

# 2014 Minerals Yearbook

STONE, CRUSHED [ADVANCE RELEASE]

### STONE, CRUSHED

#### By Jason Christopher Willett

Domestic survey data and tables were prepared by Paula R. Neely, statistical assistant, and the author.

A total of 1.25 billion metric tons (Gt) of crushed stone was produced for consumption in the United States in 2014, an increase of 5% from the total production in 2013, but 30% less than the record high of 1.78 Gt in 2006. In 2014, the total value of crushed stone produced in the United States was \$12.6 billion, an increase of 8% compared with that of 2013 (table 1). The average unit value for crushed stone increased by 2.6% compared with the average unit value for 2013. After the relatively constant levels of the previous 4 years, production still remained lower than the level of crushed stone production for consumption in the United States in 1995. The total number of employees working at construction aggregate mines has decreased every year since 2006. Employment was down slightly in 2014 but down by 20% compared with that of 2006 at mines identified as producing crushed stone by the Mine Safety and Health Administration (MSHA).

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

Foreign trade in crushed stone remained relatively small compared to nationwide consumption. In 2014, U.S. exports increased by 14% to 460,000 metric tons (t) compared with 404,000 t in 2013, but the value decreased by 8% to \$50.5 million compared with \$55.1 million in 2013 (tables 1, 17). U.S. imports of crushed stone, including calcium carbonate fines, increased by 12% to 19.9 million metric tons (Mt), and the value increased by 15% to \$251 million compared with 2013 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 by 5% compared with that of 2013.

Stone is one of the most accessible natural resources on Earth and one of the fundamental building blocks of society. It has been used from the earliest times of civilization in a variety of ways that have increased in number and complexity with time and technological progress. Today, in its crushed form, stone is a major basic raw material for the construction industry as well as agriculture and other 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 defined as the combination of crushed stone and construction sand and gravel. The construction sand and gravel industry is reviewed in a separate chapter, and both mineral commodities are usually included in any review of the national or State aggregates industry.

#### **Production**

Domestic production data for crushed stone were derived by the U.S. Geological Survey (USGS) from voluntary surveys of U.S. producers. In 2014, a total of 1,433 companies produced or sold crushed stone from 3,582 operations with 3,680 quarries and 372 sales and (or) distribution sites (table 16). Of the 3,582 active operations, 2,302 operations reported their production or sales to the USGS, and their total production was 909 Mt (73% of the U.S. total). Of the 2,302 reporting operations, 680 operations did not report a breakdown by end use. Their total production was 329 Mt (26% 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 1,280 nonrespondent operations was 338 Mt (27% of the U.S. total) and is included in table 9 under "Unspecified, estimated" uses.

A total of 372 operations reported that they were active sales yards with 185 of those reporting that they sold only recycled aggregates. Virgin crushed stone sales were reported by 187 sales yards in 2014, and the total quantity of crushed stone sold from these operations was 37.5 Mt. Information regarding the number of active operations, including recycling operations, active quarries, type of processing plants, and number of sales yards by State is provided in table 16.

Crushed stone was produced in every State except Delaware. Starting with 2005, Delaware's production was included in the U.S. total because of sales yards that reported sales of crushed stone in the State. The 10 leading producing States were, in descending order of tonnage, Texas, Pennsylvania, Missouri, Florida, Ohio, Illinois, Kentucky, North Carolina, Indiana, and Virginia. The combined production of the 10 leading States increased by 6% compared with that of 2013 and accounted for 52% of the national total (table 4).

Included in the total number of active operations were 82 underground mines, which produced 74.3 Mt of crushed stone in 2014. Active underground mines were in 17 States. The five leading States were, in descending order of tonnage, Kentucky, Missouri, Illinois, Pennsylvania, and Indiana. The combined production of the five leading States was 49.8 Mt (67% of the total of U.S. crushed stone produced underground).

A total of 259 crushed stone operations were either idle or presumed to have been idle in 2014 because no production report was received and no employment information was available to estimate their production. Since the 2013 survey, 269 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 1.25 Gt of crushed stone produced for consumption in the United States in 2014, 70% was limestone and dolomite; 13% was granite; 6% was traprock; 5% was miscellaneous stone; and 4% was sandstone and quartzite. The remaining 2% was shared, in descending order of tonnage, by marble, volcanic cinder and scoria, calcareous marl, slate, and shell. These percentages were calculated on the total amount of crushed stone produced for consumption that was reported and estimated, including individual amounts that were withheld to avoid disclosing company proprietary data (table 2).

A review of production by size of operation at the national level indicated that, in 2014, 591 Mt of crushed stone (47% of the total crushed stone) was produced by 326 operations reporting production of more than 1 million metric tons per year; 304 Mt was produced by 482 operations reporting production between 500,000 and 999,999 metric tons per year (t/yr); and 308 Mt was produced by 1,338 operations reporting production between 100,000 and 499,999 t/yr. Operations that produced more than 500,000 t/yr accounted for 72% of total crushed stone produced in the United States in 2014, an increase of 3% compared with that of 2013 (table 5A). By geographic region in 2014, the South had 1,230 active operations, followed by the Midwest with 967, the West with 654, and the Northeast with 557 active operations (table 5B).

The leading U.S. producing companies in 2014 were, in descending order of tonnage, Vulcan Materials Co.; Martin Marietta Aggregates; Oldcastle Materials, Inc.; Lehigh Hanson, Inc.; CEMEX S.A.B. de C.V.; Lafarge North America Inc.; Carmeuse Lime & Stone; Rogers Group, Inc.; Holcim Group/Aggregate Industries Management, Inc.; and Lhoist North America (table 19). In 2014, the combined production of the top 10 companies increased by 7% to 561 Mt (45% of the national total). The combined production of the top 100 companies was 934 Mt (75% of the national total). The combined production of the leading 287 companies was 1.10 Gt of crushed stone, which means that 20% of the companies produced 88% of the total sales in 2014.

In 2014, companies continued efforts to divest noncore assets and strengthen positions in strategic geographic areas. Bluegrass Materials Co., Lafarge North America, and Vulcan Materials were the three high-profile companies that were active during the year. The bulk of these transactions took place in Maryland and Texas. These transactions were much smaller than the major merger of Martin Marietta Materials, Inc. and Texas Industries, Inc. (TXI).

In July, Martin Marietta completed its acquisition of TXI, which was announced in January. TXI's assets in California and Texas increased Martin Marietta's presence in the Southwest. These assets included approximately 800 Mt of aggregates reserves, bringing Martin Marietta's total aggregates reserves to more than 13.5 Gt (Martin Marietta Materials, Inc., 2014). Martin Marietta was required to sell certain assets as a condition of the Department of Justice's approval of the acquisition. One quarry in southern Oklahoma and two distribution yards in the Dallas, TX, area were purchased by Vulcan Materials (Vulcan Materials Co., 2014a).

Vulcan Materials sold its cement and concrete businesses in Florida and southern Georgia to Cementos Argos S.A.

but retained all of its aggregates operations. The transaction included 69 ready-mixed concrete sites, 13 concrete block and building material sites, 1 cement plant, and 2 cement terminals. Vulcan expected to continue to supply aggregates to these facilities for the next 20 years as part of the deal (Vulcan Materials Co., 2014b).

Lafarge North America continued selling assets in an effort to raise capital and reduce debt. Bluegrass Materials agreed to purchase Lafarge's Maryland aggregates business, which included operations in the greater Baltimore area and western Maryland (Bluegrass Materials Co., LLC, 2014). This sale was part of Lafarge's strategy to refocus on markets in the Great Lakes and Mississippi River regions (Lafarge North America Inc., 2014).

Production of crushed stone by type is detailed below. *Calcareous Marl.*—Output of calcareous marl decreased by 5% compared with that of 2013 to 2.3 Mt valued at \$6.9 million (table 2).

*Dolomite.*—Production of dolomite increased by 4% compared with the total for 2013 to 41.7 Mt valued at \$442 million (table 2). Crushed dolomite production was reported in 25 States. The leading producing States were, in descending order of tonnage, Illinois, Pennsylvania, and New York; the total production of these three States was 23.1 Mt (55% of the U.S. output) (table 6). An additional undetermined amount 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 increased by 3% compared with that of 2013 to 166 Mt valued at \$2.1 billion (table 2). Crushed granite production was reported in 33 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 111 Mt (67% of the U.S. output) (table 7).

Limestone.—The output of crushed limestone, including some dolomite, increased by 5% compared with that of 2013 to 829 Mt valued at \$7.9 billion (table 2). Limestone production was reported in 46 States, which included small quantities of limestone and dolomite that were produced in the same quarries. Companies in 27 States reported production of 28.9 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 amount of dolomite in addition to the dolomite reported separately. The leading producing States were, in descending order of tonnage, Texas, Missouri, Florida, Ohio, and Kentucky; the total production of these five States was 362 Mt (43% of the total U.S. output) (table 6).

*Marble*.—Production of crushed marble increased by 6% compared with the total for 2013 to 7.4 Mt valued at \$117 million (table 2). Crushed marble production was reported in 13 States.

*Miscellaneous Stone.*—This category includes three different types of miscellaneous crushed stone production. The first type is production of a crushed stone that was reported by the company as "other" on the survey form or as a type of stone not listed in table 2. The second type is production of unknown stone type from a company or operation that is new to the survey. The first year that an operation is added to the survey,

its production is often estimated using MSHA employment data. The type of stone produced is updated when a response is received from the operation and the data are revised for the next report. The third type is production of a known stone type when the amount reported must be withheld to protect company proprietary data. The concealed amount is added to the quantity of miscellaneous stone produced in that State and then published.

The reported output of miscellaneous stone increased by 5% compared with the total for 2013 to 65.8 Mt valued at \$624 million (table 2). In 2014, the reported amount of miscellaneous stone accounted for 65% of the total output of miscellaneous stone and 60% of its value (table 8). The remaining 35% (35.2 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 increased by 10% compared with the total for 2013 to 46.4 Mt valued at \$434 million (table 2). Crushed sandstone production was reported in 30 States, and quartzite was produced in 17 States. The leading producing States were, in descending order of combined tonnage of sandstone and quartzite, Pennsylvania, Arkansas, Texas, South Dakota, and Missouri. Their combined total production was 27.7 Mt (60% of the U.S. output) (table 7).

*Shell.*—Shell is derived mainly from fossil reefs or oyster shell banks. The output of crushed shell increased by 17% compared with the total for 2013 to 887,000 t valued at \$14.9 million (table 2). Crushed shell production was reported in California, Florida, and Louisiana (table 8).

*Slate.*—The output of crushed slate decreased by 30% compared with that of 2013 to 1.9 Mt valued at \$24.8 million (table 2). Crushed slate was produced in 11 States, with North Carolina accounting for more than one-third of the total U.S. output (table 7).

*Traprock.*—Production of crushed traprock increased by 7% compared with the total for 2013 to 80.8 Mt valued at \$979 million (table 2). Traprock production was reported in 27 States. The leading producing States were, in descending order of tonnage, Oregon, New Jersey, Virginia, North Carolina, and Connecticut; these five States produced 39.5 Mt (49% of the U.S. output) (table 7).

*Volcanic Cinder and Scoria.*—Production of volcanic cinder and scoria increased by 37% compared with the total for 2013 to 3.8 Mt valued at \$25.5 million (table 2). Volcanic cinder and scoria production was reported in 13 States, with Wyoming accounting for 51% of the U.S. output (table 8).

#### Consumption

Crushed stone production reported to the USGS is actually material that was either sold to other companies or consumers or was used by producers. Stockpiled production is not included in the reported quantities. The "sold or used" tonnage, therefore, represents the amount of production 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" use category. The estimated production of

nonrespondents was included in the "Unspecified, estimated" use category.

The ultimate use of crushed stone determines the specification for particle size and gradation, shape, rock type, and chemical composition. Crushed stone can be used without any binder for a variety of construction or industrial applications, or it can be mixed with a matrix binding material such as dark bituminous pitch (asphalt) or portland cement. 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 leading 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 bases. 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; therefore, they 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 amounts of crushed stone are used for a variety of applications ranging from metallurgical fluxing of antimony, copper, iron, lead, and zinc to the manufacturing of glass, ceramic pottery, paper, and as fillers and extenders in asphalt, paint, rubber, and plastics. An increasing amount of finely ground limestone is being used to remove sulfur oxides from stack gases, primarily from coalburning electric generating stations, and for mine dusting to enhance mine safety by reducing the explosion risk of highly combustible coal dust.

In 2014, U.S. apparent consumption of crushed stone, which is defined as U.S. production for consumption, sold or used, plus imports and recycled material minus exports, was 1.31 Gt, an increase of 5% compared with the apparent consumption in 2013. Of the 1.25 Gt of crushed stone produced for consumption, 26% was "Unspecified, reported," and 27% was "Unspecified, estimated." Of the remaining production that was reported by uses, 76% was used as construction aggregate, mostly for highway and road construction and maintenance, as well as for a variety of building and nonbuilding construction; 11% for cement manufacturing; 7% for lime manufacturing; 4% for miscellaneous uses and products including other chemical and special uses; and 2% 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.

About 25% of limestone produced annually is used for the manufacturing of cement and lime. Totals in table 10 do not accurately account for the total amount used because the response rate of companies sending in data by product or by use is about 50%. The amount of limestone needed to manufacture the amount 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 excludes lime kiln dust, which may increase limestone requirements by 20% to 30% (H.G. van Oss, commodity specialist, National Minerals Information Center, U.S. Geological Survey, written commun., September 12, 2015). The ratio can vary from 2.5 to 4.0 t of limestone per ton of lime produced by different lime producers. For 2014, total lime produced in the United States was 19.5 Mt, which consumed between 50 and 80 Mt of limestone (Corathers, 2016).

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 of it 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 about 1.5 t of limestone per ton of clinker. One ton of clinker makes about 1.1 t of cement. Thus, producers consume about 1.36 t of limestone per ton of cement produced (H.G. van Oss, commodity specialist, National Minerals Information Center, U.S. Geological Survey, written commun., September 12, 2015). In 2014, total cement produced in the United States was about 81 Mt, which consumed approximately 110 Mt of limestone (van Oss, 2015, p. 3).

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

Additional information regarding production and consumption of crushed stone by type of rock and major uses in each State and the State districts may be found in the USGS Minerals Yearbook, volume II, Area reports—Domestic.

#### Recycling

The recycling of many construction materials was expanding, and construction aggregates producers were increasingly recycling portland cement concrete and asphalt concrete materials recovered from construction projects to be reused to produce construction aggregate materials, especially for fill and road base applications. The recycling of portland cement concrete was done at some quarries and increasingly at sales yards or distribution sites, whereas asphalt concrete often was recycled in place. The USGS surveyed construction aggregate mining companies, construction companies, and demolition companies, which reported the following data. The data represent an unknown percentage of the actual U.S. total of recycled construction aggregates.

Recycled Asphalt Concrete.—Companies reported recycled asphalt concrete in every State except Hawaii; the U.S. total was 19.9 Mt of recycled asphalt, valued at \$168 million (table 14). The leading States for 2014 were, in descending order of tonnage of recycled asphalt, California, Illinois, Minnesota, North Carolina, and Washington. Their combined total was 8.5 Mt accounting for 43% of the U.S. total.

Recycled Portland Cement Concrete.—A total of 21.8 Mt of recycled portland cement concrete valued at \$143 million was reported as recycled in 48 States (table 15). The leading States for 2014 were, in descending order of tonnage of recycled concrete, Texas, California, Illinois, Iowa, and Washington. Their combined total was 11.9 Mt accounting for 55% of the U.S. total.

#### **Transportation**

No means of transportation was reported by the producers for 732 Mt of the 1.25 Gt of crushed stone produced for consumption in 2014. Of the remaining 514 Mt of crushed stone, 72% was reported as being transported by truck from the quarry or the processing plant to the first point of sale or use, 7% by waterway, and 5% by rail. About 73.4 Mt of the specified production was reported as not having been transported and, therefore, is assumed to have been used onsite.

Shipment by truck remains 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 have had an impact on the markets they serve, especially in areas that lack the geology to support crushed stone mining. 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 impact of heavy-vehicle traffic on the infrastructure and the environment. Sales yards serve 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. This value does not include transportation from the plant or yard to the consumer. It does, however, include all costs of mining, processing, in-plant transportation, overhead, and profit. In 2014, 792 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 \$10.86 per metric ton in 2014, which was an increase of 3% compared with the reported average unit value of \$10.51 per metric ton in 2013. Leading U.S. producers increased prices by 2% to 4.5% in 2014, compared with prices in 2013. For those operations that reported production only, the unit values for specific end uses were estimated based on reported values for those specific uses in the same State. The reported State average was used in the estimation for operations reporting total production only and for operations that did not respond to the survey.

Additional information regarding prices of crushed stone by type of rock and uses in the United States and each State and the State districts may be found throughout the tables included in this chapter and in the USGS Minerals Yearbook, volume II, Area reports—Domestic.

#### **Foreign Trade**

The widespread distribution of domestic deposits of stone suitable for mining as crushed stone, the large number of existing active operations around the country, and the high cost of transportation limit foreign trade to mostly local transactions across international boundaries. U.S. imports and exports continue 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 amount 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, crushed stone imported to Florida from Mexico was counted in the total of crushed stone sold or used in Florida (table 4). This was the same accounting practice used for large quantities of crushed stone, which were transported from one State to another. For example, crushed stone mined in Kentucky and shipped down the Mississippi River to be used in Louisiana was included in the total of crushed stone sold or used in Louisiana.

*Exports.*—Exports of crushed stone increased by 14% to 460,000 t compared with the total of 404,000 t in 2013, but the value decreased by 8% to \$50.5 million (tables 1, 17). Exports of crushed limestone to Canada increased significantly, which offset a decrease in exports to countries in Asia and Europe.

*Imports.*—Imports of crushed stone increased by 12% to 19.9 Mt compared with those of 2013, and the value increased by 15% to \$251 million (table 1). Of the imported crushed stone, 73% was limestone used as construction aggregate, as flux stone, and in cement manufacturing (table 18).

#### Outlook

The crushed stone 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 crushed stone. After 4 years of decline, residential construction appeared to level off in late 2010 and crushed stone production remained almost flat until increasing by 5% in 2014. Quarterly crushed stone sales data also indicate that the construction industry may have reached the low point in the cycle and may now have begun to recover slightly (Willett, 2015a).

With significantly stronger construction activity expected across the country in 2015 and recovery in the private sector and residential construction experiencing a level of growth not

seen since late 2005, consumption of construction aggregates likely will continue to increase. It is expected that the increased consumption in 2015 from that in 2014 will again exceed the historical annual average of the past 50 years, which was a 2% to 4% increase per year. The estimated output of crushed stone in the 48 conterminous States shipped for consumption in the first 6 months of 2015 was 589 Mt, an increase of 6% compared with that of the same period of 2014 (Willett, 2015b). Demand for crushed stone is expected to be higher in 2015 as reflected by an increased output of crushed stone in every quarter since the second quarter of 2013.

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 $\label{eq:table 1} \textbf{TABLE 1} \\ \textbf{SALIENT CRUSHED STONE STATISTICS}^1$ 

	2010	2011	2012	2013	2014
Sold or used by producers: <sup>2</sup>					
Quantity	1,160,000 <sup>r</sup>	1,160,000 r	1,180,000 <sup>r</sup>	1,180,000 r	1,250,000
Value	11,000,000 r	11,100,000 <sup>r</sup>	11,500,000 <sup>r</sup>	11,700,000 r	12,600,000
Recycled:					
Quantity	26,400	27,300	31,100	40,600 <sup>r</sup>	41,600
Value	201,000	214,000	241,000	310,000 r	312,000
Exports:					
Quantity	1,210	911	1,140	404	460
Value	52,100	41,800	44,600	55,100	50,500
Imports for consumption: <sup>3</sup>					
Quantity	14,600	15,000	15,400	17,700	19,900
Value	185,000	179,000	208,000	218,000	251,000
Employment number: <sup>4</sup>					
Average number of employees	67,600	67,000	66,200	65,900	65,600
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Revised.

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

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

<sup>&</sup>lt;sup>3</sup>Excludes precipitated calcium carbonate.

<sup>&</sup>lt;sup>4</sup>Including office staff. Source: Mine Safety and Health Administration.

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

		2013	$3^3$			201	4	
	Quantity					Quantity		
	Number	(thousand	Value	Unit	Number	(thousand	Value	Unit
Type	of quarries	metric tons)	(thousands)	value	of quarries	metric tons)	(thousands)	value
Limestone <sup>4</sup>	1,981	786,000	\$7,270,000	\$9.25	1,917	829,000	\$7,870,000	\$9.49
Dolomite	133	40,200	413,000	10.27	107	41,700	442,000	10.59
Marble	33	7,010	124,000	17.72	31	7,420	117,000	15.73
Calcareous marl	5	2,410	11,800	4.91	5	2,300	6,870	2.99
Shell	6	760	14,200	18.72	5	887	14,900	16.79
Granite	398	162,000	1,990,000	12.31	389	166,000	2,110,000	12.67
Traprock	311	75,500	865,000	11.46	301	80,800	979,000	12.11
Sandstone and quartzite <sup>5</sup>	234	42,300	391,000	9.25	206	46,400	434,000	9.36
Slate	26	2,710	30,800	11.37	22	1,890	24,800	13.18
Volcanic cinder and scoria	49	2,780	23,300	8.39	47	3,810	25,500	6.69
Miscellaneous stone	680	62,400	576,000	9.23	650	65,800	624,000	9.48
Total or average	XX	1,180,000	11,700,000	9.89	XX	1,250,000	12,600,000	10.15

XX Not applicable.

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

	2013	3	2014	1
Region/division	Quantity	Value	Quantity	Value
Northeast:				
New England	35,600	415,000	36,900	447,000
Middle Atlantic	131,000	1,390,000	135,000	1,510,000
Total	166,000	1,800,000	172,000	1,950,000
Midwest:				
East North Central	187,000	1,530,000	199,000	1,670,000
West North Central	138,000	1,180,000	141,000	1,230,000
Total	325,000	2,710,000	339,000	2,900,000
South:				
South Atlantic	238,000	3,030,000	249,000	3,240,000
East South Central	125,000	1,340,000	130,000	1,420,000
West South Central	203,000	1,660,000	221,000	1,910,000
Total	566,000	6,030,000	599,000	6,560,000
West:				
Mountain	54,700	427,000	61,400	470,000
Pacific	71,400	745,000	73,900	756,000
Total	126,000	1,170,000	135,000	1,230,000
Grand total	1,180,000	11,700,000	1,250,000	12,600,000

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

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

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

<sup>&</sup>lt;sup>3</sup>Estimated quantities have been recalculated.

<sup>&</sup>lt;sup>4</sup>Includes limestone-dolomite reported with no distinction between the two kinds of stone.

<sup>&</sup>lt;sup>5</sup>Includes sandstone-quartzite reported with no distinction between the two kinds of stone.

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

<sup>&</sup>lt;sup>3</sup>Estimated quantities have been recalculated.

 ${\it TABLE~4}$  CRUSHED STONE SOLD OR USED BY PRODUCERS IN THE UNITED STATES, BY STATE AND TERRITORY  $^1$ 

		2013 <sup>2</sup>		2014				
	Quantity			Quantity				
	(thousand	Value	Unit	(thousand	Value	Unit		
State	metric tons)	(thousands)	value	metric tons)	(thousands)	value		
Alabama	36,400	\$359,000	\$9.87	36,800	\$390,000	\$10.60		
Alaska	952	12,000	12.58	851	9,230	10.83		
Arizona	8,270	73,100	8.84	8,750	74,900	8.50		
Arkansas	25,100	197,000	7.83	26,300	214,000	8.1		
California	33,600	320,000	9.52	35,800	314,000	8.8		
Colorado	10,400	81,200	7.82	12,900	106,000	8.2		
Connecticut	8,740	129,000	14.72	9,050	142,000	15.6		
Delaware <sup>3</sup>	W	W	W	W	W	V		
Florida	53,900	632,000	11.74	57,200	681,000	11.9		
Georgia	40,400	494,000	12.23	43,500	549,000	12.6		
Hawaii	5,420	92,300	17.04	5,650	107,000	18.9		
Idaho	3,820	24,000	6.30	4,380	28,200	6.4		
Illinois	45,800	472,000	10.30	52,000	515,000	9.9		
Indiana	41,000	304,000	7.41	44,100	337,000	7.6		
Iowa	31,300	290,000	9.26	31,700	298,000	9.4		
Kansas	15,400	131,000	9.20 8.51	16,000	136,000	8.5		
Kentucky	48,700	453,000	9.31	51,500		9.2		
	<del>-</del>				474,000			
Louisiana <sup>3</sup>	_ W	W	W	W	W	V		
Maine	3,690	30,800	8.35	3,830	31,500	8.2		
Maryland	19,700	186,000	9.43	22,500	221,000	9.7		
Massachusetts	10,100	130,000	12.90	10,700	148,000	13.8		
Michigan	27,100	193,000	7.10	26,900	199,000	7.4		
Minnesota	8,160	94,300	11.55	8,960	103,000	11.5		
Mississippi <sup>3</sup>	1,920	52,200	27.21	2,140	60,600	28.2		
Missouri	68,800	527,000	7.67	68,800	550,000	8.0		
Montana	2,690	26,000	9.65	2,910	26,100	9.0		
Nebraska	6,590	76,400	11.59	7,470	85,200	11.40		
Nevada	7,840	74,900	9.55	8,550	76,200	8.9		
New Hampshire	4,890	43,300	8.85	5,130	44,300	8.6		
New Jersey	17,200	144,000	8.37	16,900	154,000	9.1		
New Mexico	5,040	46,900	9.31	4,720	42,000	8.8		
New York	34,700	355,000	10.22	37,500	418,000	11.1		
North Carolina	46,600	715,000	15.33	46,200	727,000	15.7		
North Dakota	1,260	13,000	10.33	1,410	14,000	9.8		
Ohio	52,900	433,000	8.19	54,800	485,000	8.8		
Oklahoma	39,800	304,000	7.62	39,700	317,000	7.9		
Oregon	16,900	132,000	7.85	17,300	134,000	7.7		
Pennsylvania	78,800	888,000	11.27	81.100	937,000	11.5		
Rhode Island	1,640	17,600	10.73	1,700	18,400	10.8		
	_			,	*			
South Carolina	20,000	207,000	10.35	20,200	212,000	10.5		
South Dakota	6,300	44,700	7.10	6,450	47,200	7.3		
Tennessee	_ 38,200	474,000	12.41	39,200	493,000	12.5		
Texas	134,000	1,080,000	8.04	152,000	1,320,000	8.6		
Utah	7,260	59,300	8.16	8,250	65,900	7.9		
Vermont	_ 6,500	64,100	9.88	6,520	63,400	9.7		
Virginia	41,900	631,000	15.06	43,700	669,000	15.3		
Washington	14,600	189,000	12.93	14,300	191,000	13.3		
West Virginia	_ 14,800	156,000	10.52	14,900	168,000	11.2		
Wisconsin	20,300	129,000	6.37	20,800	134,000	6.4		
Wyoming	9,380	41,400	4.42	11,000	51,500	4.69		
Other	4,580	91,400	19.96	3,420	68,800	20.1		
U.S. total or average	1,180,000	11,700,000	9.89	1,250,000	12,600,000	10.1		
Territory								
American Samoa <sup>4</sup>	(5)	(5)	(5)	(5)	(5)	(.		
Guam	(5)	(5)	(5)	(5)	(5)	(:		
Puerto Rico	5,990	61,000	10.18	5,410	54,500	10.0		
Virgin Islands	_ (5)	(5)	(5)	(5)	(5)	10.0		
Grand total or average	1,190,000	11,800,000	9.91	1,250,000	12,700,000	10.1		
See footnotes at end of table	1,170,000	11,000,000	7.71	1,230,000	12,700,000	10.1		

See footnotes at end of table.

#### TABLE 4—Continued

#### CRUSHED STONE SOLD OR USED BY PRODUCERS IN THE UNITED STATES, BY STATE AND TERRITORY $^{\rm I}$

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

		20	13 <sup>3</sup>			20	)14	
			Quantity				Quantity	
Size range	Number of	Percentage	(thousand	Percentage	Number of	Percentage	(thousand	Percentage
(metric tons)	operations	of total	metric tons)	of total	operations	of total	metric tons)	of total
Less than 25,000	613	17.4	4,980	0.4	544	16.0	4,440	0.4
25,000 to 49,999	308	8.8	10,400	0.9	279	8.2	9,380	0.8
50,000 to 99,999	471	13.4	31,600	2.7	439	12.9	29,700	2.4
100,000 to 199,999	515	14.7	67,300	5.7	543	15.9	71,700	5.7
200,000 to 299,999	372	10.6	83,400	7.0	356	10.4	80,600	6.5
300,000 to 399,999	273	7.8	86,000	7.3	259	7.6	82,300	6.6
400,000 to 499,999	217	6.2	87,500	7.4	180	5.3	73,400	5.9
500,000 to 599,999	141	4.0	70,300	5.9	167	4.9	83,600	6.7
600,000 to 699,999	114	3.2	67,400	5.7	94	2.8	55,200	4.4
700,000 to 799,999	72	2.0	48,900	4.1	91	2.7	61,100	4.9
800,000 to 899,999	73	2.1	56,200	4.7	78	2.3	59,800	4.8
900,000 to 999,999	49	1.4	41,900	3.5	52	1.5	44,700	3.6
1,000,000 to 1,499,999	151	4.3	166,000	14.0	157	4.6	173,000	13.9
1,500,000 to 1,999,999	64	1.8	99,200	8.4	80	2.3	125,000	10.1
2,000,000 to 2,499,999	27	0.8	54,200	4.6	27	0.8	56,100	4.5
2,500,000 to 4,999,999	44	1.3	134,000	11.4	47	1.4	140,000	11.2
5,000,000 and more	11	0.3	74,000	6.3	15	0.4	96,900	7.8
Total	3,515	100	1,180,000	100	3,408	100	1,250,000	100

<sup>&</sup>lt;sup>1</sup>Data are rounded to no more than three significant digits except "Number of operations"; may not add to totals shown.

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

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

<sup>&</sup>lt;sup>2</sup>Estimated quantities have been recalculated.

<sup>&</sup>lt;sup>3</sup>A significant amount of sold or used material was shipped in from other States.

<sup>&</sup>lt;sup>4</sup>Includes Tutuila Island and dependencies.

<sup>&</sup>lt;sup>5</sup>Withheld to avoid disclosing company proprietary data; included in "Grand total or average."

<sup>&</sup>lt;sup>2</sup>Does not include recycling plants.

<sup>&</sup>lt;sup>3</sup>Estimated quantities have been recalculated.

TABLE 5B CRUSHED STONE SOLD OR USED IN THE UNITED STATES IN 2014, BY REGION AND SIZE OF OPERATION  $^{\!1,2}$ 

		Nort	theast			M	idwest	
	<del></del>		Quantity				Quantity	
Size range	Number of	Percentage	(thousand	Percentage	Number of	Percentage	(thousand	Percentage
(metric tons)	operations	of total	metric tons)	of total	operations	of total	metric tons)	of total
Less than 25,000	84	15.1	862	0.5	129	13.3	1,100	0.3
25,000 to 49,999	46	8.3	1,570	0.9	86	8.9	2,910	0.9
50,000 to 99,999	63	11.3	4,250	2.5	133	13.8	9,160	2.7
100,000 to 199,999	107	19.2	14,200	8.2	174	18.0	23,200	6.9
200,000 to 299,999	61	11.0	13,600	7.9	108	11.2	24,500	7.2
300,000 to 399,999	50	9.0	16,000	9.3	75	7.8	23,800	7.0
400,000 to 499,999	33	5.9	13,500	7.8	44	4.6	17,900	5.3
500,000 to 599,999	19	3.4	9,480	5.5	59	6.1	29,900	8.8
600,000 to 699,999	21	3.8	12,300	7.1	26	2.7	15,200	4.5
700,000 to 799,999	13	2.3	8,810	5.1	21	2.2	13,900	4.1
800,000 to 899,999	13	2.3	9,960	5.8	18	1.9	13,900	4.1
900,000 to 999,999	6	1.1	5,050	2.9	10	1.0	8,610	2.5
1,000,000 to 1,499,999	25	4.5	27,800	16.1	38	3.9	42,600	12.6
1,500,000 to 1,999,999	8	1.4	12,200	7.1	21	2.2	32,800	9.7
2,000,000 to 2,499,999	1	0.2	2,050	1.2	9	0.9	18,500	5.5
2,500,000 and more	7	1.3	20,700	12.0	16	1.7	61,200	18.0
Total	557	100	172,000	100	967	100	339,000	100

		So	outh			•	West	
			Quantity	_			Quantity	_
	Number of	Percentage	(thousand	Percentage	Number of	Percentage	(thousand	Percentage
	operations	of total	metric tons)	of total	operations	of total	metric tons)	of total
Less than 25,000	134	10.9	1,200	0.2	197	30.1	1,280	0.9
25,000 to 49,999	61	5.0	2,020	0.3	86	13.1	2,890	2.1
50,000 to 99,999	133	10.8	9,010	1.5	110	16.8	7,300	5.4
100,000 to 199,999	164	13.3	21,800	3.6	98	15.0	12,400	9.2
200,000 to 299,999	144	11.7	32,800	5.5	43	6.6	9,690	7.2
300,000 to 399,999	107	8.7	33,700	5.6	27	4.1	8,700	6.4
400,000 to 499,999	85	6.9	34,700	5.8	18	2.8	7,260	5.4
500,000 to 599,999	72	5.9	35,600	5.9	17	2.6	8,540	6.3
600,000 to 699,999	42	3.4	24,800	4.1	5	0.8	2,930	2.2
700,000 to 799,999	50	4.1	33,800	5.6	7	1.1	4,580	3.4
800,000 to 899,999	41	3.3	31,400	5.2	6	0.9	4,560	3.4
900,000 to 999,999	31	2.5	26,800	4.5	5	0.8	4,250	3.1
1,000,000 to 1,499,999	80	6.5	87,200	14.5	14	2.1	15,200	11.3
1,500,000 to 1,999,999	40	3.3	63,300	10.6	11	1.7	17,100	12.6
2,000,000 to 2,499,999	13	1.1	27,000	4.5	4	0.6	8,460	6.2
2,500,000 and more	33	2.7	134,000	22.4	6	0.9	20,300	15.0
Total	1,230	100	599,000	100	654	100	135,000	100

<sup>&</sup>lt;sup>1</sup>Data are rounded to no more than three significant digits except "Number of operations"; may not add to totals shown.

<sup>&</sup>lt;sup>2</sup>Does not include recycling plants.

## TABLE 6 LIMESTONE, DOLOMITE, CALCAREOUS MARL, AND MARBLE SOLD OR USED BY PRODUCERS IN THE UNITED STATES IN 2014, BY STATE $^1$

	Limest	one	Dolon	nite	Calcareou	ıs marl	Mart	le
State	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Alabama	30,700 2	313,000	(3)	(3)			2,430	39,100
Alaska								
Arizona	3,550 <sup>2</sup>	30,600						
Arkansas	12,800	89,400	787	7,840				
California	15,200 <sup>2</sup>	83,800	63	858				
Colorado	805 2	8,100	31	275			45	399
Connecticut	1,290 <sup>2</sup>	28,000	(3)	(3)			226	3,540
Delaware	(4)	(4)						
Florida	55,500 <sup>2</sup>	658,000	(3)	(3)				
Georgia	5,490	71,500					1,340	22,300
Hawaii								
Idaho	156	4,200						
Illinois	43,000 <sup>2</sup>	422,000	8,760	90,300				
Indiana	43,900 <sup>2</sup>	336,000	(3)	(3)				
Iowa	31,500 <sup>2</sup>	296,000	219	2,084				
Kansas	14,700 <sup>2</sup>	125,000		2,064				
	51,200 <sup>2</sup>			<del></del>				
Kentucky Louisiana		472,000						
	(4)	(4)						
Maine	1,650	10,400						
Maryland	14,100 2	127,000					126	1,230
Massachusetts	836 2	19,000	153	2,980				
Michigan	25,500 <sup>2</sup>	190,000	(3)	(3)	1	7		
Minnesota	4,910 <sup>2</sup>	51,600	(3)	(3)				
Mississippi	2,130	60,500			10	110		
Missouri	63,000 <sup>2</sup>	480,000	1,790	15,300				
Montana	2,100	19,000						
Nebraska	7,360	81,500						
Nevada	3,920 <sup>2</sup>	26,200	(3)	(3)				
New Hampshire	48	430						
New Jersey	352	3,200						
New Mexico	2,120	17,200						
New York	23,600 <sup>2</sup>	247,000	6,810	83,600			13	138
North Carolina	2,820	43,400	299	4,710				
North Dakota								
Ohio	54,600 <sup>2</sup>	483,000	(3)	(3)				
Oklahoma	32,100 <sup>2</sup>	251,000						
Oregon	1,390	7,270						
Pennsylvania	48,500 <sup>2</sup>	608,000	7,500	68,700			(3)	(3)
Rhode Island								
South Carolina	4,980	35,900			(3)	(3)	(3)	(3)
South Dakota	2,440 <sup>2</sup>	14,400						
Tennessee	38,100 <sup>2</sup>	480,000	398	4,350				
Texas	138,000 <sup>2</sup>	1,200,000	(3)	(3)	196	1,500	(3)	(3)
Utah	3,670	31,800	2,060	16,900				
Vermont	2,220 <sup>2</sup>	20,500	(3)	(3)			1,420	14,000
Virginia	13,900 <sup>2</sup>	197,000	(3)	(3)			(3)	(3)
	1,300 <sup>2</sup>	21,800						
Washington West Virginia			137	6,782			(3)	(3)
West Virginia	14,200	159,000						201
Wisconsin	17,200 <sup>2</sup>	111,000	(3)	(3)			61	391
Wyoming	2,690 2	15,900						
Total Zoro	839,000	7,950,000	29,000	305,000	208	1,620	5,660	81,200

<sup>--</sup> Zero.

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

<sup>&</sup>lt;sup>2</sup>Includes limestone-dolomite reported with no distinction between the two kinds of stone.

<sup>&</sup>lt;sup>3</sup>Withheld to avoid disclosing company proprietary data; included with "Limestone."

<sup>&</sup>lt;sup>4</sup>Withheld to avoid disclosing company proprietary data; included with "Miscellaneous stone" on table 8.

## TABLE 7 GRANITE, TRAPROCK, SANDSTONE AND QUARTZITE, AND SLATE SOLD OR USED BY PRODUCERS IN THE UNITED STATES IN 2014, BY STATE $^1$

	Grar		Trapro		Sandstone and		Slat	
State	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Alabama	2,220	22,200			835	9,450	464	5,120
Alaska	101	1,010	(3)	(3)				
Arizona	2,480	26,200	(3)	(3)	824	6,370		
Arkansas	4,720	49,100			6,880	59,500	114	937
California	10,300	107,000	5,500	60,800	781	13,800	8	82
Colorado	5,710	47,700	1	6	(3)	(3)		
Connecticut	938	14,500	5,830	83,500				
Delaware			(3)	(3)				
Florida	515	9,010			321	3,920		
Georgia	36,500	451,000			(3)	(3)	(3)	(3)
Hawaii		´	5,220	98,800				
Idaho	(3)	(3)	906	4,670	(3)	(3)		
Illinois					37	721		
Indiana						,21		
Iowa								
Kansas					1,280	10,900		
Kentucky	<del></del>				1,200	10,900		
Louisiana	<del></del>					(3)		
	1.720	16 700			(3)			
Maine	1,730	16,700	(3)	(3)	198	1,660		
Maryland	3,330	33,600	(3)	(3)	(3)	(3)		
Massachusetts	(3)	(3)	4,790	63,900				
Michigan			987	7,620				
Minnesota	3,470	45,200			(3)	(3)		
Mississippi								
Missouri	(3)	(3)	1,270	11,900	1,450	16,700		
Montana	(3)	(3)	(3)	(3)	(3)	(3)		
Nebraska					24	338		
Nevada	159	1,470	448	4,450	2	20		
New Hampshire	2,700	24,300	1,710	14,600	211	1,880		
New Jersey	(3)	(3)	8,630	75,800				
New Mexico					214	2,250		
New York	1,800	21,400	(3)	(3)	1,120	11,600	10	112
North Carolina	32,400	510,000	7,930	126,000			688	10,500
North Dakota					172	1,530		
Ohio					221	2,160		
Oklahoma	4,210	38,200			1,140	9,080		
Oregon	(3)	(3)	8,840	70,800	(3)	(3)	(3)	(3)
Pennsylvania	2,380	26,800	4,730	47,900	9,300	95,200	356	5,230
Rhode Island	595	6,400	939	10,300		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
South Carolina	12,800	167,000						
South Dakota					3,230			95
Tennessee	109	812			643	25,300 7,970	13	93
	(3)				6,810	45,200		
Texas		(3)	(3)	(3)				
Utah		4 200		715	(3)	(3)	101	1 000
Vermont	432	4,280	66	715	1,360	13,600	191	1,900
Virginia	18,900	305,000	8,310	130,000	995	13,900	4	70
Washington	816	10,600	5,170	56,200	(3)	(3)		
West Virginia		<del></del>			665	8,240		
Wisconsin	2,510	15,700	1,040	6,850	17	102		
Wyoming	2,200	15,100			(3)	(3)		
Total	154,000	1,970,000	72,300	875,000	38,700	361,000	1,850	24,100

<sup>--</sup> Zero.

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

<sup>&</sup>lt;sup>2</sup>Includes sandstone-quartzite reported with no distinction between the two kinds of stone.

<sup>&</sup>lt;sup>3</sup>Withheld 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 2014, BY STATE $^1$

	She	:11	Volcanic cinc	ler and scoria	Miscellaneous stone		
State	Quantity	Value	Quantity	Value	Quantity	Value	
Alabama					102	1,100	
Alaska					750	8,220	
Arizona			163	1,220	1,730	10,600	
Arkansas					949	7,390	
California	78	4,340	187	2,270	3,640	41,900	
Colorado			(2)	(2)	6,260	49,100	
Connecticut					770	12,000	
Delaware					W	W	
Florida	754	8,880			94	1,140	
Georgia					254	4,140	
Hawaii			35	593	390	7,530	
Idaho			30	189	3,290	19,100	
Illinois					289	2,330	
Indiana					104	798	
Iowa							
Kansas	<del>-</del>						
Kentucky					295	2,780	
Louisiana	(2)	(2)			W	2,700 W	
Maine					257	2,670	
Maryland					5,020	58,500	
Massachusetts					4,910	62,200	
Michigan					323	1,520	
Minnesota					577	6,690	
Mississippi						0,070	
Missouri	_				1,240	26,000	
Montana	_		139	1,350	667	5,820	
Nebraska			139	1,330	86	3,820	
Nevada							
New Hampshire			(2)	(2)	4,020 462	44,000 3,060	
New Jersey New Mexico			240		7,900 2,150	74,700	
New York			240	2,290	4,090	20,200	
						53,500	
North Carolina				4.070	2,060	32,300	
North Dakota			611	4,070	629	8,360	
Ohio					18	142	
Oklahoma					2,230	18,500	
Oregon			(2)	(2)	7,120	56,400	
Pennsylvania					8,330	84,900	
Rhode Island					162	1,740	
South Carolina					2,490	9,780	
South Dakota					655	6,630	
Tennessee					29	257	
Texas					7,720	69,800	
Utah			15	126	2,500	17,200	
Vermont					832	8,270	
Virginia					1,580	23,700	
Washington			53	688	6,820	95,200	
West Virginia							
Wisconsin					26	136	
Wyoming			1,930	9,060	4,170	11,500	
Other					3,420	68,800	
Total	833	13,200	3,400	21,900	101,000	1,040,000	

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

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

<sup>&</sup>lt;sup>2</sup>Withheld to avoid disclosing company proprietary data; included with "Miscellaneous stone."

TABLE 9 CRUSHED STONE SOLD OR USED BY PRODUCERS IN THE UNITED STATES, BY USE  $^{\rm I}$ 

	2013 <sup>2</sup>			2014	
Quantity (thousand		Unit	Quantity (thousand		Unit
metric tons)	(thousands)	value	metric tons)	(thousands)	value
·					
<del></del>					
1,510	\$12,900	\$8.54	919	\$12,300	\$13.34
9,310	104,000	11.16	7,950	101,000	12.66
	32,300	10.09	2,350		10.38
					11.44
	•		ŕ	,	
25,100	250,000	9.97	30,100	332,000	11.03
					11.85
					12.67
					10.59
					13.93
	1,120,000	10.00	100,000	1,.00,000	10.70
2 540	27 900	11.02	4 050	45 400	11.22
					10.68
					8.33
					11.42
	343,000	11.23	32,100	300,000	11.42
	126,000	7.61	50 200	467,000	7.88
					8.76
					15.18
					7.48
					10.74
					9.92
3,600	39,300	10.91	3,140	41,400	13.17
_					
					10.42
					15.71
465	12,300	26.50	252	13,200	52.49
<u></u>					
67,200	328,000	4.89	63,700	330,000	5.19
35,100	303,000	8.64	37,800	321,000	8.50
			W	W	W
2,920	24,800	8.49	3,920	29,200	7.46
237	2,440	10.29	643	6,620	10.28
321	7,650	23.81	391	9,070	23
6,650	60,500	9.09	8,270	67,900	8.21
<del>_</del>					
367	14,700	39.88	741	19,700	26.55
327		17.01		18,600	16.89
764		10.68	617	14,900	24.08
			3,490	79,200	22.69
					13.30
	01,000	-0.70	0,200	02,000	10.00
337 000	3,440,000	10.22	329.000	3,400,000	10.33
					9.89
					10.15
	(thousand metric tons)  1,510 9,310 3,210 16,400 25,100 15,900 2,970 3,820 85,900 2,540 6,480 7,830 30,700 55,900 7,310 1,590 18,900 971 97,800 3,600 8,300 1,170 465 67,200 35,100 2,920 237 321 6,650	Quantity (thousand metric tons)         Value (thousands)           1,510         \$12,900           9,310         104,000           3,210         32,300           16,400         184,000           25,100         250,000           15,900         164,000           2,970         40,000           3,820         38,100           85,900         1,150,000           2,540         27,900           6,480         60,200           7,830         67,800           30,700         345,000           55,900         426,000           7,310         64,800           1,590         26,000           18,900         138,000           971         11,500           97,800         946,000           3,600         39,300           8,300         83,900           1,170         14,700           465         12,300           67,200         328,000           35,100         303,000	Quantity (thousand metric tons)         Value (thousands)         Unit value           1,510         \$12,900         \$8.54           9,310         104,000         11.16           3,210         32,300         10.09           16,400         184,000         11.23           25,100         250,000         9.97           15,900         164,000         10.34           2,970         40,000         13.50           3,820         38,100         9.98           85,900         1,150,000         13.35           2,540         27,900         11.02           6,480         60,200         9.29           7,830         67,800         8.66           30,700         345,000         11.25           55,900         426,000         7.61           7,310         64,800         8.86           1,590         26,000         16.38           18,900         138,000         7.28           971         11,500         11.85           97,800         946,000         9.67           3,600         39,300         10.91           8,300         83,900         10.11           1,170	Quantity (thousand metric tons)         Value (thousands)         Unit value value         Quantity (thousand metric tons)           1,510         \$12,900         \$8.54         919           9,310         104,000         11.16         7,950           3,210         32,300         10.09         2,350           16,400         184,000         11.23         21,300           25,100         250,000         9.97         30,100           15,900         164,000         10.34         20,000           2,970         40,000         13.50         3,910           3,820         38,100         9.98         6,890           85,900         1,150,000         13.35         100,000           2,540         27,900         11.02         4,050           6,480         60,200         9.29         6,730           7,830         67,800         8.66         12,100           30,700         345,000         11.25         32,100           55,900         426,000         7.61         59,200           7,310         64,800         8.86         8,800           1,590         26,000         16,38         470           18,900         138,000	Quantity (thousand metric tons)         Value (thousands)         Unit value         Quantity (thousand metric tons)         Value (thousands)           1,510         \$12,900         \$8.54         919         \$12,300           9,310         \$104,000         \$11.16         7,950         \$101,000           3,210         \$32,300         \$10.09         2,350         \$24,400           16,400         \$184,000         \$11.23         \$21,300         \$244,000           25,100         \$250,000         \$9.97         \$30,100         \$32,000           25,900         \$164,000         \$10.34         \$20,000         \$27,000           2,970         \$40,000         \$13.55         \$3,910         \$49,600           3,820         \$38,100         \$9.98         \$6.890         \$72,900           \$85,900         \$1,150,000         \$13.35         \$100,000         \$1,400,000           \$46,480         \$60,200         \$9.29         \$6,730         \$71,800           \$6,480         \$62,200         \$9.29         \$6,730         \$71,800           \$7,310         \$64,800         \$8.86         \$8.800         \$77,100           \$1,590         \$26,000         \$16.38         \$470         \$7,130 </td

W Withheld to avoid disclosing company proprietary data; included in "Other miscellaneous uses and specified uses not listed." -- Zero.

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

<sup>&</sup>lt;sup>2</sup>Estimated quantities have been recalculated.

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

### ${\bf TABLE~10} \\ {\bf LIMESTONE~AND~DOLOMITE~SOLD~OR~USED~BY~PRODUCERS~IN~THE~UNITED~STATES~IN~2014,~BY~USE$^1} \\$

		Limestone <sup>2</sup>		Dolomite			
Use	Quantity	Value	Unit value	Quantity	Value	Unit value	
Construction:							
Coarse aggregate (+1½ inch):							
Macadam	614	8,370	\$13.64	13	139	\$10.69	
Riprap and jetty stone	5,640	63,000	11.17	176	2,390	13.60	
Filter stone	1,550	14,600	9.42	137	1,690	12.30	
Unspecified coarse aggregate	16,400	180,000	10.95	424	4,190	9.87	
Coarse aggregate, graded:							
Concrete aggregate, coarse	19,600	199,000	10.18	3,250	37,500	11.54	
Bituminous aggregate, coarse	8,300	89,100	10.74	2,180	26,700	12.26	
Bituminous surface-treatment aggregate	2,300	27,200	11.84	332	3,770	11.36	
Railroad ballast	969	9,130	9.42	347	4,690	13.51	
Unspecified graded coarse aggregate	67,400	907,000	13.46	2,150	27,700	12.87	
Fine aggregate (- 3/8 inch):							
Stone sand, concrete	1,620	14,700	9.09	370	5,290	14.28	
Stone sand, bituminous mix or seal	3,060	33,100	10.81	722	10,300	14.22	
Screening, undesignated	7,840	51,800	6.61	855	17,300	20.23	
Unspecified fine aggregate	21,300	238,000	11.19	451	4,490	9.95	
Coarse and fine aggregates:	<del></del>						
Graded road base or subbase	43,000	329,000	7.66	2,000	15,900	7.96	
Unpaved road surfacing	6,680	61,400	9.19	507	4,080	8.06	
Terrazzo and exposed aggregate	72	649	9.01	W	W	W	
Crusher run or fill or waste	17,300	120,000	6.92	1,550	13,400	8.63	
Roofing granules	W	W	W	W	W	W	
Unspecified coarse and fine aggregates	69,100	684,000	9.89	2,170	17,900	8.26	
Unspecified and other construction materials	1,680	19,000	11.32	54	514	9.52	
Agricultural:	<del></del>						
Agricultural limestone	7,690	78,400	10.20	691	8,920	12.90	
Poultry grit and mineral food	1,730	27,000	15.57	19	539	28.35	
Unspecified and other agricultural uses	104	6,060	58.24	41	6,660	162.47	
Chemical and metallurgical:	<del></del>						
Cement manufacture	58,200	306,000	5.25	779	7,790	10.00	
Lime manufacture	37,500	319,000	8.51	W	W	W	
Dead-burned dolomite manufacture	W	W	W	W	W	W	
Flux stone	2,170	17,200	7.95	1,750	12,000	6.83	
Chemical stone	643	6,620	10.29	,	·		
Glass manufacture	391	9,070	23.19				
Sulfur oxide removal	8,270	67,900	8.21				
Special:		,					
Mine dusting or acid water treatment	708	18,500	26.13				
Asphalt fillers or extenders	1,050	16,200	15.37	25	221	9	
Whiting or whiting substitute	145	2,800	19.28				
Other fillers or extenders	1,860	27,400	14.70	W	W	W	
Other miscellaneous uses and specified uses not listed	3,430	46,000	13.42	31	188	6.07	
Unspecified: <sup>3</sup>		10,000	13.12	51	100	5.07	
Reported	191,000	1,830,000	9.59	13,400	133,000	9.88	
Estimated	220,000	2,040,000	9.39	6,480	68,600	10.59	
Total or average	829,000	7,870,000	9.31	41,700	442,000	10.59	
W Withheld to avoid disclosing company proprietary data: in	,	, ,	9.49	41,/00	442,000	10.59	

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

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

<sup>&</sup>lt;sup>2</sup>Includes a minor amount of limestone-dolomite reported with no distinction between the two types of stone.

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

TABLE 11 LIMESTONE AND DOLOMITE SOLD OR USED BY PRODUCERS IN 2014, BY STATE AND USE  $^{\rm 1}$ 

(Thousand metric tons and thousand dollars)

	Concrete a			s aggregate	Roadstone ar		Riprap and rai		Other constr	
State	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Alabama	1,190	11,800	5,540	63,700	840	10,800	156	1,840	5,310	61,500
Alaska										
Arizona										
Arkansas	82	431	191	1,690	441	3,060	W	W	1,080	8,350
California	27	368	240	3,360	252	1,730	W	W	W	W
Colorado	W	W			W	W	W	W	W	W
Connecticut							W	W	W	W
Delaware			W	W	W	W				
Florida	6,660	86,300	11,800	209,000	5,890	48,800	66	1,240	7,710	54,700
Georgia	W	W	W	W	W	W	W	W	W	W
Hawaii										
Idaho										
Illinois	3,320	28,100	10,500	127,000	4,960	41,300	370	4,850	5,730	43,900
Indiana	2,440	21,500	6,880	52,700	6,600	48,600	784	7,770	3,340	22,600
Iowa	486	6,200	193	2,460	2,360	24,300	98	1,820	1,050	12,200
Kansas	W	W	425	4,110	2,110	17,300	52	666	808	5,130
Kentucky	3,100	29,300	4,550	50,100	3,830	37,000	306	3,250	6,090	50,000
Louisiana	W	W	W	$\mathbf{W}$	W	W			W	W
Maine	45	238			27	172				
Maryland	614	6,460	2,570	30,900	234	2,330	W	W	876	7,900
Massachusetts	116	427	63	504					W	W
Michigan	2,080	17,200	2,400	32,100	776	6,720	97	1,360	1,870	13,600
Minnesota	298	3,100	W	W	791	8,810	80	2,690	876	4,290
Mississippi <sup>2</sup>	W	W	W	W	W	W	4	62	W	W
Missouri	2,680	23,500	2,040	22,300	5,150	33,700	2,100	12,700	2,530	17,400
Montana			W	W	W	W	W	W	W	W
Nebraska	W	W	58	862	W	W	1	20	W	W
Nevada									W	W
New Hampshire										
New Jersey										
New Mexico	212	3,770	W	W	162	1,320	12	322	100	874
New York	2,900	38,600	3,580	45,800	554	6,320	350	5,600	3,870	34,700
North Carolina										
North Dakota										
Ohio	1,180	8,280	5,860	62,200	3,270	26,100	211	2,430	9,970	84,100
Oklahoma	1,950	19,500	2,440	22,400	7,490	55,800	414	6,200	6,470	44,000
Oregon			2,110							
Pennsylvania	3,450	38,100	6,040	69,200	6,960	79,800	396	6,350	5,170	35,900
Rhode Island									5,170	33,700
South Carolina	W	W	W	W	W	W			290	3,020
South Dakota					W	W	W	W	W	3,020 W
Tennessee	3,560	46,300	7,400	107,000	2,040	22,200	244	3,000	11,600	125,000
Texas	5,750	53,400	9,670	157,000	7,060	43,200	702	8,610	19,400	196,000
Utah	5,750		<i>7</i> ,070	137,000	7,000				W	170,000 W
Vermont	33	254	116	851	189	1,710	17	173	413	3,230
Virginia	1,560	19,300	1,380	16,700	2,200	26,800	264	3,720	1,440	17,400
Washington	1,500	19,300	1,380 W	10,700 W	2,200 W	20,800 W		3,720	1,440 W	17,400 W
West Virginia	392		741			12,300			1,290	
Wisconsin	392	5,050		8,430 1,520	1,110 2,870	12,300	115	2,320 674	1,290	23,500
	231	2,380	151		2,870 W	18,900 W	207 16	356	1,000	3,930
Wyoming Total	44,700	2390	94 800	1,090,000						1,600 874,000
	•	472,000	84,800		68,200	579,000	7,060	78,000	98,400	
Total withheld	1,880	27,100	2,710	49,200	1,490	23,900	74	1,230	4,150	70,100

See footnotes at end of table.

### ${\it TABLE~11--Continued} \\ {\it LIMESTONE~AND~DOLOMITE~SOLD~OR~USED~BY~PRODUCERS~IN~2014,~BY~STATE~AND~USE}^1$

State	Cement ma	ınufacture	Agricultu	ral uses	Lime mar	ufacture	Other	uses	Total		
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	
Alabama	W	W	W	W	8,310	73,700	7,230	76,200	30,700	313,000	
Alaska											
Arizona	W	W	W	W	W	W	W	W	3,550	30,600	
Arkansas	W	W	87	750	W	W	9,260	72,900	13,600	97,200	
California	W	W	312	5,990	W	W	13,000	68,000	15,300	84,700	
Colorado							387	4,070	836	8,380	
Connecticut							873	13,700	1,290	28,000	
Delaware	<del></del>						W	W	(3)	(3)	
Florida	4,730	19,700	567	4,790			18,100	233,000	55,500	658,000	
Georgia	W	W					2,570	36,000	5,490	71,500	
Hawaii											
Idaho			W	W			W	W	156	4,200	
Illinois	W	W	1,770	15,800	369	2,470	23,700	239,000	51,700	512,000	
Indiana	W	W	1,380	9,400			20,700	166,000	43,900	336,000	
Iowa	W	W	320	2,330	567	3,970	25,000	241,000	31,700	298,000	
Kansas	W	W	59	419			9,460	82,900	14,700	125,000	
Kentucky			355	2,450	2,240	15,800	30,700	284,000	51,200	472,000	
Louisiana			W	W	,	·	W	W	(3)	(3)	
Maine	629	2,100					944	7,920	1,650	10,400	
Maryland	W	W	W	W			6,330	64,600	14,100	127,000	
Massachusetts	153	2,980	W	W	W	W	W	W	988	22,000	
Michigan			970	9,570	W	W	15,000	91,900	25,500	190,000	
Minnesota			53	430			2,790	32,200	4,910	51,600	
Mississippi <sup>2</sup>			W	W			568	15,300	2,130	60,500	
Missouri	6,190	32,600	624	3,450	10,800	56,900	32,700	293,000	64,800	495,000	
Montana	773	7,210	W	W W	W	30,500 W	32,700 W	273,000 W	2,100	19,000	
Nebraska	- '73 W	V,210	228	4,100			4,240	51,200	7,360	81,500	
Nevada	- "	W	W	4,100 W	W	W	W	W W	3,920	26,200	
New Hampshire	_ ''						48	430	48	430	
New Jersey							352	3,200	352	3,200	
New Mexico							1,100	9,180	2,120	17,200	
New York			52	508			19,100	199,000	30,400	331,000	
North Carolina				308			3,120	48,100	3,120	48,100	
North Dakota	_						3,120	46,100	3,120	40,100	
Ohio	W	W	270	3,270	417	3,570	32,500	286,000	54,600	483,000	
Oklahoma	– W	W	336	3,010	W	3,370 W	11,400	93,200	32,100	251,000	
-	- w	4,630					336	2,640	1,390		
Oregon Pennsylvania	_	21,800	493	8,580	2,560	77,900	28,100	339,000	56,000	7,270 677,000	
Rhode Island										677,000	
	W		W	W			1.690	10.400	4.000	25,000	
South Carolina	_	W 2.290	w		921	 5 750	1,680	18,400	4,980	35,900	
South Dakota	822	2,380	102	2.010	821	5,750	746	5,560	2,440	14,400	
Tennessee	_ W	W	192	2,810	1.550		12,100	171,000	38,500	484,000	
Texas	_ 11,700	49,800	465	6,450	1,550	6,210	81,300	681,000	138,000	1,200,000	
Utah		W	W	W	W	W	2,780	25,900	5,730	48,600	
Vermont			W	W			1,450	14,300	2,220	20,500	
Virginia	_ W	W	736	20,200	W	W	5,730	83,300	13,900	197,000	
Washington	_ 823	12,600	W	W	150	1,540	433	13,700	1,430	28,600	
West Virginia	W	W	W	W			8,550	96,500	14,200	159,000	
Wisconsin			358	4,730			12,300	79,200	17,200	111,000	
Wyoming	736	1,230					1,400	9,500	2,690	15,900	
Total	_ 30,400	157,000	9,630	109,000	27,800	248,000	448,000	4,250,000	XX	XX	
Total withheld	28,500	156,000	648	18,500	10,900	78,100	1,520	27,200	XX	XX	
Grand total	58,900	313,000	10,300	128,000	38,600	326,000	450,000	4,280,000	871,000	8,310,000	

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

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

<sup>&</sup>lt;sup>2</sup>A significant amount of sold or used material was shipped in from other States.

<sup>&</sup>lt;sup>3</sup>Withheld 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 2014, BY USE  $^1$ 

-	Grani	ite	Trapro	ock	Sandstone and	d quartzite <sup>2</sup>
Use	Quantity	Value	Quantity	Value	Quantity	Value
Construction:						
Coarse aggregate (+1½ inch):						
Macadam	W	$\mathbf{W}$	W	W	W	W
Riprap and jetty stone	825	14,900	589	9,070	294	4,340
Filter stone	110	1,620	234	2,480	199	2,550
Unspecified coarse aggregate	1,110	22,800	2,270	24,300	511	5,390
Coarse aggregate, graded:						
Concrete aggregate, coarse	3,360	42,900	1,730	23,200	576	5,480
Bituminous aggregate, coarse	3,880	47,600	3,120	39,500	924	11,400
Bituminous surface-treatment aggregate	320	7,050	564	4,770	100	705
Railroad ballast	2,280	25,600	1,660	18,200	W	W
Unspecified graded coarse aggregate	20,900	344,000	5,930	77,400	1,620	16,700
Fine aggregate (- 3/8 inch):						
Stone sand, concrete	694	8,400	430	5,480	494	6,280
Stone sand, bituminous mix or seal	1,010	12,000	824	7,790	485	3,510
Screening, undesignated	1,690	17,000	1,160	9,550	191	1,300
Unspecified fine aggregate	6,530	84,000	1,840	19,300	1,140	11,400
Coarse and fine aggregates:						
Graded road base or subbase	3,420	32,900	4,470	33,800	2,250	18,400
Unpaved road surfacing	297	2,600	534	2,810	308	2,320
Terrazzo and exposed aggregate	40	1,130	21	337	W	W
Crusher run or fill or waste	1,960	14,600	1,250	13,600	665	6,090
Roofing granules	W	W	W	W	W	W
Unspecified coarse and fine aggregates	15,800	169,000	5,350	53,800	1,260	10,500
Unspecified and other construction materials	11	49	28	467	154	1,590
Agricultural:						,
Agricultural limestone						
Poultry grit and mineral food					1	19
Unspecified and other agricultural uses	W	W				
Chemical and metallurgical:						
Cement manufacture					W	W
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				
Whiting or whiting substitute						
Other fillers or extenders					W	W
Other miscellaneous uses and specified uses not listed	1	 7	48	436	1,810	30,000
	1	/	48	430	1,810	30,000
Unspecified: <sup>3</sup>	<b>5</b> 0 500	071 000	27 -00	220 000	12 100	100.000
Reported	70,600	871,000	25,600	339,000	12,400	109,000
Estimated	31,100	383,000	23,000	291,000	18,700	173,000
Total	166,000	2,110,000	80,800	979,000	46,400	434,000

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

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

<sup>&</sup>lt;sup>2</sup>Includes sandstone-quartzite reported with no distinction between the two kinds of stone.

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

## TABLE 13 MARBLE, VOLCANIC CINDER AND SCORIA, AND MISCELLANEOUS STONE SOLD OR USED BY PRODUCERS IN THE UNITED STATES IN 2014, BY USE $^{\rm I}$

	Marb	le	Volcanic cinde	er and scoria	Miscellaneous stone		
Use	Quantity	Value	Quantity	Value	Quantity	Value	
Construction:							
Coarse aggregate (+1½ inch):							
Macadam							
Riprap and jetty stone	W	W	W	W	410	6,610	
Filter stone					129	1,540	
Unspecified coarse aggregate	31	478	4	37	556	6,960	
Coarse aggregate, graded:							
Concrete aggregate, coarse	W	W			1,500	21,900	
Bituminous aggregate, coarse	W	W			1,280	17,200	
Bituminous surface-treatment aggregate	W	W			265	5,570	
Railroad ballast					1,600	14,900	
Unspecified graded coarse aggregate	257	3,410			2,080	21,300	
Fine aggregate (- 3/8 inch):							
Stone sand, concrete	W	W			374	4,380	
Stone sand, bituminous mix or seal	W	W			595	4,590	
Screening, undesignated	W	W			334	3,470	
Unspecified fine aggregate	71	667			751	8,140	
Coarse and fine aggregates:							
Graded road base or subbase	W	W	W	W	3,820	34,300	
Unpaved road surfacing			15	184	411	3,240	
Terrazzo and exposed aggregate	W	W	73	960	233	3,320	
Crusher run or fill or waste	W	W	248	1,570	536	5,020	
Roofing granules							
Unspecified coarse and fine aggregates	282	3,080			2,950	23,200	
Unspecified and other construction materials	2	43	203	1,750	992	17,400	
Agricultural:							
Agricultural limestone							
Poultry grit and mineral food							
Unspecified and other agricultural uses	2	23			93	358	
Chemical and metallurgical:							
Cement manufacture	2	14			646	1,930	
Lime manufacture							
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	W	W					
Other fillers or extenders	1,470	48,200			1	10	
Other miscellaneous uses and specified uses not listed	2	20			39	290	
Unspecified: <sup>2</sup>	-	20			27	270	
Reported			1,990	9,580	13,400	95,600	
Estimated	3,840	32,500	1,240	11,100	32,800	322,000	
Total	7,420	117,000	3,810	25,500	65,800	624,000	

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

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

<sup>&</sup>lt;sup>2</sup>Reported and estimated production without a breakdown by end use.

 ${\it TABLE~14}$  RECYCLED ASPHALT CONCRETE SOLD OR USED BY PRODUCERS IN THE UNITED STATES, BY STATE  $^1$ 

		2013 <sup>2</sup>			2014	
	Quantity			Quantity		
	(thousand	Value	Unit	(thousand	Value	Unit
State	metric tons)	(thousands)	value	metric tons)	(thousands)	value
Alabama	381	\$5,680	\$14.92	400	\$5,990	\$15.00
Alaska		2,070	14.04	130	1,950	15.00
Arizona	241	2,640	10.94	181	1,860	10.26
Arkansas	30	305	10.26	86	924	10.72
California	2,990	25,000	8.35	3,000	24,800	8.27
Colorado	500	3,220	6.45	436	2,940	6.76
Connecticut	580	3,960	6.83	564	3,880	6.89
Delaware	91	605	6.65	100	643	6.44
Florida	313	2,690	8.60	309	2,660	8.59
Georgia	295	2,870	9.71	282	2,850	10.11
Hawaii						
Idaho	211	1,630	7.71	218	1,650	7.56
Illinois	1,720	11,300	6.60	1,860	12,600	6.74
Indiana	156	1,410	9.01	158	1,420	8.97
Iowa	249	1,730	6.95	424	2,560	6.04
Kansas	591	1,870	3.17	591	1,870	3.17
Kentucky	375	1,280	3.41	141	529	3.74
Louisiana	134	1,320	9.82	124	1,220	9.81
Maine	210	2,740	13.03	207	2,770	13.41
Maryland	195	1,540	7.87	187	1,480	7.92
Massachusetts	434	4,090	9.44	446	4,480	10.05
Michigan	895	4,430	4.95	908	4,230	4.66
Minnesota	1,340	10,400	7.74	1,360	10,300	7.62
Mississippi		66	4.68	4	43	12.23
Missouri	175	1,280	7.34	237	1,770	7.47
Montana		1,520	10.33	147	1,520	10.33
Nebraska	83	640	7.72	153	1,250	8.12
Nevada	151	1,180	7.81	242	1,950	8.04
New Hampshire	302	3,120	10.30	269	2,460	9.16
New Jersey	179	2,420	13.56	144	1,560	10.81
New Mexico	72	560	7.79	76	816	10.76
New York	737	6,270	8.51	744	8,100	10.88
North Carolina	1,230	10,600	8.61	1,260	15,400	12.16
North Dakota	67	736	11.03	50	379	7.61
Ohio	61	474	7.74	70	564	8.12
Oklahoma	91	1,010	11.01	95	1,050	10.97
Oregon	102	695	6.80	113	1,020	9.01
Pennsylvania	1,240	9,040	7.26	731	6,260	8.55
Rhode Island	98	1,370	13.99	98	1,370	13.99
South Carolina	376	3,310	8.81	376	4,160	11.06
South Dakota		1,240	9.27	162	1,620	9.98
Tennessee	155	1,750	11.29	195	2,210	11.34
Texas	275	1,510	5.49	302	1,790	5.91
Utah	505	4,650	9.21	301	2,370	7.87
Vermont	159	2,660	16.71	171	2,450	14.31
Virginia	265	2,750	10.36	300	3,230	10.78
Washington	160	1,220	7.64	966	8,040	8.32
West Virginia	8	104	13.40	8	104	13.40
Wisconsin	475	3,070	6.46	461	2,990	6.49
Wyoming	82	358	4.38	82	358	4.38
Total or average	19,400	156,000	8.05	19,900	168,000	8.47

<sup>--</sup> Zero

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

 $<sup>^2\</sup>mbox{Estimated}$  quantities have been recalculated.

 ${\it TABLE~15}$  RECYCLED PORTLAND CEMENT CONCRETE SOLD OR USED BY PRODUCERS IN THE UNITED STATES, BY STATE  $^1$ 

State Alabama Alaska Arizona Arkansas California Colorado Connecticut Delaware Florida	Quantity (thousand metric tons)	Value (thousands)  \$1,560 1,830 67 27,600 4,520 800 313	Unit value \$12.06 8.15 7.58 7.32	Quantity (thousand metric tons)  6 52 232 2	Value (thousands) \$129 863 2,060 10	Unit value \$22.09 16.64 8.89
Alabama Alaska Arizona Arkansas California Colorado Connecticut Delaware Florida	metric tons)	(thousands) \$1,560 1,830 67 27,600 4,520 800	value  \$12.06 8.15 7.58 7.32	metric tons)  6 52 232 2	(thousands) \$129 863 2,060	value \$22.09 16.64
Alabama Alaska Arizona Arkansas California Colorado Connecticut Delaware Florida	130 224 9 3,770 682 96 69	\$1,560 1,830 67 27,600 4,520 800	\$12.06 8.15 7.58 7.32	6 52 232 2	\$129 863 2,060	\$22.09 16.64
Alaska Arizona Arkansas California Colorado Connecticut Delaware Florida	130 224 9 3,770 682 96 69 521	\$1,560 1,830 67 27,600 4,520 800	\$12.06 8.15 7.58 7.32	52 232 2	863 2,060	16.64
Arizona Arkansas California Colorado Connecticut Delaware Florida	224 9 3,770 682 96 69 521	1,830 67 27,600 4,520 800	8.15 7.58 7.32	232 2	2,060	
Arkansas California Colorado Connecticut Delaware Florida	9 3,770 682 96 69 521	67 27,600 4,520 800	7.58 7.32	2	,	8.89
California Colorado Connecticut Delaware Florida	3,770 682 96 69 521	27,600 4,520 800	7.32		10	
Colorado Connecticut Delaware Florida	682 96 69 521	4,520 800				6.24
Connecticut Delaware Florida	96 69 521	800	( (2	3,190	22,500	7.04
Delaware Florida	69 521		6.63	803	5,320	6.63
Florida	521	313	8.35	90	765	8.54
	_		4.52	77	355	4.60
	140	2,090	4.01	569	2,000	3.51
Georgia	_	1,530	10.22	93	732	7.85
Hawaii	_ 2	23	14.11	2	28	14.23
Idaho	_ 53	412	7.71	53	412	7.71
Illinois		20,100	8.28	2,340	17,500	7.48
Indiana	141	1,100	7.78	140	1,080	7.72
Iowa	1,030	5,640	5.49	1,490	7,680	5.14
Kansas	_ 322	2,770	8.58	322	2,770	8.58
Kentucky						
Louisiana	12	204	17.15	61	916	15.13
Maine	44	344	7.82	64	453	7.13
Maryland	347	2,960	8.54	335	2,970	8.87
Massachusetts	206	2,100	10.18	230	1,720	7.46
Michigan	1,050	7,120	6.79	983	6,760	6.87
Minnesota	919	5,510	6.00	945	5,550	5.87
Mississippi	68	463	6.81	68	463	6.81
Missouri	_ 12	68	5.57	11	63	5.50
Montana	22	353	16.15	22	353	16.15
Nebraska	110	1,300	11.80	110	1,300	11.80
Nevada	138	1,270	9.16	84	569	6.79
New Hampshire	90	641	7.12	90	643	7.12
New Jersey	_ 346	2,940	8.51	354	2,990	8.45
New Mexico	14	120	8.84	13	91	6.79
New York	235	1,720	7.34	272	1,950	7.17
North Carolina	332	3,570	10.77	310	3,480	11.23
North Dakota	_ 37	209	5.68	56	365	6.54
Ohio	299	2,370	7.95	316	2,610	8.26
Oklahoma	312	2,880	9.23	304	2,810	9.22
Oregon	95	870	9.13	71	587	8.31
Pennsylvania	345	1,750	5.08	452	2,510	5.55
Rhode Island	10	83	8.21	10	83	8.21
South Carolina	_ 232	2,470	10.66	258	2,840	11.01
South Dakota	109	772	7.09	144	1,010	7.02
Tennessee	20	157	7.97	21	173	8.04
Texas	3,850	24,700	6.42	3,860	15,000	3.90
Utah	380	3,290	8.67	307	2,190	7.12
Vermont	29	173	5.95	57	510	8.98
Virginia	798	7,140	8.96	768	6,670	8.68
Washington	317	2,260	7.14	1,100	8,310	7.58
West Virginia						
Wisconsin	679	3,580	5.28	561	2,920	5.20
Wyoming	60	288	4.82	60	288	4.82
Total or average	21,100	154,000	7.29	21,800	143,000	6.59

<sup>--</sup> Zero

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

<sup>&</sup>lt;sup>2</sup>Estimated quantities have been recalculated.

TABLE 16 CRUSHED AND BROKEN STONE OPERATIONS IN THE UNITED STATES IN 2014, BY STATE  $^{\rm I}$ 

State	Active operations	Active quarries	Dredging operations	Stationary	Portable	Stationary and portable	None or unspecified	Sales yards
Alabama	79	70	operations 	59	7	2	2	yarus
Alaska	18	21		4	12		1	
Arizona	52	53		21	20			1
	- 32 72					9		2
Arkansas	=	70		32	25	8	4	3
California	151	132	1	67	33	12	14	24
Colorado	_ 44	239		16	15	2	5	6
Connecticut	32	29		18	9	1	1	3
Delaware	_ 5							5
Florida	105	80	2	32	29	12	4	26
Georgia	88	80		68	4	1	6	9
Hawaii		23		8	12	2		
Idaho	_ 38	67		5	23	1	9	
Illinois	151	124	1	73	43	4	3	27
Indiana	91	86		77	5	1	3	5
Iowa	163	196	1	23	127		10	2
Kansas	75	88		20	47	1	2	5
Kentucky	91	90		67	16	5	1	2
Louisiana	15	2		1	1			13
Maine	27	22		11	8	2	1	5
Maryland	43	27		22	2	1	2	16
Massachusetts	_ 43	38		24	9	3	2	5
Michigan	35	33		17	6	1	2	9
Minnesota	42	52		10	20	2	3	7
Mississippi	19	3		2	1			16
Missouri	195	205		98	71	13	8	5
Montana	23	34		7	13	2	1	
Nebraska	14	10		7	3			4
Nevada	24	23		15	5	2		2
New Hampshire	31	29		13	12	1	3	2
New Jersey	22	17		14		2		6
New Mexico	38	41		12	21	3	1	1
New York	118	116	1	73	24	13	2	5
North Carolina	131	112		93	14	3	1	20
North Dakota	13	11			8		3	2
Ohio	109	96		65	16	7	7	14
Oklahoma	70	71		48	10	5	5	2
Oregon	140	159	1	33	93	3	7	3
Pennsylvania	245	241		158	42	17	18	10
Rhode Island	7	5		5				2
South Carolina	43	35		30	3	2		8
South Dakota	18	15		11	4			3
Tennessee	133	129		112	10	3	3	5
Texas	228	225		103	73	13	11	28
Utah	27	25		11	9		4	3
Vermont	49	47		17	20	6	4	2
Virginia	120	98		66	14	15	1	24
Washington	88	89		30	37	4	10	7
West Virginia	34	29		22	2	3	10	6
Wisconsin	131	163		32	76	4	12	7
Wyoming	30	30		6	19		4	1
11 younng	3,582	3,680	7	1,758	1,073	191	181	372

<sup>--</sup> Zero.

<sup>&</sup>lt;sup>1</sup>Includes recycling plants.

 $\label{eq:table 17} \text{U.S. EXPORTS OF CRUSHED STONE IN 2014, BY DESTINATION}^1$ 

			Limestone				
			for cement	Chalk,	Granules,		
Destination		Limestone	manufacturing	crude	chippings	Other	Total
North America	metric tons	234,000	27,500	160	39,000	141,000	441,000
South America	do.	43		6	3,980	1,260	5,290
Europe	do.	248	228	9	3,120	3,060	6,660
Asia	do.	64	2,420	5	213	2,560	5,260
Oceania	do.		25			59	84
Middle East	do.	7	129	9	830	208	1,180
Africa	do.		29		400	26	455
Total:							
Quantity	do.	234,000	30,300	189	47,500	148,000	460,000
Value	thousands	\$6,320	\$14,400	\$1	\$11,100	\$18,700	\$50,500

do. Ditto. -- Zero.

Source: U.S. Census Bureau.

 ${\it TABLE~18} \\ {\it U.S.~IMPORTS~OF~CRUSHED~STONE~AND~CALCIUM~CARBONATE~FINES,~BY~TYPE$}^1$ 

		2013			2014	
	Quantity			Quantity		
	(thousand)	Value, c.i.f. <sup>2</sup>	Unit	(thousand)	Value, c.i.f. <sup>2</sup>	Unit
Type	metric tons)	(thousands)	value	metric tons)	(thousands)	value
Crushed stone and chips:						
Limestone	11,100	\$88,900	\$8.02	13,200	\$103,000	\$7.82
Limestone for flux or cement manufacturing	1,190	14,500	12.16	1,320	15,500	11.78
Other	5,420	113,000	20.76	5,410	131,000	24.14
Total	17,700	216,000	XX	19,900	249,000	XX
Calcium carbonate fines: <sup>3</sup>						
Natural chalk	(4)	90	195.70	(4)	30	277.99
Calcium carbonates, other chalk	3	1,560	615.34	2	2,170	910.90
Total or average	3	1,650	XX	2	2,200	XX
Grand total or average	17,700	218,000	XX	19,900	251,000	XX

XX Not applicable.

Source: U.S. Census Bureau.

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

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

<sup>&</sup>lt;sup>2</sup>Cost, insurance, and freight value.

<sup>&</sup>lt;sup>3</sup>Excludes precipitated calcium carbonate.

<sup>&</sup>lt;sup>4</sup>Less than ½ unit.

 ${\it TABLE~19}$  THE TOP 100 PRODUCERS OF CRUSHED STONE IN THE UNITED STATES  $^1$ 

2014 Rank	2013 Rank	Company	2014 Rank	2013 Rank	Company
1	1	Vulcan Materials Co.	51	61	Albert Frei & Sons, Inc.
2	2	Martin Marietta Aggregates	52	44	Snyder Associated Cos., Inc.
3	3	Oldcastle Materials, Inc.	53	54	Votorantim Cement North America
4	4	Lehigh Hanson, Inc.	54	51	Anchor Stone Co.
5		•			American Infrastructure
	5	CEMEX S.A.B. de C.V.	55	56	
6 7	6 7	Lafarge North America Inc.	56 57	48 53	McGeorge Contracting Co.
8		Carmeuse Lime & Stone	58	55 59	The Kraemer Co. Glenn O. Hawbaker, Inc.
9	8	Rogers Group, Inc.	59	59 52	*
	9	Holcim Group/Aggregate Industries Management, Inc.			Stavola Construction Materials, Inc.
10	10	Lhoist North America	60	64	L. G. Everist, Inc.
11	11	New Enterprise Stone & Lime Co., Inc.	61	60	Omya Inc.
12	12	Luck Stone Corp.	62	57	Schildberg Construction Co., Inc.
13	13	Ash Grove Cement Co.	63	58	Graniterock Co.
14	15	Dolese Bros. Co.	64	66	Pounding Mill Quarry Corp.
15	14	Summit Materials, LLC.	65	68	United States Lime and Minerals, Inc.
16	17	Vecellio & Grogan, Inc.	66	63	Wendling Quarries Inc.
17	24	Mulzer Crushed Stone, Inc.	67	65	ISP Minerals, Inc.
18	16	National Lime & Stone Co.	68	98	Peckham Industries, Inc.
19	19	Buzzi Unicem USA Inc.	69	_	Youngquist Brothers Rock Inc.
20	20	Eucon Corp.	70	67	Mathy Construction Co.
21	21	Eagle Materials Inc.	71	75	Chantilly Crushed Stone, Inc.
22	22	Graymont Ltd.	72	74	Salem Stone Corp
23	23	The H&K Group	73	72	Vicat Group, The
24	18	Texas Industries, Inc.	74	80	Mitsubishi Cement Corp.
25	27	Fred Weber, Inc.	75	78	Higgins Asphalt Paving Co., Inc
26	26	Texas Crushed Stone Co., Inc.	76	69	Granite Construction, Inc.
27	25	Mississippi Lime Co.	77	79	River Products Co., Inc.
28	28	MDU Resources Group, Inc.	78	77	Bruening Rock Products, Inc.
29	30	Colorado Materials, Ltd	79	92	Palm Beach Aggregates, Inc.
30	31	Titan America LLC	80	76	RiverStone Group, Inc.
31	35	Bluegrass Materials Co.	81	97	Rockydale Quarries Corp.
32	36	Aggregate Management, Inc.	82	81	Frost Crushed Stone Co., Inc.
33	37	The Heritage Group	83	_	Zack Burkett Co.
34	62	Carolina Sunrock Corp.	84	73	Cementos Portland Valderrivas S. A.
35	32	Tower Rock Stone Co.	85	_	MGQ Aggregates, Inc.
36	41	Cementos Argos S. A.	86	87	B.V. Hedrick Gravel & Sand Co., Inc.
37	38	ESSROC Cement Corp.	87	88	Linwood Mining & Minerals Corp.
38	37	Wake Stone Corp.	88	_	Warren Paving, Inc.
39	40	VantaCore Partners LP	89	82	East Fairfield Coal Co.
40	43	Imerys	90	70	Weldon Materials, Inc.
41	46	The Melvin Stone Co.	91	85	Dyer Quarry, Inc.
42	42	Bureau of Land Management	92	_	Kerford Limestone Co.
43	49	Irving Materials, Inc.	93	86	Junction City Mining Company, LLC
44	55	Colas Inc.	94	84	Yager Materials
45	50	CalPortland Co.	95	_	Bonita Grande Aggregates
46	45	Boxley Materials Co.	96	_	S.M. Lorusso & Sons, Inc.
47	33	Capitol Aggregates, Ltd.	97	100	Glasgow, Inc.
48	71	Frontera Materials, Inc.	98	29	U.S. Forest Service
49	47	Greer Industries, Inc.	99	_	U.S. Concrete, Inc.
50	39	Hoover, Inc.	100		Brox Industries, Inc.

<sup>—</sup> Not in the top 100 producers of crushed stone in the United States in 2013.

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