SAND AND GRAVEL, CONSTRUCTION

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Construction sand and gravel is one of the most accessible and widely used natural resources. The construction sand and gravel industry is a major contributor to the economic well-being of the Nation and produces a large volume of mineral products with a low unit value. Sand and gravel and crushed stone combined are defined as construction aggregate. The crushed stone industry is reviewed in a separate chapter of the U.S. Geological Survey (USGS) Minerals Yearbook, volume I, Metals and Minerals, and both mineral commodities should be included in any review of the national, State, or local aggregates industry.

A total of 1.24 billion metric tons (Gt) of construction sand and gravel was produced in the United States in 2004. This record high production was an increase of about 80 million metric tons (Mt), or 6.9%, compared with that of 2003. After a decrease in production in 1991, sand and gravel production increased each year for the following 13 years. All percentages in this report were computed using unrounded data. Total construction activity in the United States increased by 10% in 2004, following gains of 3% in 2003 and 1% in 2002. According to the U.S. Census Bureau construction gains were recorded in most categories with residential building gaining 16%, and nonresidential building gaining 3%. Owing to strong home buyer demand, single family housing achieved a new high in dollar terms and in the number of starts in 2004 (Rock Products, 2005).

Each year, hundreds of sand and gravel operations are idled, closed, or abandoned, and hundreds more are reactivated or opened. The changing location of construction and highway projects is the major stimulus in decisions to open, idle, or close operations.

In 2004, 6,270 construction sand and gravel operations were active, 649 operations were idle, and 195 operations either were reported to be closed or were assumed to be permanently shut down. Of the 6,270 active operations, 66 were classified as sales or distribution yards only; a sales yard is defined as a fixed location that receives sand and gravel from a distant source and sells it at the yard. In addition, 45 operations reported that they were either an open pit or a dredge combined with a sales yard that supplemented local production with material from a remote location. A small number of the idle sand and gravel operations reported recycling of asphalt and portland cement concrete, but no sand and gravel mining. In 2004, of the 6,270 active operations surveyed, 3,620, or 57.7%, responded to the USGS canvass. Their total production represented 72.4% of the 1.24 Gt produced in 2004. The 6,270 operations with 10,164 active sand and gravel pits were owned by 3,892 companies or government agencies operating in all 50 States.

Foreign trade of construction sand and gravel remained minor in 2004. According to the U.S. Census Bureau, exports decreased by 62% to 677,000 metric tons (t), but the value increased by 29% to $32.1 million compared with the 2003 results (tables 1, 16). Imports increased by about 8% to 4.76 Mt, but the value decreased by about 1.4% to $56.9 million (tables 1, 17).

Because imports and exports were small compared with total production, domestic apparent consumption of construction sand and gravel, which is defined as production for consumption (sold or used) plus total imports minus total exports, was essentially equal to the U.S. production of 1.24 Gt.

Production

Of the four major geographic regions, the West again led the Nation in the production of construction sand and gravel with 490 Mt, or 40% of the U.S. total (table 2). It was followed by the Midwest with 366 Mt, or 30%; the South with 258 Mt, or 21%; and the Northeast with 123 Mt, or 10%. Compared with 2003, production in 2004 decreased slightly in the South but increased in the other three regions.

Of the nine geographic divisions, the Moutain led the Nation in the production of construction sand and gravel with 251 Mt, or 20.3% of the U.S. total, and was followed by the Pacific with 239 Mt, or 19.3%, and the East North Central with 231 Mt, or 18.6% (table 2; figure 1). Production increased in eight of the nine divisions compared with that of 2003—Mountain, 15.3%; West North Central, 10.5%; Middle Atlantic, 9.8%; Pacific, 7.6%; New England, 6.5%; South Atlantic, 3.7%; East North Central, 2.9%; and East South Central, 0.5%. Production decreased in the West South Central division by 4.5%.

A review of the production of construction sand and gravel for consumption by size of operation indicates that about 32% of the total production came from 241 operations that reported 1 million metric tons per year (Mt/yr) production or more, 24% came from 474 operations that reported between 500,000 and 999,999 metric tons per year (t/yr), and 35% of the construction sand and gravel produced in 2004 came from 2,068 operations that reported between 100,000 and 499,999 t/yr. The largest number of operations (3,487, or 56% of total operations) produced less than 100,000 t/yr (9% of the total production) (table 8A).

The estimated production for consumption by quarter for 2004 indicates that 31% of the construction sand and gravel in the United States was produced in the third quarter followed by the second and the fourth quarters (table 3). Estimated production data for each quarter also were available for most States (table 4).

In 2004, construction sand and gravel was produced in every State (table 5). The leading States were, in descending order of tonnage, California, Texas, Arizona, Michigan, Minnesota, Ohio, Wisconsin, Nevada, Washington, and Colorado. The combined

production of these 10 States represented about 54% of the national total. Production increased in 37 States and decreased in 13 States compared with that of 2003. Production increased in 8 of the top 10 States—Arizona, California, Colorado, Minnesota, Nevada, Ohio, Washington, and Wisconsin; production decreased in Michigan and Texas compared with 2003.

In 2004, the leading domestic commercial producers of construction sand and gravel were, in descending order of production, Oldcastle, Inc./Materials Group; Hanson Building Materials America, Inc.; Rinker Materials Corp.; Vulcan Materials Co.; MDU Resources Group, Inc./Knife River Corporation; Aggregates Industries, Inc.; CEMEX, Inc.; Martin Marietta Aggregates; Lafarge North America, Inc.; and Granite Construction Company.

Limited information about the production of construction sand and gravel in foreign countries can be found in the USGS Minerals Yearbook, volume III, Area Reports: International. For nonreporting countries, estimates of sand and gravel and crushed stone outputs can be based on indirect indicators, such as the levels of cement and asphalt consumption.

Mergers and acquisitions in the construction materials proceeded at moderate levels in 2004. The pace of activity in 2004 appeared to be about the same as that of 2003. Some of the more major changes in ownership in the sand and gravel industry in 2004 are listed below.

In January, Aggregate Industries acquired Southern Nevada Paving Co. of Las Vegas, NV. Southern Nevada Paving was one of the top five producers in Nevada in 2003 (Pit&Quarry, 2004a). In May, Aggregates Industries purchased Frehner Construction, another one of the top five producers in Nevada. With these two large purchases, Aggregates Industries became the leading producer of sand and gravel in Nevada with access to dozens of pits around the State (Pit&Quarry, 2004b).

In February, MDU Resources, through its subsidiary Knife River Corp., acquired Fred Carlson Company, Inc. and Roverud Construction, Inc. Fred Carlson, headquartered in Decorah, IA, had sand and gravel operations in Fillmore County, MN, and Winneshiek County, IA. MDU Resources was already the leading producer in Minnesota. Roverud Construction of Spring Grove, MN, mined sand and gravel in Clayton and Howard Counties, IA, and along with the Fred Carlson site in Iowa, represented MDU's first operations in Iowa (Rock Products, 2004b). In September, Knife River announced the purchase of Becker Gravel Co., another Iowa producer and the fifth ranked in the State in 2003. Becker Gravel produced from several pits in Stratford County, IA, and will become part of the Fred Carlson subsidiary (Aggregates Manager, 2004b).

Also in February, Rinker Materials purchased two pits with production estimated to be 1.1 Mt/yr, in the Phoenix, AZ, area from Superstition Crushing LLC (Rock Products, 2004c). Rinker Materials is by far the leading producer in Arizona, while Superstition is a top 10 producer in the State.

On March 17, Abram & Hawkins Excavating Co., Inc. announced the sale of a sand and gravel operation to Rogers Group, Inc. The site will now be called Rogers Group Graysville Sand & Gravel and is located in Sullivan County, IN (Aggregates Manager, 2004a). With this purchase, Rogers Group moves up to be the seventh ranked producer in Indiana. Rogers Group had been the 10th ranked producer of sand and gravel in Indiana in 2003. In December, Rogers Group purchased the Cumberland Mountain Sand operation of General Shale Brick, Inc., which was the 12th ranked producer of sand and gravel in Tennessee in 2003 (Aggregates Research Industries, undated§[1]).

In September, Boral USA (the U.S. subsidirary of Boral Ltd., a large Australian construction-related business) purchased two sand and gravel producers in the Denver, CO, area. The two companies were among the top 50 in the State and, when combined, will make Boral USA one of the top 20 producers of sand and gravel in the State. The companies acquired were Ready Mixed Concrete Co., in Adams County and Owens Brothers Concrete in various counties near Denver (Rock Products, 2004a).

Production of construction sand and gravel reported by producers to the USGS was material that was sold or used by the companies. Stockpiled production is not reported until it is sold or consumed by the producer. Because no consumption surveys are conducted by the USGS for sand and gravel, the sold or used tonnage is assumed to represent the amount produced for domestic consumption and export. Because some of the construction sand and gravel producers did not report a breakdown by end use, their total production was reported under "Unspecified uses, reported." The estimated production of nonrespondents was reported under "Unspecified uses, estimated."

Of the 1.24 Gt of construction sand and gravel produced in 2004, 52.9% was for unspecified uses (table 6). Of the remaining 583 Mt, 44.5% was used as concrete aggregate; 23.8%, for road base and coverings and road stabilization; 12.8%, for asphaltic concrete aggregate and other bituminous mixtures; 12.5%, for construction fill; 2.1%, for plaster and gunite sands; 1.2%, for concrete products, such as blocks, bricks, and pipes; and the remainder for filtration, railroad ballast, roofing granules, snow and ice control, and other miscellaneous uses.

To provide a more accurate estimate of the consumption patterns for construction sand and gravel, the unspecified uses are not included in the above percentages. In any marketing or use-pattern analysis, the total quantities included in "Unspecified uses" may be distributed among the reported uses by applying the above percentages. Compared with 2003, about 1.4% less of the sand and gravel production was reported for specific uses, and this must be taken into account when analyzing changes in market consumption in light of the total increase in U.S. production of 6.9%.

Additional information regarding production and/or consumption of construction sand and gravel by major uses in each State and State district can be found in the USGS Minerals Yearbook, volume II, Area Reports: Domestic.

Recycling

The aggregates industry has been involved with recycling for several decades. Recycling has become more important

[1]A reference that includes a section mark (§) is found in the Internet Reference Cited section.

to aggregates producers, and the number of aggregates-producing companies that are recycling has generally been increasing. Recycling in this industry generally refers to the crushing, screening, and reuse of asphalt and cement concretes. Aggregate and related asphalt and ready-mix companies are often involved in construction projects during which they collect and reuse the materials at the site. Sometimes construction companies haul their materials to a recycling location where the asphalt or concrete is processed for reuse. The annual survey of construction sand and gravel producers collects information only on recycling of asphalt and cement concrete by sand-and-gravel-producing companies. These amounts represent a small percentage of the total recycled cement and asphalt concretes because the recycling of these materials is done mostly by construction or demolition companies, and those companies are not surveyed by the USGS.

Asphalt Concrete.—In 2004, 4.22 Mt of asphalt concrete valued at $21.8 million was recycled by 120 sand and gravel companies in 32 States; this represented a 23.3% decrease compared with that of 2003 (tables 12, 13). The leading States were, in descending order of tonnage recycled, California, Minnesota, and Colorado. The leading companies were, in descending order of tonnage produced, Granite Construction, Midwest Asphalt Corp., All American Aggregates Company, The Lane Construction Co., and Southway Construction Co.

Cement Concrete.—In 2004, about 4 Mt of cement concrete valued at $24 million was recycled by 129 companies in 29 States; this tonnage represented a 32% decrease compared with that of 2003 (tables 14-15). The leading States were, in descending order of tonnage recycled, California, Minnesota, and Michigan. The leading companies were, in descending order of quantity produced, Vulcan Materials; Kalin Construction Co.; Aggregate Industries; A. Teichert & Sons, Inc.; and Weber Sand and Gravel, Inc.

Transportation

Information regarding the method of transportation of construction sand and gravel from the pit or processing plant to the first point of sale or use is available for each geographic division and the total United States. Reports regarding the method of transportation were provided by the producers for 546 Mt, or 44% of the total U.S. production of construction sand and gravel. Of this total, 80% was transported by truck; 2.5%, by waterway; and 1.1%, by rail (table 9). A significant amount of construction sand and gravel produced (about 15.8%) was not transported and was used at or near the production site, probably for concrete or asphalt production. Because most producers neither keep records of nor report shipping distances or cost per metric ton per mile, transportation cost data are not available.

Prices

Prices in this chapter are free on board (f.o.b.) plant, usually the first point of sale or captive use. This value does not include transportation from the plant or yard to the consumer. It does include all costs of mining, processing, in-plant transportation, overhead, and profit.

The 2004 average unit price increased by about 3.3% to $5.33 per metric ton compared with that of 2003 (table 6). By use, the unit prices varied from a high of $9.91 per ton for roofing granules to a low of $3.45 per ton for fill. The largest increases were recorded for roofing granules (48.4%), road stabilization, lime type (43.7%), and filtration (27.3%). The largest decreases were for road stabilization, cement type (20.2%) and fill (7.8%).

Foreign Trade

The widespread distribution of domestic sand and gravel deposits and the high cost of transportation limit foreign trade to mostly local transactions across international boundaries. U.S. imports and exports represented less than 1% of domestic consumption.

According to the U.S. Census Bureau, exports of construction sand decreased by about 89% to 124,000 t compared with that of 2003, but the value increased by about 33% to $27.5 million (table 16). Canada, which was the leading destination, received about 48% of the total sand, followed by Taiwan with 15% and Mexico with 14%. Exports of construction gravel decreased by about 6.7% to 553,000 t compared with those of 2003, but the value increased by about 10.3% to $4.61 million. Canada, which was the leading destination, received about 95% of the total gravel. The average value of the sand and gravel exports in 2004 was $47.45 per ton; this was up from $14.03 per ton in 2003.

Imports increased by about 8% to 4.76 Mt, but the value decreased by about 1.4% to $56.9 million (table 17). Canada was the leading source of imported construction sand and gravel with 82.1% of the total. Mexico supplied about 11.5% of the exports. The average value of the sand and gravel imports was $11.95 per ton, down from $13.07 per ton in 2003.

Outlook

The demand for construction sand and gravel in 2005 is expected to increase by 1% to 3% compared with that of 2004. Data from the USGS quarterly survey of aggregates producers indicate flat sales of sand and gravel compared with those of the first half of 2004. Most regions of the United States also will probably have increased sales in the second half of 2005, and demand will likely rise compared with 2004 levels particularly owing to the extensive need for rebuilding in areas of the United States damaged during the 2005 hurricane season.

Construction sand and gravel f.o.b. prices are expected to increase by about 3% to 5%, owing in part to the rising cost of fuel used in the mining processes. The rise in fuel cost is also expected to affect the delivered prices of construction sand and gravel. These price increases are expected to be more noticeable in and near metropolitan areas because, as nearby resources are used up, more aggregates will be transported from distant sources.

For 2005, the construction sand and gravel industry is expected to continue to consolidate. Resistance to mining, especially at the local level, will push production to more rural areas and increase transportation costs. The cost to acquire existing companies will increase because of the difficulty of starting a new "greenfield" operation. The length of time that is needed to put a new operation into production has been

estimated to be from 5 to 10 years. This includes the time required to prove the reserve base, to acquire zoning and permit approvals, and to deliver and install the necessary equipment. Also, throughout the process, the possibility exists that the project may have to be abandoned owing to local opposition and permit or zoning denial. Many companies prefer to buy permitted, active operations with reserves rather than face the cost and uncertainties involved with a greenfield operation.

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TABLE 1
SALIENT U.S.CONSTRUCTION SAND AND GRAVEL STATISTICS[1]

(Thousand metric tons and thousand dollars)

	2000	2001	2002	2003	2004
Sold or used by producers:[2]					
Quantity	1,120,000	1,130,000	1,130,000	1,160,000	1,240,000
Value	5,390,000	5,670,000	5,750,000	5,990,000	6,590,000
Exports, value	24,200	19,100	23,400	24,900	32,100
Imports, value	33,300	40,800	53,900	57,700	56,900

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

[2]Puerto Rico is excluded from all sand and gravel statistics.

TABLE 2

CONSTRUCTION SAND AND GRAVEL SOLD OR USED BY PRODUCERS IN THE UNITED STATES, BY GEOGRAPHIC DIVISION[1]

Region/division	2003				2004			
	Quantity (thousand metric tons)	Percentage of total	Value (thousands)	Percentage of total	Quantity (thousand metric tons)	Percentage of total	Value (thousands)	Percentage of total
Northeast:								
New England	46,900 r	4.0 r	$263,000 r	4.4	50,000	4.0	$287,000	4.4
Middle Atlantic	66,700	5.7	392,000	6.5	73,300	5.9	436,000	6.6
Midwest:								
East North Central	224,000	19.3	935,000	15.6	231,000	18.6	1,020,000	15.4
West North Central	122,000	10.5	483,000	8.1	135,000	10.9	540,000	8.2
South:								
South Atlantic	85,800	7.4	431,000	7.2	89,000	7.2	456,000	6.9
East South Central	46,700	4.0	241,000	4.0	46,900	3.8	243,000	3.7
West South Central	128,000	11.0	631,000	10.5	122,000	9.9	646,000	9.8
West:								
Mountain	218,000	18.8	1,070,000	17.9	251,000	20.3	1,270,000	19.3
Pacific	222,000	19.1	1,540,000	25.7	239,000	19.3	1,700,000	25.8
Total	1,160,000	100.0	5,990,000	100.0	1,240,000	100.0	6,590,000	100.0

[r]Revised.

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

TABLE 3

SAND AND GRAVEL SOLD OR USED BY PRODUCERS IN THE UNITED STATES IN 2004, BY QUARTER AND GEOGRAPHIC DIVISION[1]

Region/division	Quantity, 1st quarter (thousand metric tons)	Percentage change[2]	Quantity, 2d quarter (thousand metric tons)	Percentage change[2]	Quantity, 3d quarter (thousand metric tons)	Percentage change[2]	Quantity, 4th quarter (thousand metric tons)	Percentage change[2]	Total[3]	
									Quantity (thousand metric tons)	Value (thousands)
Northeast:										
New England	4,310	9.3	13,200	4.2	15,400	-11.1	12,900	-5.1	45,800	$268,000
Middle Atlantic	9,830	11.2	19,800	12.2	23,300	5.8	17,300	-4.9	70,300	422,000
Midwest:										
East North Central	26,600	5.3	68,600	1.6	76,200	1.9	54,500	-3.9	226,000	960,000
West North Central	9,410	17.7	41,700	17.2	59,800	26.0	37,400	20.0	148,000	548,000
South:										
South Atlantic	20,300	5.9	23,400	3.7	22,200	-2.1	21,600	0.9	87,500	458,000
East South Central	9,490	12.3	12,900	5.0	13,000	-6.3	10,700	-11.9	46,000	260,000
West South Central	27,600	0.6	33,200	-6.5	33,100	-4.6	28,900	-5.0	123,000	616,000
West:										
Mountain	48,400	14.3	76,800	25.1	73,200	15.4	60,700	19.3	259,000	1,270,000
Pacific[4]	43,300	3.3	57,200	8.9	64,000	2.8	52,100	-4.6	217,000	1,540,000
Total[3]	213,000	6.8	345,000	9.2	375,000	5.7	297,000	1.9	1,210,000 [5]	6,410,000 [5]

[1]As published in the "Crushed Stone and Sand and Gravel in the Fourth Quarter of 2004" Mineral Industry Surveys.

[2]All percentage changes are calculated using unrounded totals. Percentage changes are based on the corresponding quarter of the previous year.

[3]Data may not add to totals shown because of independent rounding and differences between projected totals by States and regions.

[4]Does not include Alaska and Hawaii.

[5]Includes Alaska and Hawaii.

TABLE 4

SAND AND GRAVEL SOLD OR USED BY PRODUCERS IN THE UNITED STATES IN 2004, BY QUARTER AND STATE[1]

State	Quantity 1st quarter (thousand metric tons)	Percentage change[2]	Quantity 2d quarter (thousand metric tons)	Percentage change[2]	Quantity 3d quarter (thousand metric tons)	Percentage change[2]	Quantity 4th quarter (thousand metric tons)	Percentage change[2]	Total[3] Quantity (thousand metric tons)	Total[3] Value (thousands)
Alabama	2,920	-7.6	4,030	2.6	2,880	-24.0	2,750	-23.7	12,600	$60,000
Alaska	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
Arizona	18,200	29.3	23,300	42.5	20,800	25.0	18,300	18.1	80,600	447,000
Arkansas	1,980	12.9	2,760	8.1	2,540	-20.7	2,070	-6.5	9,350	51,100
California	32,300	4.9	41,900	9.7	44,800	2.8	35,900	-9.0	155,000	1,190,000
Colorado	6,460	13.4	14,800	14.9	12,200	4.3	10,200	39.8	43,600	252,000
Connecticut	611	18.8	2,040	-4.9	2,550	-15.4	2,220	-10.6	7,410	47,500
Delaware	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	2,910	20,900
Florida	7,240	-9.3	7,680	-4.0	7,170	-5.1	7,320	-0.3	29,400	137,000
Georgia	2,520	59.3	2,240	7.2	2,160	0.4	2,010	7.7	8,930	37,700
Hawaii	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
Idaho	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	19,100	70,100
Illinois	3,620	-2.1	9,540	-4.6	12,600	7.7	9,190	-0.2	34,900	166,000
Indiana	6,190	-4.4	10,600	4.2	9,160	3.8	6,960	-5.5	32,900	132,000
Iowa	1,150	13.5	4,530	15.8	5,350	8.4	4,170	16.3	15,200	70,400
Kansas	1,870	1.4	2,950	-7.4	2,780	-14.5	2,210	-9.1	9,800	32,600
Kentucky	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	15,100	71,400
Louisiana	4,280	-6.5	5,090	-12.1	5,560	-3.0	4,580	-10.8	19,500	98,500
Maine	679	5.3	3,350	22.5	3,920	-11.6	2,780	6.4	10,700	49,800
Maryland	2,750	29.5	3,820	20.3	3,790	16.2	3,670	13.5	14,000	96,700
Massachusetts	2,020	3.2	3,280	10.3	4,470	4.8	3,660	-2.2	13,400	85,400
Michigan	4,840	11.9	22,700	-7.4	24,900	-2.6	16,400	-1.9	68,800	250,000
Minnesota	1,450	31.1	16,900	23.3	28,400	37.6	16,300	21.7	63,100	279,000
Mississippi	2,930	10.1	3,890	3.1	4,210	-6.2	3,490	-6.0	14,500	83,400
Missouri	1,830	28.1	3,950	24.1	4,530	18.9	3,030	38.6	13,300	63,200
Montana	1,430	-31.9	4,700	-10.3	4,380	-16.9	3,110	18.5	13,600	67,500
Nebraska	1,930	2.0	4,650	6.3	4,580	9.6	2,810	-0.8	14,000	48,400
Nevada	7,540	-8.6	8,580	1.0	11,000	0.8	8,600	-9.2	35,700	171,000
New Hampshire	858	29.1	2,470	7.4	2,530	-17.1	2,450	-0.2	8,310	41,200
New Jersey	3,580	9.7	4,490	0.1	4,620	--	5,380	-7.5	18,100	106,000
New Mexico	2,880	-2.9	4,750	24.7	4,940	31.9	3,950	39.5	16,500	82,300
New York	3,210	-12.3	8,480	1.5	11,500	3.1	6,750	-3.1	30,000	175,000
North Carolina	2,530	7.5	2,830	6.3	2,540	-15.6	2,850	2.3	10,500	56,500
North Dakota	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
Ohio	6,180	16.6	14,300	11.9	16,600	2.2	12,100	-6.1	49,200	257,000
Oklahoma	2,330	-2.8	2,940	-4.0	3,500	18.2	2,700	5.5	11,500	51,900
Oregon	3,300	0.9	4,900	19.4	7,650	22.2	6,190	26.1	22,000	133,000
Pennsylvania	3,020	54.9	6,770	40.1	7,100	14.6	5,170	-4.6	22,100	141,000
Rhode Island	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	2,950	25,300
South Carolina	2,100	-1	2,550	-12	2,400	-12	2,370	1	9,410	33,000
South Dakota	829	40.0	3,250	-12.7	6,070	31.1	3,840	36.0	14,000	54,300
Tennessee	1,380	22.6	1,950	-1.3	2,440	-0.4	1,740	-13.0	7,510	44,700
Texas	19,100	0.9	22,200	-8.1	21,400	-4.9	19,600	-4.8	82,300	414,000
Utah	4,340	3.9	10,200	45.3	10,700	16.8	8,140	14.7	33,300	140,000
Vermont	297	-28.7	1,170	-13.0	1,420	-4.3	1,020	-19.9	3,910	18,700
Virginia	2,690	27.7	3,510	20.9	3,210	2.5	3,000	-6.1	12,400	73,000
Washington	6,910	-7.3	9,870	-0.8	12,300	-6.8	11,100	9.7	40,200	217,000
West Virginia	104	-57.4	242	-7.5	248	-11.8	128	-30.2	722	3,600
Wisconsin	4,240	3.3	11,600	4.5	13,300	1.1	9,560	-5.1	38,800	155,000
Wyoming	1,070	66.4	2,450	-2.3	3,300	-10.1	1,870	27.5	8,690	38,900
Total	XX	XX	XX	XX	XX	XX	XX	XX	1,210,000	6,410,000

XX Not applicable. -- Zero.

[1]As published in the "Crushed Stone and Sand and Gravel in the Fourth Quarter of 2004" Mineral Industry Surveys.

[2]All percentage changes are calculated using unrounded totals. Percentage changes are based on the corresponding quarter of the previous year.

[3]Data may not add to totals shown because of independent rounding and differences between projected totals by States and regions.

[4]State not included in quarterly survey.

[5]Owing to a low number of reporting companies, no production estimates by quarters were generated.

TABLE 5
CONSTRUCTION SAND AND GRAVEL SOLD OR USED BY PRODUCERS IN THE UNITED STATES, BY STATE[1]

State	2003			2004		
	Quantity (thousand metric tons)	Value (thousands)	Unit value	Quantity (thousand metric tons)	Value (thousands)	Unit value
Alabama	14,500	$67,600	4.67	14,700	$65,300	4.45
Alaska	9,980	55,700	5.58	9,430	51,600	5.48
Arizona	62,600	340,000	5.44	79,600	430,000	5.40
Arkansas	9,720	52,100	5.36	9,370	53,500	5.70
California	152,000	1,150,000	7.54	166,000	1,280,000	7.74
Colorado	37,500	213,000	5.67	40,900	235,000	5.75
Connecticut	8,150	51,200	6.28	8,330	55,600	6.67
Delaware	2,550	17,900	7.05	2,980	21,900	7.35
Florida	30,900	141,000	4.56	29,300	146,000	4.99
Georgia	7,690	31,800	4.14	9,270	39,400	4.26
Hawaii	809	9,560	11.82	1,260	12,100	9.65
Idaho	16,500	59,300	3.60	19,600	74,300	3.79
Illinois	34,600	161,000	4.65	38,700	203,000	5.25
Indiana	32,900	129,000	3.92	28,300	116,000	4.11
Iowa	13,400	61,000	4.54	17,100	74,300	4.33
Kansas	10,700	34,900	3.26	9,930	32,800	3.31
Kentucky	10,000	46,500	4.64	10,300	49,700	4.82
Louisiana	21,200	105,000	4.95	19,400	103,000	5.31
Maine	10,400	47,600	4.56	10,800	49,100	4.52
Maryland	11,800	79,900	6.77	12,700	75,500	5.96
Massachusetts	12,900	80,800 r	6.25	14,400	89,900	6.23
Michigan	71,000	253,000	3.56	69,500	254,000	3.66
Minnesota	48,900	212,000	4.33	54,900	235,000	4.28
Mississippi	14,600	82,600 r	5.64	14,100	80,700	5.73
Missouri	10,600	49,400	4.66	12,200	60,100	4.91
Montana	15,200	74,200	4.86	14,400	80,000	5.57
Nebraska	13,300	45,000	3.39	15,100	53,200	3.52
Nevada	37,100	174,000	4.69	43,100	197,000	4.56
New Hampshire	8,470	41,200	4.86	8,940	46,600	5.21
New Jersey	18,200	105,000	5.77	20,100	120,000	5.95
New Mexico	13,300	65,300	4.89	13,600	89,500	6.56
New York	30,200	172,000 r	5.71	33,100	189,000	5.72
North Carolina	10,500	55,600	5.28	11,500	59,700	5.21
North Dakota	13,500	35,900	2.66	11,700	32,800	2.80
Ohio	47,300	242,000	5.13	50,800	263,000	5.19
Oklahoma	11,000	48,500	4.42	12,000	53,700	4.49
Oregon	18,500	110,000	5.92	21,000	125,000	5.97
Pennsylvania	18,400	115,000	6.25	20,000	127,000	6.32
Rhode Island	2,450 r	21,000 r	8.55 r	2,490	22,000	8.85
South Carolina	10,100	34,700	3.44	9,960	35,100	3.52
South Dakota	11,800	44,800	3.81	14,000	51,700	3.69
Tennessee	7,550	44,100	5.84	7,830	47,500	6.06
Texas	86,200	425,000	4.93	81,700	436,000	5.34
Utah	27,400	113,000	4.11	29,800	125,000	4.18
Vermont	4,520	21,100	4.68	4,970	24,000	4.82
Virginia	11,300	65,500	5.78	12,800	75,800	5.92
Washington	40,700	216,000	5.29	41,500	227,000	5.46
West Virginia	971	4,750	4.90	524	2,500	4.78
Wisconsin	38,500	150,000	3.91	43,400	178,000	4.11
Wyoming	8,290	36,400	4.39	10,200	40,100	3.95
Total or average	1,160,000	5,990,000	5.16	1,240,000	6,590,000	5.33

rRevised.

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

TABLE 6
CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN THE UNITED STATES IN 2004, BY MAJOR USE[1]

Use	Quantity (thousand metric tons)	Value (thousands)	Unit value
Concrete aggregates (including concrete sand)	260,000	$1,600,000	$6.14
Plaster and gunite sands	12,400	109,000	8.81
Concrete products (blocks, bricks, pipe, decorative, etc.)	6,990	48,900	7.00
Asphaltic concrete aggregates and other bituminous mixtures	74,700	509,000	6.82
Road base and coverings	132,000	635,000	4.80
Road stabilization, cement	5,980	27,100	4.53
Road stabilization, lime	875	5,120	5.85
Fill	72,800	252,000	3.45
Snow and ice control	5,500	27,600	5.03
Railroad ballast	936	7,510	8.02
Roofing granules	108	1,070	9.91
Filtration	1,350	7,900	5.87
Other miscellaneous uses	9,970	84,900	8.51
Unspecified:[2]			
Actual	313,000	1,630,000	5.20
Estimated	341,000	1,660,000	4.85
Total or average	1,240,000	6,590,000	5.33

[1]Data are rounded to no more than three significant digits; may not add to totals shown.
[2]Reported and estimated production without a breakdown by end use.

TABLE 7
CONSTRUCTION SAND AND GRAVEL SOLD OR USED BY PRODUCERS IN THE UNITED STATES IN 2004, BY GEOGRAPHIC DIVISION AND MAJOR USE[1]

(Thousand metric tons and thousand dollars)

	Concrete aggregates (including concrete sand)		Plaster and gunite sands		Concrete products (blocks, bricks, pipe decorative, etc.)		Asphaltic concrete aggregates and other bituminous mixtures		Road base and coverings[2]	
Region/division	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Northeast:										
New England	4,210	32,300	215	2,090	690	6,220	2,150	15,700	4,790	24,500
Middle Atlantic	10,000	70,000	514	3,600	483	5,030	7,310	44,500	4,970	25,100
Midwest:										
East North Central	41,300	188,000	731	4,110	1,190	5,560	16,400	90,400	23,500	107,000
West North Central	23,000	121,000	300	1,700	1,590	9,080	7,870	35,600	23,600	72,700
South:										
South Atlantic	32,100	188,000	1,880	11,000	990	6,550	1,750	7,860	1,690	7,160
East South Central	16,200	80,400	663	5,180	315	1,860	3,220	22,900	1,480	5,760
West South Central	45,000	274,000	514	4,460	220	1,900	2,600	16,700	6,840	40,400
West:										
Mountain	25,600	156,000	1,390	12,800	233	1,520	11,600	88,800	44,100	195,000
Pacific	62,200	487,000	6,150	63,900	1,280	11,200	21,900	187,000	28,000	190,000
Total	260,000	1,600,000	12,400	109,000	6,990	48,900	74,700	509,000	139,000	667,000

See footnotes at end of table.

TABLE 7—Continued
CONSTRUCTION SAND AND GRAVEL SOLD OR USED BY PRODUCERS IN THE UNITED STATES IN 2004, BY GEOGRAPHIC DIVISION AND MAJOR USE[1]

(Thousand metric tons and thousand dollars)

	Fill		Snow and ice control		Railroad ballast		Other uses		Total	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Northeast:										
New England	3,490	13,800	W	W	W	W	33,100	183,000	50,000	287,000
Middle Atlantic	6,070	25,800	1,620	7,750	51	453	42,200	253,000	73,300	436,000
Midwest:										
East North Central	13,800	50,600	1,400	5,240	107	481	132,000	564,000	231,000	1,020,000
West North Central	7,780	18,100	377	1,400	39	672	70,500	280,000	135,000	540,000
South:										
South Atlantic	8,140	22,600	83	594	--	--	42,300	213,000	89,000	456,000
East South Central	1,530	4,410	50	138	--	--	23,400	123,000	46,900	243,000
West South Central	8,810	23,700	W	W	W	W	58,300	284,000	122,000	646,000
West:										
Mountain	8,940	31,400	435	2,290	425	3,550	158,000	779,000	251,000	1,270,000
Pacific	14,300	61,200	226	1,160	251	1,550	105,000	697,000	239,000	1,700,000
Total	72,800	252,000	5,500	27,600	935	7,510	666,000	3,380,000	1,240,000	6,590,000

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 road and other stabilization (cement and lime).

TABLE 8A
CONSTRUCTION SAND AND GRAVEL PRODUCTION IN THE UNITED STATES IN 2004, BY REGION AND SIZE OF OPERATION

	U.S. total			
Size range (metric tons)	Number of operations	Percentage of total	Quantity[1] (thousand metric tons)	Percentage of total
Less than 25,000	1,466	23.4	14,000	1.1
25,000 to 49,999	902	14.4	30,300	2.4
50,000 to 99,999	1,119	17.8	73,500	5.9
100,000 to 199,999	1,047	16.7	134,000	10.8
200,000 to 299,999	511	8.1	113,000	9.2
300,000 to 399,999	296	4.7	93,400	7.5
400,000 to 499,999	214	3.4	87,100	7.0
500,000 to 599,999	136	2.2	67,400	5.4
600,000 to 699,999	128	2.0	75,200	6.1
700,000 to 799,999	85	1.4	57,600	4.7
800,000 to 899,999	76	1.2	58,200	4.7
900,000 to 999,999	49	0.8	41,900	3.4
1,000,000 to 1,499,999	121	1.9	130,000	10.5
1,500,000 to 1,999,999	48	0.8	74,300	6.0
2,000,000 to 2,499,999	35	0.6	71,400	5.8
2,500,000 to 4,999,999	34	0.5	102,000	8.2
5,000,000 and more	3	0.1	14,400	1.2
Total	6,270	100.0	1,240,000	100.0

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

TABLE 8B
CONSTRUCTION SAND AND GRAVEL PRODUCTION IN THE UNITED STATES IN 2004, BY REGION AND SIZE OF OPERATION

Size range (metric tons)	Northeast				Midwest			
	Number of operations	Percentage of total	Quantity[1] (thousand metric tons)	Percentage of total	Number of operations	Percentage of total	Quantity[1] (thousand metric tons)	Percentage of total
Less than 25,000	294	29.0	2,770	2.2	490	22.1	4,940	1.4
25,000 to 49,999	159	15.7	5,330	4.3	360	16.2	12,200	3.3
50,000 to 99,999	204	20.1	13,400	10.9	419	18.9	27,600	7.5
100,000 to 199,999	170	16.8	21,700	17.6	402	18.1	51,800	14.2
200,000 to 299,999	70	6.9	15,700	12.7	185	8.3	41,100	11.2
300,000 to 399,999	43	4.2	13,700	11.1	94	4.2	29,900	8.2
400,000 to 499,999	23	2.3	9,380	7.6	78	3.5	31,400	8.6
500,000 to 599,999	16	1.6	7,940	6.4	41	1.8	20,100	5.5
600,000 to 699,999	8	0.8	4,630	3.8	44	2.0	25,700	7.0
700,000 to 799,999	8	0.8	5,390	4.4	26	1.2	17,600	4.8
800,000 to 899,999	6	0.6	4,610	3.7	23	1.0	17,600	4.8
900,000 to 999,999	3	0.3	2,700	2.2	8	0.4	6,830	1.9
1,000,000 to 1,499,999	4	0.4	4,110	3.3	27	1.2	28,500	7.8
1,500,000 to 1,999,999	4	0.4	6,160	5.0	13	0.6	20,500	5.6
2,000,000 to 2,499,999	1	0.1	2,030	1.6	6	0.3	11,900	3.3
2,500,000 to 4,999,999	1	0.1	3,800	3.1	5	0.2	13,000	3.6
5,000,000 and more	--	--	--	--	1	0.1	4,970	1.4
Total	1,014	100	123,000	100	2,222	100	366,000	100

Size range (metric tons)	South				West			
	Number of operations	Percentage of total	Quantity[1] (thousand metric tons)	Percentage of total	Number of operations	Percentage of total	Quantity[1] (thousand metric tons)	Percentage of total
Less than 25,000	202	18.2	1,950	0.8	480	25.0	4,300	0.9
25,000 to 49,999	137	12.3	4,550	1.8	246	12.8	8,180	1.7
50,000 to 99,999	190	17.1	12,500	4.8	306	15.9	20,000	4.1
100,000 to 199,999	182	16.4	23,100	8.9	293	15.2	37,700	7.7
200,000 to 299,999	110	9.9	24,400	9.4	146	7.6	32,100	6.5
300,000 to 399,999	60	5.4	18,900	7.3	99	5.1	30,900	6.3
400,000 to 499,999	53	4.8	22,100	8.6	60	3.1	24,300	5.0
500,000 to 599,999	33	3.0	16,500	6.4	46	2.4	22,800	4.7
600,000 to 699,999	33	3.0	19,500	7.6	43	2.2	25,300	5.2
700,000 to 799,999	23	2.1	15,400	6.0	28	1.5	19,200	3.9
800,000 to 899,999	21	1.9	16,000	6.2	26	1.4	20,000	4.1
900,000 to 999,999	16	1.4	13,700	5.3	22	1.1	18,700	3.8
1,000,000 to 1,499,999	32	2.9	34,700	13.4	58	3.0	62,300	12.7
1,500,000 to 1,999,999	11	1.0	17,000	6.6	20	1.0	30,700	6.3
2,000,000 to 2,499,999	5	0.5	10,100	3.9	23	1.2	47,500	9.7
2,500,000 to 4,999,999	3	0.3	7,890	3.1	25	1.3	77,000	15.7
5,000,000 and more	--	--	--	--	2	0.1	9,430	1.9
Total	1,111	100	258,000	100	1,923	100	490,000	100

-- Zero.

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

TABLE 9
CONSTRUCTION SAND AND GRAVEL SOLD OR USED BY PRODUCERS IN THE UNITED STATES IN 2004, BY GEOGRAPHIC DIVISION AND METHOD OF TRANSPORTATION[1]

(Thousand metric tons)

Region/division	Truck	Rail	Water	Other	Not transported	Not specified	Total
Northeast:							
New England	12,700	353	--	20	3,530	33,400	50,000
Middle Atlantic	23,000	18	--	1,200	3,860	45,200	73,300
Midwest:							
East North Central	77,200	406	4,930	141	10,900	137,000	231,000
West North Central	37,600	538	2,620	204	10,700	83,400	135,000
South:							
South Atlantic	41,300	351	14	--	4,700	42,600	89,000
East South Central	13,900	239	3,440	46	751	28,500	46,900
West South Central	45,900	1,260	92	--	12,600	62,500	122,000
West:							
Mountain	68,600	254	--	86	16,500	166,000	251,000
Pacific	117,000	2,820	2,470	1,260	22,800	92,500	239,000
Total	437,000	6,240	13,600	2,960	86,300	691,000	1,240,000

-- Zero.

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

TABLE 10
NUMBER OF CONSTRUCTION SAND AND GRAVEL OPERATIONS AND PROCESSING PLANTS IN THE UNITED STATES IN 2004, BY GEOGRAPHIC DIVISION

	Mining operations on land					
Region/division	Stationary	Portable	Stationary and portable	No plants or unspecified	Dredging operations	Total active operations
Northeast:						
New England	189	215	49	35	--	488
Middle Atlantic	204	201	47	41	33	526
Midwest:						
East North Central	498	437	79	92	95	1,201
West North Central	269	409	33	67	243	1,021
South:						
South Atlantic	121	48	18	59	113	359
East South Central	121	24	7	16	58	226
West South Central	217	87	21	69	132	526
West:						
Mountain	385	570	101	136	25	1,217
Pacific[1]	343	206	66	63	28	706
Total	2,347	2,197	421	578	727	6,270

-- Zero.

[1]An undetermined number of operations leased from the Bureau of Land Management in Alaska are counted as one operation.

TABLE 11
NUMBER OF CONSTRUCTION SAND AND GRAVEL OPERATIONS AND PROCESSING PLANTS IN THE UNITED STATES IN 2004, BY STATE

State	Mining operations on land				Dredging operations	Total active operations
	Stationary	Portable	Stationary and portable	No plants or unspecified		
Alabama	47	5	1	5	13	71
Alaska[1]	22	14	2	6	3	47
Arizona	87	83	34	14	8	226
Arkansas	35	10	2	9	7	63
California	195	92	31	24	15	357
Colorado	62	129	19	17	7	234
Connecticut	28	26	10	2	--	66
Delaware	3	1	--	2	3	9
Florida	18	3	2	2	36	61
Georgia	12	1	1	--	24	38
Hawaii	3	2	--	1	--	6
Idaho	33	76	6	25	6	146
Illinois	57	29	8	6	41	141
Indiana	88	25	11	9	22	155
Iowa	39	57	5	2	35	138
Kansas	16	23	1	11	57	108
Kentucky	9	1	4	1	9	24
Louisiana	18	8	1	11	59	97
Maine	50	73	9	14	--	146
Maryland	19	6	5	8	3	41
Massachusetts	60	28	9	2	--	99
Michigan	157	170	30	31	7	395
Minnesota	107	144	15	23	6	295
Mississippi	44	7	--	8	23	82
Missouri	35	9	5	1	31	81
Montana	49	68	7	20	1	145
Nebraska	12	18	1	6	113	150
Nevada	46	50	10	10	--	116
New Hampshire	22	39	9	4	--	74
New Jersey	29	8	4	--	15	56
New Mexico	38	44	8	21	--	111
New York	108	176	31	31	10	356
North Carolina	28	21	6	23	16	94
North Dakota	26	75	2	2	--	105
Ohio	106	43	13	19	23	204
Oklahoma	21	11	2	11	41	86
Oregon	46	25	9	14	4	98
Pennsylvania	67	17	12	10	8	114
Rhode Island	12	4	2	1	--	19
South Carolina	13	6	--	6	18	43
South Dakota	34	83	4	22	1	144
Tennessee	21	11	2	2	13	49
Texas	143	58	16	38	25	280
Utah	51	73	12	16	--	152
Vermont	17	45	10	12	--	84
Virginia	25	8	4	18	12	67
Washington	77	73	24	18	6	198
West Virginia	3	2	--	--	1	6
Wisconsin	90	170	17	27	2	306
Wyoming	19	47	5	13	3	87
Total	2,347	2,197	421	578	727	6,270

-- Zero.

[1]An undetermined number of operations leased from the Bureau of Land Management in Alaska are counted as one operation.

TABLE 12
RECYCLED ASPHALT CONCRETE SOLD OR USED BY PRODUCERS IN THE UNITED STATES, BY GEOGRAPHIC DIVISION[1]

Region/division	2003 Quantity (thousand metric tons)	2003 Value (thousands)	2003 Unit value	2004 Quantity (thousand metric tons)	2004 Value (thousands)	2004 Unit value
Northeast:						
New England	334 r	$1,770	$5.29 r	148	$817	$5.52
Middle Atlantic	56	296	5.29	108	645	5.97
Midwest:						
East North Central	1,020	5,520	5.43	840	3,300	3.93
West North Central	1,030	6,290	6.10	553	3,800	6.87
South:						
South Atlantic	274 r	1,340	4.90 r	402	1,940	4.83
East South Central	219	745	3.40	44	200	4.55
West South Central	54	290	5.37	18	100	5.56
West:						
Mountain	968 r	3,990	4.13	778	3,390	4.36
Pacific[2]	1,540	8,410	5.46	1,330	7,590	5.73
Total or average	5,500	28,700	5.22	4,220	21,800	5.17

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

TABLE 13
RECYCLED ASPHALT CONCRETE SOLD OR USED BY PRODUCERS IN THE UNITED STATES, BY STATE[1]

State	2003 Quantity (thousand metric tons)	2003 Value (thousands)	2003 Unit value	2004 Quantity (thousand metric tons)	2004 Value (thousands)	2004 Unit value
Alaska	116	$957	$8.25	56	$343	$6.13
Arizona	137	526	3.84	139	608	4.37
California	1,140	5,970	5.22	1,100	6,200	5.65
Colorado	437	2,020	4.63	364	1,810	4.98
Connecticut	12	82	6.83	15	126	8.40
Georgia	43	275	6.40	--	--	--
Idaho	157	385	2.45	60	218	3.63
Illinois	270	1,320	4.89	234	980	4.19
Indiana	23	100	4.35	--	--	--
Iowa	41	232	5.66	17	81	4.76
Kansas	42	288	6.86	1	9	9.00
Louisiana	50	267	5.34	--	--	--
Maine	109	568	5.21	78	335	4.29
Maryland	--	--	--	86	380	4.42
Massachusetts	117	632	5.40	23	100	4.35
Michigan	365	1,270	3.47	256	635	2.48
Minnesota	913	5,530	6.05	519	3,600	6.93
Mississippi	127	420	3.31	22	120	5.45
Montana	159	714	4.49	--	--	--
Nevada	28	112	4.00	2	11	5.50
New Hampshire	34	141	4.15	--	--	--
New Jersey	38	195	5.13	--	--	--
New Mexico	4	40	10.00	--	--	--
New York	18	99	5.50	108	645	5.97
North Carolina	213	898	4.22	210	985	4.69
North Dakota	12	65	5.42	4	14	3.50

See footnotes at end of table.

TABLE 13—Continued
RECYCLED ASPHALT CONCRETE SOLD OR USED BY PRODUCERS IN THE UNITED STATES, BY STATE[1]

State	2003			2004		
	Quantity (thousand metric tons)	Value (thousands)	Unit value	Quantity (thousand metric tons)	Value (thousands)	Unit value
Ohio	6	10	1.67	6	10	1.67
Oklahoma	2	13	6.50	18	100	5.56
Oregon	88	785	8.92	86	645	7.50
Pennsylvania	(2)	1	4.42	--	--	--
Rhode Island	47	301	6.40	23	224	9.74
South Carolina	18	168	9.33	99	490	4.95
South Dakota	25	181	7.24	11	100	9.09
Tennessee	92	325	3.53	23	80	3.48
Texas	2	11	5.50	--	--	--
Utah	30	104	3.47	205	697	3.40
Vermont	15	42	2.80	10	33	3.30
Virginia	(2)	3	11.06	8	84	10.50
Washington	193	699	3.62	87	407	4.68
Wisconsin	354	2,820	7.97	344	1,680	4.88
Wyoming	16	89	5.56	8	42	5.25
Total or average	5,500	28,700	5.22	4,220	21,800	5.17

-- Zero.
[1]Data are rounded to no more than three significant digits, except unit value; may not add to totals shown.
[2]Less than ½ unit.

TABLE 14
RECYCLED CEMENT CONCRETE SOLD OR USED BY PRODUCERSIN THE UNITED STATES, BY GEOGRAPHIC DIVISION[1]

Region/division	2003			2004		
	Quantity (thousand metric tons)	Value (thousands)	Unit value	Quantity (thousand metric tons)	Value (thousands)	Unit value
Northeast:						
New England	333 r	$1,800	5.41 r	151	$563	3.73
Middle Atlantic	267 r	1,670	6.24 r	249	1,820	7.31
Midwest:						
East North Central	1,480	7,230	4.89	993	5,250	5.29
West North Central	879 r	4,400	5.00 r	620	3,690	5.95
South:						
South Atlantic	119 r	534	4.49 r	306	1,640	5.37
East South Central	3 r	11	3.67 r	--	--	--
West South Central	74	446	6.03	22	100	4.55
West:						
Mountain	643	2,720	4.22	358	1,990	5.54
Pacific[2]	2,200	11,900	5.43	1,380	8,920	6.48
Total or average	6,000 r	30,700	5.13	4,080	24,000	5.88

[r]Revised. -- Zero.
[1]Data are rounded to no more than three significant digits, except unit value; may not add to totals shown.
[2]Includes Alaska.

TABLE 15
RECYCLED CEMENT CONCRETE SOLD OR USED BY PRODUCERS IN THE UNITED STATES, BY STATE[1]

State	2003			2004		
	Quantity (thousand metric tons)	Value (thousands)	Unit value	Quantity (thousand metric tons)	Value (thousands)	Unit value
Alaska	7	$39	$5.57	--	--	--
Arizona	3	11	3.67	3	$9	$3.00
California	1,760	10,200	5.79	1,140	7,300	6.46
Colorado	218	1,140	5.22	306	1,760	5.76
Connecticut	6	41	6.83	3	27	9.00
Hawaii	4	26	6.50	--	--	--
Idaho	2	10	5.00	11	49	4.45
Illinois	377	2,150	5.69	286	1,540	5.37
Indiana	64	298	4.66	15	80	5.33
Iowa	34	217	6.38	24	138	5.75
Kansas	16	134	8.38	3	21	7.00
Louisiana	7	44	6.29	--	--	--
Maine	2	11	5.50	3	18	6.00
Maryland	31	160	5.16	241	1,350	5.58
Massachusetts	309	1,690	5.48	131	451	3.44
Michigan	339	1,370	4.03	520	2,710	5.21
Minnesota	766	3,910	5.10	571	3,490	6.11
Montana	148	626	4.23	1	6	6.00
Nebraska	(2) r	(2) r	7.33	--	--	--
Nevada	89	105	1.18	20	111	5.55
New Hampshire	11	44	4.00	--	--	--
New Jersey	63	255	4.05	--	--	--
New Mexico	110	582	5.29	--	--	--
New York	181	1,310	7.23	249	1,820	7.31
North Carolina	33	180	5.45	13	130	10.00
North Dakota	5	25	5.00	--	--	--
Ohio	58	365	6.29	52	361	6.94
Oklahoma	23	125	5.43	--	--	--
Oregon	18	110	6.11	21	129	6.14
Pennsylvania	23	101	4.39	--	--	--
Rhode Island	--	--	--	7	48	6.86
South Carolina	14	135	9.64	2	15	7.50
South Dakota	58	112	1.93	23	44	1.91
Tennessee	3	11	3.67	--	--	--
Texas	44	277	6.30	22	100	4.55
Utah	67	201	3.00	16	47	2.94
Vermont	4	11	2.75	7	19	2.71
Virginia	41	59	1.44	50	154	3.08
Washington	416	1,600	3.85	221	1,490	6.75
Wisconsin	639	3,050	4.77	121	567	4.69
Wyoming	6	43	7.17	--	--	--
Total or average	6,000 r	30,700	5.13	4,080	24,000	5.88

rRevised. -- Zero.
[1]Data are rounded to no more than three significant digits, except unit value; may not add to totals shown.
[2]Less than ½ unit.

TABLE 16

U.S. EXPORTS OF CONSTRUCTION SAND AND GRAVEL IN 2004, BY COUNTRY[1]

(Thousand metric tons and thousand dollars)

	Sand		Gravel	
Country or Territory	Quantity	Value, f.a.s.[2]	Quantity	Value, f.a.s.[2]
North America:				
Canada	59	5,050	524	3,860
Guatemala	(3)	134	(3)	6
Mexico	17	3,370	22	445
Other[4]	5	334	3	77
Total	78	8,890	550	4,390
South America:				
Brazil	3	1,670	--	--
Colombia	(3)	59	--	--
Peru	(3)	4	--	--
Venezuela	1	670	--	--
Other[5]	(3)	260	(3)	8
Total	6	2,660	(3)	8
Europe:				
Belgium	(3)	260	--	--
Denmark	4	3,370	--	--
Finland	(3)	13	(3)	25
France	(3)	47	--	--
Germany	1	614	--	--
United Kingdom	1	1,240	1	78
Other[6]	7	7,780	(3)	3
Total	14	9,950	1	106
Asia:				
China	2	304	--	--
Korea, Republic of	(3)	152	(3)	3
Taiwan	18	3,090	--	--
Other[7]	2	1,090	(3)	7
Total	22	4,630	(3)	10
Oceania, other[8]	(3)	200	(3)	17
Middle East, other[9]	1	284	2	62
Africa, other[10]	2	887	1	20
Grand total	124	27,500	553	4,610

-- Zero.

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

[2]Free alongside ship. Value of material at U.S. port of export; based on transaction price, including all charges incurred in placing material alongside ship.

[3]Less than ½ unit.

[4]Includes Anguilla, Antigua and Barbuda, The Bahamas, Barbados, Belize, Bermuda, Costa Rica, Dominica, the Dominican Republic, El Salvador, Honduras, Jamaica, the Netherlands Antilles, Panama, St. Lucia, and Trinidad and Tobago.

[5]Includes Argentina, Chile, Ecuador, French Guiana, and Uruguay.

[6]Includes Azerbaijan, Cyprus, Georgia, Iceland, Ireland, Italy, the Netherlands, Portugal, Romania, Russia, Spain, Sweden, and Switzerland.

[7]Includes Brunei, Hong Kong, India, Indonesia, Japan, Singapore, Thailand, and Vietnam.

[8]Includes Australia.

[9]Includes Iraq, Israel, Lebanon, and the United Arab Emirates.

[10]Includes Algeria, Angola, Congo (Kinshasa), Egypt, Gabon, Kenya, Niger, Nigeria, South Africa, and St. Helena.

Source: U.S. Census Bureau.

TABLE 17
U.S. IMPORTS FOR CONSUMPTION OF CONSTRUCTION SAND AND GRAVEL, BY COUNTRY[1]

(Thousand metric tons and thousand dollars)

	2003		2004	
Country or Territory	Quantity	Value, c.i.f.[2]	Quantity	Value, c.i.f.[2]
Antigua and Barbuda	56	721	34	441
Australia	25	1,430	33	1,170
Bahamas, The	44	616	170	1,890
Canada	4,110	42,100	3,910	41,900
China	43	2,520	4	1,630
Dominica	20	368	23	453
France	(3)	201	(3)	118
Japan	32	4,100	2	551
Mexico	(3)	341	548	3,690
Philippines	(3)	128	1	145
Other[4]	80	5,130	35	4,890
Total	4,410	57,700	4,760	56,900

[1]Data are rounded to no more than three significant digits; may not add to totals shown.
[2]Cost, insurance, and freight. Value of material at U.S. port of entry; based on purchase price and includes all charges (except U.S. import duties) in bringing material from foreign country to alongside carrier.
[3]Less than ½ unit.
[4]Includes Belgium, the British Virgin Islands (2004), Chile (2004), Germany, Haiti, Hong Kong, India (2004), Indonesia, Ireland, Italy, Malaysia, Mali (2003), the Netherlands, the Netherlands Antilles, New Zealand, Norway, Peru, Poland, Singapore (2004), South Africa, Spain (2004), Sweden, Switzerland, Taiwan, and the United Kingdom.

Source: U.S. Census Bureau.

FIGURE 1
PRODUCTION OF CONSTRUCTION SAND AND GRAVEL IN THE UNITED STATES IN 2004, BY GEOGRAPHIC DIVISION