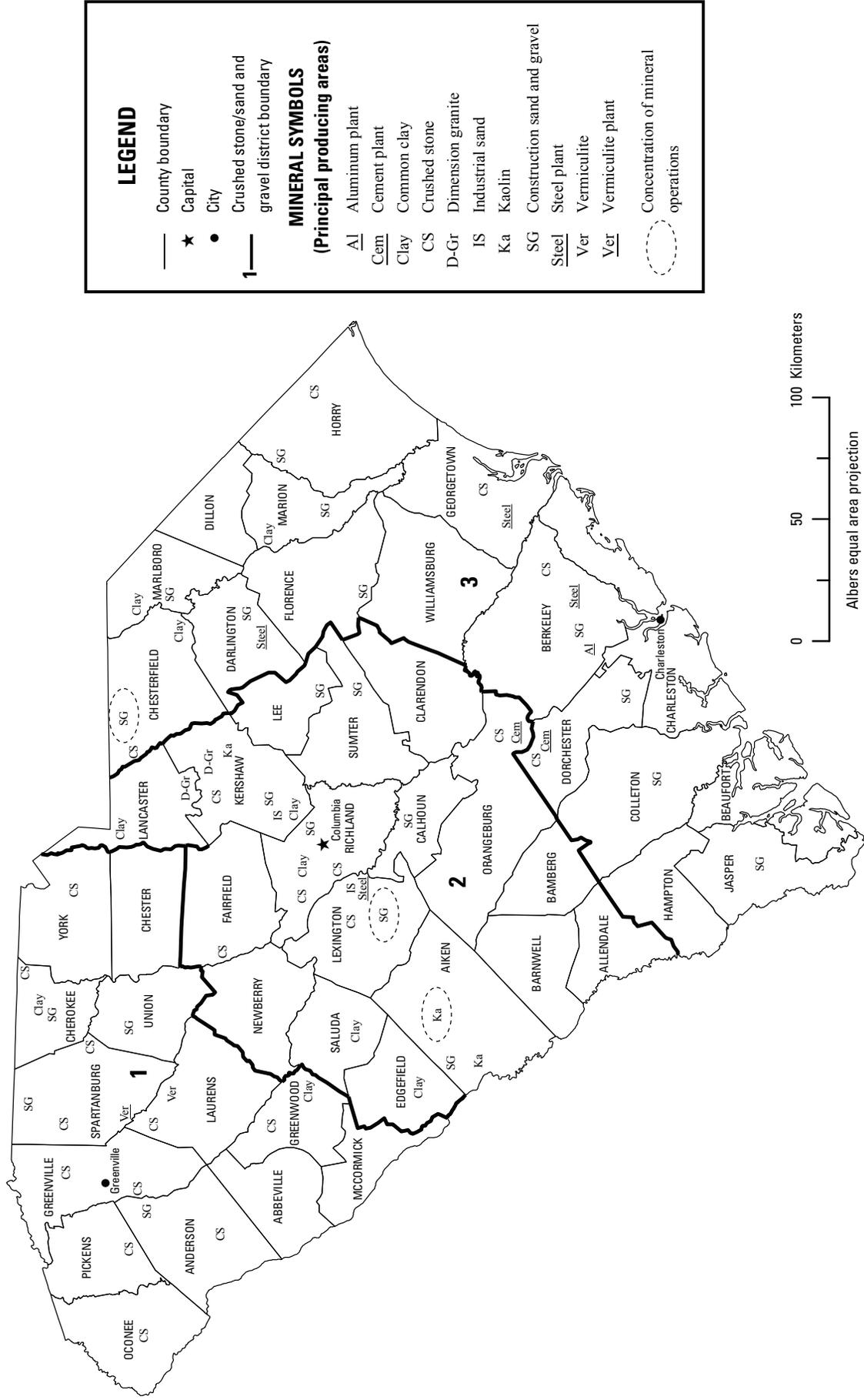




2009 Minerals Yearbook

SOUTH CAROLINA [ADVANCE RELEASE]

SOUTH CAROLINA



Source: South Carolina Geological Survey/U.S. Geological Survey (2009).

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 2009, South Carolina's nonfuel raw mineral production¹ was valued at \$449 million, based upon annual U.S. Geological Survey (USGS) data. This was a \$193 million, or a 30%, decrease from the State's total nonfuel mineral value of \$642 million in 2008, which was down by \$166 million, or almost 21%, from \$808 million in 2007. South Carolina declined to 35th from 33d in 2008, which in turn was down from 26th in 2007, in rank among the 50 States in total nonfuel mineral production value. The State accounted for 0.76% of the total U.S. nonfuel mineral production of \$59 billion in 2009, a decrease from accounting for 0.9% of the \$71.3 billion total in 2008, which in turn was down from 1.15% of the \$70 billion in 2007. [Because data for crude mica (2007–08) and crude vermiculite (2007–09) have been withheld (company proprietary data), the actual total production values for the State are higher than those reported in table 1.]

Construction minerals and materials constituted the majority of South Carolina's nonfuel mineral production. In descending order of total value, crushed stone, portland cement, and construction sand and gravel were the State's top three mineral commodities, accounting for 90% of the State's total nonfuel mineral production value. These three were followed by masonry cement and industrial sand and gravel. These five mineral commodities accounted for 98% of the State's total nonfuel mineral production value.

Excluding fire clay and crude mica, neither of which was produced in the State in 2009, and gemstones, for which

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 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>.

production values remained significantly unchanged from 2007–08, South Carolina saw a decrease in every mineral commodity for both quantities produced and production value. Three of the State's leading mineral commodities—portland cement, crushed stone, and masonry cement—had the greatest decreases in production value, down \$115 million, or 40%, \$34 million, or 14%, and more than \$19 million, or 47%, respectively. Other significant decreases in production value of more than \$1 million took place in industrial sand and gravel, down \$7.1 million, and kaolin clays, down \$2.7 million. The production and production value of crude vermiculite (actual values withheld—company proprietary data) were down 38% and 54%, respectively. By tonnage, the greatest decreases in the State took place in crushed stone, down 4.3 million metric tons (Mt), and construction sand and gravel, down 3.8 Mt. Combined, production of both of these commodities totaled 24 Mt in 2009, down from 32 Mt in 2008, or 25%.

South Carolina continued to be the top producing State of vermiculite. The only other vermiculite-producing State in 2009 was Virginia. South Carolina remained second of nine States in the production of kaolin clay, ranking behind Georgia. The State decreased from 2d in 2008 to 6th in 2009 in the production of masonry cement and from 9th to 10th in the production of portland cement.

Primary aluminum and raw steel also were produced in the State from raw materials from foreign and other domestic sources. Aluminum was produced at a facility in Berkeley County, north of Charleston. Steel was produced at facilities in Berkeley, Darlington, Lexington, and Georgetown Counties. In 2009, South Carolina ranked fourth in the production of primary aluminum, up from seventh in 2007–08, among the 10 aluminum-producing States, despite an almost 4% decrease in production and 36% decrease in production value.

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

(Thousand metric tons and thousand dollars)

Mineral	2007		2008		2009	
	Quantity	Value	Quantity	Value	Quantity	Value
Cement:						
Masonry	491	60,100 ^e	323	41,600 ^e	174	22,000 ^e
Portland	3,680	355,000 ^e	2,930	284,000 ^e	1,870	169,000 ^e
Clays:						
Common	826	3,990	461	2,130	311	1,300
Fire	37	83	29	66	--	--
Kaolin	297	17,600	199	11,300	144	8,590
Gemstones, natural	NA	1	NA	1	NA	1
Mica, crude	W	W	W	W	--	--
Sand and gravel:						
Construction	10,500 ^r	57,700 ^r	9,660 ^r	46,500 ^r	5,900	32,900
Industrial	837	22,000	679	21,100	441	14,000
Stone:						
Crushed	30,400	290,000	22,500	235,000	18,200	201,000
Dimension	9	850	4	472	3	401
Vermiculite	W	W	W	W	W	W
Total	XX	808,000 ^r	XX	642,000 ^r	XX	449,000

^eEstimated. ^rRevised. NA Not available. W Withheld to avoid disclosing company proprietary data; excluded from "Total." XX Not applicable. -- Zero.

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
SOUTH CAROLINA: CRUSHED STONE SOLD OR USED, BY TYPE¹

Type	2008			2009		
	Number of quarries	Quantity (thousand metric tons)	Value (thousands)	Number of quarries	Quantity (thousand metric tons)	Value (thousands)
Limestone	5	2,830	\$28,200	5	2,130	\$22,000
Calcareous marl	3	3,500	19,700	3	2,480	14,000
Granite	23	15,800	181,000	23	13,100	159,000
Miscellaneous stone	1	370	5,280	1	418	5,520
Total	XX	22,500	235,000	XX	18,200	201,000

XX Not applicable.

¹Data 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 2009, BY USE¹

(Thousand metric tons and thousand dollars)

Use	Quantity	Value
Construction:		
Coarse aggregate (+1½ inch):		
Macadam	W	W
Riprap and jetty stone	86	985
Filter stone	W	W
Other coarse aggregate	287	5,290
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	1,740	29,000
Fine aggregate (-¾ inch):		
Stone sand, concrete	W	W
Stone sand, bituminous mix or seal	W	W
Screening, undesignated	175	1,210
Other fine aggregate	2,140	28,200
Coarse and fine aggregates:		
Graded road base or subbase	534	4,750
Crusher run or fill or waste	283	1,960
Other coarse and fine aggregates	2,160	23,400
Agricultural, limestone	W	W
Chemical and metallurgical, cement manufacture	W	W
Unspecified: ²		
Reported	6,280	70,000
Estimated	2,620	18,000
Total	18,200	201,000

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

¹Data are rounded to no more than three significant digits.

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

TABLE 4
SOUTH CAROLINA: CRUSHED STONE SOLD OR USED BY PRODUCERS IN 2009,
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 aggregate ⁵	W	W	W	W	W	W
Agricultural ⁶	--	--	--	--	W	W
Chemical and metallurgical ⁷	--	--	--	--	W	W
Unspecified: ⁸						
Reported	2,100	25,100	953	9,900	3,220	34,900
Estimated	--	--	1,480	8,580	1,130	9,400
Total	6,130	73,500	5,350	54,300	6,690	72,900

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

¹Data are rounded to no more than three significant digits.

²Includes filter stone, macadam, riprap and jetty stone, and other coarse aggregate.

³Includes bituminous aggregate (coarse), bituminous surface-treatment aggregate, concrete aggregate (coarse), railroad ballast, and other graded coarse aggregate.

⁴Includes screening (undesignated), stone sand (concrete), stone sand (bituminous mix or seal), and other fine aggregates.

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

⁶Includes limestone.

⁷Includes cement manufacture.

⁸Reported and estimated production without a breakdown by end use.

TABLE 5
SOUTH CAROLINA: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 2009,
BY MAJOR USE CATEGORY¹

Use	Quantity	Value (thousands)	Unit value
	(thousand metric tons)		
Concrete aggregate and concrete products ²	2,710	\$15,500	\$5.72
Asphaltic concrete aggregates and road base materials ³	308	1,540	4.99
Fill	424	1,050	2.47
Golf course	46	850	18.48
Other miscellaneous uses ⁴	58	402	6.93
Unspecified: ⁵			
Reported	1,110	6,680	6.05
Estimated	1,250	6,880	5.49
Total or average	5,900	32,900	5.57

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

²Includes plaster and gunite sands.

³Includes road and other stabilization (cement).

⁴Includes filtration and snow and ice control.

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

TABLE 6
SOUTH CAROLINA: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 2009,
BY USE AND DISTRICT¹

(Thousand metric tons and thousand dollars)

Use	District 1		District 2		District 3	
	Quantity	Value	Quantity	Value	Quantity	Value
Concrete aggregate and concrete products ²	W	W	1,630	7,760	W	W
Asphaltic concrete aggregates and road base materials ³	W	W	76	344	W	W
Fill	--	--	129	325	296	724
Other miscellaneous uses ⁴	138	903	43	355	1,240	8,910
Unspecified: ⁵						
Reported	--	--	31	172	1,070	6,510
Estimated	75	464	185	1,140	993	5,270
Total	213	1,370	2,090	10,100	3,600	21,400

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 road and other stabilization (cement).

⁴Includes filtration, golf course, and snow and ice control.

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