

2011 Minerals Yearbook

STONE, CRUSHED [ADVANCE RELEASE]

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A total 1.16 billion metric tons (Gt) of crushed stone was produced for consumption in the United States in 2011, virtually unchanged from the total production of 2010 and 2009 and 35% less than the record high of 1.78 Gt in 2006. In 2011, the total value of crushed stone produced in the United States was \$11.2 billion, a slight increase compared with that of 2010 and 21% less than that of 2006 (table 1). The average unit price for crushed stone increased slightly compared with the average unit price for 2010 but was 20% higher compared with that of 2006. The relatively constant production level of the past 3 years that the crushed stone industry experienced was the lowest level of crushed stone production for consumption in the United States since 1993.

About 69% 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, slate, shell, and calcareous marl (table 2).

Foreign trade in crushed stone remained relatively small compared to nationwide consumption. In 2011, U.S. exports decreased by 25% to 911,000 metric tons (t) compared with 1.21 million metric tons (Mt) in 2010, and the value decreased by 20% to \$41.8 million, compared with \$52.1 million in 2010 (tables 1, 17). U.S. imports of crushed stone, including calcium carbonate fines, increased by 3% to 15.0 Mt, but the value decreased by 3% to \$179 million compared with the 2010 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 very slightly compared with that of 2010 because of the 25% decrease in exports along with very small increases in imports, production for consumption of crushed stone, and sales of recycled materials used as construction aggregates in 2011.

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 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 2011, a total of 1,548 companies produced or sold crushed stone from 3,693 operations with 4,002 quarries and 227 sales and (or) distribution sites. Of the 3,693 active operations, 2,258 operations reported their production or sales to the USGS, and their total production was 835 Mt (72% of the U.S. total). Of the 2,258 reporting operations, 668 operations did not report a breakdown by end use. Their total production was 300 Mt (26% of the U.S. total) and is included in table 9 under "Unspecified, reported" uses.

Production of the nonresponding quarries was estimated by using employment data provided by the Mine Safety and Health Administration (MSHA). The estimated output of 1,415 nonrespondent operations was 324 Mt (28% of the U.S. total) and is included in table 9 under "Unspecified, estimated" uses.

A total of 392 operations reported that they were an active sales yard with 165 of those reporting that they sold only recycled aggregates. Virgin crushed stone was reported by 227 sales yards in 2011, and the total quantity of crushed stone sold was 37.8 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 is 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, Illinois, Virginia, Ohio, Kentucky, North Carolina, Indiana, and Georgia. The combined production of the 10 leading States increased slightly and was 594 Mt, more than one-half of the national total.

There are 91 underground mines included in the total number of active operations, and they produced 71.6 Mt of crushed stone in 2011. Active underground mines were located in 18 States. The five leading States were, in descending order of tonnage, Kentucky, Missouri, Pennsylvania, Illinois, and Nebraska. Their combined production was 50.0 Mt (70% of the total of U.S. crushed stone produced underground).

A total of 1,057 crushed stone operations were either idle or presumed to have been idle in 2011 because no production report was received, and no employment information was available to estimate their production. Since the 2010 survey, 241 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 1.16 Gt of crushed stone produced for consumption in the United States in 2011, 69% was limestone and dolomite; 14% was granite; 7% was traprock; 5% was miscellaneous stone; and 4% was sandstone and quartzite. The remaining 1% was shared, in descending order of tonnage, by marble, volcanic cinder and scoria, slate, shell, and calcareous marl. These percentages were calculated on the total amount of crushed stone produced for consumption that was reported, 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 indicates that, in 2011, 469 Mt of crushed stone (40% of the total crushed stone) was produced by 271 operations reporting production of more than 1 million metric tons per year; 296 Mt was produced by 475 operations reporting production between 500,000 and 999,999 metric tons per year (t/yr); and 346 Mt was produced by 1,504 operations reporting production between 100,000 and 499,999 t/yr. Operations that produced more than 500,000 t/yr accounted for 66% of total crushed stone produced in the United States in 2011, a slight increase compared with that of 2010 (table 5a). By geographic region, in 2011, the South had 1,302 active operations, followed by the Midwest with 1,045, the West with 775, and the Northeast with 571 active operations (table 5b).

The leading U.S. producing companies in 2011 were, in descending order of tonnage, Vulcan Materials Co.; Martin Marietta Aggregates; Lehigh Hanson, Inc.; Oldcastle Materials, Inc.; Lafarge North America Inc.; CEMEX S.A.B. de C.V.; Carmeuse Lime & Stone; Holcim Group/Aggregate Industries Management, Inc.; Rogers Group, Inc.; and New Enterprise Stone & Lime Co., Inc. In 2011, the combined production of the top 10 companies decreased slightly to 508 Mt (44% of the national total). The combined production of the top 100 companies was 818 Mt (71% of the national total).

Merger and acquisition activity in the U.S. construction aggregates industry, after the huge acquisitions that took place in 2007, slowed to a much lower level and then came to a virtual stop in 2009. The industry continued in a holding pattern through 2010 and most of 2011, with numerous small regional purchases throughout the year and with large companies selling and swapping assets.

Many companies acquired assets to increase their regional footprint in markets of interest. Aggregates Industries, the U.S. division of Holcim, was the first to start the trend of these regional, division strengthening purchases. Aggregate Industries, at the beginning of March, acquired the remaining 51% interest in Lattimore Materials Co., L.P. and took control of 7 aggregate mines, 26 ready mix sites with 35 concrete plants, and 4 rail terminals in Texas (Aggregates Manager, 2011e). On November 1, Aggregate Industries announced the purchase of Ennstone, Inc., which operated 3 sand and gravel pits, 1 limestone quarry and 17 ready-mix concrete plants in Virginia (Aggregates Manager, 2011d).

Oldcastle Materials strengthened its market presence in two of its divisions, during 2011. During the summer, Oldcastle expanded its Central West Division by acquiring the assets, including five quarries in Missouri, of Everett Quarries Co. Inc. (Aggregates Manager, 2011b). Oldcastle finished the year by expanding its Mid-Atlantic Division by acquiring three aggregate quarries in Susquehanna County, PA, from Powers Stone, Inc. (Rock Products, 2012).

CEMEX, Lafarge, Martin Marietta, and Vulcan were all active east of the Mississippi River during the year. CEMEX bought Ready Mix USA for \$350 million to expand its operations in Alabama, Arkansas, Florida, Georgia, Mississippi, and Tennessee (Aggregates Manager, 2011c). Lafarge sold its aggregate assets in Alabama to Vulcan Materials in October (Aggregates Manager, 2011a). Also in October, Martin Marietta swapped properties along the Mississippi River with Lafarge for their aggregates operations, ready mixed concrete and asphalt plants, and a road paving business in metropolitan Denver, CO (Aggregates Manager, 2011d).

Activity, however, was not limited to the top producing domestic companies. Leading regional producers also increased their market shares. On July 1st, Rockydale Quarries Corp. took ownership of two quarry locations in Virginia from C.S. Mundy Quarries Inc. (Aggregates Manager, 2011b). With these two new sites, Rockydale owned seven quarries and an additional lime processing facility. Texas Industries, Inc. (TXI) acquired from CEMEX one aggregate operation and three ready mix concrete facilities that serve the Austin and Houston markets (Aggregates Manager, 2011b). The summer concluded with VantaCore Partners LP announcing the acquisition of Cherry Grove limestone quarry in Kentucky from North America Limestone Corp. and renaming the quarry Winn Materials of Trenton (Aggregates Manager, 2011c).

None of the activity discussed so far was close in size or scope to a proposed merger that was announced early on December 12, when the second ranked construction aggregates producer, Martin Marietta, made a hostile takeover offer for the leading construction aggregates producer, Vulcan Materials (Kuhar, 2012). Vulcan revealed that Martin Marietta had commenced an unsolicited exchange offer to acquire all outstanding common shares at a fixed exchange ratio of 0.50 shares of Martin Marietta Materials common stock for each share of Vulcan Materials common stock. Vulcan's Board of Directors advised shareholders to take no action at this time pending the review of the proposed exchange offer by the Vulcan Materials' Board (Vulcan Materials Co., 2011a). The Vulcan Board of Directors responded on December 22, after consultation with its financial and legal advisors, which unanimously determined that the Martin Marietta offer to acquire Vulcan was not in the best interests of Vulcan and its shareholders. Accordingly, the Board strongly recommended that shareholders not tender any shares to Martin Marietta (Vulcan Materials Co., 2011b). After several months of controversy and court proceedings, on May 14, 2012, Martin Marietta was ordered by a Delaware court to immediately withdraw and terminate its exchange offer for Vulcan's shares (Vulcan Materials Co., 2012).

Production of crushed stone by type is detailed below.

Calcareous Marl.—Output of calcareous marl decreased 36% compared with that of 2010 to 1.7 Mt valued at \$10.6 million (table 2).

Dolomite.—Production of dolomite increased by 3% compared with the total for 2010 to 51.2 Mt valued at \$517

million (table 2). Crushed dolomite production was reported in 27 States. The leading producing States were, in descending order of tonnage, Illinois, Pennsylvania, New York, Michigan, and Indiana; the total production of these five States was 37.3 Mt (73% of the U.S. output) (table 6). An additional undetermined amount of dolomite is included in the total crushed limestone, as explained in the limestone portion of the "Production" section.

Granite.—The output of crushed granite increased by 3% compared with that of 2010 to 162 Mt valued at \$2.0 billion (table 2). Crushed granite was reported as being produced in 34 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 108 Mt (67% of the U.S. output) (table 7).

Limestone.—The output of crushed limestone, including some dolomite, decreased slightly compared with that of 2010 to 751 Mt valued at \$6.8 billion (table 2). Limestone production was reported in 47 States, and companies in 24 States reported producing limestone and dolomite from the same quarries. Their production of about 19.0 Mt of limestone and dolomite combined is 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, Pennsylvania, Kentucky, and Ohio; the total production of these five States was 312 Mt (42% of the total U.S. output) (table 6).

Marble.—Production of crushed marble decreased by 9% compared with the total for 2010 to 5.9 Mt valued at \$90.0 million (table 2). Crushed marble production was reported in 15 States.

Miscellaneous stone.—This category includes three different types of miscellaneous crushed stone production. The first type is a crushed stone, which was reported by the company as "other" on the survey form or as a type of stone not listed on 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 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 rock 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 output of miscellaneous stone decreased slightly compared with the total for 2010 to 58.7 Mt, valued at \$498 million (table 2). In 2011, the reported amount of miscellaneous stone accounted for 79% of the total output of miscellaneous stone and 70% of its value (table 8). The remaining 21% (15.7 Mt) of the total output consisted of known stone for which data were withheld.

Sandstone and Quartzite.—The output of crushed sandstone and quartzite increased by 4% compared with the total for 2010 to 44.0 Mt, valued at \$412 million (table 2). Crushed sandstone production was reported in 29 States, and quartzite was produced in 18 States. The leading producing States were (in descending order of combined tonnage of sandstone and quartzite) Pennsylvania, Arkansas, Texas, South Dakota, and New York. Their combined total production was 29.1 Mt (69% 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 4% compared with the total for 2010 to 1.8 Mt, valued at \$25.0 million (table 2). Crushed shell was reported as being produced in four States.

Slate.—The output of crushed slate decreased by 9% compared with that of 2010 to 2.6 Mt, valued at \$33.3 million (table 2). Crushed slate was produced in 10 States, with Pennsylvania accounting for about 32% of the total U.S. output.

Traprock.—Production of crushed traprock increased by 4% compared with the total for 2010 to 75.9 Mt, valued at \$850 million (table 2). Traprock was reported as being produced in 27 States. The leading producing States were (in descending order of tonnage) Virginia, Oregon, New Jersey, Washington, and North Carolina; these five States produced 38.0 Mt (50% of U.S. output) (table 7).

Volcanic Cinder and Scoria.—Production of volcanic cinder and scoria increased by 42% compared with the total for 2010 to 4.5 Mt, valued at \$29.5 million (table 2). Volcanic cinder and scoria production was reported in 13 States, with the top producing State of Wyoming accounting for 59% of 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 is included in the "Unspecified, reported" use category. The estimated production of nonrespondents is included in the "Unspecified, estimated" use category.

In 2011, U.S. apparent consumption of crushed stone, which is defined as U.S. production plus imports and recycled material minus exports, was 1.20 Gt, almost unchanged compared with the apparent consumption in 2010. Of the 1.20 Gt of crushed stone consumed, 300 Mt (25%) was "Unspecified, reported," and 324 Mt (27%) was "Unspecified, estimated." Of the remaining consumption reported by uses, 80% was used as construction aggregate, mostly for highway and road construction and maintenance, as well as for a wide variety of building and other nonbuilding construction; 11% for cement manufacturing; 4% for special and miscellaneous uses and products; 3% for lime manufacturing; 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.

In 2011, the value of the total construction put in place decreased by 3% compared with that of 2010 to \$778 billion, as reported by the U.S. Census Bureau (2012). The value of total private construction decreased slightly to \$495 billion. The total

value of private construction has decreased every year since 2006, and in 2011 was at the lowest level since 1997. The value of total public construction decreased by 7% to \$283 billion, which was the second consecutive year of a decrease. Before 2010, the value of total public construction had not decreased in value in more than 18 years.

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

Recycled Asphalt Concrete.—Companies in every State except Hawaii reported a total of 13.4 Mt of recycled asphalt, valued at \$106 million in 2011 (table 14). The leading States were (in descending order of tonnage of recycled asphalt concrete) California, Illinois, Michigan, North Carolina, and Pennsylvania. Their combined total was 6.0 Mt, an increase of 25% compared with their combined total in 2010.

Recycled Portland Cement Concrete.—A total of 13.8 Mt of recycled concrete valued at \$103 million was reported as recycled in 48 States (table 15). The leading States for 2011 were (in descending order of tonnage of recycled portland cement concrete) California, Illinois, Michigan, Virginia, and Minnesota. Their combined total was 7.1 Mt, an increase of 15% compared with their combined total of 2010.

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 costs, and profit. In 2011, 820 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 \$10.62 per metric ton in 2011. This was about a 3% increase compared with the reported average unit value of \$10.34 per ton in 2010. The annual reports of the top U.S. producing companies reported a 1% to 3% price decrease in 2011, compared with prices in 2010. For those operations that reported production only, the unit values for total production or specific end uses were estimated based on what other operations in the same State reported. The reported State average was used in the estimation for operations reporting total production only.

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.

Transportation

For 654 Mt of the 1.16 Gt of crushed stone produced for consumption in 2011, no means of transportation was reported by the producers. Of the remaining 505 Mt of crushed stone, 78% was reported as being transported by truck from the quarry or the processing plant to the first point of sale or use; 6% by rail, and 4% by waterway. About 49.8 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 going through these sites have had a positive impact on the industry and the communities they serve. Distribution yards, supplied by rail or waterway, are located near metropolitan areas and significantly reduce the distance most 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 to distribute products and, increasingly, also serve as recycling sites.

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 decreased by 25% to 911,000 t compared with the total of 1.21 Mt in 2010, with the value decreasing by 20% to \$41.8 million. In 2011, exports of crushed limestone for cement manufacturing averaged a unit

value of \$20.67 per ton, which was lower than the average unit value of 2010 (table 17).

Imports.—Imports of crushed stone increased by 3% to 15.0 Mt compared with those of 2010, but the value decreased by 3% to \$179 million. Of the imported crushed stone, 66% of it 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 was well documented and led to decreased consumption of crushed stone. The decline in residential construction appeared to level off in late 2010 and improved in 2011 with multifamily housing starts increasing throughout 2011. Based on quarterly sales data, it appeared that the construction industry reached the low point in the cycle and may have been starting to recover (Willett, 2012).

Facing uncertainly in the domestic marketplace, many construction aggregates producers expect to see production levels remain flat or even decrease slightly. This is based on the impact of the uncertainty created by the absence of a long-term highway bill, as well as the waning impact of the American Recovery and Reinvestment Act (Martin Marietta Materials, Inc., 2012, p. 39). Any increased consumption in 2012 from that in 2011, is not expected to reach the historical annual average of the past 50 years of 2% to 4%. Increases in the first two quarters of 2012 were offset by a 5% decrease in third quarter shipments of crushed stone for consumption (Willett, 2012). However, the estimated output of crushed stone in the 48 conterminous States shipped for consumption in the first 9 months of 2012 was 867 million tons, a slight increase compared with that of the same period of 2011.

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TABLE 1 SALIENT CRUSHED STONE STATISTICS¹

(Thousand metric tons and thousand dollars)

	2007	2008	2009	2010	2011
Sold or used by producers: ²					
Quantity	1,650,000	1,450,000 r	1,160,000	1,160,000	1,160,000
Value	14,100,000	13,600,000	11,300,000	11,100,000 ^r	11,200,000
Recycle:					
Quantity	20,100	29,100	28,500	26,400 r	27,200
Value	150,000	252,000	264,000	201,000 r	210,000
Exports:					
Quantity	1,020	1,240	1,260	1,210	911
Value	62,500	61,600	58,300	52,100	41,800
Imports for consumption: ³					
Quantity	19,500	20,900	12,200	14,600	15,000
Value	212,000	232,000	174,000	185,000	179,000

^rRevised.

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

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

³Excludes precipitated calcium carbonate.

	CRUSHE	ED STONE SOLD	OR USED IN THE	E UNITED S	STATES, BY 1	TYPE ^{1, 2}			
		201	0 ³		2011				
		Quantity				Quantity			
	Number	(thousand	Value	Unit	Number	(thousand	Value	Unit	
Туре	of quarries	metric tons)	(thousands)	value	of quarries	metric tons)	(thousands)	value	
Limestone ⁴	2,086	757,000	\$6,730,000	\$8.90	2,032	751,000	\$6,790,000	\$9.05	
Dolomite	165	49,900	478,000	9.57	165	51,200	517,000	10.10	
Marble	42	6,490	96,300	14.85	40	5,880	90,000	15.30	
Calcareous marl	4	2,720	21,400	7.88	4	1,730	10,600	6.14	
Shell	8	1,700	24,100	14.22	8	1,760	25,000	14.16	
Granite	433	158,000	1,850,000	11.75	426	162,000	1,950,000	12.07	
Traprock	346	73,300	920,000	12.55	351	75,900	850,000	11.21	
Sandstone and quartzite ⁵	211	42,100	393,000	9.34	219	44,000	412,000	9.36	
Slate	34	2,910	31,700	10.90	28	2,630	33,300	12.67	
Volcanic cinder and scoria	53	3,130	23,100	7.37	47	4,460	29,500	6.63	
Miscellaneous stone	542	60,200	505,000	8.39	716	58,700	498,000	8.48	
Total or average	XX	1,160,000	11,100,000	9.58	XX	1,160,000	11,200,000	9.68	

TABLE 2

XX Not applicable.

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

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

³Estimated quantities for the prior year have been recalculated.

⁴Includes limestone-dolomite reported with no distinction between the two kinds of stone.

⁵Includes sandstone-quartzite reported with no distinction between the two kinds of stone.

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

	2010) ³	201	1
Region/division	Quantity	Value	Quantity	Value
Northeast:				
New England	33,200	362,000	34,200	367,000
Middle Atlantic	134,000	1,540,000	139,000	1,530,000
Total	167,000	1,900,000	173,000	1,890,000
Midwest:				
East North Central	191,000	1,400,000	187,000	1,420,000
West North Central	139,000	1,210,000	136,000	1,240,000
Total	330,000	2,610,000	323,000	2,660,000
South:				
South Atlantic	225,000	2,780,000	230,000	2,900,000
East South Central	128,000	1,280,000	123,000	1,310,000
West South Central	191,000	1,460,000	187,000	1,400,000
Total	544,000	5,520,000	541,000	5,610,000
West:				
Mountain	47,800	379,000	53,100	386,000
Pacific	67,200	673,000	68,700	653,000
Total	115,000	1,050,000	122,000	1,040,000
Grand total	1,160,000	11,100,000	1,160,000	11,200,000

(Thousand metric tons and thousand dollars)

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

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

³Estimated quantities for the prior year have been recalculated.

CRUSHED STONE SOLD OR USED BY PRODUCERS IN THE UNITED STATES, BY STATE AND TERRITORIES¹

		2010 ²			2011	
	Quantity			Quantity		
	(thousand	Value	Unit	(thousand	Value	Unit
State	metric tons)	(thousands)	value	metric tons)	(thousands)	value
Alabama	36,500	\$325,000	\$8.92	33,700	\$295,000	\$8.77
Alaska	1,270	17,300	13.66	1,290	14,400	11.19
Arizona	8,220	81,000	9.85	8,260	63,900	7.73
Arkansas	31,300	240,000	7.66	26,100	219,000	8.40
California	31,000	306,000	9.87	32,800	295,000	9.00
Colorado	6,220	49,000	7.87	6,200	48,200	7.78
Connecticut	7,270	92,900	12.78	7,310	101,000	13.86
Delaware ³	W	W	W	W	W	W
Florida	42,100	535,000	12.72	40,300	509,000	12.63
Georgia	43,000	467,000	10.86	41,500	479,000	11.54
Hawaii	4,740	91,900	19.39	4,490	86,000	19.18
Idaho	3,960	23,600	5.98	3,910	21,500	5.50
Illinois	54,300	487,000	8.97	51,400	492,000	9.57
Indiana	44,400	294,000	6.63	42,200	301,000	7.14
Iowa	32,000	289,000	9.02	32,100	311,000	9.69
Kansas	17,600	146,000	8.30	15,400	126,000	8.17
Kentucky	47,900	417,000	8.70	47,900	462,000	9.64
Louisiana ³	W	W	W	W	W	W
Maine	3,520	31,200	8.87	3,650	26,600	7.31
Maryland	21,500	217,000	10.10	20,400	209,000	10.26
Massachusetts	10,400	119,000	11.44	10,600	115,000	10.86
Michigan	21,500	100,000	4.67	20,700	99,000	4.77
Minnesota	7,140	87,600	12.27	8,600	105,000	12.25
Mississippi ³	2,730	63,500	23.26	2,720	65,000	23.85
Missouri	69,400	584,000	8.40	64,700	571,000	8.83
Montana	2,050	21,300	10.36	2,160	20,600	9.51
Nebraska	6,760	62,000	9.17	7,430	70,100	9.43
Nevada	7,210	83,400	11.56	7,320	78,500	10.73
New Hampshire	4,370	38,900	8.92	5,030	45,200	8.99
New Jersey	14,500	120,000	8.28	13,800	132,000	9.59
New Mexico	5,280	38,400	7.26	5,840	41,400	7.09
New York	33,900	383,000	11.31	36,000	414,000	11.49
North Carolina	40,600	592,000	14.59	42,500	621,000	14.61
North Dakota	843	3,810	4.52	1,540	9,130	5.93
Ohio	47,000	380,000	8.09	49,300	406,000	8.23
Oklahoma		321,000	8.19	39,100	306,000	7.82
Oregon	15,500	117,000	7.56	15,300	118,000	7.71
Pennsylvania	85,300	1,040,000	12.17	89,100	981,000	11.01
Rhode Island	1,380	14,500	10.54	1,520	16,200	10.62
South Carolina		215,000	11.23	19,500	199,000	10.25
South Dakota		36,600	0.09	6,050	49,400	8.16
Tennessee	40,900	4/2,000	11.53	38,800	483,000	12.46
Itab	5.650	41,200	7.04	× 000	/8/,000	0.70
Verment		41,300	10.27	8,000 6 070	62,100	10.22
Virginia		602,000	10.57	0,070	711,000	10.25
Washington	14,000	141,000	0.58	49,400	140,000	0.42
West Virginia	14,800	141,000	9.38	14,800	140,000	9.42
Wisconsin	24,000	135,000	9.72 5.62	23 800	124,000	5 20
Wyoming	9.24,000	41 400	1.02	23,800	50,700	J.20 A A2
Other	- 5,240	102 000	15 11	6 270	101.000	16.13
US total or average	1 160 000	11 100 000	9.58	1 160 000	11 200 000	9.68
Territory	1,100,000	11,100,000	2.50	1,100,000	11,200,000	2.00
American Samoa ⁴	(5)	(5)	(5)	(5)	(5)	(5)
Guam	- (5)	(5)	(5)	(5)	(5)	(5)
Puerto Rico	- 7 610	64 000	8 41	7 530	77 500	10 29
Virgin Islands	(5)	(5)	(5)	(5)	(5)	(5)
Grand total or average	1,170.000	11,200.000	9.58	1,170.000	11,300.000	9.69
	,,	, ,		, ,	, ,	

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

TABLE 4—Continued

CRUSHED STONE SOLD OR USED BY PRODUCERS IN THE UNITED STATES, BY STATE AND TERRITORIES¹

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

²Estimated quantities for the prior year have been recalculated.

³A significant amount of sold or used material was shipped in 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}

		2010 ³				2011			
			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	654	17.3	5,260	0.5	631	17.1	4,840	0.4	
25,000 to 49,999	369	9.7	12,400	1.1	328	8.9	11,100	1.0	
50,000 to 99,999	501	13.2	33,600	2.9	484	13.1	32,000	2.8	
100,000 to 199,999	574	15.2	76,100	6.6	605	16.4	78,800	6.8	
200,000 to 299,999	409	10.8	92,400	8.0	399	10.8	90,400	7.8	
300,000 to 399,999	301	8.0	94,700	8.2	276	7.5	87,200	7.5	
400,000 to 499,999	233	6.2	94,600	8.2	224	6.1	90,100	7.8	
500,000 to 599,999	159	4.2	78,900	6.8	164	4.4	81,400	7.0	
600,000 to 699,999	130	3.4	76,800	6.6	114	3.1	67,000	5.8	
700,000 to 799,999	80	2.1	54,200	4.7	94	2.5	64,100	5.5	
800,000 to 899,999	58	1.5	44,800	3.9	58	1.6	44,600	3.8	
900,000 to 999,999	43	1.1	36,700	3.2	45	1.2	38,900	3.4	
1,000,000 to 1,499,999	148	3.9	162,000	14.0	145	3.9	160,000	13.8	
1,500,000 to 1,999,999	55	1.5	85,700	7.4	49	1.3	76,400	6.6	
2,000,000 to 2,499,999	29	0.8	58,500	5.1	25	0.7	51,700	4.5	
2,500,000 to 4,999,999	37	1.0	112,000	9.7	45	1.2	134,000	11.6	
5,000,000 and more	6	0.2	38,500	3.3	7	0.2	46,200	4.0	
Total	3,786	100	1,160,000	100	3,693	100	1,160,000	100	

¹Data are rounded to no more than three significant digits except "Number of operations"; may not add to totals shown.

²Does not include recycle plants.

³Estimated quantities for the prior year have been recalculated.

TABLE 5B CRUSHED STONE SOLD OR USED IN THE UNITED STATES IN 2011, BY REGION AND SIZE OF OPERATION $^{\rm 1,\,2}$

		Nor	theast		Midwest				
			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	78	13.6	660	0.4	150	14.4	1,330	0.4	
25,000 to 49,999	48	8.4	1,590	0.9	89	8.5	3,040	0.9	
50,000 to 99,999	78	13.6	5,330	3.1	154	14.8	10,200	3.1	
100,000 to 199,999	104	18.2	13,900	8.0	170	16.3	22,200	6.9	
200,000 to 299,999	58	10.1	13,100	7.5	124	11.9	27,600	8.5	
300,000 to 399,999	42	7.3	13,200	7.6	70	6.7	22,000	6.8	
400,000 to 499,999	38	6.6	15,600	9.0	83	8.0	32,700	10.1	
500,000 to 599,999	29	5.1	14,500	8.4	51	4.9	25,300	7.8	
600,000 to 699,999	23	4.0	13,800	8.0	25	2.4	14,400	4.5	
700,000 to 799,999	20	3.5	13,700	7.9	25	2.4	17,000	5.3	
800,000 to 899,999	6	1.0	4,610	2.7	15	1.4	11,400	3.5	
900,000 to 999,999	8	1.4	6,890	4.0	16	1.5	13,700	4.2	
1,000,000 to 1,499,999	26	4.5	28,100	16.2	38	3.6	41,700	12.9	
1,500,000 to 1,999,999	10	1.7	15,000	8.7	13	1.2	19,700	6.1	
2,000,000 to 2,499,999	2	0.3	4,120	2.4	4	0.4	8,340	2.6	
2,500,000 and more	3	0.5	9,080	5.2	16	1.5	52,400	16.2	
Total	573	100	173,000	100	1,043	100	323,000	100	
		Sc	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	130	10.0	1,090	0.2	273	35.2	1,760	1.4	
25,000 to 49,999	91	7.0	3,120	0.6	100	12.9	3,360	2.8	
50,000 to 99,999	119	9.1	7,890	1.5	133	17.1	8,650	7.1	
100,000 to 199,999	217	16.7	28,000	5.2	114	14.7	14,700	12.1	
200,000 to 299,999	172	13.2	39,600	7.3	45	5.8	10,200	8.4	
300,000 to 399,999	139	10.7	44,100	8.1	25	3.2	7,850	6.4	
400,000 to 499,999	85	6.5	34,500	6.4	18	2.3	7,240	5.9	
500,000 to 599,999	70	5.4	34,400	6.4	14	1.8	7,080	5.8	
600,000 to 699,999	55	4.2	32,300	6.0	11	1.4	6,480	5.3	
700,000 to 799,999	39	3.0	26,700	4.9	10	1.3	6,770	5.6	
800,000 to 899,999	33	2.5	25,400	4.7	4	0.5	3,100	2.5	
900,000 to 999,999	19	1.5	16,600	3.1	2	0.3	1,740	1.4	
1,000,000 to 1,499,999	68	5.2	75,800	14.0	13	1.7	14,600	12.0	
1,500,000 to 1,999,999	19	1.5	30,200	5.6	7	0.9	11,400	9.4	
2,000,000 to 2,499,999	16	1.2	33,200	6.1	3	0.4	6,020	4.9	
2,500,000 and more	29	2.2	108,000	20.0	4	0.5	10,900	8.9	
Total	1.301	100	541.000	100	776	100	122,000	100	

¹Data are rounded to no more than three significant digits except "Number of operations"; may not add to totals shown.

²Does not include recycle plants.

TABLE 6 LIMESTONE, DOLOMITE, CALCAREOUS MARL, AND MARBLE SOLD OR USED BY PRODUCERS IN THE UNITED STATES IN 2011, BY STATE¹

(Thousand metric tons and thousand dollars)

	Limestone		Dolon	Dolomite		ıs marl	Marble	
State	Ouantity	Value	Ouantity	Value	Ouantity	Value	Ouantity	Value
Alabama	27,000	238,000	2,200	16,400			(2)	(2)
Alaska		·						
Arizona	3,250 ³	27,200						
Arkansas	9,250	77,300	646	5,710				
California	13,700 ³	108,000	125	690				
Colorado	414	3,750	23	179			89	694
Connecticut	1.150^{-3}	23,700	(4)	(4)			210	2.940
Delaware	(2)	(2)						
Florida	$37\ 000^{-3}$	468 000	(4)	(4)				
Georgia	4.660	54,700					1.600	31,700
Hawaii	23	442						
Idaho	257	4 2 3 0						
Illinois	$41\ 400\ ^{3}$	381,000	9 870	110 000				
Indiana	$37,700^{-3}$	267,000	4 360	33,100				
Iowa	$31,900^{-3}$	309,000	203	1 990				
Kansas	$14\ 100\ ^{3}$	115,000	205	1,770				
Kentucky	47 900 ³	462,000						
Louisiana	47,900	402,000						
Louisiana	1 680	10 800						
Mamland	1,000	118,000						
Maryland	12,000	118,000					(2)	(2)
Massachuseus	1,010	11,500	(4)	(4)				
Michigan	15,300 -	70,100	4,570	24,800	2	17		
Minnesota	3,010	34,400	1,760	24,800				
Mississippi	2,700	64,600						
Missouri	60,000	468,000	1,840	14,500			16	135
Montana	1,480	13,600						
Nebraska	7,330	66,800						
Nevada	2,460	23,300	(4)	(4)				
New Hampshire	(2)	(2)						
New Jersey	141	1,290						
New Mexico	3,510	24,400						
New York	19,600 3	221,000	8,830	97,800			36	392
North Carolina	3,890	55,300	290	4,200				
North Dakota								
Ohio	47,300 3	390,000	1,430	11,000				
Oklahoma	33,700 3	262,000	1	8				
Oregon	(2)	(2)	(2)	(2)				
Pennsylvania	51,700 ³	585,000	9,690	100,000			84	642
Rhode Island								
South Carolina	4,680	31,000			1,320	7,420	(2)	(2)
South Dakota	2,870	24,900						
Tennessee	37,100 ³	462,000	326	3,810				
Texas	105,000 ³	717,000	(4)	(4)	406	3,170	49	2,550
Utah	3,890	33,000	2,350	16,200				
Vermont	1,880 ³	18,000	81	682			1,320	13,900
Virginia	14,100 ³	195,000	1,440	19,800			(2)	(2)
Washington	1,100 ³	13,000	224	3,550			(2)	(2)
West Virginia	15,200	157,000						
Wisconsin	20,000 ³	104,000	125	728			85	442
Wyoming	3,370	19,300						
Total	746,000	6,730,000	50,400	490,000	1,730	10,600	3,490	53,500

-- Zero.

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

²Includes limestone-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 2011, BY STATE¹

(Thousand metric tons and thousand dollars)

	Gran	ite	Trapro	ock	Sandstone and	d quartzite ²	Slat	e
State	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Alabama	2,170	20,400			612	5,550	602	5,310
Alaska	152	2,280	(3)	(3)				
Arizona	2,480	18,700	104	1,370	759	5,860		
Arkansas	6,400	53,600			8,510	71,600	148	1,280
California	8,850	84,500	3,930	38,700	974	9,770	(3)	(3)
Colorado	4.430	33,200	3	19	81	572		
Connecticut	578	7.520	4.540	56.500				
Delaware			(3)	(3)				
Florida	467	7 300			62	753		
Georgia	35.000	389,000			(3)	(3)	17	425
Hawaji			3 860	77 700				
Idaho	259	1.030	1 130	4 830	93	642		
Illinois		1,050	1,150	1,050	23	326		
Indiana					25	520		
Jowa								
Kansas					1 270	10,600		
Kantucky					1,270	10,000		
Louisiana	. 				(2)	(2)		
Louisiana	1 420	10.000			204	1 400		
Manle	1,420	10,900	1070	989	204	1,490		
Maryland	3,810	37,100	4,070	46,900	11	2,090		
Massachusetts	3,020	33,600	5,180	55,000				
Michigan			(3)	(3)				
Minnesota	3,320	40,500			(3)	(3)		
Mississippi								
Missouri	1,160	/3,600	1,460	12,600				
Montana	107	1,240	254	2,780	(3)	(3)		
Nebraska					10	92		
Nevada	80	881	709	8,460	805	8,870		
New Hampshire	2,900	25,400	1,590	15,200	164	1,450		
New Jersey	5,560	50,700	8,120	80,400				
New Mexico					178	1,260		
New York	1,730	24,100	(3)	(3)	2,400	27,400	(3)	(3)
North Carolina	29,900	437,000	5,460	81,100			514	7,350
North Dakota					897	4,050		
Ohio					172	1,590		
Oklahoma	2,550	21,900			970	8,060		
Oregon	355	2,630	8,230	66,400	21	172		
Pennsylvania	3,400	37,500	5,110	52,100	11,000	115,000	832	14,000
Rhode Island	746	7,940	656	6,950				
South Carolina	12,700	153,000						
South Dakota	(3)	(3)			2,840	20,600	11	115
Tennessee	(3)	(3)			845	10,100		
Texas	(3)	(3)	(3)	(3)	4,480	20,400		
Utah					76	736		
Vermont	299	3,210	12	122	1,320	15,100	204	1,840
Virginia	22,300	334,000	9,270	134,000	1,240	13,100	59	845
Washington	572	5,940	6,900	57,900	585	13,100		
West Virginia					1,010	12,200		
Wisconsin	2,170	11,600	1,200	6,180	13	70		
Wyoming	2,150	13,600			414	1,770		
Total	161,000	1,940,000	71,800	806,000	42,100	385,000	2,390	31,100

-- Zero.

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

²Includes sandstone-quartzite reported with no distinction 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 2011, BY STATE¹

(Thousand metric tons and thousand dollars)

	She	11	Volcanic cinde	er and scoria	Miscellane	ous stone
State	Quantity	Value	Quantity	Value	Quantity	Value
Alabama					1,120	10,071
Alaska	(2)	(2)			1,130	12,100
Arizona			99	840	1,570	9,930
Arkansas					1,100	9,360
California	(2)	(2)	303	3,050	4,920	50,500
Colorado			(2)	(2)	1,160	9,800
Connecticut					834	10,700
Delaware					W	W
Florida	1,640	19,500			1,080	12,800
Georgia					210	2,370
Hawaii			365	2,990	240	4,880
Idaho			25	74	2,150	10,700
Illinois					135	827
Indiana					138	994
Iowa						
Kansas						
Kentucky					44	426
Louisiana	(2)	(2)			W	W
Maine					268	2 470
Maryland					430	4 600
Massachusetts					1 430	15 200
Michigan					859	4 040
Minnesota					511	5 660
Mississinni					28	375
Missouri					218	1 890
Montana			27	254	336	2 920
Nebraska			27	254	96	3 230
Novada				(2)	2 260	3,230
New Hampshire			(2)	(2)	3,200	3140
New Jersey					501	5,140
Now Movies			265	1 500	1 990	14 100
New Verk			203	1,590	1,000	14,100
North Carolina					3,460	45,200
North Dalvata				4 270	2,430	30,200
Notti Dakota			470	4,270	100	2 100
Olilo					1 820	3,100
Oragon					1,820	15,700
Deegon			(2)	(2)	0,710	46,600
Pennsylvania					7,250	/6,500
Rhode Island					122	1,300
South Carolina					/0/	8,220
South Dakota					329	3,/80
Tennessee					515	6,890
Texas					6,290	43,800
Utah			/	50	1,680	11,800
Vermont					945	9,140
Virginia					1,010	14,500
Washington			71	664	5,360	45,300
west Virginia						
Wisconsin					139	718
Wyoming			2,630	13,600	2,900	2,390
Other					6,270	101,000
Total	1,640	19,500	4,270	27,400	74,100	711,000

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

¹Data 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."

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

		2010^{2}		2011		
	Ouantity	2010		Ouantity	-	
	(thousand	Value	Unit	(thousand	Value	Unit
Use	metric tons)	(thousands)	value	metric tons)	(thousands)	value
Construction:	,	/		,		
Coarse aggregate (+1 ¹ / ₂ inch):	_					
Macadam	1,280	\$12,700	\$9.97	1,540	\$17,200	\$11.21
Riprap and jetty stone	10,100	115,000	11.31	13,300	144,000	10.84
Filter stone	3,540	36,000	10.17	2,870	30,000	10.46
Unspecified coarse aggregate	21,300	221,000	10.35	14,700	162,000	11.00
Coarse aggregate, graded:	_ `					
Concrete aggregate, coarse	27,000	258,000	9.54	31,300	292,000	9.34
Bituminous aggregate, coarse	26,400	260,000	9.86	25,100	269,000	10.73
Bituminous surface-treatment aggregate	5,900	69,100	11.71	6,510	82,200	12.61
Railroad ballast	5,770	55,500	9.63	7,200	72,900	10.14
Unspecified graded coarse aggregate	93,100	1,130,000	12.17	92,000	1,130,000	12.23
Fine aggregate (- ³ / ₈ inch):		, - ,		- ,	, - ,	
Stone sand, concrete	3.580	40,800	11.38	4.670	50,400	10.80
Stone sand, bituminous mix or seal	6.510	63,300	9.72	7.590	83.200	10.96
Screening, undesignated	10.900	99,000	9.10	9.370	89.200	9.52
Unspecified fine aggregate	34,600	366,000	10.57	27,900	298.000	10.66
Coarse and fine aggregates:		,		_ ,,	_, ,,, , ,	
Graded road base or subbase	59 200	449 000	7.60	58 200	444 000	7 63
Unpaved road surfacing	14 800	119,000	8.05	11 900	99,800	8 37
Terrazzo and exposed aggregate		11 200	38.58	960	10,000	10.46
Crusher run or fill or waste	16 800	123 000	7 32	23 600	165,000	7.01
Roofing granules	648	54 600	84.28	1 660	78 500	47.22
Unspecified coarse and fine aggregates	82.800	793 000	9 57	82,700	758,000	9.17
Unspecified and other construction materials	5 230	54 600	10.45	4 420	46 200	10.45
Agricultural:		0 1,000	10.10	.,.20	10,200	10.10
Agricultural limestone	10 900	91 800	8 46	8 710	80 600	9 25
Poultry grit and mineral food	1 330	26 700	20.12	1 020	20,500	20.04
Unspecified and other agricultural uses		23 200	33 55	880	24 200	27.44
Chemical and metallurgical:		20,200	00.00	000	,_00	
Cement manufacture	53 800	287 000	5 32	58 800	284 000	4 84
Lime manufacture	18 500	194 000	10.50	14 900	183,000	12 29
Dead-burned dolomite manufacture		2 050	5	586	3 230	5 51
Flux stone	2 510	18 600	7 41	1 420	13,800	9 77
Chemical stone	137	1 290	9.45	40	810	20.02
Glass manufacture	821	8 240	10.04	773	4 050	5 23
Sulfur oxide removal	7 720	72 300	9 37	6 040	60,500	10.02
Snecial:		72,500	2.57	0,010	00,000	10.02
Mine dusting or acid water treatment	- 727	21 900	30.13	807	28 800	35 70
Asphalt fillers or extenders	1 400	14 800	10.61	1 380	17 500	12.68
Whiting or whiting substitute		11 100	47 34	163	7 680	47.10
Other fillers or extenders	255	62 800	24.13	3 620	81,900	22.60
Other miscellaneous uses and specified uses not listed	5 250	52,300	997	8 460	82 100	9 71
Unspecified. ³		52,500	1.11	0,700	02,100	2.71
Reported	212.000	3 000 000	0.60	300.000	2 000 000	0.04
Estimated		2,000,000	9.00	224,000	2,390,000	9.90
Total or overege	1 1 (0 000	2,000,000	9.29	524,000	3,010,000	9.31
Total of average	1,100,000	11,100,000	9.38	1,100,000	11,200,000	9.08

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

²Estimated quantities for the prior year have been recalculated.

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

LIMESTONE AND DOLOMITE SOLD OR USED BY PRODUCERS IN THE UNITED STATES IN 2011, BY USE^{1, 2}

(Thousand metric tons and thousand dollars)

		Limestone ³	Dolomite			
Use	Quantity	Value	Unit value	Quantity	Value	Unit value
Construction:	·			- •		
Coarse aggregate (+1½ inch):	_					
Macadam	1,090	12,500	\$11.54	71	1,030	\$14.44
Riprap and jetty stone	9,950	98,200	9.88	367	4,440	12.08
Filter stone	1,790	16,400	9.19	38	393	10.45
Unspecified coarse aggregate	10,800	110,000	10.23	265	2,630	9.92
Coarse aggregate, graded:						
Concrete aggregate, coarse	20,100	173,000	8.65	3,030	31,100	10.27
Bituminous aggregate, coarse	8,350	86,000	10.30	2,580	29,900	11.58
Bituminous surface-treatment aggregate	3,030	35,400	11.69	1,360	15,800	11.64
Railroad ballast	1,270	11,500	9.01	156	1,580	10.13
Unspecified graded coarse aggregate	65,800	750,000	11.40	1,740	18,200	10.50
Fine aggregate (- ³ / ₈ inch):	=					
Stone sand, concrete	2,320	21,700	9.35	140	1,500	10.74
Stone sand, bituminous mix or seal	3,220	34,200	10.62	909	11,400	12.56
Screening, undesignated	4,470	31,300	7.00	946	19,000	20.05
Unspecified fine aggregate	16,700	173,000	10.32	790	7,540	9.54
Coarse and fine aggregates:						
Graded road base or subbase	38,500	267,000	6.94	3,370	29,000	8.61
Unpaved road surfacing	8,690	71,100	8.18	822	8,310	10.10
Terrazzo and exposed aggregate	94	1,720	18.38	W	W	W
Crusher run or fill or waste	16,800	109,000	6.46	1,670	14,000	8.38
Roofing granules	W	W	W	W	W	W
Unspecified coarse and fine aggregates	52,700	473,000	8.97	3,590	28,500	7.93
Unspecified and other construction materials	3,370	30,600	9.08	127	377	2.96
Agricultural:						
Agricultural limestone	7,770	70,300	9.05	938	10,300	10.96
Poultry grit and mineral food	949	16,300	17.13			
Unspecified and other agricultural uses	634	8,500	13.41	136	14,800	108.15
Chemical and metallurgical:	-					
Cement manufacture	57,000	275,000	4.82	W	W	W
Lime manufacture	13,700	175,000	12.85	1,230	7,570	6.13
Dead-burned dolomite manufacture				W	W	W
Flux stone	1,240	12,600	10.22	W	W	W
Chemical stone	W	W	W	W	W	W
Glass manufacture	301	2,480	8.25			
Sulfur oxide removal	6,040	60,500	10.02			
Special:	_					
Mine dusting or acid water treatment	736	26,300	35.76	W	W	W
Asphalt fillers or extenders	1,050	14,100	13.43	W	W	W
Whiting or whiting substitute	63	1,150	18.26	W	W	W
Other fillers or extenders	2,560	55,600	21.73	31	216	7.03
Other miscellaneous uses and specified uses not listed	5,910	50,000	8.45	470	4,890	10.40
Unspecified: ⁴	=					
Reported	159,000	1,490,000	9.38	15,800	164,000	10.38
Estimated		2,020,000	9.01	9,820	84,800	8.64
Total or average	751,000	6,790,000	9.05	51,200	517,000	10.10

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

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

²Totals may not match totals shown in Table 2 because of concealments. ³Includes a minor amount of limestone-dolomite reported without a distinction between the two.

⁴Reported and estimated production without a breakdown by end use.

TABLE 11 LIMESTONE AND DOLOMITE SOLD OR USED BY PRODUCERS IN 2011, BY STATE AND USE¹

(Thousand metric tons and thousand dollars)

	Concrete a	iggregate	Bituminous	aggregate	Roadstone ar	nd coverings	Riprap and ra	ilroad ballast	Other const	ruction uses
State	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Alabama	1,550	13,700	6,560	62,200	1,770	17,700	180	1,940	4,540	45,600
Alaska										
Arizona										
Arkansas	137	1,190	451	4,940	562	4,100	75	744	2,170	16,000
California	W	W	W	W	138	1,490	7	83	238	1,770
Colorado					W	W	W	W		
Connecticut							W	W	W	W
Delaware										
Florida	3,660	52,600	4,250	86,300	3,550	23,700	56	1,420	2,660	23,400
Georgia	W	W	W	W	129	1,670	W	W	W	W
Hawaii										
Idaho			W	W						
Illinois	2,130	16,400	7,090	78,200	3,340	24,200	562	6,410	4,240	29,400
Indiana	2,400	18,700	6,860	52,900	3,710	24,600	700	6,460	4,030	24,300
Iowa	1,570	17,300	464	4,460	4,310	37,200	157	2,600	1,590	15,400
Kansas	597	2,730	709	7,150	1,200	8,630	67	1,100	876	6,240
Kentucky	2,020	19,500	6,110	63,800	3,820	36,000	538	5,440	3,080	27,500
Louisiana	W	W	W	W	W	W			W	W
Maine	109	520			23	164				
Maryland	463	4,690	2,130	24,100	215	2,280	W	W	756	6,590
Massachusetts	218	2,550			W	W			124	1,660
Michigan	2,280	11,600	242	1,480	2,270	9,790	197	2,300	596	3,820
Minnesota	W	W	W	W	544	5,820	W	W	68	713
Mississippi ²	W	W	W	W	W	W			W	W
Missouri	1.460	12.600	1.880	16.300	4.300	26.600	3.580	29.400	1.850	10.800
Montana					W	W	W	W	W	W
Nebraska	W	W	W	W	W	W	W	W	W	W
Nevada										
New Hampshire										
New Jersev										
New Mexico	W	W	644	3.000	45	478	35	663	36	250
New York	2.650	31.100	3.640	46.000	3.040	28.100	465	6.680	4.820	45.300
North Carolina	,								40	521
North Dakota										
Ohio	3.070	23,700	6.960	70.800	3.630	27,800	378	3.070	11.300	84,400
Oklahoma	925	7.690	7.150	57,700	1.650	13,400	290	4.570	5.560	33,400
Oregon			W	W			W	W		
Pennsylvania	3.310	33,300	7,490	79.800	8.360	85.600	1.470	16.300	8,490	51,500
Rhode Island										
South Carolina	W	W			W	W			W	W
South Dakota									(3)	3
Tennessee	2.760	36.300	9,260	126.000	2.920	27.100	709	7.870	9,120	91.800
Texas	7.820	54,700	9,120	111.000	8,950	46.200	785	7.520	10.500	89,500
Utah			W	W	15	61	5	74	W	W
Vermont	W	W	96	744	65	610			404	2.860
Virginia	1.050	13.700	1.270	16.400	1.340	16.000	171	2.360	2.110	23.000
Washington	W	W	W	W	158	743		-,	W	W
West Virginia	392	4.840	906	9.700	877	8.980	117	1.990	1.470	22.000
Wisconsin	196	953	811	5.730	1.730	7.510	907	2,770	2.180	9.850
Wyoming								_,	(3)	(3)
Total	40.800	380.000	84.100	928.000	62.600	486.000	11.500	112.000	82.800	667.000
Total withheld	2.300	27.300	4.020	66.900	969	16.000	288	3.890	3.390	66.100
Grand total	43,100	408,000	88,100	995,000	63,600	502,000	11,700	116,000	86,200	734,000

See fotnotes at end of table.

TABLE 11—Continued LIMESTONE AND DOLOMITE SOLD OR USED BY PRODUCERS IN 2011, BY STATE AND USE¹

(Thousand metric tons and thousand dollars)

	Cement ma	inufacture	Agricultu	iral uses	Lime man	ufacture	Othe	ruses	Тс	otal
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Alabama	1,550	6,860	186	1,740	4,310	23,400	8,540	80,800	29,200	254,000
Alaska										
Arizona	W	W					2,600	19,700	2,600	19,700
Arkansas	W	W	146	1,670	W	W	5,700	49,600	9,240	78,300
California	6,880	19,600	151	6,190	W	W	6,140	76,600	13,600	106,000
Colorado							399	3,390	399	3,390
Connecticut							750	9,580	750	9,580
Delaware							W	W	(4)	(4)
Florida	484	1,600	292	2,380			22,100	277,000	37,000	468,000
Georgia	W	W	123	982			2,470	30,300	4,660	54,700
Hawaii							23	442	23	442
Idaho	2	2	W	W			W	W	2	2
Illinois	W	W	1,460	11,300			31,700	318,000	51,300	491,000
Indiana	3,150	15,600	1,220	7,920			19,900	150,000	42,000	300,000
Iowa	674	1,490	1,140	10,800	W	W	22,000	218,000	32,100	311,000
Kansas	W	W	166	799			8,630	71,900	12,200	98,600
Kentucky			395	2,780	W	W	31,500	304,000	47,900	462,000
Louisiana							W	W	(4)	(4)
Maine	W	W					1,040	7,590	1,170	8,270
Maryland	W	W	W	W			5,950	64,300	9,510	102,000
Massachusetts	- 				W	W	555	5,910	896	10,100
Michigan	4,080	9,560	159	736			10,000	55,600	19,900	94,900
Minnesota			71	518			3,930	50,800	4,620	57,900
Mississinni ²			W	W			708	17,400	708	17,400
Missouri	8 020	37 900	764	3 780	W	W	38 500	337,000	61 800	483 000
Montana		W	W	5,700 W	W	w	737	6 830	737	6 830
Nebraska	- W	W	268	4 680			3 780	40,300	4 050	45,000
Nevada		W	208 W	4,000 W	w	w	5,780 W	40,500 W	4,050	45,000
New Hampshire		**	**	••	**	**	85	750	85	750
New Interposition							141	1 290	141	1 290
New Mexico	378	1 030					2 340	1,290	3 /30	23 300
New Work		7,060	142	2 520			12,000	152,000	28,400	23,300
North Carolina	000	7,000	143	2,320			13,000	50,000	28,400	50,500
North Dalvata							4,140	39,000	4,180	39,500
			022	7 920			21 700	170.000	47.000	299,000
Ohio	W	w	923	7,830			21,700	1/0,000	47,900	388,000
Oklanoma			247	2,360	w	w	17,700	142,000	33,500	261,000
Oregon			W	W			W	W	(4)	(4)
Pennsylvania	2,330	13,900	499	6,500	2,770	87,700	26,700	310,000	61,400	685,000
Rhode Island										
South Carolina	W	W					1,980	20,400	4,680	31,000
South Dakota	W	W					2,140	22,800	2,140	22,800
Tennessee	W	W	147	2,170	195	24,200	11,800	148,000	36,900	463,000
Texas	9,730	33,800	582	6,640	1,380	4,780	56,500	364,000	105,000	717,000
Utah	1,990	17,600	W	W	W	W	2,900	21,600	4,900	39,400
Vermont			W	W			1,380	14,400	1,940	18,600
Virginia	1,130	7,940	619	14,800			7,810	120,000	15,500	214,000
Washington	1	10	W	W			1,080	10,800	1,320	16,600
West Virginia	W	W	W	W			9,610	101,000	13,400	149,000
Wisconsin			407	4,870			13,900	72,900	20,200	105,000
Wyoming	882	3,400					2,490	15,900	3,370	19,300
Total	41,900	184,000	10,100	104,000	8,650	140,000	425,000	3,960,000	XX	XX
Total withheld	15,200	91,000	323	16,100	6,830	46,200	1,410	15,800	XX	XX
Grand total	57,100	275,000	10,400	120,000	15,500	186,000	426,000	3,970,000	802,000	7,310,000

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

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

²A significant amount of sold or used material was shipped in from other States.

³Less then $\frac{1}{2}$ unit.

⁴Withheld to avoid disclosing company proprietary data; included in "Grand total."

GRANITE, TRAPROCK, SANDSTONE AND QUARTZITE SOLD OR USED BY PRODUCERS IN THE UNITED STATES IN 2011, BY USE¹

(Thousand metric tons and thousand dollars)

	Gran	ite	Trapro	ock	Sandstone and	d quartzite ²
Use	Quantity	Value	Quantity	Value	Quantity	Value
Construction:						
Coarse aggregate (+1 ¹ / ₂ inch):						
Macadam	W	W	202	1,890	W	W
Riprap and jetty stone	1,290	17,200	489	7,510	618	8,190
Filter stone	277	4,090	361	5,110	261	2,360
Unspecified coarse aggregate	1,460	24,300	1,170	15,400	698	5,780
Coarse aggregate, graded:						
Concrete aggregate, coarse	3,870	37,600	1,940	22,300	1,130	11,300
Bituminous aggregate, coarse	7,460	79,300	4,590	49,000	1,070	12,800
Bituminous surface-treatment aggregate	472	9,410	633	6,210	570	8,070
Railroad ballast	3,260	34,700	1,280	12,800	117	1,590
Unspecified graded coarse aggregate	18,700	284,000	4,150	58,100	837	7,520
Fine aggregate (- ³ / ₈ inch):						
Stone sand, concrete	1,060	13,300	246	2,160	703	9,220
Stone sand, bituminous mix or seal	1,480	15,800	996	12,600	702	5,310
Screening, undesignated	2,680	26,200	723	7,830	239	2,230
Unspecified fine aggregate	6,880	78,700	2,480	28,500	703	7,130
Coarse and fine aggregates:						
Graded road base or subbase	4,410	45,700	5,430	43,100	2,610	22,600
Unpaved road surfacing	447	3,450	1,070	6,400	575	5,350
Terrazzo and exposed aggregate	659	3,300	10	101	27	624
Crusher run or fill or waste	2,200	19,100	492	4,120	952	7,640
Roofing granules	1,410	74,100	W	W	W	W
Unspecified coarse and fine aggregates	17,300	174,000	6,410	63,000	706	5,530
Unspecified and other construction materials	154	1,270	112	1,040	247	3,180
Agricultural:						
Agricultural limestone						
Poultry grit and mineral food					W	W
Unspecified and other agricultural uses	W	W			1	24
Chemical and metallurgical:						
Cement manufacture					W	W
Lime manufacture						
Dead-burned dolomite manufacture						
Flux stone					W	W
Chemical stone						
Glass manufacture					473	1,560
Sulfur oxide removal						
Special:						
Mine dusting or acid water treatment						
Asphalt fillers or extenders	W	W				
Whiting or whiting substitute						
Other fillers or extenders	296	1,980				
Other miscellaneous uses and specified uses not listed	576	4,020	59	512	650	14,100
Unspecified. ³		, -				,
Reported	65,600	790,000	21.200	265,000	14,600	116.000
Estimated	19.500	208,000	21.800	237.000	15.300	151.000
Total	162.000	1.950.000	75,900	850.000	44,000	412.000

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

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

²Includes sandstone-quartzite reported with no distinction between the two kinds of stone.

³Reported 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 2011, BY USE¹

(Thousand metric tons and thousand dollars)

	Marb	le	Volcanic cinde	r and scoria	Miscellaneo	ous stone
Use	Quantity	Value	Quantity	Value	Quantity	Value
Construction:						
Coarse aggregate (+1 ¹ / ₂ inch):						
Macadam	20	175			52	194
Riprap and jetty stone	W	W	1	15	537	7,890
Filter stone					143	1,630
Unspecified coarse aggregate	W	W	W	W	224	2,090
Coarse aggregate, graded:						
Concrete aggregate, coarse	W	W	W	W	1,120	14,500
Bituminous aggregate, coarse	W	W			785	8,110
Bituminous surface-treatment aggregate	W	W			431	6,940
Railroad ballast					1,110	10,800
Unspecified graded coarse aggregate	W	W	30	235	350	2,580
Fine aggregate (- ³ / ₈ inch):						
Stone sand, concrete	68	729	12	179	127	1,720
Stone sand, bituminous mix or seal	W	W			242	3,120
Screening, undesignated	W	W	W	W	310	2,750
Unspecified fine aggregate	W	W	16	144	231	2,080
Coarse and fine aggregates:						
Graded road base or subbase	W	W	W	W	3,320	30,500
Unpaved road surfacing			8	109	238	4,540
Terrazzo and exposed aggregate	W	W	W	W	150	1,560
Crusher run or fill or waste	W	W	322	1,420	902	7,800
Roofing granules	W	W	W	W	2	18
Unspecified coarse and fine aggregates	W	W			1,850	12,900
Unspecified and other construction materials	W	W	112	1,240	267	2,350
Agricultural:				,		,
Agricultural limestone						
Poultry grit and mineral food						
Unspecified and other agricultural uses	W	W	W	W	57	207
Chemical and metallurgical:						
Cement manufacture					299	1,060
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	735	24,000				
Other miscellaneous uses and specified uses not listed	2	326	17	250	750	8,780
Unspecified ^{.2}						- ,
Reported			3 120	18 000	19 900	135 000
Estimated	3 790	39 100	691	6 390	25 300	229 000
Total	5 880	90,000	4 460	29 500	58 700	498 000
• • • • •	5,000	20,000	1,100	27,500	20,700	120,000

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

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

²Reported and estimated production without a breakdown by end use.

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

		2010^2		2011				
	Ouantity	2010		Ouantity				
	(thousand	Value	Unit	(thousand	Value	Unit		
State	metric tons)	(thousands)	value	metric tons)	(thousands)	value		
Alabama	108	\$1,610	\$14.87	52	\$852	\$16.53		
Alaska	35	673	19.03	39	606	15.69		
Arizona	182	1,730	9.50	127	1,300	10.19		
Arkansas	- 18	100	5.51	19	212	11.05		
California	1,570	10,900	6.92	2,170	15,000	6.91		
Colorado	356	2,270	6.37	419	2,880	6.87		
Connecticut	102	685	6.74	88	606	6.89		
Delaware	(3)	5	15.29	(3)	5	15.29		
Florida	101	1,580	15.72	244	2,930	12.02		
Georgia	112	969	8.64	286	4,630	16.21		
Hawaii								
Idaho	114	708	6.19	41	257	6.27		
Illinois	902	7,870	8.72	1,210	8,520	7.03		
Indiana	198	2,070	10.46	198	1,630	8.27		
Iowa	107	856	7.99	119	1,110	9.28		
Kansas	1,270	7,160	5.64	727	3,750	5.16		
Kentucky	65	457	7.00	114	649	5.68		
Louisiana	136	865	6.38	85	597	7.03		
Maine		520	13.49	50	622	12.53		
Maryland	186	943	5.07	156	1,350	8.66		
Massachusetts	167	1,310	7.85	330	2,530	7.67		
Michigan	1,040	6,730	6.45	939	5,800	6.18		
Minnesota	507	4,040	7.96	776	6,320	8.14		
Mississippi	81	1,570	19.45	11	37	3.27		
Missouri	31	120	3.88	88	589	6.70		
Montana	34	282	8.34	25	120	4.84		
Nebraska	55	477	8.65	101	931	9.17		
Nevada	72	400	5.59	73	692	9.48		
New Hampshire	276	3,500	12.67	168	751	4.48		
New Jersey	53	312	5.85	78	559	7.17		
New Mexico	78	473	6.10	48	267	5.52		
New York	378	3,080	8.14	593	4,690	7.91		
North Carolina	698	6,400	9.16	834	7,320	8.78		
North Dakota	10	124	12.72	41	380	9.35		
Ohio	222	1,300	5.85	213	1,940	9.11		
Oklahoma	57	628	10.96	53	600	11.41		
Oregon	89	858	9.64	85	697	8.21		
Pennsylvania	550	4,850	8.83	812	5,480	6.75		
Rhode Island	86	599	7.00	16	155	9.55		
South Carolina	219	3,680	16.84	199	3,630	18.22		
South Dakota	105	905	8.65	113	1,080	9.57		
Tennessee	94	806	8.56	129	1,680	13.05		
Texas	259	2,000	7.73	208	2,410	11.60		
Utah	37	238	6.47	160	1,480	9.28		
Vermont	50	992	19.95	53	576	10.77		
Virginia	277	2,780	10.03	302	2,990	9.92		
Washington	194	1,160	5.97	255	1,750	6.84		
West Virginia				11	34	3.02		
Wisconsin	1,410	8,440	5.97	452	2,580	5.70		
Wyoming	14	77	5.53	90	544	6.06		
U.S. total or average	12,800	100,000	7.85	13,400	106,000	7.92		
Territory	_							
Puerto Rico	45	169	3.75					
Grand total or average	12,800	100,000	7.83	13,400	106,000	7.92		

-- Zero.

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

²Estimated quantities for the prior year have been recalculated.

 $^{3}Less$ then $^{1}\!/_{2}$ unit.

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

		2010^{2}	2011			
	Quantity			Quantity		
	(thousand	Value	Unit	(thousand	Value	Unit
State	metric tons)	(thousands)	value	metric tons)	(thousands)	value
Alabama	(3)	\$1	\$8.17	(3)	(3)	\$9.89
Alaska	65	323	4.99	112	562	5.02
Arizona	122	1,060	8.76	71	640	8.99
Arkansas	27	60	2.20	1	7	7.72
California	2,870	20,900	7.31	2,800	21,200	7.58
Colorado	582	3,710	6.38	426	2,980	7.00
Connecticut	101	737	7.33	77	533	6.94
Delaware	108	598	5.51	1	13	10.99
Florida	304	3,400	11.19	550	2,330	4.23
Georgia	99	2,020	20.34	117	986	8.42
Hawaii	6	70	12.26	6	81	13.55
Idaho	181	1,090	6.00	18	120	6.61
Illinois	836	6,640	7.94	1,690	13,400	7.93
Indiana	114	863	7.54	183	1,420	7.76
Iowa	240	1,170	4.88	265	1,470	5.53
Kansas	275	1,870	6.80	317	2,330	7.33
Kentucky						
Louisiana	39	691	17.75	31	519	16.50
Maine	28	214	7.59	33	227	6.90
Maryland	294	1,330	4.53	323	3,110	9.63
Massachusetts	142	1,250	8.78	199	1,040	5.23
Michigan	1,210	8,020	6.65	1,040	7,200	6.93
Minnesota	571	4,250	7.44	731	5,170	7.07
Mississippi	133	1,990	14.96	62	413	6.72
Missouri	37	322	8.75	54	393	7.24
Montana	34	282	8.34	25	120	4.84
Nebraska	128	1,070	8.38	116	1,340	11.53
Nevada	42	255	6.03	50	300	6.03
New Hampshire	99	381	3.84	152	825	5.42
New Jersey	195	1,360	6.97	199	1,420	7.15
New Mexico	5	38	7.71	2	13	7.71
New York	250	2,060	8.24	179	1,740	9.71
North Carolina	222	2,490	11.21	261	2,950	11.31
North Dakota	6	63	11.39	32	327	10.21
Ohio	349	2,380	6.81	445	3,540	7.96
Oklahoma	87	1,050	12.00	84	1,030	12.27
Oregon	/0	/33	10.44	59	452	/.6/
Pennsylvania	352	1,740	4.94	350	1,750	5.00
Rhode Island	84	583	6.91	15	139	9.25
South Carolina	219	3,310	15.07	245	3,510	14.34
South Dakota	92	537	5.85	79	667	8.42
Tennessee	22	155	7.19	30	15/	5.28
Itah	34 280	2/3	1.97 8.27	2/5	2,280	8.28
	280	2,340	8.3/ 5.20	102	1,300	8.37
Vincinia	4	20	2.38	21	7 210	5.58
	0/4	6,000 1,740	8.91	833	7,210	8.05
Wast Virginia	507	1,740	5.00	303	2,490	0.81
Wissensin			 5 20			 5 10
Wyoming	1,/00	9,100 77	5.58	289	5,050	5.18
U.S. total or average	12 600	101.000	3.33	12 000	102 000	0.00
U.S. total of average	13,000	101,000	/.38	13,800	103,000	1.52
Puerto Rico						
Grand total or everage	12 600	101.000		12 000	102 000	7 50
Granu total of average	13,000	101,000	1.38	15,800	105,000	1.32

-- Zero.

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

²Estimated quantities for the prior year have been recalculated.

 $^{3}Less$ then $^{1}\!\!/_{2}$ unit.

TABLE 16 CRUSHED AND BROKEN STONE OPERATIONS IN THE UNITED STATES IN 2011, BY STATE $^{\rm 1}$

	Processing plants							
State	Active	Active quarries	Dredging	Stationary	Portable	Stationary and portable	None or unspecified	Sales vards
Alabama	82	72		56	9	4	3	10
Alaska	23	31		4	15		3	1
Arizona	57	61		24	25	6		2
Arkansas	- 83	83		37	30	8	5	3
California	169	149	1	74	40	11	13	30
Colorado	52	245		13	27		5	7
Connecticut		34		20	12	1	1	2
Delaware	4			20				2 4
Florida	120	96	2	38	40	11	2	27
Georgia	03	84	2	72	40		5	10
Hawaii	- 26	27		8	15	3	5	10
Idaho		72		9	32	1	6	1
Illinois	155	133		76	32	1	0	22
Indiana	00	01	1	70		3	2	22
Inutatia		211		80 25	140	3	5	0 2
Iowa	7(211	1	23	140	1	0	2
Kansas		8/		20	45	4	1	0
Кептиску	- 85	85		64	12	/	2	
Louisiana	21	4		2	1	1		17
Maine		23		12	/	3	1	4
Maryland	41	28		21	2	1	3	14
Massachusetts	47	42		26	10	2	3	6
Michigan	41	36		19	9	1	1	11
Minnesota	50	53		11	25	1	4	9
Mississippi	23	5		2	2	1		18
Missouri	206	211		104	77	11	11	3
Montana	24	40		7	17			
Nebraska	15	11	1	7	3			4
Nevada	25	25		18	6			1
New Hampshire	30	28		12	10	2	4	2
New Jersey	26	20		14	1	5		6
New Mexico	46	46		10	30	4	1	1
New York	127	123	1	80	26	11	5	4
North Carolina	141	121		106	11	2	1	21
North Dakota	9	6			5		1	3
Ohio	114	103		69	21	5	5	14
Oklahoma	74	79		50	9	4	9	2
Oregon	164	182		43	105	4	7	5
Pennsylvania	251	255		175	33	15	20	8
Rhode Island	8	6		6				2
South Carolina	45	34		30	2	2		11
South Dakota	16	13		10	1	2		3
Tennessee	130	126		109	11	2	3	5
Texas	253	248		115	74	12	18	34
Utah	40	39		13	19		5	3
Vermont	44	42		16	17	5	4	2
Virginia	121	103		83	7	6	3	22
Washington		134		37	48	5	17	7
West Virginia		31		25	1	3	1	6
Wisconsin	156	226		42	86	5	15	8
Wyoming	33	32		5	25	2		1
Total	3,884	4,036	7	1,899	1,198	182	206	392

-- Zero.

¹Includes recycle plants.

 TABLE 17

 U.S. EXPORTS OF CRUSHED STONE IN 2011, BY DESTINATION¹

			Limestone				
			for cement	Chalk,	Granules,		
Destir	ation	Limestone	manufacturing	crude	chippings	Other	Total
North America	metric tons	21,700	545,000	225,000	1,010	40,300	833,000
South America	do.	553	9	4,770	1	4,250	9,580
Europe	do.	1,070	57	50,000	631	1,570	53,400
Asia	do.	285	202	9,350	118	25	9,980
Oceania	do.	29	7	1,930	109		2,070
Middle East	do.		286	221	3	2,010	2,520
Africa	do.	38		53		7	98
Total:							
Quantity	do.	23,700	546,000	291,000	1,870	48,200	911,000
Value	thousands	\$2,340	\$11,300	\$19,400	\$2	\$8,770	\$41,800
1 0 7							

do. Ditto. -- Zero.

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

Source: U.S. Census Bureau.

TABLE 18
U.S. IMPORTS OF CRUSHED STONE AND CALCIUM CARBONATE FINES, BY TYPE ¹

		2010			2011		
	Quantity			Quantity			
	(thousand)	Value, c.i.f. ²	Unit	(thousand)	Value, c.i.f. ²	Unit	
Туре	metric tons)	(thousands)	value	metric tons)	(thousands)	value	
Crushed stone and chips:							
Limestone	8,900	\$74,700	\$8.39	8,970	\$76,200	\$8.49	
Limestone for flux or cement manufacturing	940	12,300	13.11	920	11,500	12.48	
Other	4,710	96,600	20.52	5,130	90,300	17.59	
Total	14,500	184,000	XX	15,000	178,000	XX	
Calcium carbonate fines: ³							
Natural chalk	1	100	129.14	(4)	71	154.44	
Calcium carbonates, other chalk	- 1	1,210	935.73	1	911	824.39	
Total or average	2	1,310	XX	2	982	XX	
Grand total or average	14,600	185,000	XX	15,000	179,000	XX	

XX Not applicable.

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

²Cost, insurance, and freight value.

³Excludes precipitated calcium carbonate.

⁴Less then $\frac{1}{2}$ unit.

Source: U.S. Census Bureau.

 TABLE 19

 THE TOP 100 PRODUCERS OF CRUSHED STONE IN THE UNITED STATES¹

2011	2010		2011	2010	
Rank	Rank	Company	Rank	Rank	Company
1	1	Vulcan Materials Co.	51	54	Trap Rock Industries, Inc.
2	2	Martin Marietta Aggregates	52	43	Hoover, Inc.
3	3	Lehigh Hanson, Inc.	53	51	Irving Materials, Inc.
4	4	Oldcastle Materials, Inc.	54	67	Aggregates Management, Inc.
5	5	Lafarge North America Inc.	55	75	Specialty Granules Inc.
6	6	CEMEX S.A.B. de C.V.	56	62	Alamo Cement Co.
7	7	Carmeuse Lime & Stone	57	52	Mathy Construction Co.
8	9	Holcim Group/Aggregate Industries Management, Inc.	58	_	Bluegrass Materials Co.
9	8	Rogers Group, Inc.	59	59	Wendling Quarries Inc.
10	10	New Enterprise Stone & Lime Co., Inc.	60	53	Laurel Aggregates, Inc.
11	14	Lhoist North America	61	100	Albert Frei & Sons, Inc.
12	11	Luck Stone Corp.	62	98	Sherwood Construction Co., Inc.
13	_	Summit Materials, LLC.	63	70	Pete Lien & Sons, Inc.
14	18	Texas Industries, Inc.	64	66	Chantilly Crushed Stone, Inc.
15	13	Ash Grove Cement Co.	65	55	MGQ Aggregates, Inc.
16	12	Dolese Bros. Co.	66	64	United States Lime & Minerals, Inc.
17	15	Mulzer Crushed Stone, Inc.	67	72	Savage Stone, LLC
18	16	Ready Mix USA Holding Co.	68	81	Kerford Limestone Co.
19	27	Graymont Ltd.	69	68	RiverStone Group, Inc.
20	20	MDU Resources Group, Inc.	70	92	L. G. Everist, Inc.
21	23	Fred Weber, Inc.	71	60	Snyder Associated Cos., Inc.
21	19	National Lime & Stone Co.	72	79	Granite Construction Inc.
22	25	Vecellio & Grogan. Inc.	73	80	Graniterock Co.
23	17	Eucon Corp.	74	65	Melvin Stone Co.
24	22	Buzzi Unicem USA Inc.	75	82	Pounding Mill Quarry Corp.
25	21	The H&K Group	76	73	Weldon Materials. Inc.
26	24	Mississippi Lime Co.	77	56	Omva Inc.
27	27	Capitol Aggregates. Inc.	78	58	The DePaul Group
29	26	Tower Rock Stone Co.	79	91	Yager Materials
30	29	Eagle Materials Inc.	80	94	East Fairfield Coal Co.
31	34	Titan America LLC	81	95	Peckham Industries. Inc.
32	41	Colorado Materials. Ltd	82	86	River Products Co., Inc.
33	32	Colas Inc.	83	97	Mitsubishi Cement Corp.
34	30	Texas Crushed Stone Co., Inc.	84		Salem Stone Corp.
35	35	ESSROC Cement Corp.	85	96	Glasgow. Inc.
36	33	Glenn O. Hawbaker. Inc.	86	99	BMC Aggregates, L.C.
37	37	Boxley Materials Co.	87	85	B.V. Hedrick Gravel & Sand Co., Inc.
38	36	Wake Stone Corp.	88	74	Columbia Quarry Co.
39	39	Bureau of Land Management	89	78	Stavola Construction Materials Co., Inc.
40	47	CalPortland Co.	90	87	Dver Ouarry. Inc.
41	41	American Infrastructure	91		Minerals Technologies Inc.
42	57	Imervs	92	69	Great Lakes Aggregates. Inc.
43	48	Greer Industries Inc	93	71	Votorantim Cement North America
44	44	Anchor Stone Co.	94		Gohmann Asphalt & Construction Inc.
45	46	Schildberg Construction Co Inc	95		Coolspring Mining, Inc.
46	50	The Kraemer Co.	96		J. F. Allen Co.
47	77	U.S. Forest Service	97	_	Linwood Mining & Minerals Corp
48	49	The Heritage Group	98	_	Rockydale Quarries Corp.
49	38	3M Co	99	_	Vicat Group The
50	42	McGeorge Contracting Co	100	_	Brox Industries Inc

S0 42 McGeorge Contracting Co.
 Not in the top 100 producers of crushed stone in the United States in 2010.

¹In descending order of tonnage produced.