



# 2015 Minerals Yearbook

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

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# SAND AND GRAVEL, CONSTRUCTION

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A total of 885 million metric tons (Mt) of construction sand and gravel was produced for consumption in the United States in 2015, an increase of 6.5% from the total production of 2014, but 34% less than the record high of 1.34 billion metric tons in 2006. In 2015, the total value of construction sand and gravel produced in the United States was \$7.3 billion, an increase of 9% compared with that of 2014 (table 1). The average unit value for construction sand and gravel increased slightly compared with the average unit value for 2014 (table 3). Despite the 6.5% increase in 2015 after the relatively constant levels of the previous 4 years, production remained slightly lower than the level of construction sand and gravel production for consumption in the United States in 1994. Employment increased slightly in 2015 from that of 2014 but was down by 24% 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 2015, U.S. exports decreased by 19% to 70,300 metric tons (t) compared with 87,100 t in 2014, and the value decreased slightly to \$21.7 million (tables 1, 8). U.S. imports of construction sand and gravel decreased slightly to 3.89 Mt, but the value increased by 33% to \$61.4 million compared with 2014 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, increased by 6.5% compared with that of 2014.

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 have begun 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 2015, a total of

3,646 companies produced or sold construction sand and gravel from 6,328 operations with 9,382 pits and 361 sales and (or) distribution sites (table 7). Of the 6,328 active operations, 2,813 operations reported their production or sales to the USGS, and their total production was 456 Mt (52% of the U.S. total). Of the 2,813 reporting operations, 1,224 operations did not report a breakdown by end use. Their total production was 173 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 the 3,515 nonrespondent operations was 430 Mt (49% of the U.S. total) and is included in table 5 under “Unspecified, estimated” uses.

A total of 361 operations reported that they were active sales yards, of which 176 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, 185 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 2015, the total quantity of construction sand and gravel sold from these operations was 53.2 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, Michigan, Arizona, Colorado, Washington, Ohio, New York, and Utah. The combined production of the 10 leading States increased by 9% compared with that of 2014 and accounted for 53% of the national total (table 3).

A review of production by size of operation at the national level in 2015 indicated that 181 Mt of construction sand and gravel (20% of the total construction sand and gravel) was produced by 121 operations reporting production of more than 1 million metric tons per year; 199 Mt was produced by 317 operations reporting production between 500,000 and 999,999 metric tons per year (t/yr), and 388 Mt was produced by 1,897 operations reporting production between 100,000 and 499,999 t/yr. Operations that produced less than 500,000 t/yr accounted for 57% of total construction sand and gravel produced in the United States in 2015 (table 4A). By geographic region in 2015, the Midwest had 2,403 active operations, followed by the West with 1,904, the Northeast with 1,081, and the South with 965 (table 4B).

The leading U.S. producing companies in 2015 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 2015, the combined production of the top 10 companies increased by 8% to 220 Mt (25% of the national total). The combined production of the top 100 companies was 440 Mt (50% of the national total).

## 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 (table 5).

In 2015, 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 889 Mt, a 6.5% increase compared with the apparent consumption in 2014. Of the 885 Mt of construction sand and gravel produced for consumption, 68% was reported or estimated without a breakdown by end use (table 5). Of the remaining construction sand and gravel produced for consumption, 45% was used as concrete aggregate; 23% was used for road base and coverings; 12%, for construction fill; 11%, for asphaltic concrete aggregate and other bituminous mixtures; 6%, for other miscellaneous uses, and the remaining 3% was used for concrete products, filtration, golf course maintenance, plaster and gunite sands, railroad ballast, road stabilization, roofing granules, and snow and ice control.

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 2015 increased by 11% compared with that of 2014, to \$1.11 trillion. The value of total private construction increased by 13% to \$824 billion. The value of total public construction increased by 5% to \$289 billion, which was the second year of an increase after 4 consecutive years of decreasing value (U.S. Census Bureau, 2016).

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 635 Mt of the 885 Mt of construction sand and gravel

produced for consumption in 2015. Of the remaining 251 Mt of construction sand and gravel, 75% was reported as being transported by truck from the pit or the processing plant to the first point of sale or use, 5% by waterway, and 3% by rail. About 42.5 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 2015, 1,120 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 \$9.05 per metric ton in 2015, which was an increase of 6% compared with the reported average unit value of \$8.53 per metric ton in 2014. Leading U.S. producers increased prices by 7% to 8% in 2015 compared with prices in 2014. 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 unit value 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 can be found in 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 decreased by 19% to 70,300 t compared with 87,100 t in 2014, and the value decreased slightly to \$21.7 million (table 1). Argentina, which was the leading destination, received 43% of the total sand exports but none of the gravel exports. Canada, the second-ranked destination, received 28% of the total sand exports and 68% of total gravel exports (table 8). The average unit value of sand and gravel exports in 2015 was \$308 per ton, an increase of 23% from \$250 per ton in 2014. 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 decreased slightly to 3.89 Mt, but the value increased by 33% to \$61.4 million (table 1). Canada was the leading source of construction sand and gravel imports, with 91% of the total quantity (table 9). Of the remaining imports, China,

Mexico, and Norway supplied 90%. The average unit value of sand and gravel imports in 2015 was \$15.77 per ton, up from \$11.72 per ton in 2014.

## 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 had remained at constant levels until it increased by 11% in 2015 compared with that of 2014. Similarly, construction sand and gravel production remained almost flat since 2010 until increasing 6.5% in 2015 compared with that of 2014.

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## GENERAL SOURCES OF INFORMATION

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TABLE 1  
SALIENT U.S. CONSTRUCTION SAND AND GRAVEL STATISTICS<sup>1</sup>

(Thousand metric tons and thousand dollars)

	2011	2012	2013	2014	2015
Sold or used by producers: <sup>2</sup>					
Quantity	806,000 <sup>r</sup>	816,000 <sup>r</sup>	824,000 <sup>r</sup>	831,000 <sup>r</sup>	885,000
Value	6,040,000 <sup>r</sup>	6,250,000 <sup>r</sup>	6,400,000 <sup>r</sup>	6,670,000 <sup>r</sup>	7,280,000
Exports:					
Quantity	413	484	58	87	70
Value	28,700	26,200	15,800	21,800	21,700
Imports for consumption:					
Quantity	3,180 <sup>r</sup>	3,890 <sup>r</sup>	3,940 <sup>r</sup>	3,930 <sup>r</sup>	3,890
Value	31,000 <sup>r</sup>	36,900 <sup>r</sup>	42,500 <sup>r</sup>	46,100 <sup>r</sup>	61,400
Average number of employees <sup>3</sup>	36,100	37,100	36,400	34,600	34,800

<sup>r</sup>Revised.

<sup>1</sup>Data are rounded to no more than three significant digits.

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

<sup>3</sup>Including 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<sup>1,2</sup>

Region and division	2014 <sup>3</sup>		2015	
	Quantity (thousand metric tons)	Value (thousands)	Quantity (thousand metric tons)	Value (thousands)
Northeast:				
New England	37,600	\$317,000	36,600	\$320,000
Middle Atlantic	49,400	441,000	51,900	490,000
Midwest:				
East North Central	129,000	839,000	140,000	966,000
West North Central	119,000	691,000	124,000	740,000
South:				
South Atlantic	53,300	472,000	57,900	518,000
East South Central	33,800	226,000	36,100	249,000
West South Central	115,000	1,070,000	119,000	1,140,000
West:				
Mountain	156,000	1,210,000	168,000	1,310,000
Pacific	138,000	1,410,000	152,000	1,560,000
Total	831,000	6,670,000	885,000	7,280,000

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

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

<sup>3</sup>Estimated quantities have been recalculated.

TABLE 3  
CONSTRUCTION SAND AND GRAVEL SOLD OR USED BY PRODUCERS IN  
THE UNITED STATES, BY STATE<sup>1</sup>

State	2014 <sup>2</sup>			2015		
	Quantity (thousand metric tons)	Value (thousands)	Unit value	Quantity (thousand metric tons)	Value (thousands)	Unit value
Alabama	8,850	\$61,000	\$6.89	10,700	\$74,500	\$6.99
Alaska	8,360	63,200	7.56	8,900	77,500	8.70
Arizona	36,200	313,000	8.64	38,700	345,000	8.93
Arkansas	8,080	69,800	8.65	7,510	66,000	8.79
California	86,000	1,000,000	11.68	97,000	1,090,000	11.21
Colorado	34,200	242,000	7.06	33,800	260,000	7.69
Connecticut	5,360	55,300	10.32	5,120	49,900	9.74
Delaware	1,500	15,100	10.04	2,370	19,800	8.35
Florida	16,000	152,000	9.52	17,200	176,000	10.19
Georgia	5,490	37,000	6.75	5,810	41,400	7.12
Hawaii	492	7,830	15.91	459	10,300	22.50
Idaho	13,800	82,300	5.98	14,200	82,600	5.82
Illinois	18,300	126,000	6.85	21,500	148,000	6.86
Indiana	17,600	132,000	7.49	17,300	134,000	7.70
Iowa	13,500	92,700	6.89	14,800	118,000	7.98
Kansas	8,580	48,600	5.67	9,320	57,000	6.12
Kentucky	8,510	41,500	4.88	9,040	45,500	5.03
Louisiana	17,800	220,000	12.34	16,400	185,000	11.29
Maine	7,250	54,100	7.46	7,760	60,700	7.81
Maryland	7,110	91,600	12.89	7,570	95,000	12.55
Massachusetts	11,000	88,200	8.02	10,100	92,500	9.16
Michigan	36,400	204,000	5.61	39,600	243,000	6.13
Minnesota	42,000	189,000	4.51	48,400	237,000	4.90
Mississippi	10,700	82,100	7.68	9,950	78,900	7.93
Missouri	10,600	67,500	6.35	9,830	67,200	6.84
Montana	10,900	89,600	8.23	11,900	90,900	7.62
Nebraska	12,100	86,700	7.17	12,600	90,100	7.13
Nevada	13,600	87,900	6.46	15,400	89,700	5.83
New Hampshire	6,360	53,600	8.43	6,280	52,500	8.36
New Jersey	12,100	93,300	7.74	11,400	89,900	7.92
New Mexico	8,290	84,500	10.19	9,320	84,800	9.09
New York	27,600	252,000	9.14	30,300	290,000	9.57
North Carolina	7,350	48,600	6.61	7,940	52,300	6.58
North Dakota	20,600	147,000	7.15	18,100	116,000	6.43
Ohio	30,500	228,000	7.46	33,300	274,000	8.24
Oklahoma	11,800	89,400	7.60	11,500	95,600	8.29
Oregon	11,000	94,000	8.57	12,500	109,000	8.73
Pennsylvania	9,730	95,100	9.78	10,300	111,000	10.75
Rhode Island	2,830	32,800	11.58	2,360	28,200	11.93
South Carolina	8,080	42,000	5.20	8,770	47,600	5.43
South Dakota	11,900	59,100	4.97	11,100	54,100	4.89
Tennessee	5,790	41,000	7.09	6,460	50,500	7.81
Texas	77,100	693,000	9.00	83,700	790,000	9.44
Utah	25,500	191,000	7.48	29,300	220,000	7.48
Vermont	4,790	32,800	6.86	4,960	36,000	7.26
Virginia	7,110	80,400	11.32	7,660	81,400	10.62
Washington	32,000	238,000	7.44	33,300	271,000	8.12
West Virginia	618	5,240	8.49	583	4,950	8.49
Wisconsin	26,300	149,000	5.68	28,000	168,000	6.00
Wyoming	13,700	118,000	8.64	15,000	134,000	8.93
Total or average	831,000	6,670,000	8.03	885,000	7,280,000	8.22

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

<sup>2</sup>Estimated quantities have been recalculated.

TABLE 4A  
 CONSTRUCTION SAND AND GRAVEL PRODUCTION IN THE UNITED STATES  
 IN 2015, BY SIZE OF OPERATION<sup>1</sup>

Size range (metric tons)	Number of operations	Percent of total	Quantity (thousand metric tons)	Percent of total
Less than 25,000	2,029	32	17,900	2
25,000 to 49,999	964	15	31,700	4
50,000 to 99,999	1,025	16	67,500	8
100,000 to 199,999	988	16	129,000	15
200,000 to 299,999	446	7	99,300	11
300,000 to 399,999	291	5	90,700	10
400,000 to 499,999	172	3	69,400	8
500,000 to 599,999	114	2	57,000	6
600,000 to 699,999	70	1	41,100	5
700,000 to 799,999	56	0.9	37,900	4
800,000 to 899,999	47	0.7	36,400	4
900,000 to 999,999	30	0.5	26,200	3
1,000,000 to 1,499,999	69	1	76,000	9
1,500,000 and more	52	0.8	105,000	12
Total	6,353	100	885,000	100

<sup>1</sup>Production data 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 2015, BY REGION AND SIZE OF OPERATION<sup>1</sup>

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	459	42	4,020	5	773	32	6,800	3
25,000 to 49,999	192	18	6,120	7	408	17	13,500	5
50,000 to 99,999	137	13	8,870	10	448	19	29,700	11
100,000 to 199,999	160	15	21,000	24	366	15	47,700	18
200,000 to 299,999	55	5	12,400	14	170	7	37,300	14
300,000 to 399,999	40	4	12,300	14	78	3	24,500	9
400,000 to 499,999	15	1.4	5,970	7	54	2	21,800	8
500,000 to 599,999	4	0.4	2,010	2	37	2	18,500	7
600,000 to 699,999	6	0.6	3,650	4	19	0.8	11,100	4
700,000 to 799,999	3	0.3	2,020	2	14	0.6	9,470	4
800,000 to 899,999	2	0.2	1,560	2	7	0.3	5,450	2
900,000 to 999,999	2	0.2	1,730	2	6	0.2	5,210	2
1,000,000 to 1,499,999	5	0.5	5,150	6	15	0.6	17,500	7
1,500,000 and more	1	0.1	1,720	2	8	0.3	15,400	6
Total	1,081	100	88,500	100	2,403	100	264,000	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	192	20	1,570	0.7	605	32	5,470	2
25,000 to 49,999	92	10	2,990	1	272	14	9,110	3
50,000 to 99,999	138	14	9,120	4	302	16	19,800	6
100,000 to 199,999	174	18	22,700	11	288	15	37,500	12
200,000 to 299,999	103	11	23,100	11	118	6	26,500	8
300,000 to 399,999	83	9	25,600	12	90	5	28,300	9
400,000 to 499,999	52	5	21,100	10	51	3	20,600	6
500,000 to 599,999	33	3	16,300	8	40	2	20,200	6
600,000 to 699,999	17	2	9,910	5	28	1	16,400	5
700,000 to 799,999	19	2	12,800	6	20	1.1	13,600	4
800,000 to 899,999	16	2	12,400	6	22	1.2	17,000	5
900,000 to 999,999	10	1	8,720	4	12	0.6	10,600	3
1,000,000 to 1,499,999	25	3	26,800	13	24	1	26,600	8
1,500,000 and more	11	1	20,200	9	32	2	68,200	21
Total	965	100	213,000	100	1,904	100	320,000	100

<sup>1</sup>Production data 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 USE<sup>1</sup>

Use	2014 <sup>2</sup>			2015		
	Quantity (thousand metric tons)	Value (thousands)	Unit value	Quantity (thousand metric tons)	Value (thousands)	Unit value
Concrete aggregates (including concrete sand)	127,000	\$1,100,000	\$8.67	127,000	\$1,160,000	\$9.09
Plaster and gunitite sands	2,260	26,600	11.74	2,560	31,100	12.14
Concrete products (blocks, bricks, pipe, decorative, and so forth)	3,170	28,200	8.88	2,520	25,200	10.00
Asphaltic concrete aggregates and other bituminous mixtures	31,000	288,000	9.27	30,300	299,000	9.88
Road base and coverings	65,600	463,000	7.05	63,900	440,000	6.89
Road stabilization, cement	1,670	11,800	7.07	537	5,090	9.48
Road stabilization, lime	555	4,130	7.43	565	4,530	8.02
Fill	32,800	194,000	5.93	34,300	227,000	6.61
Snow and ice control	2,930	23,400	7.99	3,160	27,900	8.85
Railroad ballast	385	5,460	14.20	251	4,250	16.92
Roofing granules	102	1,400	13.69	70	923	13.23
Filtration	367	3,540	9.64	209	2,190	10.49
Golf course maintenance sand	254	3,190	12.59	176	3,150	17.95
Other miscellaneous uses	6,540	73,700	11.27	16,400	191,000	11.67
Unspecified: <sup>3</sup>						
Reported	162,000	1,290,000	7.98	173,000	1,440,000	8.31
Estimated	394,000	3,150,000	7.99	430,000	3,420,000	7.96
Total or average	831,000	6,670,000	8.03	885,000	7,280,000	8.22

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

<sup>2</sup>Estimated quantities have been recalculated.

<sup>3</sup>Reported and estimated production without a breakdown by end use.

TABLE 6  
CONSTRUCTION SAND AND GRAVEL SOLD OR USED BY PRODUCERS IN 2015, BY STATE AND USE<sup>1</sup>

(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 <sup>2</sup>	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Alabama	3,260	21,600	--	--	--	--	206	1,050	W	W
Alaska	4,050	42,000	--	--	W	W	344	2,680	474	4,690
Arizona	4,240	41,700	53	775	W	W	1,720	23,900	3,230	21,400
Arkansas	1,560	13,900	--	--	--	--	82	1,020	214	1,060
California	18,400	206,000	930	11,900	604	8,300	6,450	87,200	6,030	49,100
Colorado	3,180	27,300	24	226	W	W	338	2,770	3,730	29,300
Connecticut	408	3,880	--	--	W	W	214	1,670	145	1,780
Delaware	560	4,680	--	--	W	W	--	--	W	W
Florida	1,420	16,700	W	W	W	W	W	W	W	W
Georgia	1,500	11,000	109	628	W	W	--	--	W	W
Hawaii	W	W	--	--	W	W	--	--	W	W
Idaho	873	8,150	W	W	(3)	8	284	2,740	3,710	16,600
Illinois	6,110	37,600	W	W	110	891	859	7,340	780	6,520
Indiana	4,070	31,600	23	342	W	W	783	8,070	940	5,960
Iowa	1,780	15,600	9	131	W	W	37	263	1,130	6,060
Kansas	1,230	8,600	22	205	W	W	315	2,080	981	6,090
Kentucky	3,750	15,800	W	W	--	--	W	W	--	--
Louisiana	2,770	26,100	16	516	--	--	W	W	613	14,800
Maine	596	3,440	W	W	46	191	W	W	508	5,030
Maryland	2,290	31,600	W	W	W	W	W	W	4	26
Massachusetts	1,140	13,800	--	--	W	W	162	2,150	146	1,430
Michigan	2,100	12,900	51	240	70	471	2,040	13,700	3,680	26,500
Minnesota	2,120	13,200	28	349	56	1,070	3,840	22,700	6,900	31,600
Mississippi	1,880	13,500	W	W	--	--	--	--	483	5,460
Missouri	2,930	18,900	W	W	83	729	W	W	24	214
Montana	542	5,470	--	--	W	W	435	3,780	2,360	17,200
Nebraska	2,100	12,400	169	1,460	W	W	261	1,740	1,660	15,700
Nevada	757	8,190	W	W	W	W	922	9,580	2,360	14,400
New Hampshire	469	3,070	54	857	W	W	185	1,470	826	7,580
New Jersey	2,640	16,000	W	W	452	2,470	950	1,850	W	W
New Mexico	726	8,190	31	215	W	W	888	9,680	600	4,530
New York	2,680	33,000	279	3,740	9	97	921	11,900	2,810	19,700
North Carolina	1,940	12,800	W	W	W	W	342	1,840	32	264
North Dakota	622	6,030	--	--	--	--	W	W	2,730	13,400
Ohio	5,720	45,300	28	427	139	1,180	1,840	16,300	1,040	10,300
Oklahoma	2,530	21,600	58	665	W	W	375	2,280	307	2,700
Oregon	1,220	11,900	W	W	W	W	722	6,140	2,120	18,400
Pennsylvania	1,140	13,100	14	225	W	W	326	3,040	418	3,520
Rhode Island	204	3,350	--	--	--	--	W	W	174	2,320
South Carolina	932	6,790	--	--	--	--	W	W	--	--
South Dakota	425	3,670	W	W	--	--	520	1,710	2,470	10,400
Tennessee	699	6,550	--	--	W	W	W	W	W	W
Texas	21,600	226,000	347	3,810	W	W	757	9,410	3,680	21,200
Utah	704	6,940	W	W	--	--	97	429	2,400	15,800
Vermont	W	W	--	--	--	--	--	--	282	1,760
Virginia	1,480	19,000	W	W	W	W	343	4,470	17	279
Washington	3,870	31,500	18	144	3	34	657	6,530	2,330	17,800
West Virginia	3	28	--	--	--	--	--	--	--	--
Wisconsin	1,600	9,570	63	383	W	W	535	12,500	1,200	6,270
Wyoming	476	5,110	--	--	W	W	W	W	1,140	9,490
Total	127,000	1,160,000	2,330	27,200	1,580	15,400	28,700	284,000	64,700	447,000
Total withheld	105	3,090	235	3,850	946	9,770	1,500	14,900	290	2,980
Grand total	127,000	1,160,000	2,560	31,100	2,520	25,200	30,300	299,000	65,000	450,000

See footnotes at end of table.

TABLE 6—Continued  
CONSTRUCTION SAND AND GRAVEL SOLD OR USED BY PRODUCERS IN 2015, BY STATE AND USE<sup>1</sup>

(Thousand metric tons and thousand dollars)

State	Fill		Snow and ice control		Railroad ballast		Other uses <sup>4</sup>		Total	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Alabama	343	884	--	--	--	--	W	W	10,700	74,500
Alaska	250	2,560	27	391	1	9	W	W	8,900	77,500
Arizona	690	7,000	(3)	8	--	--	W	W	38,700	345,000
Arkansas	113	922	W	W	--	--	W	W	7,510	66,000
California	4,720	55,100	106	550	W	W	W	W	97,000	1,090,000
Colorado	1,190	5,000	117	2,940	--	--	W	W	33,800	260,000
Connecticut	133	683	78	1,140	--	--	W	W	5,120	49,900
Delaware	776	2,960	--	--	--	--	974	11,400	2,370	19,800
Florida	2,120	22,900	--	--	--	--	13,200	132,000	17,200	176,000
Georgia	116	776	--	--	--	--	4,030	28,500	5,810	41,400
Hawaii	--	--	--	--	--	--	343	6,600	459	10,300
Idaho	724	1,170	6	31	--	--	W	W	14,200	82,600
Illinois	1,090	5,490	39	229	--	--	W	W	21,500	148,000
Indiana	1,280	8,390	252	2,190	--	--	W	W	17,300	134,000
Iowa	342	1,720	29	340	--	--	W	W	14,800	118,000
Kansas	544	2,110	15	104	--	--	W	W	9,320	57,000
Kentucky	49	440	--	--	--	--	5,080	28,100	9,040	45,500
Louisiana	368	2,020	--	--	W	W	12,400	139,000	16,400	185,000
Maine	257	1,430	51	495	W	W	W	W	7,760	60,700
Maryland	571	4,850	W	W	--	--	W	W	7,570	95,000
Massachusetts	637	4,580	137	1,940	--	--	W	W	10,100	92,500
Michigan	1,940	7,160	62	269	19	238	29,700	181,000	39,600	243,000
Minnesota	1,220	4,520	60	354	W	W	W	W	48,400	237,000
Mississippi	47	213	108	528	--	--	W	W	9,950	78,900
Missouri	44	272	4	22	--	--	6,740	47,100	9,830	67,200
Montana	149	790	17	113	--	--	W	W	11,900	90,900
Nebraska	378	1,180	20	165	--	--	W	W	12,600	90,100
Nevada	995	5,450	87	1,290	W	W	W	W	15,400	89,700
New Hampshire	258	1,040	75	959	--	--	W	W	6,280	52,500
New Jersey	165	1,170	27	273	--	--	7,100	67,900	11,400	89,900
New Mexico	557	6,190	2	31	1	16	W	W	9,320	84,800
New York	951	5,680	1,050	6,930	W	W	W	W	30,300	290,000
North Carolina	1,180	5,520	5	40	--	--	4,380	31,000	7,940	52,300
North Dakota	276	957	2	13	4	62	W	W	18,100	116,000
Ohio	1,880	17,500	66	408	W	W	W	W	33,300	274,000
Oklahoma	645	2,690	--	--	--	--	W	W	11,500	95,600
Oregon	30	258	W	W	W	W	8,420	72,500	12,500	109,000
Pennsylvania	131	806	151	1,960	--	--	W	W	10,300	111,000
Rhode Island	135	753	134	1,500	--	--	W	W	2,360	28,200
South Carolina	1,870	5,290	W	W	--	--	5,870	35,000	8,770	47,600
South Dakota	239	590	4	40	--	--	W	W	11,100	54,100
Tennessee	W	W	--	--	--	--	W	W	6,460	50,500
Texas	1,330	6,710	W	W	W	W	W	W	83,700	790,000
Utah	632	3,260	W	W	W	W	W	W	29,300	220,000
Vermont	49	330	84	546	--	--	W	W	4,960	36,000
Virginia	1,480	8,390	72	512	--	--	4,160	47,700	7,660	81,400
Washington	484	4,460	159	701	30	306	25,700	209,000	33,300	271,000
West Virginia	--	--	--	--	--	--	580	4,920	583	4,950
Wisconsin	762	2,690	73	394	--	--	W	W	28,000	168,000
Wyoming	107	497	W	W	--	--	W	W	15,000	134,000
Total	34,200	225,000	3,120	27,400	56	631	129,000	1,040,000	391,000	3,230,000
Total withheld	95	1,590	36	539	195	3,620	491,000	4,020,000	494,000	4,060,000
Grand total	34,300	227,000	3,160	27,900	251	4,250	620,000	5,060,000	885,000	7,280,000

W Withheld to avoid disclosing company proprietary data; included in "Total withheld." XX Not applicable. -- Zero.

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

<sup>2</sup>Includes road and other stabilization (cement and lime).

<sup>3</sup>Less than ½ unit.

<sup>4</sup>Includes reported and estimated production without a breakdown by end use.

TABLE 7  
CONSTRUCTION SAND AND GRAVEL OPERATIONS IN THE UNITED STATES IN 2015, BY STATE

State	Active operations	Active pits	Dredging operations	Processing plants				Sales yards
				Stationary	Portable	Stationary and portable	None or unspecified	
Alabama	58	59	8	29	11	3	7	2
Alaska	78	104	1	26	34	5	12	6
Arizona	158	253	1	65	65	12	15	12
Arkansas	47	53	2	29	12	--	4	2
California	308	362	6	188	86	17	11	17
Colorado	254	385	1	82	118	10	43	6
Connecticut	54	62	2	20	26	6	--	5
Delaware	10	10	4	3	1	--	2	1
Florida	54	61	18	14	17	--	5	--
Georgia	36	34	10	20	5	1	--	2
Hawaii	12	13	--	7	5	--	--	--
Idaho	159	397	2	56	74	7	20	9
Illinois	101	101	27	48	11	4	11	4
Indiana	118	120	11	69	26	8	4	12
Iowa	157	189	20	40	70	7	20	8
Kansas	118	145	32	25	42	4	15	4
Kentucky	20	22	7	6	4	2	1	3
Louisiana	106	99	36	37	13	1	19	11
Maine	199	207	3	63	64	9	60	13
Maryland	37	40	3	22	2	3	7	9
Massachusetts	94	98	9	48	22	2	13	13
Michigan	348	413	14	129	128	17	60	19
Minnesota	464	673	10	171	153	28	102	16
Mississippi	63	68	7	27	22	--	7	6
Missouri	70	79	23	34	7	2	4	4
Montana	179	240	--	70	80	8	21	4
Nebraska	153	182	49	51	40	1	12	3
Nevada	83	728	--	27	42	6	8	9
New Hampshire	103	106	--	62	30	6	5	13
New Jersey	51	47	11	26	6	1	7	6
New Mexico	97	366	3	41	41	9	3	9
New York	379	429	22	147	142	24	44	13
North Carolina	77	78	11	34	15	2	15	4
North Dakota	154	219	--	73	65	2	14	11
Ohio	209	217	33	111	39	8	18	11
Oklahoma	71	74	21	28	14	5	3	5
Oregon	90	162	1	34	45	4	6	7
Pennsylvania	88	95	3	46	23	9	7	6
Rhode Island	21	20	1	7	8	3	2	3
South Carolina	40	52	5	15	16	2	2	3
South Dakota	156	241	4	55	70	10	17	7
Tennessee	31	33	5	14	11	1	--	3
Texas	238	244	12	130	73	7	16	12
Utah	165	255	4	66	78	13	4	4
Vermont	91	107	--	40	36	3	12	6
Virginia	69	73	8	34	11	4	12	9
Washington	183	205	10	87	64	14	8	8
West Virginia	4	4	2	1	1	--	--	--
Wisconsin	338	389	12	155	114	17	40	16
Wyoming	135	769	2	50	63	7	13	5
Total	6,328	9,382	476	2,662	2,145	314	731	361

-- Zero.

TABLE 8  
U.S. EXPORTS OF CONSTRUCTION SAND AND GRAVEL IN 2015, BY DESTINATION<sup>1</sup>

(Thousand metric tons and thousand dollars)

Destination	Sand <sup>2</sup>		Gravel <sup>3</sup>	
	Quantity	Value, f.a.s. <sup>4</sup>	Quantity	Value, f.a.s. <sup>4</sup>
North America:				
Bahamas, The	2	333	(5)	190
Canada	17	1,600	7	3,180
Dominican Republic	1	446	(5)	8
Mexico	3	947	(5)	81
Other	2	877	1	378
Total	25	4,210	8	3,830
South America	28	9,850	(5)	28
Europe	4	1,730	(5)	394
Asia	2	998	1	370
Oceania	(5)	90	1	155
Africa	(5)	14	(5)	10
Grand total	60	16,900	11	4,790

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

<sup>2</sup>Includes Harmonized Tariff Schedule of the United States (HTS) code 2505.90.0000.

<sup>3</sup>Includes HTS code 2517.10.0015

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

<sup>5</sup>Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 9  
U.S. IMPORTS FOR CONSUMPTION OF CONSTRUCTION SAND  
AND GRAVEL, BY COUNTRY<sup>1,2</sup>

Country	2014 <sup>1</sup>			2015		
	Quantity (thousand metric tons)	Value, c.i.f. <sup>3</sup> (thousands)	Unit value	Quantity (thousand metric tons)	Value, c.i.f. <sup>3</sup> (thousands)	Unit value
Antigua and Barbuda	6	\$125	\$21.27	6	\$120	\$20.62
Bahamas, The	4	18	4.82	6	32	5.51
Canada	3,720	32,600	8.78	3,530	37,800	10.69
China	10	1,730	167.57	159	11,900	74.47
Mexico	99	2,710	27.31	118	3,230	27.43
New Zealand	7	2,000	272.24	10	2,490	238.48
Norway	45	2,710	60.28	47	3,210	68.38
Peru	5	1,050	209.55	5	1,140	220.38
Other	40	3,130	79.04	9	1,540	178.01
Total	3,930	46,100	11.72	3,890	61,400	15.77

<sup>1</sup>Revised.

<sup>2</sup>Data are rounded to no more than three significant digits, except unit values; may not add to totals shown.

<sup>3</sup>Includes Harmonized Tariff Schedule of the United States (HTS) codes 2505.90.0000 and 2517.10.0015.

<sup>4</sup>Cost, insurance, and freight. Value of material at U.S. port of entry; based on purchase price and includes all charges (except U.S. imports duties) in bringing material from foreign country to alongside carrier.

Source: U.S. Census Bureau.

TABLE 10  
THE TOP 100 PRODUCERS OF CONSTRUCTION SAND AND GRAVEL IN THE UNITED STATES IN 2015<sup>1,2</sup>

2015 rank	2014 rank	Company	2015 rank	2014 rank	Company
1	1	Oldcastle Materials, Inc.	51	71	Nebco, Inc.
2	2	Vulcan Materials Co.	52	—	Bluegrass Materials Co.
3	3	Lehigh Hanson, Inc.	53	44	The Heritage Group
4	4	CEMEX S.A.B. de C.V.	54	59	Rieth-Riley Construction Co., Inc.
5	5	MDU Resources Group, Inc.	55	67	Central Specialties, Inc.
6	6	Holcim Group/Aggregate Industries Management, Inc.	56	36	Varra Cos., Inc.
7	7	Martin Marietta Aggregates	57	57	Northern Improvement Co.
8	8	Granite Construction, Inc.	58	66	Sundre Sand & Gravel, Inc.
9	9	Summit Materials, LLC	59	54	Croell Redi-Mix
10	10	Mitsubishi Cement Corp.	60	69	JMAC Resources, Inc.
11	12	Fisher Industries	61	79	O.L. Thompson Construction Co., Inc.
12	15	Bureau of Land Management	62	60	Memphis Stone & Gravel Co.
13	13	Teichert, Inc.	63	53	Dolese Bros. Co.
14	11	CalPortland Co.	64	—	A & S Construction Co.
15	21	Wm. D. Scepaniak Construction	65	99	Johnson Sand & Gravel Inc.
16	16	Trinity Industries, Inc.	66	95	Eagle Materials Inc.
17	14	Clyde Cos., Inc.	67	94	Capitol Aggregates, Ltd.
18	19	Lafarge North America Inc.	68	68	Clayton Sand Co.
19	18	Ash Grove Cement Co.	69	—	Construction Partners, Inc.
20	17	Colas Inc.	70	58	Wright Materials, Inc.
21	20	L. G. Everist, Inc.	71	—	TM Crushing, LLC
22	23	Gila River Indian Community	72	90	LS Sand & Gravel LTD
23	22	Edw. C. Levy Co.	73	63	Corliss Resources, Inc.
24	24	Nugent Sand Co.	74	91	S&S Aggregates Co.
25	28	Mathy Construction Co.	75	—	Sibson Gravel LLC
26	27	Fordyce Ltd.	76	76	A. Lindberg & Sons Inc.
27	25	Miles Sand & Gravel Co.	77	74	Wissota Sand & Gravel
28	26	Chandler Aggregates, Inc.	78	72	Irving Materials, Inc.
29	31	Salt River Pima-Maricopa Indian Community	79	89	Aggregate Resources, Inc.
30	34	Holliday Rock Co.	80	82	Rasmussen Group, Inc.
31	29	U.S. Concrete, Inc.	81	61	Pioneer Sand Co.
32	33	Dan Gernatt Gravel Products, Inc.	82	73	Hunter Sand & Gravel LLC
33	42	E.R. Jahna Industries, Inc.	83	92	Eucon Corp.
34	46	Pine Bluff Materials LLC	84	87	Grand Rapids Gravel Co.
35	39	Strata Corp.	85	88	Hilltop Basic Resources, Inc.
36	35	Polaris Materials Corp.	86	86	Gateway Dredging & Contracting, LLC
37	51	Las Vegas Paving Corp.	87	70	Bowes Construction, Inc.
38	49	Thelen Sand & Gravel, Inc.	88	56	Peak Sand & Gravel, Inc.
39	41	FST Sand & Gravel, Inc.	89	78	Simpson Construction Materials, LLC
40	43	Watson Gravel, Inc.	90	93	McMurry Ready Mix Co.
41	37	The Olen Corp.	91	80	Capital Sand Co., Inc.
42	40	R.E. Janes Gravel Co.	92	—	The Jurgensen Cos.
43	32	Multisources Ltd.	93	84	Tiller Corp.
44	47	Southwest Rock Products, LLC	94	—	Welch Sand & Gravel Inc.
45	30	Quikrete Co.	95	—	Coram Materials Corp.
46	55	Burnco Rock Products Ltd	96	97	Texas Aggregates, LP
47	50	York Building Products Co.	97	—	Roanoke Sand & Gravel Corp.
48	45	All American Asphalt Co.	98	98	Liberty Materials Inc.
49	48	Chaney Enterprises L.P.	99	—	GS Materials, Inc.
50	38	FNF Mining Inc.	100	—	Continental Materials Corp.

— Not in the top 100 producers of construction sand and gravel in the United States in 2014.

<sup>1</sup>In descending order of tonnage produced.

<sup>2</sup>Rankings for the previous year have been recalculated.