

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 2000, the estimated value¹ of nonfuel mineral production for South Carolina was \$560 million, based upon preliminary U.S. Geological Survey (USGS) data. This was a marginal decrease from that of 1999,² and from 1998 to 1999, the value remained the same. The State was 27th in rank (26th in 1999) among the 50 States in total nonfuel mineral production value, of which South Carolina accounted for nearly 1.5% of the U.S. total.

In 2000, cement (portland and masonry) by value was the

¹The terms "nonfuel mineral production" and related "values" encompass variations in meaning, depending upon the minerals or 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 2000 USGS mineral production data published in this chapter are preliminary estimates as of July 2001 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. A telephone listing of the specialists may be retrieved over the Internet at URL <http://minerals.usgs.gov/minerals/contacts/comdir.html>, by using MINES FaxBack at (703) 648-4999 from a fax machine with a touch-tone handset (request Document #1000 for a telephone listing of all mineral commodity specialists), or by calling USGS information at (703) 648-4000 for the specialist's name and number. All Mineral Industry Surveys—mineral commodity, State, and country—also may be retrieved over the Internet at URL <http://minerals.usgs.gov/minerals/>; facsimile copies may be obtained from MINES FaxBack.

²Values, percentage calculations, and rankings for 1999 may vary from the Minerals Yearbook, Area Reports: Domestic 1999, Volume II, owing to the revision of preliminary 1999 to final 1999 data. Data for 2000 are preliminary and are expected to change; related rankings may also change.

State's leading nonfuel mineral commodity followed by crushed stone, construction sand and gravel, kaolin, industrial sand and gravel, and vermiculite. The first three accounted for about 89% of South Carolina's total nonfuel mineral production value. Whereas gold had been a significant portion of the State's nonfuel mineral economy for more than a decade, no gold was produced in 2000. Kennecott Minerals Co.'s Ridgeway Mine ceased production in the fall of 1999.

In 1999, increases in the values of crushed stone, masonry cement, construction sand and gravel, common clays, and lime were offset by decreases in gold, kaolin, portland cement, industrial sand and gravel, and dimension stone values, resulting in the same total value as that of the previous year (minerals listed in descending order of change) (table 1). All other changes in value were smaller than these and had little effect on the overall result.

Based upon USGS estimates of the quantities produced in the 50 States in 2000, South Carolina remained first of 2 States that produce vermiculite, third in mica and fire clays (descending order of value), and fifth in masonry cement. While the State rose to 8th from 10th in portland cement and to 10th from 12th in industrial sand and gravel, it decreased to 3d from 2d in kaolin. Additionally, significant quantities of crushed stone and common clay were produced in South Carolina. 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 decreased to eighth from seventh of 14 States in the production of primary aluminum in 2000.

TABLE 1
NONFUEL RAW MINERAL PRODUCTION IN SOUTH CAROLINA 1/ 2/

(Thousand metric tons and thousand dollars)

Mineral	1998		1999		2000 p/	
	Quantity	Value	Quantity	Value	Quantity	Value
Cement:						
Masonry	374	43,700 e/	421	49,400 e/	424	49,800 e/
Portland	2,640	210,000 e/	2,610	205,000 e/	2,800	217,000 e/
Clays:						
Common	1,220	3,950	1,130	4,930	1,130	4,930
Fire	36	38	35	45	35	45
Kaolin	395	22,000	408	15,700	403	17,700
Gemstones	NA	1	NA	1	NA	1
Sand and gravel:						
Construction	9,690	35,900	9,660	38,200	9,450	38,000
Industrial	881	20,700	769	18,400	916	17,700
Stone:						
Crushed	28,000	182,000	29,200	193,000	29,000	196,000
Dimension metric tons	12,900	1,150	9,230	855	9,230	855
Combined values of gold (1998-99), lime (1999-2000), mica (crude), silver (1998-99), vermiculite						
Total	XX	562,000	XX	562,000	XX	560,000

e/ Estimated. p/ Preliminary. NA Not available. 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.

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

Kind	1998				1999			
	Number of quarries	Quantity (thousand metric tons)	Value (thousands)	Unit value	Number of quarries	Quantity (thousand metric tons)	Value (thousands)	Unit value
Limestone	11 r/	3,680 r/	\$23,600 r/	\$6.42 r/	10	3,930	\$21,500	\$5.48
Granite	27 r/	21,300 r/	143,000 r/	6.73 r/	28	22,300	154,000	6.92
Marble	1	W	W	W	1	W	W	W
Calcareous marl	2	W	W	W	2	W	W	W
Total or average	XX	28,000	182,000	6.50	XX	29,200	193,000	6.60

r/ Revised. 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; may not add to totals shown.

TABLE 3
SOUTH CAROLINA: CRUSHED STONE SOLD OR USED BY PRODUCERS
IN 1999, BY USE 1/ 2/

Use	Quantity (thousand metric tons)	Value (thousands)	Unit value
Construction:			
Coarse aggregate (+1 1/2 inch):			
Macadam	W	W	\$5.87
Riprap and jetty stone	W	W	11.07
Filter stone	W	W	9.43
Other coarse aggregate	3,630	\$24,500	6.75
Coarse aggregate, graded:			
Concrete aggregate, coarse	W	W	9.28
Bituminous aggregate, coarse	W	W	10.74
Bituminous surface-treatment aggregate	W	W	9.65
Railroad ballast	W	W	9.76
Other graded coarse aggregate	7,130	60,100	8.43
Fine aggregate (-3/8 inch):			
Stone sand, concrete	W	W	6.74
Stone sand, bituminous mix or seal	W	W	5.69
Screening, undesignated	W	W	6.10
Other fine aggregate	2,730	16,500	6.05
Coarse and fine aggregates:			
Graded road base or subbase	W	W	10.63
Terrazzo and exposed aggregate	W	W	9.07
Crusher run or fill or waste	W	W	4.87
Other coarse and fine aggregates	1,920	13,100	6.82
Other construction materials	2	11	5.50
Chemical and metallurgical, cement manufacture	(3/)	(3/)	4.05
Unspecified: 4/			
Reported	11,500	69,100	5.99
Estimated	180	1,100	6.33
Total or average	29,200	193,000	6.60

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

1/ Includes calcareous marl, granite, limestone, and marble.

2/ Data are rounded to three significant digits, except unit value; may not add to totals shown.

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

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

TABLE 4
SOUTH CAROLINA: CRUSHED STONE SOLD OR USED BY PRODUCERS IN 1999,
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/	W	W	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
Other construction materials	2	11	--	--	--	--
Chemical and metallurgical 6/	--	--	--	--	W	W
Unspecified: 7/						
Reported	1,930	11,400	6,510	38,800	3,120	18,900
Estimated	--	--	150	980	25	160
Total	12,000	80,600	9,710	60,500	7,510	51,800

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

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

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

5/ Includes crusher run (select material or fill), graded road base or subbase, terrazzo and exposed aggregate, and other coarse and fine aggregates.

6/ Includes cement manufacture.

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

TABLE 5
SOUTH CAROLINA: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 1999,
BY MAJOR USE CATEGORY 1/

Use	Quantity	Value	Unit
	(thousand metric tons)	(thousands)	value
Concrete aggregate (including concrete sand)	3,750	\$16,300	\$4.35
Concrete products (blocks, bricks, decorative, pipe, etc.) 2/	1,050	3,960	3.77
Asphaltic concrete aggregates and other bituminous mixtures	116	300	2.59
Road base and coverings 3/	317	1,710	5.38
Fill	914	1,740	1.90
Other miscellaneous uses 4/	117	858	7.33
Unspecified: 5/			
Reported	1,880	7,120	3.78
Estimated	1,500	6,200	4.13
Total or average	9,660	38,200	3.96

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

2/ Includes gunite and plaster sands.

3/ Includes road and other stabilization (cement and lime).

4/ Includes filtration.

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

TABLE 6
SOUTH CAROLINA: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 1999,
BY USE AND DISTRICT 1/

(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/	211	972	1,440	5,380	3,150	14,000
Asphaltic concrete aggregates and other bituminous mixtures	32	114	14	30	71	156
Other miscellaneous uses 3/	17	65	165	383	1,170	3,850
Unspecified 4/	307	1,430	469	1,870	2,620	10,000
Total	567	2,580	2,090	7,660	7,000	28,000

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

2/ Includes gunite and plaster sands.

3/ Includes fill, filtration, and road and other stabilization (cement and lime).

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