

2018 Minerals Yearbook

STONE, CRUSHED [ADVANCE RELEASE]

STONE, CRUSHED

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A total of 1.39 billion metric tons (Gt) of crushed stone was produced for consumption in the United States in 2018, a slight increase from the total production in 2017 but 22% less than the record high of 1.78 Gt in 2006 (fig. 1). In 2018, the total value of crushed stone produced in the United States was \$16.2 billion, an increase of 4.0% compared with that in 2017. The average unit value for crushed stone increased by 2.5% compared with the average unit value in 2017. Employment decreased slightly to 68,500 employees working at operations that were identified by the Mine Safety and Health Administration (MSHA) as producing crushed stone (table 1).

Approximately 70% of crushed stone production was limestone and dolomite, followed by, in descending order of tonnage, granite, traprock, miscellaneous stone, sandstone and quartzite, volcanic cinder and scoria, marble, calcareous marl, slate, and shell (table 2).

Foreign trade in crushed stone remained relatively small compared with nationwide consumption. In 2018, U.S. exports decreased by 47% to 335,000 metric tons (t) compared with 634,000 t in 2017; the value increased by 14% to \$61.0 million, compared with \$53.3 million in 2017 (tables 1, 17). U.S. imports of crushed stone, including calcium carbonate fines, increased by 14% to 21.0 million metric tons (Mt), and the value increased by 7.5% to \$180 million compared with 2017 totals (tables 1, 18). Apparent domestic consumption of crushed stone, which is defined as production for consumption (sold or used) plus recycling and imports minus exports, increased slightly compared with the apparent domestic consumption in 2017.

Stone is one of the most accessible natural resources on Earth and one of the fundamental building blocks of society. Stone has been used since the beginning of civilization in a variety of ways that have increased in number and complexity alongside technological progress. Today, in its crushed form, stone is a basic, major, raw material for the construction industry, agriculture, and industries that use complex chemical and metallurgical processes. Despite the relatively low but increasing unit value of its basic products, the crushed stone industry is a major contributor to, and an indicator of, the economic well-being of the Nation. Construction aggregates are the combination of crushed stone and construction sand and gravel. The construction sand and gravel industry is reviewed in a separate chapter of the Minerals Yearbook, and both mineral commodities are usually included in any review of the national or State construction aggregates industry.

Production

Domestic production data for crushed stone were derived by the U.S. Geological Survey (USGS) from voluntary surveys of U.S. producers. In 2018, a total of 1,409 companies produced or sold crushed stone from 3,585 operations with 3,445 quarries and 359 sales and (or) distribution sites (table 16).

Of the 3,585 active operations, 2,183 operations reported their production or sales to the USGS, and their total production was 1.03 Gt (74% of the U.S. total). Of the 2,183 reporting operations, 787 operations did not report a breakdown by end use. The total production for these 787 operations was 445 Mt (32% of the U.S. total) and is included in table 9 under “Unspecified, reported” uses.

Production from the nonresponding quarries was estimated by using employment data provided by MSHA. The estimated output of 1,402 nonrespondent operations was 359 Mt (26% of the U.S. total) and is included in table 9 under “Unspecified, estimated” uses.

A total of 359 operations reported that they were active sales yards and 198 of those operations reported that they sold only recycled aggregates. Virgin crushed stone sales were reported by the other 161 sales yards in 2018, and the total quantity of crushed stone sold from these operations was 44.2 Mt. Information on the number of active operations, including recycling operations, active quarries, dredging operations, types of processing plants, and number of sales yards is provided, by State, in table 16.

Crushed stone was sold in every State and produced in every State except Delaware. The 10 leading producing States were, in descending order of tonnage, Texas, Pennsylvania, Florida, Missouri, Ohio, North Carolina, Georgia, Kentucky, Virginia, and Indiana. The combined production of the 10 leading States increased slightly compared with that in 2017 and accounted for 53% of the national total (table 4).

Included in the total number of active operations for 2018 were 109 underground mines, which produced 96.2 Mt of crushed stone in 17 States. The five leading States for production from underground mines were, in descending order of tonnage, Kentucky, Missouri, Pennsylvania, Iowa, and Illinois. The combined production of the five leading States was 67.7 Mt (70% of the total of U.S. crushed stone produced underground).

A total of 266 crushed stone operations were either idle or presumed idle in 2018 because no production report was received and no employment information was available to estimate production. Since the 2017 survey, 87 operations have closed. Most of the idle or closed operations were small, temporary quarries, some of which were operated by State or local governments. Operations in U.S. Territories are not included in the above count.

Of the total 1.39 Gt of crushed stone produced for consumption in the United States in 2018, 70% was limestone and dolomite, 15% was granite, 6.2% was traprock, 5.1% was miscellaneous stone, and 3.2% was sandstone and quartzite. The remaining 1.0% was a combination of, in descending order of tonnage, volcanic cinder and scoria, marble, calcareous marl, slate, and shell. These percentages were calculated on the basis of the total

quantity of crushed stone produced for consumption that was reported and estimated, including individual quantities withheld to avoid the disclosure of company proprietary data (table 2).

A review of production by operation size at the national level indicated that in 2018, 690 Mt of crushed stone (49% of the total crushed stone) was produced by 345 operations reporting production of more than 1 million metric tons per year; 323 Mt (23%) was produced by 462 operations reporting production between 500,000 and 999,999 metric tons per year (t/yr); and 337 Mt (24%) was produced by 1,309 operations reporting production between 100,000 and 499,999 t/yr (table 5A). In 2018, by geographic region, the South had 1,252 active operations, the Midwest with 976, the West with 565, and the Northeast with 529 (table 5B).

The leading producing companies in 2018 were, in descending order of tonnage, Vulcan Materials Co.; Martin Marietta Materials, Inc.; CRH Americas Materials, Inc.; Lehigh Hanson, Inc.; LafargeHolcim Ltd.; CEMEX S.A.B. de C.V.; Rogers Group Inc.; Carmeuse Americas; Lhoist North America, Inc; and Luck Stone Corp. (table 19). In 2018, the combined production of the top 10 companies increased by 8.3% to 695 Mt (50% of the national total) from 642 Mt in 2017. The combined production of the top 100 companies was 1.22 Gt (87% of the national total). The combined production of the leading 282 companies was 1.25 Gt of crushed stone, meaning that 20% of the companies produced 89% of the total sales in 2018.

Production of crushed stone, by type, is detailed below.

Calcareous Marl.—The output of calcareous marl decreased by 21%, compared with that in 2017, to 2.2 Mt valued at \$8.3 million (table 2).

Dolomite.—The production of dolomite increased by 4.7%, compared with that in 2017, to 56.8 Mt valued at \$619 million (table 2). Crushed dolomite production was reported in 26 States. The leading producing States were, in descending order of tonnage, Pennsylvania, New York, and Utah; the total production of these three States was 38% of the total U.S. output (table 6). An additional undetermined quantity of dolomite was included in the crushed limestone total, as explained in the limestone portion of the “Production” section.

Granite.—The output of crushed granite decreased slightly compared with that in 2017 to 203 Mt valued at \$3.1 billion in 2018 (table 2). Crushed granite production was reported in 35 States. The leading producing States were, in descending order of tonnage, Georgia, North Carolina, Virginia, South Carolina, and California; the total production of these five States was 142 Mt (70% of U.S. output) (table 7).

Limestone.—The output of crushed limestone (including some dolomite) increased slightly, compared with that in 2017, to 917 Mt valued at \$9.8 billion (table 2). Limestone production was reported in 45 States, which included small quantities of limestone and dolomite that were produced in the same quarries. Companies in 32 States reported production of 46.4 Mt of limestone and dolomite combined, which was included with the limestone listed in table 2. The limestone totals listed in this chapter, therefore, include an undetermined quantity of dolomite in addition to the dolomite reported separately. The leading producing States were, in descending order of tonnage, Texas,

Florida, Ohio, Missouri, and Pennsylvania; the total production of these five States was 417 Mt (46% of the total U.S. output) (table 6).

Marble.—The production of crushed marble increased slightly, compared with the total for 2017, to 3.9 Mt valued at \$85.6 million (table 2). Crushed marble production was reported in 10 States (table 6).

Miscellaneous Stone.—This category includes three types of miscellaneous crushed stone production: (1) crushed stone reported by the company as “other” on the survey form or as a type of stone not listed in table 2, (2) an unknown stone type from a company or operation new to the survey, and (3) a known stone type when the quantity reported must be withheld to protect company proprietary data. The withheld quantity is added to the quantity of miscellaneous stone produced in that State and then published. The first year that an operation is added to the survey, its production is often estimated using MSHA employment data. The type of stone is updated when a response is received from the operation, and the data are revised for the next report.

The reported output of miscellaneous stone increased by 3.1%, compared with the total for 2017, to 71.6 Mt valued at \$776 million (table 2). In 2018, the reported quantity of miscellaneous stone accounted for 70% of the total output of miscellaneous stone and 63% of its value (table 8). The remaining 30% (30.2 Mt) of the total output consisted of known stone types for which data were withheld.

Sandstone and Quartzite.—The output of crushed sandstone and quartzite, was essentially unchanged compared with the total for 2017, 45.0 Mt valued at \$528 million (table 2). The leading producing States were, in descending order of combined tonnage of sandstone and quartzite, Pennsylvania and Arkansas (table 7). Crushed sandstone was produced in 31 States, and production was 34.4 Mt, which included 0.7 Mt of sandstone and quartzite produced in the same quarry. Crushed quartzite was produced in 17 States, and production was 10.7 Mt.

Shell.—Shell is derived mainly from fossil reefs or oyster shell banks. The 2018 output of crushed shell more than tripled from that in 2017, to 849,000 t valued at \$12.4 million (table 2). In 2018, crushed shell production was reported only in Florida and Louisiana (table 8).

Slate.—The output of crushed slate increased by 3.3%, compared with that in 2017, to 1.4 Mt valued at \$18.8 million (table 2). Crushed slate was produced in nine States (table 7).

Traprock.—Production of crushed traprock decreased slightly, compared with the total for 2017, to 86.5 Mt valued at \$1.31 billion (table 2). Traprock production was reported in 29 States. The leading producing States were, in descending order of tonnage, New Jersey, Oregon, Virginia, North Carolina, and California; these five States produced 44.6 Mt (52% of U.S. output) (table 7).

Volcanic Cinder and Scoria.—Production of volcanic cinder and scoria increased by 26%, compared with the total for 2017, to 5.8 Mt valued at \$28.6 million (table 2). Volcanic cinder and scoria production was reported in 11 States, with Wyoming accounting for 68% of U.S. output (table 8).

Consumption

Crushed stone production reported to the USGS is material used by producers or sold to other companies or consumers. Stockpiled production is not included in the reported quantities. The “sold or used” tonnage, therefore, represents the quantity of production, including some imports, released for domestic consumption or export in a given year. Because some of the crushed stone producers did not report a breakdown by end use, their total production was included in the “Unspecified, reported” end-use category. The estimated production of nonrespondents was included in the “Unspecified, estimated” end-use category.

The ultimate use of crushed stone determines the specifications for particle size and gradation, shape, rock type, and chemical composition. Crushed stone can be mixed with a matrix binding material such as dark bituminous pitch (asphalt) or portland cement or it can be used without any binder for a variety of construction or industrial applications. The most common use of crushed stone for construction purposes is as aggregate without a binder, including road base or road-surfacing material, macadam, riprap, railroad ballast, and filter stone (table 9). The second-ranked use of crushed stone is as bituminous aggregate or concrete aggregate in a variety of forms and applications in residential and nonresidential construction, highway and road construction and repair, airports, dams, sewers, and foundations. Sized crushed stone is used as bituminous aggregate and road base. Broken surfaces adhere to the hot, dark, bituminous asphaltic mixture better than rounded surfaces and provide interlocking surfaces that tend to strengthen the asphaltic concrete. Broken particles pack better and tend to move less under load than rounded particles and, therefore, make a better road base product for highway and road construction. This characteristic is essential because the road base and asphaltic concrete tend to flow when placed under great or long duration stresses. Other uses include limestone for lime and portland cement manufacturing, as agricultural limestone for direct application to soil, as filler and conditioner for fertilizers, in animal mineral feeds, and as poultry grit. Smaller quantities of crushed stone are used for a variety of applications, ranging from metallurgical fluxing of antimony, copper, iron, lead, and zinc to the manufacture of glass, ceramic pottery, paper, and as fillers and extenders in asphalt, paint, rubber, and plastics. Finely ground limestone is used to remove sulfur oxides from stack gases, primarily from coal-burning, electric-generating stations, and for mine dusting to enhance mine safety by reducing the explosion risk of highly combustible coal dust.

A total of 1.39 Gt of crushed stone was produced for consumption in the United States in 2018, a slight increase from the total in 2017. Of the 1.39 Gt of crushed stone produced for consumption, 32% was “Unspecified, reported,” and 26% was “Unspecified, estimated.” Of the remaining production reported by use, 71% was used as construction aggregate (mostly for highway and road construction and maintenance) and for a variety of building and other construction; 17% for cement manufacturing; 8% for lime manufacturing; 2% for miscellaneous uses and products, including other chemical and special uses;

and 1% for agricultural uses (table 9). In marketing analysis or use-pattern studies, the quantities included in unspecified uses may be prorated and added to the reported uses by applying the above percentages calculated for the reported quantities.

At least 25% of the limestone produced annually is used to manufacture cement and lime. Totals in table 10 do not accurately account for the total quantity of limestone used because the response rate of companies sending in limestone data by product or use was not 100%; however, the quantity of limestone needed to manufacture the quantity of lime and cement that was produced can be estimated.

For high-calcium lime, under ideal conditions, 1.8 t of limestone is needed to produce 1 t of lime. This quantity excludes lime kiln dust, which may increase limestone requirements by 20% to 30% (H.G. van Oss, Mineral Commodity Specialist, National Minerals Information Center, U.S. Geological Survey, written commun., September 12, 2015). The ratio can vary by producer from 2.5 to 4.0 t of limestone per ton of lime produced. For 2018, total lime produced in the United States was 18.0 Mt, using 45 to 72 Mt of limestone (Apodaca, 2021).

For cement, limestone is used to make clinker and as an additive in the finish mill to bulk out portland cement, to make certain types of blended cement, or to make most forms of masonry cement. The actual requirements cannot be easily calculated because portland cement manufacturers can use quite impure limestone. The theoretical requirements for clinker with 65% calcium oxide (CaO), assuming all comes from limestone, is 1.16 t of limestone per 650 kilograms of CaO (that is, per ton of clinker). Because of impurities in the limestone, moisture content, and cement kiln dust (commonly recycled), producers typically need approximately 1.50 t of limestone per ton of clinker. A single ton of clinker makes approximately 1.10 t of cement. Thus, producers use approximately 1.36 t of limestone per ton of cement produced (H.G. van Oss, Mineral Commodity Specialist, National Minerals Information Center, U.S. Geological Survey, written commun., September 12, 2015). In 2018, total cement produced in the United States was approximately 86 Mt, using approximately 117 Mt of limestone (Hatfield, 2021).

The value of the total construction put in place in 2018 increased by 4%, compared with that in 2017, to \$1.33 trillion. The value of total private construction increased by 4% to \$1.02 trillion. The value of total public construction increased by 5% to \$310 billion (U.S. Census Bureau, 2020).

Recycling

The recycling of many construction materials expanded in 2018. Producers of construction aggregates actively recycled portland cement concrete and asphalt concrete materials recovered from construction projects for reuse as construction aggregate materials, especially for fill and road-base applications. Portland cement concrete was recycled at some quarries and increasingly at sales yards and distribution sites, whereas asphalt concrete was often recycled in place. The USGS surveyed construction aggregate mining companies and 175 construction and demolition companies about their

recycling activities. Incomplete data from the construction and demolition industry represents an unknown percentage of the actual U.S. total of recycled construction aggregates.

Recycled Asphalt Concrete.—Companies reported that asphalt concrete was recycled in every State except Hawaii and West Virginia. The U.S. total of recycled asphalt was 16.3 Mt valued at \$157 million (table 14). The leading States in 2018 were, in descending order of tonnage of recycled asphalt, California, Illinois, Minnesota, North Carolina, and Michigan. The combined total production for these States was 7.1 Mt, which accounted for 43% of the U.S. total.

Since 2010, the National Asphalt Pavement Association, in partnership with the Federal Highway Administration, has conducted an annual survey of the asphalt pavement industry on the use of recycled materials. It was reported that more than 99% of the reclaimed asphalt pavement (RAP) in 2018 was recycled and reused. The disposal of RAP in construction and demolition landfills is rare. In 2018, the average percentage of RAP used in asphalt mixtures was approximately 21%, which was estimated to be 82.2 Mt. It was estimated that 6.4 Mt of RAP was reused as construction aggregate (Williams and others, 2020, p. 14).

Recycled Portland Cement Concrete.—The amount of portland cement concrete recycled in 2018 was 21.3 Mt, valued at \$167 million (table 15). Of the 46 States that recycled portland cement concrete in 2018, the leading States were, in descending order of tonnage, Texas, California, Illinois, Minnesota, and Michigan. The combined total tonnage for these States was 12.0 Mt, which accounted for 56% of the U.S. total.

Transportation

No means of transportation was reported by the producers for 995 Mt of the 1.39 Gt of crushed stone produced for consumption in 2018. Of the remaining 399 Mt of crushed stone, 78% of the responses were reported as transported by truck from the quarry or the processing plant to the first point of sale or use; 5% by rail; and 3% by waterway. About 42.2 Mt of the specified production was reported as not transported and, therefore, was assumed to have been used onsite.

Shipment by truck remained the most widely used method of transportation for crushed stone. The significant increase in the number of sales and distribution yards in the past few years and the increase in the volume of crushed stone sold at these sites affected the markets they served, especially in areas without sufficient resources to support the quarrying of crushed stone. Distribution yards, supplied by rail or waterway, are located near metropolitan areas and significantly reduce the distance trucks must travel to pick up and deliver crushed stone. Therefore, the transportation costs are reduced, as is the effect of heavy-vehicle traffic on the infrastructure and the environment. Sales yards served as distribution sites and, increasingly, as recycling sites.

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 crushed stone producing companies. Prices do not include transportation from the plant or yard to the consumer,

although they do include all costs of mining, processing, in-plant transportation, overhead, and profit. In 2017, 993 operations reported the monetary value of their production with an average unit value of \$12.51 per metric ton. In 2018, 872 operations reported the monetary value of their production with an average unit value of \$12.54 per metric ton. Leading U.S. producers reported that prices increased by 1% to 3% 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 was used in the estimation for operations reporting total production only and for operations that did not respond to the survey, resulting in average unit values of \$11.36 and \$11.64 per metric ton in 2017 and 2018, respectively (table 9).

Additional information regarding prices of crushed stone by type of rock and uses in the United States, and each State, can be found throughout the tables included in this chapter.

Foreign Trade

The widespread distribution of domestic deposits of stone suitable for mining as crushed stone, the large number of existing active operations throughout the country, and the high cost of transportation limit foreign trade to primarily local transactions across international boundaries. U.S. imports and exports continued to be small, representing slightly more than 1% of domestic consumption.

Information on imports of crushed stone used for this report was derived from two sources. The primary source was import and export data from the U.S. Census Bureau (tables 1, 17–18). Additionally, companies provided import data when reporting the quantity sold or used for consumption at each operation, usually a sales yard. The tonnage reported was attributed to the State where it was first sold or used; for example, the crushed stone imported to Florida from Mexico was counted in the total of crushed stone sold or used in Florida (table 4). This accounting practice was the same practice used for large quantities of crushed stone transported from one State to another. For example, crushed stone mined in Kentucky and shipped on the Mississippi River for use in Louisiana was included in the total of crushed stone sold or used in Louisiana.

Exports.—Exports of crushed stone decreased by 47% to 335,000 t, compared with the total of 634,000 t in 2017, and the value increased by 14% to \$61.0 million (table 1). Based on the detailed export data from the U.S. Census Bureau, total exports of crushed stone to The Bahamas and Mexico increased, and exports to Canada decreased by 52% compared with those in 2017. In 2018, exports of crushed limestone for cement manufacturing had an average unit value of \$329 per ton (table 17), down from \$363 per ton in 2017.

Imports.—Imports of crushed stone increased by 14% to 21.0 Mt, compared with those in 2017, and the value increased by 7% to \$180 million (table 1). Of the imported crushed stone, 68% was limestone used as construction aggregate, flux stone, and in cement manufacturing (table 18). Based on detailed import data from the U.S. Census Bureau, imports of limestone from Mexico increased by 19% to 11.8 Mt from 9.9 Mt in 2017. During the same period, imports of limestone from The Bahamas increased by 14% to 2.5 Mt from 2.2 Mt.

The customs districts of Houston-Galveston, TX, Laredo, TX, and Tampa, FL, received 60% of the total crushed stone imports into the United States in 2018. These same three customs districts received 72% of total crushed stone imported from Mexico. The Tampa, FL, customs district received 78% of the limestone imported from The Bahamas. Almost one-half of the crushed stone imported from Canada went through the Seattle, WA, and Tampa, FL, customs districts.

Outlook

The crushed stone industry is cyclical, 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 led to decreased consumption of crushed stone. After 4 years of decline, residential construction stabilized in late 2010, and crushed stone production has increased every year since 2012 (fig. 1). Crushed stone production is estimated to increase by 7% in 2019 to approximately 1.5 Gt (Willett, 2020).

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TABLE 1
SALIENT CRUSHED STONE STATISTICS¹

(Thousand metric tons and thousand dollars)

	2014	2015	2016	2017	2018
Sold or used by producers: ²					
Quantity	1,250,000	1,340,000	1,360,000	1,370,000	1,390,000
Value	12,700,000 ^r	14,100,000	15,100,000	15,600,000 ^r	16,200,000
Recycled:					
Quantity	40,500	48,100	48,700	42,600 ^r	37,600
Value	309,000	380,000	393,000	356,000 ^r	324,000
Exports:					
Quantity	455	427	530	634	335
Value	48,600	44,200	47,100	53,300	61,000
Imports for consumption: ³					
Quantity	17,700	19,900	19,700	18,500	21,000
Value	162,000	194,000	184,000	167,000 ^r	180,000
Employment ⁴	65,600	67,100	68,100	68,600	68,500

¹Revised.

¹Table includes data available through March 10, 2021. Data are rounded to no more than three significant digits.

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

³Excludes precipitated calcium carbonate.

⁴Average number of employees including office staff. Source: Mine Safety and Health Administration.

TABLE 2
CRUSHED STONE SOLD OR USED IN THE UNITED STATES, BY TYPE^{1,2}

Type	2017 ³				2018			
	Number of quarries	Quantity (thousand metric tons)	Value (thousands)	Unit value	Number of quarries	Quantity (thousand metric tons)	Value (thousands)	Unit value
Limestone ⁴	1,960	901,000	\$9,350,000	\$10.38	1,960	917,000	\$9,770,000	\$10.66
Dolomite	103	54,300	577,000	10.63	109	56,800	619,000	10.89
Marble	19	3,850	86,000	22.31	18	3,930	85,600	21.81
Calcareous marl	4	2,800	10,300	3.68	3	2,210	8,250	3.73
Shell	6	207	1,640	7.93	6	849	12,400	14.60
Granite	389	205,000	2,980,000	14.54	391	203,000	3,070,000	15.09
Traprock	267	87,600	1,310,000	14.98	265	86,500	1,310,000	15.20
Sandstone and quartzite ⁵	199	44,900	511,000	11.39	191	45,000	528,000	11.73
Slate	17	1,310	16,600	12.67	18	1,360	18,800	13.82
Volcanic cinder and scoria	36	4,640	23,800	5.13	35	5,850	28,600	4.89
Miscellaneous stone	497	69,400	741,000	10.67	448	71,600	776,000	10.84
Total or average	XX	1,370,000	15,600,000	11.36	XX	1,390,000	16,200,000	11.64

XX Not applicable.

¹Table includes data available through March 10, 2021. Data are rounded to no more than three significant digits, except “Number of quarries” and “Unit value”; 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.

⁴Includes limestone and (or) dolomite reported with no distinction between the two kinds of stone.

⁵Includes sandstone, quartzite, and sandstone and (or) quartzite where no distinction was reported between the two kinds of stone.

TABLE 3
CRUSHED STONE SOLD OR USED IN THE UNITED STATES, BY GEOGRAPHIC DIVISION^{1,2}

(Thousand metric tons and thousand dollars)

Region and division	2017 ³		2018	
	Quantity	Value	Quantity	Value
Northeast:				
New England	38,700	483,000	38,500	489,000
Middle Atlantic	143,000	1,840,000	144,000	1,870,000
Total	181,000	2,330,000	182,000	2,360,000
Midwest:				
East North Central	217,000	2,050,000	228,000	2,160,000
West North Central	150,000	1,380,000	145,000	1,340,000
Total	367,000	3,420,000	373,000	3,510,000
South:				
South Atlantic	304,000	4,370,000	303,000	4,540,000
East South Central	136,000	1,550,000	136,000	1,570,000
West South Central	231,000	2,460,000	239,000	2,670,000
Total	671,000	8,380,000	679,000	8,780,000
West:				
Mountain	69,100	564,000	71,000	595,000
Pacific	85,700	917,000	88,900	974,000
Total	155,000	1,480,000	160,000	1,570,000
Grand total	1,370,000	15,600,000	1,390,000	16,200,000

¹Table includes data available through March 10, 2021. Data 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 4
CRUSHED STONE SOLD OR USED BY PRODUCERS IN THE UNITED STATES, BY STATE AND TERRITORY¹

State	2017 ²			2018		
	Quantity (thousand metric tons)	Value (thousands)	Unit value	Quantity (thousand metric tons)	Value (thousands)	Unit value
Alabama	37,500	\$410,000	\$10.92	38,100	\$422,000	\$11.07
Alaska	1,040	22,200	21.33	1,400	27,800	19.88
Arizona	10,700	99,900	9.36	12,700	112,000	8.81
Arkansas	30,800	292,000	9.46	28,800	275,000	9.56
California	44,900	422,000	9.40	46,000	439,000	9.55
Colorado	15,500	149,000	9.63	14,700	149,000	10.13
Connecticut	9,640	149,000	15.51	9,270	143,000	15.45
Delaware ³	W	W	W	W	W	W
Florida	74,900	944,000	12.61	77,800	1,000,000	12.88
Georgia	53,200	827,000	15.55	53,400	881,000	16.51
Hawaii	5,070	111,000	21.83	4,680	107,000	22.81
Idaho	4,060	28,800	7.09	4,370	29,900	6.85
Illinois	49,500	517,000	10.45	48,600	506,000	10.42
Indiana	49,000	426,000	8.70	50,300	461,000	9.17
Iowa	39,000	433,000	11.11	38,700	433,000	11.20
Kansas	15,600	133,000	8.54	14,900	126,000	8.50
Kentucky	50,700	479,000	9.45	51,100	484,000	9.46
Louisiana ³	W	W	W	W	W	W
Maine	4,360	34,500	7.92	4,000	36,300	9.06
Maryland	24,300	295,000	12.12	22,500	275,000	12.19
Massachusetts	12,700	178,000	13.94	13,800	191,000	13.79
Michigan	32,800	221,000	6.74	36,600	243,000	6.62
Minnesota	7,240	97,600	13.47	7,970	107,000	13.45
Mississippi ³	2,000	60,700	30.36	1,990	62,000	31.23
Missouri	74,400	568,000	7.64	70,300	529,000	7.53
Montana	2,680	23,800	8.88	2,730	23,000	8.42
Nebraska	7,060	92,800	13.14	7,060	96,200	13.62
Nevada	12,300	100,000	8.14	12,600	113,000	8.92
New Hampshire	5,190	51,900	10.01	5,250	53,200	10.12
New Jersey	17,200	192,000	11.18	17,800	192,000	10.81
New Mexico	4,410	40,000	9.07	4,010	37,900	9.46
New York	37,000	463,000	12.52	39,800	514,000	12.93
North Carolina	54,600	933,000	17.10	55,400	1,000,000	18.05
North Dakota	427	2,550	5.98	326	2,310	7.10
Ohio	60,900	677,000	11.12	66,000	738,000	11.18
Oklahoma	35,700	339,000	9.51	36,700	340,000	9.27
Oregon	19,600	150,000	7.63	21,900	187,000	8.52
Pennsylvania	88,600	1,190,000	13.42	86,100	1,170,000	13.57
Rhode Island	2,230	24,100	10.79	1,800	19,500	10.82
South Carolina	28,700	364,000	12.66	27,500	366,000	13.30
South Dakota	6,440	47,800	7.42	6,220	49,900	8.01
Tennessee	46,000	597,000	12.99	45,100	604,000	13.41
Texas	161,000	1,770,000	10.94	171,000	2,000,000	11.71
Utah	9,670	72,800	7.53	9,880	76,500	7.74
Vermont	4,570	45,800	10.02	4,390	46,700	10.62
Virginia	52,800	836,000	15.82	51,000	826,000	16.18
Washington	15,100	212,000	14.08	14,900	214,000	14.34
West Virginia	14,600	160,000	10.91	15,100	174,000	11.52
Wisconsin	25,100	204,000	8.13	26,500	215,000	8.13
Wyoming	9,850	49,700	5.05	9,920	54,200	5.47
Other	3,220	75,400	23.43	3,010	68,600	22.77
U.S. total or average	1,370,000	15,600,000	11.36	1,390,000	16,200,000	11.64
Territory						
American Samoa ⁴	(5)	(5)	(5)	(5)	(5)	(5)
Guam	(5)	(5)	(5)	(5)	(5)	(5)
Puerto Rico	5,060	48,700	9.62	4,530	49,500	10.94
Virgin Islands	(5)	(5)	(5)	(5)	(5)	(5)
Grand total or average	1,380,000	15,700,000	11.36	1,400,000	16,300,000	11.65

See footnotes at end of table.

TABLE 4—Continued
CRUSHED STONE SOLD OR USED BY PRODUCERS IN THE UNITED STATES, BY STATE AND TERRITORY¹

W Withheld to avoid disclosing company proprietary data; included with “Other.”

¹Table includes data available through March 10, 2021. Data are rounded to no more than three significant digits, except unit values; may not add to totals shown.

²Estimated quantities have been recalculated.

³Significant quantities of sold or used material were shipped from other States.

⁴Includes Tutuila Island and dependencies.

⁵Withheld to avoid disclosing company proprietary data; included in “Grand total or average.”

TABLE 5A
CRUSHED STONE SOLD OR USED IN THE UNITED STATES, BY SIZE OF OPERATION^{1,2}

Size range (metric tons)	2017 ³				2018			
	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	512	15.3	4,940	0.4	511	15.4	4,730	0.3
25,000 to 49,999	280	8.3	10,700	0.8	292	8.8	10,800	0.8
50,000 to 99,999	446	13.3	33,100	2.4	403	12.1	29,700	2.1
100,000 to 199,999	499	14.9	72,600	5.3	499	15.0	73,300	5.3
200,000 to 299,999	353	10.5	86,100	6.3	364	11.0	90,000	6.5
300,000 to 399,999	272	8.1	94,700	6.9	272	8.2	95,200	6.8
400,000 to 499,999	183	5.5	81,500	5.9	174	5.2	78,100	5.6
500,000 to 599,999	154	4.6	84,900	6.2	142	4.3	77,700	5.6
600,000 to 699,999	119	3.5	76,800	5.6	123	3.7	79,400	5.7
700,000 to 799,999	80	2.4	60,200	4.4	68	2.0	50,900	3.7
800,000 to 899,999	68	2.0	57,800	4.2	76	2.3	64,300	4.6
900,000 to 999,999	49	1.5	46,300	3.4	53	1.6	50,300	3.6
1,000,000 to 1,499,999	163	4.9	199,000	14.5	166	5.0	203,000	14.5
1,500,000 to 1,999,999	86	2.6	149,000	10.9	89	2.7	155,000	11.1
2,000,000 to 2,499,999	31	0.9	69,100	5.0	26	0.8	56,800	4.1
2,500,000 to 4,999,999	44	1.3	140,000	10.2	45	1.4	143,000	10.2
5,000,000 and more	15	0.4	107,000	7.8	19	0.6	133,000	9.5
Total	XX	100	1,370,000	100	XX	100	1,390,000	100

XX Not applicable.

¹Table includes data available through March 10, 2021. Data are rounded to no more than three significant digits, except “Number of operations”; may not add to totals shown.

²Does not include recycling plants.

³Estimated quantities have been recalculated.

TABLE 5B
CRUSHED STONE SOLD OR USED IN THE UNITED STATES IN 2018, BY REGION AND SIZE OF OPERATION^{1,2}

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	86	16.3	816	0.4	159	16.3	1,502	0.4
25,000 to 49,999	56	10.6	2,093	1.1	89	9.1	3,208	0.9
50,000 to 99,999	55	10.4	4,359	2.4	119	12.2	8,717	2.3
100,000 to 199,999	69	13.0	10,170	5.6	169	17.3	24,640	6.6
200,000 to 299,999	62	11.7	15,583	8.6	114	11.7	28,047	7.5
300,000 to 399,999	47	8.9	16,527	9.1	82	8.4	28,654	7.7
400,000 to 499,999	34	6.4	15,441	8.5	40	4.1	17,657	4.7
500,000 to 599,999	28	5.3	15,232	8.4	36	3.7	19,493	5.2
600,000 to 699,999	24	4.5	15,935	8.7	28	2.9	17,806	4.8
700,000 to 799,999	10	1.9	7,585	4.2	21	2.2	15,848	4.2
800,000 to 899,999	10	1.9	8,392	4.6	22	2.3	18,408	4.9
900,000 to 999,999	6	1.1	5,709	3.1	14	1.4	13,326	3.6
1,000,000 to 1,499,999	28	5.3	33,659	18.5	31	3.2	38,824	10.4
1,500,000 to 1,999,999	9	1.7	15,268	8.4	26	2.7	44,422	11.9
2,000,000 to 2,499,999	0	0.0	0	0.0	7	0.7	15,967	4.3
2,500,000 and more	5	0.9	15,415	8.5	19	1.9	76,926	20.6
Total	529	100	182,185	100	976	100	373,446	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	139	11.1	1,320	0.2	127	22.5	1,090	0.7
25,000 to 49,999	73	5.8	2,720	0.4	74	13.1	2,780	1.7
50,000 to 99,999	125	10.0	9,180	1.4	104	18.4	7,450	4.7
100,000 to 199,999	180	14.4	26,800	4.0	81	14.3	11,600	7.3
200,000 to 299,999	142	11.3	35,300	5.2	46	8.1	11,100	6.9
300,000 to 399,999	113	9.0	39,600	5.8	30	5.3	10,500	6.6
400,000 to 499,999	77	6.2	35,100	5.2	23	4.1	9,910	6.2
500,000 to 599,999	65	5.2	35,700	5.3	13	2.3	7,290	4.6
600,000 to 699,999	62	5.0	40,000	5.9	9	1.6	5,680	3.6
700,000 to 799,999	32	2.6	23,700	3.5	5	0.9	3,770	2.4
800,000 to 899,999	39	3.1	33,200	4.9	5	0.9	4,230	2.6
900,000 to 999,999	24	1.9	22,800	3.4	9	1.6	8,460	5.3
1,000,000 to 1,499,999	90	7.2	109,000	16.1	17	3.0	21,300	13.3
1,500,000 to 1,999,999	45	3.6	79,200	11.7	9	1.6	15,800	9.9
2,000,000 to 2,499,999	14	1.1	29,900	4.4	5	0.9	11,000	6.9
2,500,000 and more	32	2.6	155,000	22.9	8	1.4	27,900	17.4
Total	1,252	100	679,000	100	565	100	160,000	100

¹Table includes data available through March 10, 2021. Data are rounded to no more than three significant digits, except "Number of operations"; may not add to totals shown.

²Does not include recycling plants.

TABLE 6
LIMESTONE, DOLOMITE, CALCAREOUS MARL, AND MARBLE SOLD OR USED BY PRODUCERS IN THE UNITED STATES
IN 2018, BY STATE¹

(Thousand metric tons and thousand dollars)

State	Limestone		Dolomite		Calcareous marl		Marble	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Alabama	32,600 ²	353,000	660	8,900	--	--	--	--
Alaska	--	--	--	--	--	--	--	--
Arizona	4,080 ²	31,200	--	--	--	--	--	--
Arkansas	12,500 ²	104,000	514	6,520	--	--	--	--
California	20,500 ²	147,000	60	676	--	--	--	--
Colorado	2,410 ²	21,600	(4)	(4)	--	--	--	--
Connecticut	750 ²	12,400	26	858	--	--	336	5,260
Delaware	(3)	(3)	--	--	--	--	--	--
Florida	76,300 ²	977,000	(4)	(4)	--	--	--	--
Georgia	4,180	68,700	--	--	--	--	2,140	54,300
Hawaii	--	--	--	--	--	--	--	--
Idaho	(3)	(3)	--	--	--	--	--	--
Illinois	48,300 ²	503,000	(4)	(4)	--	--	--	--
Indiana	50,000 ²	459,000	(4)	(4)	--	--	--	--
Iowa	36,100 ²	409,000	2,530	23,300	--	--	--	--
Kansas	14,100 ²	119,000	--	--	--	--	--	--
Kentucky	51,100 ²	484,000	--	--	--	--	--	--
Louisiana	(3)	(3)	--	--	--	--	--	--
Maine	1,310	10,600	--	--	--	--	--	--
Maryland	13,900 ²	152,000	--	--	--	--	94	1,290
Massachusetts	944 ²	20,300	1,150	16,000	--	--	--	--
Michigan	35,900 ²	238,000	(4)	(4)	--	--	--	--
Minnesota	1,860 ²	23,200	1,460	19,200	--	--	--	--
Mississippi	(3)	(3)	--	--	--	--	--	--
Missouri	62,400 ²	427,000	2,030	14,800	--	--	--	--
Montana	1,830	15,400	--	--	--	--	--	--
Nebraska	(3) ²	(3)	--	--	--	--	--	--
Nevada	5,140 ²	46,700	(4)	(4)	--	--	--	--
New Hampshire	--	--	--	--	--	--	--	--
New Jersey	472	4,600	--	--	--	--	159	1,950
New Mexico	1,780	14,900	--	--	--	--	--	--
New York	24,300 ²	295,000	7,650	105,000	--	--	2	24
North Carolina	3,730 ²	67,600	328	6,010	--	--	--	--
North Dakota	--	--	--	--	--	--	--	--
Ohio	65,600 ²	729,000	(4)	(4)	--	--	--	--
Oklahoma	30,700 ²	288,000	(4)	(4)	--	--	--	--
Oregon	1,140	5,010	--	--	--	--	--	--
Pennsylvania	51,800 ²	630,000	9,220	108,000	--	--	--	--
Rhode Island	--	--	--	--	--	--	--	--
South Carolina	4,780	40,300	--	--	(3)	(3)	(3)	(3)
South Dakota	2,000	10,900	--	--	--	--	--	--
Tennessee	43,300 ²	581,000	(4)	(4)	--	--	--	--
Texas	161,000 ²	1,890,000	(4)	(4)	(3)	(3)	(3)	(3)
Utah	3,890 ²	28,300	4,530	37,200	--	--	--	--
Vermont	1,910 ²	19,000	(4)	(4)	--	--	--	--
Virginia	18,500 ²	236,000	(4)	(4)	--	--	(3)	(3)
Washington	725 ²	13,400	7	109	--	--	22	1,910
West Virginia	14,100	161,000	--	--	--	--	--	--
Wisconsin	22,300 ²	164,000	414	2,770	--	--	112	843
Wyoming	3,200 ²	19,600	--	--	--	--	--	--
Total	932,000	9,830,000	30,600	349,000	--	--	2,860	65,600

-- Zero.

¹Table includes data available through March 10, 2021. Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes limestone and (or) dolomite reported with no distinction between the two kinds of stone.

³Withheld to avoid disclosing company proprietary data; included with "Miscellaneous stone" on table 8.

⁴Withheld to avoid disclosing company proprietary data; included with "Limestone."

TABLE 7
GRANITE, TRAPROCK, SANDSTONE AND QUARTZITE, AND SLATE SOLD OR USED BY PRODUCERS IN THE UNITED STATES
IN 2018, BY STATE¹

(Thousand metric tons and thousand dollars)

State	Granite		Traprock		Sandstone and quartzite ²		Slate	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Alabama	2,930	36,000	--	--	1,120	14,300	(3)	(3)
Alaska	64	924	(3)	(3)	--	--	--	--
Arizona	4,090	47,900	(3)	(3)	1,560	19,000	--	--
Arkansas	6,180	63,700	--	--	7,610	80,800	104	1,920
California	12,000	135,000	6,670	75,000	1,240	20,100	12	113
Colorado	6,070	69,600	(3)	(3)	(3)	(3)	--	--
Connecticut	667	10,500	6,230	96,000	--	--	--	--
Delaware	--	--	(3)	(3)	--	--	--	--
Florida	633	14,000	--	--	19	262	--	--
Georgia	46,500	747,000	--	--	538	9,530	44	1,530
Hawaii	--	--	4,210	97,400	--	--	--	--
Idaho	(3)	(3)	898	5,930	55	376	--	--
Illinois	--	--	--	--	11	142	--	--
Indiana	--	--	--	--	--	--	--	--
Iowa	--	--	--	--	--	--	--	--
Kansas	--	--	--	--	776	6,940	--	--
Kentucky	--	--	--	--	--	--	--	--
Louisiana	--	--	--	--	(3)	(3)	--	--
Maine	2,140	20,400	62	483	320	2,630	--	--
Maryland	3,840	44,300	(3)	(3)	(3)	(3)	--	--
Massachusetts	4,280	57,700	5,000	63,400	--	--	--	--
Michigan	--	--	282	2,040	--	--	--	--
Minnesota	3,280	50,200	7	93	659	8,060	--	--
Mississippi	--	--	--	--	--	--	--	--
Missouri	1,720	36,900	(3)	(3)	2,860	39,700	--	--
Montana	129	1,710	249	2,970	439	1,960	--	--
Nebraska	--	--	--	--	--	--	--	--
Nevada	128	1,040	1,060	10,100	1	8	--	--
New Hampshire	2,860	28,000	1,930	20,500	235	2,360	--	--
New Jersey	5,400	62,500	11,800	123,000	--	--	--	--
New Mexico	(3)	(3)	--	--	233	2,180	--	--
New York	2,170	29,900	2,920	46,500	1,950	26,000	10	121
North Carolina	41,900	750,000	6,780	126,000	--	--	--	--
North Dakota	--	--	--	--	--	--	--	--
Ohio	--	--	(3)	(3)	278	7,460	--	--
Oklahoma	2,830	31,400	--	--	455	4,260	--	--
Oregon	(3)	(3)	9,830	88,400	(3)	(3)	--	--
Pennsylvania	3,010	36,300	4,060	176,000	9,900	116,000	196	2,690
Rhode Island	442	4,770	1,240	13,400	--	--	--	--
South Carolina	20,200	312,000	--	--	--	--	--	--
South Dakota	100	791	--	--	3,480	31,400	12	88
Tennessee	1,180	14,500	--	--	564	8,290	--	--
Texas	215	1,760	(3)	(3)	964	10,800	--	--
Utah	--	--	--	--	(3)	(3)	--	--
Vermont	331	4,270	108	1,290	1,320	14,200	283	3,020
Virginia	21,000	391,000	9,500	162,000	885	15,700	(3)	(3)
Washington	1,120	11,700	6,230	77,200	(3)	(3)	--	--
West Virginia	--	--	--	--	998	13,000	--	--
Wisconsin	2,300	18,700	1,160	26,900	59	440	--	--
Wyoming	2,270	19,300	--	--	--	--	--	--
Total	202,000	3,050,000	80,200	1,210,000	38,500	456,000	661	9,480

-- Zero.

¹Table includes data available through March 10, 2021. Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes sandstone, quartzite, and sandstone and (or) quartzite where no distinction was reported between the two kinds of stone.

³Withheld to avoid disclosing company proprietary data; included with "Miscellaneous stone" on table 8.

TABLE 8
SHELL, VOLCANIC CINDER AND SCORIA, AND MISCELLANEOUS STONE SOLD OR USED
BY PRODUCERS IN THE UNITED STATES IN 2018, BY STATE¹

(Thousand metric tons and thousand dollars)

State	Shell		Volcanic cinder and scoria		Miscellaneous stone	
	Quantity	Value	Quantity	Value	Quantity	Value
Alabama	--	--	--	--	790	9,970
Alaska	--	--	--	--	1,330	26,800
Arizona	--	--	435	3,510	2,540	10,300
Arkansas	--	--	--	--	1,910	18,000
California	--	--	200	2,630	5,330	59,100
Colorado	--	--	134	1,300	6,110	56,700
Connecticut	--	--	--	--	1,260	18,200
Delaware	--	--	--	--	W	W
Florida	(2)	(2)	--	--	817	11,300
Georgia	--	--	--	--	--	--
Hawaii	--	--	39	840	429	8,530
Idaho	--	--	8	50	3,410	23,600
Illinois	--	--	--	--	249	2,810
Indiana	--	--	--	--	265	2,500
Iowa	--	--	--	--	46	446
Kansas	--	--	--	--	--	--
Kentucky	--	--	--	--	--	--
Louisiana	(2)	(2)	--	--	W	W
Maine	--	--	--	--	177	2,260
Maryland	--	--	--	--	4,690	77,300
Massachusetts	--	--	--	--	2,450	33,000
Michigan	--	--	--	--	387	2,080
Minnesota	--	--	--	--	713	6,500
Mississippi	--	--	--	--	1,990	62,000
Missouri	--	--	--	--	1,280	10,800
Montana	--	--	--	--	84	997
Nebraska	--	--	--	--	7,060	96,200
Nevada	--	--	269	2,160	6,010	52,500
New Hampshire	--	--	--	--	230	2,300
New Jersey	--	--	--	--	--	--
New Mexico	--	--	251	2,350	1,750	18,500
New York	--	--	--	--	753	11,500
North Carolina	--	--	--	--	2,670	50,500
North Dakota	--	--	180	1,320	145	995
Ohio	--	--	--	--	144	1,400
Oklahoma	--	--	--	--	2,730	16,200
Oregon	--	--	279	1,710	10,700	91,500
Pennsylvania	--	--	--	--	7,900	99,200
Rhode Island	--	--	--	--	116	1,260
South Carolina	--	--	--	--	2,580	13,400
South Dakota	--	--	--	--	634	6,630
Tennessee	--	--	--	--	18	265
Texas	--	--	--	--	8,680	97,900
Utah	--	--	--	--	1,460	11,000
Vermont	--	--	--	--	444	4,870
Virginia	--	--	--	--	1,140	20,800
Washington	--	--	51	779	6,770	109,000
West Virginia	--	--	--	--	(3)	(3)
Wisconsin	--	--	--	--	168	1,430
Wyoming	--	--	4,000	11,900	442	3,380
Other	--	--	--	--	3,010	68,600
Total	--	--	5,850	28,600	102,000	1,220,000

W Withheld to avoid disclosing company proprietary data; included with "Other." -- Zero.

¹Table includes data available through March 10, 2021. Data are rounded to no more than three significant digits; may not add to totals shown.

²Withheld to avoid disclosing company proprietary data; included with "Miscellaneous stone."

³Less than ½ unit.

TABLE 9
CRUSHED STONE SOLD OR USED BY PRODUCERS IN THE UNITED STATES, BY USE¹

Use	2017 ²			2018		
	Quantity (thousand metric tons)	Value (thousands)	Unit value	Quantity (thousand metric tons)	Value (thousands)	Unit value
Construction:						
Coarse aggregate (+1½ inch):						
Macadam	474	\$5,860	\$12.36	526	\$5,540	\$10.53
Riprap and jetty stone	9,080	124,000	13.65	6,610	83,100	12.58
Filter stone	2,430	28,200	11.60	2,070	23,800	11.46
Unspecified coarse aggregate	20,800	347,000	16.71	22,600	408,000	18.03
Coarse aggregate, graded:						
Concrete aggregate, coarse	26,400	333,000	12.62	21,900	255,000	11.64
Bituminous aggregate, coarse	13,700	183,000	13.36	13,700	179,000	13.09
Bituminous surface-treatment aggregate	3,950	55,900	14.15	2,720	38,900	14.32
Railroad ballast	5,060	58,200	11.52	5,370	67,600	12.60
Unspecified graded coarse aggregate	134,000	2,080,000	15.52	110,000	1,880,000	17.17
Fine aggregate (-¾ inch):						
Stone sand, concrete	3,000	44,100	14.70	2,710	33,600	12.41
Stone sand, bituminous mix or seal	6,860	79,700	11.61	3,940	54,300	13.79
Screening, undesignated	5,530	55,000	9.94	4,540	41,200	9.08
Unspecified fine aggregate	39,600	524,000	13.24	32,900	453,000	13.75
Coarse and fine aggregates:						
Graded road base or subbase	50,300	438,000	8.71	40,000	338,000	8.44
Unpaved road surfacing	5,160	52,200	10.11	5,980	51,500	8.61
Terrazzo and exposed aggregate	2,490	44,900	18.05	649	14,400	22.15
Crusher run or fill or waste	16,200	143,000	8.83	14,600	128,000	8.77
Roofing granules	W	W	W	W	W	53.80
Unspecified coarse and fine aggregates	116,000	1,300,000	11.21	115,000	1,340,000	11.57
Unspecified and other construction materials	4,170	53,900	12.94	12,000	122,000	10.20
Agricultural:						
Agricultural limestone	7,440	82,300	11.06	4,850	55,800	11.51
Poultry grit and mineral food	1,840	30,900	16.78	920	14,800	16.04
Unspecified and other agricultural uses	586	25,000	42.70	318	18,800	59.11
Chemical and metallurgical:						
Cement manufacture	105,000	501,000	4.76	103,000	480,000	4.65
Lime manufacture	44,800	309,000	6.90	48,800	356,000	7.29
Dead-burned dolomite manufacture	W	W	W	W	W	W
Flux stone	4,130	34,300	8.29	W	W	W
Chemical stone	532	4,760	8.94	W	W	W
Glass manufacture	W	W	W	W	W	W
Sulfur oxide removal	6,660	61,600	9.25	2,360	36,200	15.34
Special:						
Mine dusting or acid water treatment	333	10,200	30.59	769	16,500	21.50
Asphalt fillers or extenders	1,170	22,600	19.30	794	17,800	22.44
Whiting or whiting substitute	W	W	W	W	W	42.66
Other fillers or extenders	4,070	102,000	25.11	2,970	105,000	35.40
Other miscellaneous uses and specified uses not listed	2,140	46,000	21.48	2,520	49,400	19.64
Unspecified: ³						
Reported	418,000	4,900,000	11.71	445,000	5,380,000	12.10
Estimated	309,000	3,330,000	10.77	359,000	3,990,000	11.11
Total or average	1,370,000	15,600,000	11.36	1,390,000	16,200,000	11.64

W Withheld to avoid disclosing company proprietary data; included in "Total or average."

¹Table includes data available through March 10, 2021. Data 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 specified end use.

TABLE 10
LIMESTONE AND DOLOMITE SOLD OR USED BY PRODUCERS IN THE UNITED STATES IN 2018, BY USE¹

(Thousand metric tons and thousand dollars)

Use	Limestone ²			Dolomite		
	Quantity	Value	Unit value	Quantity	Value	Unit value
Construction:						
Coarse aggregate (+1½ inch):						
Macadam	255	\$2,650	\$10.38	W	W	W
Riprap and jetty stone	4,790	47,100	9.83	238	\$3,990	\$16.73
Filter stone	1,470	16,000	10.91	W	W	W
Unspecified coarse aggregate	18,600	327,000	17.60	224	3,280	14.65
Coarse aggregate, graded:						
Concrete aggregate, coarse	14,200	168,000	11.80	W	W	W
Bituminous aggregate, coarse	5,000	59,900	11.97	W	W	12.50
Bituminous surface-treatment aggregate	1,490	19,200	12.87	W	W	15.15
Railroad ballast	1,120	15,600	13.85	187	2,380	12.67
Unspecified graded coarse aggregate	71,200	1,140,000	16.01	2,610	37,100	14.22
Fine aggregate (-¾ inch):						
Stone sand, concrete	565	7,260	12.85	W	W	7.48
Stone sand, bituminous mix or seal	1,580	18,800	11.91	933	15,700	16.78
Screening, undesignated	2,660	20,600	7.74	617	4,790	7.76
Unspecified fine aggregate	18,500	243,000	13.10	523	6,080	11.63
Coarse and fine aggregates:						
Graded road base or subbase	27,200	210,000	7.70	1,790	14,400	8.06
Unpaved road surfacing	2,950	28,300	9.57	218	2,320	10.64
Terrazzo and exposed aggregate	W	W	W	W	W	W
Crusher run or fill or waste	9,470	76,000	8.03	1,630	15,600	9.55
Roofing granules	W	W	W	--	--	--
Unspecified coarse and fine aggregates	81,700	917,000	11.23	3,660	32,800	8.96
Unspecified and other construction materials	7,580	75,500	9.95	1,850	15,500	8.36
Agricultural:						
Agricultural limestone	4,370	46,000	10.53	422	8,710	20.63
Poultry grit and mineral food	916	14,400	15.68	--	--	--
Unspecified and other agricultural uses	269	11,200	41.81	40	7,520	187.64
Chemical and metallurgical:						
Cement manufacture	98,200	458,000	4.66	--	--	--
Lime manufacture	44,700	326,000	7.30	W	W	7.21
Dead-burned dolomite manufacture	--	--	--	W	W	W
Flux stone	W	W	W	W	W	7.83
Chemical stone	W	W	W	--	--	--
Glass manufacture	W	W	W	--	--	--
Sulfur oxide removal	2,360	36,200	15.34	--	--	--
Special:						
Mine dusting or acid water treatment	741	15,500	20.94	--	--	--
Asphalt fillers or extenders	731	13,100	17.88	--	--	--
Whiting or whiting substitute	2	101	42.66	W	W	W
Other fillers or extenders	1,580	65,800	41.58	13	300	22.63
Other miscellaneous uses and specified uses not listed	886	13,700	15.44	19	345	17.97
Unspecified: ³						
Reported	264,000	2,960,000	11.20	24,200	275,000	11.34
Estimated	226,000	2,390,000	10.59	6,740	68,200	10.11
Total or average	917,000	9,770,000	10.66	56,800	619,000	10.89

W Withheld to avoid disclosing company proprietary data; included in "Total or average." -- Zero.

¹Table includes data available through March 10, 2021. Data are rounded to no more than three significant digits, except unit values; may not add to totals shown.

²Includes a minor amount of limestone and (or) dolomite reported with no distinction between the two types of stone.

³Reported and estimated production without a specified end use.

TABLE 11
LIMESTONE AND DOLOMITE SOLD OR USED BY PRODUCERS IN 2018, BY STATE AND USE¹

(Thousand metric tons and thousand dollars)

State	Concrete aggregate		Bituminous aggregate		Roadstone and coverings		Riprap and railroad ballast		Other construction uses	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Alabama	2,040	23,800	W	W	1,320	18,600	205	3,290	6,970	85,400
Alaska	W	W	W	W	W	W	W	W	40	448
Arizona	308	3,120	W	W	58	760	W	W	704	7,730
Arkansas	339	3,330	635	8,520	808	8,320	97	1,520	5,850	54,300
California	1,620	23,400	W	W	1,070	13,200	979	16,400	2,680	26,600
Colorado	W	W	1,230	16,300	725	8,010	531	12,100	1,170	8,370
Connecticut	226	3,030	334	3,010	387	5,230	101	1,410	490	8,460
Delaware	W	W	W	W	W	W	--	--	W	W
Florida	6,510	93,100	W	W	4,240	40,300	W	W	8,090	85,400
Georgia	W	W	W	W	607	13,700	396	5,640	7,370	95,100
Hawaii	156	3,600	169	4,160	246	6,070	3	78	1,390	36,900
Idaho	--	--	W	W	1,470	7,960	9	21	459	2,500
Illinois	2,550	27,100	8,980	112,000	3,750	32,100	301	3,980	4,640	40,300
Indiana	875	9,820	2,630	28,800	2,650	24,200	519	5,650	6,200	59,700
Iowa	W	W	W	W	1,550	11,900	18	242	689	8,410
Kansas	W	W	W	W	1,660	13,600	W	W	390	2,630
Kentucky	1,910	23,700	3,120	36,600	1,700	19,400	283	3,360	9,580	88,200
Louisiana	W	W	W	W	W	W	W	W	W	W
Maine	68	413	W	W	42	299	--	--	38	284
Maryland	W	W	W	W	W	W	W	W	4,070	38,900
Massachusetts	416	4,130	423	4,510	--	--	45	750	319	5,100
Michigan	55	374	51	491	220	1,130	4	58	5,190	42,200
Minnesota	--	--	W	W	W	W	W	W	43	459
Mississippi ²	W	W	W	W	W	W	W	W	428	13,300
Missouri	1,210	8,270	576	6,680	2,030	13,400	W	W	3,080	28,400
Montana	--	--	W	W	--	--	W	W	4	42
Nebraska	W	W	W	W	W	W	W	W	632	2,710
Nevada	1,150	12,000	W	W	1,100	7,180	W	W	563	5,270
New Hampshire	--	--	865	9,820	--	--	--	--	--	--
New Jersey	W	W	W	W	W	W	W	W	190	2,090
New Mexico	102	1,660	W	W	98	1,430	W	W	408	1,860
New York	1,130	15,200	2,270	36,100	378	4,330	95	2,170	4,140	40,100
North Carolina	2,480	38,100	6,500	139,000	2,020	38,600	248	5,000	5,900	92,700
North Dakota	--	--	--	--	--	--	--	--	38	601
Ohio	1,620	9,010	11,500	152,000	2,180	16,500	318	3,400	5,500	48,700
Oklahoma	2,760	29,000	336	4,370	2,780	21,700	W	W	1,740	14,100
Oregon	489	7,150	1,320	13,600	3,160	27,600	W	W	915	7,380
Pennsylvania	4,940	65,400	12,000	161,000	6,120	73,000	884	11,100	13,700	267,000
Rhode Island	--	--	--	--	--	--	--	--	--	--
South Carolina	W	W	W	W	W	W	W	W	3,690	49,500
South Dakota	--	--	--	--	--	--	1	4	148	854
Tennessee	3,630	55,900	W	W	2,720	31,400	166	2,320	20,000	250,000
Texas	7,890	89,000	17,400	311,000	14,400	241,000	1,390	20,200	15,800	193,000
Utah	--	--	W	W	--	--	--	--	2	69
Vermont	16	343	W	W	573	5,350	34	306	125	2,190
Virginia	2,280	39,200	7,330	152,000	1,270	19,600	612	9,360	7,450	85,400
Washington	157	1,890	W	W	834	7,580	91	1,630	356	5,100
West Virginia	1	11	263	3,680	501	4,820	27	390	273	2,560
Wisconsin	259	1,810	331	3,360	3,860	18,800	67	904	673	4,460
Wyoming	270	2,950	92	492	86	497	5	105	15	89
Total	47,500	596,000	78,400	1,210,000	66,600	758,000	7,430	111,000	152,000	1,820,000
Total withheld	10,000	145,000	52,400	966,000	2,450	44,100	4,550	39,400	1,270	27,300
Grand total	57,500	741,000	131,000	2,170,000	69,100	802,000	12,000	151,000	153,000	1,840,000

See footnotes at end of table.

TABLE 11—Continued
LIMESTONE AND DOLOMITE SOLD OR USED BY PRODUCERS IN 2018, BY STATE AND USE¹

(Thousand metric tons and thousand dollars)

State	Cement manufacture		Agricultural uses		Lime manufacture		Other uses		Total	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Alabama	4,210	20,700	W	W	7,880	69,600	8,210	99,700	38,100	422,000
Alaska	--	--	--	--	--	--	1,170	24,800	1,400	27,800
Arizona	3,390	24,400	--	--	458	3,790	7,620	69,500	12,700	112,000
Arkansas	W	W	W	W	W	W	18,400	187,000	28,800	275,000
California	14,200	45,200	W	W	W	W	22,400	258,000	46,000	439,000
Colorado	3,330	17,600	--	--	--	--	W	W	14,700	149,000
Connecticut	--	--	--	--	--	--	7,730	122,000	9,270	143,000
Delaware	--	--	--	--	--	--	W	W	(3)	(3)
Florida	6,740	24,000	809	6,990	173	1,900	42,100	562,000	77,800	1,000,000
Georgia	861	7,590	36	862	18	80	27,300	454,000	53,400	881,000
Hawaii	--	--	W	W	--	--	W	W	4,680	107,000
Idaho	--	--	W	W	--	--	1,920	14,100	4,370	29,900
Illinois	W	W	1,370	10,600	--	--	W	W	48,600	506,000
Indiana	3,360	14,500	843	6,290	--	--	33,200	312,000	50,300	461,000
Iowa	2,220	13,800	269	3,310	W	W	33,200	388,000	38,700	433,000
Kansas	1,660	5,480	W	W	--	--	10,700	98,900	14,900	126,000
Kentucky	--	--	138	623	3,880	22,900	30,500	289,000	51,100	484,000
Louisiana	--	--	--	--	--	--	W	W	(3)	(3)
Maine	W	W	--	--	--	--	3,470	32,900	4,000	36,300
Maryland	3,510	16,000	W	W	--	--	9,180	124,000	22,500	275,000
Massachusetts	--	--	W	W	W	W	12,400	172,000	13,800	191,000
Michigan	W	W	--	--	W	W	14,300	84,600	36,600	243,000
Minnesota	--	--	W	W	--	--	7,760	106,000	7,970	107,000
Mississippi ²	--	--	W	W	--	--	735	21,400	1,990	62,000
Missouri	11,500	48,900	W	W	8,550	41,600	40,700	365,000	70,300	529,000
Montana	435	1,920	--	--	W	W	1,520	13,800	2,730	23,000
Nebraska	W	W	25	287	--	--	4,670	66,000	7,060	96,200
Nevada	W	W	W	W	W	W	5,980	50,400	12,600	113,000
New Hampshire	--	--	--	--	--	--	4,390	43,400	5,250	53,200
New Jersey	--	--	--	--	--	--	15,900	170,000	17,800	192,000
New Mexico	585	5,160	--	--	--	--	2,180	21,000	4,010	37,900
New York	1,720	5,680	52	711	W	W	W	W	39,800	514,000
North Carolina	--	--	W	W	--	--	W	W	55,400	1,000,000
North Dakota	--	--	--	--	--	--	287	1,710	326	2,310
Ohio	1,430	11,200	97	658	W	W	W	W	66,000	738,000
Oklahoma	1,950	20,700	W	W	272	2,180	26,400	245,000	36,700	340,000
Oregon	1,140	5,010	--	--	--	--	W	W	21,900	187,000
Pennsylvania	1,510	9,960	289	8,010	W	W	W	W	86,100	1,170,000
Rhode Island	--	--	--	--	--	--	1,800	19,500	1,800	19,500
South Carolina	4,370	14,100	8	85	--	--	12,400	160,000	27,500	366,000
South Dakota	578	1,690	--	--	743	3,270	4,760	44,100	6,220	49,900
Tennessee	W	W	W	W	W	W	7,450	104,000	45,100	604,000
Texas	16,200	75,100	196	2,200	2,230	12,600	95,600	1,060,000	171,000	2,000,000
Utah	W	W	W	W	W	W	6,440	54,500	9,880	76,500
Vermont	--	--	W	W	--	--	3,620	38,200	4,390	46,700
Virginia	1,420	6,250	357	12,200	1,700	5,610	28,600	496,000	51,000	826,000
Washington	634	8,630	W	W	10	105	12,600	182,000	14,900	214,000
West Virginia	W	W	--	--	--	--	W	W	15,100	174,000
Wisconsin	--	--	297	4,090	W	W	W	W	26,500	215,000
Wyoming	1,730	10,400	--	--	--	--	7,720	39,700	9,920	54,200
Total	88,700	414,000	4,780	56,900	25,900	164,000	575,000	6,590,000	XX	XX
Total withheld	14,500	66,000	1,300	32,400	23,400	201,000	237,000	2,990,000	XX	XX
Grand total	103,000	480,000	6,090	89,400	49,300	365,000	813,000	9,580,000	1,390,000	16,200,000

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

¹Table includes data available through March 10, 2021. Data are rounded to no more than three significant digits; may not add to totals shown.

²Significant quantities of sold or used material were shipped from other States.

³Withheld to avoid disclosing company proprietary data; included in "Grand total."

TABLE 12
GRANITE, TRAPROCK, SANDSTONE AND QUARTZITE SOLD OR USED BY PRODUCERS IN THE UNITED STATES IN 2018, BY USE¹

(Thousand metric tons and thousand dollars)

Use	Granite		Traprock		Sandstone and quartzite ²	
	Quantity	Value	Quantity	Value	Quantity	Value
Construction:						
Coarse aggregate (+1½ inch):						
Macadam	--	--	W	W	W	W
Riprap and jetty stone	686	\$15,300	240	\$4,980	170	\$3,340
Filter stone	W	W	205	2,650	W	W
Unspecified coarse aggregate	1,470	35,900	1,480	30,100	278	3,230
Coarse aggregate, graded:						
Concrete aggregate, coarse	W	W	1,400	18,100	265	3,030
Bituminous aggregate, coarse	2,740	37,400	2,030	30,800	W	W
Bituminous surface-treatment aggregate	W	W	247	3,380	W	W
Railroad ballast	W	W	1,240	15,600	--	--
Unspecified graded coarse aggregate	26,800	548,000	5,140	97,100	1,300	19,100
Fine aggregate (-¾ inch):						
Stone sand, concrete	243	4,380	339	5,320	272	4,120
Stone sand, bituminous mix or seal	178	1,010	743	10,100	87	1,150
Screening, undesignated	467	7,170	384	4,590	W	W
Unspecified fine aggregate	9,530	140,000	1,980	29,500	1,100	17,200
Coarse and fine aggregates:						
Graded road base or subbase	1,790	22,500	3,420	40,600	954	10,100
Unpaved road surfacing	189	1,490	1,650	12,400	W	W
Terrazzo and exposed aggregate	W	W	W	W	W	W
Crusher run or fill or waste	1,680	14,800	695	10,400	213	1,860
Roofing granules	W	W	W	W	W	W
Unspecified coarse and fine aggregates	19,700	250,000	5,280	85,900	1,300	12,300
Unspecified and other construction materials	34	1,170	39	288	2,140	26,000
Agricultural:						
Agricultural limestone	W	W	--	--	--	--
Poultry grit and mineral food	W	W	--	--	--	--
Unspecified and other agricultural uses	--	--	9	35	--	--
Chemical and metallurgical:						
Cement manufacture	--	--	--	--	2,300	8,750
Lime manufacture	--	--	--	--	--	--
Dead-burned dolomite manufacture	--	--	--	--	--	--
Flux stone	--	--	--	--	W	W
Chemical stone	--	--	--	--	--	--
Glass manufacture	--	--	--	--	--	--
Sulfur oxide removal	--	--	--	--	--	--
Special:						
Mine dusting or acid water treatment	--	--	--	--	--	--
Asphalt fillers or extenders	W	W	W	W	--	--
Whiting or whiting substitute	--	--	--	--	--	--
Other fillers or extenders	--	--	--	--	84	1,960
Other miscellaneous uses and specified uses not listed	566	10,000	20	281	279	13,500
Unspecified: ³						
Reported	88,700	1,360,000	34,700	470,000	18,700	217,000
Estimated	42,700	539,000	24,100	299,000	15,100	179,000
Total	203,000	3,070,000	86,500	1,310,000	45,000	528,000

W Withheld to avoid disclosing company proprietary data; included in "Total." -- Zero.

¹Table includes data available through March 10, 2021. Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes sandstone, quartzite, and sandstone and (or) quartzite where no distinction was reported between the two kinds of stone.

³Reported and estimated production without a specified end use.

TABLE 13
MARBLE, VOLCANIC CINDER AND SCORIA, AND MISCELLANEOUS STONE SOLD OR USED BY PRODUCERS IN THE UNITED STATES
IN 2018, BY USE¹

(Thousand metric tons and thousand dollars)

Use	Marble		Volcanic cinder and scoria		Miscellaneous stone	
	Quantity	Value	Quantity	Value	Quantity	Value
Construction:						
Coarse aggregate (+1½ inch):						
Macadam	--	--	--	--	--	--
Riprap and jetty stone	W	W	--	--	449	7,710
Filter stone	--	--	--	--	56	672
Unspecified coarse aggregate	40	798	--	--	415	5,120
Coarse aggregate, graded:						
Concrete aggregate, coarse	W	W	W	W	1,730	17,700
Bituminous aggregate, coarse	W	W	--	--	1,670	20,600
Bituminous surface-treatment aggregate	W	W	--	--	203	3,660
Railroad ballast	--	--	--	--	669	6,960
Unspecified graded coarse aggregate	218	3,320	--	--	2,140	32,400
Fine aggregate (–¾ inch):						
Stone sand, concrete	W	W	W	W	528	6,610
Stone sand, bituminous mix or seal	W	W	--	--	398	7,190
Screening, undesignated	--	--	--	--	229	2,350
Unspecified fine aggregate	38	390	--	--	1,040	13,700
Coarse and fine aggregates:						
Graded road base or subbase	W	W	--	--	4,660	38,600
Unpaved road surfacing	W	W	--	--	800	4,760
Terrazzo and exposed aggregate	6	1,850	W	W	230	2,920
Crusher run or fill or waste	W	W	--	--	637	5,390
Roofing granules	--	--	--	--	--	--
Unspecified coarse and fine aggregates	123	1,470	--	--	3,410	32,800
Unspecified and other construction materials	--	--	2	11	318	3,710
Agricultural:						
Agricultural limestone	W	W	--	--	18	200
Poultry grit and mineral food	--	--	--	--	--	--
Unspecified and other agricultural uses	--	--	--	--	--	--
Chemical and metallurgical:						
Cement manufacture	--	--	--	--	605	5,190
Lime manufacture	W	W	--	--	--	--
Dead-burned dolomite manufacture	--	--	--	--	--	--
Flux stone	--	--	--	--	--	--
Chemical stone	--	--	--	--	--	--
Glass manufacture	--	--	--	--	--	--
Sulfur oxide removal	--	--	--	--	--	--
Special:						
Mine dusting or acid water treatment	W	W	--	--	--	--
Asphalt fillers or extenders	--	--	--	--	--	--
Whiting or whiting substitute	--	--	--	--	--	--
Other fillers or extenders	1,090	36,400	--	--	204	816
Other miscellaneous uses and specified uses not listed	563	9,000	--	--	184	2,580
Unspecified: ²						
Reported	W	W	4,420	14,600	9,640	82,600
Estimated	1,070	17,400	1,350	13,400	41,300	472,000
Total	3,930	85,600	5,850	28,600	71,600	776,000

W Withheld to avoid disclosing company proprietary data; included in "Total." -- Zero.

¹Table includes data available through March 10, 2021. Data are rounded to no more than three significant digits; may not add to totals shown.

²Reported and estimated production without a specified end use.

TABLE 14
RECYCLED ASPHALT CONCRETE SOLD OR USED BY PRODUCERS IN THE UNITED STATES, BY STATE¹

State	2017 ²			2018		
	Quantity (thousand metric tons)	Value (thousands)	Unit value	Quantity (thousand metric tons)	Value (thousands)	Unit value
Alabama	273	\$2,760	\$10.12	273	\$2,760	\$10.12
Alaska	76	980	12.90	73	928	12.76
Arizona	146	1,350	9.24	142	1,290	9.08
Arkansas	91	963	10.59	83	921	11.13
California	2,550	21,900	8.59	2,400	20,500	8.51
Colorado	349	2,730	7.83	400	2,800	7.01
Connecticut	560	3,900	6.97	560	3,850	6.88
Delaware	100	643	6.44	91	600	6.61
Florida	398	3,750	9.41	346	3,520	10.17
Georgia	288	3,560	12.39	281	3,080	10.93
Hawaii	--	--	--	--	--	--
Idaho	205	1,410	6.85	167	1,190	7.15
Illinois	1,790	11,200	6.23	1,860	11,600	6.23
Indiana	140	976	6.97	135	941	6.95
Iowa	345	1,990	5.78	214	946	4.42
Kansas	557	1,550	2.79	554	1,530	2.77
Kentucky	610	5,040	8.26	123	732	5.93
Louisiana	84	615	7.30	34	290	8.43
Maine	171	2,180	12.71	141	1,850	13.18
Maryland	277	1,850	6.69	214	1,180	5.54
Massachusetts	338	3,320	9.82	197	1,560	7.94
Michigan	603	3,850	6.38	761	4,840	6.35
Minnesota	1,210	8,630	7.13	1,160	8,100	7.01
Mississippi	4	43	12.24	4	43	12.25
Missouri	283	2,130	7.52	216	1,650	7.67
Montana	184	1,670	9.07	184	1,670	9.07
Nebraska	97	1,010	10.49	48	704	14.59
Nevada	244	2,430	9.95	222	2,220	10.00
New Hampshire	179	1,520	8.51	198	1,770	8.93
New Jersey	619	3,160	5.11	157	831	5.29
New Mexico	126	1,320	10.42	117	1,160	9.94
New York	687	8,550	12.43	397	5,380	13.56
North Carolina	964	12,700	13.22	905	14,700	16.25
North Dakota	12	109	9.06	12	109	9.06
Ohio	110	817	7.43	139	5,320	38.37
Oklahoma	39	509	13.12	36	444	12.46
Oregon	111	697	6.29	64	313	4.85
Pennsylvania	414	4,560	11.01	256	3,080	12.03
Rhode Island	92	875	9.56	77	721	9.36
South Carolina	301	4,140	13.77	249	5,770	23.21
South Dakota	132	901	6.85	132	901	6.85
Tennessee	644	16,700	25.96	689	19,200	27.88
Texas	824	5,970	7.24	728	6,040	8.30
Utah	363	2,440	6.73	363	2,440	6.73
Vermont	183	1,960	10.73	152	1,550	10.20
Virginia	296	2,570	8.69	350	3,370	9.62
Washington	122	935	7.67	135	1,030	7.68
West Virginia	--	--	--	--	--	--
Wisconsin	361	2,460	6.82	270	1,530	5.66
Wyoming	64	1,760	27.39	10	79	8.03
Total or average	18,600	167,000	8.98	16,300	157,000	9.62

-- Zero.

¹Table includes data available through March 10, 2021. Data are rounded to no more than three significant digits, except unit values; may not add to totals shown.

²Estimated quantities have been recalculated.

TABLE 15
RECYCLED PORTLAND CEMENT CONCRETE SOLD OR USED BY PRODUCERS IN THE UNITED STATES, BY STATE¹

State	2017 ²			2018		
	Quantity (thousand metric tons)	Value (thousands)	Unit value	Quantity (thousand metric tons)	Value (thousands)	Unit value
Alabama	--	--	--	--	--	--
Alaska	12	\$178	\$15.05	7	\$92	\$13.88
Arizona	151	1,440	9.53	121	1,110	9.18
Arkansas	1	11	8.16	--	--	--
California	3,670	26,200	7.14	3,510	26,100	7.45
Colorado	774	7,150	9.24	709	5,120	7.23
Connecticut	191	1,140	5.98	193	1,070	5.55
Delaware	123	1,020	8.33	113	965	8.51
Florida	795	4,510	5.68	734	4,510	6.14
Georgia	232	2,630	11.31	90	889	9.87
Hawaii	--	--	--	2	22	14.33
Idaho	25	199	8.04	22	174	7.74
Illinois	2,260	16,000	7.07	1,880	13,800	7.35
Indiana	166	1,660	9.97	166	1,660	9.97
Iowa	1,010	6,980	6.88	642	3,410	5.32
Kansas	362	3,280	9.05	350	3,180	9.09
Kentucky	--	--	--	--	--	--
Louisiana	48	709	14.70	94	1,390	14.85
Maine	44	338	7.68	38	281	7.32
Maryland	562	4,470	7.96	500	4,160	8.32
Massachusetts	351	2,650	7.57	424	3,190	7.54
Michigan	979	6,640	6.78	799	5,170	6.48
Minnesota	1,230	8,130	6.61	1,170	7,460	6.36
Mississippi	72	586	8.15	74	648	8.79
Missouri	49	364	7.50	7	55	8.01
Montana	38	323	8.60	38	323	8.60
Nebraska	102	1,130	11.14	100	1,120	11.18
Nevada	489	3,630	7.43	70	510	7.33
New Hampshire	39	262	6.66	19	128	6.85
New Jersey	419	2,890	6.88	328	2,770	8.43
New Mexico	225	1,740	7.74	159	1,380	8.67
New York	314	3,170	10.08	202	2,240	11.07
North Carolina	310	4,070	13.12	288	3,820	13.29
North Dakota	1	36	24.81	1	36	24.81
Ohio	351	2,950	8.42	362	2,960	8.19
Oklahoma	585	6,460	11.05	426	4,290	10.05
Oregon	83	630	7.55	280	895	3.20
Pennsylvania	130	1,050	8.08	214	1,500	7.03
Rhode Island	11	103	9.25	2	12	5.84
South Carolina	256	2,870	11.20	184	2,270	12.34
South Dakota	199	1,170	5.90	199	1,170	5.91
Tennessee	22	168	7.68	13	84	6.65
Texas	4,690	39,200	8.36	4,670	40,900	8.76
Utah	595	3,590	6.04	595	3,590	6.04
Vermont	18	115	6.27	18	115	6.27
Virginia	1,070	9,820	9.22	775	6,880	8.87
Washington	466	3,940	8.46	402	3,320	8.27
West Virginia	4	58	13.40	--	--	--
Wisconsin	422	2,560	6.07	308	1,790	5.80
Wyoming	41	498	12.20	32	248	7.81
Total or average	24,000	189,000	7.87	21,300	167,000	7.82

-- Zero.

¹Table includes data available through March 10, 2021. Data are rounded to no more than three significant digits, except unit values; may not add to totals shown.

²Estimated quantities have been recalculated.

TABLE 16
CRUSHED AND BROKEN STONE OPERATIONS IN THE UNITED STATES IN 2018, BY STATE¹

State	Active operations	Active quarries	Dredging operations	Processing plants				Sales yards
				Stationary	Portable	Stationary and portable	None or unspecified	
Alabama	72	65	--	59	4	--	2	7
Alaska	15	13	--	4	7	--	2	2
Arizona	49	47	--	29	15	3	--	2
Arkansas	70	67	--	35	23	7	2	3
California	138	123	--	73	25	14	7	19
Colorado	35	33	--	19	7	1	3	5
Connecticut	34	31	--	17	12	1	1	3
Delaware	3	--	--	--	--	--	--	3
Florida	111	83	2	37	29	11	2	30
Georgia	104	81	--	68	6	1	6	23
Hawaii	21	21	--	11	10	--	--	--
Idaho	32	46	--	7	17	1	7	--
Illinois	140	115	--	74	32	5	4	25
Indiana	91	87	--	80	4	--	3	4
Iowa	162	185	1	40	111	--	8	2
Kansas	72	94	--	25	40	--	3	4
Kentucky	92	93	--	67	17	5	1	2
Louisiana	14	1	--	1	--	--	--	13
Maine	29	25	--	14	8	2	1	4
Maryland	41	28	--	25	2	--	1	13
Massachusetts	41	36	--	25	6	3	2	5
Michigan	30	30	--	17	8	--	1	4
Minnesota	49	49	--	14	25	1	3	6
Mississippi	17	2	--	1	1	--	--	15
Missouri	197	205	--	101	73	12	7	4
Montana	13	13	--	9	3	--	1	--
Nebraska	16	12	--	6	5	--	1	4
Nevada	26	27	--	17	6	1	1	1
New Hampshire	24	22	--	12	9	1	--	2
New Jersey	24	18	--	14	1	3	--	6
New Mexico	34	33	--	15	15	2	--	2
New York	115	112	1	80	16	11	3	4
North Carolina	136	117	--	94	15	3	4	20
North Dakota	9	9	--	4	3	--	2	--
Ohio	130	119	--	85	18	10	5	12
Oklahoma	66	65	--	53	3	3	5	2
Oregon	140	160	--	51	80	5	1	3
Pennsylvania	257	260	--	172	48	15	14	8
Rhode Island	9	6	--	5	1	--	--	3
South Carolina	46	38	--	34	3	1	--	8
South Dakota	16	13	--	11	2	--	--	3
Tennessee	137	134	--	115	14	--	4	4
Texas	282	249	--	112	105	16	10	39
Utah	22	20	--	10	5	--	3	4
Vermont	42	42	--	16	17	6	3	--
Virginia	114	97	--	87	4	1	1	21
Washington	72	76	--	25	35	5	4	3
West Virginia	31	27	--	23	1	1	1	5
Wisconsin	136	187	--	39	77	4	9	7
Wyoming	29	29	--	21	7	--	1	--
Total	3,585	3,445	4	1,953	975	155	139	359

-- Zero.

¹Table includes data available through March 10, 2021. Includes recycling plants.

TABLE 17
U.S. EXPORTS OF CRUSHED STONE IN 2018, BY DESTINATION¹

Destination		Limestone ²	Limestone for cement manufacturing ³	Chalk, crude ⁴	Granules, chippings ⁵	Other ⁶	Total
North America:	metric tons						
Bahamas, The	do.	1,950	380	--	--	86	2,410
British Virgin Islands	do.	--	3	--	--	--	3
Canada	do.	144,000	37,700	61	40,800	62,200	285,000
Guadeloupe	do.	--	7	--	--	10,800	10,800
Mexico	do.	1,180	95	9	12,900	1,180	15,400
Nicaragua	do.	--	--	--	4,090	--	4,090
Sint Maarten	do.	150	--	--	--	--	150
Saint Lucia	do.	--	--	--	--	--	--
Trinidad and Tobago	do.	--	--	--	1,370	1	1,370
Other	do.	178	153	--	945	504	1,780
Total	do.	147,000	38,300	71	60,100	74,700	321,000
South America	do.	42	125	5	3,230	413	3,820
Europe	do.	194	202	41	552	271	1,260
Asia	do.	1,820	408	2	3,040	2,290	7,550
Oceania	do.	1,220	78	--	13	20	1,330
Africa	do.	10	120	--	--	--	130
Grand total:							
Quantity	do.	151,000	39,200	119	67,000	77,700	335,000
Value	thousands	\$15,600	\$12,900	\$796	\$14,400	\$17,300	\$61,000

do. Ditto. -- Zero.

¹Table includes data available through March 10, 2021. Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes Schedule B code 2517.10.0020.

³Includes Schedule B code 2521.00.0000.

⁴Includes Schedule B code 2509.00.1000.

⁵Includes Schedule B code 2517.41.0000 and 2517.49.0000.

⁶Includes Schedule B code 2517.10.0055.

Source: U.S. Census Bureau.

TABLE 18
U.S. IMPORTS OF CRUSHED STONE AND CALCIUM CARBONATE FINES, BY TYPE¹

Type	2017			2018		
	Quantity (thousand) metric tons	Value, c.i.f. ² (thousands)	Unit value	Quantity (thousand) metric tons	Value, c.i.f. ² (thousands)	Unit value
Crushed stone and chips:						
Limestone ³	11,700	\$87,500 ^r	\$7.51 ^r	13,200	\$97,900	\$7.43
Limestone for flux or cement manufacturing ⁴	1,020	10,900 ^r	10.63 ^r	1,070	11,900	11.12
Other ⁵	5,830	66,900 ^r	11.46 ^r	6,800	67,800	9.96
Total	18,500	165,000 ^r	XX	21,000	177,000	XX
Calcium carbonate fines: ⁶						
Natural chalk ⁷	--	--	--	(8)	7	3,370.50
Calcium carbonates, other chalk ⁹	3	1,780 ^r	509.95 ^r	2	2,070	1,219.39
Total or average	3	1,780 ^r	XX	2	2,070	XX
Grand total or average	18,500	167,000 ^r	XX	21,000	180,000	XX

^rRevised. XX Not applicable. -- Zero.

¹Table includes data available through March 10, 2021. Data are rounded to no more than three significant digits, except unit values; may not add to totals shown.

²Cost, insurance, and freight.

³Includes Harmonized Tariff Schedule of the United States (HTS) code 2517.10.0020.

⁴Includes HTS code 2521.00.0000.

⁵Includes HTS codes 2517.10.0055, 2517.41.0000, and 2517.49.0000.

⁶Excludes precipitated calcium carbonate.

⁷Includes HTS code 2509.00.1000.

⁸Less than ½ unit.

⁹Includes HTS code 2509.00.2000.

Source: U.S. Census Bureau.

TABLE 19
THE TOP 100 PRODUCERS OF CRUSHED STONE IN THE UNITED STATES¹

2018 rank	2017 rank ^f	Company	2018 rank	2017 rank ^f	Company
1	1	Vulcan Materials Co.	51	60	Albert Frei & Sons, Inc.
2	2	Martin Marietta Materials, Inc.	52	73	Warren Paving, Inc.
3	3	CRH Americas Materials (Oldcastle Materials, Inc.)	53	61	Capital Materials
4	4	Lehigh Hanson, Inc.	54	49	Blue Water Industries, LLC
5	5	LafargeHolcim Ltd.	55	56	Votorantim Cementos North America
6	6	CEMEX S.A.B. de C.V.	56	48	Bureau of Land Management
7	8	Rogers Group Inc.	57	62	Haydon Materials, LLC
8	7	Carmeuse Americas	58	45	Carolina Sunrock LLC
9	9	Lhoist North America, Inc.	59	59	Bruening Rock Products, Inc.
10	10	Luck Stone Corp.	60	71	Las Vegas Paving Corp.
11	12	New Enterprise Stone & Lime Co., Inc.	61	78	Salem Stone Corp.
12	14	Summit Materials, LLC.	62	64	United States Lime & Minerals, Inc.
13	15	Dolese Bros. Co.	63	69	Vicat S.A.
14	13	Vecellio & Grogan, Inc.	64	65	Boxley Materials Co.
15	17	Buzzi Unicem USA Inc.	65	76	B.V. Hedrick Gravel and Sand Co.
16	18	National Lime & Stone Co.	66	96	Bjoin Limestone Inc.
17	19	Eagle Materials Inc.	67	66	Mitsubishi Cement Corp.
18	20	TITAN Cement International S.A.	68	70	Glenn O. Hawbaker, Inc.
19	25	MDU Resources Group, Inc.	69	67	Glasgow, Inc.
20	21	Eucon Corp.	70	88	CSA Materials, Inc.
21	27	Texas Crushed Stone Co.	71	63	Grupo Cementos de Chihuahua, S.A.B. de C.V.
22	32	Colorado Materials, Ltd.	72	68	Chantilly Crushed Stone, Inc.
23	24	The H&K Group, Inc.	73	42	Capitol Aggregates Inc.
24	28	Fred Weber, Inc.	74	89	Pattison Co.
25	23	Cementos Argos S.A.	75	—	U.S. Forest Service
26	26	Graymont Ltd.	76	—	Maple Grove Cos.
27	44	CalPortland Co.	77	72	Wendling Quarries Inc.
28	34	The Olen Corp.	78	87	Youngquist Brothers, Inc.
29	31	Mississippi Lime Co.	79	—	Frazier Quarry Inc.
30	33	Aggregate Management, Inc.	80	82	Rockydale Quarries Corp.
31	35	Wake Stone Corp.	81	86	Junction City Mining Co., LLC
32	29	The Heritage Group	82	—	BoDean Co.
33	37	Tower Rock Stone Co.	83	75	River Products Co., Inc.
34	38	VantaCore Partners LP	84	79	Weldon Materials, Inc.
35	39	Colas Inc.	85	81	Palm Beach Aggregates, Inc.
36	36	Irving Materials, Inc.	86	84	ISP Minerals, Inc.
37	30	3M Co.	87	—	George Reed Inc.
38	43	Melvin Stone Co.	88	91	East Fairfield Coal Co.
39	40	Pine Bluff Sand & Gravel Co.	89	83	RiverStone Group, Inc.
40	47	Graniterock Co.	90	94	Casper Stolle Quarry Co./Falling Springs Quarry Co.
41	41	McGeorge Contracting Co.	91	80	L. G. Everist, Inc.
42	46	Lannon Stone Products, Inc.	92	90	Jobe Materials L.P.
43	54	Allan Myers Materials	93	74	Granite Construction Inc.
44	52	Snyder Associated Cos., Inc.	94	77	Mathy Construction Co.
45	50	Schildberg Construction Co., Inc.	95	85	Peckham Industries, Inc.
46	55	Anchor Stone Co.	96	97	Kerford Limestone Co.
47	53	Linwood Mining & Minerals Corp.	97	93	U.S. Concrete, Inc.
48	58	Greer Industries, Inc.	98	—	Stavola Construction Materials, Inc.
49	51	The DePaul Group	99	—	S.M. Lorusso & Sons, Inc.
50	57	The Kraemer Co.	100	—	Columbia Quarry Co.

^fRevised. — Not in the top 100 producers of crushed stone in the United States in 2017.

¹Table includes data available through March 10, 2021. In descending order of tonnage produced.

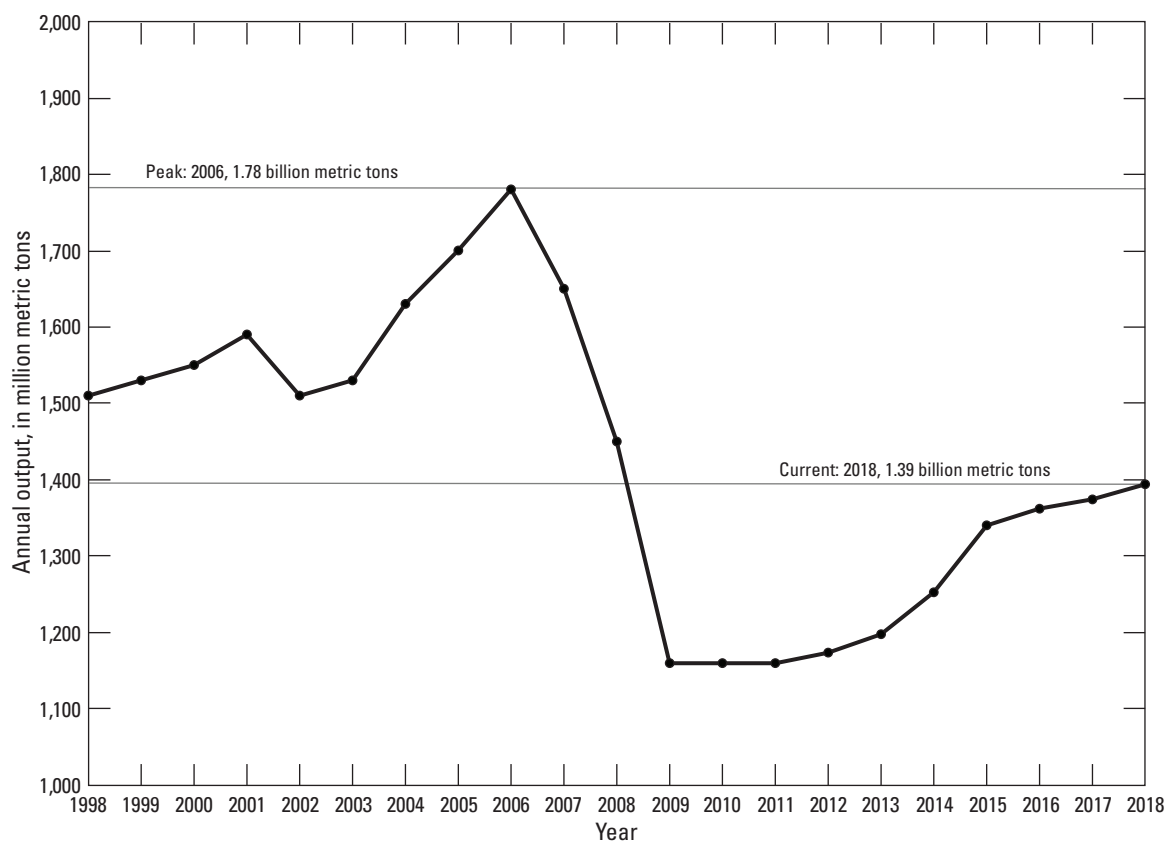


Figure 1. Annual output of crushed stone produced for consumption in the United States from 1998 through 2018. (Source: Crushed Stone Statistics. Historical Statistics for Mineral and Material Commodities in the United States, Data Series 140).