

2005 Minerals Yearbook

SAND AND GRAVEL, CONSTRUCTION

CONSTRUCTION SAND AND GRAVEL

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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; both of these mineral commodities are usually included in reviews of national, State, or local aggregates industries.

A total of 1.27 billion metric tons (Gt) of construction sand and gravel was produced in the United States in 2005. This record-high production was an increase of about 33 million metric tons (Mt), or 2.7%, compared with that of 2004. After a decrease in production in 1991, sand and gravel production increased each year for the following 14 years. All percentages in this report were computed using unrounded data. Total construction activity in the United States increased by 10% in 2005, following gains of 10% in 2004 and 3% in 2003. According to the U.S. Census Bureau, construction gains were recorded in most categories with residential building gaining 14%, nonbuilding construction gaining 7%, and nonresidential building gaining 5%. Single-family home sales set another record as they topped 2004 sales by 6.6% (Rock Products, 2006).

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 2005, 6,029 construction sand and gravel operations were active, 581 operations were idle, and 189 operations either were reported to be closed or were assumed to be permanently shut down. Of the 6,029 active operations, 64 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, 53 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 2005, of the 6,029 active operations surveyed, 3,479, or 57.7%, responded to the USGS canvass. Their total production represented 68.3% of the 1.27 Gt produced in 2005. The 6,029 operations with 9,975 active sand and gravel pits were owned by 3,794 companies or government agencies operating in all 50 States. A review of the data provided by the U.S. Mine Safety and Health Administration for 2005 revealed 147 previously unaccounted for sand and gravel locations that reported at least 2,000 man-hours of activity

within the year. Information was gathered from these "new" operations and they were included in this report.

Foreign trade of construction sand and gravel remained minor in 2005 but imports did reach record levels. According to the U.S. Census Bureau, exports decreased by 23% to 519,000 metric tons (t), and the value decreased by 12% to \$28.2 million compared with the 2004 results (tables 1, 16). Imports increased by about 50% to 7.16 Mt, and the value increased by about 53% to \$86.8 million (tables 1, 17). Imports are becoming a significant source for sand and gravel in some areas of the country.

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 1.28 Gt. Though only by a very slight margin, this is the first time that imports have been significant enough to cause apparent consumption to be different from U.S. production. Imports and exports have historically been so minor as to not affect domestic apparent consumption.

Production

Of the four major geographic regions, the West again led the Nation in the production of construction sand and gravel with 521 Mt, or 41% of the U.S. total (table 2). It was followed by the Midwest with 360 Mt, or 28%; the South with 271 Mt, or 21%; and the Northeast with 122 Mt, or 10%. Compared with 2004, production in 2005 decreased in the Midwest and Northeast regions but increased in the South and West regions.

Of the nine geographic divisions, the Mountain led the Nation in the production of construction sand and gravel with 278 Mt, or 21.8% of the U.S. total, and was followed by the Pacific with 242 Mt, or 19.0%, and the East North Central with 225 Mt, or 17.7% (table 2; figure 1). Production increased in six of the nine divisions compared with that of 2004—South Atlantic, 11.3%; Mountain, 9.7%; New England, 4.3%; East South Central, 2.6%; Pacific, 1.4%; and West South Central, 0.8%. Production decreased in the three remaining divisions—Middle Atlantic, 5.0%; East North Central, 2.2%; and West North Central, 0.2%.

A review of the production of construction sand and gravel for consumption by size of operation indicates that about 34% of the total production came from 259 operations that reported 1 million metric tons per year (Mt/yr) production or more, 33% came from 2,001 operations that reported between 100,000 and 499,999 metric tons per year (t/yr), and 25% of the construction sand and gravel produced in 2005 came from 2,068 operations that reported between 500,000 and 999,999 t/yr. The largest number of operations (3,270, or 54% 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 2005 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 2005, construction sand and gravel was produced in every State (tables 4-5). The leading States were, in descending order of tonnage, California, Arizona, Texas, Michigan, Minnesota, Nevada, Ohio, Washington, Colorado, and Wisconsin. The combined production of these 10 States represented about 54% of the national total. Production increased in 29 States and decreased in 21 States compared with that of 2004. Production increases of greater than 10% were reported in 13 States—Florida (27.7%), Georgia (20.2%), Nevada (17.0%), New Mexico (16.4%), Iowa (15.9%), Massachusetts (14.0%), Arkansas (13.7%), Washington (13.6%), Utah (13.0%), South Carolina (11.8%), Oklahoma (11.4%), Wyoming (11.2%), and Hawaii (11.0%). Production decreases of greater than 10% were recorded in only 3 States—West Virginia (39.3%), Pennsylvania (14.7%), and Delaware (11.5%).

In 2005, 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; CEMEX, Inc.; Aggregates Industries, Inc.; Martin Marietta Aggregates; Lafarge North America, Inc.; and Granite Construction Company.

Some 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 production can be based on indirect indicators, such as the levels of cement and asphalt consumption.

Mergers and acquisitions in the construction sand and gravel industry proceeded at increased levels in 2005. Several large acquisitions were recorded in 2005 while in 2004 activity consisted of small or medium-sized companies being snapped up by larger companies. Some of the more significant changes in ownership in the sand and gravel industry in 2005 are listed below.

In February, CEMEX S.A de C.V., a Mexico-based global producer of aggregates and cement finalized the acquisition of RMC Group plc, a British conglomerate that was a significant global producer of ready-mix concrete and aggregates. In 2004, RMC was the 12th leading producer of sand and gravel in the United States. With this acquisition, CEMEX became the sixth leading producer of sand and gravel in 2005 after being the seventh leading producer in 2004 (Aggregates Manager, 2005a).

In March, the Swiss-based Holcim Group Ltd. acquired the United Kingdom-based Aggregates Industries plc, the seventh leading producer of sand and gravel in the United States in 2005. Holcim was the second leading producer of cement in the world and this \$3.4 billion purchase gives Holcim control of about 75 sand and gravel operations in 12 States (Aggregates Manager, 2005b).

Also in March, Vulcan Materials Co. purchased New West Materials Co., LLC of Phoenix and Tucson, AZ. New West produced from four operations and was the fifth leading producer in Arizona in 2004. Vulcan is now the third leading producer in Arizona and was the eighth leading producer in the State in 2004 (Aggregates Manager, 2005f). In August, Vulcan purchased Crister Companies, Inc. in Indiana. Vulcan moved up to the eighth leading producer of sand and gravel in the State in 2005 with this addition and remained the fourth leading producer in the United States (Aggregates Manager, 2005e).

In April, Rinker Materials Corp. purchased Pahrump Concrete, a concrete and sand and gravel operation about 97 kilometers west of Las Vegas, NV. Rinker is the third leading producer of sand and gravel in the United States and now has two operations in Nevada and about 60 operations in 9 States (Rock Products, 2005).

In June, MDU Resources Group, through its Knife River Corp. subsidiary, purchased seven construction materials operations in Oregon. MDU is the fifth leading producer of sand and gravel in the United States. MDU is by far the leading producer in Oregon and these additional operations helped the gap widen in 2005 (Aggregates Manager, 2005c).

Also in June, Hanson PLC announced the acquisition of Mission Valley Rock Company, Sunol, CA. Mission Valley was a major producer of sand and gravel in the Nation's leading State for sand and gravel production. Even with this acquisition, Hanson declined from the fourth leading producer in 2004 to the fifth leading in 2005 in California. However, Hanson maintained its position as the second leading producer of sand and gravel in the Nation (Aggregates Manager, 2005d).

Oldcastle Materials, Inc., the leading producer of sand and gravel in the United States was also active in 2005, especially in October and November. The company made acquisitions in Idaho, Iowa, Minnesota, and Utah. Oldcastle was already the leading producer in all these States, except Minnesota, where they had no presence until November when they purchased Southern Minnesota Construction. Southern Minnesota Construction was the leading aggregates and asphalt supplier in the south-central region of Minnesota with 80 Mt of aggregate reserves and a production of about 3 million metric tons per year of aggregate (Aggregates Manager, 2006b).

In November, Lafarge North America, Inc. acquired Wichita, KS-based Ritchie Corp., a supplier of ready-mix and aggregates. Ritchie was the leading producer of construction sand and gravel in Kansas and this purchase represents a significant first move for Lafarge. Prior to this, Lafarge did not have any sand and gravel presence in Kansas and now they are the number one producer in the State. Lafarge remains the ninth leading domestic producer of sand and gravel (Aggregates Manager, 2006b).

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 1.27 Gt of construction sand and gravel produced in 2005, 48.8% was for unspecified uses (table 6). Of the remaining 651 Mt, 45.1% was used as concrete aggregate; 21.5%, for road base and coverings and road stabilization; 14.1%, for construction fill; 12.0%, for asphaltic concrete aggregate and other bituminous mixtures; 2.1%, for plaster and gunite sands; 0.8%, 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 use categories by applying the above percentages. Compared with 2004, about 4.1% more 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 2.7%.

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 to aggregates producers, and the number of aggregatesproducing 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. Aggregates companies 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 the construction or demolition companies, and those companies are not surveyed by the USGS.

Asphalt Concrete.—In 2005, 3.75 Mt of asphalt concrete valued at \$23.7 million was recycled by 171 sand and gravel companies in 35 States; this quantity represented an 11.0% decrease compared with that of 2004 (tables 12-13). The leading States were, in descending order of tonnage recycled, California, Minnesota, and Utah. The leading companies were, in descending order of tonnage produced, Granite Construction; The Lane Construction Co.; Midwest Asphalt Corp.; Troesh Recycling, Inc.; and Vulcan Materials.

Cement Concrete.—In 2005, about 4.6 Mt of cement concrete valued at \$27 million was recycled by 166 companies in 35 States; this tonnage represented a 13% increase compared with that of 2004 (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.; Danner, Inc.; Custom Crushing and Recycling Co.; and Midwest Asphalt Corp.

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 610 Mt, or 48% of the total U.S. production of construction sand and gravel. Of this total, 81.6% was transported by truck; 2.8%, by waterway; and 2.0%, by rail (table 9). A significant amount of construction sand and gravel produced (about 13.2%) was not transported and was used at or near the production site, probably for cement 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 2005 average unit price increased by about 10.2% to \$5.86 per metric ton compared with that of 2004 (table 6). By use, the unit prices varied from a high of \$10.36 per ton for railroad ballast to a low of \$3.94 per ton for fill. The largest increases were recorded for road base and coverings (33.3%), railroad ballast (29.2%), and concrete products (26.0%). The largest decreases were for lime type road stabilization (7.4%), and roofing granules (1.9%). The U.S. Bureau of Labor Statistics (BLS) reported by regions in the United States that construction sand prices increased between 1.8% and 13.7% from 2004 to 2005. For construction gravel, the BLS reported increases between 4.5% and 13.5% for the same period (Aggregates Manager, 2006a).

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 increased by about 10.5% to 137,000 t compared with that of 2004, but the value decreased by about 15.1% to \$23.4 million (table 16). Canada, which was the leading destination,

received about 47% of the total sand, followed by Taiwan with 25% and Mexico with 7%. Exports of construction gravel decreased by nearly 31% to 382,000 t compared with those of 2004, but the value increased by about 4.1% to \$4.8 million. Canada, which was the leading destination, received about 89.8% of the total gravel. The average value of the sand and gravel exports in 2005 was \$54.27 per ton; this was up from \$47.45 per ton in 2004. These high values may be owing to some higher grade sand and gravel being misclassified as construction sand and gravel.

Imports increased by about 50% to 7.16 Mt, and the value increased by about 53% to \$86.8 million (table 17). Canada was the leading source of imported construction sand and gravel with 60.2% of the total. Mexico supplied about 34.3% of the imports. The average value of the sand and gravel imports was \$12.12 per ton, up from \$11.95 per ton in 2004.

Outlook

The demand for construction sand and gravel in 2006 is expected to increase between 1% and 3% compared with that of 2005. Data from the USGS quarterly survey of aggregates producers indicate about a 2% increase in sales of sand and gravel compared with those of the first half of 2005. Most regions of the United States also will probably have increased sales in the second half of 2006, and demand will likely rise compared with 2005 levels particularly if oil prices remain below the higher prices experienced in the first half of 2006. Lower fuel prices should help to keep the cost of asphalt and cement down and increase consumption of downstream aggregate-containing products: asphalt and portland cement concrete. Lower oil prices would also make aggregates more affordable (by decreasing production cost), and therefore, limited public dollars for road and highway construction could be spent on more projects and aggregate consumption would increase. Nonresidential construction has been strong in 2006 and could also help to increase demand for aggregates. This more positive scenario will be tempered, however, owing to a marked drop in residential construction and home sales in 2006.

After increases of about 10% as recorded in 2005, construction sand and gravel f.o.b. prices are expected to increase by only about 4% to 6% for the full 12 months of 2006, partially owing to the rising cost of fuel used in the mining processes. The rise in fuel cost, especially in the first part of 2006, 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 2006, 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 develop reserves, to acquire zoning and permit

approvals, and to deliver and install the necessary production 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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 ${\bf TABLE~1} \\ {\bf SALIENT~U.S.~CONSTRUCTION~SAND~AND~GRAVEL~STATISTICS}^I \\$

(Thousand metric tons and thousand dollars)

	2001	2002	2003	2004	2005
Sold or used by producers: ²					
Quantity	1,130,000	1,130,000	1,160,000	1,240,000	1,270,000
Value	5,670,000	5,750,000	5,990,000	6,600,000 ^r	7,460,000
Exports, value	19,100	23,400	24,900	32,100	28,200
Imports, value	40,800	53,900	57,700	56,900	86,800

rRevised.

 ${\it TABLE~2}$ Construction sand and gravel sold or used by producers in the united states, by Geographic division $^{\it I}$

		20	04			20	05	
	Quantity				Quantity			
	(thousand	Percentage	Value	Percentage	(thousand	Percentage	Value	Percentage
Region/division	metric tons)	of total	(thousands)	of total	metric tons)	of total	(thousands)	of total
Northeast:								
New England	50,000	4.0	\$287,000	4.4	52,100	4.1	\$341,000	4.6
Middle Atlantic	73,100 ^r	5.9	435,000 ^r	6.6	69,500	5.5	460,000	6.2
Midwest:	_							
East North Central	231,000	18.6	1,020,000	15.4	225,000	17.7	1,070,000	14.3
West North Central	135,000	10.9	540,000	8.2	135,000	10.5	585,000	7.8
South:	_							
South Atlantic	89,000	7.2	456,000	6.9	99,000	7.9	584,000	7.9
East South Central	47,000 ^r	3.8	243,000	3.7	48,200	3.8	262,000	3.5
West South Central	122,000	9.8	646,000	9.8	123,000	9.7	712,000	9.5
West:	_							
Mountain	254,000 ^r	20.5 ^r	1,270,000	19.3	278,000	21.8	1,520,000	20.3
Pacific	239,000	19.3	1,700,000	25.8	242,000	19.0	1,940,000	25.9
Total	1,240,000	100.0	6,600,000 r	100.0	1,270,000	100.0	7,460,000	100.0

Revised.

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

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

¹Data 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 2005, BY QUARTER AND GEOGRAPHIC DIVISION $^{\rm l}$

	Quantity,		Quantity,		Quantity,		Quantity,		То	otal ³
	1st quarter		2d quarter		3d quarter		4th quarter		Quantity	
	(thousand	Percentage	(thousand	Percentage	(thousand	Percentage	(thousand	Percentage	(thousand	Value
Region/division	metric tons)	change ²	metric tons)	(thousands)						
Northeast:										
New England	4,290	-4.8	12,900	-9.8	18,300	11.3	13,100	-11.5	48,500	\$274,000
Middle Atlantic	8,240	-17.0	21,500	5.0	24,700	0.2	16,800	-8.0	71,200	444,000
Midwest:										
East North Central	25,500	-2.0	68,800	0.4	75,400	-4.5	54,500	-4.8	224,000	1,040,000
West North Central	10,300	18.9	40,300	4.3	64,700	15.6	32,500	2.2	148,000	578,000
South:										
South Atlantic	21,100	3.5	24,900	5.2	24,700	9.8	22,300	-0.9	92,900	490,000
East South Central	9,450	-1.0	11,500	-13.1	13,100	-2.1	10,600	-1.6	44,600	241,000
West South Central	31,300	13.3	34,200	4.7	32,800	-2.1	29,900	5.0	128,000	709,000
West:										
Mountain	49,300	6.4	74,900	-0.5	74,900	6.1	64,300	8.9	263,000	1,390,000
Pacific ⁴	39,300	-13.3	56,000	-9.3	64,100	-4.1	58,200	6.9	218,000	1,640,000
Total ³	210,000	-0.1	343,000	-1.7	387,000	2.3	307,000	3.0	1,250,000 5	6,800,000 5

¹As published in the "Crushed Stone and Sand and Gravel in the Fourth Quarter of 2005" Mineral Industry Surveys.

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

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

⁴Does not include Alaska and Hawaii.

⁵Includes Alaska and Hawaii.

TABLE 4 SAND AND GRAVEL SOLD OR USED BY PRODUCERS IN THE UNITED STATES IN 2005, BY QUARTER AND STATE $^{\rm l}$

	Quantity		Quantity		Quantity		Quantity			tal ³
	1st quarter		2d quarter		3d quarter		4th quarter		Quantity	
Q	(thousand	Percentage	(thousand	Percentage	(thousand	Percentage	(thousand	Percentage	(thousand	Value
State	metric tons)	change ²	metric tons)	change ²	metric tons)	change ²	metric tons)	change ²	metric tons)	(thousands)
Alabama	3,130	-10.9	3,390	-30.1	2,960	-14.4	2,480	-13.6	12,000	\$55,800
Alaska	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
Arizona	17,800	-0.6	24,500	5.3	22,100	7.9	22,300	23.4	86,600	491,000
Arkansas	2,340	24.2	2,750	-1.1	2,740	4.5	2,580	23.7	10,400	62,300
California	26,900	-23.1	40,300	-11.6	45,600	-4.0	40,800	8.1	154,000	1,250,000
Colorado	7,310	18.5	12,600	-11.1	12,700	17.1	9,740	0.4	42,300	256,000
Connecticut	718	4.6	2,490	8.7	3,160	10.4	2,360	-5.1	8,730	61,100
Delaware	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	2,040	15,700
Florida	7,940	8.5	8,360	8.9	7,790	10.3	7,390	2.0	31,500	165,000
Georgia	2,600	-0.3	3,070	57.5	3,330	63.4	2,930	9.3	11,900	53,300
Hawaii	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
Idaho	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	18,900	75,400
Illinois	3,790	0.0	11,300	2.1	12,500	-10.4	9,460	-4.7	37,000	204,000
Indiana	3,630	-7.2	8,750	-1.4	8,650	-3.3	6,800	3.1	27,800	120,000
Iowa	1,870	44.2	5,820	14.0	9,140	51.5	5,730	22.1	22,600	103,000
Kansas	1,490	-21.6	2,680	-10.2	2,780	-0.8	2,240	-0.1	9,190	31,900
Kentucky	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	10,300	51,900
Louisiana	4,370	1.7	4,970	-2.5	5,100	-6.7	4,410	-2.1	18,800	105,000
Maine	373	-4.9	2,200	-38.2	4,360	15.4	2,760	-11.1	9,700	46,000
Maryland	2,310	-6.9	3,370	-2.4	3,530	3.0	3,130	-5.6	12,300	77,200
Massachusetts	1,890	-9.2	3,640	4.0	4,520	-6.2	4,000	-0.7	14,100	92,000
Michigan	4,960	-5.9	21,400	0.7	24,100	-5.1	16,200	-8.1	66,600	256,000
Minnesota	1,870	37.9	15,300	-0.7	29,200	11.9	11,500	-4.6	57,900	260,000
Mississippi	2,890	5.5	3,490	-8.8	4,300	5.2	3,590	4.3	14,300	85,800
Missouri	1,950	16.3	3,710	2.3	3,980	-4.0	2,980	7.4	12,600	65,100
Montana	1,120	-25.5	3,690	-25.6	5,040	9.1	2,850	-13.0	12,700	74,300
Nebraska	1,850	-5.2	5,260	20.2	5,440	16.6	3,860	-6.0	16,400	60,600
Nevada	8,850	-1.9	11,300	12.3	13,800	1.2	11,200	7.5	45,100	216,000
New Hampshire	859	-7.0	2,430	-8.4	3,150	15.9	2,470	-6.5	8,910	48,700
New Jersey	2,560	-38.0	5,210	4.7	4,920	2.4	6,140	-0.8	18,800	118,000
New Mexico	3,230	37.8	3,910	-0.4	3,830	-6.4	3,250	-1.0	14,200	97,900
New York	3,650	2.3	9,530	1.7	12,800	0.1	6,610	-10.8	32,600	196,000
North Carolina	2,520	2.2	3,040	-5.8	2,970	5.0	2,380	-18.9	10,900	59,700
North Dakota	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
Ohio	6,290	-4.3	14,600	-0.8	16,300	-3.4	11,800	-6.8	49,000	267,000
Oklahoma	3,410	40.6	3,740	21.8	3,400	-6.9	3,020	7.4	13,600	64,000
Oregon	4,200	33.3	5,340	-1.2	7,120	1.9	6,550	20.0	23,200	145,000
Pennsylvania	2,050	-17.6	6,770	11.8	6,470	-1.3	4,360	-11.6	19,700	130,000
Rhode Island	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
South Carolina	2,350	5.9	2,730	4.4	3,020	15.8	2,600	3.4	10,700	39,600
South Dakota	922	5.0	4,400	30.5	6,220	6.2	3,310	-15.0	14,900	57,500
Tennessee	1,480	2.2	1,870	-8.1	2,380	-6.3	1,690	-6.8	7,420	47,200
Texas	21,300	10.2	22,700	4.9	21,400	-0.6	19,800	3.4	85,200	478,000
Utah	5,240	34.8	9,280	2.0	9,300	-2.8	6,930	-4.8	30,700	135,000
Vermont	332	-8.1	1,200	-15.8	2,460	58.1	1,090	-33.3	5,070	25,700
Virginia	2,620	-2.0	3,480	-5.3	3,410	2.6	3,040	-33.3	12,500	78,000
Washington	8,890	36.7	10,400	0.2	11,700	-8.4	11,300	-5.1 -5.1	42,300	242,000
									42,300 279	
West Virginia	(5) 5 310	(5) 18 0	(5)	(5)	(5) 15 000	(5)	(5) 10.400	(5) 2.3		1,400 192,000
Wisconsin	5,310	18.9	13,900	4.0	15,000	0.8	10,400	-2.3	44,600	
Wyoming	936 VV	-24.9	2,760	-3.8 VV	4,110 VV	6.7	2,470	13.2	10,300	42,600
Total XX Not applicable	XX	XX	XX	XX	XX	XX	XX	XX	1,250,000	6,800,000

¹As published in the "Crushed Stone and Sand and Gravel in the Fourth Quarter of 2005" Mineral Industry Surveys.

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

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

⁴State not included in quarterly survey.

⁵Owing 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 $^{\rm I}$

		2004			2005	
	Quantity			Quantity		
	(thousand	Value	Unit	(thousand	Value	Unit
State	metric tons)	(thousands)	value	metric tons)	(thousands)	value
Alabama	14,700 ^r	\$65,400 °	\$4.45	15,700	\$70,500	\$4.48
Alaska	9,470 ^r	51,700 ^r	5.48	8,660	48,100	5.56
Arizona	79,500 ^r	430,000	5.41 ^r	84,900	516,000	6.08
Arkansas	9,320 ^r	53,400 ^r	5.73 ^r	10,600	62,000	5.85
California	166,000	1,280,000	7.74	163,000	1,440,000	8.84
Colorado	41,100	235,000	5.72	44,700	280,000	6.26
Connecticut	8,330	55,600	6.67	8,400	64,200	7.64
Delaware	2,980	21,900	7.35	2,640	20,000	7.59
Florida	29,300	146,000	4.99	37,500	210,000	5.60
Georgia	9,270	39,400	4.26	11,100	68,300	6.14
Hawaii	1,260	12,100	9.65	1,390	17,500	12.54
Idaho	19,800 r	74,600 ^r	3.77	20,800	93,800	4.52
Illinois	38,700	203,000	5.25	37,400	210,000	5.60
Indiana	28,300	116,000	4.11	28,400	135,000	4.76
Iowa	17,100	74,300	4.33	19,900	93,100	4.69
Kansas	9,950 ^r	32,800	3.30 ^r	10,100	36,900	3.66
Kentucky	10,300	49,700	4.82	10,500	55,000	5.25
Louisiana	19,400	103,000	5.30	18,600	113,000	6.07
Maine	10,800	48,900 ^r	4.52	11,100	57,400	5.16
Maryland	12,700	75,500	5.96	12,300	89,500	7.25
Massachusetts	14,400	89,900	6.23	16,500	117,000	7.12
Michigan	69,400 r	254,000	3.66	64,800	243,000	3.75
Minnesota	54,800 ^r	235,000	4.29	54,100	253,000	4.68
Mississippi	14,100 r	80,800 ^r	5.73	14,400	85,200	5.93
Missouri	12,200	60,100	4.91	12,200	61,600	5.06
Montana	14,300 ^r	79,600 ^r	5.58	14,000	83,600	5.97
Nebraska	15,100	53,200	3.52	14,300	60,200	4.22
Nevada	44,700 ^r	199,000 ^r	4.46 ^r	52,300	230,000	4.41
New Hampshire	8,940	46,600	5.21	8,400	47,400	5.64
New Jersey	20,100	120,000	5.95	21,200	145,000	6.85
New Mexico	13,800 ^r	90,200 ^r	6.56	16,000	112,000	7.01
New York	33,100	189,000	5.72	31,300	204,000	6.50
North Carolina	11,400 ^r	59,700	5.22 ^r	12,000	63,900	5.34
North Dakota	11,700 ^r	32,800	2.80	11,300	34,500	3.06
Ohio	50,800	263,000	5.19	51,700	288,000	5.58
Oklahoma	12,000	53,700	4.49	13,300	65,000	4.88
Oregon	20,700 r	125,000	6.04 ^r	22,000	146,000	6.63
Pennsylvania	19,900 ^r	126,000 ^r	6.35 ^r	17,000	111,000	6.55
Rhode Island	2,490	22,000	8.85 ^r	2,510	23,000	9.16
South Carolina	9,960	35,100	3.52	11,100	45,200	4.06
South Dakota	13,900 ^r	51,400 ^r	3.70 ^r	12,800	45,500	3.55
Tennessee	7,830	47,500	6.06	7,570	51,500	6.80
Texas	81,700	436,000	5.34	80,700	472,000	5.84
Utah	30,000 r	125,000	4.17 ^r	33,900	149,000	4.42
Vermont	4,970	24,000	4.82	5,240	32,000	6.11
Virginia	12,800	75,800	5.92	12,000	85,800	7.13
Washington	41,500	227,000	5.46	47,200	282,000	5.97
West Virginia	524	2,500	4.78	318	1,630	5.12
Wisconsin	43,400	178,000	4.11	43,200	191,000	4.41
Wyoming	10,500 ^r	40,700 ^r	3.88 ^r	11,700	52,400	4.49
Total or average	1,240,000	6,600,000 ^r	5.32 ^r	1,270,000	7,460,000	5.86

rRevised.

¹Data 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 2005, BY MAJOR USE $^{\rm l}$

	Quantity		
	(thousand	Value	Unit
Use	metric tons)	(thousands)	value
Concrete aggregates (including concrete sand)	294,000	\$1,980,000	\$6.74
Plaster and gunite sands	14,000	137,000	9.82
Concrete products (blocks, bricks, pipe, decorative, etc.)	5,020	44,300	8.82
Asphaltic concrete aggregates and other bituminous mixtures	77,900	572,000	7.33
Road base and coverings	140,000	757,000	6.40
Road stabilization, cement	5,270	24,400	4.64
Road stabilization, lime	1,180	6,780	5.74
Fill	92,200	363,000	3.94
Snow and ice control	6,020	32,000	5.32
Railroad ballast	1,280	13,200	10.36
Roofing granules	140	1,380	9.82
Filtration	1,510	10,100	6.66
Other miscellaneous uses	13,300	105,000	7.88
Unspecified: ²			
Actual	304,000	1,740,000	5.71
Estimated	317,000	1,680,000	5.31
Total or average	1,270,000	7,460,000	5.86

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

²Reported 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 2005, BY GEOGRAPHIC DIVISION AND MAJOR USE $^{\rm I}$

(Thousand metric tons and thousand dollars)

		aggregates oncrete sand)	Plaste gunite		Concrete (blocks, br. decorative	icks, pipe	aggregate	c concrete s and other us mixtures	Road b	
Region/division	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Northeast:	-		-						-	
New England	6,320	57,500	244	2,550	347	2,830	2,870	21,900	5,850	33,900
Middle Atlantic	13,700	106,000	393	3,190	490	4,990	7,270	48,600	6,930	39,400
Midwest:										
East North Central	44,700	226,000	484	3,090	1,290	5,950	14,000	70,900	20,900	106,000
West North Central	19,300	93,400	378	2,160	569	4,530	8,290	40,000	22,900	74,300
South:										
South Atlantic	42,200	283,000	2,400	14,900	740	4,970	2,240	13,500	3,100	26,100
East South Central	21,800	116,000	481	4,240	282	1,730	4,680	32,100	2,130	9,100
West South Central	45,700	294,000	889	4,900	373	2,800	2,640	17,200	7,460	44,500
West:										
Mountain	33,800	224,000	1,350	12,700	122	688	12,900	104,000	46,000	221,000
Pacific	66,000	578,000	7,340	89,300	803	15,800	23,000	224,000	31,400	234,000
Total	294,000	1,980,000	14,000	137,000	5,020	44,300	77,900	572,000	147,000	788,000
	F	ill	Snow and	ice control	Railroad	ballast	Othe	er uses ³	T	Cotal
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Northeast:										
New England	4,670	20,400	W	W	W	W	30,300	191,000	52,100	341,000
Middle Atlantic	5,930	26,400	1,550	7,240	40	499	33,200	223,000	69,500	460,000
Midwest:										
East North Central	19,700	72,400	1,300	5,230	13	53	123,000	577,000	225,000	1,070,000
West North Central	6,640	19,500	493	2,310	22	165	76,000	348,000	135,000	585,000
South:										
South Atlantic	11,400	38,400	147	1,020			36,800	202,000	99,000	584,000
East South Central	1,660	6,060	11	34			17,100	93,000	48,200	262,000
West South Central	9,080	26,200	W	W	W	W	57,100	321,000	123,000	712,000
West:										
Mountain	10,500	38,500	393	2,750	789	8,770	172,000	905,000	278,000	1,520,000
Pacific	22,500	115,000	553	2,460	336	2,670	90,500	674,000	242,000	1,940,000
Total	92,200	363,000	6,020	32,000	1,280	13,200	636,000	3,540,000	1,270,000	7,460,000

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

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

²Includes road and other stabilization (cement and lime).

³Includes reported and estimated production without a breakdown by end use.

TABLE 8A
CONSTRUCTION SAND AND GRAVEL PRODUCTION IN THE UNITED STATES
IN 2005, BY REGION AND SIZE OF OPERATION

		U.S.	total	
			Quantity ¹	
Size range	Number of	Percentage	(thousand	Percentage
(metric tons)	operations	of total	metric tons)	of total
Less than 25,000	1,334	22.2	13,200	1.0
25,000 to 49,999	878	14.5	29,400	2.3
50,000 to 99,999	1,058	17.5	68,700	5.4
100,000 to 199,999	977	16.3	126,000	9.9
200,000 to 299,999	510	8.5	113,000	8.9
300,000 to 399,999	317	5.2	99,900	7.8
400,000 to 499,999		3.3	79,400	6.2
500,000 to 599,999	169	2.8	83,600	6.6
600,000 to 699,999	— 111	1.8	65,500	5.1
700,000 to 799,999		1.5	60,500	4.8
800,000 to 899,999		1.3	58,900	4.6
900,000 to 999,999	53	0.9	45,300	3.5
1,000,000 to 1,499,999	133	2.2	147,000	11.6
1,500,000 to 1,999,999		0.9	87,200	6.9
2,000,000 to 2,499,999		0.5	59,200	4.7
2,500,000 and more	— 41	0.6	136,000	10.7
Total	6,029	100	1,270,000	100

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

 ${\it TABLE~8B}$ CONSTRUCTION SAND AND GRAVEL PRODUCTION IN THE UNITED STATES IN 2005, BY REGION AND SIZE OF OPERATION

		Northeast					idwest		
			Quantity ¹				Quantity ¹		
Size range	Number of	Percentage	(thousand	Percentage	Number of	Percentage	(thousand	Percentage	
(metric tons)	operations	of total	metric tons)	of total	operations	of total	metric tons)	of total	
Less than 25,000	288	29.5	2,790	2.3	459	21.3	4,570	1.3	
25,000 to 49,999	153	15.7	5,090	4.2	369	17.1	12,400	3.4	
50,000 to 99,999	184	18.9	12,200	10.0	413	19.1	26,700	7.4	
100,000 to 199,999	164	16.8	21,100	17.3	364	16.9	47,300	13.1	
200,000 to 299,999		7.3	15,600	12.8	187	8.7	41,800	11.6	
300,000 to 399,999	39	4.0	12,200	10.0	92	4.3	29,200	8.1	
400,000 to 499,999	25	2.6	10,100	8.3	71	3.3	28,700	7.9	
500,000 to 599,999	12	1.2	5,960	4.9	63	2.9	31,100	8.6	
600,000 to 699,999	14	1.4	8,280	6.8	36	1.7	21,500	5.9	
700,000 to 799,999	7	0.7	4,830	4.0	22	1.0	14,900	4.1	
800,000 to 899,999	_ 2	0.2	1,540	1.3	23	1.1	17,700	4.9	
900,000 to 999,999	_ 5	0.5	4,190	3.4	13	0.6	11,000	3.0	
1,000,000 to 1,499,999	7	0.7	7,870	6.5	18	0.8	19,100	5.3	
1,500,000 to 1,999,999	_ 2	0.2	3,180	2.6	14	0.6	22,300	6.2	
2,000,000 to 2,499,999	_ 2	0.2	3,920	3.2	7	0.3	14,600	4.1	
2,500,000 and more	_ 1	0.1	2,860	2.4	6	0.3	18,400	5.1	
Total	976	100	122,000	100	2,157	100	361,000	100	
		So	uth			W	est		

	South West							
			Quantity ¹				Quantity ¹	
Size range	Number of	Percentage	(thousand	Percentage	Number of	Percentage	(thousand	Percentage
(metric tons)	operations	of total	metric tons)	of total	operations	of total	metric tons)	of total
Less than 25,000	182	17.6	2,040	0.8	405	21.8	3,770	0.7
25,000 to 49,999	114	11.0	3,890	1.4	242	13.0	8,040	1.5
50,000 to 99,999	177	17.0	11,500	4.2	284	15.3	18,300	3.5
100,000 to 199,999	163	15.7	21,000	7.8	286	15.4	37,400	7.2
200,000 to 299,999	91	8.8	20,000	7.4	161	8.7	35,800	6.9
300,000 to 399,999	89	8.6	28,400	10.5	97	5.2	30,100	5.8
400,000 to 499,999	35	3.4	14,000	5.2	66	3.5	26,700	5.1
500,000 to 599,999	36	3.5	18,000	6.6	58	3.1	28,500	5.5
600,000 to 699,999	18	1.7	10,400	3.8	43	2.3	25,400	4.9
700,000 to 799,999	27	2.6	18,300	6.8	33	1.8	22,500	4.3
800,000 to 899,999	18	1.7	13,600	5.0	34	1.8	26,000	5.0
900,000 to 999,999	15	1.4	12,900	4.8	20	1.1	17,200	3.3
1,000,000 to 1,499,999	46	4.6	49,300	18.2	62	3.3	71,100	13.6
1,500,000 to 1,999,999	11	1.1	16,700	6.2	29	1.6	45,100	8.7
2,000,000 to 2,499,999	6	0.6	12,200	4.5	14	0.8	28,400	5.5
2,500,000 and more	7	0.7	18,400	6.8	27	1.3	96,500	18.5
Total	1,035	100	271,000	100	1,861	100	521,000	100

¹Data 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 2005, BY GEOGRAPHIC DIVISION AND METHOD OF TRANSPORTATION $^{\rm I}$

(Thousand metric tons)

					Not	Not	
Region/division	Truck	Rail	Water	Other	transported	specified	Total
Northeast:							
New England	17,600			145	3,220	31,100	52,100
Middle Atlantic	28,600	92	1,080	389	2,830	36,400	69,500
Midwest:	_						
East North Central	77,600	2,470	2,130	891	11,200	131,000	225,000
West North Central	41,100	1,080	1,620	130	6,870	83,800	135,000
South:	_						
South Atlantic	57,200	2,060	828	41	3,980	34,900	99,000
East South Central	19,600	529	4,920	47	2,460	20,600	48,200
West South Central	46,900	1,010	34		10,100	65,200	123,000
West:	_						
Mountain	78,500	1,500		87	17,000	181,000	278,000
Pacific	131,000	3,200	6,320	1,100	23,000	78,200	242,000
Total	498,000	11,900	16,900	2,830	80,700	663,000	1,270,000
7							

⁻⁻ Zero.

TABLE 10 NUMBER OF CONSTRUCTION SAND AND GRAVEL OPERATIONS AND PROCESSING PLANTS IN THE UNITED STATES IN 2005, BY GEOGRAPHIC DIVISION

		Mining op	erations on land			
Region/division	Stationary	Portable	Stationary and portable	No plants or unspecified	Dredging operations	Total active operations
Northeast:				-		
New England	181	212	48	29		470
Middle Atlantic	190	202	43	36	35	506
Midwest:						
East North Central	482	416	94	65	103	1,160
West North Central	264	408	35	49	241	997
South:						
South Atlantic	110	52	14	49	109	334
East South Central	115	23	8	12	57	215
West South Central	205	80	22	48	131	486
West:						
Mountain	384	590	93	117	17	1,201
Pacific ¹	322	198	71	37	32	660
Total	2,253	2,181	428	442	725	6,029

⁻⁻ Zero.

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

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

 ${\it TABLE~11}\\ {\it NUMBER~OF~CONSTRUCTION~SAND~AND~GRAVEL~OPERATIONS~AND~PROCESSING~PLANTS}\\ {\it IN~THE~UNITED~STATES~IN~2005,~BY~STATE}\\$

		mining op	erations on land	No plente e:	Dradaina	Total active
State	Stationary	Portable	Stationary and portable	No plants or unspecified	Dredging operations	operations
Alabama	44	5	1	diispecified 6	12	68
Alaska ¹	15	16	3	5	5	44
Arizona	94	81	29	10	5	219
Arkansas	34	10	1	2	8	55
California	189	84	32	16	16	337
Colorado	65	133	15	18	6	237
Connecticut	28	22	10	2		62
Delaware	3	1		1	3	8
Florida	16	5	1	2	35	59
Georgia	13	1	1	1	25	41
Hawaii	2	4		1		7
Idaho	30	82	4	17	4	137
Illinois	52	27	12	5	38	134
Indiana	86	21	16	8	23	154
Iowa	38	51	4	3	36	132
Kansas	17	28	1	11	56	113
Kentucky	10		3	1	9	23
Louisiana	19	9	1	8	56	93
Maine	51	71	9	15		146
Maryland	22	4	3	8	3	4(
Massachusetts	56	28	8	1	<i></i>	93
Michigan	137	167	34	29	11	378
	103	150	19	12	6	290
Minnesota Mississinni	41	8	19	3	22	290 75
Mississippi Missouri	31	9	7		32	79
Missouri	53	70	8	14		145
Montana Nebraska	13	16		6		145
	42	54	12		110	
Nevada Navy Hammahina	19	43	12	11 2		119 74
New Hampshire	28	8	3			56
New Jersey					17	
New Mexico	33	51	5 27	18		107
New York	100	173		27	9	336
North Carolina	23	21	5	19	15	83
North Dakota	29	75	1	1		106
Ohio	109	40	16	8	30	203
Oklahoma	19	9	3	8	40	79
Oregon	43	25	10	6	4	88
Pennsylvania	62	21	13	9	9	114
Rhode Island	9	6	2	1		18
South Carolina	10	9		5	17	41
South Dakota	33	79	3	16	1	132
Tennessee	20	10	3	2	14	49
Texas	133	52	17	30	27	259
Utah	52	70	14	14		150
Vermont	18	42	9	8		77
Virginia	21	9	4	13	9	56
Washington	73	69	26	9	7	184
West Virginia	2	2			2	6
Wisconsin	98	161	16	15	1	291
Wyoming	15	49	6	15	2	87
Total Zero.	2,253	2,181	428	442	725	6,029

⁻⁻ Zero.

¹An 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 $^{\rm I}$

		2004			2005			
	Quantity			Quantity				
	(thousand	Value	Unit	(thousand	Value	Unit		
Region/division	metric tons)	(thousands)	value	metric tons)	(thousands)	value		
Northeast:								
New England	148	\$817	\$5.52	225	\$1,870	\$8.30		
Middle Atlantic	108	645	5.97	76	370	4.87		
Midwest:	_							
East North Central	840	3,300	3.93	233	1,110	4.76		
West North Central	553	3,800	6.87	820	5,240	6.40		
South:	_							
South Atlantic	402	1,940	4.83	404	2,140	5.31		
East South Central	44	200	4.55	27	180	6.67		
West South Central	18	100	5.56	5	35	7.00		
West:	_							
Mountain	778	3,390	4.36	416	1,920	4.62		
Pacific ²	1,330	7,590	5.73	1,550	10,900	7.02		
Total or average	4,220	21,800	5.17	3,750	23,700	6.33		
1-	1,220	21,000	0.17	3,750	23,700			

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

²Includes Alaska.

TABLE 13 RECYCLED ASPHALT CONCRETE SOLD OR USED BY PRODUCERS IN THE UNITED STATES, BY ${\rm STATE}^1$

		2004		2005				
	Quantity	Quantity			Quantity			
	(thousand	Value	Unit	(thousand	Value	Unit		
State	metric tons)	(thousands)	value	metric tons)	(thousands)	value		
Alabama				W	W	\$6.67		
Alaska	56	\$343	\$6.13	W	W	9.40		
Arizona	139	608	4.37	W	W	7.00		
California	1,100	6,200	5.65	1,220	8,460	6.91		
Colorado	364	1,810	4.98	87	521	5.99		
Connecticut	15	126	8.40	7	49	7.00		
Idaho	60	218	3.63	16	69	4.31		
Illinois	234	980	4.19	38	166	4.37		
Indiana				27	147	5.44		
Iowa	17	81	4.76	25	165	6.60		
Kansas		9	9.00	9	99	11.00		
Louisiana				W	W	7.72		
Maine	78	335	4.29	88	697	7.92		
Maryland	86	380	4.42	W	W	4.99		
Massachusetts		100	4.35	16	164	10.25		
Michigan	256	635	2.48	126	618	4.90		
Minnesota	519	3,600	6.93	733	4,800	6.55		
Mississippi		120	5.45					
Montana				21	78	3.71		
Nebraska				10	40	4.00		
Nevada		11	5.50	W	W	5.37		
New Hampshire				36	151	4.19		
New Mexico				W	W	6.16		
New York	108	645	5.97	76	370	4.87		
North Carolina	210	985	4.69	197	924	4.69		
North Dakota	4	14	3.50	W	W	4.08		
Ohio	6	10	1.67					
Oklahoma	18	100	5.56					
Oregon	86	645	7.50	155	1,330	8.61		
Rhode Island	23	224	9.74	W	W	11.08		
South Carolina	99	490	4.95	111	662	5.96		
South Dakota		100	9.09	28	82	2.93		
Tennessee	23	80	3.48					
Utah	205	697	3.40	W	W	3.41		
Vermont		33	3.30	10	62	6.20		
Virginia	8	84	10.50	W	W	10.12		
Washington	87	407	4.68	128	699	5.46		
Wisconsin	344	1,680	4.88	41	176	4.29		
Wyoming	8	42	5.25	16	183	11.44		
Total or average	4,220	21,800	5.17	3,750	23,700	6.33		

Total or average 4,220 21,800 5.17 3,750 W Withheld to avoid disclosing company proprietary data; included in "Total." -- Zero.

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

TABLE 14 RECYCLED CEMENT CONCRETE SOLD OR USED BY PRODUCERS IN THE UNITED STATES, BY GEOGRAPHIC DIVISION $^{\rm I}$

	2004			2005			
	Quantity			Quantity			
	(thousand	Value	Unit	(thousand	Value	Unit	
Region/division	metric tons)	(thousands)	value	metric tons)	(thousands)	value	
Northeast:							
New England	151	\$563	\$3.73	108	\$752	\$6.96	
Middle Atlantic	249	1,820	7.31	106	585	5.52	
Midwest:	-						
East North Central	993	5,250	5.29	1,300	7,180	5.53	
West North Central	620	3,690	5.95	1,040	5,280	5.05	
South:	-						
South Atlantic	306	1,640	5.37	156	1,150	7.39	
East South Central				1	2	2.00	
West South Central	22	100	4.55	22	148	6.73	
West:	-						
Mountain	358	1,990	5.54	548	2,390	4.36	
Pacific ²	1,380	8,920	6.48	1,320	9,580	7.24	
Total or average	4,080	24,000	5.88	4,610	27,100	5.87	

^rRevised. -- Zero.

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

²Includes Alaska.

TABLE 15 RECYCLED CEMENT CONCRETE SOLD OR USED BY PRODUCERS IN THE UNITED STATES, BY ${\rm STATE}^1$

		2004	2005				
	Quantity			Quantity			
	(thousand	Value	Unit	(thousand	Value	Unit	
State	metric tons)	(thousands)	value	metric tons)	(thousands)	value	
Alaska				W	W	\$5.65	
Arizona	3	\$9	\$3.00	98	\$274	2.80	
California	1,140	7,300	6.46	1,070	8,040	7.49	
Colorado	306	1,760	5.76	200	1,240	6.22	
Connecticut	3	27	9.00	3	25	8.33	
Hawaii				W	W	6.80	
Idaho	- 11	49	4.45	(2)	(2)	2.22	
Illinois	286	1,540	5.37	354	2,050	5.80	
Indiana	15	80	5.33	91	485	5.33	
Iowa	_ 24	138	5.75	58	435	7.50	
Kansas	3	21	7.00	W	W	9.56	
Maine	3	18	6.00	W	W	5.63	
Maryland	241	1,350	5.58	W	W	5.47	
Massachusetts	131	451	3.44	77	568	7.38	
Michigan	520	2,710	5.21	688	3,880	5.64	
Minnesota		3,490	6.11	970	4,690	4.84	
Mississippi				1	2	2.00	
Missouri				2	14	7.00	
Montana	_ 1	6	6.00	35	117	3.34	
Nebraska				4	35	8.75	
Nevada	20	111	5.55	W	W	2.17	
New Mexico				W	W	5.23	
New York	249	1,820	7.31	106	585	5.52	
North Carolina	13	130	10.00	W	W	10.00	
North Dakota				W	W	8.00	
Ohio	52	361	6.94	25	159	6.36	
Oregon	21	129	6.14	40	258	6.45	
Rhode Island	_ 7	48	6.86				
South Carolina	_ 2	15	7.50	W	W	10.60	
South Dakota	23	44	1.91				
Texas		100	4.55	22	148	6.73	
Utah		47	2.94	1	3	3.00	
Vermont		19	2.71	20	115	5.75	
Virginia	50	154	3.08	W	W	8.50	
Washington	221	1,490	6.75	182	1,120	6.13	
Wisconsin	121	567	4.69	139	598	4.30	
Wyoming				W	W	6.13	
Total or average	4,080	24,000	5.88	4,610	27,100	5.87	

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

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

²Less than ½ unit.

 ${\it TABLE~16} \\ {\it U.S.~EXPORTS~OF~CONSTRUCTION~SAND~AND~GRAVEL~IN~2005,~BY~COUNTRY}^{I}$

(Thousand metric tons and thousand dollars)

	Sar	ıd	Grav	vel
		Value,		Value,
Country or Territory	Quantity	f.a.s. ²	Quantity	f.a.s. ²
North America:				
Canada	64	4,590	343	3,260
Guatemala	(3)	77		
Mexico	9	2,170	3	402
Panama		326	(3)	12
Other ⁴	6	572	7	232
Total	81	7,730	353	3,900
South America:				
Brazil	3	692		
Colombia	1	136		
Peru	(3)	47		
Venezuela	1	463		
Other ⁵	(3)	243		
Total	5	1,580		
Europe:				
Belgium	(3)	125		
Denmark	1	396		
Finland	(3)	24	1	71
France	(3)	39		
Germany	1	1,030		
Norway	(3)	3	8	459
Sweden	(3)	15	1	18
United Kingdom	1	471	(3)	72
Other ⁶	4	1,160	4	138
Total	7	3,270	14	758
Asia:				
China	1	333	(3)	5
Japan	(3)	154	(3)	14
Korea, Republic of	(3)	64	(3)	42
Taiwan	34	6,300	14	69
Other ⁷	1	508		
Total	36	7,350	15	130
Oceania, other ⁸	1	311		
Middle East, other ⁹	(3)	128	(3)	10
Africa, other ¹⁰	7	2,990		
Grand total	137	23,400	382	4,800

⁻⁻ Zero.

Source: U.S. Census Bureau.

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

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

³Less than ½ unit.

⁴Includes Anguilla, Aruba, The Bahamas, Barbados, Bermuda, British Virgin Islands, Cayman Islands, Costa Rica, the Dominican Republic, El Salvador, Grenada, Guadeloupe, Haiti, Honduras, Jamaica, the Netherlands Antilles, St. Lucia, Trinidad and Tobago, and Turks and Caicos Islands.

⁵Includes Argentina, Chile, and Ecuador.

⁶Includes Austria, Estonia, Ireland, Italy, Luxembourg, the Netherlands, Poland, Romania, Russia, Spain, Switzerland, and Turkey.

⁷Includes Afghanistan, Hong Kong, India, Indonesia, Japan, Malaysia, Pakistan, Singapore, and Thailand.

⁸Includes Australia, New Zealand, and Palau.

⁹Includes Israel, Kuwait, Lebanon, Qatar, and the United Arab Emirates.

 $^{^{10}\}mbox{Includes}$ Algeria, Angola, Egypt, Nigeria, St. Helena, Tunisia, and Zaire.

TABLE 17 U.S. IMPORTS FOR CONSUMPTION OF CONSTRUCTION SAND AND GRAVEL, BY COUNTRY $^{\rm I}$

(Thousand metric tons and thousand dollars)

	200-	4	200)5
		Value,		Value,
Country or Territory	Quantity	c.i.f. ²	Quantity	c.i.f. ²
Antigua and Barbuda	34	441	19	268
Australia	33	1,170	17	1,270
Bahamas, The	170	1,890	213	3,570
Canada	3,910	41,900	4,310	50,200
China	4	1,630	84	10,400
Dominica		453	4	84
France	(3)	118	1	211
Japan		551	2	468
Mexico	548	3,690	2,460	14,000
Philippines	1	145	(3)	118
Other ⁴	35	4,890	53	6,140
Total	4,760	56,900	7,160	86,800

¹Data are rounded to no more than three significant digits; may not add to totals shown. ²Cost, 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.

Source: U.S. Census Bureau.

³Less than 1/2 unit.

⁴Includes Belgium, the British Virgin Islands (2004), Dominican Republic (2005), Germany Haiti, Malaysia, Montserrat (2005), the Netherlands Antilles, New Zealand, Norway, Peru, Poland, Republic of South Africa, Sweden, and the United Kingdom.

FIGURE 1 PRODUCTION OF CONSTRUCTION SAND AND GRAVEL IN THE UNITED STATES IN 2005, BY GEOGRAPHIC DIVISION

