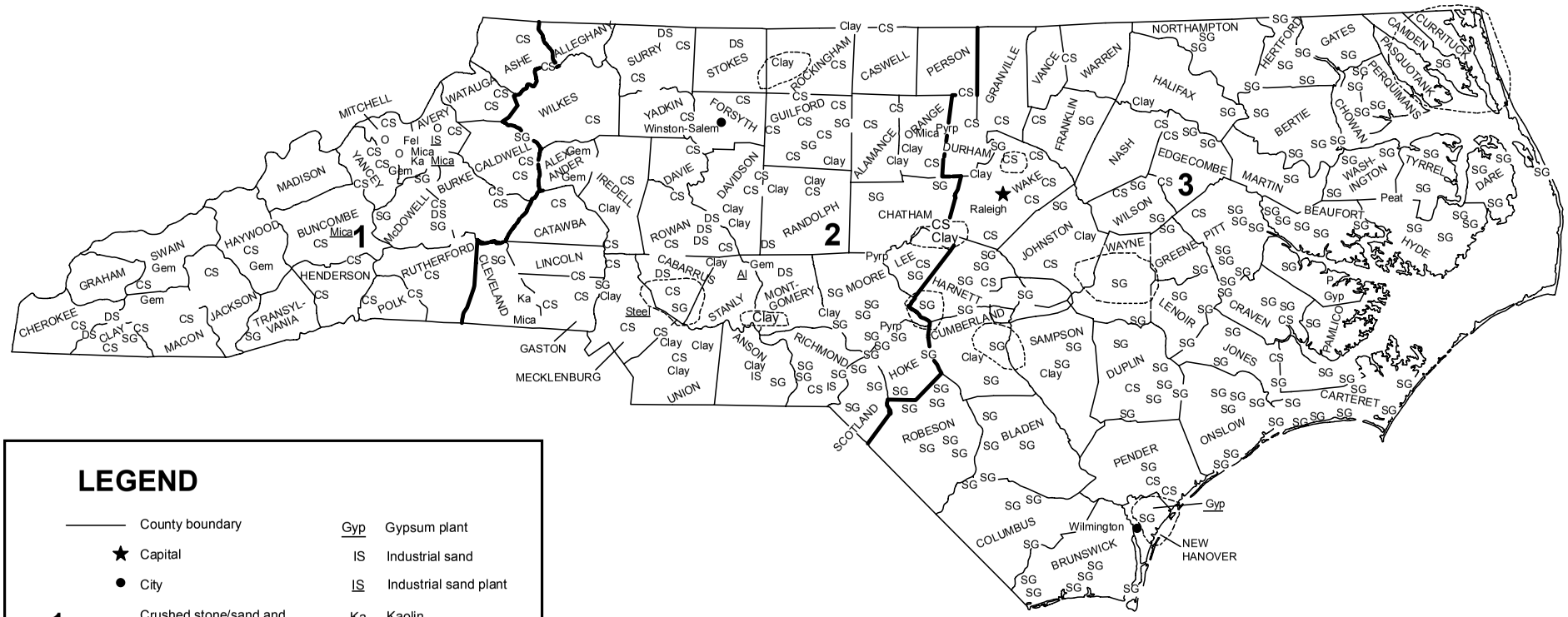
NORTH CAROLINA



LEGEND

- County boundary
- Capital
- City
- 1 Crushed stone/sand and gravel districts

MINERAL SYMBOLS
(Major producing areas)

Al	Aluminum plant
Clay	Common clay
CS	Crushed stone
DS	Dimension stone
Fel	Feldspar
Gem	Gemstones
Gyp	Gypsum
Gyp	Gypsum plant
IS	Industrial sand
IS	Industrial sand plant
Ka	Kaolin
Mica	Mica
Mica	Mica plant
O	Olivine
P	Phosphate rock
Peat	Peat
Pyrp	Pyrophyllite
SG	Construction sand and gravel
Steel	Steel plant
	Concentration of mineral operations

Source: North Carolina Geological Survey/U.S. Geological Survey (2004)

THE MINERAL INDUSTRY OF NORTH CAROLINA

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

In 2004, North Carolina's nonfuel raw mineral production was valued[1] at $805 million, based upon annual U.S. Geological Survey (USGS) data. This was about a 9.7% increase from that of 2003[2] and followed a 6.5% increase from 2002 to 2003. The State was 21st in rank (19th in 2003) among the 50 States in total nonfuel mineral production value, of which North Carolina accounted for about 2% of the U.S. total.

Crushed stone remained North Carolina's leading nonfuel raw mineral in 2004, accounting for more than 68% of the State's total value of nonfuel raw mineral production. It was followed by phosphate rock, construction sand and gravel, industrial sand and gravel, feldspar, dimension stone, common clays, and mica. The largest increases in value for the year were in crushed stone and phosphate rock, up $43 million and $21 million, respectively. Smaller yet significant increases in value also took place in construction sand and gravel, industrial sand and gravel, common clays, and feldspar. The most significant decrease was that of a $3.7 million drop in the value of kaolin (table 1).

In 2003, crushed stone with a nearly 7% increase in production from 2002 led the way with a $54 million increase in value (an increase of 12% from 2002). Smaller yet significant increases took place, in descending order of change, in the values of mica, up $6.5 million and construction sand and gravel, up nearly $5 million. The most significant decrease in value was about $20 million in phosphate rock (table 1).

In 2004, North Carolina continued to lead the Nation in the quantities of feldspar, common clays, mica, and pyrophyllite produced;[3] the latter two were produced in only one other State and North Carolina alone, respectively. North Carolina continued to be 2d of 2 olivine-producing States,[3] 3d in the production of phosphate rock, 7th in industrial sand and gravel, and 8th in crushed stone. The State decreased to 11th from 10th in gemstones (based upon value). Additionally, significant quantities of construction sand and gravel and dimension stone were produced in the State. Metal production in the State, especially that of primary aluminum and raw steel, resulted from the processing of recycled materials or raw materials received from other domestic and foreign sources.

The following narrative information was provided by the North Carolina Geological Survey[4] (NCGS).

Commodity Review

Industrial Minerals

Clays.—Increasing construction in the central Piedmont of North Carolina, known as the Triangle, and across the region has prompted General Shale Brick to expand production capacity at its Moncure plant. The Johnson City, Tennessee-based company is adding a third kiln, which will boost production capacity to 270 million bricks each year, up 50% from current annual capacity of 180 million bricks. The company is not saying how much the new fully automated kiln will cost, but 25 workers will be added when it begins firing brick in late 2005. General Shale currently has about 100 workers at the Moncure plant.

This is the second expansion at the site since General Shale Brick bought the State's largest brickmaker, Cherokee Sanford Brick, for $81 million in 2000. General Shale Brick is the Nation's second leading brickmaker, and the Moncure plant is its leading producer. General Shale's parent company (Weinerberger of Vienna) Austria, is the world's leading brickmaker in terms of sales (News and Observer, 2005a).

Gypsum.—The Clean Air Act of 2002 required utility companies burning high-sulfur coal and releasing sulfur dioxide into the atmosphere to reduce their sulfur dioxide emissions. As a result, utility companies have formed partnerships with wallboard companies to convert the sulfur dioxide emissions into synthetic gypsum (calcium sulfate), which can be used in the manufacture of wallboard. In the past, synthetic gypsum would have been sent to landfills as a combustion byproduct from the burning of coal. North Carolina's two major electric utilities, Progress Energy, Inc. and Duke Energy Corp., have announced plans to sell byproduct gypsum rather than send it to a landfill.

BPB plc, a manufacturer and marketer of wall and ceiling products throughout North America, announced on February 13, 2004, that it had completed a long-term agreement with Progress Energy to supply synthetic gypsum to a new gypsum wallboard plant in Roxboro, NC. The plant will generate more than 200 new jobs in the Roxboro area. Under the agreement, BPB will commission in 2007 a $100 million gypsum wallboard plant in Person County, NC, adjacent to Progress Energy's coal-fired power generator. The

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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 2004 USGS mineral production data published in this chapter are those available as of December 2005. All USGS Mineral Industry Surveys and USGS Minerals Yearbook chapters—mineral commodity, State, and country—also can be retrieved over the Internet at URL http://minerals.usgs.gov/minerals.

[2]Values, percentage calculations, and rankings for 2003 may differ from the Minerals Yearbook, Area Reports: Domestic 2003, Volume II, owing to the revision of preliminary 2003 to final 2003 data. Data and rankings for 2004 are considered to be final and are not likely to change significantly.

[3]Corrections posted August 17, 2006.

[4]Jeffrey C. Reid, Senior Geologist for the Minerals and Geographic Information Systems, authored the text for the State mineral industry information provided by the North Carolina Geological Survey.

new facility will operate at world-class manufacturing standards and will produce 65 million square meters per year of gypsum wallboard to meet expected sales volume growth. The agreement will provide BPB's new facility with a secure source of high-quality synthetic gypsum. The Person County Commissioners voted 5-0 on March 14, 2005, to approve a special use permit that will clear the way for the wallboard plant to operate next to Progress Energy's Roxboro and Mayo plants (Herald-Sun, 2005§[5]).

Mica.—Oglebay Norton Company, a Cleveland, Ohio-based company, announced on April 6, 2005, that its Oglebay Norton Specialty Minerals, Inc. subsidiary has completed the sale of its Kings Mountain, NC, mica operation to King's Mountain Mining LLC, an affiliate of Zemex Corporation for $15 million. The company said it expects to complete the sale of its Velarde, New Mexico, mica facility by yearend 2005. Operations at Velarde have been suspended since September 2004. The company had previously announced its intent to sell all its mica operations as part of its plan to focus on its industrial sands, lime, limestone, limestone fillers, and marine services businesses.

Oglebay-Norton emerged from Chapter 11 bankruptcy on January 31, 2005, pursuant to a plan of reorganization approved by the U.S. Bankruptcy Court for the District of Delaware on November 17, 2004 (Oglebay Norton Co., 2005§).

Zemex Corporation is a leading producer of industrial minerals with facilities across the United States and Canada. Its products are used in a variety of commercial applications and are sold throughout Asia, Europe, North America, and South America. Zemex is based in Atlanta.

CertainTeed Corp. will invest more than $50 million to expand its shingle-manufacturing plant in Granville County, NC, creating 55 jobs during the next 3 years. The new jobs will be manufacturing and assembly positions and will pay an average weekly salary of $670, roughly $35,000 annually.

The company will receive a $300,000 grant from an economic development fund administered by the North Carolina Governor to help pay for the project, which will include a new 6,040-square-meter production wing to be completed in 2007. CertainTeed made specially laminated shingles for commercial and residential buildings and employed 200 people at its Oxford (Granville County) facility. Hiring for the new jobs will begin in late 2005.

CertainTeed is a subsidiary of Paris-based Saint-Gobain Corp., which in 2003 had sales of $27.2 billion, about 8% of which was from CertainTeed (News and Observer, 2004a).

Synthetic Gemstones.—Charles & Colvard, Ltd. signed a distribution deal with J.C. Penney to distribute its moissanite jewels. After a 5-month test, J.C. Penney agreed to sell Charles & Colvard jewelry in 460 of its stores across the Unites States and via its catalogs and Internet site (News and Observer, 2004b). Charles & Colvard expanded its moissanite gem distribution with the announcement that Finlay Enterprises, which leases department store jewelry counters at chains such at Lord & Taylor, Marshall Fields, and Mon-Macy's, agreed to sell the diamondlike stones at 83 additional counters, bringing the total to 114 (News and Observer, 2005c).

Moissanite is a manufactured gemstone that some say is brighter and cheaper than diamonds. During the past 5 years, the Morrisville (North Carolina)-based Charles & Colvard has been able to interest mostly television shopping channels and small regional jewelry retailers. The deal with J.C. Penney provided a national platform for its moissanite. J.C. Penney agreed to sell a wide variety of moissanite jewelry set in 14-karat gold including rings, bracelets and earrings. Financial terms of the deal were not disclosed. The moissanite is grown in a laboratory. The clear stones, which sometimes have a green tint, are shipped to the Far East, where they are cut and polished. They then return to the Triangle (Raleigh-Durham, NC, area) for inspection and grading.

On February 16, 2005, Charles & Colvard announced that it now has a new supplier. A Swedish company will begin supplying Charles & Colvard with some of the raw material it needs to create synthetic jewels. Charles & Colvard agreed to purchase silicon carbide from Norstel AB in a 3-year contract worth at least $4 million. Cree, a Durham chipmaker, had been the sole materials supplier (News and Observer, 2005b).

Environmental Issues, Reclamation, and Technological Achievements

A listing of permitted active and inactive mines in North Carolina is available on the Internet at URL http://www.geology.enr.state.nc.us/Permitted_mines_20041130/Permitted_mines_North_Carolina_Geological_Survey.htm. Links are provided to the Mining Act, Administrative Rules, the North Carolina Mining Commission, staff, and forms.

At its February 2005 meeting, the North Carolina Mining Commission presented the 2005 Mined Land Reclamation Stewardship Award to PCS Phosphate Company, Inc. for its reclamation efforts associated with the restoration of approximately 34 hectares of mined lands along the headwaters of Whitehurst Creek at its Aurora Phosphate Mine in Beaufort County. After being nominated by State officials, PCS Phosphate also won the 2005 Interstate Mining Compact Commission's (IMCC) national reclamation award and has been nominated for competition in the National Association of State Land Reclamationists' (NASLR) Awards Program.

The North Carolina Mining Commission awarded the 2005 Public Outreach/Education and Community Relations Mining Stewardship Award to Hedrick Industries for exceptional efforts at its Grove Stone and Sand Mine in Buncombe County. Grove Stone and Sand Company partnered with the North Carolina Wildlife Federation to educate children and adults about benefits of mining and wildlife enhancement at the Grove Stone and Sand Mine through the Wildlife and Industry Together Program (W.A.I.T.). The W.A.I.T. certification at the mine site includes education programs, wildlife habitat management and protection, community partnership, and W.A.I.T. team functions. After being nominated by State officials, Hedrick Industries also won the 2005 IMCC's national public outreach award and has been nominated for competition in the 2005 NASLR Awards Program.

[5]References that include a section mark (§) are found in the Internet References Cited section.

Vulcan Construction Materials received an honorable mention in the Community Relations Category for its initiative and considerable efforts in community relations at its Gold Hill Quarry in Cabarrus County.

Government Programs

The NCGS, in collaboration with industry and other groups, will host the Forty-Second Forum on the Geology of Industrial Minerals, which will be held in Asheville, NC, on May 7-13, 2006. A series of field trips are planned in conjunction with the formal sessions to highlight the industrial minerals and their diversity in North Carolina. This is the first time that the Forum will be held in North Carolina. A preliminary program and event schedule was posted on the Forum's Web site at URL http://www.geology.enr.state.nc.us/NCIndustrialMineralsForum/index.htm.

The Mecklenburg Partnership project is a collaborative effort to produce seamless digital topographic maps for the Nation. This prototype involves the NCGS, the USGS, and Mecklenburg County, NC. The product generation's goal is to generate a near-standard USGS 1:24000-scale-content topographic map using information available using data in The National Map (http://nationalmap.gov) and local data. More information on this project is available on the Internet at URL http://mcmcwebmap.usgs.gov.

References Cited

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News and Observer, The, 2004b, [Untitled]: The News and Observer, [Raleigh, NC], October 6, 2004, p. 1-2D.
News and Observer, The, 2005a, [Untitled]: The News and Observer, [Raleigh, NC], February 3, 2005, p. 3D.
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News and Observer, The, 2005c, [Untitled]: The News and Observer, [Raleigh, NC], March 2, 2005, p. 2D.

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Herald-Sun, The, 2005, Wallboard factory permit gets OK, accessed March 23, 2005, at URL http://www.herald-sun.com/person/12-586701.html.
Oglebay Norton Co., 2005, Oglebay Norton emerges from chapter 11 bankruptcy, announces intent to sell lime and mica operations, Company News, accessed March 23, 2005, at URL http://www.oglebaynorton.com.

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

(Thousand metric tons and thousand dollars)

Mineral	2002		2003		2004	
	Quantity	Value	Quantity	Value	Quantity	Value
Clays:						
Common	2,420	11,900	2,190	10,900	2,260	12,900
Kaolin	W	W	W	4,500	34	764
Feldspar	330 r	17,100	362	18,900	351	20,500
Gemstones	NA	280	NA	279	NA	280
Mica, crude	40 r	3,100	39	9,580	40	9,600
Sand and gravel:						
Construction	10,000	50,700	10,500	55,600	11,500	59,700
Industrial	1,320	25,600	1,530	26,700	1,630	29,000
Stone:						
Crushed	62,900	451,000	67,100	505,000	72,300	548,000
Dimension	41	17,900	47	18,700	43	18,200
Combined values of olivine, phosphate rock, pyrophyllite (crude), and value indicated by symbol W	XX	111,000	XX	84,500	XX	105,000
Total	XX	689,000	XX	734,000	XX	805,000

[r]Revised. NA Not available. W Withheld to avoid disclosing company proprietary data. Withheld values included in "Combined values" 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.

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

Kind	2002				2003				2004			
	Number of quarries	Quantity (thousand metric tons)	Value (thousands)	Unit value	Number of quarries	Quantity (thousand metric tons)	Value (thousands)	Unit value	Number of quarries	Quantity (thousand metric tons)	Value (thousands)	Unit value
Limestone	12	5,540	$38,000	$6.85	12	6,360	$46,200	$7.26	11	6,670	$48,800	$7.32
Dolomite	1	W	W	6.73	1	W	W	6.72	1	W	W	6.72
Calcareous marl	--	--	--	--	--	--	--	--	1	W	W	26.46
Granite	76	48,400	349,000	7.20	78	49,800	378,000	7.60	75	51,800	396,000	7.63
Traprock	7	4,930	36,200	7.34	8	7,050	50,900	7.22	7	7,280	53,500	7.35
Quartzite	2	W	W	8.64	2	W	W	8.95	2	W	W	9.48
Slate	2	W	W	6.72	2	W	W	7.17	2	W	W	7.17
Volcanic cinder and scoria	1	W	W	6.72	1	W	W	7.17	3	W	W	7.77
Miscellaneous stone	2	872	6,200	7.11	2	864	6,470	7.49	2	1,010	7,630	7.59
Total or average	XX	62,900	451,000	7.18	XX	67,100	505,000	7.52	XX	72,300	548,000	7.59

W Withheld to avoid disclosing company proprietary data; included in "Total or average." XX Not applicable. -- Zero.

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

TABLE 3a

NORTH CAROLINA: CRUSHED STONE SOLD OR USED BY PRODUCERS IN 2003, BY USE[1]

Use	Quantity (thousand metric tons)	Value (thousands)	Unit value
Construction:			
Coarse aggregate (+1½ inch):			
Macadam	131	$542	$4.14
Riprap and jetty stone	610	7,420	12.16
Filter stone	W	W	11.02
Other coarse aggregates	358	3,710	10.37
Total or average	1,100	11,700	10.62
Coarse aggregate, graded:			
Concrete aggregate, coarse	2,590	26,400	10.19
Bituminous aggregate, coarse	1,880	18,800	10.02
Bituminous surface-treatment aggregate	1,830	18,000	9.85
Railroad ballast	1,200	7,830	6.52
Other graded coarse aggregate	3,300	33,200	10.08
Total or average	10,800	104,000	9.66
Fine aggregate (-⅜ inch):			
Stone sand, concrete	1,000	4,410	4.40
Stone sand, bituminous mix or seal	(2)	(2)	8.69
Screening, undesignated	2,150	14,900	6.93
Other fine aggregates	1,520	12,700	8.34
Total or average	4,670	32,000	6.85
Coarse and fine aggregates:			
Graded road base or subbase	6,260	47,100	7.52
Unpaved road surfacing	(3)	(3)	9.04
Terrazzo and exposed aggregate	(3)	(3)	22.04
Crusher run or fill or waste	385	2,950	7.66
Other coarse and fine aggregate	4,360	28,600	6.57
Total or average	11,000	78,700	7.15
Other construction materials	36	400	11.11
Unspecified:[4]			
Reported	36,500	258,000	7.07
Estimated	3,000	20,000	6.59
Total or average	39,500	278,000	7.03
Grand total or average	67,100	505,000	7.52

W Withheld to avoid disclosing company proprietary data; included with "Other coarse aggregates.

[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 with "Other fine aggregates."

[3]Withheld to avoid disclosing company proprietary data; included with "Other coarse and fine aggregate

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

TABLE 3b

NORTH CAROLINA: CRUSHED STONE SOLD OR USED BY PRODUCERS IN 2004, BY USE[1]

Use	Quantity (thousand metric tons)	Value (thousands)	Unit value
Construction:			
Coarse aggregate (+1½ inch):			
Macadam	W	W	$4.32
Riprap and jetty stone	755	$9,230	12.23
Filter stone	328	3,350	10.22
Other coarse aggregates	304	1,350	4.44
Total or average	1,390	13,900	10.05
Coarse aggregate, graded:			
Concrete aggregate, coarse	3,190	33,500	10.51
Bituminous aggregate, coarse	1,740	18,200	10.46
Bituminous surface-treatment aggregate	1,600	16,100	10.06
Railroad ballast	1,300	8,650	6.66
Other graded coarse aggregates	3,030	30,600	10.11
Total or average	10,800	107,000	9.86
Fine aggregate (-⅜ inch):			
Stone sand, concrete	1,090	4,770	4.36
Stone sand, bituminous mix or seal	(2)	(2)	9.15
Screening, undesignated	2,560	18,100	7.10
Other fine aggregates	1,060	9,120	8.63
Total or average	4,710	32,000	6.81
Coarse and fine aggregates:			
Graded road base or subbase	5,840	44,800	7.66
Unpaved road surfacing	149	1,930	12.98
Terrazzo and exposed aggregate	(3)	(3)	7.72
Crusher run or fill or waste	745	6,020	8.08
Other coarse and fine aggregates	4,300	29,800	6.93
Total or average	11,000	82,500	7.48
Unspecified:[4]			
Reported	41,700	294,000	7.06
Estimated	2,600	18,000	7.13
Total or average	44,300	313,000	7.07
Grand total or average	72,300	548,000	7.59

W Withheld to avoid disclosing company proprietary data; included with "Other coarse aggregates."

[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 with "Other fine aggregates."

[3]Withheld to avoid disclosing company proprietary data; included with "Other coarse and fine aggregates."

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

TABLE 4a

NORTH CAROLINA: CRUSHED STONE SOLD OR USED BY PRODUCERS IN 2003, 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 (+1½ inch)[2]	W	W	W	W	W	W
Coarse aggregate, graded[3]	W	W	W	W	W	W
Fine aggregate (-⅜ inch)[4]	W	W	W	W	W	W
Coarse and fine aggregate[5]	W	W	W	W	W	W
Other construction materials	36	400	--	--	--	--
Unspecified:[6]						
Reported	2,840	20,000	18,000	129,000	15,700	110,000
Estimated	1,600	9,500	160	1,300	1,200	8,800
Total	11,000	84,500	34,200	259,000	21,900	161,000

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

[3]Includes bituminous aggregate (coarse), bituminous surface-treatment aggregate, 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, terrazzo and exposed aggregate, unpaved road surfacing, and other coarse and fine aggregates.

[6]Reported and estimated production without a breakdown by end use.

TABLE 4b

NORTH CAROLINA: CRUSHED STONE SOLD OR USED BY PRODUCERS IN 2004, 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 (+1½ inch)[2]	W	W	W	W	W	W
Coarse aggregate, graded[3]	W	W	W	W	W	W
Fine aggregate (-⅜ inch)[4]	W	W	W	W	W	W
Coarse and fine aggregate[5]	2,910	21,100	5,840	43,300	2,300	18,000
Unspecified:[6]						
Reported	4,790	35,300	19,600	139,000	17,300	120,000
Estimated	1,200	8,400	200	1,600	1,200	8,400
Total	12,600	97,000	35,700	273,000	24,000	178,000

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

[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 aggregates.

[3]Includes bituminous aggregate (coarse), bituminous surface-treatment aggregate, 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 or fill or waste, graded road base or subbase, terrazzo and exposed aggregate, unpaved road surfacing, and other coarse and fine aggregates.

[6]Reported and estimated production without a breakdown by end use.

TABLE 5a
NORTH CAROLINA: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 2003, BY MAJOR USE CATEGORY[1]

Use	Quantity (thousand metric tons)	Value (thousands)	Unit value
Concrete aggregate (including concrete sand)	3,320	$17,400	$5.22
Plaster and gunite sands	23	204	8.87
Concrete products (blocks, bricks, pipe, decorative, etc.)	465	1,920	4.14
Asphaltic concrete aggregates and other bituminous mixtures	536	2,270	4.23
Road base and coverings	303	2,380	7.85
Road and other stabilization (lime)	27	136	5.04
Fill	905	2,670	2.95
Snow and ice control	17	87	5.12
Other miscellaneous uses[2]	49	543	11.08
Unspecified:[3]			
Reported	2,440	15,500	6.37
Estimated	2,400	13,000	5.21
Total or average	10,500	55,600	5.28

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

TABLE 5b
NORTH CAROLINA: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 2004,
BY MAJOR USE CATEGORY[1]

Use	Quantity (thousand metric tons)	Value (thousands)	Unit value
Concrete aggregate (including concrete sand)	4,430	$21,600	$4.87
Concrete products (blocks, bricks, pipe, decorative, etc.) [2]	251	1,390	5.56
Asphaltic concrete aggregates and other bituminous mixtures	436	1,780	4.07
Road base and coverings [3]	524	1,450	2.77
Fill	716	1,970	2.74
Snow and ice control	14	90	6.29
Other miscellaneous uses	108	818	7.58
Unspecified:[4]			
Reported	2,060	14,900	7.23
Estimated	2,900	16,000	5.42
Total or average	11,500	59,700	5.22

[1]Data are rounded to no more than three significant digits; may not add to totals shown.
[2]Includes plaster and gunite sand.
[3]Includes road and other stabilization (lime).
[4]Reported and estimated production without a breakdown by end use.

TABLE 6a
NORTH CAROLINA: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 2003, 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 [3]	933	5,260	2,880	14,200
Asphaltic concrete aggregates and road base materials [4]	524	3,530	342	1,250
Fill	316	809	590	1,860
Other miscellaneous uses [5]	41	450	25	178
Unspecified:[6]				
Reported	1,820	13,000	623	2,550
Estimated	600	3,200	1,800	9,300
Total	4,250	26,200	6,290	29,400

[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 plaster and gunite sands.
[4]Includes road and other stabilization (lime).
[5]Includes railroad ballast, and snow and ice control.
[6]Reported and estimated production without a breakdown by end use.

TABLE 6b
NORTH CAROLINA: CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN 2004,
BY USE AND DISTRICT[1, 2]

(Thousand metric tons and thousand dollars)

Use	Districts 1 and 2		District 3		Unspecified districts	
	Quantity	Value	Quantity	Value	Quantity	Value
Concrete aggregates and concrete products[3]	2,120	10,500	2,560	12,400	--	--
Asphaltic concrete aggregates and road base materials[4]	317	1,540	644	1,690	--	--
Fill	253	675	370	959	93	332
Other miscellaneous uses[5]	24	280	66	382	32	247
Unspecified:[6]						
Reported	1,250	11,500	807	3,440	--	--
Estimated	700	4,100	2,200	12,000	--	--
Total	4,670	28,600	6,660	30,600	125	579

-- 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 plaster and gunite sands.

[4]Includes road and other stabilization (lime).

[5]Includes snow and ice control.

[6]Reported and estimated production without a breakdown by end use.