



2014 Minerals Yearbook

**SAND AND GRAVEL, CONSTRUCTION [ADVANCE
RELEASE]**

SAND AND GRAVEL, CONSTRUCTION

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A total of 819 million metric tons (Mt) of construction sand and gravel was produced for consumption in the United States in 2014, essentially unchanged from the total production of 2013, but 39% less than the record high of 1.34 billion metric tons (Gt) in 2006. In 2014, the total value of construction sand and gravel produced in the United States was \$6.6 billion, an increase of 4% compared with that of 2013 (table 1). The average unit value for construction sand and gravel sold or used by producers increased by 3% compared with the average unit value for 2013. After the relatively constant levels of the previous 3 years, production still remained lower than the level of construction sand and gravel production for consumption in the United States in 1992. Employment was down by 5% in 2014 from that of 2013 but down by 25% compared with that of 2006 at mines identified as producing construction sand and gravel by the Mine Safety and Health Administration (MSHA).

Foreign trade in construction sand and gravel remained relatively small compared to U.S. consumption. In 2014, U.S. exports increased by 49% to 87,000 metric tons (t) compared with 58,000 t in 2013, and the value increased by 38% to \$21.8 million compared with \$15.8 million in 2013 (tables 1, 8). U.S. imports of construction sand and gravel increased slightly to 4.3 Mt, and the value increased by 28% to \$64 million compared with 2013 totals (tables 1, 9). Apparent domestic consumption of construction sand and gravel, which is defined as production for consumption (sold or used) plus imports minus exports, remained virtually unchanged compared with that of 2013.

Construction sand and gravel is a traditional basic building material and is one of the earliest materials used by humans for dwellings and later for outdoor areas such as paths, roadways, and other constructs. Despite the relatively low, but increasing, unit value of its basic products, the construction sand and gravel industry is a major contributor to and an indicator of the economic well-being of the Nation. Sand and gravel is very accessible and is widely used throughout the United States and the world. As sand and gravel has become less available owing to resource constraints or economic conditions in some locales, builders began to crush bedrock to produce a manufactured sand and gravel often referred to as crushed stone. Construction aggregates are defined as the combination of crushed stone and construction sand and gravel. The crushed stone industry is reviewed in a separate chapter, and both mineral commodities are usually included in any review of the national or State aggregates industry.

Production

Domestic production data for construction sand and gravel were derived by the U.S. Geological Survey (USGS) from voluntary surveys of U.S. producers. In 2014, a total of 3,646 companies produced or sold construction sand and gravel

from 5,895 operations with 8,567 pits and 363 sales and (or) distribution sites (table 7). Of the 5,895 active operations, 2,983 operations reported their production or sales to the USGS, and their total production was 438 Mt (54% of the U.S. total). Of the 2,983 reporting operations, 675 operations did not report a breakdown by end use. Their total production was 163 Mt (20% of the U.S. total) and is included in table 5 under “Unspecified, reported” uses.

Production from the nonresponding quarries was estimated by using employment data provided by MSHA. The estimated output of 2,912 nonrespondent operations was 381 Mt (46% of the U.S. total) and is included in table 5 under “Unspecified, estimated” uses.

A total of 363 operations reported that they were active sales yards, of which 175 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, 188 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. In 2014, the total quantity of construction sand and gravel sold from these operations was 46.7 Mt. Information regarding the number of active operations, active quarries, types of processing plants, and number of sales yards by State is provided in table 7.

Construction sand and gravel was produced in every State. The 10 leading producing States were, in descending order of tonnage, California, Texas, Minnesota, Arizona, Michigan, Colorado, Washington, Ohio, New York, and Wisconsin. The combined production of the 10 leading States increased slightly compared with that of 2013 and accounted for 52% of the national total (table 3).

A review of production by size of operation at the national level in 2014 indicated that 148 Mt of construction sand and gravel (18% of the total construction sand and gravel) was produced by 103 operations reporting production of more than 1 million metric tons per year; 177 Mt was produced by 288 operations reporting production between 500,000 and 999,999 metric tons per year (t/yr); and 381 Mt was produced by 1,851 operations reporting production between 100,000 and 499,999 t/yr. Operations that produced less than 500,000 t/yr accounted for 60% of total construction sand and gravel produced in the United States in 2014 (table 4A). By geographic region in 2014, the Midwest had 2,179 active operations, followed by the West with 1,783, the Northeast with 974, and the South with 959 active operations (table 4B).

The leading U.S. producing companies in 2014 were, in descending order of tonnage, Oldcastle Materials, Inc.; Vulcan Materials Co.; Lehigh Hanson, Inc.; CEMEX S.A.B. de C.V.; MDU Resources Group, Inc.; Holcim Group/Aggregate

Industries Management, Inc.; Martin Marietta Aggregates; Granite Construction, Inc.; Summit Materials, LLC; and Mitsubishi Cement Corp. (table 10). In 2014, the combined production of the top 10 companies increased by 6% to 204 Mt (25% of the national total). The combined production of the top 100 companies was 434 Mt (53% of the national total).

In 2014, companies continued efforts to divest noncore assets and strengthen positions in strategic geographic areas. In July, Martin Marietta completed its acquisition of Texas Industries, Inc. (TXI), which was announced in January. TXI's assets in California and Texas increased Martin Marietta's presence in the Southwest. These assets included approximately 800 Mt of aggregates reserves, bringing Martin Marietta's total aggregates reserves to more than 13.5 Gt (Martin Marietta Materials, Inc., 2014). Martin Marietta was required to sell certain assets as a condition of the Department of Justice's approval of the acquisition.

Consumption

Construction sand and gravel production reported to the USGS is actually material that was either sold to other companies or consumers or was used by producers. Stockpiled production is not included in the reported quantities. The "sold or used" tonnage, therefore, represents the amount of production including some imports released for domestic consumption or export in a given year. Because some of the construction sand and gravel producers did not report a breakdown by end use, their total production was included in the "Unspecified, reported" use category. The estimated production of nonrespondents was included in the "Unspecified, estimated" use category.

In 2014, U.S. apparent consumption of construction sand and gravel, which is defined as U.S. production for consumption, sold or used, plus imports minus exports, was 823 Mt, essentially unchanged with the apparent consumption in 2013. Of the 819 Mt of construction sand and gravel produced for consumption, 66% was reported or estimated without a breakdown by end use (table 5). Of the remaining construction sand and gravel produced for consumption, 46% was used as concrete aggregate; 24%, for road base and coverings; 12%, for construction fill; 11%, for asphaltic concrete aggregate and other bituminous mixtures; 4%, for concrete products, plaster and guniting sands, road stabilization, and snow and ice control; 3%, for other miscellaneous uses; and the remainder was used for golf course maintenance, filtration, railroad ballast, and roofing granules.

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.

The value of the total construction put in place in 2014 increased by 5% compared with that of 2013, to \$962 billion. The value of total private construction increased by 6% to \$686 billion. The value of total public construction increased by 2% to \$276 billion, which was the first increase after 4 consecutive years of decreasing value (U.S. Census Bureau, 2015).

Additional information regarding production and consumption of construction sand and gravel by major uses in each State can be found in table 6 and in the USGS Minerals Yearbook, volume II, Area reports—Domestic.

Transportation

No means of transportation was reported by the producers for 551 Mt of the 819 Mt of construction sand and gravel produced for consumption in 2014. Of the remaining 268 Mt of construction sand and gravel, 78% was reported as being transported by truck from the pit or the processing plant to the first point of sale or use, 3% by waterway, and 2% by rail. About 39.4 Mt of the specified production was reported as not having been transported and, therefore, is assumed to have been used onsite.

Prices

Prices in this chapter are the annual average free-on-board plant prices, usually at the first point of sale or captive use, as reported by construction sand and gravel producing companies. This value does not include transportation from the plant or yard to the consumer. It does, however, include all costs of mining, processing, in-plant transportation, overhead, and profit. In 2014, 1,300 operations responding to the annual survey reported the dollar value of their production for the current and previous year. The average unit value for operations reporting production and value was \$8.56 per metric ton in 2014, which was an increase of 4% compared with the reported average unit value of \$8.21 per metric ton in 2013. Leading U.S. producers increased prices by 2% to 4.5% in 2014 compared with prices in 2013. For those operations that reported production only, the unit values for specific end uses were estimated based on reported values for those specific uses in the same State. The reported State average was used in the estimation for operations reporting total production only and for operations that did not respond to the survey.

Additional information regarding prices of construction sand and gravel by major uses in the United States and each State and the State districts can be found throughout the tables included in this chapter and in the USGS Minerals Yearbook, volume II, Area reports—Domestic.

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.

Exports.—Exports of sand and gravel increased by 49% to 87,000 t compared with 58,000 t in 2013, and the value increased by 38% to \$21.8 million (table 1). Argentina, which was the leading destination, received 42% of the total sand exports but none of the gravel exports. Canada, the second leading destination, received 28% of the total sand exports and 65% of total gravel exports (table 8). The average value of sand and gravel exports in 2014 was \$250 per ton, which was

down by 8% from \$270 per ton in 2013. 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), may have been misclassified as construction sand and gravel.

Imports.—Imports of construction sand and gravel increased slightly to 4.3 Mt, and the value increased by 28% to \$64.2 million (table 1). Canada was the leading source of construction sand and gravel imports, with 89% of the total quantity (table 9). Mexico supplied 6% of the imports, and most of the remaining 5% was supplied by five other countries. The average unit value of sand and gravel imports in 2014 was \$14.91 per ton, up from \$11.86 per ton in 2013.

Outlook

The aggregates industry is a cyclical business, reacting to the levels of activity in public infrastructure projects, commercial and residential construction markets, and other types of construction. The residential construction slowdown in the United States that began in 2006 was well documented and led to decreased consumption of construction sand and gravel. After 4 years of decline, residential construction appeared to level off in late 2010 and construction sand and gravel production remained almost flat through 2014. Quarterly construction sand and gravel sales data also indicate that the construction industry may have reached the low point in the cycle and may now have begun to recover slightly (Willett and Bennett, 2016).

With significantly stronger construction activity expected across the country in 2015 and recovery in the private sector and residential construction experiencing a level of growth not seen since late 2005, consumption of construction aggregates likely will continue to increase. It is expected that the increased consumption in 2015 from that in 2014 will once again exceed the historical annual average of the past 50 years, which was a 2% to 4% increase per year. Construction sand and gravel in 2015 is projected to increase by 5% compared with that of 2014 (Willett, 2015).

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

(Thousand metric tons and thousand dollars)

	2010	2011	2012	2013	2014
Sold or used by producers:²					
Quantity	799,000 ^r	807,000 ^r	812,000 ^r	817,000 ^r	819,000
Value	5,860,000 ^r	6,050,000 ^r	6,220,000 ^r	6,350,000 ^r	6,570,000
Exports:					
Quantity	516 ^r	413 ^r	484 ^r	58 ^r	87
Value	23,100 ^r	28,700 ^r	26,200 ^r	15,800 ^r	21,800
Imports for consumption:					
Quantity	2,670	3,440	4,110	4,230	4,310
Value	75,400 ^r	43,400 ^r	42,400 ^r	50,100 ^r	64,200
Average number of employees ³	36,000	36,100	37,100	36,400	34,600

^rRevised.

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

²Does not include American Samoa, Guam, Puerto Rico, and the U.S. Virgin Islands.

³Including office staff. Source: Mine Safety and Health Administration.

TABLE 2
CONSTRUCTION SAND AND GRAVEL SOLD OR USED BY PRODUCERS
IN THE UNITED STATES, BY GEOGRAPHIC DIVISION^{1,2}

Region/division	2013 ³		2014	
	Quantity (thousand metric tons)	Value (thousands)	Quantity (thousand metric tons)	Value (thousands)
Northeast:				
New England	37,800	\$318,000	36,800	\$304,000
Middle Atlantic	50,100	437,000	49,000	439,000
Midwest:				
East North Central	121,000	770,000	128,000	831,000
West North Central	124,000	726,000	117,000	677,000
South:				
South Atlantic	49,200	422,000	53,400	476,000
East South Central	33,900	230,000	33,600	221,000
West South Central	115,000	956,000	113,000	1,050,000
West:				
Mountain	149,000	1,130,000	152,000	1,170,000
Pacific	138,000	1,350,000	136,000	1,410,000
Total	817,000	6,350,000	819,000	6,570,000

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

²Does not include American Samoa, Guam, Puerto Rico, and the U.S. Virgin Islands.

³Estimated quantities have been recalculated.

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

State	2013 ²			2014		
	Quantity (thousand metric tons)	Value (thousands)	Unit value	Quantity (thousand metric tons)	Value (thousands)	Unit value
Alabama	9,210	\$61,700	\$6.70	8,700	\$59,700	\$6.86
Alaska	9,800	65,800	6.72	8,270	62,500	7.56
Arizona	35,100	306,000	8.72	35,500	306,000	8.63
Arkansas	8,010	68,200	8.52	8,020	69,500	8.68
California	85,600	954,000	11.15	84,400	1,010,000	11.94
Colorado	31,200	222,000	7.12	34,000	237,000	6.98
Connecticut	5,100	47,200	9.26	5,360	53,100	9.91
Delaware	1,690	13,200	7.82	1,690	16,100	9.55
Florida	14,700	133,000	9.03	16,000	152,000	9.52
Georgia	5,090	33,000	6.49	5,490	37,500	6.84
Hawaii	658	10,100	15.30	492	7,830	15.92
Idaho	11,400	68,800	6.02	13,400	80,000	5.97
Illinois	17,100	119,000	6.98	18,200	123,000	6.78
Indiana	18,300	132,000	7.24	17,600	132,000	7.49
Iowa	13,400	84,100	6.27	13,400	92,000	6.88
Kansas	8,700	48,700	5.60	8,540	48,700	5.70
Kentucky	8,350	43,700	5.23	8,510	41,500	4.88
Louisiana	18,600	190,000	10.20	17,100	215,000	12.55
Maine	7,490	52,000	6.95	7,050	52,600	7.46
Maryland	6,540	76,900	11.76	7,110	91,900	12.94
Massachusetts	11,700	106,000	9.05	10,800	82,700	7.69
Michigan	31,800	167,000	5.26	35,400	200,000	5.66
Minnesota	40,900	191,000	4.68	41,000	184,000	4.50
Mississippi	10,300	76,400	7.42	10,500	79,300	7.55
Missouri	11,200	78,200	6.97	10,500	66,900	6.35
Montana	12,700	96,300	7.60	10,500	86,700	8.27
Nebraska	12,600	88,100	6.97	11,600	83,800	7.20
Nevada	12,700	87,800	6.90	13,400	88,700	6.61
New Hampshire	6,200	46,700	7.53	6,250	51,800	8.29
New Jersey	11,000	94,000	8.53	12,100	99,000	8.21
New Mexico	9,110	81,900	8.99	7,720	77,800	10.08
New York	28,600	248,000	8.66	27,200	245,000	9.02
North Carolina	7,390	49,900	6.75	7,340	48,800	6.65
North Dakota	25,300	182,000	7.20	20,000	143,000	7.14
Ohio	28,700	224,000	7.79	31,000	232,000	7.50
Oklahoma	11,100	76,600	6.93	11,900	89,300	7.51
Oregon	11,300	90,700	8.04	10,900	94,300	8.62
Pennsylvania	10,500	94,800	9.07	9,700	94,400	9.74
Rhode Island	2,410	30,000	12.49	2,580	31,200	12.09
South Carolina	6,510	37,300	5.72	8,080	42,100	5.21
South Dakota	11,800	53,000	4.49	11,800	58,500	4.94
Tennessee	6,060	48,300	7.98	5,870	40,100	6.84
Texas	77,000	622,000	8.07	76,000	671,000	8.83
Utah	25,100	181,000	7.18	25,300	188,000	7.45
Vermont	4,850	36,200	7.46	4,750	32,600	6.86
Virginia	6,820	75,000	11.01	7,120	82,200	11.55
Washington	31,000	234,000	7.55	31,700	236,000	7.44
West Virginia	487	4,130	8.47	618	5,240	8.48
Wisconsin	24,600	127,000	5.17	25,500	143,000	5.61
Wyoming	11,300	91,100	8.09	12,600	107,000	8.44
Total or average	817,000	6,350,000	7.77	819,000	6,570,000	8.03

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

²Estimated quantities have been recalculated.

TABLE 4A
 CONSTRUCTION SAND AND GRAVEL PRODUCTION IN THE UNITED STATES
 IN 2014, BY SIZE OF OPERATION¹

Size range (metric tons)	Number of operations	Percent of total	Quantity (thousand metric tons)	Percent of total
Less than 25,000	1,740	30	16,200	2
25,000 to 49,999	902	15	29,600	4
50,000 to 99,999	1,010	17	65,800	8
100,000 to 199,999	939	16	120,000	15
200,000 to 299,999	440	7	97,800	12
300,000 to 399,999	306	5	96,100	12
400,000 to 499,999	166	3	67,400	8
500,000 to 599,999	109	2	53,700	7
600,000 to 699,999	65	1	38,200	5
700,000 to 799,999	47	0.8	31,800	4
800,000 to 899,999	39	0.7	29,800	4
900,000 to 999,999	28	0.5	24,000	3
1,000,000 to 1,499,999	62	1	68,000	8
1,500,000 and more	41	0.7	80,400	10
Total	5,900	100	819,000	100

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

TABLE 4B
CONSTRUCTION SAND AND GRAVEL PRODUCTION IN THE UNITED STATES IN 2014, BY REGION AND SIZE OF OPERATION¹

Size range (metric tons)	Northeast				Midwest			
	Number of operations	Percent of total	Quantity (thousand metric tons)	Percent of total	Number of operations	Percent of total	Quantity (thousand metric tons)	Percent of total
Less than 25,000	368	38	3,460	4	621	28	5,930	2
25,000 to 49,999	168	17	5,440	6	371	17	12,200	5
50,000 to 99,999	146	15	9,440	11	445	20	29,200	12
100,000 to 199,999	158	16	20,400	24	369	17	46,900	19
200,000 to 299,999	63	6	14,400	17	139	6	30,400	12
300,000 to 399,999	41	4	12,800	15	84	4	26,500	11
400,000 to 499,999	8	0.8	3,180	4	51	2	20,600	8
500,000 to 599,999	3	0.3	1,530	2	34	2	16,600	7
600,000 to 699,999	5	0.5	2,880	3	18	0.8	10,500	4
700,000 to 799,999	6	0.6	4,130	5	14	0.6	9,470	4
800,000 to 899,999	4	0.4	3,020	4	6	0.3	4,660	2
900,000 to 999,999	--	--	--	--	7	0.3	6,000	2
1,000,000 to 1,499,999	3	0.3	3,570	4	15	0.7	16,700	7
1,500,000 and more	1	0.1	1,560	2	5	0.2	8,960	4
Total	974	100	85,700	100	2,180	100	245,000	100

Size range (metric tons)	South				West			
	Number of operations	Percent of total	Quantity (thousand metric tons)	Percent of total	Number of operations	Percent of total	Quantity (thousand metric tons)	Percent of total
Less than 25,000	202	21	1,610	0.8	551	31	5,150	2
25,000 to 49,999	101	11	3,250	2	262	15	8,620	3
50,000 to 99,999	130	14	8,550	4	288	16	18,700	6
100,000 to 199,999	161	17	20,800	10	251	14	32,100	11
200,000 to 299,999	104	11	23,400	12	134	8	29,600	10
300,000 to 399,999	89	9	27,700	14	92	5	29,100	10
400,000 to 499,999	50	5	20,300	10	57	3	23,200	8
500,000 to 599,999	38	4	18,800	9	34	2	16,800	6
600,000 to 699,999	19	2	11,300	6	23	1	13,500	5
700,000 to 799,999	12	1	8,030	4	15	0.8	10,100	4
800,000 to 899,999	15	2	11,400	6	14	0.8	10,700	4
900,000 to 999,999	9	0.9	7,710	4	12	0.7	10,300	4
1,000,000 to 1,499,999	20	2	21,900	11	24	1	25,900	9
1,500,000 and more	9	0.9	15,500	8	26	1	54,400	19
Total	959	100	200,000	100	1,780	100	288,000	100

-- Zero.

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

TABLE 5
CONSTRUCTION SAND AND GRAVEL SOLD OR USED IN THE UNITED STATES, BY USE¹

Use	2013 ²			2014		
	Quantity (thousand metric tons)	Value (thousands)	Unit value	Quantity (thousand metric tons)	Value (thousands)	Unit value
Concrete aggregates (including concrete sand)	124,000	\$1,080,000	\$8.73	126,000	\$1,100,000	\$8.68
Plaster and gunite sands	2,420	26,000	10.74	2,250	26,000	11.60
Concrete products (blocks, bricks, pipe, decorative, and so forth)	1,590	14,700	9.26	3,170	28,200	8.89
Asphaltic concrete aggregates and other bituminous mixtures	32,000	283,000	8.83	31,100	289,000	9.28
Road base and coverings	67,500	448,000	6.64	65,700	463,000	7.05
Road stabilization, cement	1,130	7,690	6.82	1,670	11,800	7.07
Road stabilization, lime	854	7,410	8.68	555	4,130	7.44
Fill	37,500	199,000	5.29	32,900	195,000	5.93
Snow and ice control	3,350	24,700	7.36	2,930	23,400	7.99
Railroad ballast	234	3,530	15.08	385	5,460	14.19
Roofing granules	156	2,130	13.67	102	1,400	13.72
Filtration	809	7,830	9.67	367	3,540	9.64
Golf course maintenance sand	175	2,160	12.31	254	3,190	12.57
Other miscellaneous uses	7,600	80,900	10.64	7,510	82,200	10.94
Unspecified: ³						
Reported	169,000	1,320,000	7.80	163,000	1,320,000	8.09
Estimated	369,000	2,840,000	7.71	381,000	3,020,000	7.94
Total or average	817,000	6,350,000	7.77	819,000	6,570,000	8.03

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

²Estimated quantities have been recalculated.

³Reported and estimated production without a breakdown by end use.

TABLE 6
CONSTRUCTION SAND AND GRAVEL SOLD OR USED BY PRODUCERS IN 2014, BY STATE AND USE¹

(Thousand metric tons and thousand dollars)

State	Concrete aggregates (including concrete sand)		Plaster and gunitite sands		Concrete products (blocks, bricks, pipe decorative, and so forth)		Asphaltic concrete aggregates and other bituminous mixtures		Road base and coverings ²	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Alabama	2,420	16,100	W	W	W	W	524	3,980	63	462
Alaska	3,490	34,300	--	--	W	W	118	932	332	2,620
Arizona	3,740	37,300	81	1,070	W	W	1,820	20,800	3,480	22,700
Arkansas	881	7,870	--	--	--	--	75	683	216	1,080
California	14,500	179,000	583	8,340	437	5,700	7,480	96,200	4,900	54,700
Colorado	4,610	32,200	39	576	220	1,450	480	3,530	4,710	36,200
Connecticut	557	5,910	--	--	W	W	67	506	136	1,650
Delaware	823	9,810	--	--	W	W	W	W	21	387
Florida	1,720	19,800	W	W	W	W	W	W	W	W
Georgia	1,550	10,800	128	740	W	W	--	--	W	W
Hawaii	W	W	--	--	W	W	--	--	W	W
Idaho	535	5,170	W	W	W	W	264	2,960	4,030	18,600
Illinois	7,580	47,100	W	W	246	1,780	789	8,650	606	5,450
Indiana	3,350	23,800	26	375	W	W	1,070	11,900	451	4,440
Iowa	1,710	13,500	37	251	W	W	85	737	1,250	6,200
Kansas	1,360	7,900	36	223	W	W	261	1,910	965	6,020
Kentucky	2,320	11,500	W	W	W	W	430	1,090	--	--
Louisiana	3,360	33,900	--	--	--	--	W	W	668	13,400
Maine	564	2,800	--	--	W	W	143	3,670	596	4,680
Maryland	2,100	29,000	W	W	W	W	W	W	11	162
Massachusetts	1,410	12,900	W	W	W	W	436	2,440	568	3,810
Michigan	3,170	19,700	W	W	60	344	2,370	16,400	4,100	22,600
Minnesota	1,980	10,300	49	613	126	1,280	2,950	15,300	8,390	30,200
Mississippi	1,140	7,160	W	W	--	--	--	--	537	5,420
Missouri	2,370	14,500	W	W	102	643	W	W	11	103
Montana	848	9,470	--	--	W	W	310	3,510	2,380	17,300
Nebraska	1,880	10,800	181	1,950	W	W	402	4,200	1,370	11,800
Nevada	1,580	14,100	50	606	6	71	814	6,990	1,580	11,100
New Hampshire	89	757	--	--	W	W	286	2,120	667	5,230
New Jersey	1,260	9,710	W	W	W	W	793	2,220	W	W
New Mexico	881	11,700	42	350	W	W	464	4,840	637	5,480
New York	2,240	24,300	102	1,430	37	197	694	7,990	1,490	10,300
North Carolina	2,110	13,800	W	W	W	W	650	3,780	11	173
North Dakota	282	3,820	--	--	--	--	W	W	4,180	33,100
Ohio	6,590	46,700	22	313	113	877	2,270	16,100	1,780	16,900
Oklahoma	3,720	30,700	W	W	5	45	116	687	495	3,520
Oregon	462	4,390	W	W	W	W	165	1,350	1,690	14,200
Pennsylvania	1,750	17,500	84	976	147	1,180	241	2,230	664	5,950
Rhode Island	248	3,730	--	--	W	W	W	W	251	2,840
South Carolina	2,060	11,700	--	--	W	W	77	486	157	1,070
South Dakota	760	5,200	W	W	--	--	W	W	2,390	13,400
Tennessee	1,120	7,740	--	--	W	W	624	4,940	74	634
Texas	19,700	184,000	457	4,450	253	2,270	395	4,810	1,950	11,200
Utah	1,830	16,700	41	885	--	--	443	3,150	2,140	14,000
Vermont	181	1,660	--	--	W	W	W	W	486	2,830
Virginia	1,030	15,700	W	W	W	W	439	3,390	189	2,960
Washington	5,030	36,500	W	W	2	29	428	2,590	4,480	34,700
West Virginia	W	W	--	--	--	--	--	--	--	--
Wisconsin	2,930	15,500	W	W	W	W	600	8,400	1,550	8,370
Wyoming	541	7,230	W	W	W	W	427	4,530	945	8,400
Total	126,000	1,100,000	1,960	23,100	1,760	15,900	30,000	280,000	67,600	476,000
Total withheld	59	1,730	285	2,900	1,420	12,300	1,140	8,990	358	3,150
Grand total	126,000	1,100,000	2,250	26,000	3,170	28,200	31,100	289,000	67,900	479,000

See footnotes at of table.

TABLE 6—Continued
CONSTRUCTION SAND AND GRAVEL SOLD OR USED BY PRODUCERS IN 2014, BY STATE AND USE¹

(Thousand metric tons and thousand dollars)

State	Fill		Snow and ice control		Railroad ballast		Other uses ³		Total	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Alabama	473	1,740	W	W	2	28	5,160	36,700	8,700	59,700
Alaska	153	1,110	7	83	5	75	W	W	8,270	62,500
Arizona	810	6,260	W	W	--	--	25,400	217,000	35,500	306,000
Arkansas	46	512	W	W	W	W	6,800	59,400	8,020	69,500
California	3,430	35,900	W	W	W	W	53,000	628,000	84,400	1,010,000
Colorado	1,350	4,870	139	2,790	--	--	22,400	156,000	34,000	237,000
Connecticut	227	1,670	97	1,150	--	--	W	W	5,360	53,100
Delaware	319	1,770	W	W	--	--	517	4,060	1,690	16,100
Florida	1,870	15,100	--	--	--	--	11,800	112,000	16,000	152,000
Georgia	81	452	--	--	--	--	3,660	25,000	5,490	37,500
Hawaii	--	--	--	--	144	1,750	394	5,460	492	7,830
Idaho	153	508	6	32	W	W	8,260	50,800	13,400	80,000
Illinois	815	5,080	175	1,110	--	--	W	W	18,200	123,000
Indiana	1,460	10,100	294	2,520	--	--	W	W	17,600	132,000
Iowa	491	2,340	27	390	--	--	W	W	13,400	92,000
Kansas	544	1,960	34	213	--	--	W	W	8,540	48,700
Kentucky	24	72	--	--	W	W	5,370	28,000	8,510	41,500
Louisiana	588	2,770	--	--	W	W	12,400	163,000	17,100	215,000
Maine	253	1,200	55	501	--	--	W	W	7,050	52,600
Maryland	426	3,830	--	--	--	--	4,530	58,600	7,110	91,900
Massachusetts	828	4,640	193	1,860	15	149	7,200	56,000	10,800	82,700
Michigan	2,170	7,300	139	625	9	68	W	W	35,400	200,000
Minnesota	1,190	5,270	64	456	--	--	26,300	121,000	41,000	184,000
Mississippi	207	1,530	--	--	--	--	W	W	10,500	79,300
Missouri	40	219	W	W	W	W	7,980	51,200	10,500	66,900
Montana	68	395	34	212	--	--	W	W	10,500	86,700
Nebraska	326	1,110	16	140	--	--	W	W	11,600	83,800
Nevada	679	3,780	23	252	10	70	8,710	51,900	13,400	88,700
New Hampshire	195	943	36	410	--	--	W	W	6,250	51,800
New Jersey	183	1,190	25	232	--	--	9,740	84,900	12,100	99,000
New Mexico	198	2,130	W	W	--	--	5,490	53,200	7,720	77,800
New York	854	4,810	782	4,540	--	--	21,000	192,000	27,200	245,000
North Carolina	841	5,070	4	32	W	W	3,620	24,900	7,340	48,800
North Dakota	276	854	2	12	--	--	W	W	20,000	143,000
Ohio	1,300	9,820	82	524	--	--	18,800	141,000	31,000	232,000
Oklahoma	689	2,570	W	W	13	184	6,850	51,600	11,900	89,300
Oregon	85	739	W	W	W	W	8,510	73,300	10,900	94,300
Pennsylvania	702	4,980	272	2,440	W	W	W	W	9,700	94,400
Rhode Island	62	578	W	W	1	9	1,430	18,600	2,580	31,200
South Carolina	1,720	3,780	--	--	--	--	W	W	8,080	42,100
South Dakota	280	1,550	12	40	--	--	8,350	37,900	11,800	58,500
Tennessee	53	962	--	--	--	--	W	W	5,870	40,100
Texas	1,830	10,000	--	--	W	W	W	W	76,000	671,000
Utah	739	3,680	W	W	--	--	W	W	25,300	188,000
Vermont	108	514	136	695	--	--	3,690	25,600	4,750	32,600
Virginia	1,030	6,840	28	285	54	623	4,360	52,300	7,120	82,200
Washington	1,390	7,420	41	220	--	--	W	W	31,700	236,000
West Virginia	--	--	--	--	W	W	610	5,180	618	5,240
Wisconsin	1,140	4,180	139	726	W	W	19,200	106,000	25,500	143,000
Wyoming	167	959	36	656	--	--	10,400	82,500	12,600	107,000
Total	32,900	195,000	2,900	23,100	253	2,950	332,000	2,770,000	XX	XX
Total withheld	--	--	36	288	131	2,510	220,000	1,660,000	XX	XX
Grand total	32,900	195,000	2,930	23,400	385	5,460	552,000	4,430,000	819,000	6,570,000

W Withheld to avoid disclosing company proprietary data; included in "Total withheld." XX Not applicable. -- 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 7
CONSTRUCTION SAND AND GRAVEL OPERATIONS IN THE UNITED STATES IN 2014, BY STATE

State	Active operations	Active pits	Dredging operations	Processing plants				Sales yards
				Stationary	Portable	Stationary and portable	None or unspecified	
Alabama	52	53	9	25	14	2	2	2
Alaska	71	93	1	32	25	6	7	7
Arizona	147	251	2	62	65	16	2	13
Arkansas	44	51	1	27	13	2	1	3
California	294	336	8	176	88	20	2	16
Colorado	235	368	3	93	115	11	13	9
Connecticut	59	75	2	23	28	6	--	4
Delaware	11	11	4	5	1	--	1	2
Florida	55	60	18	16	16	1	4	1
Georgia	38	37	13	15	7	3	--	1
Hawaii	10	10	--	3	7	--	--	1
Idaho	142	365	1	57	74	3	7	8
Illinois	101	101	25	53	13	3	7	4
Indiana	123	123	12	71	30	9	1	14
Iowa	143	171	19	33	78	5	8	9
Kansas	108	131	33	28	39	2	6	3
Kentucky	20	26	6	7	4	2	1	3
Louisiana	101	94	34	44	6	1	16	15
Maine	151	154	3	65	62	9	12	10
Maryland	37	39	1	20	4	4	8	11
Massachusetts	91	92	11	50	27	1	2	12
Michigan	287	364	13	134	112	16	12	15
Minnesota	378	579	11	170	151	22	24	11
Mississippi	63	67	7	28	24	--	4	7
Missouri	72	81	22	36	11	2	1	3
Montana	157	215	--	63	77	10	7	3
Nebraska	146	173	47	52	41	3	3	3
Nevada	81	725	--	30	44	5	2	7
New Hampshire	86	97	--	48	29	7	2	12
New Jersey	55	51	10	29	6	2	8	7
New Mexico	89	353	3	32	39	10	5	10
New York	343	398	21	128	150	21	23	17
North Carolina	76	75	10	34	15	3	14	6
North Dakota	159	224	--	82	62	3	12	9
Ohio	218	223	34	114	44	9	17	14
Oklahoma	75	80	22	31	15	4	3	5
Oregon	85	164	--	35	44	3	3	9
Pennsylvania	87	98	3	45	29	6	4	2
Rhode Island	18	17	1	7	6	4	--	1
South Carolina	43	50	7	14	15	3	4	4
South Dakota	149	246	5	54	69	5	16	6
Tennessee	32	33	5	10	14	3	--	3
Texas	225	234	17	120	74	8	6	13
Utah	156	253	4	58	82	12	--	3
Vermont	84	101	--	36	40	4	4	4
Virginia	80	84	7	47	12	2	12	10
Washington	181	199	9	89	62	12	9	6
West Virginia	4	4	2	1	1	--	--	--
Wisconsin	294	361	13	145	106	19	11	18
Wyoming	134	377	2	61	58	3	10	7
Total	5,895	8,567	481	2,638	2,148	307	316	363

-- Zero.

TABLE 8
U.S. EXPORTS OF CONSTRUCTION SAND AND GRAVEL IN 2014, BY DESTINATION¹

(Thousand metric tons and thousand dollars)

Destination	Sand ²		Gravel ³	
	Quantity	Value, f.a.s. ⁴	Quantity	Value, f.a.s. ⁴
North America:				
Bahamas, The	2	574	(5)	141
Canada	22	1,870	5	2,650
Dominican Republic	1	258	(5)	9
Mexico	3	1,280	(5)	20
Other	2	947	1	474
Total	30	4,930	7	3,300
South America	44	10,100	(5)	3,310
Europe	4	2,020	(5)	305
Asia	2	717	1	255
Oceania	(5)	32	(5)	13
Africa	(5)	26	(5)	30
Grand total	79	17,800	8	3,920

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

²Includes Harmonized Tariff Schedule of the United States (HTS) code 2505.90.0000

³Includes HTS code 2517.10.0015

⁴Free alongside ship. Value of material at U.S. port of export; based on transaction price, including all charges incurred in placing material alongside ship.

⁵Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 9
U.S. IMPORTS FOR CONSUMPTION OF CONSTRUCTION SAND
AND GRAVEL, BY COUNTRY¹

(Thousand metric tons and thousand dollars)

Country	2013		2014	
	Quantity	Value, c.i.f. ²	Quantity	Value, c.i.f. ²
Canada	3,800	34,300 ^r	3,840	36,100
China	4	1,860 ^r	11	2,200
Germany	5	1,050 ^r	19	1,080
Mexico	315	3,930 ^r	246	3,680
Norway	32	1,950 ^r	49	3,250
Sweden	(3)	9	80	9,450
Vietnam	25	1,430 ^r	20	1,170
Other	40 ^r	5,610 ^r	45	7,250
Total	4,230	50,100 ^r	4,310	64,200

^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 10
THE TOP 100 PRODUCERS OF CONSTRUCTION SAND AND GRAVEL IN THE UNITED STATES IN 2014¹

2014 rank	2013 rank	Company	2014 rank	2013 rank	Company
1	1	Oldcastle Materials, Inc.	51	63	Las Vegas Paving Corp.
2	2	Vulcan Materials Co.	52	59	Boral LTD
3	3	Lehigh Hanson, Inc.	53	56	Dolese Bros. Co.
4	4	CEMEX S.A.B. de C.V.	54	54	Burnco Rock Products Ltd
5	5	MDU Resources Group, Inc.	55	37	Northern Improvement Co.
6	6	Holcim Group/Aggregate Industries Management, Inc.	56	—	Peak Sand & Gravel, Inc.
7	7	Martin Marietta Aggregates	57	48	Memphis Stone & Gravel Co.
8	8	Granite Construction, Inc.	58	53	Wright Materials, Inc.
9	10	Summit Materials, LLC	59	—	Rieth-Riley Construction Co., Inc.
10	9	Mitsubishi Cement Corp.	60	74	Pioneer Sand Co.
11	14	CalPortland Co.	61	20	Texas Industries, Inc.
12	11	Fisher Industries	62	89	Corliss Resources, Inc.
13	13	Teichert, Inc.	63	98	Standard Gravel Co., Inc.
14	19	Colas Inc.	64	71	Standard Sand & Silica Co.
15	18	Clyde Cos., Inc.	65	76	Sundre Sand & Gravel, Inc.
16	12	Bureau of Land Management	66	69	Central Specialties, Inc.
17	17	Ash Grove Cement Co.	67	92	Clayton Sand Co.
18	15	Lafarge North America Inc.	68	84	Bowes Construction, Inc.
19	16	Trinity Industries, Inc.	69	96	JMAC Resources, Inc.
20	30	L. G. Everist, Inc.	70	60	Nebco, Inc.
21	21	Wm. D. Scepaniak Construction	71	—	Irving Materials, Inc.
22	22	Gila River Indian Community	72	95	Hunter Sand & Gravel LLC
23	26	Edw. C. Levy Co.	73	64	Pyne Sand & Stone Co., Inc.
24	24	Nugent Sand Co.	74	79	A. Lindberg & Sons Inc.
25	23	Miles Sand & Gravel Co.	75	61	Amboy Aggregates
26	28	Fordyce Ltd.	76	90	Simpson Construction Materials, LLC
27	34	U.S. Concrete, Inc.	77	—	O.L. Thompson Construction Co., Inc.
28	27	Mathy Construction Co.	78	85	Capital Sand Co., Inc.
29	33	Chandler Aggregates, Inc.	79	78	Miller Springs Materials, LLC
30	29	Quikrete Co.	80	—	Wissota Sand & Gravel
31	44	Salt River Pima-Maricopa Indian Community	81	97	Rasmussen Group, Inc.
32	25	Multisources Ltd.	82	—	Cemstone Products Co.
33	35	Dan Gernatt Gravel Products, Inc.	83	87	Tiller Corp.
34	66	Holliday Rock Co.	84	72	Continental Materials Corp.
35	32	Polaris Materials Corp.	85	83	Gateway Dredging & Contracting, LLC
36	40	Varra Cos., Inc.	86	—	Grand Rapids Gravel Co.
37	31	The Olen Corp.	87	77	Hilltop Basic Resources, Inc.
38	36	Strata Corp.	88	—	Aggregate Resources, Inc.
39	46	R.E. Janes Gravel Co.	89	—	LS Sand & Gravel LTD
40	41	FST Sand & Gravel, Inc.	90	—	S&S Aggregates Co.
41	50	E.R. Jahna Industries, Inc.	91	82	Eucon Corp.
42	47	FNF Mining Inc.	92	—	McMurry Ready Mix Co.
43	58	Watson Gravel, Inc.	93	—	Capitol Aggregates, Ltd.
44	43	The Heritage Group	94	75	Eagle Materials Inc.
45	42	All American Asphalt Co.	95	73	Croell Redi-Mix
46	49	Pine Bluff Materials LLC	96	—	Texas Aggregates, LLC
47	62	Chaney Enterprises L.P.	97	81	Liberty Materials Inc.
48	38	Southwest Rock Products, LLC	98	88	The Jurgensen Cos.
49	67	Thelen Sand & Gravel, Inc.	99	—	Anchor Stone Co.
50	57	York Building Products Co.	100	51	VantaCore Partners LP

— Not in the top 100 producers of construction sand and gravel in the United States in 2013.

¹In descending order of tonnage produced.