



# 2019 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 918 million metric tons (Mt) of construction sand and gravel was produced for consumption in the United States in 2019, essentially unchanged from the total production in 2018, but 31% less than the record high of 1.34 billion metric tons in 2006 (fig. 1). In 2019, the total value of construction sand and gravel produced in the United States was \$8.66 billion, an increase of 4% compared with that in 2018 (table 1). The average unit value for construction sand and gravel increased by 3% compared with the average unit value for 2018. Employment increased by 3% in 2019 from that in 2018 at operations 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 2019, U.S. exports decreased by 17% to 65,300 metric tons (t) compared with 78,500 t in 2018, and the value decreased by 5% to \$22.2 million (tables 1, 8). U.S. imports of construction sand and gravel decreased by 10% to 5.26 Mt and the value decreased by 13% to \$63.7 million compared with 2018 totals (tables 1, 9). Domestic apparent consumption of construction sand and gravel, which is defined as production for consumption (sold or used) plus imports minus exports, was essentially unchanged at 923 Mt compared with that in 2018.

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 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. Although construction sand and gravel is very accessible and widely used throughout the United States and the world, sand and gravel is less available in some locales owing to resource constraints or economic conditions; in these situations, builders 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. Both mineral commodities usually are included in any review of the national or State aggregates industry. Information on the crushed stone industry can be found in a separate chapter in the U.S. Geological Survey Minerals Yearbook, volume I, Metals and Minerals, on crushed stone.

## 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 2019, a total of 3,408 companies produced or sold construction sand and gravel from 5,602 operations with 6,288 pits, 437 dredging operations, and 169 sales and (or) distribution sites (table 7). Of the 5,602 active operations, 2,239 operations reported their production or sales to the USGS, and their total production

was 411 Mt (45% of the U.S. total). Of the 2,239 reporting operations, 781 operations did not report a breakdown by end use. Their total production was 212 Mt (23% of the U.S. total) and is included in table 5 under “Unspecified, reported” uses.

Production for the nonresponding operations was estimated by using employment data provided by MSHA. The estimated output of the 3,363 nonrespondent operations was 507 Mt (55% of the U.S. total) and is included in table 5 under “Unspecified, estimated” uses.

A total of 783 construction sand and gravel operations were either idle or presumed idle in 2019 because no response to the survey was received and no employment information was available to estimate production. Since the 2018 survey, 276 operations have closed. Most of the idle or closed operations were small, temporary pits, some of which were operated by State or local governments.

Construction sand and gravel was produced in every State. The 10 leading producing States were, in descending order of tonnage, California, Texas, Arizona, Michigan, Minnesota, Washington, Colorado, Ohio, Utah, and New York. The combined production of the 10 leading States was unchanged compared with that in 2018 and accounted for 53% of the national total. The combined production of California and Texas was unchanged from that in 2018 and accounted for 21% of the national total (table 3).

A review of production by size of operation at the national level in 2019 indicated that 241 Mt of construction sand and gravel (26% of the total construction sand and gravel) was produced by 169 operations reporting production of more than 1 million metric tons per year, 202 Mt was produced by 327 operations reporting production between 500,000 and 999,999 metric tons per year (t/yr), and 377 Mt was produced by 1,783 operations reporting production between 100,000 and 499,999 t/yr. Operations that produced less than 500,000 t/yr accounted for 52% of total construction sand and gravel produced in the United States (table 4A). By geographic region, the Midwest had 2,075 active operations, followed by the West with 1,667, the Northeast with 981, and the South with 865 (table 4B).

The leading U.S. producing companies in 2019 were, in descending order of tonnage, CRH Americas Materials; Vulcan Materials Co.; Lehigh Hanson, Inc.; MDU Resources Group, Inc.; CEMEX S.A.B. de C.V.; Martin Marietta Materials, Inc.; LafargeHolcim Ltd.; Teichert, Inc.; Granite Construction Inc.; and Mitsubishi Cement Corp. (table 10). The combined production of the top 10 companies increased to 221 Mt (24% of the national total) from 219 Mt in 2018. The combined production of the top 100 companies was 454 Mt (49% of the national total). The combined production of the leading 682 companies was 756 Mt of construction sand and gravel; thus, 20% of the companies produced 82% of the total sales in 2019.

## Consumption

Construction sand and gravel production reported to the USGS is material that was either sold to other companies or consumers or was used by producers. Stockpiled production was 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 2019, 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 923 Mt, essentially unchanged compared with the apparent consumption in 2018. Of the 918 Mt of construction sand and gravel produced for consumption, 78% was reported or estimated without a breakdown by end use (table 5). Of the remaining construction sand and gravel produced for consumption, 40% was used as concrete aggregate; 23% for road base and coverings; 13%, for asphaltic concrete aggregate and other bituminous mixtures; 12%, for construction fill; 8%, for other miscellaneous uses; and the remainder 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 2019 increased by 4% compared with that in 2018, to \$1.39 trillion. The value of total private construction increased slightly to \$1.05 trillion. The value of total public construction increased by 11% to \$344 billion (U.S. Census Bureau, 2022).

## Transportation

No means of transportation were reported by the producers for 755 Mt of the 918 Mt of construction sand and gravel produced for consumption in 2019. Of the remaining 163 Mt of construction sand and gravel, 84% was reported as being transported by truck from the pit or the processing plant to the first point of sale or use, 2% by waterway, and less than 1% by rail. About 19.2 Mt of the specified production was reported as not having been transported and, therefore, was 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 2019, 967 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 \$9.36 per metric ton in 2019, which was a slight increase compared with the reported average unit value of \$9.21 per metric ton in 2018. Leading U.S. producers increased construction aggregate prices by 5% to 7% in 2019 compared with prices in 2018. For those operations that reported production only, the unit values for specific end uses were estimated on the basis of 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.

## Foreign Trade

The widespread distribution of domestic sand and gravel deposits and the high cost of transportation limited 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 17% to 65,300 t compared with 78,500 t in 2018, and the value also decreased to \$22.2 million (tables 1, 8). Bermuda, which was the leading destination in North America, received 9% of the total sand exports and 33% of total gravel exports. Canada, the second-ranked destination, received 5% of the total sand exports and 47% of total gravel exports. The average unit value of sand and gravel exports in 2019 was \$340 per metric ton, an increase of 14% from \$297 per metric ton in 2018. 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 by 10% to 5.26 Mt and the value decreased by 13% to \$63.7 million compared with 2018 totals (tables 1, 9). Canada was the leading source of construction sand and gravel imports, accounting for 96% of the total quantity. Mexico supplied 2%, and the remainder was supplied by several other countries. Imports of construction sand and gravel from The Bahamas, Canada, and Mexico all decreased in 2019. The average unit value of sand and gravel imports in 2019 was \$12.11 per metric ton, a decrease of 3% from \$12.46 per metric ton in 2018. The average unit value of sand and gravel imports from Canada in 2019 was \$8.81 per metric ton, down from \$9.05 per metric ton in 2018.

## 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. Construction sand and gravel production

remained almost flat starting in 2010 until increasing by 6% in 2015 compared with that in 2014, and production has slowly increased since 2015 (fig. 1). Construction sand and gravel production was estimated to decrease slightly in 2020 (Willett, 2021).

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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)

	2015	2016	2017	2018	2019
Sold or used by producers: <sup>2</sup>					
Quantity	880,000	885,000	889,000 <sup>r</sup>	909,000 <sup>r</sup>	918,000
Value	7,290,000	7,440,000	7,860,000 <sup>r</sup>	8,300,000	8,660,000
Exports:					
Quantity	70	32	36	79	65
Value	21,700	13,900	15,300	23,300	22,200
Imports for consumption:					
Quantity	3,890	3,490	6,520	5,860	5,260
Value	78,400	57,200	73,700	73,000	63,700
Average number of employees <sup>3</sup>	34,800	35,300	36,500	38,600	39,600

<sup>r</sup>Revised.

<sup>1</sup>Table includes data available through April 26, 2022. 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	2018 <sup>3</sup>		2019	
	Quantity (thousand metric tons)	Value (thousands)	Quantity (thousand metric tons)	Value (thousands)
Northeast:				
New England	36,900	\$326,000	36,500	\$353,000
Middle Atlantic	53,300	525,000	56,100	568,000
Midwest:				
East North Central	139,000	1,040,000	139,000	1,050,000
West North Central	109,000	729,000	112,000	750,000
South:				
South Atlantic	65,600	640,000	64,000	661,000
East South Central	42,600	341,000	45,700	387,000
West South Central	118,000	1,250,000	122,000	1,220,000
West:				
Mountain	181,000	1,540,000	183,000	1,670,000
Pacific	164,000	1,900,000	159,000	2,010,000
Total	909,000	8,300,000	918,000	8,660,000

<sup>1</sup>Table includes data available through April 26, 2022. 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	2018 <sup>2</sup>			2019		
	Quantity (thousand metric tons)	Value (thousands)	Unit value	Quantity (thousand metric tons)	Value (thousands)	Unit value
Alabama	14,300	\$132,000	\$9.23	17,200	\$165,000	\$9.61
Alaska	6,930	55,200	7.97	5,850	50,300	8.60
Arizona	47,600	478,000	10.03	48,700	521,000	10.72
Arkansas	7,120	68,300	9.60	7,090	69,700	9.83
California	104,000	1,350,000	13.02	100,000	1,410,000	14.06
Colorado	34,900	307,000	8.79	34,300	307,000	8.96
Connecticut	4,610	45,200	9.82	4,710	50,000	10.62
Delaware	2,680	21,000	7.86	2,650	23,500	8.89
Florida	22,100	246,000	11.13	21,500	247,000	11.51
Georgia	6,180	42,800	6.93	6,570	48,900	7.45
Hawaii	378	7,630	20.21	396	8,320	21.03
Idaho	18,400	118,000	6.39	20,000	148,000	7.38
Illinois	20,300	145,000	7.16	19,100	130,000	6.81
Indiana	17,300	142,000	8.24	18,400	163,000	8.86
Iowa	16,300	156,000	9.55	15,500	146,000	9.43
Kansas	8,510	60,100	7.07	8,900	61,800	6.95
Kentucky	8,800	45,400	5.16	9,180	58,600	6.38
Louisiana	12,200	132,000	10.81	11,900	139,000	11.63
Maine	8,060	61,700	7.65	8,180	65,400	7.99
Maryland	7,850	110,000	13.96	6,680	96,200	14.39
Massachusetts	9,020	86,400	9.58	8,570	91,800	10.72
Michigan	43,500	285,000	6.54	44,100	265,000	6.00
Minnesota	40,000	199,000	4.97	41,800	207,000	4.96
Mississippi	11,400	98,400	8.62	10,300	83,400	8.13
Missouri	10,500	85,200	8.13	10,000	77,500	7.71
Montana	10,800	88,000	8.15	10,300	92,200	8.95
Nebraska	10,200	79,800	7.83	12,800	106,000	8.34
Nevada	19,200	120,000	6.24	19,600	133,000	6.83
New Hampshire	7,060	56,900	8.05	6,830	65,300	9.56
New Jersey	13,800	111,000	8.06	14,400	111,000	7.70
New Mexico	8,880	92,700	10.44	7,470	87,400	11.71
New York	29,600	319,000	10.80	30,600	341,000	11.13
North Carolina	8,950	58,900	6.58	8,870	64,800	7.31
North Dakota	12,700	103,000	8.10	13,000	100,000	7.72
Ohio	31,100	279,000	8.98	31,300	292,000	9.33
Oklahoma	8,850	79,200	8.95	12,000	100,000	8.34
Oregon	16,200	172,000	10.58	16,800	201,000	11.95
Pennsylvania	9,950	94,600	9.51	11,100	116,000	10.52
Rhode Island	2,840	37,800	13.31	2,640	38,800	14.70
South Carolina	9,010	53,400	5.93	9,050	57,400	6.34
South Dakota	10,900	46,500	4.26	10,400	51,500	4.97
Tennessee	8,010	64,900	8.10	9,090	80,300	8.83
Texas	89,900	973,000	10.83	91,300	906,000	9.93
Utah	31,500	245,000	7.79	31,000	269,000	8.67
Vermont	5,260	37,700	7.17	5,540	41,900	7.56
Virginia	8,330	104,000	12.50	8,550	122,000	14.23
Washington	36,600	321,000	8.78	35,600	337,000	9.48
West Virginia	530	4,500	8.49	177	1,510	8.54
Wisconsin	26,300	186,000	7.06	25,600	201,000	7.84
Wyoming	9,840	95,400	9.69	12,200	107,000	8.78
Total or average	909,000	8,300,000	9.13	918,000	8,660,000	9.43

<sup>1</sup>Table includes data available through April 26, 2022. Data are rounded to no more than three significant digits, except

“Unit value”; 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, BY SIZE OF OPERATION<sup>1</sup>

Size range (metric tons)	2018 <sup>2</sup>				2019			
	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	1,816	31.0	15,300	1.7	1,678	30.0	14,900	1.6
25,000 to 49,999	823	14.0	26,800	2.9	768	13.7	25,300	2.8
50,000 to 99,999	897	15.3	58,700	6.5	863	15.4	56,900	6.2
100,000 to 199,999	944	16.1	123,000	13.5	860	15.4	112,000	12.2
200,000 to 299,999	444	7.6	99,200	10.9	453	8.1	101,000	11.0
300,000 to 399,999	281	4.8	88,500	9.7	275	4.9	85,500	9.3
400,000 to 499,999	171	2.9	69,400	7.6	195	3.5	79,100	8.6
500,000 to 599,999	117	2.0	57,900	6.4	128	2.3	64,300	7.0
600,000 to 699,999	76	1.3	44,600	4.9	74	1.3	43,300	4.7
700,000 to 799,999	51	0.9	34,300	3.8	46	0.8	31,300	3.4
800,000 to 899,999	61	1.0	46,800	5.2	46	0.8	35,300	3.9
900,000 to 999,999	33	0.6	28,400	3.1	33	0.6	28,000	3.1
1,000,000 to 1,499,999	86	1.5	92,500	10.2	100	1.8	107,000	11.6
1,500,000 and more	61	1.0	124,000	13.6	69	1.2	134,000	14.6
Total	5,861	100	909,000	100	5,588	100	918,000	100

<sup>1</sup>Table includes data available through April 26, 2022. Production data are rounded to no more than three significant digits except “Number of operations”; may not add to totals shown. Does not include recycling plants.

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



TABLE 4B  
CONSTRUCTION SAND AND GRAVEL PRODUCTION IN THE UNITED STATES IN 2019, 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	394	40.2	3,360	3.6	644	31.0	5,850	2.3
25,000 to 49,999	162	16.5	5,280	5.7	327	15.8	10,900	4.3
50,000 to 99,999	140	14.3	9,070	9.8	375	18.1	24,700	9.8
100,000 to 199,999	136	13.9	17,600	19.0	344	16.6	43,800	17.5
200,000 to 299,999	64	6.5	13,700	14.8	145	7.0	32,100	12.8
300,000 to 399,999	32	3.3	9,870	10.7	67	3.2	21,100	8.4
400,000 to 499,999	27	2.8	11,000	11.9	61	2.9	24,500	9.8
500,000 to 599,999	6	0.6	3,070	3.3	36	1.7	18,100	7.2
600,000 to 699,999	2	0.2	1,170	1.3	17	0.8	10,100	4.0
700,000 to 799,999	3	0.3	2,020	2.2	12	0.6	8,160	3.3
800,000 to 899,999	3	0.3	2,320	2.5	14	0.7	10,800	4.3
900,000 to 999,999	4	0.4	3,460	3.7	8	0.4	6,860	2.7
1,000,000 to 1,499,999	5	0.5	5,410	5.8	15	0.7	16,100	6.4
1,500,000 and more	3	0.3	5,160	5.6	10	0.5	17,800	7.1
Total	981	100	92,500	100	2,075	100	251,000	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	167	19.3	1,380	0.6	473	28.4	4,320	1.3
25,000 to 49,999	59	6.8	1,890	0.8	220	13.2	7,180	2.1
50,000 to 99,999	113	13.1	7,640	3.3	235	14.1	15,500	4.5
100,000 to 199,999	148	17.1	20,200	8.7	232	13.9	30,400	8.9
200,000 to 299,999	86	9.9	19,100	8.2	158	9.5	35,700	10.4
300,000 to 399,999	85	9.8	26,100	11.3	91	5.5	28,400	8.3
400,000 to 499,999	48	5.5	19,400	8.4	59	3.5	24,200	7.1
500,000 to 599,999	46	5.3	23,100	9.9	40	2.4	20,100	5.9
600,000 to 699,999	23	2.7	13,300	5.7	32	1.9	18,700	5.5
700,000 to 799,999	14	1.6	9,470	4.1	17	1.0	11,600	3.4
800,000 to 899,999	12	1.4	9,200	4.0	17	1.0	13,000	3.8
900,000 to 999,999	10	1.2	8,470	3.7	11	0.7	9,260	2.7
1,000,000 to 1,499,999	36	4.2	38,300	16.5	44	2.6	47,100	13.7
1,500,000 and more	18	2.1	34,500	14.9	38	2.3	76,800	22.4
Total	865	100	232,000	100	1,667	100	342,000	100

<sup>1</sup>Table includes data available through April 26, 2022. Production data are rounded to no more than three significant digits except "Number of operations"; 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	2018 <sup>2</sup>			2019		
	Quantity (thousand metric tons)	Value (thousands)	Unit value	Quantity (thousand metric tons)	Value (thousands)	Unit value
Concrete aggregates (including concrete sand)	109,000	\$1,160,000	\$10.60	80,200	\$864,000	\$10.77
Plaster and gunite sands	3,150	39,600	12.57	1,280	18,300	14.28
Concrete products (blocks, bricks, pipe, decorative, and so forth)	1,460	18,300	12.55	2,120	23,200	10.92
Asphaltic concrete aggregates and other bituminous mixtures	29,200	333,000	11.40	26,000	306,000	11.77
Road base and coverings	53,500	420,000	7.86	45,900	365,000	7.94
Road stabilization, cement	627	7,410	11.82	1,120	12,300	11.02
Road stabilization, lime	1,390	8,820	6.32	901	8,990	9.98
Fill	29,200	223,000	7.63	23,900	204,000	8.54
Snow and ice control	1,860	15,400	8.28	1,810	12,700	7.00
Railroad ballast	271	2,720	10.05	221	3,670	16.64
Roofing granules	--	--	--	--	--	--
Filtration	75	647	8.57	85	1,270	14.93
Golf course maintenance sand	42	548	13.13	26	396	15.47
Other miscellaneous uses and specified uses not listed	16,000	184,000	11.49	15,300	176,000	11.57
Unspecified: <sup>3</sup>						
Reported	183,000	1,670,000	9.13	212,000	2,080,000	9.82
Estimated	480,000	4,220,000	8.78	507,000	4,580,000	9.04
Total or average	909,000	8,300,000	9.13	918,000	8,660,000	9.43

-- Zero.

<sup>1</sup>Table includes data available through April 26, 2022. Data are rounded to no more than three significant digits, except "Unit value"; 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 2019, 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	2,900	28,300	--	--	--	--	W	W	W	W
Alaska	68	695	W	W	5	65	141	1,820	65	1,020
Arizona	5,600	64,400	51	735	W	W	2,290	37,400	4,050	26,100
Arkansas	493	5,240	--	--	--	--	--	--	129	949
California	11,400	179,000	501	7,330	W	W	6,840	115,000	3,590	42,500
Colorado	2,200	21,300	37	616	W	W	W	W	2,890	22,800
Connecticut	337	3,700	--	--	W	W	W	W	125	1,600
Delaware	W	W	--	--	W	W	W	W	W	W
Florida	W	W	W	W	W	W	W	W	--	--
Georgia	W	W	--	--	--	--	--	--	W	W
Hawaii	W	W	--	--	W	W	--	--	W	W
Idaho	448	4,840	W	W	W	W	54	565	3,280	23,300
Illinois	1,470	10,600	W	W	W	W	W	W	313	2,940
Indiana	2,150	16,800	W	W	20	151	1,310	13,300	97	814
Iowa	1,460	14,000	W	W	W	W	26	138	1,330	7,530
Kansas	499	4,670	W	W	W	W	80	446	680	4,330
Kentucky	188	1,300	W	W	1	10	W	W	W	W
Louisiana	2,100	21,800	--	--	--	--	90	989	W	W
Maine	350	2,240	--	--	W	W	W	W	469	4,240
Maryland	969	14,500	W	W	W	W	W	W	W	W
Massachusetts	961	11,400	--	--	W	W	84	846	202	2,130
Michigan	1,260	10,200	W	W	19	262	W	W	2,230	12,600
Minnesota	2,610	17,700	W	W	354	1,170	1,760	9,920	6,500	24,900
Mississippi	585	5,290	W	W	--	--	W	W	W	W
Missouri	3,940	28,800	--	--	W	W	33	180	W	W
Montana	503	5,180	W	W	--	--	W	W	930	7,280
Nebraska	359	2,310	W	W	2	92	125	1,830	622	6,340
Nevada	1,070	12,800	W	W	1	40	W	W	2,760	22,100
New Hampshire	203	1,930	W	W	W	W	W	W	790	8,000
New Jersey	4,090	28,200	W	W	W	W	980	6,350	96	657
New Mexico	729	9,760	6	84	W	W	575	8,030	613	6,510
New York	1,900	29,900	W	W	--	--	785	9,520	1,310	10,900
North Carolina	239	1,740	W	W	--	--	W	W	14	78
North Dakota	34	783	--	--	--	--	192	1,390	1,600	11,400
Ohio	7,570	76,400	W	W	47	503	1,450	11,200	1,720	20,300
Oklahoma	1,830	16,200	14	286	W	W	133	1,140	W	W
Oregon	2,180	26,600	W	W	W	W	W	W	1,590	17,100
Pennsylvania	W	W	W	W	15	351	103	952	121	1,380
Rhode Island	W	W	--	--	W	W	W	W	W	W
South Carolina	W	W	--	--	--	--	--	--	55	358
South Dakota	W	W	--	--	--	--	W	W	908	4,880
Tennessee	W	W	--	--	W	W	W	W	W	W
Texas	6,150	58,700	W	W	--	--	290	3,360	978	10,100
Utah	807	9,100	1	13	1	10	272	5,210	2,330	16,900
Vermont	--	--	--	--	--	--	55	300	378	3,110
Virginia	1,140	18,000	56	806	W	W	W	W	27	421
Washington	2,010	15,700	W	W	W	W	1,010	8,310	1,300	17,100
West Virginia	--	--	--	--	--	--	--	--	--	--
Wisconsin	1,960	12,900	--	--	W	W	574	14,800	1,450	7,620
Wyoming	315	3,630	W	W	1	10	W	W	977	11,100
Total	75,000	797,000	666	9,870	466	2,670	19,700	255,000	46,500	361,000
Total withheld	5,190	67,100	616	8,460	1,660	20,500	6,280	50,200	1,460	25,100
Grand total	80,200	864,000	1,280	18,300	2,120	23,200	26,000	306,000	48,000	386,000

See footnotes at end of table.

TABLE 6—Continued  
CONSTRUCTION SAND AND GRAVEL SOLD OR USED BY PRODUCERS IN 2019, BY STATE AND USE<sup>1</sup>

(Thousand metric tons and thousand dollars)

State	Fill		Snow and ice control		Railroad ballast		Other uses <sup>3</sup>		Total	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Alabama	444	1,630	--	--	--	--	13,700	134,000	17,200	165,000
Alaska	130	985	W	W	--	--	5,420	45,500	5,850	50,300
Arizona	956	10,700	W	W	W	W	35,500	380,000	48,700	521,000
Arkansas	67	673	--	--	--	--	6,400	62,900	7,090	69,700
California	3,740	53,100	14	183	W	W	73,800	1,010,000	100,000	1,410,000
Colorado	446	3,140	14	312	W	W	27,300	255,000	34,300	307,000
Connecticut	97	503	W	W	--	--	4,030	42,500	4,710	50,000
Delaware	956	4,220	--	--	--	--	1,480	16,900	2,650	23,500
Florida	2,710	32,100	--	--	--	--	16,100	175,000	21,500	247,000
Georgia	13	148	--	--	--	--	6,500	48,300	6,570	48,900
Hawaii	--	--	--	--	--	--	312	4,880	396	8,330
Idaho	462	2,660	W	W	W	W	15,700	116,000	20,000	148,000
Illinois	315	2,690	1	9	--	--	16,600	112,000	19,100	130,000
Indiana	215	1,560	32	199	--	--	W	W	18,400	163,000
Iowa	509	2,750	22	187	--	--	12,100	121,000	15,500	146,000
Kansas	127	833	10	53	W	W	7,490	51,300	8,900	61,800
Kentucky	75	352	--	--	--	--	8,690	55,000	9,180	58,600
Louisiana	205	2,100	--	--	W	W	8,850	95,300	11,900	139,000
Maine	188	1,020	21	112	W	W	7,010	56,000	8,180	65,400
Maryland	232	3,210	--	--	--	--	5,210	75,300	6,680	96,200
Massachusetts	65	340	17	236	--	--	W	W	8,570	91,800
Michigan	1,450	5,300	W	W	W	W	37,600	228,000	44,100	265,000
Minnesota	603	2,130	39	189	--	--	W	W	41,800	207,000
Mississippi	111	179	--	--	--	--	9,010	73,900	10,300	83,400
Missouri	56	280	--	--	--	--	5,660	45,200	10,000	77,500
Montana	34	268	W	W	W	W	8,670	77,500	10,300	92,200
Nebraska	211	753	18	142	--	--	11,400	94,900	12,800	106,000
Nevada	1,110	6,900	W	W	W	W	13,800	82,500	19,600	133,000
New Hampshire	195	1,130	94	886	W	W	5,340	51,100	6,830	65,300
New Jersey	312	1,770	W	W	--	--	8,880	73,300	14,400	111,000
New Mexico	500	6,150	W	W	9	120	4,950	55,800	7,470	87,400
New York	806	4,070	631	4,430	18	88	W	W	30,600	341,000
North Carolina	101	2,270	--	--	--	--	8,350	60,000	8,870	64,800
North Dakota	38	91	10	168	2	17	11,100	86,100	13,000	100,000
Ohio	1,240	12,600	15	137	1	13	W	W	31,300	292,000
Oklahoma	248	874	W	W	--	--	9,570	80,000	12,000	100,000
Oregon	185	1,140	--	--	W	W	12,400	151,000	16,800	201,000
Pennsylvania	343	3,740	28	346	--	--	10,000	104,000	11,100	116,000
Rhode Island	7	36	W	W	--	--	1,890	25,900	2,640	38,800
South Carolina	121	417	9	68	--	--	W	W	9,050	57,400
South Dakota	73	285	1	6	--	--	9,040	44,000	10,400	51,500
Tennessee	212	3,480	--	--	--	--	7,770	64,100	9,090	80,300
Texas	1,220	5,070	--	--	--	--	W	W	91,300	906,000
Utah	511	2,640	3	18	--	--	27,100	235,000	31,000	269,000
Vermont	44	156	61	372	6	50	5,000	37,900	5,540	41,900
Virginia	556	6,820	--	--	--	--	6,320	89,700	8,550	122,000
Washington	1,300	9,920	21	211	25	233	29,900	285,000	35,600	337,000
West Virginia	--	--	--	--	--	--	177	1,510	177	1,510
Wisconsin	326	891	149	1,110	--	--	W	W	25,600	201,000
Wyoming	69	361	6	26	--	--	10,700	90,900	12,200	107,000
Total	23,900	204,000	1,220	9,400	61	521	565,000	5,190,000	XX	XX
Total withheld	--	--	593	3,270	160	3,150	170,000	1,650,000	XX	XX
Grand total	23,900	204,000	1,810	12,700	221	3,670	734,000	6,840,000	918,000	8,660,000

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

<sup>1</sup>Table includes data available through April 26, 2022. 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>Includes reported and estimated production without a breakdown by end use.

TABLE 7  
CONSTRUCTION SAND AND GRAVEL OPERATIONS IN THE UNITED STATES IN 2019, BY STATE<sup>1</sup>

State	Active operations	Active pits	Dredging operations	Processing plants				Sales yards
				Stationary	Portable	Stationary and portable	None or unspecified	
Alabama	56	54	10	21	28	--	2	3
Alaska	67	76	3	33	31	5	3	1
Arizona	152	162	2	64	61	15	12	7
Arkansas	38	45	2	21	14	1	2	--
California	266	273	5	157	81	15	13	16
Colorado	214	279	1	74	108	5	27	5
Connecticut	53	57	4	21	26	4	2	1
Delaware	12	11	1	8	3	--	1	1
Florida	49	51	6	26	21	--	2	1
Georgia	32	30	5	18	10	2	2	2
Hawaii	7	8	--	2	4	--	1	--
Idaho	147	185	3	52	79	5	11	6
Illinois	88	89	17	57	24	2	5	2
Indiana	108	108	16	75	23	5	5	2
Iowa	134	152	17	35	81	5	13	3
Kansas	99	111	24	41	45	8	5	--
Kentucky	17	15	6	5	10	1	1	2
Louisiana	79	74	22	45	17	2	15	6
Maine	184	188	4	83	79	7	15	8
Maryland	29	29	2	21	4	--	4	4
Massachusetts	84	90	5	52	28	1	3	5
Michigan	324	358	16	144	147	16	17	9
Minnesota	384	492	12	186	164	21	13	10
Mississippi	47	47	5	25	20	--	2	2
Missouri	67	75	18	37	25	4	1	--
Montana	136	156	--	57	65	11	3	1
Nebraska	121	137	49	65	51	3	2	--
Nevada	76	129	--	23	43	8	2	1
New Hampshire	90	93	3	50	33	5	2	3
New Jersey	48	48	13	31	12	5	--	2
New Mexico	90	97	5	36	41	10	3	5
New York	334	368	27	142	148	27	17	8
North Carolina	57	55	11	23	20	6	8	4
North Dakota	146	179	2	48	83	3	12	2
Ohio	183	194	35	112	56	6	9	--
Oklahoma	63	65	20	27	31	3	2	1
Oregon	80	101	5	37	38	4	1	3
Pennsylvania	81	81	2	29	41	5	6	--
Rhode Island	21	30	1	10	8	3	0	1
South Carolina	35	47	8	16	11	1	7	3
South Dakota	124	163	2	47	68	4	5	2
Tennessee	29	29	3	8	19	--	2	1
Texas	237	236	16	136	82	7	12	14
Utah	155	180	4	64	79	9	3	2
Vermont	88	99	--	40	43	3	2	2
Virginia	83	78	3	18	49	3	13	9
Washington	165	178	6	88	57	11	9	2
West Virginia	2	2	2	2	--	--	--	--
Wisconsin	300	337	12	154	120	20	6	6
Wyoming	121	147	2	16	95	3	7	1
Total	5,602	6,288	437	2,582	2,426	284	310	169

-- Zero.

<sup>1</sup>Table includes data available through April 26, 2022. Includes recycling plants.

TABLE 8  
U.S. EXPORTS OF CONSTRUCTION SAND AND GRAVEL IN 2019, BY DESTINATION<sup>1</sup>

(Metric tons and dollars)

Destination	Sand <sup>2</sup>		Gravel <sup>3</sup>	
	Quantity	Value <sup>4</sup>	Quantity	Value <sup>4</sup>
North America:				
Bahamas, The	3,240	432,000	350	267,000
Bermuda	4,580	327,000	4,540	347,000
Canada	2,700	638,000	6,380	4,150,000
Mexico	4,170	1,560,000	857	1,180,000
Trinidad and Tobago	3,110	487,000	--	--
Other	2,810	1,240,000	413	444,000
Total	20,600	4,690,000	12,500	6,390,000
South America	20,500	6,390,000	101	87,200
Europe	5,430	2,140,000	520	635,000
Asia	4,290	1,400,000	166	172,000
Oceania	748	107,000	181	31,000
Africa	97	44,000	52	105,000
Grand total	51,700	14,800,000	13,600	7,420,000

-- Zero.

<sup>1</sup>Table includes data available through March 31, 2022. Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>Includes Schedule B code 2505.90.0000.

<sup>3</sup>Includes Schedule B code 2517.10.0015.

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

Source: U.S. Census Bureau.

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

Country or locality	2018			2019		
	Quantity (thousand) metric tons	Value <sup>3</sup> (thousands)	Unit value	Quantity (thousand) metric tons	Value <sup>3</sup> (thousands)	Unit value
Antigua and Barbuda	--	--	--	2	\$48	\$31.93
Bahamas, The	49	\$1,810	\$36.59	14	521	38.54
Canada	5,490	49,700	9.05	5,060	44,600	8.81
China	16	3,990	253.22 <sup>r</sup>	22	4,700	216.73
Dominican Republic	4	874	201.83	6	772	135.17
Guyana	4	129	36.80	(4)	3	3,000.00
Haiti	4	709	194.77	5	992	196.16
India	(4)	22	399.37	1	190	162.37
Indonesia	1	227	245.40	3	673	245.76
Martinique	6	80	14.52	--	--	--
Mexico	225	4,490	19.96	118	2,970	25.31
Montserrat	9	221	24.51	9	222	25.11
New Zealand	11	2,870	265.58	8	2,110	272.41
Norway	22	2,590	117.86	--	--	--
Peru	7	1,690	255.49	8	2,040	259.59
South Africa	1	1,250	1,010.00	1	1,010	952.86
Turkey	3	675	242.68	3	738	273.42
Other	3	1,630 <sup>r</sup>	484.64 <sup>r</sup>	4	2,130	484.34
Total	5,860	73,000	12.46	5,260	63,700	12.11

-- Zero.

<sup>1</sup>Table includes data available through March 31, 2022. Data are rounded to no more than three significant digits, except "Unit value"; may not add to totals shown.

<sup>2</sup>Includes Harmonized Tariff Schedule of the United States codes 2505.90.0000 and 2517.10.0015.

<sup>3</sup>Cost, insurance, and freight value. 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.

<sup>4</sup>Less than ½ unit.

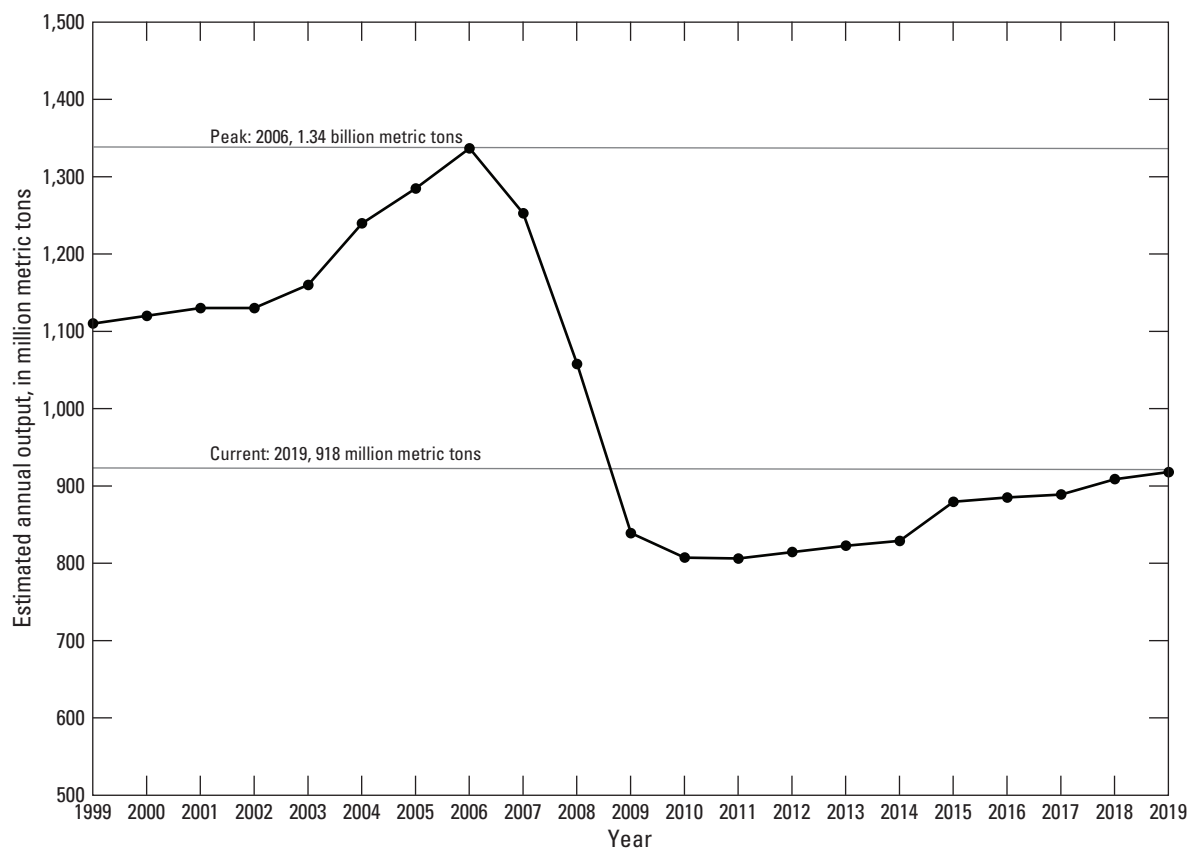
Source: U.S. Census Bureau.

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

2019 rank	2018 rank <sup>f</sup>	Company	2019 rank	2018 rank <sup>f</sup>	Company
1	1	CRH Americas Materials, Inc. (Oldcastle Materials, Inc.)	51	50	All American Asphalt Co.
2	2	Vulcan Materials Co.	52	63	Dolese Bros. Co.
3	3	Lehigh Hanson, Inc.	53	56	Quikrete Co.
4	6	MDU Resources Group, Inc.	54	58	Troy Sand & Gravel Company, Inc.
5	5	CEMEX S.A.B. de C.V.	55	52	Rasmussen Group, Inc.
6	7	Martin Marietta Materials, Inc.	56	47	TM Crushing, LLC
7	4	LafargeHolcim Ltd.	57	57	Irving Materials, Inc.
8	8	Teichert, Inc.	58	53	Capital Sand Co., Inc.
9	9	Granite Construction, Inc.	59	75	Hilltop Cos.
10	12	Mitsubishi Cement Corp.	60	69	GS Materials, Inc.
11	13	Clyde Cos., Inc.	61	66	Johnson Sand & Gravel Inc.
12	10	CalPortland Co.	62	99	Gateway Dredging & Contracting, LLC
13	11	Summit Materials, Inc..	63	95	Foley Materials Co.
14	16	Fisher Industries	64	65	Rieth-Riley Construction Co., Inc.
15	15	Pine Bluff Materials LLC	65	35	Watson Gravel, Inc.
16	17	Gila River Indian Community	66	67	Capitol Aggregates, Ltd.
17	14	Bureau of Land Management	67	72	Stewart Materials, LLC
18	23	L. G. Everist, Inc.	68	61	Central Specialties, Inc.
19	18	Trinity Industries, Inc.	69	70	Wright Materials, Inc.
20	22	Edw. C. Levy Co.	70	59	Strata Corp.
21	19	Chandler Aggregates, Inc.	71	68	Nebeo, Inc.
22	24	Holliday Rock Co.	72	77	A & S Construction Co.
23	25	Colas Inc.	73	51	Chaney Enterprises L.P.
24	20	WM. D. Scepaniak Construction	74	71	The Heritage Group
25	21	Miles Sand & Gravel Co.	75	96	Alleyton Resource Co.
26	27	Mathy Construction Co.	76	—	Permian Basin Materials, LLC
27	29	Salt River Pima-Maricopa Indian Community	77	64	Aggregate Resources, Inc.
28	26	Nugent Sand Co.	78	93	Eucon Corp.
29	30	Multisources Ltd.	79	—	Couch Aggregates, LLC
30	32	Southwest Rock Products, LLC	80	—	P & R Mining, LLC
31	28	Fordyce Ltd.	81	94	Ashley Land Development Co., Inc.
32	34	U.S. Concrete, Inc.	82	88	Wissota Sand & Gravel
33	36	E.R. Jahna Industries, Inc.	83	—	The Jurgensen Cos.
34	33	Eagle Materials Inc.	84	78	Hi-Grade Materials Co.
35	31	Dan Gernatt Gravel Products, Inc.	85	82	B.V. Hedrick Gravel & Sand Co., Inc.
36	48	Varra Cos., Inc.	86	91	State Ready Mix Inc.
37	83	Prowers Aggregate Operators, LLC	87	79	Ford Construction Co.
38	38	Thelen Sand & Gravel, Inc.	88	—	A. Lindberg & Sons Inc.
39	40	FST Sand & Gravel, Inc.	89	—	Mid Michigan Materials, Inc.
40	44	Clayton Sand Co.	90	—	BURNCO Rock Products Ltd.
41	39	Polaris Materials Corp.	91	89	Atlanta Sand & Supply Co.
42	41	York Building Products Co.	92	92	Lakeview Rock Products, Inc.
43	42	The Olen Corp.	93	62	Grand Rapids Gravel Co.
44	46	CAPA	94	97	S&S Aggregates Co.
45	43	Las Vegas Paving Corp.	95	100	O.L. Thompson Construction Co., Inc.
46	87	Peak Sand & Gravel	96	90	Coram Materials Corp.
47	—	Rogers Group, Inc.	97	—	TITAN Cement International S.A.
48	85	Construction Partners, Inc.	98	98	Halliday Sand & Gravel Inc.
49	49	Memphis Stone & Gravel Co.	99	80	Central-Allied Enterprises, Inc.
50	60	R.E. Janes Gravel Co.	100	76	National Lime & Stone Co.

<sup>f</sup>Revised. — Not in the top 100 producers of construction sand and gravel in the United States in 2018.

<sup>1</sup>Table includes data available through April 26, 2022. Listed in descending order of tonnage produced.



**Figure 1.** Annual output of construction sand and gravel produced for consumption in the United States from 1999 through 2019. The current annual output and the record-high output from 2006 output are both highlighted.