



2007 Minerals Yearbook

SAND AND GRAVEL, CONSTRUCTION

SAND AND GRAVEL, CONSTRUCTION

By Wallace P. Bolen

Domestic survey data and tables were prepared by Cheryl J. Crawford and Marc A. Angulo, statistical assistants.

Construction sand and gravel is a traditional basic building material and is one of the earliest materials used by humanity for dwellings and later for outdoor areas such as paths, roadways, and other constructs. Sand and gravel is very accessible and is widely used throughout the United States and the world. As sand and gravel became less available owing to resource restraint or economic conditions in some locales, builders began to crush bedrock to produce a manufactured sand and gravel often referred to as crushed stone. 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.

All percentages in this report were computed by using unrounded data. A total of 1.23 billion metric tons (Gt) of construction sand and gravel was produced in the United States in 2007. This was a decrease of about 87 million metric tons (Mt), or 6.6%, from the record-high production of 2006. This is the first decrease in production since 1991 and reflects primarily falling demand from home builders and secondarily a slowdown in road and highway projects.

Strong activity in the commercial and public sectors partially offset the effects of the downturn in residential construction (Aggregates Manager, 2007d). Total construction value put in place in the United States decreased by 2.5% in 2007, following a gain of about 5.3% in 2006. According to the U.S. Commerce Department, this decrease was led by residential construction, which was down 17.5% from 2006 to 2007. On the positive side, nonresidential construction was up 17.5% from 2006 to 2007 and this increase helped to mitigate the huge loss in housing construction (Aggregates Manager, 2008b). The value of existing homes and prices for new homes also declined in 2007 (Aggregates Manager, 2008a). Despite greater dollar amounts allocated to highway funds in many States, spectacular increases in asphalt and other material costs reduced the miles of road projects that could be completed. Because governmental revenues are often tied to real estate values, funding for road and other construction in most areas of the United States decreased and exacerbated the effects related to the increased costs for asphalt and other construction materials.

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 the United States in 2007, 6,668 construction sand and gravel operations were active (table 6A), 594 operations were idle, and 95 operations either were reported to be closed or

were assumed to be permanently shut down. Of the 6,668 active operations, 77 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, 34 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. The 6,668 operations with 8,662 active sand and gravel pits were owned by 4,084 companies or government agencies operating in all 50 States. A review of the data provided by the U.S. Mine Safety and Health Administration revealed 338 previously unaccounted for sand and gravel locations that reported at least 2,000 employee hours of activity within the year. Information was gathered from these newly recognized operations, and they were included in this report. In 2007, of the 6,668 active operations surveyed, 3,372, or 50.6%, responded to the USGS canvass. Their total production represented 57.7% of the 1.23 Gt produced in 2007.

Foreign trade of construction sand and gravel continued to decline from the record levels seen in 2006. According to the U.S. Census Bureau, exports in 2007 decreased 29% to 365,000 metric tons (t), but the value increased by 19% to \$28.7 million compared with the 2006 results (tables 1, 14). Imports decreased by about 11% to 4.42 Mt, and the value decreased by about 7% to \$87.7 million (tables 1, 15). 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 1.24 Gt.

Production

Of the four major geographic regions, the West again led the Nation in the production of construction sand and gravel in 2007 with 502 Mt, or 41% of the U.S. total (table 2). The West was followed by the Midwest with 327 Mt, or 27%; the South with 285 Mt, or 23%; and the Northeast with 119 Mt, or 10%. Compared with that of 2006, production decreased in all four regions in 2007.

Of the nine geographic divisions, the Mountain division led the Nation in the production of construction sand and gravel in 2007 with 290 Mt, or 23% of the U.S. total, and was followed by the Pacific with 212 Mt, or 17%, and the East North Central with 197 Mt, or 16% (table 2). Production decreased in all nine divisions compared with that of 2006. The largest decrease was in the East South Central, 19%, followed by the South Atlantic,

12%; Pacific, 10%; Middle Atlantic, 9%; West North Central, 8%; New England, 5%; Mountain, 4%; West South Central, 2%; and East North Central, 1%.

A review of the production of construction sand and gravel for consumption by size of operation indicates that about 41% of the total production came from 2,440 operations that reported between 100,000 and 499,999 metric tons per year (t/yr); 27% came from 223 operations that reported 1 million metric tons per year (Mt/yr) production or more; and 22% of the construction sand and gravel produced came from 436 operations that reported between 500,000 and 999,999 t/yr. The largest number of operations (3,569, or 54% of total operations) produced less than 100,000 t/yr (10% of the total production) (table 6A).

In 2007, construction sand and gravel was produced in every State (table 3). The leading States were, in descending order of tonnage, California, Texas, Arizona, Michigan, Minnesota, Colorado, Washington, Utah, Ohio, and Wisconsin. The combined production of these 10 States represented about 51% of the national total. Production increased in just 13 States and decreased in the other 37 States compared with that of 2006. Production increases of greater than 10% were reported in 7 States—West Virginia (57.3%), Delaware (19.5%), Maine (17.9%), Montana (16.0%), Louisiana (14.1%), Michigan (13.9%), and Wyoming (11.2%). Production decreases of greater than 15% were recorded in 10 States—Mississippi (27.8%), New Jersey (25.0%), Florida (24.2%), Nevada (23.8%), Arkansas (18.4%), Missouri (17.3%), Alabama (17.0%), New Hampshire (16.4%), Tennessee (16.1%), and South Dakota (15.3%).

In 2007, the leading domestic commercial producers of construction sand and gravel were, in descending order of production, Oldcastle Materials, Inc.; CEMEX S.A.B. de C.V.; Vulcan Materials Co.; Lehigh Hanson; MDU Resources Group, Inc./Knife River Corporation; Holcim/Aggregate Industries; Lafarge North America, Inc.; Martin Marietta Aggregates; Granite Construction Co., Inc; and Fisher Industries, Inc. The combined production of these 10 companies was about 281 Mt, or about 23% of the national total.

Some information about the production of construction sand and gravel in foreign countries can be found in the U.S. Geological Survey 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 asphalt and cement consumption.

Mergers and acquisitions activity in the construction sand and gravel industry increased in 2007 compared with that of 2006. There were several acquisitions involving leading aggregate producers, as the industry continued its consolidation. There were also many smaller acquisitions during the year, and the total number of operating companies expanded in 2007 compared with those of 2006, which means there are plenty of operations available for more consolidation in the coming years. Some of the significant changes in ownership in the sand and gravel industry are listed below.

Early in 2007, Rinker Materials Group purchased Walling Sand and Gravel Co. of Salem, OR, and JR & Sons Ready Mix of St. George, UT. Walling Sand and Gravel was the 14th

largest producer of sand and gravel in Oregon in 2007 in terms of total production volumes. JR & Sons Ready Mix was a small producer of sand and gravel but was attractive to Rinker mainly as a producer of ready-mixed concrete (Rock Products, 2007d).

Also in early 2007, National Lime and Stone Co. purchased the sand and gravel assets of J.P. Sand and Gravel Co. near Columbus, OH (Rock Products, 2007c). J.P. Sand and Gravel was ranked as the 38th largest sand and gravel producer in terms of total production volumes in Ohio in 2006. After combining these assets, National Lime and Stone improved to the 24th largest sand and gravel producer in Ohio in 2007.

In March 2007, the 7th largest producer in terms of total production volumes in the Nation, Lafarge, completed the purchase of Feltes Sand and Gravel Co. of Elburn, IL. This acquisition, coupled with the 2006 purchase of The Western Sand and Gravel Co., vaulted Lafarge into second place in the rankings of sand and gravel producers in Illinois for 2007. The sand and gravel operations, crushed stone quarries, and an Illinois River dock facility provide Lafarge with a network of aggregate facilities in Illinois (Rock Products, 2007b).

In April 2007, Trinity Industries, Inc., the second largest sand and gravel producer in terms of total production volumes in Texas in 2006, acquired the 30th largest producer in Texas, Armor Materials, Ltd. With the help of these newly acquired operations, Trinity became the largest producer of sand and gravel in Texas for 2007. Trinity also moved up to rank 18th among all producers in the United States in 2007 compared with 20th in 2006 (Aggregates Manager, 2007a).

In May 2007, HeidelbergCement AG, the German international construction materials conglomerate, agreed to purchase Hanson PLC of the United Kingdom for \$16 billion. Hanson operated various businesses in many countries and was the second largest producer of sand and gravel in terms of total production volumes in the United States in 2006 while Heidelberg was the 27th largest during the same period. Interestingly, after all the large mergers in 2007, Lehigh Hanson (the operating company in the United States) is now the fourth largest sand and gravel producer in the United States and produces sand and gravel in 15 States (Aggregates Manager, 2007b).

After about 6 months of speculation and discussions, CEMEX was able to convince the majority of shareholders of Rinker Group, Ltd., to agree to a merger of the two companies in the spring of 2007. Much of Rinker's business was in the United States, although the company was based in Australia and had operations there as well. Rinker was the third largest producer of sand and gravel while CEMEX was the eighth largest in terms of total production volumes in the United States in 2006. The amalgamated companies in 2007 form the second largest producer of sand and gravel, failing to overtake Oldcastle by just a small margin. CEMEX now produces sand and gravel in 13 States and strongly dominates the Arizona market even after disposing of some Arizona operations as required by U.S. regulatory agencies (Aggregates Manager, 2007a).

Following a February announcement and many months of governmental reviews and approvals, Vulcan Materials was able to finalize the purchase of Florida Rock Industries, Inc., in November. This was one of the larger acquisitions in

2007; it was valued at \$4.2 billion and included more than 2 Gt of additional reserves for Vulcan Materials. With this purchase, Vulcan Materials rises from the fourth to the third largest producer of sand and gravel in terms of total production volumes in the United States. Additionally, Vulcan Materials further solidifies its position as the largest aggregates producer in the United States (Aggregates Manager, 2008c).

In August 2007, Holcim/Aggregate Industries, the 6th largest sand and gravel producer in terms of total production volumes in the United States, purchased Hardaway Concrete Co., Inc., which was the 18th largest sand and gravel producer in South Carolina in 2006. This purchase marks the first sand and gravel operations for Holcim/Aggregate Industries in South Carolina (Aggregates Manager, 2007c). In November, Holcim/Aggregate Industries announced that they had taken a large minority position in Lattimore Materials Co., L.P. In 2007, Lattimore, with operations in Oklahoma and Texas, was the 34th largest producer of sand and gravel in the United States, the 2d largest in Oklahoma, and the 7th largest in Texas. Lattimore is one of the largest ready-mixed concrete producers in Texas and has extensive rail facilities and a large truck fleet (Aggregates Manager, 2008c).

Late in 2007, Granite Construction Co. purchased the remaining shares of Wilder Construction Co. that it did not already own. Wilder Construction operated in the Puget Sound area and in Alaska. Wilder Construction was ranked in the top five producers of sand and gravel in terms of total production volumes in Alaska in 2007. Wilder Construction and Granite Construction received the highest percentage of their revenues from construction activity rather than from sand and gravel mining (Rock Products, 2007a).

Consumption

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 1.23 Gt of construction sand and gravel produced in 2007, 56.8% was for unspecified uses (tables 4-5). Of the remaining 533 Mt, 44.3% was used as concrete aggregate; 23.6% was used for road base and coverings and road stabilization; 13.8%, for construction fill; 11.7%, for asphaltic concrete aggregate and other bituminous mixtures; 2.6%, for plaster and gunite sands; 1.0%, for concrete products, such as blocks, bricks, and pipes; and the remaining 3% was used 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 specific uses in 2006, about 7.1% less of the sand and gravel production was reported for specific uses in 2007, and this change must be taken into account when analyzing changes in market consumption in light of the total decrease in U.S. production of 6.6%.

Additional information regarding production or consumption of construction sand and gravel by major uses in each State and State district can be found in the U.S. Geological Survey 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 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. 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 asphalt and cement concretes because the recycling of these materials is done mostly by the construction or demolition companies, and those companies are not currently surveyed by the USGS.

Asphalt Concrete.—In 2007, 6.27 Mt of asphalt concrete valued at \$51.9 million was recycled by 210 sand and gravel companies in 35 States; this quantity represented a slight increase compared with that of 2006 (tables 10-11). The leading States were, in descending order of tonnage recycled, California, Minnesota, and Arizona. The leading companies were, in descending order of tonnage produced, All American Aggregate Co.; U.S. Crushing, Inc.; Granite Construction; Lane Construction Co.; and Vulcan Materials.

Cement Concrete.—In 2007, about 6.9 Mt of cement concrete valued at \$44 million was recycled by 210 companies in 38 States; this tonnage represented a 48.3% increase compared with that of 2006 (tables 12-13). The leading States were, in descending order of tonnage recycled, Arizona, California, and Wisconsin. The leading companies were, in descending order of quantity produced, U.S. Crushing, Inc.; A.W. Oakes & Sons, Inc.; Vulcan Materials; Kalin Construction Co.; and Holcim/Aggregates Industries.

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 451 Mt, or 37% of the total U.S. production of construction sand and gravel in 2007. Of this total, 80% was transported by truck; 3%, by waterway; and 1%, by rail (table 7). A significant amount of construction sand and gravel produced (about 15%) was not transported and was used at or near the production site, probably for asphalt or cement concrete 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 2007 average unit price increased by about 8.3% to \$7.01 per metric ton compared with that of 2006 (table 4). By use, the unit prices varied from a high of \$15.58 per metric ton for filtration to a low of \$4.39 per metric ton for fill. The largest increases in unit price were recorded for filtration (87.5%), railroad ballast (69.8%), and golf course maintenance (49.6%). The largest decreases were for concrete products (14.6%) and plaster and gunite sands (6.5%).

The States having the highest unit price per metric ton were, in descending order, Rhode Island (\$12.94), Hawaii (\$12.11), California (\$10.79), Maryland (\$9.78), Virginia (\$9.35), New Jersey (\$9.26), and Louisiana (\$9.14). The States having the lowest unit price per metric ton were, in ascending order, North Dakota (\$3.29), South Dakota (\$3.62), Michigan (\$4.08), Kansas (\$4.65), and Wisconsin (\$4.86). The unit value decreased in 8 States and increased in the other 42 States (table 3). The States having the largest increases in unit value were, in descending order, Maine (27.5%), New York (23.6%), Rhode Island (22.2%), Montana (21.3%), and Alabama (21.2%). The States having the largest decreases in unit value were, in descending order, Delaware (7.4%), Hawaii (6.1%), New Hampshire (4.8%), and Michigan (4.1%).

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 5.3% to 107,000 t compared with that of 2006, but the value increased by about 16.8% to \$23.0 million (table 14). Canada, which was the leading destination, received about 30% of the total sand, followed by Taiwan (21%) and Mexico (4%). Exports of construction gravel decreased by 35.8% to 258,000 t compared with those of 2006, but the value increased by about 30% to \$5.7 million. Canada, which was the

leading destination, received about 69% of the total gravel. The average value of the sand and gravel exports in 2007 was \$78.76 per metric ton; this was up from \$46.73 per metric ton in 2006. These high values may have been reached because of some higher grade sand and gravel being misclassified as construction sand and gravel.

In 2007, imports of construction sand and gravel decreased by about 11% to 4.42 Mt, and the value decreased by about 7% to \$87.7 million (table 15). Canada was the leading source of imported construction sand and gravel with 81% of the total. The Bahamas supplied about 10% of the imports, and Mexico supplied about 6%. The average value of the sand and gravel imports in 2007 was \$19.85 per metric ton, up from \$18.98 per metric ton in 2006.

Outlook

Consumption of construction sand and gravel in 2008 is expected to decrease about 15% compared with that of 2007. Data from the 2008 USGS quarterly survey of U.S. aggregates producers indicate about an 18% decrease in sales of sand and gravel compared with those of the first three quarters of 2007, based on a limited sample of sand and gravel producers in the United States. Most regions of the United States also will probably have decreased sales in the second half of 2008, and demand will likely slip compared with 2007 levels in response to decreases in the housing market and lower revenues to local and State governments.

After price increases of about 10% as recorded in 2006 and 8% in 2007, analysts expected construction sand and gravel f.o.b. prices to continue to increase for the full 12 months of 2008 but by a smaller margin. Slumping sales in the housing market and falling fuel costs should lessen upward pressures on sand and gravel prices. However, price increases are more likely to continue in and near metropolitan areas because, as nearby resources are used up, more aggregates will be transported from distant sources with the accompanying extra fuel cost.

For 2008, the construction sand and gravel industry was expected to see less consolidation as companies experience lower sales and decreased revenues. It was expected that some layoffs would also take place as producers scale back production and operating hours as they await a rebound in demand. 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 average 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.

References Cited

- Aggregates Manager, 2007a, Mergers & acquisitions: Aggregates Manager, v. 12, no. 6, June, p. 10-11.
- Aggregates Manager, 2007b, Mergers & acquisitions: Aggregates Manager, v. 12, no. 7, July, p. 12.
- Aggregates Manager, 2007c, Mergers & acquisitions: Aggregates Manager, v. 12, no. 9, September, p. 10.
- Aggregates Manager, 2007d, Non-residential sectors continue to be strong despite sharp residential declines: Aggregates Manager, v. 12, no. 8, August, p. 15.
- Aggregates Manager, 2008a, Aggman outlook: Aggregates Manager, v. 13, no. 2, February, p. 14-15.
- Aggregates Manager, 2008b, Aggman outlook: Aggregates Manager, v. 13, no. 3, March, p. 16-17.
- Aggregates Manager, 2008c, Mergers & acquisitions: Aggregates Manager, v. 13, no. 1, January, p. 10.
- Rock Products, 2007a, Granite buys remaining shares of Wilder: Rock Products, v. 110, no. 12, December, p. 15.
- Rock Products, 2007b, Lafarge buys Feltes in Illinois: Rock Products, v. 110, no. 4, April, p. 4.
- Rock Products, 2007c, National Lime & Stone buys J.P. Sand & Gravel: Rock Products, v. 110, no. 2, February, p. 4.
- Rock Products, 2007d, Rinker buys in three States: Rock Products, v. 110, no. 2, February, p. 4.

GENERAL SOURCES OF INFORMATION

U.S. Geological Survey Publications

- Crushed Stone and Sand and Gravel. Mineral Industry Surveys, quarterly.
- Directory of Principal Crushed Stone Producers. Mineral Industry Surveys, annual.
- Directory of Principal Sand and Gravel Producers. Mineral Industry Surveys, annual.
- Directory of State Publications Listing Crushed Stone, Sand and Gravel Producers, Mineral Industry Surveys, periodic.
- Natural Aggregate—Building America's Future. Circular 1110, 1990.

- Natural Aggregates of the Conterminous United States. Bulletin 1594, 1988.
- Natural Aggregates—Foundation of America's Future. Fact Sheet FS 144-97, 1997.
- Sand and Gravel. Ch. in United States Mineral Resources, Professional Paper 820, 1973.
- Sand and Gravel, Construction. Ch. in Mineral Commodity Summaries, annual.
- Stone, Crushed. Ch. in Mineral Commodity Summaries, annual.
- Stone, Crushed. Ch. in Minerals Yearbook, annual.

Other

- Aggregates Handbook. National Stone Association, 1991. Aggregates Manager.
- Aggregates—Sand, Gravel, & Crushed Rock Aggregates for Construction Purposes. The Geological Society [United Kingdom], 1985.
- Bates, R.L., and Harben, P.W., 1984, Geology of Nonmetallics: London, United Kingdom, Metal Bulletin Inc., 357 p. Canadian Aggregates.
- Concrete Manual—A Water Resources Publication. U.S. Department of the Interior, Bureau of Reclamation, 1975.
- Earth Manual—A Water Resources Publication. U.S. Department of the Interior, Bureau of Reclamation, 1974.
- Handbook of Concrete Aggregates. Dolar-Mantuani, L. Noyes Publications, 1983.
- Industrial Minerals.
- Pit&Quarry.
- Quarry Management.
- Rock Products.
- Sand and Gravel. Ch. in Industrial Minerals and Rocks (7th ed.), Society for Mining, Metallurgy, and Exploration, Inc., 2006.
- Sand and Gravel. Ch. in Mineral Facts and Problems, U.S. Bureau of Mines Bulletin 675, 1985.
- Stone, Sand & Gravel Review.

TABLE 1
SALIENT U.S. CONSTRUCTION SAND AND GRAVEL STATISTICS¹

(Thousand metric tons and thousand dollars)

	2003	2004	2005	2006	2007
<u>Sold or used by producers:²</u>					
Quantity	1,160,000	1,240,000	1,280,000	1,320,000	1,230,000
Value	5,990,000	6,600,000	7,500,000	8,530,000 [†]	8,640,000
<u>Exports:</u>					
Quantity	1,770	677	519	515	365
Value	24,900	32,100	28,200	24,100	28,700
<u>Imports:</u>					
Quantity	4,410	4,760	7,160	4,960	4,420
Value	57,700	56,900	86,800	94,100	87,700

[†]Revised.

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

²Puerto 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 DIVISION¹

Region/division	2006				2007			
	Quantity (thousand metric tons)	Percentage of total	Value (thousands)	Percentage of total	Quantity (thousand metric tons)	Percentage of total	Value (thousands)	Percentage of total
<u>Northeast:</u>								
New England	54,600	4.1	\$396,000	4.6	51,700	4.2	\$421,000	4.9
Middle Atlantic	74,300	5.6	554,000	6.5	67,300	5.5	566,000	6.5
<u>Midwest:</u>								
East North Central	198,000	15.0	1,020,000	11.9	197,000	15.9	1,020,000	11.8
West North Central	141,000 [†]	10.7 [†]	639,000 [†]	7.5 [†]	130,000	10.6	630,000	7.3
<u>South:</u>								
South Atlantic	104,000	7.9	689,000 [†]	8.1	90,800	7.4	676,000	7.8
East South Central	57,900	4.4	341,000	4.0	46,800	3.8	290,000	3.4
West South Central	151,000	11.4	957,000	11.2	147,000	12.0	1,060,000	12.2
<u>West:</u>								
Mountain	303,000 [†]	23.0 [†]	1,860,000	21.8 [†]	290,000	23.5	1,970,000	22.8
Pacific	235,000 [†]	17.9 [†]	2,080,000	24.4 [†]	212,000	17.2	2,010,000	23.2
Total	1,320,000 [†]	100	8,530,000 [†]	100	1,230,000	100	8,640,000	100

[†]Revised.

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

TABLE 3
CONSTRUCTION SAND AND GRAVEL SOLD OR USED BY PRODUCERS IN
THE UNITED STATES, BY STATE¹

State	2006			2007		
	Quantity (thousand metric tons)	Value (thousands)	Unit value	Quantity (thousand metric tons)	Value (thousands)	Unit value
Alabama	20,100	\$96,000	\$4.78	16,700	\$96,500	\$5.79
Alaska	9,140 ^r	53,900 ^r	5.18	10,000	56,000	5.58
Arizona	94,100 ^r	662,000	7.05	85,800	652,000	7.60
Arkansas	11,100	73,600	6.61	9,080	66,300	7.31
California	153,000	1,520,000	9.96	134,000	1,450,000	10.79
Colorado	48,000	327,000	6.81	46,100	364,000	7.91
Connecticut	8,780	75,600	8.61	8,290	73,400	8.85
Delaware	2,790	22,400	8.02	3,330	24,700	7.43
Florida	40,000	266,000	6.64	30,300	231,000	7.62
Georgia	10,700 ^r	69,000 ^r	6.53	10,200	63,800	6.28
Hawaii	1,230	15,900	12.90	1,180	14,200	12.11
Idaho	23,800 ^r	117,000 ^r	4.92	24,700	129,000	5.22
Illinois	32,500	176,000	5.42	31,800	175,000	5.51
Indiana	29,300	153,000	5.24	28,100	153,000	5.43
Iowa	18,400 ^r	91,300 ^r	4.97	17,100	94,000	5.50
Kansas	12,100	50,000	4.15	10,700	49,600	4.65
Kentucky	10,100	54,400	5.39	9,070	48,300	5.33
Louisiana	23,300	188,000	8.07	26,600	243,000	9.14
Maine	10,400	62,400	5.98	12,300	93,900	7.63
Maryland	11,900	96,700	8.15	11,900	117,000	9.78
Massachusetts	17,600	134,000	7.58	15,600	139,000	8.90
Michigan	50,500	215,000	4.25	57,600	235,000	4.08
Minnesota	50,300	240,000	4.77	46,100	239,000	5.17
Mississippi	19,300	133,000	6.88	13,900	94,200	6.77
Missouri	17,000	92,100	5.43	14,000	77,400	5.51
Montana	13,700	95,300	6.95	15,900	134,000	8.43
Nebraska	13,100	62,000	4.74	13,400	70,600	5.28
Nevada	45,500	224,000	4.93	34,700	180,000	5.18
New Hampshire	9,500	61,600	6.48	7,940	49,000	6.17
New Jersey	20,900	192,000	9.17	15,700	145,000	9.26
New Mexico	18,400	157,000	8.51	18,300	157,000	8.55
New York	35,000	236,000	6.75	33,300	278,000	8.34
North Carolina	12,900	70,000	5.42	11,400	62,300	5.48
North Dakota	14,000	43,700	3.12	14,900	49,100	3.29
Ohio	46,300	289,000	6.24	40,800	271,000	6.65
Oklahoma	17,000	91,900	5.41	16,700	96,200	5.78
Oregon	23,800	175,000	7.36	21,200	163,000	7.70
Pennsylvania	18,400	126,000	6.84	18,300	143,000	7.80
Rhode Island	2,430	25,800	10.59	2,410	31,200	12.94
South Carolina	10,900	51,100	4.68	10,700	57,000	5.32
South Dakota	16,500 ^r	60,000 ^r	3.64	13,900	50,500	3.62
Tennessee	8,500	57,900	6.82	7,140	50,900	7.14
Texas	99,500	603,000	6.06	95,400	651,000	6.82
Utah	42,400 ^r	204,000 ^r	4.82	45,100	261,000	5.79
Vermont	5,810	37,300	6.42	5,140	34,100	6.65
Virginia	14,200	110,000	7.79	12,300	115,000	9.35
Washington	48,400	315,000	6.50	45,500	324,000	7.12
West Virginia	429	3,470	8.10	675	5,620	8.32
Wisconsin	39,600	182,000	4.60	38,200	186,000	4.86
Wyoming	17,200	74,600	4.35	19,100	95,800	5.02
Total or average	1,320,000	8,530,000 ^r	6.47	1,230,000	8,640,000	7.01

^rRevised.

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

TABLE 4
CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN THE UNITED STATES IN 2007,
BY MAJOR USE¹

Use	Quantity (thousand metric tons)	Value (thousands)	Unit value
Concrete aggregates (including concrete sand)	236,000	\$1,850,000	\$7.83
Plaster and gunite sands	13,600	110,000	8.31
Concrete products (blocks, bricks, pipe, decorative, etc.)	5,290	32,300	6.11
Asphaltic concrete aggregates and other bituminous mixtures	62,400	616,000	9.86
Road base and coverings	121,000	740,000	6.09
Road stabilization, cement	3,360	23,100	6.88
Road stabilization, lime	1,140	6,710	5.89
Fill	73,400	324,000	4.39
Snow and ice control	4,480	28,700	6.41
Railroad ballast	813	9,320	11.46
Roofing granules	157	1,770	11.28
Filtration	535	8,340	15.58
Golf course maintenance sand	601	8,110	13.49
Other miscellaneous uses	9,800	85,600	8.74
Unspecified: ²			
Actual	234,000	1,660,000	7.10
Estimated	466,000	3,140,000	6.73
Total or average	1,230,000	8,640,000	7.01

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 5
CONSTRUCTION SAND AND GRAVEL SOLD OR USED BY PRODUCERS IN THE UNITED STATES IN 2007, BY GEOGRAPHIC
DIVISION AND MAJOR USE¹

(Thousand metric tons and thousand dollars)

Region/division	Concrete aggregates (including concrete sand)		Plaster and gunitite sands		Concrete products (blocks, bricks, pipe decorative, etc.)		Asphaltic concrete aggregates and other bituminous mixtures		Road base and coverings ²	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Northeast:										
New England	5,980	57,200	34	354	129	717	2,660	36,200	5,650	41,200
Middle Atlantic	12,500	121,000	327	3,340	359	2,990	4,140	47,700	5,610	39,000
Midwest:										
East North Central	34,700	188,000	321	1,890	865	4,880	11,300	62,000	18,000	90,700
West North Central	14,400	74,300	421	2,620	379	3,640	4,830	35,000	20,700	70,700
South:										
South Atlantic	29,700	234,000	897	7,320	1,020	6,920	1,950	12,400	1,690	13,400
East South Central	19,900	121,000	423	3,300	201	1,540	2,730	21,300	1,400	7,370
West South Central	46,800	355,000	1,580	11,800	127	1,090	1,240	10,400	5,970	50,000
West:										
Mountain	32,000	275,000	3,910	25,300	2,050	9,000	15,000	163,000	42,700	255,000
Pacific	40,200	422,000	5,710	53,700	161	1,560	18,600	228,000	24,100	202,000
Total	236,000	1,850,000	13,600	110,000	5,290	32,300	62,400	616,000	126,000	770,000
	Fill		Snow and ice control		Railroad ballast		Other uses ³		Total	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Northeast:										
New England	3,160	16,100	787	7,120	24	276	33,300	262,000	51,700	421,000
Middle Atlantic	4,460	22,100	1,060	6,280	232	3,680	38,600	320,000	67,300	566,000
Midwest:										
East North Central	15,500	52,800	W	W	W	W	114,000	613,000	197,000	1,020,000
West North Central	5,340	16,500	433	2,160	88	873	83,600	424,000	130,000	630,000
South:										
South Atlantic	7,530	28,300	W	W	W	W	48,000	374,000	90,800	676,000
East South Central	1,800	5,190	7	54	--	--	20,300	130,000	46,800	290,000
West South Central	8,390	29,300	W	W	W	W	83,400	597,000	148,000	1,060,000
West:										
Mountain	14,600	67,600	523	5,040	193	1,840	179,000	1,170,000	290,000	1,970,000
Pacific	12,500	85,900	308	1,900	106	774	111,000	1,010,000	212,000	2,010,000
Total	73,400	324,000	4,480	28,700	814	9,320	711,000	4,900,000	1,230,000	8,640,000

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 6A
CONSTRUCTION SAND AND GRAVEL PRODUCTION IN THE UNITED STATES
IN 2007, BY REGION AND SIZE OF OPERATION

Size range (metric tons)	U.S. total			
	Number of operations	Percentage of total	Quantity ¹ (thousand metric tons)	Percentage of total
Less than 25,000	1,413	21.2	12,600	1.0
25,000 to 49,999	956	14.3	32,400	2.6
50,000 to 99,999	1,200	18.0	78,700	6.3
100,000 to 199,999	1,206	18.1	157,000	12.7
200,000 to 299,999	639	9.6	142,000	11.5
300,000 to 399,999	361	5.4	113,000	9.1
400,000 to 499,999	234	3.5	94,100	7.6
500,000 to 599,999	154	2.3	76,100	6.1
600,000 to 699,999	102	1.5	59,600	4.8
700,000 to 799,999	77	1.2	52,300	4.2
800,000 to 899,999	55	0.8	42,000	3.4
900,000 to 999,999	48	0.7	41,300	3.3
1,000,000 to 1,499,999	135	2.0	146,000	11.9
1,500,000 to 1,999,999	42	0.6	66,000	5.4
2,000,000 to 2,499,999	23	0.3	46,200	3.7
2,500,000 and more	23	0.3	72,800	5.9
Total	6,668	100	1,230,000	100

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

TABLE 6B
CONSTRUCTION SAND AND GRAVEL PRODUCTION IN THE UNITED STATES IN 2007, 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	276	27.2	2,450	2.1	491	21.5	4,400	1.4
25,000 to 49,999	175	17.2	5,880	4.9	380	16.7	12,900	3.9
50,000 to 99,999	201	19.8	12,900	10.8	445	19.5	29,200	9.0
100,000 to 199,999	176	17.3	22,900	19.3	434	19	56,100	17.2
200,000 to 299,999	82	8.1	18,100	15.2	194	8.5	43,100	13.2
300,000 to 399,999	36	3.5	11,200	9.4	123	5.4	38,600	11.9
400,000 to 499,999	19	1.9	7,550	6.3	66	2.9	26,700	8.2
500,000 to 599,999	16	1.6	7,870	6.6	50	2.2	24,600	7.6
600,000 to 699,999	10	1.0	5,840	4.9	23	1.0	13,300	4.1
700,000 to 799,999	7	0.7	4,740	4.0	14	0.6	9,450	2.9
800,000 to 899,999	3	0.3	2,310	1.9	12	0.5	9,080	2.8
900,000 to 999,999	3	0.3	2,600	2.2	9	0.4	7,680	2.4
1,000,000 to 1,499,999	9	0.9	9,790	8.2	28	1.2	29,600	9.1
1,500,000 to 1,999,999	2	0.2	2,840	2.4	4	0.2	6,180	1.9
2,000,000 to 2,499,999	1	0.1	2,020	1.7	4	0.2	7,870	2.4
2,500,000 and more	--	--	--	--	3	0.1	7,940	2.4
Total	1,016	100	119,000	100	2,280	100	327,000	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	182	15.5	1,710	0.6	464	21.1	4,010	0.8
25,000 to 49,999	119	10.1	3,920	1.3	282	12.8	9,780	1.9
50,000 to 99,999	184	15.7	12,300	4.3	370	16.8	24,300	4.8
100,000 to 199,999	221	18.9	28,800	10.1	375	17.0	48,800	9.7
200,000 to 299,999	146	12.4	32,500	11.0	217	9.9	48,600	9.7
300,000 to 399,999	78	6.7	24,800	8.4	124	5.6	38,800	7.7
400,000 to 499,999	67	5.7	26,900	9.1	82	3.7	32,900	6.6
500,000 to 599,999	38	3.2	18,700	6.4	50	2.3	24,900	5.0
600,000 to 699,999	26	2.3	15,400	5.4	43	2.0	25,100	5.0
700,000 to 799,999	19	1.6	12,900	4.4	37	1.7	25,200	5.0
800,000 to 899,999	16	1.4	12,200	4.1	24	1.1	18,400	3.7
900,000 to 999,999	14	1.2	12,000	4.1	22	1.0	19,100	3.8
1,000,000 to 1,499,999	38	3.2	40,900	13.7	60	2.7	66,000	13.1
1,500,000 to 1,999,999	15	1.3	23,300	8.2	21	1.0	33,600	6.7
2,000,000 to 2,499,999	8	0.7	16,300	5.5	10	0.5	20,000	4.0
2,500,000 and more	1	0.1	2,470	0.9	19	0.9	62,400	12.4
Total	1,172	100	285,000	100	2,200	100	502,000	100

-- Zero.

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

TABLE 7
CONSTRUCTION SAND AND GRAVEL SOLD OR USED BY PRODUCERS IN THE
UNITED STATES IN 2007, BY GEOGRAPHIC DIVISION AND METHOD OF TRANSPORTATION¹

(Thousand metric tons)

Region/division	Truck	Rail	Water	Other	Not transported	Not specified	Total
Northeast:							
New England	11,800	--	--	67	1,890	38,000	51,700
Middle Atlantic	20,800	39	1,710	--	2,420	42,300	67,300
Midwest:							
East North Central	56,200	181	2,150	718	9,030	128,000	197,000
West North Central	32,100	398	1,430	35	6,490	89,800	130,000
South:							
South Atlantic	30,900	360	119	--	1,570	57,800	90,800
East South Central	17,200	613	3,690	--	2,270	23,000	46,800
West South Central	43,200	744	--	276	10,000	93,500	148,000
West:							
Mountain	68,100	807	--	606	17,800	202,000	290,000
Pacific	81,100	1,040	4,810	2,570	15,500	107,000	212,000
Total	361,000	4,180	13,900	4,270	67,000	782,000	1,230,000

-- Zero.

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

TABLE 8
NUMBER OF CONSTRUCTION SAND AND GRAVEL OPERATIONS AND PROCESSING PLANTS
IN THE UNITED STATES IN 2007, BY GEOGRAPHIC DIVISION

Region/division	Mining operations on land			No plants or unspecified	Dredging operations	Total active operations
	Stationary	Portable	Stationary and portable			
Northeast:						
New England	208	216	44	38	1	507
Middle Atlantic	195	198	42	39	35	509
Midwest:						
East North Central	531	406	83	94	110	1,224
West North Central	288	446	30	71	221	1,056
South:						
South Atlantic	135	49	16	53	110	363
East South Central	137	27	5	14	54	237
West South Central	286	95	29	49	113	572
West:						
Mountain	536	647	99	133	18	1,433
Pacific ¹	407	211	72	54	23	767
Total	2,723	2,295	420	545	685	6,668

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

TABLE 9
NUMBER OF CONSTRUCTION SAND AND GRAVEL OPERATIONS AND PROCESSING PLANTS
IN THE UNITED STATES IN 2007, BY STATE

State	Mining operations on land				Dredging operations	Total active operations
	Stationary	Portable	Stationary and portable	No plants or unspecified		
Alabama	59	7	--	3	12	81
Alaska ¹	29	18	3	6	4	60
Arizona	134	87	23	11	4	259
Arkansas	32	15	5	6	7	65
California	239	72	33	17	10	371
Colorado	84	133	16	22	8	263
Connecticut	30	23	12	4	--	69
Delaware	3	--	--	3	5	11
Florida	20	4	1	2	33	60
Georgia	14	1	2	1	27	45
Hawaii	3	2	1	--	--	6
Idaho	45	94	8	24	4	175
Illinois	64	19	6	4	35	128
Indiana	88	22	17	10	19	156
Iowa	44	51	4	7	34	140
Kansas	24	27	3	15	40	109
Kentucky	9	--	2	1	9	21
Louisiana	42	11	2	8	47	110
Maine	60	73	6	18	1	158
Maryland	25	4	1	8	2	40
Massachusetts	61	26	6	1	--	94
Michigan	144	156	32	41	13	386
Minnesota	99	168	15	23	8	313
Mississippi	48	10	--	9	20	87
Missouri	36	8	3	2	32	81
Montana	66	74	7	20	--	167
Nebraska	19	16	2	6	106	149
Nevada	62	42	9	10	--	123
New Hampshire	27	43	10	6	--	86
New Jersey	27	6	4	2	17	56
New Mexico	47	49	9	14	--	119
New York	110	167	26	28	9	340
North Carolina	27	19	8	21	15	90
North Dakota	30	95	1	1	--	127
Ohio	107	38	14	12	41	212
Oklahoma	36	11	3	11	36	97
Oregon	46	38	11	13	2	110
Pennsylvania	58	25	12	9	9	113
Rhode Island	7	8	2	1	--	18
South Carolina	18	8	1	4	17	48
South Dakota	36	81	2	17	1	137
Tennessee	21	10	3	1	13	48
Texas	176	58	19	24	23	300
Utah	67	76	19	15	--	177
Vermont	23	43	8	8	--	82
Virginia	26	11	3	14	9	63
Washington	90	81	24	18	7	220
West Virginia	2	2	--	--	2	6
Wisconsin	128	171	14	27	2	342
Wyoming	31	92	8	17	2	150
Total	2,723	2,295	420	545	685	6,668

-- Zero.

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

TABLE 10
 RECYCLED ASPHALT CONCRETE SOLD OR USED BY PRODUCERS IN THE UNITED STATES,
 BY GEOGRAPHIC DIVISION¹

Region/division	2006			2007		
	Quantity (thousand metric tons)	Value (thousands)	Unit value	Quantity (thousand metric tons)	Value (thousands)	Unit value
Northeast:						
New England	433 ^r	\$4,070	\$9.39 ^r	618	\$10,000	\$16.21
Middle Atlantic	126	806	6.40	104	780	7.50
Midwest:						
East North Central	451 ^r	2,760	6.12 ^r	475	2,450	5.16
West North Central	1,570	11,200	7.17 ^r	965	7,000	7.26
South:						
South Atlantic	295 ^r	1,910	6.47 ^r	435	2,280	5.24
East South Central	125	525	4.20	--	--	--
West South Central	2	30	15.00	18	300	16.67
West:						
Mountain	1,070	6,360	5.93	1,290	7,190	5.57
Pacific ²	2,100	17,400	8.32	2,360	21,900	9.26
Total or average	6,170	45,100	7.32	6,270	51,900	8.28

^rRevised. -- Zero.

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

²Includes Alaska.

TABLE 11
 RECYCLED ASPHALT CONCRETE SOLD OR USED BY PRODUCERS IN THE UNITED STATES,
 BY STATE¹

State	2006			2007		
	Quantity (thousand metric tons)	Value (thousands)	Unit value	Quantity (thousand metric tons)	Value (thousands)	Unit value
Alabama	W	W	\$6.61	--	--	--
Alaska	W	W	7.02	W	W	\$8.36
Arizona	199	\$1,490	7.48	510	\$1,730	3.38
California	1,740	15,000	8.59	1,910	18,100	9.45
Colorado	242	1,470	6.05	95	651	6.85
Connecticut	87	275	3.16	28	272	9.71
Idaho	90	843	9.37	136	1,130	8.30
Illinois	18	98	5.44	154	1,060	6.90
Indiana	W	W	6.03	77	378	4.91
Iowa	51	269	5.27	31	471	15.19
Kansas	56	632	11.29	47	608	12.94
Louisiana	W	W	11.03	W	W	16.54
Maine	99	1,040	10.49	130	1,310	10.08
Maryland	W	W	4.96	--	--	--
Massachusetts	112	2,110	18.86	263	5,800	22.02
Michigan	263	1,020	3.86	214	871	4.06
Minnesota	1,350	9,940	7.38	764	4,980	6.51
Mississippi	W	W	3.31	--	--	--
Montana	27	135	5.00	W	W	7.02
Nebraska	15	146	9.73	W	W	7.25
Nevada	86	306	3.56	36	74	2.06
New Hampshire	70	434	6.20	80	535	6.69
New Jersey	86	547	6.36	69	433	6.28
New Mexico	73	674	9.23	210	1,920	9.12
New York	41	259	6.32	35	348	9.94
North Carolina	30	233	7.77	283	1,330	4.69
North Dakota	W	W	3.68	84	855	10.18
Ohio	W	W	1.76	W	W	3.34
Oregon	202	1,590	7.88	304	2,960	9.73
Rhode Island	W	W	2.20	113	2,090	18.45
South Carolina	18	131	7.28	124	635	5.12
South Dakota	110	382	3.47	W	W	2.25
Utah	352	1,420	4.03	158	585	3.70
Vermont	20	107	5.35	3	13	4.33
Virginia	96	795	8.28	W	W	10.96
Washington	134	746	5.57	133	740	5.56
Wisconsin	149	1,540	10.32	22	113	5.14
Wyoming	3	29	9.67	27	279	10.33
Total or average	6,170	45,100	7.32	6,270	51,900	8.28

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 12
 RECYCLED CEMENT CONCRETE SOLD OR USED BY PRODUCERS IN THE UNITED STATES,
 BY GEOGRAPHIC DIVISION¹

Region/division	2006			2007		
	Quantity (thousand metric tons)	Value (thousands)	Unit value	Quantity (thousand metric tons)	Value (thousands)	Unit value
Northeast:						
New England	290	\$1,820	\$6.27	516	\$4,640	\$8.99
Middle Atlantic	310	2,130	6.88	323	2,250	6.96
Midwest:						
East North Central	937	5,720	6.10	1,960	9,880	5.03
West North Central	894 ^r	6,200	6.93 ^r	810	5,450	6.73
South:						
South Atlantic	330 ^r	2,940	8.90 ^r	253	2,510	9.91
East South Central	5 ^r	53	10.60 ^r	9	98	10.89
West South Central	221 ^r	1,600	7.23 ^r	2	20	10.00
West:						
Mountain	559 ^r	3,100	5.55 ^r	1,890	8,690	4.60
Pacific ²	1,140	8,660	7.61	1,180	10,900	9.24
Total or average	4,680	32,200	6.88	6,950	44,400	6.40

^rRevised.

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

²Includes Alaska.

TABLE 13
 RECYCLED CEMENT CONCRETE SOLD OR USED BY PRODUCERS IN THE UNITED STATES,
 BY STATE¹

State	2006			2007		
	Quantity (thousand metric tons)	Value (thousands)	Unit value	Quantity (thousand metric tons)	Value (thousands)	Unit value
Alabama	W	W	\$13.00	8	\$97	\$12.13
Alaska	W	W	12.25	W	W	7.70
Arizona	21	\$146	6.01	1,140	4,520	3.96
California	954	7,370	7.73	1,040	9,870	9.51
Colorado	237	1,410	5.97	223	1,530	6.86
Connecticut	20	160	8.00	22	204	9.27
Florida	2	54	27.00	--	--	--
Idaho	50	285	5.70	83	371	4.47
Illinois	192	1,490	7.74	310	2,810	9.07
Indiana	73	390	5.34	104	646	6.21
Iowa	66	658	9.97	73	600	8.22
Kansas	W	W	11.31	W	W	14.33
Louisiana	W	W	16.34	--	--	--
Maine	5	21	4.20	6	70	11.67
Maryland	152	914	6.01	W	W	4.00
Massachusetts	252	1,560	6.18	311	2,300	7.40
Michigan	515	2,880	5.60	561	3,190	5.69
Minnesota	791	5,320	6.72	661	3,930	5.94
Mississippi	(2)	(2)	1.10	459	506	1.10
Missouri	3	21	7.00	--	--	--
Montana	W	W	5.58	W	W	6.50
Nebraska	W	W	14.36	16	119	7.44
Nevada	50	124	2.48	5	27	5.40
New Hampshire	2	16	8.00	6	50	8.33
New Jersey	168	1,230	7.32	211	1,400	6.63
New Mexico	W	W	6.85	85	604	7.11
New York	142	906	6.38	105	810	7.71
North Carolina	57	691	12.12	141	1,720	12.21
North Dakota	--	--	--	53	719	13.57
Ohio	59	442	7.49	78	799	10.24
Oklahoma	W	W	8.82	W	W	10.00
Oregon	16	111	6.94	16	110	6.88
Pennsylvania	--	--	--	6	40	6.67
Rhode Island	--	--	--	164	1,980	12.10
South Carolina	W	W	11.52	1	13	13.00
South Dakota	W	W	3.49	--	--	--
Texas	151	978	6.48	--	--	--
Utah	50	159	3.18	314	1,400	4.44
Vermont	W	W	5.79	W	W	5.33
Virginia	W	W	9.10	47	516	10.98
Washington	161	1,130	7.04	115	848	7.37
Wisconsin	98	517	5.28	912	2,430	2.67
Wyoming	W	W	4.96	19	140	7.37
Total or average	4,680	32,200	6.88	6,950	44,400	6.40

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.

TABLE 14
U.S. EXPORTS OF CONSTRUCTION SAND AND GRAVEL IN 2007, BY COUNTRY¹

(Thousand metric tons and thousand dollars)

Country or Territory	Sand		Gravel	
	Quantity	Value, f.a.s. ²	Quantity	Value, f.a.s. ²
North America:				
Canada	32	3,330	178	2,450
Dominican Republic	(3)	34	1	56
Guatemala	(3)	92	--	--
Mexico	4	872	1	33
Other ⁴	22	1,420	69	2,640
Total	61	5,750	249	5,180
South America:				
Brazil	3	1,900	--	--
Colombia	1	424	--	--
Peru	1	241	--	--
Venezuela	1	369	(3)	7
Other ⁵	1	939	(3)	81
Total	7	3,870	1	88
Europe:				
Belgium	(3)	124	--	--
Denmark	(3)	4	--	--
Finland	(3)	50	1	34
France	(3)	49	(3)	11
Germany	2	1,090	--	--
Sweden	1	286	1	20
United Kingdom	1	648	2	150
Other ⁶	2	1,820	(3)	12
Total	9	4,080	4	226
Asia:				
China	(3)	268	--	--
Japan	1	248	1	49
Korea, Republic of	1	678	--	--
Taiwan	22	3,970	(3)	5
Other ⁷	2	1,930	(3)	4
Total	27	7,100	1	58
Oceania, other ⁸	(3)	63	2	64
Middle East, other ⁹	1	586	2	119
Africa, other ¹⁰	2	1,560	--	--
Grand total	107	23,000	258	5,740

-- Zero.

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, Antigua and Barbuda, Aruba, The Bahamas, Barbados, Bermuda, British Virgin Islands, Cayman Islands, Costa Rica, Dominica, El Salvador, Grenada, Honduras, the Netherlands Antilles, Nicaragua, Panama, St. Kitts and Nevis, St. Lucia, St. Vincent, Trinidad and Tobago, and Turks and Caicos Islands.

⁵Includes Chile, Ecuador, and Uruguay.

⁶Includes Austria, Cyprus, Greece, Italy, Latvia, the Netherlands, Poland, Portugal, Romania, Russia, Slovenia, Spain, Switzerland, and Turkey.

⁷Includes Hong Kong, India, Indonesia, Malaysia, Pakistan, the Philippines, Singapore, and Thailand.

..

TABLE 15
U.S. IMPORTS FOR CONSUMPTION OF CONSTRUCTION SAND
AND GRAVEL, BY COUNTRY¹

(Thousand metric tons and thousand dollars)

Country or territory	2006		2007	
	Quantity	Value, c.i.f. ²	Quantity	Value, c.i.f. ²
Antigua and Barbuda	8	119	1	32
Australia	43	3,460	25	1,650
Bahamas, The	249	5,160	462	6,110
Canada	3,740	55,300	3,580	60,000
China	77	14,900	45	10,300
Dominican Republic	20	569	(3)	20
Germany	1	776	9	635
Japan	1	449	(3)	261
Mexico	762	6,190	263	3,450
New Zealand	12	1,600	12	1,880
Peru	1	256	2	412
Philippines	1	269	1	261
United Kingdom	10	1,550	(3)	269
Other ⁴	30 ^r	3,540 ^r	16	2,410
Total	4,960	94,100	4,420	87,700

¹Revised.

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

³Cost, 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.

⁴Less than ½ unit.

⁵Includes Algeria (2007), Argentina (2006), Belgium, Brazil, Colombia, Republic of the Congo (2006), Denmark, Egypt (2007), Faroe Islands (2006), France, Greenland (2006), Haiti (2006), Hong Kong (2007), Iceland (2007), India, Indonesia, Ireland (2006), Italy, Kuwait (2006), Republic of Korea, Kuwait, Malaysia, Namibia (2006), Netherlands Antilles, Norway, Oman, Poland, Singapore, South Africa, Spain, Sweden, Switzerland (2007), Taiwan, Trinidad and Tobago (2006), Turkey, Venezuela (2006), and Vietnam.

Source: U.S. Census Bureau.