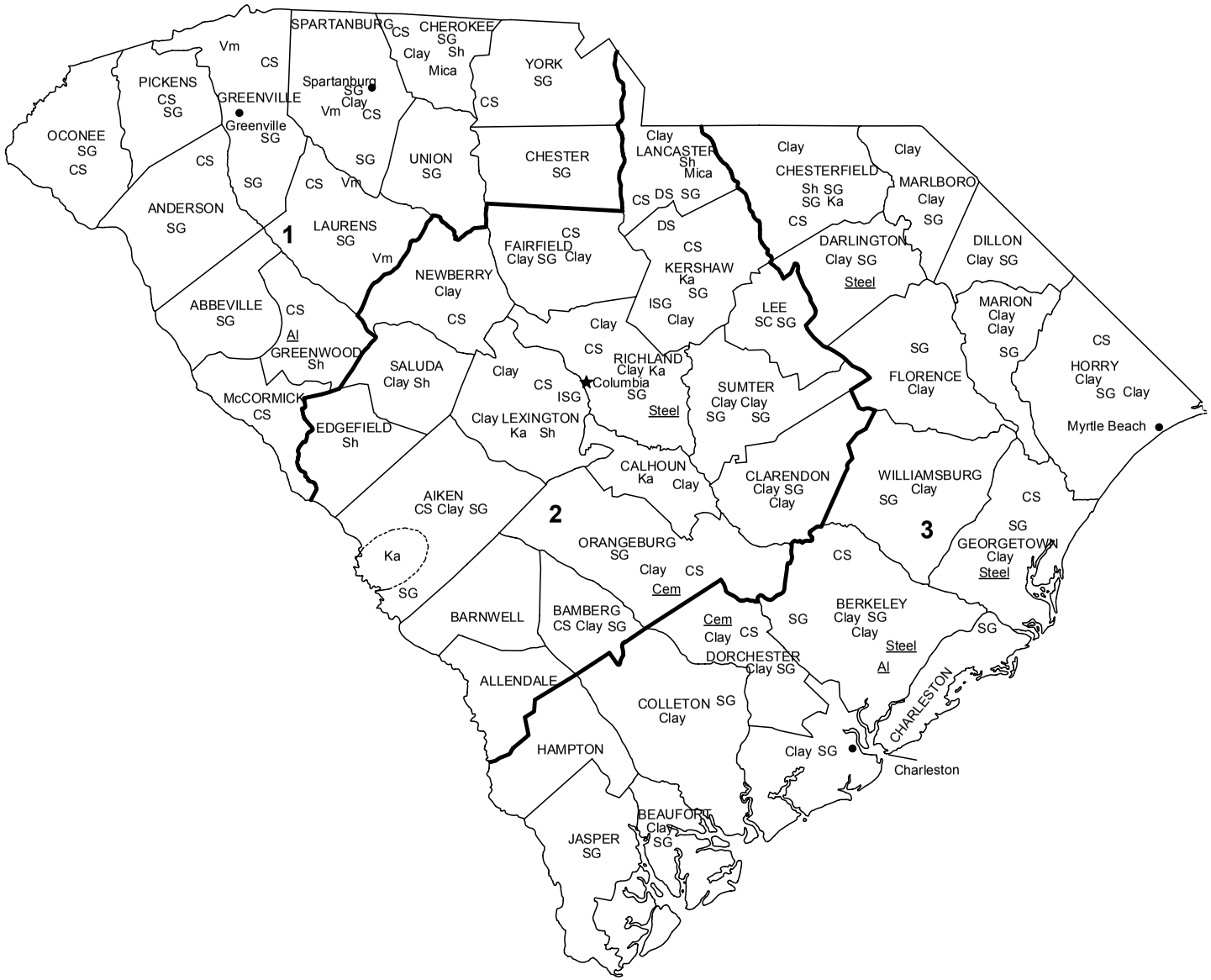
SOUTH CAROLINA



Source: South Carolina Geological Survey/U.S. Geological Survey (2003)

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 2003, the estimated value[1] of nonfuel raw mineral production for South Carolina was $474 million, based upon preliminary U.S. Geological Survey (USGS) data. This was a 3% increase from that of 2002[2] and followed no net change in value from 2001 to 2002. The State increased to 27th from 29th in rank among the 50 States in total nonfuel raw mineral production value, of which South Carolina accounted for more than 1% of the U.S. total. Because data for mica and vermiculite have been withheld (company proprietary data), the actual total values for 2001-03 are somewhat higher than those reported in table 1.

In 2003, cement (portland and masonry) by value remained the State's leading nonfuel mineral commodity, followed by crushed stone, construction sand and gravel, kaolin, industrial sand and gravel, and vermiculite. The first three, the State's most prominent raw construction materials, accounted for 91% of South Carolina's total nonfuel raw mineral production value.

In 2002, increases in the values both of crushed stone, up $4 million, and cement (portland and masonry), each having about 4% less production, and increases in the values of industrial sand and gravel and fire clay, each of the latter two having significant increases in production, were offset by decreases in the values of construction sand and gravel, kaolin, and common clay, resulting in no net change in total nonfuel mineral value for the year (table 1). Gold had been a significant portion of the State's nonfuel mineral economy for more than a decade, but gold has not been produced in South Carolina since Kennecott Minerals Co.'s Ridgeway Mine in Fairfield County ceased production in the fall of 1999.

From 2001 to 2003, the production and values of mica showed small decreases each year; while the production of vermiculite similarly decreased, the commodity's value rose by 20% in 2002 and returned the following year to about its 2001 level.

Based upon USGS estimates of the quantities produced in the 50 States in 2003, South Carolina continued to be first of 2 States that produce vermiculite, second in fire clay, third in masonry cement and kaolin (descending order of value), and ninth in common clays, but decreased to fourth from third in mica. Additionally, significant quantities of portland cement, crushed stone, construction sand and gravel, and industrial sand and gravel were produced in the State. Primary aluminum and raw steel also were produced in the State but from raw materials that were acquired from other domestic and foreign sources. South Carolina continued to be seventh of 13 States in the production of primary aluminum in 2003.

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[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 2003 USGS mineral production data published in this chapter are preliminary estimates as of July 2004 and are expected to change. For some mineral commodities, such as construction sand and gravel, crushed stone, and portland cement, estimates are updated periodically. To obtain the most current information, please contact the appropriate USGS mineral commodity specialist. Specialist contact information may be retrieved over the Internet at URL http://minerals.usgs.gov/ minerals/contacts/comdir.html; alternatively, specialists' names and telephone numbers may be obtained by calling USGS information at (703) 648-4000 or by calling the USGS Earth Science Information Center at 1-888-ASK-USGS (275-8747). All USGS Mineral Industry Surveys and USGS Minerals Yearbook chapters—mineral commodity, State, and country—also may be retrieved over the Internet at URL http://minerals.usgs.gov/minerals.

[2]Values, percentage calculations, and rankings for 2002 may differ from the Minerals Yearbook, Area Reports: Domestic 2002, Volume II, owing to the revision of preliminary 2002 to final 2002 data. Data for 2003 are preliminary and are expected to change; related rankings also may change.

TABLE 1
NONFUEL RAW MINERAL PRODUCTION IN SOUTH CAROLINA[1, 2]

(Thousand metric tons and thousand dollars unless otherwise specified)

Mineral		2001		2002		2003[p]	
		Quantity	Value	Quantity	Value	Quantity	Value
Cement:							
Masonry		487	52,600 [e]	426	41,000 [e]	425	40,400 [e]
Portland		2,560	165,000 [e]	2,510	176,000 [e]	2,500	183,000 [e]
Clays:							
Common		1,050	4,150	1,020	3,360	1,020 [e]	3,360 [e]
Fire		42	510 [r]	53	739	53 [e]	739 [e]
Kaolin		377	22,800	374	21,400	374 [e]	21,400 [e]
Gemstones		NA	1	NA	1	NA	1
Mica, crude	metric tons	W	(3)	W	(3)	W	(3)
Sand and gravel:							
Construction		10,500	36,900	10,300	35,500	10,300	36,100
Industrial		694	15,900	831	16,400	995	17,300
Stone:							
Crushed		26,700	161,000	25,700	165,000	26,300	171,000
Dimension		9	855	9	850	9	855
Vermiculite, crude[e]	metric tons	W	(3)	W	(3)	W	(3)
Total		XX	460,000 [r]	XX	460,000	XX	474,000

[e]Estimated. [p]Preliminary. NA Not available. W Withheld to avoid disclosing company proprietary 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]Value withheld to avoid disclosing company proprietary data.

TABLE 2
SOUTH CAROLINA: CRUSHED STONE SOLD OR USED, BY KIND [1]

Kind	2001				2002			
	Number of quarries	Quantity (thousand metric tons)	Value (thousands)	Unit value	Number of quarries	Quantity (thousand metric tons)	Value (thousands)	Unit value
Limestone	5	2,730	$17,100	$6.28	4	2,320	$14,700	$6.32
Marble	1	W	W	6.94	1	W	W	7.41
Calcareous marl	3	W	W	3.88	3	W	W	4.57
Granite	24	20,100	127,000	6.32	24	18,900	128,000	6.76
Total or average	XX	26,700	161,000	6.03	XX	25,700	165,000	6.43

W Withheld to avoid disclosing company proprietary data; included in "Total." XX Not applicable.
[1]Data are rounded to no more than three significant digits, except unit values; may not add to totals shown.

TABLE 3
SOUTH CAROLINA: CRUSHED STONE SOLD OR USED BY PRODUCERS IN 2002, BY USE [1]

Use	Quantity (thousand metric tons)	Value (thousands)	Unit value
Construction:			
Coarse aggregate (+1 1/2 inch):			
Riprap and jetty stone	W	W	$9.25
Filter stone	W	W	14.44
Other coarse aggregates	266	$2,050	7.69
Total or average	266	2,050	7.69
Coarse aggregate, graded:			
Concrete aggregate, coarse	W	W	8.73
Bituminous aggregate, coarse	W	W	9.80
Railroad ballast	W	W	15.57
Other graded coarse aggregates	7,870	60,100	7.64
Total or average	7,870	60,100	7.64
Fine aggregate (-3/8 inch):			
Stone sand, concrete	W	W	6.44
Stone sand, bituminous mix or seal	W	W	5.45
Screening, undesignated	W	W	10.12
Other fine aggregates	2,780	16,300	5.84
Total or average	2,780	16,300	5.84
Coarse and fine aggregates:			
Graded road base or subbase	W	W	6.90
Crusher run or fill or waste	W	W	6.45
Other coarse and fine aggregates	4,290	26,500	6.18
Total or average	4,290	26,500	6.18
Chemical and metallurgical, cement manufacture	(2)	(2)	4.93
Unspecified:[3]			
Reported	7,250	43,600	6.01
Estimated	500	3,100	6.17
Total or average	7,750	46,600	6.02
Grand total or average	25,700	165,000	6.43

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

TABLE 4
SOUTH CAROLINA: CRUSHED STONE SOLD OR USED BY PRODUCERS IN 2002, 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 (+1 1/2 inch)[2]	159	1,180	W	W	W	W
Coarse aggregate, graded[3]	W	W	W	W	W	W
Fine aggregate (-3/8 inch)[4]	W	W	W	W	W	W
Coarse and fine aggregate[5]	W	W	W	W	W	W
Chemical and metallurgical[6]	--	--	(7)	(7)	(7)	(7)
Unspecified:[8]						
Reported	857	5,480	3,940	22,400	5,160	29,000
Estimated	150	970	230	1,500	120	650
Total	10,500	67,500	7,340	46,400	7,880	51,000

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 aggregates.
[3]Includes bituminous aggregate (coarse), concrete aggregate (coarse), railroad ballast, and other graded coarse aggregates.
[4]Includes screening (undesignated), stone sand (bituminous mix or seal), stone sand (concrete), and other fine aggregates.
[5]Includes crusher run (select material or fill), graded road base or subbase, and other coarse and fine aggregates.
[6]Includes cement manufacture.
[7]Withheld to avoid disclosing company proprietary data; included in "Unspecified: Reported."
[8]Reported and estimated production without a breakdown by end use.

TABLE 5
SOUTH CAROLINA: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 2002,
BY MAJOR USE CATEGORY [1]

Use	Quantity (thousand metric tons)	Value (thousands)	Unit value
Concrete aggregate (including concrete sand)	5,360	$21,000	$3.92
Plaster and gunite sands	14	84	6.00
Concrete products (blocks, bricks, pipe, decorative, etc.)	560	1,990	3.56
Asphaltic concrete aggregates and other bituminous mixtures	467	1,310	2.80
Road base and coverings	42	96	2.29
Fill	1,620	2,770	1.71
Other miscellaneous uses[2]	97	615	6.34
Unspecified:[3]			
Reported	449	2,480	5.53
Estimated	1,700	5,200	3.06
Total or average	10,300	35,500	3.45

[1]Data are rounded to no more than three significant digits, except unit value; may not add to totals shown.
[2]Includes snow and ice control.
[3]Reported and estimated production without a breakdown by end use.

TABLE 6
SOUTH CAROLINA: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 2002,
BY USE AND DISTRICT [1, 2]

(Thousand metric tons and thousand dollars)

Use	District 1 and 2		District 3	
	Quantity	Value	Quantity	Value
Concrete aggregate and concrete products	1,770	6,520	4,140	16,500
Plaster and gunite sands	--	--	14	84
Asphaltic concrete aggregates and road base materials	108	320	401	1,080
Other miscellaneous uses[3]	408	753	1,310	2,630
Unspecified:[4]				
Reported	6	21	444	2,460
Estimated	400	1,700	1,300	3,500
Total	2,700	9,310	7,590	26,200

-- Zero.
[1]Data are rounded to no more than three significant digits; may not add to totals shown.
[2]Districts 1 and 2 are combined to avoid disclosing company proprietary data.
[3]Includes fill and snow and ice control.
[4]Reported and estimated production without a breakdown by end use.