete products <sup>2</sup>	448	2,510	1,750	8,820	2,740	17,200
Fill	--	--	228	617	493	1,230
Other miscellaneous uses <sup>3</sup>	--	--	--	--	85	1,490
Unspecified: <sup>4</sup>						
Reported	3	18	--	--	2,960	16,300
Estimated	200	1,100	1,200	4,500	600	3,200
Total	642	3,600	3,220	14,000	6,850	39,400

-- Zero.

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

<sup>2</sup>Includes plaster and gunite sands, asphaltic concrete aggregates, road base materials, and road and other stabilization (cement and lime).

<sup>3</sup>Includes golf course.

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