



2011 Minerals Yearbook

SAND AND GRAVEL, CONSTRUCTION

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A total of 810 million metric tons (Mt) of construction sand and gravel was produced in the United States in 2011. This was a slight increase of 5 Mt from the revised production of 2010, the first increase in annual production since 2006, following 4 consecutive years of decreases. The slight improvement came in response to increased demand from certain State economies experiencing the boom in natural gas and oil production and from some construction segments. While the 810 Mt is an increase, 2011 concluded 2 consecutive years with the lowest levels of U.S. sand and gravel production since 1991.

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 constraint 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 aggregates. 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 aggregate industries. All percentages in this report were computed using unrounded data.

Although some States had greatly increased demand related to energy production, demand was kept in check by the historically weak nationwide activity in the construction industry. The nearly flat sand and gravel consumption in 2011 was a reflection of the decrease in the total construction put in place as reported by the U.S. Census Bureau. Total construction value in the United States declined by about 3.3% in 2011 compared with that in 2010, after an 11% decrease in 2010 compared with that in 2009. Residential and nonresidential construction declined in 2011, 1.4% and 4.1%, respectively. Only 4 of 16 nonresidential categories of construction increased in 2011: commercial (10.4%), conservation and development (2.8%), manufacturing (2.6%), and health care (0.9%) (U.S. Census Bureau, 2012).

In the United States in 2011, 6,591 construction sand and gravel operations were active (table 6A), 648 operations were reported or assumed idle, and 213 operations either were reported to be closed or were assumed to be permanently shut down. Of the 6,591 active operations, 68 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, 80 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 6,591 operations with 7,949 active sand and gravel pits were owned by 4,107 companies or government agencies operating in all 50 States.

A review of the data provided by the U.S. Mine Safety and Health Administration (MSHA) revealed 439 newly opened or previously unaccounted for sand and gravel locations that reported at least 500 employee hours of activity during 2011. Information was gathered from these newly recognized operations and is included in this report. In 2011, of the 6,591 active operations surveyed, 3,254, or 49%, responded to the USGS canvass. Their total production represented 53% of the 810 Mt produced in 2011. Estimates for operations that did not report were based on prior year's data and MSHA employee hour reports. 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 factor in decisions to open, idle, or close operations.

According to the U.S. Census Bureau in 2011, sand and gravel exports decreased by 6% to 357,000 metric tons (t), but the value increased by 25% to \$28.2 million compared with the 2010 data (tables 1, 12). For the first time since 2008, imports of construction sand and gravel increased, rising 29% in 2011 compared with those in 2010, but the value decreased by 32% to \$64.8 million (tables 1, 13). Imports have become a significant source for sand and gravel in some areas of the country but remain a tiny fraction of total consumption. 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 813 Mt. In addition to this, about 27 Mt of asphaltic and portland cement concrete was recycled during 2011.

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.

Production

Of the four major geographic regions, the West again led the Nation in the production of construction sand and gravel in 2011 with 280 Mt, or 35% of the U.S. total (table 2). The Midwest ranked second with 242 Mt, or 30%; the South produced 197 Mt, or 24%; and the Northeast produced 91 Mt, or 11%. Compared with that of 2010, production was down slightly in the Northeast and South regions and up slightly in the West. In the Midwest region, production increased more than the other

regions, but still increased less than 2% compared with that of 2010.

Of the nine geographic divisions, the Mountain division led the Nation in the production of construction sand and gravel in 2011 with 149 Mt, or 18% of the U.S. total, and was followed by the Pacific with 131 Mt, or 16%, and the East North Central with 124 Mt, or 15% (table 2). The two largest increases by division were in the Pacific (7.9%) and the West North Central (7.3%) in 2011 compared with that of 2010. The two largest decreases by division were in the South Atlantic (6.5%) and the Mountain (5.0%) in 2011 compared with that of 2010. Increases in the Pacific and West North Central divisions were partially in response to infrastructure related demand from the rapidly expanding oil and gas activity in those regions.

In 2011, construction sand and gravel was produced in every State (table 3). The leading States with production greater than 25 Mt were, in descending order of tonnage, California, Texas, Minnesota, Arizona, Michigan, New York, Washington, Wisconsin, Ohio, Colorado, and Utah. The combined production of these 11 States represented about 52% of the national total. In 2011, production decreased in 29 States and increased in 21 States compared with that of 2010. Production increases of greater than 10% were reported in nine States—Rhode Island (33%), North Dakota (25%), West Virginia (19%), Delaware (18%), New Jersey (17%), Alaska (15%), Nevada (15%), Oregon (14%), and Minnesota (12%). Production decreases of 10% or more were reported in seven States—Missouri (22%), Maryland (14%), Virginia (14%), Arkansas (13%), Wyoming (12%), New Mexico (11%), and Idaho (10%).

A review of the production of construction sand and gravel for consumption by size of operation indicates that 51% of the total production came from 2,021 operations with between 100,000 and 499,999 metric tons (t) of production in 2011; 19% of the construction sand and gravel produced came from 269 operations with between 500,000 and 999,999 t of production; and 15% came from 79 operations with 1 Mt or more of production. The majority of operations (4,222, or 64% of total operations) produced less than 100,000 t in 2011 (15% of the total production) (table 6A).

In 2011, the leading domestic commercial producers of construction sand and gravel were, in descending order of production, Oldcastle Materials, Inc.; Lehigh Hanson, Inc.; Vulcan Materials Co.; CEMEX S.A.B. de C.V.; MDU Resources Group, Inc.; Holcim Group/Aggregate Industries Management, Inc.; Martin Marietta Aggregates; Granite Construction, Inc.; Lafarge North America, Inc.; and Mitsubishi Cement Corp. The combined production of these 10 companies was about 166 Mt, or about 21% of the national total. The top 100 producers of construction sand and gravel in the United States in 2010 are listed in table 14.

Of the top 100 companies, one of the most active in recent years was a relatively new company, Summit Materials LLC. Founded in September 2009, Summit Materials was formed by a group of investors and the former chief executive officer of another leading U.S. aggregate company. Summit Materials developed a portfolio through acquisition of active aggregate operations and related businesses. Since then through 2011, the company purchased, in order of acquisition, Hamm, Inc.,

Perry, KS; Hinkle Contracting Corp., Paris, KY; Cornejo & Sons, Inc., Wichita, KS; Continental Cement Co., Hannibal, MO; Harper-Kilgore Cos. and Altaview Concrete, Inc. in Salt Lake City, UT; Con-Agg of Mo, LLC, Columbia, MO; RK Hall Construction, Ltd. and associated companies, Paris, TX; Elam Construction, Inc. and Grand Junction Concrete Pipe, Inc. in Grand Junction, CO; Fischer Quarries, LLC, Sedina, MO; B&B Resources, Inc., Salt Lake City, UT; Triple C Concrete, Inc., Twin Falls, ID; and Wind River Materials, LLC, Kemmerer, WY (Summit Materials, 2012). Summit Materials ranked 35th in production of construction sand and gravel in 2011, up from 36th in 2010.

Consumption

Production of construction sand and gravel reported to the USGS by producers 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 810 Mt of construction sand and gravel produced in 2011, 60% was reported or estimated without a breakdown by end use (tables 4–5). Of the remaining 327 Mt, 44% was used as concrete aggregate; 25% was used for road base and coverings and road stabilization; 13%, for asphaltic concrete aggregate and other bituminous mixtures; 12%, for construction fill; about 1% each, for concrete products, plaster and gunite sands, and snow and ice control; and the remainder was used for golf course maintenance, filtration, railroad ballast, road stabilization, roofing granules, and many 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.

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 USGS collects recycling statistics from construction and demolition companies. Although not all of the companies surveyed responded to the request for information on asphalt and portland cement concrete recycling, many did. These data have been combined with recycling data received from aggregate mining companies, including construction sand and gravel and crushed stone producers. Recycling in this industry generally refers to the crushing, screening, and reuse of asphalt and portland cement concretes. Aggregates,

construction, and demolition 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 and (or) portland cement concrete is processed for reuse. The USGS welcomes additional information on recycling and encourages all construction materials recycling companies to provide statistics on their activities. Companies involved in recycling may contact the author of this report to receive more information on how to report.

Recycled Asphalt Concrete.—In 2011, 13.4 Mt of asphalt concrete valued at \$106 million was recycled by aggregate, construction, and demolition companies in 48 States (table 10). The leading States, all with more than 500,000 t of recycled asphalt concrete were, in descending order of tonnage recycled, California, Illinois, Michigan, North Carolina, Pennsylvania, Minnesota, Kansas, and New York. About 5 Mt of asphalt concrete was recycled by 287 sand and gravel companies. Sand and gravel producers who reported the most recycled asphalt concrete were, in descending order, All American Asphalt Co.; KGM Contractors, Inc.; Oldcastle Materials, Inc.; Edw. C. Levy Co.; and B.R. Amon & Sons, Inc.

Recycled Concrete.—In 2011, about 13.8 Mt of portland cement concrete valued at \$103 million was recycled in 48 States (table 11). The leading States, all with more than 500,000 t of recycled portland cement concrete were, in descending order of tonnage recycled, California, Illinois, Michigan, Virginia, Minnesota, Wisconsin, and Florida. About 5 Mt of portland cement concrete was recycled by 289 sand and gravel companies. Sand and gravel producers who reported the most recycled portland cement concrete were, in descending order, Vulcan Materials, Inc.; Dan Copp Crushing Corp.; Knopik Crushing, Inc.; Kalin Construction Co., Inc.; and Kraemer Trucking and Excavation, Inc.

Transportation

Information regarding the method of transportation of construction sand and gravel from the pit or processing plant to the first point of sale or use is available for each geographic division and the total United States. Reports regarding the method of transportation were provided by the producers for 303 Mt, or 37% of the total U.S. production of construction sand and gravel in 2010. Of this total, 85% was transported by truck; 2%, by waterway; and less than 1% by rail (table 7). A significant portion of the 303 Mt (about 12%) was not transported and was used at or near the production site, probably for asphalt or portland 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 discussed in this chapter are synonymous with average unit value and are free on board (f.o.b.) plant, usually at the first point of sale or for captive use. This 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 2011 average price increased slightly to \$7.43 per metric ton compared with that of 2010. By use, the prices varied from a high of \$11.44 per ton for roofing granules to a low of \$4.93 per ton for fill (table 4). The largest increases in price were recorded for railroad ballast (31.8%), fill (10.2%), road base and coverings (5.9%), plaster and gunite sands (5.8%), and filtration (5.6%). The largest decreases were for road stabilization, lime (20.5%) and golf course maintenance (10.8%).

The States having the highest unit value per metric ton were, in descending order, Hawaii (\$15.67), Rhode Island (\$12.92), Maryland (\$11.89), Virginia (\$11.61), California (\$11.07), and Massachusetts (\$10.13). The States having the lowest unit value per metric ton were, in ascending order, South Dakota (\$3.78), South Carolina (\$4.43), Kansas (\$4.90), and Minnesota (\$4.91). The unit value decreased in 16 States and increased in 34 States (table 3). The States having the largest increases in unit value were, in descending order, Wyoming (43%), North Dakota (39%), Maryland (17%), Alaska (16%), Maine (16%), and Missouri (12%). The States having the largest decreases in unit value were, in descending order, Delaware (22%), Oregon (15%), New Jersey (12%), and Nevada (11%).

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 were equivalent to less than 1% of domestic consumption.

According to the U.S. Census Bureau, exports of construction sand increased by 144% to 144,000 t compared with that of 2010, and the value increased by 32% to \$21.9 million (table 12). Mexico, which was the leading destination, received 45% of the total sand exports, followed by the Canada (20%), and Argentina (7%). Exports of construction gravel decreased by 34% to 213,000 t compared with those of 2010, but the value increased by 5% to \$6.3 million. Canada, which was the leading destination, received 61% of total gravel exports. Germany was the second leading destination receiving 22% of the gravel exports. The average value of the sand and gravel exports in 2011 was \$79 per metric ton; this was up by 33% from \$59 per metric ton in 2010. These values may have been relatively high because some higher grade sand and gravel, such as industrial sand and gravel (especially frac sand), was being misclassified as construction sand and gravel.

In 2011, imports of construction sand and gravel increased by 29% to 3.44 Mt, but the value decreased by 32% to \$64.8 million (table 13). Canada was the leading source of construction sand and gravel imports, with 86% of the total. Mexico supplied about 9% of the imports, and The Bahamas supplied about 3%. The average unit value of the sand and gravel imports in 2011 was \$18.82 per ton, down from \$35.86 per ton in 2010.

Outlook

Weak demand growth from most construction segments and flat revenues to and funding for governmental agencies and programs were expected to result in little or no increase in sand

and gravel consumption in 2012 compared with that of 2011. Data from the 2012 USGS quarterly survey of U.S. aggregates producers projects a slight increase in sales of sand and gravel compared with those of 2011, based on a sample of the leading sand and gravel producers in the United States.

Pricing in the industry rebounded in 2011 after experiencing the first drop in average price since 1990. The 2011 average, while an improvement from 2010, was still a bit below the alltime high of \$7.51 per ton set in 2009. Improving sales in the housing market and higher fuel costs could keep some upward pressures on sand and gravel prices for 2012. Larger price increases are more likely to continue in and near metropolitan areas because, as nearby resources are depleted, more aggregates will be transported from distant sources with the accompanying extra fuel cost.

Reference Cited

- Summit Materials, 2012, News: Summit Materials, LLC. (Accessed March 20, 2013, via <http://www.summit-materials.com/news.html>.)
 U.S. Census Bureau, 2012, Annual value of construction put in place 2002–2011: U.S. Census Bureau, August 1. (Accessed March 19, 2013, via <http://www.census.gov/construction/c30/totpage.html>.)

GENERAL SOURCES OF INFORMATION

U.S. Geological Survey Productions

- Crushed Stone and Sand and Gravel. Mineral Industry Surveys, quarterly.
 Historical Statistics for Mineral and Material Commodities in the United States, Data Series 140.
 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)

	2007	2008	2009	2010	2011
<u>Sold or used by producers:²</u>					
Quantity	1,250,000	1,060,000	838,000 ^r	805,000 ^r	810,000
Value	8,810,000	7,900,000 ^r	6,290,000 ^r	5,870,000 ^r	6,020,000
<u>Recycled:³</u>					
Quantity	20,100	29,100	28,500	26,400 ^r	27,200
Value	150,000	252,000	264,000	201,000 ^r	210,000
<u>Exports:</u>					
Quantity	365	392	439	381	357
Value	28,700	22,400	23,100	22,600	28,200
<u>Imports:</u>					
Quantity	4,420	5,430	2,980	2,670	3,440
Value	87,700	114,000	66,100	95,900	64,800

^rRevised.

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

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

³Asphalt and portland cement concrete recycled by construction, demolition, and aggregate mining companies.

TABLE 2
CONSTRUCTION SAND AND GRAVEL SOLD OR USED BY PRODUCERS IN THE UNITED STATES, BY GEOGRAPHIC DIVISION¹

Region/division	2010				2011			
	Quantity (thousand metric tons)	Percentage of total	Value (thousands)	Percentage of total	Quantity (thousand metric tons)	Percentage of total	Value (thousands)	Percentage of total
Northeast:								
New England	36,500 ^r	4.5	\$302,000 ^r	5.1	36,100	4.5	\$316,000	5.2
Middle Atlantic	54,300 ^r	6.8	474,000 ^r	8.1	54,700	6.8	478,000	8.0
Midwest:								
East North Central	128,000	15.9 ^r	801,000 ^r	13.6 ^r	124,000	15.4	773,000	12.8
West North Central	109,000 ^r	13.5	565,000 ^r	9.6	117,000	14.5	633,000	10.5
South:								
South Atlantic	51,700 ^r	6.4	398,000 ^r	6.8 ^r	48,400	6.0	389,000	6.5
East South Central	34,100 ^r	4.2 ^r	227,000 ^r	3.9 ^r	33,400	4.1	225,000	3.7
West South Central	112,000 ^r	14.0 ^r	878,000 ^r	15.0 ^r	116,000	14.3	912,000	15.2
West:								
Mountain	157,000 ^r	19.5	1,070,000 ^r	18.1	149,000	18.4	1,020,000	17.0
Pacific	121,000	15.1 ^r	1,160,000	19.8 ^r	131,000	16.2	1,270,000	21.1
Total	805,000 ^r	100	5,870,000 ^r	100	810,000	100	6,020,000	100

^rRevised.

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

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

State	2010			2011		
	Quantity (thousand metric tons)	Value (thousands)	Unit value	Quantity (thousand metric tons)	Value (thousands)	Unit value
Alabama	10,400 ^r	\$56,200	\$5.39 ^r	9,910	\$53,600	\$5.41
Alaska	6,390 ^r	52,700 ^r	8.25 ^r	7,340	70,000	9.53
Arizona	35,800 ^r	296,000 ^r	8.27	32,800	264,000	8.05
Arkansas	9,050	76,800	8.49	7,830	66,800	8.53
California	74,700	811,000 ^r	10.87 ^r	80,300	889,000	11.07
Colorado	28,900	209,000	7.22	27,100	198,000	7.31
Connecticut	5,910	55,300	9.35	5,510	54,600	9.91
Delaware	1,620	12,300	7.59	1,910	11,200	5.90
Florida	13,300 ^r	105,000 ^r	7.93	12,000	105,000	8.71
Georgia	5,120	28,400	5.54	5,050	29,700	5.88
Hawaii	1,020 ^r	15,500 ^r	15.25 ^r	962	15,100	15.67
Idaho	13,800 ^r	78,500 ^r	5.68 ^r	12,400	67,700	5.46
Illinois	19,600 ^r	129,000 ^r	6.57	18,800	121,000	6.44
Indiana	18,900 ^r	116,000 ^r	6.16	18,800	111,000	5.88
Iowa	13,700 ^r	84,400 ^r	6.16 ^r	15,000	101,000	6.75
Kansas	9,970 ^r	52,000 ^r	5.21 ^r	9,620	47,100	4.90
Kentucky	5,760 ^r	30,100 ^r	5.23 ^r	5,750	32,600	5.66
Louisiana	21,300 ^r	197,000 ^r	9.22 ^r	20,700	207,000	9.96
Maine	7,970 ^r	45,900 ^r	5.76 ^r	7,990	53,500	6.69
Maryland	8,120	82,700	10.18	6,980	83,100	11.89
Massachusetts	9,710 ^r	91,400	9.42	9,230	93,500	10.13
Michigan	33,300 ^r	190,000 ^r	5.70	31,900	178,000	5.57
Minnesota	32,600 ^r	160,000 ^r	4.90 ^r	36,600	180,000	4.91
Mississippi	12,000 ^r	93,800 ^r	7.79 ^r	11,600	93,600	8.07
Missouri	11,900 ^r	73,900 ^r	6.21	9,250	64,100	6.93
Montana	10,200 ^r	82,100 ^r	8.08 ^r	11,000	85,800	7.80
Nebraska	12,600 ^r	80,000 ^r	6.38	12,900	77,900	6.03
Nevada	15,100	87,500	5.78	17,300	89,200	5.14
New Hampshire	6,620 ^r	55,600 ^r	8.40 ^r	6,260	54,500	8.70
New Jersey	10,000	105,000	10.50	11,800	108,000	9.19
New Mexico	11,600	84,400	7.30	10,300	76,200	7.40
New York	30,800 ^r	249,000 ^r	8.09	30,300	257,000	8.47
North Carolina	8,260 ^r	46,500 ^r	5.63	8,140	47,000	5.78
North Dakota	17,000	66,400 ^r	3.90 ^r	21,300	116,000	5.43
Ohio	29,900	232,000	7.75	27,400	219,000	8.01
Oklahoma	10,600 ^r	64,600 ^r	6.09 ^r	10,700	65,900	6.17
Oregon	11,400	93,000	8.15	13,000	90,400	6.93
Pennsylvania	13,500 ^r	119,000 ^r	8.81	12,700	114,000	8.96
Rhode Island	1,510 ^r	17,800 ^r	11.81 ^r	2,010	26,000	12.92
South Carolina	7,100	30,200	4.25	7,070	31,400	4.43
South Dakota	11,600 ^r	48,600 ^r	4.19 ^r	12,700	47,800	3.78
Tennessee	5,900	47,000	7.97	6,100	45,600	7.47
Texas	71,500 ^r	540,000 ^r	7.56 ^r	76,400	573,000	7.50
Utah	26,900 ^r	156,000 ^r	5.78 ^r	25,400	149,000	5.85
Vermont	4,820 ^r	35,600 ^r	7.39	5,050	33,700	6.67
Virginia	7,780 ^r	89,200 ^r	11.47	6,670	77,500	11.61
Washington	27,700 ^r	191,000 ^r	6.89	29,100	208,000	7.16
West Virginia	448	3,740	8.35	534	4,470	8.36
Wisconsin	26,200 ^r	134,000 ^r	5.11	27,500	145,000	5.26
Wyoming	14,500 ^r	72,200 ^r	4.98 ^r	12,800	91,000	7.11
Total or average	805,000 ^r	5,870,000 ^r	7.30 ^r	810,000	6,020,000	7.43

^rRevised.

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

TABLE 4
CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN THE UNITED STATES IN 2011,
BY MAJOR USE¹

Use	Quantity (thousand metric tons)	Value (thousands)	Unit value
Concrete aggregates (including concrete sand)	144,000	\$1,160,000	\$8.03
Plaster and gunite sands	3,360	33,400	9.96
Concrete products (blocks, bricks, pipe, decorative, etc.)	2,450	21,900	8.93
Asphaltic concrete aggregates and other bituminous mixtures	41,300	363,000	8.79
Road base and coverings	80,900	516,000	6.37
Road stabilization, cement	1,220	9,100	7.46
Road stabilization, lime	801	4,610	5.76
Fill	38,800	191,000	4.93
Snow and ice control	3,750	27,300	7.28
Railroad ballast	967	10,600	10.98
Roofing granules	160	1,830	11.44
Filtration	1,110	10,300	9.22
Golf course maintenance sand	1,170	10,500	8.98
Other miscellaneous uses	7,050	75,000	10.63
Unspecified: ²			
Actual	160,000	1,210,000	7.54
Estimated	323,000	2,380,000	7.39
Total or average	810,000	6,020,000	7.43

¹Data are rounded to no more than three significant digits, except unit value; 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 2011, 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	2,820	27,700	135	1,870	72	586	1,580	17,100	4,070	34,000
Middle Atlantic	9,080	90,700	264	2,470	162	1,690	2,650	22,000	4,710	36,500
Midwest:										
East North Central	27,400	162,000	103	766	716	5,380	8,830	62,800	12,900	78,500
West North Central	14,500	93,000	453	2,430	149	1,830	6,200	36,400	24,100	103,000
South:										
South Atlantic	18,200	160,000	411	3,780	670	5,300	1,910	12,600	1,000	7,340
East South Central	7,570	50,700	73	547	122	666	1,980	15,500	1,050	6,160
West South Central	29,300	237,000	201	1,830	136	1,700	1,270	8,730	2,430	26,100
West:										
Mountain	13,000	108,000	595	4,710	285	2,840	6,340	60,400	19,600	137,000
Pacific	22,200	228,000	1,120	15,000	140	1,880	10,600	128,000	13,100	101,000
Total	144,000	1,160,000	3,360	33,400	2,450	21,900	41,300	363,000	82,900	529,000
	Fill		Snow and ice control		Railroad ballast		Other uses ³		Total	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Northeast:										
New England	2,020	9,830	825	7,580	64	443	24,500	217,000	36,100	316,000
Middle Atlantic	2,830	15,400	1,090	7,060	14	98	34,000	302,000	54,700	478,000
Midwest:										
East North Central	8,960	41,200	941	4,580	188	1,440	64,300	417,000	124,000	773,000
West North Central	4,180	14,200	399	2,610	40	838	67,200	379,000	117,000	633,000
South:										
South Atlantic	4,360	13,900	29	243	--	--	21,800	186,000	48,400	389,000
East South Central	805	4,570	8	77	--	--	21,800	147,000	33,400	225,000
West South Central	4,310	19,200	7	51	31	832	78,000	617,000	116,000	912,000
West:										
Mountain	4,930	23,200	365	4,350	304	3,020	104,000	678,000	149,000	1,020,000
Pacific	6,390	50,000	87	738	327	3,950	76,900	745,000	131,000	1,270,000
Total	38,800	191,000	3,750	27,300	968	10,600	492,000	3,690,000	810,000	6,020,000

-- 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 2011, BY SIZE OF OPERATION¹

Size range (metric tons)	Number of operations	Percentage of total	Quantity (thousand metric tons)	Percentage of total
Less than 25,000	2,048	31.5	19,300	2.0
25,000 to 49,999	1,001	15.0	32,900	4.0
50,000 to 99,999	1,173	17.0	77,300	9.0
100,000 to 199,999	1,042	15.0	134,000	16.5
200,000 to 299,999	532	8.0	117,000	14.0
300,000 to 399,999	299	4.0	93,000	11.5
400,000 to 499,999	148	2.0	59,500	7.0
500,000 to 599,999	110	1.0	54,000	6.0
600,000 to 699,999	74	1.0	43,200	5.0
700,000 to 799,999	40	0.7	27,300	3.0
800,000 to 899,999	23	0.3	17,600	3.0
900,000 to 999,999	22	0.2	18,800	2.0
1,000,000 to 1,499,999	48	0.9	51,300	7.0
1,500,000 to 1,999,999	15	0.2	23,400	2.0
2,000,000 to 2,499,999	12	0.7	24,200	4.0
2,500,000 and more	4	0.3	16,100	2.0
Total	6,591	100	810,000	100

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

TABLE 6B
CONSTRUCTION SAND AND GRAVEL PRODUCTION IN THE UNITED STATES IN 2011, BY REGION AND SIZE OF OPERATION¹

Size range (metric tons)	Northeast				Midwest			
	Number of operations	Percentage of total	Quantity (thousand metric tons)	Percentage of total	Number of operations	Percentage of total	Quantity (thousand metric tons)	Percentage of total
Less than 25,000	398	37.3	3,680	4.0	733	30.8	7,230	3.0
25,000 to 49,999	197	18.5	6,510	7.2	381	16.0	12,500	5.2
50,000 to 99,999	176	16.5	11,300	12.4	482	20.2	32,200	13.3
100,000 to 199,999	158	14.8	21,000	23.1	398	16.7	50,400	20.9
200,000 to 299,999	60	5.6	13,800	15.2	169	7.1	36,600	15.1
300,000 to 399,999	43	4.0	13,400	14.7	88	3.7	27,100	11.2
400,000 to 499,999	12	1.1	4,580	5.0	50	2.1	20,200	8.4
500,000 to 599,999	7	0.7	3,530	3.9	38	1.6	18,700	7.7
600,000 to 699,999	6	0.6	3,520	3.9	12	0.5	6,900	2.9
700,000 to 799,999	2	0.2	1,300	1.4	10	0.4	6,890	2.9
800,000 to 899,999	3	0.3	2,290	2.5	7	0.3	5,400	2.2
900,000 to 999,999	2	0.2	1,650	1.8	4	0.2	3,400	1.4
1,000,000 or more	3	0.3	4,300	4.7	11	0.5	14,000	5.8
Total	1,067	100	90,800	100	2,383	100	242,000	100
Size range (metric tons)	South				West			
	Number of operations	Percentage of total	Quantity (thousand metric tons)	Percentage of total	Number of operations	Percentage of total	Quantity (thousand metric tons)	Percentage of total
Less than 25,000	228	21.5	2,130	1.1	689	33.1	6,300	2.3
25,000 to 49,999	114	10.7	3,860	2.0	309	14.9	10,000	3.6
50,000 to 99,999	173	16.3	11,300	5.7	342	16.4	22,500	8.0
100,000 to 199,999	186	17.5	24,800	12.6	300	14.4	38,300	13.7
200,000 to 299,999	122	11.5	26,800	13.6	181	8.7	39,900	14.3
300,000 to 399,999	82	7.7	25,600	13.0	86	4.1	26,900	9.6
400,000 to 499,999	44	4.1	17,800	9.0	42	2.0	16,900	6.0
500,000 to 599,999	35	3.3	17,200	8.7	30	1.4	14,700	5.2
600,000 to 699,999	24	2.3	14,000	7.1	32	1.5	18,800	6.7
700,000 to 799,999	14	1.3	9,550	4.8	14	0.7	9,530	3.4
800,000 to 899,999	7	0.7	5,290	2.7	6	0.3	4,630	1.7
900,000 to 999,999	7	0.7	5,990	3.0	9	0.4	7,780	2.8
1,000,000 or more	25	2.4	33,000	16.7	40	2.0	63,800	22.8
Total	1,061	100	197,000	100	2,080	100	280,000	100

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 2011, BY GEOGRAPHIC DIVISION AND METHOD OF TRANSPORTATION¹

(Thousand metric tons)

Region/division	Truck	Rail	Water	Other	Not transported	Not specified	Total
Northeast:							
New England	9,100	--	--	37	1,480	25,400	36,100
Middle Atlantic	19,800	17	236	44	1,910	32,700	54,700
Midwest:							
East North Central	47,500	138	2,700	831	4,850	68,300	124,000
West North Central	42,700	259	331	83	7,530	66,400	117,000
South:							
South Atlantic	24,200	58	148	9	1,830	22,100	48,400
East South Central	6,010	74	1,230	42	765	25,200	33,400
West South Central	29,700	579	--	28	2,990	82,400	116,000
West:							
Mountain	39,500	--	--	168	5,930	104,000	149,000
Pacific	39,500	--	2,560	990	7,400	80,400	131,000
Total	258,000	1,130	7,210	2,240	34,700	506,000	810,000

-- 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 2011, 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	250	207	47	19	--	523
Middle Atlantic	249	198	44	28	25	544
Midwest:						
East North Central	532	391	71	61	89	1,144
West North Central	498	454	33	82	172	1,239
South:						
South Atlantic	131	63	14	58	73	339
East South Central	108	32	6	13	49	208
West South Central	276	101	15	36	86	514
West:						
Mountain	592	604	62	78	9	1,345
Pacific ¹	396	238	50	35	16	735
Total	3,032	2,288	342	410	519	6,591

-- Zero.

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 2011, BY STATE

State	Mining operations on land			No plants or unspecified	Dredging operations	Total active operations
	Stationary	Portable	Stationary and portable			
Alabama	38	7	1	6	14	66
Alaska ¹	42	25	5	8	2	82
Arizona	85	92	13	2	--	192
Arkansas	33	14	2	--	3	52
California	206	86	24	7	7	330
Colorado	103	123	11	19	4	260
Connecticut	37	18	12	--	--	67
Delaware	3	--	--	3	4	10
Florida	23	6	--	8	19	56
Georgia	18	4	3	--	17	42
Hawaii	16	6	--	--	--	22
Idaho	52	88	2	17	2	161
Illinois	65	16	6	4	27	118
Indiana	71	36	11	1	12	131
Iowa	49	73	6	8	21	157
Kansas	30	44	2	11	36	123
Kentucky	6	3	2	1	10	22
Louisiana	49	11	--	14	39	113
Maine	72	76	11	7	--	166
Maryland	21	3	3	7	3	37
Massachusetts	66	23	4	1	--	94
Michigan	137	143	28	22	14	344
Minnesota	167	170	16	27	6	386
Mississippi	44	15	--	5	14	78
Missouri	34	8	2	--	29	73
Montana	97	73	7	12	--	189
Nebraska	45	15	2	6	79	147
Nevada	59	28	9	7	--	103
New Hampshire	35	42	10	2	--	89
New Jersey	30	9	3	3	12	57
New Mexico	48	47	8	6	1	110
New York	167	162	31	17	7	384
North Carolina	30	19	5	22	12	88
North Dakota	115	69	3	4	--	191
Ohio	111	51	11	13	33	219
Oklahoma	30	13	--	5	30	78
Oregon	36	47	4	8	1	96
Pennsylvania	52	27	10	8	6	103
Rhode Island	13	3	4	1	--	21
South Carolina	14	16	1	5	11	47
South Dakota	58	75	2	26	1	162
Tennessee	20	7	3	1	11	42
Texas	164	63	13	17	14	271
Utah	87	83	10	4	--	184
Vermont	27	45	6	8	--	86
Virginia	18	14	2	13	7	54
Washington	96	74	17	12	6	205
West Virginia	4	1	--	--	--	5
Wisconsin	148	145	15	21	3	332
Wyoming	61	70	2	11	2	146
Total	3,032	2,288	342	410	519	6,591

-- Zero.

¹ An 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 STATE¹

State	2010			2011		
	Quantity (thousand metric tons)	Value (thousands)	Unit value	Quantity (thousand metric tons)	Value (thousands)	Unit value
Alabama	108 ^r	\$1,610 ^r	\$14.87 ^r	52	\$852	\$16.53
Alaska	35 ^r	673 ^r	19.03 ^r	39	606	15.69
Arizona	182 ^r	1,730 ^r	9.50 ^r	127	1,300	10.19
Arkansas	18	100	5.51	19	212	11.05
California	1,570 ^r	10,900 ^r	6.92 ^r	2,170	15,000	6.91
Colorado	356 ^r	2,270 ^r	6.37 ^r	419	2,880	6.87
Connecticut	102 ^r	685 ^r	6.74 ^r	88	606	6.89
Delaware	(2)	5	15.29 ^r	(2)	5	15.29
Florida	101 ^r	1,580 ^r	15.72 ^r	244	2,930	12.02
Georgia	112	969 ^r	8.64 ^r	286	4,630	16.21
Hawaii	--	--	--	--	--	--
Idaho	114 ^r	708 ^r	6.19 ^r	41	257	6.27
Illinois	902 ^r	7,870 ^r	8.72 ^r	1,210	8,520	7.03
Indiana	198 ^r	2,070 ^r	10.46 ^r	198	1,630	8.27
Iowa	107 ^r	856 ^r	7.99 ^r	119	1,110	9.28
Kansas	1,270 ^r	7,160 ^r	5.64 ^r	727	3,750	5.16
Kentucky	65	457	7.00	114	649	5.68
Louisiana	136 ^r	865 ^r	6.38 ^r	85	597	7.03
Maine	39 ^r	520 ^r	13.49 ^r	50	622	12.53
Maryland	186 ^r	943 ^r	5.07 ^r	156	1,350	8.66
Massachusetts	167 ^r	1,310 ^r	7.85 ^r	330	2,530	7.67
Michigan	1,040 ^r	6,730 ^r	6.45 ^r	939	5,800	6.18
Minnesota	507 ^r	4,040 ^r	7.96 ^r	776	6,320	8.14
Mississippi	81	1,570	19.45 ^r	11	37	3.27
Missouri	31	120	3.88	88	589	6.70
Montana	34 ^r	282 ^r	8.34 ^r	25	120	4.84
Nebraska	55 ^r	477 ^r	8.65 ^r	101	931	9.17
Nevada	72 ^r	400 ^r	5.59 ^r	73	692	9.48
New Hampshire	276 ^r	3,500 ^r	12.67 ^r	168	751	4.48
New Jersey	53 ^r	312 ^r	5.85 ^r	78	559	7.17
New Mexico	78 ^r	473 ^r	6.10 ^r	48	267	5.52
New York	378 ^r	3,080 ^r	8.14 ^r	593	4,690	7.91
North Carolina	698 ^r	6,400 ^r	9.16 ^r	834	7,320	8.78
North Dakota	10 ^r	124 ^r	12.72 ^r	41	380	9.35
Ohio	222 ^r	1,300 ^r	5.85 ^r	213	1,940	9.11
Oklahoma	57 ^r	628 ^r	10.96 ^r	53	600	11.41
Oregon	89 ^r	858 ^r	9.64 ^r	85	697	8.21
Pennsylvania	550 ^r	4,850 ^r	8.83 ^r	812	5,480	6.75
Rhode Island	86 ^r	599 ^r	7.00 ^r	16	155	9.55
South Carolina	219 ^r	3,680 ^r	16.84 ^r	199	3,630	18.22
South Dakota	105 ^r	905 ^r	8.65 ^r	113	1,080	9.57
Tennessee	94 ^r	806 ^r	8.56 ^r	129	1,680	13.05
Texas	259	2,000	7.73 ^r	208	2,410	11.60
Utah	37	238 ^r	6.47 ^r	160	1,480	9.28
Vermont	50 ^r	992 ^r	19.95 ^r	53	576	10.77
Virginia	277 ^r	2,780 ^r	10.03 ^r	302	2,990	9.92
Washington	194 ^r	1,160 ^r	5.97 ^r	255	1,750	6.84
West Virginia	--	--	--	11	34	3.02
Wisconsin	1,410 ^r	8,440 ^r	5.97 ^r	452	2,580	5.70
Wyoming	14 ^r	77 ^r	5.53 ^r	90	544	6.06
U.S. total or average	12,800 ^r	100,000 ^r	7.85 ^r	13,400	106,000	7.92
Territory						
Puerto Rico	45	169 ^r	3.75 ^r	--	--	--
Grand total or average	12,800 ^r	100,000 ^r	7.83 ^r	13,400	106,000	7.92

^rRevised. -- 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 11
 RECYCLED PORTLAND CEMENT CONCRETE SOLD OR USED BY PRODUCERS IN THE UNITED STATES, BY STATE¹

State	2010			2011		
	Quantity (thousand metric tons)	Value (thousands)	Unit value	Quantity (thousand metric tons)	Value (thousands)	Unit value
Alabama	(2)	\$1	\$8.17	(2)	(2)	\$9.89
Alaska	65 [†]	323 [†]	4.99 [†]	112	562	5.02
Arizona	122 [†]	1,060 [†]	8.76 [†]	71	640	8.99
Arkansas	27	60	2.20	1	7	7.72
California	2,870 [†]	20,900	7.31	2,800	21,200	7.58
Colorado	582	3,710	6.38	426	2,980	7.00
Connecticut	101 [†]	737 [†]	7.33 [†]	77	533	6.94
Delaware	108	598	5.51	1	13	10.99
Florida	304	3,400	11.19	550	2,330	4.23
Georgia	99	2,020	20.34	117	986	8.42
Hawaii	6	70	12.26 [†]	6	81	13.55
Idaho	181	1,090	6.00	18	120	6.61
Illinois	836	6,640 [†]	7.94 [†]	1,690	13,400	7.93
Indiana	114	863	7.54	183	1,420	7.76
Iowa	240	1,170	4.88	265	1,470	5.53
Kansas	275	1,870	6.80	317	2,330	7.33
Kentucky	--	--	--	--	--	--
Louisiana	39	691	17.75	31	519	16.50
Maine	28 [†]	214 [†]	7.59 [†]	33	227	6.90
Maryland	294	1,330	4.53	323	3,110	9.63
Massachusetts	142	1,250 [†]	8.78 [†]	199	1,040	5.23
Michigan	1,210	8,020 [†]	6.65 [†]	1,040	7,200	6.93
Minnesota	571	4,250	7.44	731	5,170	7.07
Mississippi	133	1,990	14.96	62	413	6.72
Missouri	37	322	8.75 [†]	54	393	7.24
Montana	34	282	8.34	25	120	4.84
Nebraska	128	1,070	8.38	116	1,340	11.53
Nevada	42	255	6.03 [†]	50	300	6.03
New Hampshire	99 [†]	381 [†]	3.84 [†]	152	825	5.42
New Jersey	195	1,360	6.97	199	1,420	7.15
New Mexico	5	38	7.71	2	13	7.71
New York	250	2,060 [†]	8.24 [†]	179	1,740	9.71
North Carolina	222	2,490	11.21 [†]	261	2,950	11.31
North Dakota	6	63	11.39 [†]	32	327	10.21
Ohio	349	2,380	6.81	445	3,540	7.96
Oklahoma	87	1,050	12.00 [†]	84	1,030	12.27
Oregon	70	733	10.44	59	452	7.67
Pennsylvania	352	1,740	4.94	350	1,750	5.00
Rhode Island	84	583	6.91	15	139	9.25
South Carolina	219	3,310	15.07	245	3,510	14.34
South Dakota	92	537	5.85	79	667	8.42
Tennessee	22	155 [†]	7.19 [†]	30	157	5.28
Texas	34	273	7.97 [†]	275	2,280	8.28
Utah	280	2,340	8.37	162	1,360	8.37
Vermont	4	20	5.38	21	115	5.38
Virginia	674	6,000 [†]	8.91	833	7,210	8.65
Washington	307	1,740	5.66 [†]	365	2,490	6.81
West Virginia	--	--	--	--	--	--
Wisconsin	1,700 [†]	9,160	5.38 [†]	589	3,050	5.18
Wyoming	14	77	5.53	90	544	6.06
U.S. total or average	13,600 [†]	101,000 [†]	7.38 [†]	13,800	103,000	7.52
Territory						
Puerto Rico	--	--	--	--	--	--
Grand total or average	13,600 [†]	101,000 [†]	7.38 [†]	13,800	103,000	7.52

[†]Revised. -- 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 12
U.S. EXPORTS OF CONSTRUCTION SAND AND GRAVEL IN 2011, 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:				
Bahamas, The	2	334	1	58
British Virgin Islands	3	50	3	57
Canada	29	3,250	130	2,960
Mexico	65	3,070	(3)	15
Other	2	642	16	321
Total	101	7,350	150	3,420
South America:				
Argentina	10	2,650	--	--
Brazil	2	838	1	45
Venezuela	1	159	3	93
Other	(3)	189	(3)	20
Total	13	3,840	4	158
Europe:				
Denmark	7	2,480	--	--
Germany	4	1,680	46	1,680
Netherlands	6	1,840	--	--
United Kingdom	2	955	1	45
Other	2	588	3	109
Total	21	7,540	50	1,830
Asia:				
China	5	1,520	--	--
Korea, Republic of	1	331	1	570
Other	2	947	6	241
Total	8	2,800	7	811
Oceania	(3)	25	2	45
Middle East	(3)	244	(3)	49
Africa	(3)	92	--	--
Grand total	144	21,900	213	6,310

-- 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.

Source: U.S. Census Bureau.

TABLE 13
U.S. IMPORTS FOR CONSUMPTION OF CONSTRUCTION SAND
AND GRAVEL, BY COUNTRY¹

(Thousand metric tons and thousand dollars)

Country or territory	2010		2011	
	Quantity	Value, c.i.f. ²	Quantity	Value, c.i.f. ²
Antigua and Barbuda	1	16	1	19
Australia	7	819	(3)	631
Bahamas, The	181	2,620	98	1,630
Canada	2,190	42,100	2,950	43,100
China	10	2,810	14	2,880
Colombia	8	186	13	181
France	3	800	4	647
Germany	1	576	2	876
Mexico	226	37,000	306	7,510
New Zealand	5	1,490	7	2,240
Peru	4	820	3	765
Vietnam	26	2,020	28	2,230
Other	14 ^r	4,570 ^r	18	2,050
Total	2,670	95,900	3,440	64,800

^rRevised.

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.

³Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 14
THE TOP 100 PRODUCERS OF CONSTRUCTION SAND & GRAVEL IN THE UNITED STATES IN 2011¹

2011 Rank	2010 Rank	Company	2011 Rank	2010 Rank	Company
1	1	Oldcastle Materials, Inc.	51	73	Strata Corp.
2	4	Lehigh Hanson, Inc.	52	56	F.S. Lopke Contracting, Inc.
3	3	Vulcan Materials Co.	53	65	Wright Materials, Inc.
4	2	CEMEX S.A.B. de C. V.	54	38	Irving Materials, Inc.
5	6	Bureau of Land Management	55	—	Tiller Corp.
6	5	MDU Resources Group, Inc.	56	59	The Heritage Group
7	7	Holcim Group/Aggregate Industries Management, Inc.	57	55	Watson Gravel, Inc.
8	8	Martin Marietta Aggregates	58	85	Cretex Companies, Inc.
9	10	Granite Construction, Inc.	59	48	E. R. Jahna Industries, Inc.
10	9	Lafarge North America, Inc.	60	—	Farden Construction, Inc.
11	11	Mitsubishi Materials Corp.	61	67	A. Lindberg & Sons, Inc.
12	12	Trinity Industries, Inc.	62	—	Dalrymple Gravel & Construction Co.
13	16	Colas, Inc.	63	60	Boral USA
14	14	Fisher Industries	64	50	Clemente Materials, Inc.
15	13	CalPortland Co.	65	64	Memphis Stone & Gravel Co.
16	17	A. Teichert & Son, Inc.	66	35	McMurry Ready Mix Co.
17	15	Clyde Cos., Inc.	67	76	Southwest Rock Products, LLC
18	19	Edw. C. Levy Co.	68	57	Wood Resources Corp.
19	22	Fordyce Ltd.	69	24	Las Vegas Paving Corp.
20	45	WM. D. Scepaniak Construction	70	—	Bowes Construction, Inc.
21	27	Mathy Construction Co.	71	—	B. R. Amon & Sons, Inc.
22	20	Nugent Sand Co.	72	62	Simpson Construction Materials, LLC
23	18	Texas Industries, Inc.	73	69	Grand Rapids Gravel Co.
24	23	Lyman-Richey Sand & Gravel Co.	74	77	Hilltop Basic Resources, Inc.
25	21	Gila River Indian Community	75	78	Miller Springs Materials, LLC
26	44	Miles Sand & Gravel Co.	76	75	Capital Sand Co., Inc.
27	40	Holliday Rock Products Corp.	77	100	Higman Sand & Gravel, Inc.
28	25	R.E. Janes Gravel Co.	78	—	Liberty Materials, Inc.
29	28	L. G. Everist, Inc.	79	82	Mark Sand & Gravel Co.
30	30	All American Asphalt Co.	80	—	O & G Industries, Inc.
31	29	Ash Grove Cement Co.	81	81	Hammett Gravel Co.
32	34	Gernatt Dan Gravel Products, Inc.	82	88	Chaney Enterprises Ltd.
33	46	The Olen Corp.	83	52	Sundre Sand & Gravel, Inc.
34	42	F S T Sand & Gravel, Inc.	84	97	Pacific Aggregates, Inc.
35	36	Summit Materials LLC	85	—	Rasmussen Group, Inc.
36	39	U.S. Concrete, Inc.	86	—	Nebco, Inc.
37	83	Standard Sand & Silica Co.	87	—	Seven Points Sand & Gravel, Inc.
38	86	Amboy Aggregates	88	51	Thelen Sand & Gravel, Inc.
39	—	JMAC Resources, Inc.	89	—	William Mueller & Sons, Inc.
40	89	Aggregate Construction, Inc.	90	91	Wissota Sand & Gravel Co.
41	47	Salt River Pima-Maricopa Indian Community	91	84	Roanoke Sand & Gravel Corp.
42	26	York Building Products Co.	92	—	Waste Management, Inc.
43	37	Southern Aggregates LLC	93	68	Croell Redi-Mix, Inc.
44	63	Dolese Bros. Co.	94	—	LS Sand & Gravel Ltd.
45	41	Central Specialties, Inc.	95	—	Alleyton Resource Corp.
46	49	New Enterprise Stone & Lime Co., Inc.	96	—	BJ Rees's Enterprise
47	53	Eucon Corp.	97	93	Aggregate Resources, Inc.
48	32	Multisources Ltd.	98	—	Hi-Grade Materials Co.
49	61	Chandler Aggregates, Inc.	99	—	Northern Improvement Co.
50	43	Mulzer Crushed Stone, Inc.	100	96	Baldwin Sand and Gravel, Inc.

— Not in the top 100 producers of construction sand and gravel in the United States in 2010.

¹In descending order of tonnage produced.