

2010 Minerals Yearbook

STONE, CRUSHED [ADVANCE RELEASE]

STONE, CRUSHED

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A total 1.16 billion metric tons (Gt) of crushed stone was produced for consumption in the United States in 2010, virtually unchanged from the total production of 2009 and 35% less than the record high of 1.78 Gt in 2006. In 2010, the total value of crushed stone produced in the United States was \$11.2 billion, a slight decrease compared with that of 2009 and 22% less than that of 2006 (table 1). The average unit price for crushed stone decreased slightly compared with the average unit price for 2009 but was 21% higher compared with that of 2006. In 2010, the crushed stone industry experienced the lowest level of crushed stone production for consumption in the United States since 1993, with the lowest total value since 2004.

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, slate, calcareous marl, volcanic cinder and scoria, and shell (table 2).

Foreign trade in crushed stone remained relatively small compared to nationwide consumption. In 2010, U.S. exports decreased by 4% to 1.21 million metric tons (Mt) compared with 1.26 Mt in 2009, and the value decreased by 11% to \$52.1 million, compared with \$58.3 million in 2009 (tables 1, 17). U.S. imports of crushed stone, including calcium carbonate fines, increased by 19% to 14.6 Mt, and the value increased by 6% to \$185 million compared with the 2009 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, was virtually unchanged compared with that of 2009 because of the very slight decrease in production for consumption of crushed stone in the United States in 2010.

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 2010, a total of 1,598 companies produced or sold crushed stone from 3,953 operations with 3,897 quarries

and 207 sales and (or) distribution sites. Of the 3,953 active operations, 2,295 operations reported their production or sales to the USGS, and their total production was 843 Mt (73% of the U.S. total). Of the 2,295 reporting operations, 1,199 operations did not report a breakdown by end use. Their total production was 310 Mt (27% 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 1,519 nonrespondent operations was 314 Mt (27% of the U.S. total) and is included in table 9 under "Unspecified, estimated" uses.

A total of 207 sales yards were active in 2010, and the total quantity of crushed stone sold was 40.3 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, Kentucky, Ohio, Indiana, Virginia, Georgia, and Florida. The combined production of the 10 leading States increased by 2% and was 594 Mt, more than one-half of the national total.

There are 93 underground mines included in the total number of active operations, and they produced 68.7 Mt of crushed stone in 2010. Active underground mines were located in 17 States. The five leading States were, in descending order of tonnage, Kentucky, Missouri, Illinois, Pennsylvania, and Iowa. Their combined production was 48.2 Mt (70% of the total of U.S. crushed stone produced underground).

A total of 1,076 crushed stone operations were either idle or presumed to have been idle in 2010 because no production report was received, and no employment information was available to estimate their production. Since the 2009 survey, 113 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 2010, 70% was limestone and dolomite; 14% was granite; 6% was traprock; 5% was miscellaneous stone; and 4% was sandstone and quartzite. The remaining 1% was shared, in descending order of tonnage, by marble, slate, calcareous marl, volcanic cinder and scoria, and shell. 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 2010, 455 Mt of crushed stone (39% of the total crushed stone) was produced by 275 operations reporting production of more than 1 million metric tons per year; 294 Mt was produced by 475 operations reporting production between 500,000 and 999,999 metric tons per year (t/yr); and 356 Mt was produced by 1,512 operations reporting production between 100,000 and 499,999 t/yr. Operations that produced more than 500,000 t/yr accounted for 65% of total crushed stone produced in the United States in 2010, a slight increase compared with that of 2009 (table 5a). By geographic region, in 2010, the South had 1,305 active operations, followed by the Midwest with 1,080, the West with 797, and the Northeast with 582 active operations (table 5b).

The leading U.S. producing companies in 2010 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; Rogers Group, Inc.; Holcim Group/ Aggregate Industries Management, Inc.; and New Enterprise Stone & Lime Co., Inc. The combined production of the top 10 companies was 562 Mt (49% of the national total). The combined production of the top 100 companies was 914 Mt (79% 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 stop in 2009. The lack of activity continued throughout 2009 as companies focused resources on restructuring debt, raising capital, and strengthening core assets (Aggregates Manager, 2010c). The refocusing of resources had been the common theme since mid-2009, but the trend may have begun to change after a few quarters in 2010, with increased consumption (Willett, 2011).

CEMEX S.A.B. de C.V. committed to reducing debt in 2010 by selling off assets in five States, mostly in the Eastern United States. CEMEX announced the sale of seven quarries, three salesyards, and one concrete block plant in Kentucky to Bluegrass Materials Co., LLC (Aggregates Manager, 2010b). These assets were acquired when CEMEX purchased Rinker Group Ltd. in 2007 (Rock Products, 2010). Later in the year, the company sold three quarries in Wyoming plus its remaining stake in Granite Canyon Quarry to Martin Marietta Aggregates (Aggregates Manager, 2010a). From its joint venture with Ready Mix USA, LLC, CEMEX sold the combined total of 2 granite quarries and 20 limestone quarries in the States of Georgia, Tennessee, and Virginia (Aggregates Manager, 2010b).

Summit Materials, LLC completed purchases in nine States during 2010 to increase its construction materials business. Summit purchased Altaview Concrete, Inc.; B&B Resources, Inc.; and Harper-Kilgore, LLC to add to its construction aggregates and ready-mix concrete assets in Utah (Summit Materials, 2010b). Summit also purchased RK Hall, a construction aggregates and asphalt producer with operations in Arkansas, Oklahoma, and Texas. Con-Agg of MO, LLC (Con-Agg), an aggregates and ready-mix concrete company based in Missouri, was purchased by Summit along with Fischer Quarries, LLC, also based in Missouri (Summit Materials, 2010c). Summit also made purchases in Colorado, Idaho, and

Wyoming of Elam Construction, Inc.; Grand Junction Concrete Pipe, Inc.; Triple C Concrete, Inc.; and Wind River Materials, LLC (Summit Materials, 2010a).

Lafarge North America Inc. and Titan America LLC sold assets in 2010. Dolese Bros. Co; Luck Stone Corp.; Martin Marietta; Oldcastle Materials, Inc.; and VantaCore Partners LP made small acquisitions. Oldcastle Materials completed two small acquisitions with the purchase of the construction materials assets of A.L. Blades & Sons, Inc. (Hornell, New York) and MAC Construction, Inc. (Virginia) to add on to its asphalt paving and construction business (Aggregates Manager, 2010b, 2011).

Production of crushed stone by type is detailed below. *Calcareous Marl.*—Output of calcareous marl increased 5% compared with that of 2009 to 2.7 Mt valued at \$21.4 million (table 2).

Dolomite.—Production of dolomite decreased by 5% compared with the total for 2009 to 48.9 Mt valued at \$470 million (table 2). Crushed dolomite production was reported in 25 States. The leading producing States were, in descending order of tonnage, Pennsylvania, Illinois, New York, Michigan, and Indiana; the total production of these five States was 36.2 Mt (74% 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 decreased by 3% compared with that of 2009 to 157 Mt valued at \$1.8 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 106 Mt (67% of the U.S. output) (table 7).

Limestone.—The output of crushed limestone, including some dolomite, increased slightly compared with that of 2009 to 756 Mt valued at \$6.8 billion (table 2). Limestone production was reported in 47 States, and companies in 22 States reported producing limestone and dolomite from the same quarries. Their production of about 18.8 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, Kentucky, Pennsylvania, and Ohio; the total production of these five States was 309 Mt (41% of the total U.S. output) (table 6).

Marble.—Production of crushed marble decreased by 28% compared with the total for 2009 to 6.5 Mt valued at \$86.1 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 by 7% compared with the total for 2009 to 59.7 Mt, valued at \$503 million (table 2). In 2010, the reported amount of miscellaneous stone accounted for 67% of the total output of miscellaneous stone and 60% of its value (table 13). The remaining 33% (29.8 Mt) of the total output consisted of known stone for which data were withheld. Of the 29.8 Mt, 57% was limestone and traprock, with the remaining 43% consisting of (in descending order of tonnage) granite, marble, sandstone and quartzite, slate, volcanic cinder and scoria, shell, dolomite, and calcareous marl.

Sandstone and Quartzite.—The output of crushed sandstone and quartzite was virtually unchanged compared with the total for 2009 at 43.8 Mt, valued at \$416 million (table 2). Crushed sandstone production was reported in 30 States, while 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 New York. Their combined total production was 28.7 Mt (66% of the U.S. output) (table 7).

Shell.—Shell is derived mainly from fossil reefs or oyster shell banks. The output of crushed shell more than tripled compared with the total for 2009 to 1.7 Mt, valued at \$24.6 million (table 2). Crushed shell was reported as being produced in three States.

Slate.—The output of crushed slate increased by 6% compared with that of 2008 to 3.2 Mt, valued at \$34.4 million (table 2). Crushed slate was produced in 10 States, with Pennsylvania accounting for about 37% of the total U.S. output.

Traprock.—Production of crushed traprock increased very slightly compared with the total for 2009 to 73.9 Mt, valued at \$927 million (table 2). Traprock was reported as being produced in 27 States. The leading producing States were (in descending order of tonnage) New Jersey, Oregon, Virginia, Washington, and North Carolina; these five States produced 35.8 Mt (48% of U.S. output) (table 7).

Volcanic Cinder and Scoria.—Production of volcanic cinder and scoria decreased by 72% compared with the total for 2009 to 2.3 Mt, valued at \$17.8 million (table 2). Volcanic cinder and scoria production was reported in 13 States, with the top producing State of Wyoming accounting for 49% 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 2010, 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 2009. Of the 1.20 Gt of crushed stone consumed, 310 Mt (27%) was "Unspecified, reported," and 314 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; 10% for cement manufacturing; 3% for lime manufacturing; 2% for agricultural uses; and 2% for special and miscellaneous uses and products (table 9). It is indicated that, 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. Using this procedure, the analyst assumes that the breakdown by uses of the unspecified uses is similar to that of the reported uses.

In 2010, the value of the total construction put in place decreased by 11% compared with that of 2009 to \$804 billion, as reported by the U.S. Census Bureau (2011). The value of total private construction decreased by 15% to \$501 billion. This was the fourth consecutive drop in the total value of private construction and the lowest level since 1997. The value of total public construction decreased by 4% to \$303 billion, which was the first decrease in total 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 cement concrete and asphalt concrete materials recovered from construction projects to be reused to produce aggregate materials, especially fill and road base. The recycling of 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.—Companies in 48 States reported a total of 11.4 Mt of recycled asphalt, valued at \$119 million in 2010 (table 14). The leading recycling States were (in descending order of tonnage) California, Kansas, North Carolina, Michigan, and Illinois. Their combined total was 5.4 Mt, a decrease of 8% compared with their combined total in 2009.

Recycled Concrete.—A total of 13.4 Mt of recycled concrete valued at \$98.6 million was reported as recycled in 48 States (table 15). The leading recycling States for 2010 were (in descending order of tonnage) California, Wisconsin, Michigan, Illinois, and Virginia. Their combined total was 7.3 Mt, an increase of 47% compared with their combined total of 2009.

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 2010, 825 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 \$10.02 per metric ton in 2010. This was a slight decrease compared with the average unit value of \$10.16 per ton in 2009. The annual reports of the top U.S. producing companies reported a 2% to 4% price decrease in 2010, compared with prices in 2009. For those operations that reported production only, the unit values of total production or specific end uses were estimated based on what other operations in the same State reported. The average unit value for specific end uses within a State was used in the estimation of value for operations reporting specific end uses. The State average was used in the estimation for operations reporting total production but not total value.

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 672 Mt of the 1.16 Gt of crushed stone produced for consumption in 2010, no means of transportation was reported by the producers. Of the remaining 483 Mt of crushed stone, 62% was reported as being transported by truck from the quarry or the processing plant to the first point of sale or use; 4% by rail; and 6% by waterway. About 126 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 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 4% to 1.21 Mt compared with the total of 1.26 Mt in 2009, with the value decreasing by 11% to \$52.1 million. In 2010, exports of crushed limestone for cement manufacturing averaged a unit value of \$21.62 per ton, which was lower than the average unit value of 2009 (table 17).

Imports.—Imports of crushed stone increased by 19% to 14.6 Mt compared with those of 2009, and the value increased by 6% to \$185 million. Of the imported crushed stone, almost all 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 modest improvements are expected in 2011. Based on quarterly sales data, it is thought that the construction industry reached the low point in the cycle and was starting to recover (Willett, 2011).

Even with the uncertainty in the economic and political climate in the United States, many construction aggregates producers expect to see improvements in production levels in 2011. It has been predicted that almost one-third of the American Recovery and Reinvestment Act of 2009 funds will be spent in 2011, and this could contribute to increased consumption of construction materials (Martin Marietta, 2011, p. 5; Vulcan Materials, 2011, p. 25). Increased consumption of crushed stone in commercial construction combined with State highway and infrastructure projects may offset the continuing decline in residential construction. Increased consumption in 2011 from that in 2010, is not expected to reach the historical annual average of the past 50 years of 2% to 4%. However, the estimated output of crushed stone in the 48 conterminous States shipped for consumption in the first 6 months of 2011 was 507 Mt, a 4% decrease compared with that of the same period of 2010. Second quarter shipments of crushed stone for consumption decreased by 6.5% compared with those of the same period of 2010 (Willett, 2011). This might indicate that the recovery might take longer than previously expected.

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TABLE 1
SALIENT CRUSHED STONE STATISTICS¹

	2006	2007	2008	2009	2010
Sold or used by producers: ²					
Quantity	1,780,000	1,650,000 ^r	1,460,000 ^r	1,160,000 ^r	1,160,000
Value	14,300,000	14,100,000 ^r	13,600,000 ^r	11,300,000 ^r	11,200,000
Recycle:					
Quantity	15,400	20,100	29,100	28,500 ^r	24,900
Value	111,000	150,000	252,000	264,000 ^r	218,000
Exports:					
Quantity	1,140	1,020	1,240	1,260	1,210
Value	57,300	62,500	61,600	58,300	52,100
Imports for consumption: ³					
Quantity	19,800	19,500	20,900	12,200	14,600
Value	206,000	212,000	232,000	174,000	185,000

^rRevised; estimated quantities for the prior year have been recalculated.

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.

 $\label{eq:table 2} \text{CRUSHED STONE SOLD OR USED IN THE UNITED STATES, BY TYPE}^{1,\,2}$

		2009) ³			201	0	
	-	Quantity			-	Quantity		
	Number	(thousand	Value	Unit	Number	(thousand	Value	Unit
Type	of quarries	metric tons)	(thousands)	value	of quarries	metric tons)	(thousands)	value
Limestone ⁴	2,160	744,000	\$6,650,000	\$8.94	2,080	756,000	\$6,830,000	\$9.03
Dolomite	145	51,700	521,000	10.08	164	48,900	470,000	9.62
Marble	38	9,030	120,000	13.27	42	6,490	86,100	13.27
Calcareous marl		2,590	14,700	5.68	4	2,720	21,400	7.88
Shell	6	464	8,450	18.20	8	1,730	24,600	14.24
Granite	425	162,000	1,950,000	12.09	427	157,000	1,840,000	11.74
Traprock	354	73,800	989,000	13.39	346	73,900	927,000	12.55
Sandstone and quartzite ⁵	220	43,700	423,000	9.68	211	43,800	416,000	9.51
Slate	40	2,980	30,900	10.36	37	3,150	34,400	10.95
Volcanic cinder and scoria	48	8,330	48,300	5.80	44	2,340	17,800	7.63
Miscellaneous stone	565	64,200	563,000	8.77	533	59,700	503,000	8.42
Total or average	XX	1,160,000	11,300,000	9.74	XX	1,160,000	11,200,000	9.67

XX Not applicable.

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

	2009	3	2010)
Region/division	Quantity	Value	Quantity	Value
Northeast:				
New England	35,100	387,000	33,000	362,000
Middle Atlantic	134,000	1,560,000	133,000	1,540,000
Total	169,000	1,950,000	166,000	1,900,000
Midwest:				
East North Central	188,000	1,490,000	189,000	1,410,000
West North Central	142,000	1,260,000	139,000	1,230,000
Total	329,000	2,760,000	328,000	2,640,000
South:				
South Atlantic	221,000	2,760,000	227,000	2,810,000
East South Central	126,000	1,260,000	128,000	1,290,000
West South Central	182,000	1,400,000	191,000	1,480,000
Total	529,000	5,420,000	545,000	5,570,000
West:				
Mountain	56,400	433,000	47,700	383,000
Pacific	77,800	761,000	69,100	683,000
Total	134,000	1,190,000	117,000	1,070,000
Grand total	1,160,000	11,300,000	1,160,000	11,200,000

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

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.

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

³Estimated quantities for the prior year have been recalculated.

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

		2009 ²			2010	
	Quantity			Quantity		
	(thousand	Value	Unit	(thousand	Value	Unit
State	metric tons)	(thousands)	value	metric tons)	(thousands)	value
Alabama	35,700	\$327,000	\$9.15	35,400	\$331,000	\$9.36
Alaska	1,940	34,700	17.93	1,510	22,600	14.97
Arizona	9,520	88,700	9.32	8,280	80,300	9.70
Arkansas	29,400	215,000	7.31	31,000	238,000	7.66
California	39,800	377,000	9.45	31,700	313,000	9.86
Colorado	6,800	62,200	9.14	7,320	58,400	7.98
Connecticut	8,160	102,000	12.54	7,250	92,700	12.78
Delaware ³	W	W	W	W	W	W
Florida	41,200	558,000	13.54	42,800	548,000	12.79
Georgia	44,500	510,000	11.46	42,900	466,000	10.86
Hawaii	5,800	101,000	17.35	4,750	91,900	19.37
Idaho	3,880	26,600	6.85	4,030	23,900	5.95
Illinois	56,900	514,000	9.04	53,100	477,000	8.98
Indiana	44,200	290,000	6.56	44,300	291,000	6.57
Iowa	32,700	298,000	9.13	31,800	292,000	9.16
Kansas	16,900	142,000	8.38	16,800	143,000	8.51
Kentucky	47,000	415,000	8.84	49,200	425,000	8.65
Louisiana ³	W	W	W	W	W	W
Maine	3,600	31,600	8.79	3,430	30,200	8.80
Maryland	23,300	208,000	8.93	21,700	221,000	10.17
Massachusetts	11,200	130,000	11.56	10,400	120,000	11.46
Michigan	20,400	116,000	5.69	21,900	122,000	5.55
Minnesota	7,440	92,300	12.40	7,350	90,200	12.27
	3,130	63,400	20.25	2,910	65,500	22.54
Mississippi ³ Missouri	72,800	639,000	8.77	70,200	595,000	8.48
Montana	1,990	20,400	10.25	2,020	21,200	10.50
Nebraska	6,200	59,200	9.54	6,760	70,100	10.37
Nevada	7,380	81,300	11.01	6,970	80,800	11.58
	4,800	47,600	9.93	4,320	39,500	9.14
New Hampshire New Jersey			8.51			8.27
	14,500	124,000		14,400	119,000	
New Mexico	6,000	39,400	6.57	4,280	34,100	7.97
New York	38,000	431,000	11.35	33,000	367,000	11.12
North Carolina	38,700	587,000	15.15	40,500	591,000	14.59
North Dakota	985	3,980	4.05	835	3,770	4.52
Ohio	43,300	395,000	9.12	47,200	394,000	8.36
Oklahoma	36,100	301,000	8.34	39,000	343,000	8.80
Oregon	15,500	118,000	7.60	16,300	122,000	7.49
Pennsylvania	81,500	1,000,000	12.31	85,500	1,050,000	12.29
Rhode Island	1,820	20,200	11.09	1,440	15,800	10.95
South Carolina	18,200	201,000	11.01	19,200	215,000	11.23
South Dakota	4,540	29,900	6.58	4,890	32,200	6.59
Tennessee	40,300	453,000	11.25	40,900	464,000	11.35
Texas	110,000	788,000	7.15	114,000	807,000	7.05
Utah	4,790	39,100	8.17	5,840	43,800	7.50
Vermont	5,480	55,900	10.21	6,080	64,100	10.53
Virginia	42,300	580,000	13.70	44,100	613,000	13.88
Washington	14,800	132,000	8.93	14,800	133,000	9.02
West Virginia	12,300	112,000	9.07	14,700	141,000	9.62
Wisconsin	23,100	179,000	7.75	22,600	130,000	5.77
Wyoming	16,000	75,400	4.71	8,910	40,300	4.52
Other	6,550	102,000	15.60	6,730	102,000	15.11
U.S. total or average	1,160,000	11,300,000	9.74	1,160,000	11,200,000	9.67

		2009^2			2010				
	Quantity			Quantity					
	(thousand	Value	Unit	(thousand	Value	Unit			
State	metric tons)	(thousands)	value	metric tons)	(thousands)	value			
Territory									
American Samoa ⁴	(5)	(5)	(5)	(5)	(5)	(5)			
Guam	296	3,060	10.35	114	1,180	10.35			
Puerto Rico	9,450	72,400	7.67	8,060	68,200	8.46			
Virgin Islands	(5)	(5)	(5)	(5)	(5)	(5)			
Grand total or average	1,170,000	11,400,000	9.73	1,160,000	11,300,000	9.66			

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

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

		20	09^{3}			20	010	
			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	636	16.5	5,310	0.5	642	17.1	5,120	0.4
25,000 to 49,999	342	8.9	11,400	1.0	366	9.7	12,400	1.1
50,000 to 99,999	531	13.8	35,100	3.0	494	13.1	33,000	2.9
100,000 to 199,999	620	16.1	81,700	7.0	579	15.4	77,100	6.7
200,000 to 299,999	428	11.1	97,100	8.4	401	10.7	90,400	7.8
300,000 to 399,999	306	7.9	96,400	8.3	300	8.0	94,300	8.2
400,000 to 499,999	250	6.5	102,000	8.8	232	6.2	94,200	8.1
500,000 to 599,999	163	4.2	80,400	6.9	158	4.2	78,400	6.8
600,000 to 699,999	127	3.3	74,400	6.4	134	3.6	79,100	6.8
700,000 to 799,999	85	2.2	57,400	4.9	84	2.2	56,800	4.9
800,000 to 899,999	69	1.8	52,900	4.6	55	1.5	42,500	3.7
900,000 to 999,999	43	1.1	37,000	3.2	44	1.2	37,600	3.3
1,000,000 to 1,499,999	145	3.8	158,000	13.6	151	4.0	167,000	14.4
1,500,000 to 1,999,999	45	1.2	68,600	5.9	54	1.4	83,700	7.2
2,000,000 to 2,499,999	30	0.8	61,100	5.3	27	0.7	54,400	4.7
2,500,000 to 4,999,999	34	0.9	101,000	8.7	37	1.0	112,000	9.7
5,000,000 and more	7	0.2	41,100	3.5	6	0.2	38,500	3.3
Total	3,860	100	1,160,000	100	3,760	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.

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.

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."

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 2010, BY REGION AND SIZE OF OPERATION $^{\rm 1,\,2}$

		Nor	theast			M	idwest	
			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	82	14.1	773	0.5	162	15.0	1,550	0.5
25,000 to 49,999	67	11.5	2,170	1.3	98	9.1	3,250	1.0
50,000 to 99,999	68	11.7	4,560	2.7	152	14.1	10,000	3.1
100,000 to 199,999	99	17.0	13,300	8.0	174	16.1	23,000	7.0
200,000 to 299,999	62	10.7	13,800	8.3	117	10.8	26,000	7.9
300,000 to 399,999	44	7.6	13,700	8.3	100	9.3	31,100	9.5
400,000 to 499,999	45	7.7	18,100	10.9	73	6.8	29,800	9.1
500,000 to 599,999	20	3.4	9,900	6.0	47	4.4	23,400	7.1
600,000 to 699,999	29	5.0	17,400	10.5	39	3.6	23,000	7.0
700,000 to 799,999	15	2.6	10,200	6.1	20	1.9	13,500	4.1
800,000 to 899,999	4	0.7	3,130	1.9	14	1.3	10,800	3.3
900,000 to 999,999	7	1.2	6,020	3.6	12	1.1	10,300	3.1
1,000,000 to 1,499,999	28	4.8	31,100	18.8	39	3.6	44,100	13.4
1,500,000 to 1,999,999	6	1.0	8,870	5.3	14	1.3	21,600	6.6
2,000,000 to 2,499,999	5	0.9	10,100	6.1	6	0.6	12,200	3.7
2,500,000 to 4,999,999	1	0.2	2,670	1.6	11	1.0	32,500	9.9
5,000,000 and more					2	0.2	11,600	3.5
Total	582	100	166,000	100	1,080	100	328,000	100

		South				7	West	
			Quantity				Quantity	
	Number of	Percentage	(thousand	Percentage	Number of	Percentage	(thousand	Percentage
	operations	of total	al metric tons)	of total	operations	of total	metric tons)	of total
Less than 25,000	114	8.7	881	0.2	284	35.6	1,920	1.6
25,000 to 49,999	82	6.3	2,890	0.5	119	14.9	4,040	3.5
50,000 to 99,999	150	11.5	10,300	1.9	124	15.6	8,180	7.0
100,000 to 199,999	182	13.9	24,800	4.5	124	15.6	16,000	13.7
200,000 to 299,999	174	13.3	40,100	7.4	48	6.0	10,500	9.0
300,000 to 399,999	135	10.3	42,800	7.8	21	2.6	6,780	5.8
400,000 to 499,999	100	7.7	40,600	7.4	14	1.8	5,720	4.9
500,000 to 599,999	77	5.9	38,100	7.0	14	1.8	6,990	6.0
600,000 to 699,999	58	4.4	34,100	6.2	8	1.0	4,600	3.9
700,000 to 799,999	38	2.9	25,700	4.7	11	1.4	7,410	6.4
800,000 to 899,999	36	2.8	27,800	5.1	1	0.1	739	0.6
900,000 to 999,999		1.7	18,800	3.4	3	0.4	2,490	2.1
1,000,000 to 1,499,999	73	5.6	79,300	14.5	11	1.4	12,000	10.3
1,500,000 to 1,999,999	26	2.0	40,900	7.5	8	1.0	12,300	10.6
2,000,000 to 2,499,999	12	0.9	24,400	4.5	4	0.5	7,680	6.6
2,500,000 to 4,999,999		1.7	67,300	12.3	3	0.4	9,360	8.0
5,000,000 and more	4	0.3	26,800	4.9				
Total	1,310	100	545,000	100	797	100	117,000	100

⁻⁻ Zero.

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 2010, BY STATE 1,2

	Limesto		Dolon		Calcareou		Mart	
State	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Alabama	29,000	270,000	1,070	9,670			1,810	17,500
Alaska								
Arizona	3,320 ³	34,300					(4)	
Arkansas	11,300	81,000	(5)					
California	13,400 ³	119,000	226	2,100				
Colorado	407	4,050	(5)				(4)	
Connecticut	1,180 3	22,600	(5)				(4)	
Delaware	(4)							
Florida	39,600 ³	512,000	(5)					
Georgia	4,610	52,400					1,060	24,400
Hawaii	(4)							
Idaho	250	3,670						
Illinois	43,100 ³	381,000	9,550	91,600				
Indiana	40,100 ³	260,000	4,050	29,600				
Iowa	31,800 ³	291,000	(5)					
Kansas	15,800	135,000						
Kentucky	49,100	424,000						
Louisiana	(4)							
Maine	1,620	12,200						
Maryland	12,400 3	125,000					(4)	
Massachusetts	792 ³	15,900						
Michigan	16,300 ³	93,800	4,670	25,000	(4)			
Minnesota	2,590 ³	29,800	1,590	22,700				
Mississippi	2,710	63,200						
Missouri	65,400 ³	513,000	2,500	19,500			(4)	
Montana	1,610	17,200						
Nebraska	6,680	69,200						
Nevada	2,250	28,600	(5)					
New Hampshire	(4)							
New Jersey	(4)							
New Mexico	2,780	21,700						
New York	19,900 3	222,000	7,240	70,400			94	1,030
North Carolina	4,210	61,000	(5)					
North Dakota	´							
Ohio	44,200 ³	370,000	2,300	19,100				
Oklahoma	33,900 ³	301,000	(5)					
Oregon	(4)		(4)					
Pennsylvania	47,000 ³	526,000	10,700	110,000			(4)	
Rhode Island								
South Carolina	2,530	24,900			2,720	21,400		
South Dakota	2,690	15,700					(4)	
Tennessee	39,600 ³	448,000	(5)					
Texas	103,000	725,000					100	2,990
Utah	4,230	32,400	(5)					2,770
Vermont	2,000 ³	19,500	(5)				(4)	
Virginia	15,700 ³	203,000	(5)				(4)	
Washington	967 ³	12,400	198	3,220				
West Virginia	13,600						(4)	
west virgilia	13,000	129,000						

TABLE 6 LIMESTONE, DOLOMITE, CALCAREOUS MARL, AND MARBLE SOLD OR USED BY PRODUCERS IN THE UNITED STATES IN 2010, BY STATE $^{1.2}$

	Limestone		Dolomite		Calcareous marl		Marble	
State	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Wisconsin	19,300 ³	111,000	165	882			(4)	
Wyoming	2,940 3	19,000						
Total	754,000	6,800,000	44,300	404,000	2,720	21,400	3,070	45,900

⁻⁻ Zero.

 $^{^{1}\}mathrm{Data}$ 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 limestone-dolomite reported with no distinction between the two kinds of stone.

⁴Concealed to avoid disclosing company proprietary data; included with "Miscellaneous stone."

⁵Concealed 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 2010, BY STATE 1,2

	Gran	ite	Trapro	ock	Sandstone and	l quartzite ³	Slat	e
State	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Alabama	1,860	18,200			920	8,960	(4)	
Alaska	203	2,680	261	2,500				
Arizona	2,130	22,000	(4)		528	5,350		
Arkansas	7,570	61,000			10,600	84,000	(4)	
California	8,730	85,100	4,760	55,800	1,030	9,270	(4)	
Colorado	4,780	38,500	(4)		1,330	10,000		
Connecticut	526	5,500	4,450	50,300				
Delaware			(4)					
Florida	(4)				(4)			
Georgia	37,000	387,000			203	2,270	(4)	
Hawaii			4,180	81,000				
Idaho	251	1,180	1,720	8,210	(4)			
Illinois					(4)			
Indiana								
Iowa								
Kansas					934	7,720		
Kentucky								
Louisiana					(4)			
Maine	1,240	12,200	(4)		279	2,480		
Maryland	4,600	44,900	(4)		96	2,340		
Massachusetts	3,490	38,000	4,660	49,400		2,340		
Michigan			(4)					
Minnesota	2,810	33,700	(4)		(4)			
Mississippi	2,010	33,700						
Missouri	 899	52,900	(4)					
Montana		52,900	(4)		9	130		
Nebraska	(4)		(4)			130		
Nevada	107	1,120	(4)		(4)			
	2,190	19,200	1,550	14,500	(4)			
New Hampshire	5,160	47,100	9,070	70,600	(4)			
New Jersey New Mexico								
	1.040	15 000			(4)	20.400		
New York	1,040	15,000	(4) 5.220	77 200	1,690	20,400	(4)	
North Carolina	28,300	413,000	5,330	77,200			(4)	
North Dakota					(4)	2.750		
Ohio	2.500	21.000			315	2,750		
Oklahoma	2,580	21,900	7.020		946	8,130		
Oregon	362	2,460	7,820	64,300	(4)		1 170	11.000
Pennsylvania	2,740	30,100	4,860	183,000	11,500	114,000	1,170	11,800
Rhode Island	595	6,890	(4)					
South Carolina	13,400	163,000						
South Dakota	(4)				2,010	15,300	(4)	
Tennessee	(4)				812	10,100		
Texas	(4)		(4)		2,960	17,300		
Utah					242	3,150		
Vermont	(4)		(4)		1,020	12,100	249	2,640
Virginia	18,400	269,000	7,460	104,000	1,280	18,600	(4)	
Washington	682	6,730	6,100	55,000	726	14,600		

TABLE 7—Continued

GRANITE, TRAPROCK, SANDSTONE AND QUARTZITE, AND SLATE SOLD OR USED BY PRODUCERS IN THE UNITED STATES IN 2010, BY STATE 1,2

	Gran	Granite		Traprock		Sandstone and quartzite ³		te
State	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
West Virginia					1,070	12,400		
Wisconsin	1,460	8,410	1,510	9,020	(4)			
Wyoming	(4)							
Total	153,000	1,810,000	63,700	825,000	40,500	382,000	1,420	14,400

⁻⁻ Zero.

 $^{^{1}\}mathrm{Data}$ are rounded to no more than three significant digits; may not add to totals shown.

 $^{^2\}mbox{Totals}$ may not match totals shown in table 2 because of concealments.

³Includes sandstone-quartzite reported with no distinction between the two kinds of stone.

⁴Concealed to avoid disclosing company proprietary data; included with "Miscellaneous stone."

TABLE 8 SHELL, VOLCANIC CINDER AND SCORIA, AND MISCELLANEOUS STONE SOLD OR USED BY PRODUCERS IN THE UNITED STATES IN 2010, BY STATE $^{1,\,2}$

(Thousand metric tons and thousand dollars)

	She	11	Volcanic cinde	r and scoria	Miscellane	ous stone
State	Quantity	Value	Quantity	Value	Quantity	Value
Alabama					694	6,760
Alaska	(3)				1,040	17,400
Arizona			123	759	2,170	18,000
Arkansas					1,540	11,800
California	(3)		313	3,500	3,330	38,300
Colorado			(3)		799	5,820
Connecticut					1,100	14,200
Delaware					W	W
Florida	1,670	20,900			1,560	14,700
Georgia					7	168
Hawaii			103	1,760	463	9,210
Idaho			(3)	·	1,810	10,900
Illinois					515	4,120
Indiana					138	1,020
Iowa					36	340
Kansas						340
Kentucky					73	688
Louisiana					W	W
Maine					291	
						3,300
Maryland					4,600	48,600
Massachusetts					1,500	16,200
Michigan					986	2,780
Minnesota					372	4,050
Mississippi					200	2,320
Missouri					1,380	9,640
Montana			(3)		402	3,960
Nebraska					79	822
Nevada			(3)		4,620	51,000
New Hampshire					575	5,780
New Jersey					126	1,070
New Mexico			226	1,520	1,270	10,900
New York					3,100	38,000
North Carolina					2,760	40,000
North Dakota			86	987	749	2,790
Ohio					338	2,730
Oklahoma					1,620	12,800
Oregon			18	71	8,070	55,000
Pennsylvania					7,600	75,500
Rhode Island					844	8,880
South Carolina					486	6,030
South Dakota					188	1,280
Tennessee					499	5,720
Texas					8,170	61,400
Utah			(3)		1,370	8,200
Vermont			(3)		2,820	29,800
Virginia	<u> </u>				1,320	18,100
Washington						
West Virginia			(3)		6,110	41,300
Wisconsin					167	998

TABLE 8—Continued SHELL, VOLCANIC CINDER AND SCORIA, AND MISCELLANEOUS STONE SOLD OR USED BY PRODUCERS IN THE UNITED STATES IN 2010, BY STATE $^{\rm 1,\,2}$

	Shell		Volcanic cinde	er and scoria	Miscellaneous stone		
State	Quantity	Value	Quantity	Value	Quantity	Value	
Wyoming			1,140	5,450	4,830	15,800	
Other					6,730	102,000	
Total	1,670	20,900	2,010	14,000	89,400	840,000	

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

 $^{^{1}\}mathrm{Data}$ 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.

³Concealed to avoid disclosing company proprietary data; included with "Miscellaneous stone."

 ${\it TABLE 9}$ CRUSHED STONE SOLD OR USED BY PRODUCERS IN THE UNITED STATES, BY USE 1

		2009^2			2010	
	Quantity			Quantity		
	(thousand	Value	Unit	(thousand	Value	Unit
Use	metric tons)	(thousands)	value	metric tons)	(thousands)	value
Construction:						
Coarse aggregate (+1½ inch):						
Macadam	1,650	\$17,900	\$10.83	1,270	\$12,700	\$10.01
Riprap and jetty stone	9,600	100,000	10.44	10,000	114,000	11.33
Filter stone	3,600	36,700	10.22	3,540	36,200	10.24
Other coarse aggregate	17,400	196,000	11.22	21,300	221,000	10.34
Coarse aggregate, graded:						
Concrete aggregate, coarse	29,800	292,000	9.82	27,000	258,000	9.58
Bituminous aggregate, coarse	19,200	189,000	9.82	26,300	260,000	9.87
Bituminous surface-treatment aggregate	6,490	80,300	12.38	5,880	68,900	11.72
Railroad ballast	9,540	88,700	9.30	5,750	55,400	9.63
Other graded coarse aggregate	94,700	1,130,000	11.89	93,100	1,130,000	12.15
Fine aggregate (- 3/8 inch):						
Stone sand, concrete	4,560	54,900	12.05	3,560	39,600	11.14
Stone sand, bituminous mix or seal	6,310	63,800	10.12	6,410	64,700	10.09
Screening, undesignated	9,420	85,900	9.11	10,900	99,100	9.11
Other fine aggregate	44,300	514,000	11.62	34,600	365,000	10.55
Coarse and fine aggregates:	<u> </u>					
Graded road base or subbase	56,300	411,000	7.30	58,700	446,000	7.59
Unpaved road surfacing	12,200	94,000	7.74	14,400	116,000	8.05
Terrazzo and exposed aggregate	328	8,040	24.49	266	10,700	40.27
Crusher run or fill or waste	15,000	113,000	7.52	16,800	123,000	7.34
Roofing granules	2,590	313,000	121.23	648	54,600	84.28
Other coarse and fine aggregates	75,900	728,000	9.60	82,800	792,000	9.57
Other construction materials	6,510	50,200	7.70	5,250	54,900	10.46
Agricultural:						
Agricultural limestone	7,810	74,500	9.53	10,700	87,700	8.19
Poultry grit and mineral food	970	19,900	20.55	1,330	26,700	20.12
Other agricultural uses	589	21,900	37.13	690	23,200	33.62
Chemical and metallurgical:						
Cement manufacture	51,200	270,000	5.28	52,600	298,000	5.66
Lime manufacture	11,700	101,000	8.60	16,400	194,000	11.81
Dead-burned dolomite manufacture				383	2,050	5.35
Flux stone	2,490	15,300	6.14	2,510	18,600	7.41
Chemical stone	227	2,040	8.99	137	1,290	9.45
Glass manufacture	896	22,000	24.59	821	13,800	16.84
Sulfur oxide removal	5,690	45,800	8.05	7,670	72,000	9.38
Special:						
Mine dusting or acid water treatment	150	7,080	47.35	727	19,600	27.01
Asphalt fillers or extenders	687	8,320	12.10	1,400	14,800	10.61
Whiting or whiting substitute	178	3,000	16.90	235	4,450	18.91
Other fillers or extenders	2,220	35,500	15.99	2,600	59,300	22.76
Other miscellaneous uses and specified uses not listed	716	22,300	31.18	5,250	52,400	9.99
Unspecified: ³				,	,	
Reported	307,000	3,010,000	9.83	310,000	3,020,000	9.75
Estimated	344,000	3,100,000	8.99	314,000	2,940,000	9.38
Total or average	1,160,000	11,300,000	9.74	1,160,000	11,200,000	9.67
Zero.	1,100,000	,00,000	····	-,-00,000	,0,000	7.07

⁻⁻ Zero.

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

 $^{^2\!\!}$ Estimated quantities for the prior year have been recalculated.

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

TABLE 10 LIMESTONE AND DOLOMITE SOLD OR USED BY PRODUCERS IN THE UNITED STATES IN 2010, BY USE $^{\rm 1,2}$

		Limestone ³			Dolomite	
Use	Quantity	Value	Unit value	Quantity	Value	Unit value
Construction:						
Coarse aggregate (+1½ inch):						
Macadam	1,010	9,860	\$9.75	9	80	\$8.89
Riprap and jetty stone	7,260	75,800	10.44	210	2,950	14.08
Filter stone	2,590	24,400	9.41	32	293	9.09
Other coarse aggregate	16,000	152,000	9.50	827	9,070	10.97
Coarse aggregate, graded:						
Concrete aggregate, coarse	16,500	158,000	9.62	2,820	21,200	7.52
Bituminous aggregate, coarse	15,600	159,000	10.20	1,670	15,500	9.26
Bituminous surface-treatment aggregate	2,730	29,100	10.64	1,230	13,400	10.88
Railroad ballast	1,350	10,400	7.65	107	897	8.35
Other graded coarse aggregate	63,600	698,000	10.98	3,540	43,100	12.20
Fine aggregate (- 3/8 inch):						
Stone sand, concrete	1,390	13,600	9.77	137	1,350	9.81
Stone sand, bituminous mix or seal	3,250	32,500	9.98	915	9,500	10.38
Screening, undesignated	5,460	45,500	8.34	566	4,790	8.46
Other fine aggregate	20,000	208,000	10.39	2,490	23,400	9.43
Coarse and fine aggregates:						
Graded road base or subbase	37,800	275,000	7.28	2,210	18,700	8.47
Unpaved road surfacing	9,190	76,200	8.28	1,200	12,000	9.96
Terrazzo and exposed aggregate	93	5,190	55.91	36	1,900	52.36
Crusher run or fill or waste	9,290	63,500	6.83	2,140	16,900	7.90
Roofing granules	304	5,090	16.73			
Other coarse and fine aggregates	51,300	458,000	8.93	4,100	32,900	8.02
Other construction materials	2,460	24,700	10.06	192	1,250	6.50
Agricultural:						
Agricultural limestone	9,600	79,400	8.27	990	7,440	7.51
Poultry grit and mineral food	1,290	22,800	17.67	1	16	10.44
Other agricultural uses	548	20,400	37.21	10	901	94.33
Chemical and metallurgical:		,				
Cement manufacture	50,900	288,000	5.65	57	37	0.65
Lime manufacture	16,300	192,000	11.79			
Dead-burned dolomite manufacture	3	28	10	380	2,020	5
Flux stone	917	10,000	10.93	1,580	8,510	5.37
Chemical stone	136	1,280	9.37		0,510	3.37
Glass manufacture	477	7,110	14.88			
Sulfur oxide removal	7,670	72,000	9.38			
Special:	7,070	72,000	7.30			
Mine dusting or acid water treatment	677	17,900	26.48			
Asphalt fillers or extenders	916	10,200	11.16			
Whiting or whiting substitute	171	4,080	23.83			
Other fillers or extenders	1,910	40,400	23.83	20	419	21.33
Other miscellaneous uses and specified uses not listed	600		13.98	262		14.96
	OUU	8,380	13.70	202	3,920	14.90
Unspecified: ⁴	102.000	1 (00 000	0.20	10.000	102.000	0.40
Reported	183,000	1,690,000	9.20	10,800	103,000	9.49
Estimated	211,000	1,820,000	8.60	5,720	48,400	8.47
Total Zero.	754,000	6,800,000	9.02	44,300	404,000	9.12

⁻⁻ Zero.

¹Data are rounded to no more than three significant digits, except unit value; 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.

 ${\it TABLE~11}$ LIMESTONE AND DOLOMITE SOLD OR USED BY PRODUCERS IN 2010, BY STATE AND ${\it USE}^1$

	Concrete		Bituminou	s aggregate	Roadstone ar	nd coverings	Riprap and rai		Other constr	ruction uses
State	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Alabama	1,790	15,600	7,260	70,600	2,690	27,500	461	4,630	4,470	48,900
Alaska										
Arizona									W	W
Arkansas	289	2,410	395	3,920	1,130	9,610	101	1,060	1,770	12,700
California	W	W	101	1,640	108	1,160	82	1,120	310	2,370
Colorado							11	153		
Connecticut	10	155	21	337	23	203	W	W	W	W
Delaware										
Florida	4,230	67,800	4,090	85,500	3,910	28,400	66	1,230	5,600	55,100
Georgia	W	W	W	W	W	W			W	W
Hawaii										
Idaho					45	185				
Illinois	2,450	19,500	8,810	97,100	4,420	31,900	544	6,450	4,420	31,100
Indiana	4,030	26,300	8,410	59,000	3,370	22,000	607	4,830	3,360	21,100
Iowa	1,010	11,200	904	12,000	6,810	63,800	310	5,590	1,510	10,100
Kansas	514	5,160	376	5,490	725	4,410	4	76	705	3,990
Kentucky	2,510	23,300	8,220	76,700	6,020	46,300	711	7,020	4,830	40,400
Louisiana										
Maine	73	380			23	87				
Maryland	2,800	29,500	2,230	21,800	246	2,110	21	282	847	6,240
Massachusetts					109	1,450			27	233
Michigan	3,250	16,200	390	2,210	1,710	9,130	117	1,280	354	1,710
Minnesota	W	W	638	11,600	422	4,200	44	859	450	4,170
Mississippi ²	W	W	W	W	W	W			W	W
Missouri	1,930	18,500	2,260	20,200	6,150	43,600	2,550	20,400	1,730	11,200
Montana	-				W	W	W	W	W	W
Nebraska	W	W	W	W	W	W	W	W	W	W
Nevada										
New Hampshire	-									
New Jersey										
New Mexico	128	1,690	29	284	150	1,090	37	681	86	515
New York	3,320	36,500	3,350	48,100	1,010	11,000	224	2,990	5,560	52,200
North Carolina	W	W	W	W	W	W	W	W	W	W
North Dakota										
Ohio	2,210	18,700	8,730	79,600	8,210	69,000	376	3,730	3,450	24,700
Oklahoma	359	4,130	3,540	28,500	1,120	11,900	133	1,830	960	9,010
Oregon										
Pennsylvania	3,180	31,400	8,690	77,800	5,810	55,700	794	8,680	7,540	64,400
Rhode Island										
South Carolina	W	W	W	W	W	W	5	52	238	1,910
South Dakota									W	W
Tennessee	2,080	27,100	9,930	130,000	3,250	29,900	820	6,770	8,150	77,900
Texas	3,260	24,400	7,390	87,400	5,440	27,100	475	4,070	14,600	119,000
Utah		,				,			W	W
Vermont	W	W	W	W	W	W	W	W	355	2,990
Virginia	1,550	19,100	2,190	25,800	1,450	15,200	214	2,830	1,760	17,700
Washington	- W	W	2,190 W	25,555 W	138	658		2,030	W	W
West Virginia	362	3,850	2,600	24,800	828	8,790	76	1,280	1,620	16,800
Wisconsin	328	2,050	1,270	9,180	1,450	7,590	70	797	2,120	11,000
Wyoming	- W	2,030 W	W	y,180	W W	7,590 W			2,120 W	11,000 W
Total	41,600	405,000	91,800	979,000	66,800	534,000	8,860	88,700	76,800	648,000
Total withheld	1,670	21,000	1,710	31,600	1,480	19,200	74	1,310	1,920	40,400
Grand total	43,300	426,000	93,500	1,010,000	68,300	553,000	8,930	90,000	78,800	688,000
Grand total	+3,300	720,000	75,500	1,010,000	00,500	222,000	0,730	70,000	70,000	000,000

 ${\it TABLE~11} - {\it Continued}$ LIMESTONE AND DOLOMITE SOLD OR USED BY PRODUCERS IN 2010, BY STATE AND USE $^{\it I}$

	Cement ma	nufacture	Agricultu	ıral uses	Lime man	ufacture	Other	uses	То	tal
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Alabama	W	W	367	3,540	W	W	10,100	85,500	30,100	280,000
Alaska										
Arizona	W	W	W	W			1,530	15,700	3,320	34,300
Arkansas	W	W	185	1,930	W	W	5,480	41,400	11,300	81,000
California	6,660	18,400	327	11,200			5,980	84,900	13,600	121,000
Colorado					32	237	364	3,660	407	4,050
Connecticut			9	92			705	8,010	1,180	22,600
Delaware										
Florida	W	W	631	4,060			20,700	267,000	39,600	512,000
Georgia	W	W	68	600			2,580	30,500	4,610	52,400
Hawaii	- 							·	·	
Idaho	- 		W	W			W	W	250	3,670
Illinois	W	W	1,910	10,800	W	W	29,200	268,000	52,600	473,000
Indiana	3,240	12,500	1,860	11,700	W	W	19,300	132,000	44,200	290,000
Iowa	490	1,080	900	6,790	W	W	19,500	177,000	31,800	291,000
Kansas	- ¥90 W	1,080 W	63	227			11,200	97,000	15,800	135,000
Kentucky			427	2,360	W	W	21,800	189,000	49,100	424,000
Louisiana	_									
							062	0.100	1 (20)	12 200
Maine	W	W					962	9,180	1,620	12,200
Maryland				700			6,250	64,800	12,400	125,000
Massachusetts			61	780	5	66	590	13,400	792	15,900
Michigan			231	1,840			14,900	86,400	20,900	119,000
Minnesota			120	1,230			2,310	28,000	4,170	52,500
Mississippi ²			97	2,900			593	11,700	2,710	63,200
Missouri	7,780	48,800	841	4,380	1,690	11,100	43,000	354,000	67,900	532,000
Montana	W	W	W	W	W	W	779	9,650	1,610	17,200
Nebraska	W	W	253	4,440			4,230	43,800	6,680	69,200
Nevada	W	W	W	W	W	W			2,250	28,600
New Hampshire										
New Jersey										
New Mexico							2,350	17,400	2,780	21,700
New York	1,090	11,600	163	1,940			12,400	128,000	27,100	293,000
North Carolina			2	86			3,960	57,700	4,210	61,000
North Dakota										
Ohio	W	W	964	9,250			21,200	175,000	46,500	389,000
Oklahoma	W	W	132	982	W	W	26,300	239,000	33,900	301,000
Oregon										
Pennsylvania	3,070	34,700	972	13,400	1,670	64,500	26,000	286,000	57,700	636,000
Rhode Island	_ 5,070						20,000			
South Carolina	- 						1,630	16,400	2,530	24,900
South Dakota	- W	W					1,940	13,400	2,690	15,700
Tennessee	– W	W	214	2,960	W	W	13,700	145,000	39,600	448,000
						W				
Texas	11,100	40,100	469	5,420	W		59,000	412,000	103,000	725,000
Utah	1,610	14,100	W	W	W	W	1,460	11,500	4,230	32,400
Vermont			W	W			1,460	15,100	2,000	19,500
Virginia			553	11,100			7,940	111,000	15,700	203,000
Washington	_ 2	20			W	W	803	11,000	1,170	15,700
West Virginia	W	W	W	W			6,890	67,400	13,600	129,000
Wisconsin			429	3,420			13,800	77,800	19,500	112,000

$\label{total continued} TABLE~11\\ --Continued$ LIMESTONE AND DOLOMITE SOLD OR USED BY PRODUCERS IN 2010, BY STATE AND USE 1

	Cement ma	nufacture	Agricultu	ıral uses	Lime mar	nufacture	Other	r uses	To	otal
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Wyoming	359	2,040					2,370	15,100	2,940	19,000
Total	35,400	184,000	12,200	117,000	3,400	75,900	425,000	3,820,000	798,000	7,200,000
Total withheld	15,500	104,000	194	13,600	13,300	119,000	163	2,150	XX	XX
Grand total	50,900	288,000	12,400	131,000	16,700	195,000	425,000	3,820,000	798,000	7,200,000

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

 ${\rm TABLE~12}$ GRANITE, TRAPROCK, SANDSTONE AND QUARTZITE SOLD OR USED BY PRODUCERS IN THE UNITED STATES IN 2010, BY USE $^{\rm 1,2}$

	Gran	ite	Trapro	ock	Sandstone and quartzite ³		
Use	Quantity	Value	Quantity	Value	Quantity	Value	
Construction:							
Coarse aggregate (+1½ inch):							
Macadam			137	1,190	70	924	
Riprap and jetty stone	1,550	19,400	273	4,620	308	4,410	
Filter stone	371	4,650	278	3,470	137	1,570	
Other coarse aggregate	1,680	30,400	427	4,920	411	3,270	
Coarse aggregate, graded:							
Concrete aggregate, coarse	3,490	33,300	1,240	11,200	717	7,530	
Bituminous aggregate, coarse	3,280	33,100	1,240	11,600	602	6,410	
Bituminous surface-treatment aggregate	798	11,400	200	1,790	293	3,720	
Railroad ballast	3,390	33,300	365	3,700	41	595	
Other graded coarse aggregate	17,400	271,000	2,990	41,200	989	10,500	
Fine aggregate (-3/8 inch):							
Stone sand, concrete	211	2,480	197	5,490	673	7,050	
Stone sand, bituminous mix or seal	777	6,970	731	8,230	211	2,630	
Screening, undesignated	3,060	31,300	839	10,200	415	2,960	
Other fine aggregate	6,330	72,800	2,100	23,100	766	8,290	
Coarse and fine aggregates:							
Graded road base or subbase	5,460	52,600	5,160	42,100	2,230	18,800	
Unpaved road surfacing	321	3,240	559	3,810	275	2,240	
Terrazzo and exposed aggregate	9	87	9	80	20	250	
Crusher run or fill or waste	2,050	16,500	761	5,840	794	5,530	
Roofing granules	322	49,000	10	50	9	341	
Other coarse and fine aggregates	14,200	153,000	6,860	75,400	1,170	10,400	
Other construction materials	211	1,560	931	13,900	391	4,940	
Agricultural:							
Agricultural limestone						-	
Poultry grit and mineral food						-	
Other agricultural uses	42	538	2	23	5	80	
Chemical and metallurgical:						-	
Cement manufacture					135	1,620	
Lime manufacture	77	809				_	
Dead-burned dolomite manufacture						_	
Flux stone					10	83	
Chemical stone						_	
Glass manufacture					344	6,730	
Sulfur oxide removal						-	
Special:							
Mine dusting or acid water treatment						_	
Asphalt fillers or extenders	294	3,100				_	
Whiting or whiting substitute						_	
Other fillers or extenders						_	
Other miscellaneous uses and specified uses not listed	56	561	35	373	2,620	22,400	
Unspecified: ⁴	30	501	33	373	2,020	22,400	
Reported	66,100	744,000	20,000	235,000	9,870	85,800	
Estimated	21,600	232,000	18,400	318,000	17,000	162,000	
Total Zero.	153,000	1,810,000	63,700	825,000	40,500	382,00	

⁻⁻ Zero.

 $^{^{1}\}mbox{Data}$ 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.

 $^{^{3}}$ Includes sandstone-quartzite reported with no distinction between the two kinds of stone.

⁴Reported 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 2010, BY USE 1,2

	Marb	le	Volcanic cinde	r and scoria	Miscellaneous stone		
Use	Quantity	Value	Quantity	Value	Quantity	Value	
Construction:							
Coarse aggregate (+1½ inch):							
Macadam					40	632	
Riprap and jetty stone			1	18	413	6,200	
Filter stone					129	1,850	
Other coarse aggregate			8	60	1,930	20,400	
Coarse aggregate, graded:							
Concrete aggregate, coarse	24	171			1,970	21,800	
Bituminous aggregate, coarse					3,910	33,800	
Bituminous surface-treatment aggregate					626	9,550	
Railroad ballast					495	6,530	
Other graded coarse aggregate			49	488	4,140	59,300	
Fine aggregate (- 3/8 inch):							
Stone sand, concrete	64	627			882	9,060	
Stone sand, bituminous mix or seal					523	4,880	
Screening, undesignated			2	49	516	4,170	
Other fine aggregate			1	6	2,550	25,900	
Coarse and fine aggregates:							
Graded road base or subbase			76	775	5,230	34,100	
Unpaved road surfacing			87	563	2,710	17,200	
Terrazzo and exposed aggregate	12	2,190	2	46	85	957	
Crusher run or fill or waste			85	378	1,310	12,100	
Roofing granules					4	159	
Other coarse and fine aggregates			20	165	5,110	62,600	
Other construction materials			66	987	920	6,720	
Agricultural:							
Agricultural limestone					110	887	
Poultry grit and mineral food					34	3,860	
Other agricultural uses					85	1,270	
Chemical and metallurgical:							
Cement manufacture					245	1,050	
Lime manufacture					5	425	
Dead-burned dolomite manufacture						_	
Flux stone							
Chemical stone							
Glass manufacture							
Sulfur oxide removal							
Special:							
Mine dusting or acid water treatment							
Asphalt fillers or extenders					189	1,530	
Whiting or whiting substitute					64	319	
Other fillers or extenders	610	18,100			59	365	
Other miscellaneous uses and specified uses not listed		10,100	68	152	1,580	16,500	
			00	132	1,500	10,500	
Unspecified: ³	402	4.650	1.020	4.250	10 400	150.000	
Reported	403	4,650	1,020	4,350	18,400	159,000	
Estimated	1,910	18,600	532	6,010	35,200	317,000	
Total Zero.	3,070	45,900	2,010	14,000	89,400	840,000	

⁻⁻ Zero.

 $^{^{1}\}mathrm{Data}$ are rounded to no more than three significant digits; may not add to totals shown.

 $^{^{2}}$ Totals may not match totals shown in table 2 because of concealments.

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

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

		2009			2010	
	Quantity			Quantity		
	(thousand	Value	Unit	(thousand	Value	Unit
State	metric tons)	(thousands)	value	metric tons)	(thousands)	value
Alabama	127	\$2,520	\$19.81	133	\$2,670	\$20.09
Alaska	58	1,200	20.77	31	650	20.85
Arizona	228	1,370	5.99	139	1,200	8.62
Arkansas	86	908	10.61	18	100	5.51
California	1,700	11,600	6.82	1,480	11,400	7.73
Colorado	362	4,050	11.17	377	1,590	4.21
Connecticut	125	517	4.14	141	601	4.26
Delaware	2	35	15.44	(2)	5	14.36
Florida	904	12,300	13.65	77	1,310	17.11
Georgia	197	4,280	21.74	112	1,970	17.55
Hawaii	73	1,030	14.24			
Idaho	95	587	6.16	185	1,190	6.42
Illinois	1,470	12,500	8.56	828	6,360	7.67
Indiana	225	1,870	8.29	138	2,850	20.64
Iowa	27	210	7.70	62	227	3.64
Kansas	1,290	33,200	25.73	1,290	32,600	25.34
Kentucky	49	928	19.00	65	457	7.00
Louisiana	135	757	5.59	121	565	4.67
Maine	139	1,130	8.13	61	597	9.86
Maryland	146	703	4.80	120	625	5.21
Massachusetts	288	2,410	8.38	171	1,350	7.90
Michigan	533	3,010	5.66	883	3,560	4.03
Minnesota	531	5,460 °	10.28	445	3,550	7.97
Mississippi	137	1,780	13.04	81	1,570	19.44
Missouri	164	693	4.22	31	120	3.88
Montana	9	89	10.33	50	609	12.22
Nebraska	84	1,090	12.91	36	535	14.87
Nevada	276	1,500	5.45	114	638	5.61
New Hampshire	297	3,480	11.68	301	3,840	12.77
New Jersey	156	1,350	8.66	63	376	5.95
New Mexico	47 ^r	262 ^r	5.57	150	749	5.00
New York	382	2,840	7.45	299	2,160	7.22
North Carolina	875	7,850	8.96	931	9,610	10.33
North Dakota	42	450	10.74	23	294	12.59
Ohio	179	1,090	6.10	123	717	5.83
Oklahoma	118	1,570	13.28	69	657	9.52
Oregon	217	1,580	7.25	87	832	9.56
Pennsylvania	1,020	10,100	9.96	572	5,110	8.92
Rhode Island	67	642 ^r	9.59	20	114	5.62
South Carolina	205	4,420	21.54	269	3,500	12.99
South Dakota	122	752	6.18	112	1,260	11.26
Tennessee	198	1,450	7.34	108	747	6.91
Texas	616	4,650	7.54	259	2,000	7.74
Utah	235	1,560	6.64	37	248	6.71
Vermont		426	14.58	55	1,030	18.67
Virginia	233	2,980	12.78	275	2,750	10.01
Washington	170	948 ^r	5.59	114	767	6.74
West Virginia						
Wisconsin	625	4,290	6.86	352	3,350	9.53
Wyoming	15	205	13.94	5	33	6.72
U.S. total or average	15,300 ^r	161,000 ^r	10.50	11,400	119,000	10.44

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

		2009		2010			
	Quantity			Quantity			
	(thousand	Value	Unit	(thousand	Value	Unit	
State	metric tons)	(thousands)	value	metric tons)	(thousands)	value	
Territory							
Puerto Rico	45	186 ^r	4.13	45.00	186	4.13	
Grand total or average	15,400 ^r	161,000 ^r	10.48	11,400	119,000	10.41	

^rRevised. -- Zero.

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

²Less then ½ unit.

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

		2009			2010	
	Quantity			Quantity		
	(thousand	Value	Unit	(thousand	Value	Unit
State	metric tons)	(thousands)	value	metric tons)	(thousands)	value
Alabama	51	\$377	\$7.34	(2)	\$1	\$8.17
Alaska	26	124	4.76	61	300	4.96
Arizona	69	485	7.00	25	269	10.71
Arkansas	43	193	4.53	27	60	2.20
California	1,780 ^r	14,200 ^r	7.94	2,860	20,900	7.31
Colorado	721 ^r	5,010 ^r	6.94	582	3,710	6.38
Connecticut	41	328	8.01	91	647	7.07
Delaware	7	75	11.02	108	598	5.51
Florida	424	4,830	11.40	304	3,400	11.19
Georgia	83	274	3.29	99	2,020	20.34
Hawaii		215	9.64	6	70	12.23
Idaho	32	192	6.05	181	1,090	6.00
Illinois	1,180	8,820	7.50	836	5,720	6.85
Indiana	139	753	5.43	114	863	7.54
Iowa	28	239	8.39	240	1,170	4.88
Kansas	298	2,230	7.49	275	1,870	6.80
Kentucky	441	4,370	9.92			
Louisiana	7	71	10.21	39	691	17.75
Maine	39	294	7.53	26	198	7.68
Maryland	389	2,030	5.21	294	1,330	4.53
Massachusetts	192	1,610	8.39	142	1,340	9.42
Michigan	1,010	7,180	7.13	1,210	8,030	6.66
Minnesota	782 r	4,890 ^r	6.25	571	4,250	7.44
Mississippi	71	1,550	21.85	133	1,990	14.96
Missouri	1	2	4.37	37	322	8.76
Montana	20	156	7.97	34	282	8.34
Nebraska	122	1,120	9.19	128	1,070	8.38
Nevada	94	561	5.98	42	255	6.02
New Hampshire	12	109	8.87	8	77	9.07
New Jersey	583	4,730	8.11	195	1,360	6.97
New Mexico		4,730	1.10	5	38	7.71
New York	338	2,620	7.74	250	2,070	8.28
North Carolina	338			222	2,490	11.22
		1,850 188	12.86 11.23	6	63	
North Dakota Ohio	337	2,230	6.60	349	2,380	11.43 6.81
	224					
Oklahoma		2,940	13.14	87	1,050	11.99
Oregon	101	882	8.76	70	733	10.44
Pennsylvania	420	2,450	5.83	352	1,740	4.94
Rhode Island	127	948 ^r	7.48	84	583	6.91
South Carolina	216	3,630	16.79	219	3,310	15.07
South Dakota	110	535	4.89	92	537	5.85
Tennessee	25	149	6.02	22	95	4.41
Texas	859	6,750	7.86	34	273	7.96
Utah	224	1,890	8.45	280	2,340	8.37
Vermont	22	102	4.59	4	20	5.38
Virginia	631	5,680	9.01	674	6,010	8.91
Washington	216	1,360 ^r	6.31	307	1,740	5.67
West Virginia						
Wisconsin	369	1,940	5.24	1,710	9,160	5.36
Wyoming	58	339	5.86	14	77	5.53
U.S. total or average	13,100 ^r	103,000 ^r	7.87	13,400	98,600	7.33

$\label{thm:continued} \textbf{RECYCLED CONCRETE SOLD OR USED BY PRODUCERS IN THE UNITED STATES, BY STATE1}$

		2009		2010				
	Quantity			Quantity				
	(thousand	Value	Unit	(thousand	Value	Unit		
State	metric tons)	(thousands)	value	metric tons)	(thousands)	value		
Territory								
Puerto Rico								
Grand total or average	13,100 ^r	103,000 ^r	7.87	13,400	98,600	7.33		

^rRevised. -- Zero.

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

²Less then ½ unit.

TABLE 16 CRUSHED AND BROKEN STONE OPERATIONS IN THE UNITED STATES IN 2010, BY STATE $^{\rm 1}$

	Active	Active	Dredging			Stationary	None or	Sales
State	operations	quarries	operations	Stationary	Portable	and portable	unspecified	yards
Alabama	84	72		57	8	4	3	12
Alaska	29	35		4	18	1	5	1
Arizona	65	67		28	26	5	2	4
Arkansas	81	79		37	29	7	5	3
California	168	151	1	78	41	11	9	28
Colorado	53	47		13	26	1	5	8
Connecticut	35	33		19	12	1	1	2
Delaware	4							4
Florida	121	99	2	38	41	10	4	26
Georgia	91	81		70	7		3	11
Hawaii		25		8	13	3		
Idaho	48	77		9	31	1	7	
Illinois	158	135	1	75	46	7	5	24
Indiana	102	95		82	4	3	5	8
Iowa	180	210	1	27	137	1	11	3
Kansas		93		22	44	6	2	5
Kentucky	90	89		70	9	9	1	1
Louisiana	20	4		2	1	1		16
Maine	27	23		13	5	3	2	4
Maryland	43	31		20	3	2	5	13
Massachusetts	50	46		28	11	3	3	5
Michigan	43	36		22	7	1	1	12
Minnesota	_ 45 46	51		12	23	1	4	6
Mississippi	_ 24	6		4	1	1		18
Missouri		222		111	80	12	11	3
Montana		42		7	19	12		
Nebraska	_ 20 14	11	1	7	3			3
Nevada	_ 14 27	27		18	8			1
New Hampshire		27		14	7	2	4	2
New Jersey		21		15		6		4
New Mexico		48		12	27	4	4	1
	_			85	26	9		
New York	131	126	1				4	6
North Carolina	_ 137	119		102	11	3	2	19
North Dakota	_ 9	6			6			3
Ohio	_ 117	106		71	23	7	3	13
Oklahoma		71		51	9	3	6	3
Oregon	_ 175	189		46	115	4	6	4
Pennsylvania	_ 261	261		186	29	14	23	9
Rhode Island	_ 8	6		6				2
South Carolina	_ 44	32		30	1	1		12
South Dakota	_ 16	13		8	3	2		3
Tennessee	130	127		111	11	2	2	4
Texas	258	262		127	69	13	18	31
Utah		36		11	18		5	2
Vermont	44	43		17	18	4	4	1
Virginia	121	103		82	8	6	3	22
Washington	119	135		38	55	7	15	4
West Virginia	36	32		25	2	3	1	5
Wisconsin	160	221		47	87	5	15	6
Wyoming	28	26		7	18	1		2
Total	3,953	3,897	7	1,972	1,196	190	209	379

⁻⁻ Zero.

¹Includes recycle plants.

 ${\bf TABLE~17}$ U.S. EXPORTS OF CRUSHED STONE IN 2010, BY DESTINATION 1

			Limestone				
			for cement	Chalk,	Granules,		
Destin	ation	Limestone	manufacturing	crude	chippings	Other	Total
North America	metric tons	49,300	647,000	418	93,800	365,000	1,160,000
South America	do.	217	18	2	1,800	694	2,730
Europe	do.	2,310	2,070	166	841	27,400	32,800
Asia	do.	46	518	91	162	7,510	8,330
Oceania	do.	3,040		25	19	783	3,870
Middle East	do.	1,040	72		2,570	5,310	8,990
Africa	do.				4	76	80
Total:	_						
Quantity	do.	55,900	649,000	701	99,200	407,000	1,210,000
Value	thousands	\$2,550	\$14,000	\$1	\$13,800	\$21,700	\$52,100

do. Ditto. -- Zero.

Source: U.S. Census Bureau.

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

		2009			2010	
	Quantity			Quantity		
	(thousand)	Value, c.i.f. ²	Unit	(thousand)	Value, c.i.f. ²	Unit
Type	metric tons)	(thousands)	value	metric tons)	(thousands)	value
Crushed stone and chips:						
Limestone	3,900	\$36,900	\$9.45	8,900	\$74,700	\$8.39
Limestone for flux or cement manufacturing	1,040	9,490	9.15	940	12,300	13.11
Other	7,260	125,000	17.21	4,710	96,600	20.52
Total or average	12,200	171,000	XX	14,500	184,000	XX
Calcium carbonate fines: ³	-					
Natural chalk	25	1,300	53.05	1	100	129.14
Calcium carbonates, other chalk	2	1,600	930.30	1	1,210	935.73
Total or average	26	2,900	XX	2	1,310	XX
Grand total or average	12,200	174,000	XX	14,600	185,000	XX

XX Not applicable.

Source: U.S. Census Bureau.

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

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.

TABLE 19 THE TOP 100 PRODUCERS OF CRUSHED STONE IN THE UNITED STATES IN $2010^1\,$

2010	2009		2010	2009	
Rank	Rank	Company	Rank	Rank	Company
1	1	Vulcan Materials Co.	51	73	The DePaul Group
2	2	Martin Marietta Aggregates	52	59	Mathy Construction Co.
3	3	Lehigh Hanson, Inc.	53	56	The Heritage Group
4	4	Oldcastle Materials, Inc.	54	54	Aggregate Management, Inc.
5	6	Lafarge North America Inc.	55	58	Trap Rock Industries, Inc.
6	5	CEMEX S.A.B. de C.V.	56	48	Great Lakes Aggregates Inc.
7	9	Carmeuse Lime & Stone	57	70	MGQ Aggregates, Inc.
8	7	Rogers Group, Inc.	58	40	Omya Inc.
9	8	Holcim Group/Aggregate Industries Management Inc.	59	74	Imerys
10	10	New Enterprise Stone & Lime Co., Inc.	60	76	The Melvin Stone Co.
11	12	Luck Stone Corp.	61	67	Wendling Quarries Inc.
12	13	Dolese Bros. Co.	62	88	Snyder Associated Cos., Inc.
13	15	Ash Grove Cement Co.	63	63	Alamo Cement Co.
14	17	Mulzer Crushed Stone, Inc.	64	55	Hinkle Contracting Corp.
15	11	Lhoist S.A.	65	72	United States Lime & Minerals, Inc.
16	16	Ready Mix USA Holding Co.	66	92	Chantilly Crushed Stone, Inc.
17	19	Texas Industries, Inc.	67	86	Laurel Aggregates, Inc.
18	21	National Lime & Stone Co.	68	65	RiverStone Group, Inc.
19	20	Eucon Corp.	69	60	Pete Lien & Sons, Inc.
20	22	MDU Resources Group, Inc.	70	87	Votorantim Cement North America
21	23	The H&K Group	71	_	Savage Stone, LLC
22	24	Buzzi Unicem USA Inc.	72	95	Weldon Materials, Inc.
23	18	Fred Weber, Inc.	73	62	Columbia Quarry Co.
24	26	Mississippi Lime Co.	74	61	ISP Minerals Inc.
25	25	Vecellio & Grogan, Inc.	75	97	Frontera Materials, Inc.
26	27	Tower Rock Stone Co.	76	14	U.S. Forest Service
27	36	Capitol Aggregates Ltd.	77	64	Stavola Construction Materials, Inc.
28	30	Graymont Ltd.	78	69	Granite Construction Inc.
29	29	Eagle Materials Inc.	79	83	Graniterock Co.
30	31	Texas Crushed Stone Co., Inc.	80	89	Kerford Limestone Co.
31	34	Colas Inc.	81	84	Pounding Mill Quarry Corp.
32	47	Titan America LLC	82	_	Rockydale Quarries Corp.
33	33	Franklin Industries, Inc.	83	85	N.R. Hamm Quarry, Inc.
34	37	ESSROC Cement Corp.	84	_	VantaCore Partners LP
35	42	Glenn O. Hawbaker, Inc.	85	90	B.V. Hedrick Gravel & Sand Co., Inc.
36	41	Wake Stone Corp.	86	91	River Products Co., Inc.
37	32	Boxley Materials Co.	87	82	Mitsubishi Cement Corp.
38	44	CalPortland Co.	88	99	Mertens Construction Co., Inc.
39	38	3M Co.	89	75	Syar Industries, Inc.
40	28	Bureau of Land Management	90	78	Jobe Materials, L.P.
41	43	Hunter Industries, Inc.	91	_	Yager Materials
42	39	American Infrastructure	92	_	L.G. Everist, Inc.
43	50	McGeorge Contracting Co.	93	80	Midwest Minerals, Inc.
44	46	Hoover, Inc.	94	_	East Fairfield Coal Co.
45	52	Anchor Stone Co.	95	_	Peckham Industries, Inc.
46	57	Norris Aggregate Products Co.	96	100	Glasgow, Inc.
47	45	Schildberg Construction Co., Inc.	97	96	Paul Niemann Construction Co.
48	68	Greer Industries, Inc.	98	_	Sherwood Construction Co., Inc.
49	53	The Kraemer Co.	99	94	BMC Aggregates, L.C.
50	49	Irving Materials, Inc.	100	_	Albert Frei & Sons, Inc.

[—] Not in the top 100 producers of crushed stone in the United States in 2009.

¹In descending order of tonnage produced.