

2012 Minerals Yearbook

SAND AND GRAVEL, CONSTRUCTION

SAND AND GRAVEL, CONSTRUCTION—2012

SAND AND GRAVEL, CONSTRUCTION

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Domestic survey data and tables were prepared by Michelle B. Blackwell, statistical assistant.

A total of 812 million metric tons (Mt) of construction sand and gravel was produced in the United States in 2012. Although this was a slight increase of 4 Mt from the revised production of 2011, production was nearly 40% less than the peak production of 1.34 billion metric tons during 2006 and 2012 concluded 3 consecutive years with the lowest levels of U.S. sand and gravel production since 1991. Despite the modest increase, more than one-half of the States had decreased production in 2012 compared with that of 2011. Some regions, however, had increased demand, especially in areas where States have experienced a boom in natural gas and oil production and (or) in areas that had been particularly hard hit during the recent recession and have reported improvements in housing construction.

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 a few States had greatly increased demand related to energy production, demand elsewhere was dampened by the still relatively weak nationwide construction industry. The U.S. Census Bureau reported that the value of construction put in place was up by nearly 9% in 2012 compared with that of 2011 but still nearly 54% less than the peak year of 2006. The improving numbers reported by the U.S. Census Bureau have not yet translated to a corresponding increase in annual sand and gravel consumption (U.S. Census Bureau, undated).

In the United States in 2012, 6,598 construction sand and gravel operations were known to be active (table 6A), 1,093 operations were reported or assumed idle, and 311 operations either were reported to be closed or were assumed to be permanently shut down. Of the 6,598 active operations, 87 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. Additionally, 167 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. The 6,598 operations with 8,007 active sand and gravel pits were

owned by 4,129 companies or government agencies located in all 50 States.

A review of the data provided by the U.S. Mine Safety and Health Administration (MSHA) revealed 370 newly opened or previously unaccounted for sand and gravel locations that reported at least 500 employee hours of activity during 2012. Information was gathered from these newly recognized operations and is included in the 2012 data. In 2012, of the 6,598 active operations surveyed, 3,135, or 48%, responded to the USGS canvass. Their total production represented 53% of the 812 Mt produced in 2012. Estimates for operations that did not report were based on prior years' 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, exports of sand and gravel in 2012 increased by 19% to 426,000 metric tons (t) compared with those of 2011. However, the value of these exports decreased by 10% to \$25.5 million compared with the 2011 value (tables 1, 12). Imports of construction sand and gravel increased by 19% in 2012 compared with those in 2011, but the value decreased by 9% to \$59.2 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 815 Mt. In addition to this, at least 30 Mt of asphaltic and portland cement concrete was recycled during 2012.

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

Production

Of the four major geographic regions, the West continued to lead the Nation in the production of construction sand and gravel in 2012 with 265 Mt, or 33% of the U.S. total (table 2). The Midwest ranked a close second with 256 Mt, or 32%; the South produced 202 Mt, or 25%; and the Northeast produced 89 Mt, or 11%. Compared with that of 2011, production was down slightly in every region of the United States except in the Midwest, where production increased by about 5%.

Of the nine geographic divisions, the Mountain division led the Nation in the production of construction sand and gravel in 2012 with 142 Mt, or 18% of the U.S. total, and was followed by the West North Central with 132 Mt, or 16%; the East North Central with 124 Mt, or 15%; and the Pacific with 123 Mt, or 15% (table 2). The largest production increase was in the West North Central division, which rose by 11.5% compared with that of 2011, mainly in response to infrastructure related demand from the rapidly expanding oil and gas activity. Production also increased in the New England (2.5%), South Atlantic (1.5%), and Mountain (1%) divisions. The two largest decreases were in the Middle Atlantic (6.4%) and Pacific (5.2%) divisions.

In 2012, 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, Texas, California, Minnesota, Arizona, Michigan, Ohio, North Dakota, New York, Washington, Colorado, and Wisconsin. The combined production of these 11 States represented about 54% of the national total. In 2012, production decreased in 30 States and increased in 20 States compared with that of 2011. Production increases of greater than 10% were reported in five States— North Dakota (35%), Rhode Island (25%), Minnesota (19%), Florida (14%), and Maryland (11%). Production decreases of 10% or more were reported in five States—Hawaii (18%), Louisiana (13%), North Carolina (12%), Illinois (11%), and Iowa (10%).

A review of the production of construction sand and gravel for consumption by size of operation indicated that 49% of the total production came from 2,016 operations having between 100,000 and 499,999 metric tons (t) of production in 2012, 20% of the construction sand and gravel produced came from 277 operations having between 500,000 and 999,999 t of production, and 15% came from 76 operations having 1 Mt or more of production. The majority of operations (4,229, or 65% of total operations) produced less than 100,000 t in 2012 (16% of the total production) (table 6A).

In 2012, 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, Inc.; MDU Resources Group, Inc.; Martin Marietta Aggregates; Holcim Group/ Aggregate Industries Management, Inc.; Trinity Industries, Inc.; Mitsubishi Materials Corp.; and Granite Construction, Inc. The combined production of these 10 companies was about 159 Mt, or about 19% of the national total. The top 100 producers of construction sand and gravel in the United States in 2012 had a combined production of 349 Mt (43% of the national total), and are listed in table 14. The companies that improved their rank on the list of top 100 producers were almost all serving States that had improved economies related to oil and gas exploration and production, especially North Dakota and Texas.

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 812 Mt of construction sand and gravel produced in 2012, 62% was reported or estimated without a breakdown by end use (tables 4–5). Of the remaining 310 Mt, 42% was used as concrete aggregate; 26% was used for road base and coverings; 12%, for asphaltic concrete aggregate and other bituminous mixtures; 12%, for construction fill; about 1% each, for concrete products, plaster and gunite sands, road stabilization, and snow and ice control; and the remainder was used for golf course maintenance, filtration, railroad ballast, roofing granules, and many other miscellaneous uses.

The reported percentage consumption patterns for construction sand and gravel exclude the unspecified uses. In any marketing or use-pattern analysis based on quantity distribution, the total quantities included in "Unspecified uses" may be distributed among the reported use categories by applying the above percentages.

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

Recycling

The USGS collects recycling statistics from construction and demolition companies. Not all of the companies surveyed responded to the request for information on asphalt and portland cement concrete recycling, and the data shown in tables 10 and 11 do not include estimates for nonrespondents. 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.

Recycled Asphalt Concrete.—In 2012, 16.6 Mt of asphalt concrete valued at \$134 million was reported as recycled by aggregate, construction, and demolition companies in 49 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, Pennsylvania, Minnesota, North Carolina, Michigan, New York, Utah, Kansas, and Connecticut. About 6.2 Mt of asphalt concrete was recycled by 294 sand and gravel companies. Sand and gravel producers who reported the most recycled asphalt concrete were, in descending order, All American Asphalt Co.; Midwest Asphalt Corp.; Kenny Seng Construction, Inc.; The Lane Construction Corp.; and Oldcastle Materials. These five companies recycled about 2.3 Mt of asphalt concrete.

Recycled Concrete.—In 2012, about 13.7 Mt of portland cement concrete valued at \$102 million was reported as recycled

in 47 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, Texas, Michigan, Virginia, Wisconsin, and Colorado. About 4.7 Mt of portland cement concrete was recycled by 291 sand and gravel companies. Sand and gravel producers who reported the most recycled portland cement concrete were, in descending order, Vulcan Materials; Kenny Seng Construction; Knopik Crushing, Inc.; Kraemer Trucking and Excavation, Inc.; and Dan Copp Crushing Corp. These five companies recycled about 1.1 Mt of portland cement concrete.

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 of 252 Mt, or 31% of the total U.S. production of construction sand and gravel in 2012. Of this, 79% was transported by truck; 4%, by waterway; 2%, other; and less than 1% by rail (table 7). The "other" category probably indicates customer pickup or was unknown by the respondent but was likely transported by truck. A significant portion of the 252 Mt (about 14%) 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 average unit values 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 normally includes all costs of mining, processing, in-plant transportation, overhead, and profit.

The 2012 average unit value of construction sand and gravel increased by 2.1% to \$7.65 per metric ton compared with the revised unit value for 2011. By use, the prices varied from a high of \$12.56 per ton for filtration to a low of \$4.93 per ton for fill (table 4). The largest increases in price were recorded for sand and gravel used for filtration (36.2%); road stabilization, lime (28.7%); road base and coverings (9.6%); and plaster and gunite sands (5.3%). The largest decreases were for road stabilization, cement (19.8%) and concrete products (9.9%).

The States having the highest unit value per metric ton of construction sand and gravel were, in descending order, Hawaii (\$19.06), Maryland (\$11.75), Virginia (\$11.39), Rhode Island (\$11.34), Louisiana (\$11.05), and California (\$10.93). The States having the lowest unit value of construction sand and gravel per metric ton were, in ascending order, South Dakota (\$4.81), Kentucky (\$4.90), Minnesota (\$4.99), and Wisconsin (\$5.00). The construction sand and gravel unit value decreased in 20 States and increased in 30 States (table 3). The States having the largest increases in unit value were, in descending order, Delaware (46%), North Dakota (32%), South Carolina (28%), South Dakota (27%), Hawaii (22%), Idaho (22%),

Utah (22%), and Vermont (22%). The States having the largest decreases in unit value were, in descending order, Alaska (22%), New Hampshire (17%), Rhode Island (12%), Massachusetts (8%), and Florida (6%).

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 37% to 197,000 t compared with that of 2011, but the value decreased by 11% to \$19.6 million (table 12). Canada, which was the leading destination, received 70% of the total sand exports, followed by Mexico (12%), and Germany (8%). Exports of construction gravel increased by 8% to 229,000 t compared with those of 2011, but the value decreased by 6% to \$5.9 million. Canada, which was the leading destination, received 67% of total gravel exports. Germany was the second leading destination receiving 11% of the gravel exports. The average value of sand and gravel exports in 2012 was \$60 per ton, which was down by 24% from \$79 per ton in 2011. All of these values may have been relatively high because some higher grade sand and gravel, such as industrial sand and gravel (especially hydraulic fracturing sand used in natural gas and oil drilling), was being misclassified as construction sand and gravel.

In 2012, imports of construction sand and gravel increased by 19% to 4.1 Mt, but the value decreased by 9% to \$59.2 million (table 13). Canada was the leading source of construction sand and gravel imports, with 89% of the total. Mexico supplied about 8% of the imports, and most of the remaining 3% was supplied by nine other countries. The average unit value of sand and gravel imports in 2012 was \$14.41 per ton, down from \$18.82 per ton in 2011.

Outlook

Many economic indicators show an improving economy in the United States and 2013 sand and gravel consumption was expected to increase compared with that of 2012. Data from the 2013 USGS quarterly survey of U.S. aggregates producers projected a 4% increase in sales of sand and gravel compared with those of 2012, based on a sample of the leading sand and gravel producers in the United States.

The average price for construction sand and gravel in 2012 increased for the second consecutive year after experiencing the first drop in average price in 2010 since 1990. The 2012 average price exceeded the previous all-time high of \$7.51 per ton set in 2009. Improving demand from many sectors and higher fuel costs could keep some upward pressure on sand and gravel production costs for 2013. Higher costs are 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.

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SALIENT U.S. CONSTRUCTION SAND AND GRAVEL STATISTICS¹

	2008	2009	2010	2011	2012
Sold or used by producers: ²					
Quantity	1,060,000	839,000 ^r	807,000 ^r	808,000 r	812,000
Value	7,900,000	6,300,000 ^r	5,890,000 r	6,050,000 r	6,210,000
Recycled: ³					
Quantity	29,100	28,500	26,400	27,300 ^r	30,300
Value	252,000	264,000	201,000	214,000 r	237,000
Exports:					
Quantity	392	439	381	357	426
Value	22,400	23,100	22,600	28,200	25,500
Imports:					
Quantity	5,430	2,980	2,670	3,440	4,110
Value	114,000	66,100	95,900	64,800	59,200

(Thousand metric tons and thousand dollars)

^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

		201	1			20	12	
	Quantity ^r				Quantity			
	(thousand	Percent	Value	Percent	(thousand	Percent	Value	Percent
Region/division	metric tons)	of total	(thousands)	of total	metric tons)	of total	(thousands)	of total
Northeast:								
New England	36,300	4.5	\$317,000 ^r	5.2	37,200	4.6	\$316,000	5.1
Middle Atlantic	54,900	6.8	480,000 r	8.0	51,400	6.3	454,000	7.3
Midwest:								
East North Central	125,000	15.5 ^r	776,000 ^r	12.8	124,000	15.3	766,000	12.4
West North Central	119,000	14.7 ^r	637,000 ^r	10.5	132,000	16.3	780,000	12.6
South:								
South Atlantic	48,600	6.0	389,000	6.4 ^r	49,300	6.0	409,000	6.6
East South Central	34,500	4.3 ^r	226,000 r	3.7	33,300	4.1	225,000	3.6
West South Central	120,000	14.8 ^r	942,000 r	15.6 ^r	119,000	14.6	930,000	14.9
West:								
Mountain	140,000	17.4 ^r	1,010,000 ^r	16.7 ^r	142,000	17.5	1,110,000	17.9
Pacific	130,000	16.1 ^r	1,270,000	21.1	123,000	15.1	1,210,000	19.5
Total	808,000	100	6,050,000 ^r	100	812,000	100	6,210,000	100
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^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

	2011			2012			
	Ouantity			Ouantity			
	(thousand	Value	Unit	(thousand	Value	Unit	
State	metric tons)	(thousands)	value	metric tons)	(thousands)	value	
Alabama	9,910	\$53,600	\$5.41	9,060	\$54,500	\$6.01	
Alaska	7,710 ^r	70,800 ^r	9.18 ^r	7,080	50,600	7.15	
Arizona	31,600 ^r	267,000 r	8.44 ^r	34,100	301,000	8.83	
Arkansas	7,990 ^r	68,200 ^r	8.53	7,980	68,200	8.56	
California	80,600 r	891,000 ^r	11.05 ^r	77,100	843,000	10.93	
Colorado	26,800 r	198,000	7.39 r	27,700	209,000	7.53	
Connecticut	5.560 ^r	54.200 r	9.75 ^r	5,280	49,600	9.39	
Delaware	1.910	11.200	5.90	1,820	15,600	8.58	
Florida	12.000	104.000 ^r	8.61 r	13,700	111.000	8.10	
Georgia	5,160 ^r	30,300 ^r	5.88	5,410	33,800	6.24	
Hawaii	962	15,100	15.67	786	15,000	19.06	
Idaho	10.500 r	64.000 ^r	6.07 r	10,000	73,800	7.38	
Illinois	18,800	121.000	6.44	16,700	113.000	6.79	
Indiana	18.800	111.000	5.88	18,500	107.000	5.81	
Iowa	15.200 r	102.000 r	6.75	13,600	89.200	6.54	
Kansas	9.620	47.100	4.90	9.710	52,200	5.38	
Kentucky	6.810 r	32.500 r	4.77 r	6.610	32,400	4.90	
Louisiana	21.400 r	212.000 r	9.94 r	18,500	205,000	11.05	
Maine	8.120 r	54,400 r	6.69	8,500	62,700	7.37	
Maryland	6 980	83,100	11.89	7 730	90,700	11.75	
Massachusetts	9 270 r	93 800 ^r	10.13	9 470	88 200	9.31	
Michigan	32100^{r}	179,000 r	5.57	31,600	173,000	5.48	
Minnesota	37 200 r	$182\ 000\ r$	4 91	44 400	221,000	4 99	
Mississippi	11.700 r	94.100 r	8.07	11,500	90,500	7.88	
Missouri	9 340 r	64 800 ^r	6.93	9 310	62 500	6.71	
Montana	11 100 r	86 400 r	7.80	12 000	90,300	7.50	
Nebraska	13,000 r	76 300 ^r	5.86 ^r	12,000	84 800	6.59	
Nevada	13,000 r	81 400 r	6.15 r	12,300	84 700	6.86	
New Hampshire	6 270 r	54 400 r	8 68 ^r	6 760	48 600	7 20	
New Jersey	11 800	108 000	9 1 9	11 100	97 600	8.83	
New Mexico	9 410 r	74 600 r	7.92 r	10,200	83 200	8.19	
New York	30,300	257,000	8 47	28,800	254 000	8 82	
North Carolina	8 250 r	47,000 r	5 78	7 220	42 900	5.94	
North Dakota	21,700 r	116,000	5 37 ^r	29,300	207,000	7.07	
Ohio	27,400	219,000	8.02	29,500	234 000	7.94	
Oklahoma	11,000 r	68 000 r	6.17	11 800	73 200	6.22	
Oregon	11,000 r	86 900 r	7.66 ^r	10,400	89,500	8.63	
Pennsylvania	12,500 r	115 000 ^r	8.96	11,600	103,000	8 87	
Rhode Island	2 010	26,000	12.92	2 500	28 400	11 34	
South Carolina	2,010	20,000	4 43	6 380	36 300	5.68	
South Dakota	12 700	47 800	3 78	13,100	63,100	4 81	
Tennessee	6 100	45,600	7 47	6 1 1 0	47 500	7.77	
Texas	70 200 r	593 000 r	7.40 r	80,800	584,000	7.77	
Utah	25 300 r	149,000	5 90 r	23,800	172 000	7.23	
Vermont	25,500 5.070 r	33 800 r	6.67	23,800	38,400	8 17	
Virginia	5,070 6,680 ^r	77 500	11.61	4,700	73 700	11 30	
Washington	20 600 r	211.000 r	7 1 2 ^r	28 100	214.000	7 6/	
West Virginia	29,000	211,000 A A70	9.15 9.26	20,100	∠14,000 4 800	7.04 Q 15	
Wisconsin	27 000 r	4,470 147.000 f	0.30 5.26	378 27 500	4,090	0.40 5.00	
Wyoming	27,900 °	20 200 T	7 20 r	27,300 11.800	100,000	5.00 8 51	
Total or average	202 000 r	6 050 000 r	7.20 °	812.000	6 210 000	7.65	
rotar of average	000,000	0,050,000	/.47	012,000	0,210,000	7.05	

^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 2012, BY MAJOR USE $^{\rm l}$

	Quantity		
	(thousand	Value	Unit
Use	metric tons)	(thousands)	value
Concrete aggregates (including concrete sand)	131,000	\$1,050,000	\$7.98
Plaster and gunite sands	3,550	37,200	10.49
Concrete products (blocks, bricks, pipe, decorative, etc.)	2,530	20,400	8.05
Asphaltic concrete aggregates and other bituminous mixtures	37,200	326,000	8.76
Road base and coverings	81,500	570,000	6.98
Road stabilization, cement	2,500	14,900	5.98
Road stabilization, lime	597	4,430	7.41
Fill	36,800	182,000	4.93
Snow and ice control	3,320	23,400	7.06
Railroad ballast	766	8,670	11.32
Roofing granules	76	879	11.57
Filtration	736	9,240	12.56
Golf course maintenance sand	763	7,180	9.41
Other miscellaneous uses	8,700	84,100	9.66
Unspecified: ²			
Actual	167,000	1,330,000	8.00
Estimated	335,000	2,540,000	7.58
Total or average	812,000	6,210,000	7.65

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 2012, BY GEOGRAPHIC DIVISION AND MAJOR USE¹

(Thousand metric tons and thousand dollars)

	Concrete (including c	aggregates oncrete sand)	Plaster gunite	r and sands	Concrete (blocks, br decorativ	products icks, pipe ve, etc.)	Asphalti aggregate bituminou	c concrete s and other is mixtures	Road b	ase and rings ²
Region/division	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Northeast:										
New England	3,130	29,100	96	1,350	191	1,380	1,890	18,500	4,130	34,900
Middle Atlantic	7,470	72,500	337	3,180	259	2,500	2,200	18,200	4,260	34,800
Midwest:										
East North Central	19,100	106,000	156	894	316	2,370	6,810	47,300	12,300	75,600
West North Central	15,000	95,000	338	1,990	358	2,870	7,370	42,100	25,000	136,000
South:										
South Atlantic	16,200	151,000	262	2,220	609	4,910	1,470	10,100	495	3,590
East South Central	10,500	65,800	125	651	468	2,930	1,750	14,100	1,200	8,540
West South Central	27,300	200,000	460	3,810	24	352	1,580	13,600	4,220	44,500
West:										
Mountain	12,200	115,000	256	3,370	164	1,000	5,780	57,400	20,800	149,000
Pacific	20,300	213,000	1,520	19,800	143	2,080	8,380	105,000	12,300	102,000
Total	131,000	1,050,000	3,550	37,200	2,530	20,400	37,200	326,000	84,600	589,000
	F	ill	Snow and i	ce control	Railroad	Railroad ballast Othe		er uses ³	1	Total
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Northeast:										
New England	1,740	8,190	639	5,180	44	473	25,400	217,000	37,200	316,000
Middle Atlantic	2,020	11,500	1,180	8,080	11	99	33,700	303,000	51,400	454,000
Midwest:										
East North Central	8,220	36,500	860	4,230	33	281	76,000	493,000	124,000	766,000
West North Central	5,170	18,500	224	1,420	12	172	78,800	482,000	132,000	780,000
South:										
South Atlantic	4,710	17,300	34	255	5	47	25,500	219,000	49,300	409,000
East South Central	934	3,790	3	42			18,300	129,000	33,300	225,000
West South Central	3,500	15,800	7	152	24	669	81,900	651,000	119,000	930,000
West:										
Mountain	4,340	21,700	277	3,330	226	2,130	97,900	761,000	142,000	1,110,000
Pacific	6,180	48,400	99	727	414	4,800	74,100	717,000	123,000	1,210,000
Total	36,800	182,000	3,320	23,400	769	8,670	512,000	3,970,000	812,000	6,210,000

--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 2012, BY SIZE OF OPERATION $^{\rm I}$

· · · · · · · · · · · · · · · · · · ·			Quantity	
Size range	Number of	Percent	(thousand	Percent
(metric tons)	operations	of total	metric tons)	of total
Less than 25,000	2,041	33	19,100	3
25,000 to 49,999	1,016	15	33,400	4
50,000 to 99,999	1,172	17	76,900	9
100,000 to 199,999	1,065	16	138,000	17
200,000 to 299,999	518	7	115,000	14
300,000 to 399,999	270	4	84,000	10
400,000 to 499,999	163	3	66,000	8
500,000 to 599,999	87	2	43,800	6
600,000 to 699,999	78	1	45,800	5
700,000 to 799,999	48	0.7	32,300	4
800,000 to 899,999	37	0.3	28,400	3
900,000 to 999,999	27	0.2	23,200	2
1,000,000 to 1,499,999	38	0.2	40,000	5
1,500,000 to 1,999,999	24	0.3	37,600	5
2,000,000 to 2,499,999	11	0.1	22,600	3
2,500,000 and more	3	0.3	4,820	2
Total	6,598	100	812,000	100

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

TABLE 6B

CONSTRUCTION SAND AND GRAVEL PRODUCTION IN THE UNITED STATES IN 2012, BY REGION AND SIZE OF OPERATION¹

		Nor	theast			Mic	lwest	
	-		Quantity		-		Quantity	
Size range	Number of	Percent	(thousand	Percent	Number of	Percent	(thousand	Percent
(metric tons)	operations	of total	metric tons)	of total	operations	of total	metric tons)	of total
Less than 25,000	409	37.7	3,800	4.3	744	30.6	7,080	2.8
25,000 to 49,999	200	18.4	6,480	7.3	370	15.2	12,300	4.8
50,000 to 99,999	189	17.4	12,400	14	505	20.8	33,400	13
100,000 to 199,999	148	13.6	19,300	21.7	419	17.2	53,900	21.1
200,000 to 299,999	76	7	17,000	19.2	160	6.5	35,200	13.7
300,000 to 399,999	27	2.5	8,280	9.3	98	4	30,400	11.9
400,000 to 499,999	16	1.5	6,480	7.3	52	2.1	20,800	8.1
500,000 to 599,999	7	0.6	3,630	4.1	23	0.9	11,400	4.4
600,000 to 699,999	5	0.5	2,840	3.2	18	0.7	10,600	4.1
700,000 to 799,999	4	0.4	2,640	3	15	0.6	10,000	3.9
800,000 to 899,999	2	0.2	1,500	1.7	10	0.4	7,640	3
900,000 to 999,999					6	0.2	5,160	2
1,000,000 or more	3	0.3	4,220	4.8	15	0.5	18,300	7.1
Total	1,086	100	88,600	100	2,434	100	256,000	100
		South				W	/est	
			Quantity		Quantity			
Size range	Number of	Percent	(thousand	Percent	Number of	Percent	(thousand	Percent
(metric tons)	operations	of total	metric tons)	of total	operations	of total	metric tons)	of total
Less than 25,000	212	20	2,080	1	676	33.5	6,130	2.3
25,000 to 49,999	129	12.2	4,380	2.2	317	15.7	10,300	3.9
50,000 to 99,999	165	15.6	10,700	5.3	313	15.5	20,400	7.7
100,000 to 199,999	190	18	25,000	12.4	308	15.2	40,200	15.2
200,000 to 299,999	126	11.9	28,000	13.9	157	7.8	35,100	13.2
300,000 to 399,999	79	7.5	24,900	12.4	66	3.3	20,400	7.7
400,000 to 499,999	44	4.2	17,900	8.9	51	2.5	20,800	7.8
500,000 to 599,999	28	2.6	14,100	7	29	1.4	14,700	5.5
600,000 to 699,999	27	2.6	16,200	8	28	1.4	16,300	6.1
700,000 to 799,999	14	1.3	9,530	4.7	15	0.7	10,100	3.8
800,000 to 899,999	8	0.8	6,270	3.1	17	0.8	13,000	4.9
900,000 to 999,999	11	1	9,460	4.7	10	0.5	8,610	3.2
1,000,000 or more	25	1.3	33,000	16.4	33	1.5	49,400	18.6
Total	1,058	100	202,000	100	2,020	100	265,000	100

--Zero.

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

CONSTRUCTION SAND AND GRAVEL SOLD OR USED BY PRODUCERS IN THE UNITED STATES IN 2012, BY GEOGRAPHIC DIVISION AND METHOD OF TRANSPORTATION¹

					Not	Not	
Region/division	Truck	Rail	Water	Other	transported	specified	Total
Northeast:						-	
New England	7,550			118	1,630	27,900	37,200
Middle Atlantic	12,800	11	276	378	1,520	36,400	51,400
Midwest:							
East North Central	32,000	33	3,170	210	5,050	83,400	124,000
West North Central	35,400	29	660	56	7,760	88,400	132,000
South:							
South Atlantic	16,300	23	33	10	862	32,100	49,300
East South Central	7,730	102	2,900	1,550	529	20,500	33,300
West South Central	24,000	476		26	3,140	91,300	119,000
West:							
Mountain	29,800			1,090	6,460	105,000	142,000
Pacific	34,300	36	3,920	1,340	8,830	75,000	123,000
Total	200,000	713	11,000	4,780	35,800	560,000	812,000
Zero.							

(Thousand metric tons)

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 2012, BY GEOGRAPHIC DIVISION

		Mining op	erations on land			
			Stationary	No plants or	Dredging	Total active
Region/division	Stationary	Portable	and portable	unspecified	operations	operations
Northeast:						
New England	267	203	48	22		540
Middle Atlantic	243	202	43	36	22	546
Midwest:						
East North Central	513	380	74	69	90	1,126
West North Central	522	478	35	91	182	1,308
South:						
South Atlantic	147	63	12	49	67	338
East South Central	106	27	7	11	45	196
West South Central	294	91	17	36	86	524
West:						
Mountain	551	602	69	74	11	1,307
Pacific ¹	379	235	52	31	16	713
Total	3,022	2,281	357	419	519	6,598
7						

-- Zero.

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

		Mining op	erations on land			
			Stationary	No plants or	Dredging	Total active
State	Stationary	Portable	and portable	unspecified	operations	operations
Alabama	33	6	2	7	13	61
Alaska ¹	35	28	4	8	2	77
Arizona	78	81	14	3		176
Arkansas	33	13	3	1	2	52
California	198	85	25	5	7	320
Colorado	105	125	11	17	5	263
Connecticut	35	19	14			68
Delaware	4			3	4	11
Florida	27	7		6	17	57
Georgia	21	4	2		15	42
Hawaii	13	7				20
Idaho	43	83	3	12	3	144
Illinois	58	15	6	3	27	109
Indiana	71	32	12	1	12	128
Iowa	39	77	4	6	28	154
Kansas	33	48	2	9	36	128
Kentucky	6	3	2	1	9	21
Louisiana	60	10		15	36	121
Maine	76	72	9	11		168
Maryland	23	3	3	6	3	38
Massachusetts	74	20	6			100
Michigan	126	141	30	20	16	333
Minnesota	169	173	19	40	6	407
Mississippi	48	14		3	12	77
Missouri	40	8	2		28	78
Montana	95	77	10	14		196
Nebraska	43	20	2	7	82	154
Nevada	51	31	9	5		96
New Hampshire	35	44	9	2		90
New Jersey	28	8	3	5	10	54
New Mexico	50	46	9	6	1	112
New York	163	162	31	24	7	387
North Carolina	35	20	4	20	12	91
North Dakota	140	69	4	9		222
Ohio	101	49	12	19	32	213
Oklahoma	29	11		4	34	78
Oregon	38	43	4	8	1	94
Pennsylvania	52	32	9	7	5	105
Rhode Island	12	3	5	1		21
South Carolina	13	13	1	3	11	41
South Dakota	59	83	2	20	2	166
Tennessee	19	4	3		11	37
Texas	172	57	14	16	14	273
Utah	82	87	12	4		185
Vermont	34	45	5	8		92
Virginia	21	15	2	11	5	54
Washington	95	72	19	10	6	202
West Virginia	4	1				5
Wisconsin	155	143	14	26	3	341
Wyoming	48	72	1	13	2	136
Total	3,022	2,281	357	419	519	6,598

TABLE 9 NUMBER OF CONSTRUCTION SAND AND GRAVEL OPERATIONS AND PROCESSING PLANTS IN THE UNITED STATES IN 2012, BY STATE

-- Zero.

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

RECYCLED ASPHALT CONCRETE SOLD OR USED BY PRODUCERS IN THE UNITED STATES, BY STATE^1

		2011 ²		2012		
	Quantity			Quantity		
	(thousand	Value	Unit	(thousand	Value	Unit
State	metric tons)	(thousands)	value	metric tons)	(thousands)	value
Alabama	254	\$5,340	\$21.01	296	\$5,680	\$19.20
Alaska	71	1,220	17.30	69	1,180	17.15
Arizona	116	1,060	9.11	125	2,010	16.11
Arkansas	19	212	11.05	26	260	10.14
California	2,020	15,500	7.65	1,880	15,400	8.20
Colorado	349	2,320	6.66	352	2,330	6.61
Connecticut	126	544	4.31	543	3,650	6.71
Delaware	(3)	5	15.29	91	605	6.65
Florida	224	2,660	11.90	211	2,350	11.13
Georgia	286	4,630	16.21	241	4,110	17.08
Hawaii						
Idaho	76	521	6.84	30	207	6.78
Illinois	1,080	7,190	6.65	1,500	9,560	6.37
Indiana	122	981	8.04	123	2,020	16.41
Iowa	28	289	10.14	85	917	10.79
Kansas	722	3,790	5.25	604	2,250	3.73
Kentucky	114	649	5.68	367	1,330	3.63
Louisiana	85	597	7.03	129	1,250	9.68
Maine	142	1,910	13.40	118	1,580	13.41
Maryland	116	914	7.90	206	1,790	8.68
Massachusetts	337	3,240	9.60	403	4,010	9.94
Michigan	838	3,530	4.21	966	3,930	4.07
Minnesota	769	7,130	9.27	1,190	9,070	7.64
Mississippi	11	23	2.17	11	23	2.17
Missouri	88	589	6.70	188	1,430	7.60
Montana	71	736	10.40	39	456	11.82
Nebraska	85	660	7.75	81	589	7.30
Nevada	125	976	7.79	229	1,090	4.75
New Hampshire	204	1,180	5.78	283	3,060	10.83
New Jersey	43	257	5.92	194	1,450	7.50
New Mexico	78	578	7.39	236	1,360	5.77
New York	550	4,060	7.39	715	6,500	9.09
North Carolina	1,030	7,470	7.28	1,100	8,370	7.59
North Dakota	96	684	7.16	55	259	4.72
Ohio	_ 84	750	8.95	72	538	7.42
Oklahoma	_ 49	541	11.03	91	1,000	11.00
Oregon	- 91	66/	/.31	/9	561	7.15
Pennsylvania	_ 834	5,730	0.8/	1,350	9,740	/.21
Rhode Island	- //	/39	9.54	31	2 200	22.90
South Carolina		3,370	13.96	214	3,300	15.38
	_ 119	1,210	10.20	81	/10	8.84 12.95
Tennessee	- 132	1,700	12.83	139	1,780	12.85
I exas		2,410	0.60	220	2,410	10.07
Vermont	132	1,270	9.00	0/0	5,570	8.02
Vincinia	- 44	373	10.20	96	1,080	0.01
Washington		4,000	6 27	2/0 122	2,400	9.01 7.20
West Virginia	101	1,150	2.02	123	910	2.02
Wisconsin		34 3 070	5.02 7.25	11	34 3 280	5.02 7.24
Wyoming		3,970	7.23	455	3,200	7.24 8.00
Total or average	13 500	110 000	8 16	16 600	134 000	8.08
i otar or average	15,500	110,000	0.10	10,000	134,000	0.00

-- Zero.

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

²Estimated quantities and values have been recalculated.

³Less than $\frac{1}{2}$ unit.

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

		2011^2		2012		
	Quantity	-		Quantity		
	(thousand	Value	Unit	(thousand	Value	Unit
State	metric tons)	(thousands)	value	metric tons)	(thousands)	value
Alabama	(3)	(3)	\$9.89			
Alaska	112	562	5.02	24	395	16.54
Arizona	71	640	8.99	69	596	8.68
Arkansas	1	7	7.72	1	8	6.94
California	2.800	21.200	7.58	2.140	15,900	7.43
Colorado	426	2.980	7.00	504	3.370	6.68
Connecticut	77	533	6.94	74	603	8.16
Delaware	1	13	10.99	69	313	4.52
Florida	550	2.330	4.23	473	1.640	3.46
Georgia	117	986	8 42	116	906	7.83
Hawaii	6	81	13.55	4	51	14 31
Idaho	18	120	6.61	(3)	1	12.09
Illinois	1 710	13 600	7 93	1 460	10 300	7.07
Indiana	180	1 400	7 79	130	1 1 50	8 79
Iowa	265	1,400	5 53	197	1,150	7 37
Kansas	317	2 3 3 0	7 33	33/	2 860	8.58
Kantucky		2,550	1.55	554	2,800	0.50
Louisiana	31	510	16 50	35	507	16.06
Maine	31	227	6.00	22	144	6.21
Mand	323	3 110	0.90	307	2 950	0.21
Marsachusetta	323	3,110	5.05	101	2,930	9.59
Mishigan	199	7,200	5.25	191	6,160	6.00
Minnagata	1,040	7,200	0.95	902	0,100	7.22
Mindesota	632	0,090	6.72	4//	3,430	6.75
Missouri	02	413	7.24	02	417	5.99
Mastana	34	120	1.24	20	110	J.00 9 1 2
Montana Nala mala	23	120	4.04	14	110	0.12
Neoraska		1,340	(02	00 20	932	10.81
Nevada	50	300	0.03 5.42	50 150	1/8	6.01 5.27
New Hampshire	152	825	5.42	159	852	5.5/
New Jersey	157	1,140	7.30	3/4	3,180	8.51
New Mexico	2	13	/./1	ے ۱ <i>۶۶</i>	12	0.04
New York	1/9	1,740	9./1	155	1,280	8.20
North Carolina	264	2,970	11.25	218	2,370	10.90
North Dakota	32	327	10.21	50	320	6.37
	445	3,540	7.96	396	2,930	7.40
Oklahoma	84	1,030	12.27	308	2,810	9.13
Oregon	59	452	/.6/	56	428	/.59
Pennsylvania	350	1,750	5.00	326	1,640	5.02
Rhode Island	15	139	9.25	14	121	8.92
South Carolina	245	3,510	14.34	185	2,430	13.09
South Dakota	/9	66 /	8.42	167	1,680	10.03
Tennessee	30	157	5.28	39	250	6.36
Texas	275	2,280	8.28	1,440	11,100	7.75
Utah	162	1,360	8.37	488	4,550	9.32
Vermont	21	115	5.38	9	48	5.39
Virginia	876	7,490	8.55	611	5,220	8.55
Washington	365	2,490	6.81	286	1,710	5.99
West Virginia						
Wisconsin	589	3,050	5.18	553	3,000	5.42
Wyoming	90	544	6.06	46	358	7.80
Total or average	13,900	105.000	7.53	13.700	102.000	7.47

-- Zero.

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

²Estimated quantities and values have been recalculated.

³Less than $\frac{1}{2}$ unit.

U.S. EXPORTS OF CONSTRUCTION SAND AND GRAVEL IN 2012, BY COUNTRY $^{\rm 1}$

(Thousand metric tons and thousand dollars)

Value, Value, Value, Country or territory Quantity $f.a.s.^2$ Quantity $f.a.s.^2$ North America: - - - - Bahamas, The 2 439 (3) 30 British Virgin Islands (3) 46 4 56 Canada 138 6,450 154 3,720 Mexico 23 4,010 3 128 St. Lucia 2 79 Trinidad and Tobago 1 115 (3) 37 Other 2 480 9 305 Total 168 11,600 170 4,280 South America: - - - - Argentina 2 789 - Brazil (3) 86 1 39 Venezuela 1 157 (3) 37 Other 1 157 103 30		Sand		Gravel	
$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$			Value,		Value,
North America: 2 439 (3) 30 British Virgin Islands (3) 46 4 56 Canada 138 6,450 154 3,720 Mexico 23 4,010 3 128 St. Lucia 2 79 Trinidad and Tobago 1 115 (3) 37 Other 2 480 9 305 Total 168 11,600 170 4,280 South America: 2 789 Brazil (3) 86 1 39 Venezuela 1 289 16 27 Other 1 157 (3) 37 Total 4 1,320 17 103 Europe: 1 30 Denmark 1 30 Germany 16 3,900 26 891 <th>Country or territory</th> <th>Quantity</th> <th>f.a.s.²</th> <th>Quantity</th> <th>f.a.s.²</th>	Country or territory	Quantity	f.a.s. ²	Quantity	f.a.s. ²
Bahamas, The 2 439 (3) 30 British Virgin Islands (3) 46 4 56 Canada 138 6,450 154 3,720 Mexico 23 4,010 3 128 St. Lucia 2 79 Trinidad and Tobago 1 115 (3) 37 Other 2 480 9 305 Total 168 11,600 170 4,280 South America: - - - - Argentina 2 789 Brazil (3) 86 1 39 Venezuela 1 289 16 27 Other 1 157 (3) 37 Total 1 30 Germany 16 3,900 26 891 Ireland (3) 84 4 158	North America:				
British Virgin Islands (3) 46 4 56 Canada 138 6,450 154 3,720 Mexico 23 4,010 3 128 St. Lucia 2 79 Trinidad and Tobago 1 115 (3) 37 Other 2 480 9 305 Total 168 11,600 170 4,280 South America: - - - - Argentina 2 789 - Brazil (3) 86 1 39 Venezuela 1 289 16 27 Other 1 157 (3) 37 Total 4 1,320 17 103 Europe: - - - - - Denmark - - 130 6 4 158 Netherlands (3)	Bahamas, The	2	439	(3)	30
$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	British Virgin Islands	(3)	46	4	56
$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	Canada	138	6,450	154	3,720
St. Lucia279Trinidad and Tobago1115(3)37Other24809305Total16811,6001704,280South America:2789Argentina2789Brazil(3)86139Venezuela12891627Other1157(3)37Total41,32017103Europe:3844Denmark130Germany163,90026891Ireland(3)844158Netherlands(3)40United Kingdom4902160Other11213114Total2492Japan12397251Korea, Republic of1272(3)3Other3320(3)10Total(3)157(3)6Middle East(3)32(3)16Africa(3)62(3)12Grand total19719,6002295,930	Mexico	23	4,010	3	128
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	St. Lucia	2	79		
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	Trinidad and Tobago	1	115	(3)	37
$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	Other	2	480	9	305
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Total	168	11,600	170	4,280
$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	South America:				
$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	Argentina	2	789		
$\begin{tabular}{ c c c c c c c c c c c } \hline Venezuela & 1 & 289 & 16 & 27 \\ \hline Other & 1 & 157 & (3) & 37 \\ \hline Total & 4 & 1,320 & 17 & 103 \\ \hline Europe: & & & & & & & \\ \hline Denmark & & & 1 & 30 \\ \hline Germany & 16 & 3,900 & 26 & 891 \\ \hline Ireland & (3) & 84 & 4 & 158 \\ \hline Netherlands & (3) & 40 & & \\ \hline United Kingdom & 4 & 902 & 1 & 60 \\ \hline Other & 1 & 121 & 3 & 114 \\ \hline Total & 21 & 5,050 & 35 & 1,250 \\ \hline Asia: & & & & & \\ \hline China & 2 & 492 & & \\ \hline Japan & 1 & 239 & 7 & 251 \\ \hline Korea, Republic of & 1 & 272 & (3) & 3 \\ \hline Other & & (3) & 320 & (3) & 10 \\ \hline Total & & 4 & 1,320 & 7 & 264 \\ \hline Oceania & & (3) & 157 & (3) & 6 \\ \hline Middle East & & (3) & 32 & (3) & 12 \\ \hline Grand total & & 197 & 19,600 & 229 & 5,930 \\ \hline \end{tabular}$	Brazil	(3)	86	1	39
$\begin{tabular}{ c c c c c c c c c c c } \hline Other & 1 & 157 & (3) & 37 \\ \hline Total & 4 & 1,320 & 17 & 103 \\ \hline Europe: & & & & & & & \\ \hline Denmark & & & 1 & 30 \\ \hline Germany & 16 & 3,900 & 26 & 891 \\ \hline Ireland & (3) & 84 & 4 & 158 \\ \hline Netherlands & (3) & 40 & & \\ \hline United Kingdom & 4 & 902 & 1 & 60 \\ \hline Other & 1 & 121 & 3 & 114 \\ \hline Total & 21 & 5,050 & 35 & 1,250 \\ \hline Asia: & & & & & \\ \hline China & 2 & 492 & & \\ \hline Japan & 1 & 239 & 7 & 251 \\ \hline Korea, Republic of & 1 & 272 & (3) & 3 \\ \hline Other & & & (3) & 320 & (3) & 10 \\ \hline Total & & 4 & 1,320 & 7 & 264 \\ \hline Oceania & & & & & & \\ \hline Middle East & & & & & & \\ \hline Africa & & & & & & & & \\ \hline Grand total & & & & & & 197 & 19,600 & 229 & 5,930 \\ \hline \end{tabular}$	Venezuela	1	289	16	27
$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	Other	1	157	(3)	37
$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	Total	4	1,320	17	103
$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	Europe:				
$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	Denmark			1	30
$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	Germany	16	3,900	26	891
$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	Ireland	(3)	84	4	158
$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	Netherlands	(3)	40		
$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	United Kingdom	4	902	1	60
Total 21 5,050 35 1,250 Asia:	Other	1	121	3	114
Asia: 2 492 Japan 1 239 7 251 Korea, Republic of 1 272 (3) 3 Other (3) 320 (3) 10 Total 4 1,320 7 264 Oceania (3) 157 (3) 6 Middle East (3) 32 (3) 16 Africa (3) 62 (3) 12 Grand total 197 19,600 229 5,930	Total	21	5,050	35	1,250
$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	Asia:				
Japan 1 239 7 251 Korea, Republic of 1 272 (3) 3 Other (3) 320 (3) 10 Total 4 1,320 7 264 Oceania (3) 157 (3) 6 Middle East (3) 32 (3) 16 Africa (3) 62 (3) 12 Grand total 197 19,600 229 5,930	China	2	492		
Korea, Republic of 1 272 (3) 3 Other (3) 320 (3) 10 Total 4 1,320 7 264 Oceania (3) 157 (3) 6 Middle East (3) 32 (3) 16 Africa (3) 62 (3) 12 Grand total 197 19,600 229 5,930	Japan	1	239	7	251
Other (3) 320 (3) 10 Total 4 1,320 7 264 Oceania (3) 157 (3) 6 Middle East (3) 32 (3) 16 Africa (3) 62 (3) 12 Grand total 197 19,600 229 5,930	Korea, Republic of	1	272	(3)	3
Total 4 1,320 7 264 Oceania (3) 157 (3) 6 Middle East (3) 32 (3) 16 Africa (3) 62 (3) 12 Grand total 197 19,600 229 5,930	Other	(3)	320	(3)	10
Oceania (3) 157 (3) 6 Middle East (3) 32 (3) 16 Africa (3) 62 (3) 12 Grand total 197 19,600 229 5,930	Total	4	1,320	7	264
Middle East (3) 32 (3) 16 Africa (3) 62 (3) 12 Grand total 197 19,600 229 5,930	Oceania	(3)	157	(3)	6
Africa (3) 62 (3) 12 Grand total 197 19,600 229 5,930	Middle East	(3)	32	(3)	16
Grand total 197 19,600 229 5,930	Africa	(3)	62	(3)	12
	Grand total	197	19,600	229	5,930

-- 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 COUNTRY $^{\rm 1}$

	2011		2012	
		Value,		Value,
Country or territory	Quantity	c.i.f. ²	Quantity	c.i.f. ²
Antigua and Barbuda	1	19	5	124
Australia	(3)	631		
Bahamas, The	98	1,630	4	149
Canada	2,950	43,100	3,660	40,000
China	14	2,880	7	2,500
Colombia	13	181	26	81
France	4	647	2	301
Germany	2	876	4	928
Mexico	306	7,510	326	4,910
New Zealand	7	2,240	5	1,860
Norway			43	4,700
Peru	3	765	8	1,020
Vietnam	28	2,230		
Other	18	2,050	14	2,640
Total	3,440	64,800	4,110	59,200

(Thousand metric tons and thousand dollars)

-- Zero.

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 ¹/₂ unit.

Source: U.S. Census Bureau.

THE TOP 100 PRODUCERS OF CONSTRUCTION SAND AND GRAVEL IN THE UNITED STATES IN 2012^1

RankCompanyRankCompany	
1 1 Oldcastle Materials, Inc. 51 59 E.R. Jahna Industries, Inc.	
2 4 CEMEX S.A.B. de C.V. 52 79 Mark Sand & Gravel Co.	
3 3 Vulcan Materials Co. 53 43 Southern Aggregates LLC	
4 2 Lehigh Hanson,Inc. 54 89 Quikrete Co.	
5 6 MDU Resources Group, Inc. 55 95 Alleyton Resource Corp.	
6 8 Martin Marietta Aggregates 56 100 Northern Improvement Co.	
7 7 Holcim Group/Aggregate Industries Management, Inc. 57 67 Southwest Rock Products, LLC	
8 12 Trinity Industries, Inc. 58 99 Crockett County Mining, LTD	
9 5 Bureau of Land Management 59 39 JMAC Resources. Inc.	
10 11 Mitsubishi Materials Corp. 60 78 Liberty Materials, Inc.	
11 9 Granite Construction, Inc. 61 53 Wright Materials, Inc.	
12 10 Lafarge North America Inc. 62 57 Watson Gravel, Inc.	
13 15 CalPortland Co. 63 — Colorado County Sand & Grave	1 Co. LLC
14 16 Teichert 64 74 Hillton Basic Resources. Inc.	
15 14 Fisher Industries 65 87 Seven Points Sand & Gravel Inc	2
16 31 Ash Grove Cement Co. 66 56 The Heritage Group	
17 13 Colas Inc. 67 — Megasand Enterprises Inc.	
18 17 Clude Cos Inc. 68 66 McMurry Ready Mix Co	
19 20 WM D Scenaniak Construction 69 — Jobe Materials J. P	
20 18 Edw C Levy Co	o Inc
21 21 Mathy Construction Co. 71 83 Sundre Sand & Gravel Inc.	, me.
21 21 Thinking Construction Co. 71 Go Sundar Construction Inc. 72 Tri-City Paviero Inc. 72 Tri-City Paviero Inc.	
22 29 Foxus industries, inc. 72 The Ory Further, inc. 23 29 L G Evenist Inc. 73 — S&S Aggregates Co.	
24 26 Miles Sand and Gravel Co. 74 — ENE Mining Inc.	
25 19 Fordyce I td 75 — Pinnacle Materials II C	
26 25 Gilge Bizer Indian Community 76 47 Eucon Corp	
20 25 One River indian community 70 47 Eddon Corp.	
27 22 Fugen San Co. 77 55 Find Corp.	
20 40 Chandler Aggregates Inc. 70 — City Transfer Inc.	
2) 4) Aggregate Aggregates, inc. 7 — City Hanstein, inc. 20 40 Aggregate Construction Inc. 80 — 75 Millar Springer Materials LLC.	
30 40 Aggregate Construction, inc. 80 75 Winter Springs Matchais, LLC 31 51 Strate Corp. 81 71 B.P. Amon & Song Inc.	
22 22 Data Corp. 61 /1 D.C. Anior & Solit, inc. 82 72 Simpson Construction Materials	
32 52 Dan Gemain Graver Froducts, inc. 82 72 Simpson Construction Watchars 33 61 A Lindbarg & Sons Inc. 83 54 Irving Matarials Inc.	, LLC
24 29 DE Lange Gental Co. 94 Ered Waher Inc.	
34 26 K.E. Jailes Olavei Co. 64 — Field Webel, life. 35 36 LLS Concrete Inc. 85 58 NBP Send LLC	
26 92 Charay Entermines LD 96 27 Standard Sand & Silice Co	
30 32 Chancy Entriprises E.1. 80 57 Standard Sand & Sinda Co. 37 30 All American Asphalt Co. 87 50 Mulzer Crushed Stone Inc.	
37 50 An American Asphan Co. 67 50 Wulzer Clushed Stolle, IIC.	
30 70 For initial solutions and the second	
$40 44 \text{ Dolese Bros } C_0$ $00 76 \text{ Conital Soud } C_2 \text{ Inc.}$	ic.
41 27 Holliday Doole Co. 41 27 Holliday Doole Co. 41 27 Holliday Doole Co.	
41 2/ Hulliday Rock Co. 91 — Julgensen Cos. 42 41 Solt River Dima Maricona Indian Community 02 Unitar Sond & Crevel LLC	
72 71 San Kiver Finia-Mancopa mutan Community 92 — numer Sand & Oravel LLC 12 29 Ambay Aggregates 02 Daldwin Sand & Gravel Ca	
44 60 Lee Vereze Com	
44 09 Las vegas raving Corp. 94 — Lindy Paving, Inc.	
45 45 Central Specialities, inc. 95 80 Nebco, inc.	
40 55 Summit Materials, LLC 96 — M.K. Tanner Mining, Inc. 47 Knonik Grushing Inc. 97 95 Desenvision Grushing Inc.	
4/ — Kilopik Clushing, inc. 9/ 65 Kasmussen Group, inc.	
40 42 York Duilding Draduate Co. 90 97 A connected Discourse Line.	
77 72 For building robucts Co. 77 77 Aggregate Resources, Inc.	

- Not in the top 100 producers of construction sand and gravel in the United States in 2011.

¹In descending order of tonnage produced.