

2009 Minerals Yearbook

STONE, CRUSHED [ADVANCE RELEASE]

STONE, CRUSHED

By Jason Christopher Willett

Domestic survey data and tables were prepared by Susan M. Weaver, statistical assistant.

A total 1.17 billion metric tons (Gt) of crushed stone was produced for consumption in the United States in 2009, nearly 20% less than the total production of 2008 and 34% less than the record high of 1.78 Gt in 2006. This was the lowest level of crushed stone produced for consumption in the United States since 1993. In 2009, the total value of crushed stone produced in the United States was \$11.3 billion, a decrease of 17% compared with that of 2008 (table 1). The average unit price for crushed stone increased 4% compared with the average unit price for 2008 and increased 13% compared with that of 2007. The increase in unit prices partially offset the impact of the large decrease in production, but the total value of the crushed stone produced in 2009 was only about the same as the total value in 1996.

About 68% of crushed stone production continued to be limestone and dolomite, followed by (in descending order of tonnage) granite, miscellaneous stone, traprock, sandstone and quartzite, volcanic cinder and scoria, marble, calcareous marl, slate, and shell (table 2).

Foreign trade in crushed stone remained relatively small compared to nationwide consumption. In 2009, U.S. exports increased slightly to 1.26 million metric tons (Mt) compared with 1.24 Mt in 2008, but the value decreased by 5% to \$58.3 million, compared with \$61.6 million in 2008 (tables 1, 17). U.S. imports of crushed stone, including calcium carbonate fines, decreased by 41% to 12.2 Mt, and the value decreased by 25% to \$174 million compared with the 2008 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, decreased by 20% to 1.21 Gt compared with 1.51 Gt in 2008 because of lower demand resulting from the U.S. economic recession.

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

Production

Domestic production data for crushed stone were derived by the U.S. Geological Survey (USGS) from voluntary surveys of U.S. producers. In 2009, a total of 1,606 companies produced

or sold crushed stone from 3,788 operations with 3,968 quarries and 195 sales and/or distribution sites. Of the 3,788 active operations, 2,272 operations reported their production or sales to the USGS, and their total production was 819 Mt (70% of the U.S. total). Of the 2,272 reporting operations, 1,155 operations owned by 306 companies did not report a breakdown by end use. Their total production was 432 Mt (37% 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 1,510 nonrespondent operations owned by 971 companies was 346 Mt (30% of the U.S. total) and is included in table 9 under "Unspecified, estimated" uses.

A total of 195 sales yards were active in 2009, and their total output was 39.0 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, Florida, Georgia, Kentucky, Indiana, Ohio, and Virginia. The combined production of the 10 leading States decreased by 21% and was 584 Mt, one-half of the national total.

There are 91 underground mines included in the total number of active operations, and they produced 65.1 Mt of crushed stone in 2009. Active underground mines were located in 17 States. The five leading States were, in descending order of tonnage, Kentucky, Illinois, Missouri, Pennsylvania, and Iowa. Their combined production was 46.6 Mt (72% of the total U.S. crushed stone produced underground).

A total of 939 operations were either idle or presumed to have been idle in 2009 because no production report was received, and no employment information was available to estimate their production. Since the 2008 survey, 255 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 1.17 Gt of crushed stone produced for consumption in the United States in 2009, 68% was limestone and dolomite; 14% was granite; 6% was traprock; 5% was miscellaneous stone; and 4% was sandstone and quartzite. The remaining 3% was shared, in descending order of tonnage, by marble, volcanic cinder and scoria, slate, calcareous marl, 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.

A review of production by size of operation at the national level indicates that, in 2009, 436 Mt of crushed stone (37% of the total crushed stone) was produced by 260 operations reporting production of more than 1 million metric tons per year; 304 Mt was produced by 490 operations reporting production between 500,000 and 999,999 metric tons per year (t/yr); and 376 Mt was produced by 1,598 operations reporting production between 100,000 and 499,999 t/yr. The production by size of operation information also indicates that 63% of total crushed stone produced in the United States in 2009 came from operations that produced more than 500,000 t/yr (table 5a). By geographic region, in 2009, the South had 1,336 active operations, followed by the Midwest with 1,093, the West with 801, and the Northeast with 587 active operations (table 5b).

The leading U.S. producing companies in 2009 were, in descending order of tonnage, Vulcan Materials Co.; Martin Marietta Aggregates; Lehigh Hanson, Inc.; Oldcastle Materials, Inc.; CEMEX S.A.B. de C.V.; Lafarge North America Inc.; Rogers Group, Inc.; Holcim Group/Aggregate Industries Management, Inc.; Carmeuse Lime & Stone; and New Enterprise Stone & Lime Co., Inc. The combined production of the top 10 companies was 513 Mt (44% of the national total). The combined production of the top 100 companies was 837 Mt (72% 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 in 2008 and virtually came to a stop by the start of 2009. The lack of activity continued through 2009 as companies focused resources on restructuring debt, raising capital, and strengthening core assets (Aggregates Manager, 2010).

Production of crushed stone by type is detailed below. *Calcareous Marl.*—Output of calcareous marl decreased 29% compared with that of 2008 to 2.5 Mt valued at \$14.0 million (table 2).

Dolomite.—Production of dolomite decreased by 23% compared with the total for 2008 to 45.7 Mt valued at \$447 million (table 2). Crushed dolomite production was reported in 25 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 38.9 Mt (85% 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 23% compared with that of 2008 to 155 Mt valued at \$1.9 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 107 Mt (69% of the U.S. output) (table 7).

Limestone.—The output of crushed limestone, including some dolomite, decreased by 21% compared with that of 2008 to 747 Mt valued at \$6.6 billion (table 2). Limestone was reported as being produced in 47 States, and companies in 24 States reported producing limestone and dolomite from the same quarries. Their production of about 18.6 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, Florida, Pennsylvania, Illinois, and Kentucky; the total production of these six States was 343 Mt (46% of the total U.S. output) (table 6).

Marble.—Production of crushed marble increased by 51% compared with the total for 2008 to 5.5 Mt valued at \$81.7 million (table 2). Crushed marble production was reported in 16 States

Miscellaneous Stone.—This category includes three different types of miscellaneous crushed stone production. The first type is a crushed stone which is 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 a new operation is on the survey, it usually does not respond, and its production must be 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 8% compared with the total for 2008 to 85.4 Mt, valued at \$806 million (table 2). In 2009, the reported amount of miscellaneous stone accounted for 75% of the total output of miscellaneous stone and 69% of its value. The remaining 25% (21.7 Mt) of the total output consisted of known stone for which data were withheld. Of the 21.7 Mt, 68% was limestone, granite, and marble, with the remaining 32% consisting of (in descending order of tonnage) traprock, sandstone and quartzite, slate, volcanic cinder and scoria, shell, and calcareous marl.

Sandstone and Quartzite.—The output of crushed sandstone and quartzite decreased by 9% compared with the total for 2008 to 43.9 Mt, valued at \$414 million (table 2). Crushed sandstone production was reported in 30 States, while quartzite was produced in 16 States. The leading producing States were (in descending order of combined tonnage of sandstone and quartzite) Pennsylvania, Arkansas, Texas, New York, and South Dakota. Their combined total production was 28.9 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 decreased by 13% compared with the total for 2008 to 0.4 Mt, valued at \$5.3 million (table 2). Crushed shell was reported as being produced in 2 States.

Slate.—The output of crushed slate decreased by 35% compared with that of 2008 to 2.4 Mt, valued at \$22.8 million (table 2). Crushed slate was produced in 11 States, with Pennsylvania accounting for about 37% of the total U.S. output.

Traprock.—Production of crushed traprock decreased by 28% compared with the total for 2008 to 70.3 Mt, valued at \$957 million (table 2). Traprock was reported as being produced in 30 States. The leading producing States were (in descending order

of tonnage) New Jersey, Virginia, Oregon, Washington, and Pennsylvania; these five States produced 33.7 Mt (48% of U.S. output) (table 7).

Volcanic Cinder and Scoria.—Production of volcanic cinder and scoria increased by 42% compared with the total for 2008 to 8.2 Mt, valued at \$46.7 million (table 2). Volcanic cinder and scoria production was reported in 13 States, with the top producing State of Wyoming accounting for 84% 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 the 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 2009, U.S. apparent consumption of crushed stone, which is defined as U.S. production plus imports and recycled material minus exports, was 1.21 Gt, a 20% decrease compared with the apparent consumption in 2008. Of the 1.21 Gt of crushed stone consumed, 307 Mt (25%) was "Unspecified, reported," and 346 Mt (29%) was "Unspecified, estimated." Of the remaining consumption reported by uses, 82% 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; 2% for lime manufacturing; 2% for agricultural uses; and 4% for special and miscellaneous uses and products (table 9). Where end uses were unspecified, quantities were redistributed to end uses according to the distributions of reported data.

In 2009, the value of the total construction put in place decreased by 15% compared with that of 2008 to \$908 billion, as reported by the U.S. Census Bureau (2010). The value of total private construction decreased by 22% to \$592 billion, while the value of total public construction increased slightly to \$315 billion. The value of private construction dropped to its lowest level since 1999.

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 is increasing, and aggregates producers are increasingly recycling more 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.

Recycled Asphalt.—Companies in 49 States reported a total of 16.0 Mt of recycled asphalt, valued at \$169 million in 2009 (table 14). The leading recycling States were (in descending order of tonnage) California, Illinois, Kansas, Pennsylvania, and Florida. Their combined total was 6.4 Mt, an increase of 26% compared with their combined total of 2008.

Recycled Concrete.—A total of 13.0 Mt of recycled concrete valued at \$102 million was reported as recycled in 49 States (table 15). The leading recycling States for 2009 were (in descending order of tonnage) California, Illinois, Michigan, Texas, and Minnesota. Their combined total was 5.6 Mt, a decrease of 22% compared with their combined total of 2008.

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 the 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 2009, 832 operations responding to the annual survey reported the dollar value of their production for the current and previous year. The average unit value for operations reporting production and value was \$9.92 per metric ton in 2009. This was an increase of 3% compared with the average unit value of \$9.66 per ton in 2008. The annual reports of the top U.S. producing companies reported nearly a 2% to 3% price increase in 2009, compared with prices in 2008. 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

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 702 Mt of the 1.17 Gt of crushed stone produced for consumption in 2009, no means of transportation was reported by the producers. Of the remaining 464 Mt of crushed stone, 75% was reported as being transported by truck from the quarry or the processing plant to the first point of sale or use; 7% by rail, and 7% by waterway. About 41.6 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 sites, 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 also 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 amounts of crushed stone which were transported from one State to another. For example, crushed stone mined in Kentucky and shipped down the Mississippi River to be used in Louisiana was included in the total of crushed stone sold or used in Louisiana.

Exports.—Exports of crushed stone increased slightly to 1.26 Mt compared with the total of 1.24 Mt in 2008, but the value decreased by 5% to \$58.3 million. In 2009, exports of crushed limestone for cement manufacturing averaged a unit value of \$24.96 per ton (table 17).

Imports.—Imports of crushed stone decreased by 41% to 12.2 Mt compared with those of 2008, and the value decreased by 25% to \$174 million. Of the imported crushed stone, almost all of the limestone was 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 contributed to decreased consumption of crushed stone. By almost any economic measure, 2009 was an extremely difficult year for the construction industry. The decline in residential construction was expected to level off in 2010.

Many construction aggregates producers expect that their production levels would start to recover in 2010 and are cautiously predicting that demand could be flat or increase slightly. If demand does increase in 2010, it is predicted to increase at the historical average of the last 50 years or 2%

to 4% from the 2009 level. Recovery or growth in demand is expected to be from stimulus-related construction activity and improvements in residential construction. In the past, industry experts have indicated that crushed stone consumed in commercial construction combined with State highway and infrastructure projects would help offset any of the continuing decrease in demand of residential construction. For 2010, it is predicted that if commercial construction remains at current levels, then infrastructure investments will drive the recovery.

References Cited

Aggregates Manager, 2010, The year for getting one's house in order: Aggregates Manager, v. 15, no. 1, January, p. 14.

U.S. Census Bureau, 2010, Annual value of construction put in place: U.S. Census Bureau, August 2, p. 1–2. (Accessed October 8, 2010, at http://www.census.gov/const/www/totpage.html.)

GENERAL SOURCES OF INFORMATION

U.S. Geological Survey Publications

Construction Stone. Ch. in United States Mineral Resources, Professional Paper 820, 1973.

Limestone and Dolomite. Ch. in United States Mineral Resources, Professional Paper 820, 1973.

Natural Aggregate—Building America's Future. Circular 1110, 1990.

Natural Aggregates—Foundation of America's Future. Fact Sheet 144–97, 1997.

Natural Aggregates of the Conterminous United States. Bulletin 1594, 1988.

Sand and Gravel, Construction. Ch. in Mineral Commodity Summaries, annual.

Other

Aggregate Handbook. National Stone Association, 1991. Aggregates Manager.

Aggregates—Sand, Gravel, and Crushed Rock Aggregates for Construction Purposes. The Geological Society, 1985.

Calcium Carbonate—From the Cretaceous Period into the 21st Century. Birkhäuser Verlag, 2001.

Concrete Manual, A Water Resources Publication. U.S. Department of the Interior, Bureau of Reclamation, 1975.

Construction Aggregates. Mining Engineering, annual review of industrial mineral commodities.

Crushed Stone. Ch. in Mineral Facts and Problems, U.S. Bureau of Mines Bulletin 675, 1985.

Geology of Nonmetallics. Metal Bulletin Inc., 1984.

Handbook of Concrete Aggregates. Noyes Publications, 1983. Industrial Minerals.

Lime and Limestone—Chemistry and Technology, Production and Uses. Wiley-VCH, 1998.

National Stone, Sand and Gravel Association.

Pit & Quarry.

Rock Products.

Stone, Crushed. Ch. in Industrial Minerals and Rocks (7th ed.), Society for Mining, Metallurgy, and Exploration, Inc., 2006.

 $\label{eq:table 1} {\sf TABLE~1}$ SALIENT CRUSHED STONE STATISTICS 1

	2005	2006	2007	2008	2009
Sold or used by producers: ²					
Quantity	1,700,000	1,780,000	1,650,000	1,460,000 ^r	1,170,000
Value	12,400,000	14,300,000	14,100,000	13,600,000 ^r	11,300,000
Recycle:					
Quantity	14,400	15,400	20,100	29,100 ^r	29,000
Value	99,200	111,000	150,000	252,000 ^r	272,000
Exports:					
Quantity	1,260	1,140	1,020	1,240	1,260
Value	50,500	57,300	62,500	61,600	58,300
Imports for consumption: ³					
Quantity	21,000	19,800	19,500	20,900	12,200
Value	194,000	206,000	212,000	232,000	174,000

Revised.

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

		200	8			200	9	
		Quantity			Quantity			
	Number	(thousand	Value	Unit	Number	(thousand	Value	Unit
Type	of quarries	metric tons)	(thousands)	value	of quarries	metric tons)	(thousands)	value
Limestone ³	2,250 ^r	944,000 ^r	\$8,110,000 r	\$8.60 °r	2,147	747,000	\$6,620,000	\$8.87
Dolomite	136 ^r	59,400 ^r	529,000 ^r	8.91 ^r	124	45,700	447,000	9.77
Marble	11 ^r	3,600 ^r	53,500 ^r	14.89 ^r	27	5,450	81,700	15.01
Calcareous marl	3	3,500	19,700	5.62	3	2,480	14,000	5.62
Shell	3	475	3,710	7.82	5	414	5,310	12.82
Granite	412 ^r	200,000 ^r	2,310,000 ^r	11.53 ^r	407	155,000	1,890,000	12.20
Traprock	367 ^r	97,200 ^r	1,240,000 ^r	12.76 ^r	330	70,300	957,000	13.61
Sandstone and quartzite ⁴	213 ^r	48,100 ^r	453,000 ^r	9.41 ^r	215	43,900	414,000	9.43
Slate	44 ^r	3,630 ^r	32,300 ^r	8.90 ^r	34	2,380	22,800	9.57
Volcanic cinder and scoria	45 ^r	5,770 °	43,200 ^r	7.48 ^r	42	8,170	46,700	5.72
Miscellaneous stone	592 ^r	92,600 ^r	845,000 ^r	9.13 ^r	634	85,400	806,000	9.44
Total or average	XX	1,460,000 ^r	13,600,000 ^r	9.36 ^r	XX	1,170,000	11,300,000	9.70

^rRevised. XX Not applicable.

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.

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.

³Includes limestone-dolomite reported with no distinction between the two kinds of stone.

⁴Includes sandstone-quartzite reported with no distinction between the two kinds of stone.

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

	200)8 ^r	2009		
Region/division	Quantity	Value	Quantity	Value	
Northeast:					
New England	37,600	385,000	34,100	376,000	
Middle Atlantic	160,000	1,680,000	135,000	1,510,000	
Total	197,000	2,060,000	169,000	1,880,000	
Midwest:					
East North Central	226,000	1,780,000	187,000	1,500,000	
West North Central	162,000	1,340,000	138,000	1,240,000	
Total	388,000	3,130,000	325,000	2,750,000	
South:					
South Atlantic	310,000	3,690,000	228,000	2,860,000	
East South Central	153,000	1,340,000	124,000	1,220,000	
West South Central	237,000	1,800,000	183,000	1,400,000	
Total	700,000	6,830,000	535,000	5,470,000	
West:					
Mountain	71,100	545,000	57,700	440,000	
Pacific	102,000	1,080,000	79,800	764,000	
Total	173,000	1,620,000	138,000	1,200,000	
Grand total	1,460,000	13,600,000	1,170,000	11,300,000	

rRevised.

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

		2008 ^r			2009	
	Quantity			Quantity		-
	(thousand	Value	Unit	(thousand	Value	Unit
State	metric tons)	(thousands)	value	metric tons)	(thousands)	value
Alabama	50,000 ²	\$370,000	\$7.40	36,400	\$332,000	\$9.11
Alaska	1,990	31,400	15.81	1,940	34,800	17.93
Arizona	15,300	153,000	9.97	9,120	80,000	8.77
Arkansas	32,200 ²	241,000	7.49	30,000	217,000	7.23
California	51,400	572,000	11.13^{-2}	41,400	378,000	9.13
Colorado	9,590	71,300	7.44	6,970	63,200	9.06
Connecticut	9,640	106,000	10.95	8,030	101,000	12.53
Delaware ³	W	W	W	W	W	W
Florida	68,400	894,000	13.06	48,600	643,000	13.23
Georgia	61,900 ²	666,000 ²	10.76^{-2}	45,100	518,000	11.49
Hawaii	7,410	134,000	18.04	5,920	101,000	17.07
Idaho	5,950	38,800	6.51^{-2}	4,410	30,800	7.00
Illinois	67,600	613,000	9.07^{-2}	56,500	513,000	9.07
Indiana	51,800	352,000	6.79	44,100	290,000	6.57
Iowa	38,700	312,000	8.05	32,600	297,000	9.12
Kansas	23,100	180,000 ²	7.80^{-2}	17,200	143,000	8.34
Kentucky	52,700	422,000	8.02	44,300	389,000	8.78
Louisiana ³	W	W	W	W	W	W

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

 $^{^2\}mbox{Does}$ not include American Samoa, Guam, Puerto Rico, and the U.S. Virgin Islands.

		2008 ^r			2009	
	Quantity			Quantity		
	(thousand	Value	Unit	(thousand	Value	Unit
State	metric tons)	(thousands)	value	metric tons)	(thousands)	value
Maine	4,020	33,900	8.42 2	3,600	31,600	8.79
Maryland	26,100	237,000	9.08^{-2}	22,300	200,000	8.95
Massachusetts	11,200	130,000	11.58^{-2}	10,500	122,000	11.59
Michigan	26,100	136,000	5.20	20,400	115,000	5.66
Minnesota	10,300	122,000	11.76	8,670	110,000	12.73
Mississippi ³	4,380 ²	88,800 ²	20.29 2	3,130	63,400	20.25
Missouri	76,400	614,000	8.04	67,700	598,000	8.83
Montana	1,980	14,000	7.05	1,990	20,400	10.25
Nebraska	7,960 ²	78,100 ²	9.81 2	6,340	59,700	9.42
Nevada	10,200	95,100	9.31 2	8,290	90,500	10.92
New Hampshire	5,170 ²	50,900 ²	9.83 ²	4,680	47,000	10.06
New Jersey	17,900 ²	155,000 ²	8.66 ²	14,500	124,000	8.51
New Mexico	7,020	43,400	6.18	6,130	40,200	6.56
New York	41,000	384,000	9.37	37,200	410,000	11.03
North Carolina	57,500 ²	806,000 ²	14.03 ²	38,500	584,000	15.15
North Dakota	26 ²	133 ²	5.12 ²	985	3,980	4.04
Ohio	54,100	446,000	8.25 2	42,700	388,000	9.08
Oklahoma	47,200	345,000	7.32^{-2}	36,800	308,000	8.35
Oregon	23,500	174,000	7.40	15,800	119,000	7.52
Pennsylvania	101,000	1,140,000 ²	11.26	83,000	975,000	11.74
Rhode Island	1,840	17,900	9.70 ²	1,820	20,200	11.10
South Carolina	22,500 ²	235,000 ²	10.41^{-2}	18,200	201,000	11.04
South Dakota	5,390 ²	34,300 ²	6.37^{-2}	4,450	29,300	6.58
Tennessee	46,200 ²	461,000 ²	9.97^{-2}	40,100	431,000	10.75
Texas	150,000	1,100,000	7.34	110,000	782,000	7.09
Utah	8,950	72,700	8.13	4,830	39,400	8.17
Vermont	5,690	47,500	8.34	5,430	54,900	10.13
Virginia	57,400	712,000	12.40	42,200	577,000	13.67
Washington	17,500	168,000	9.60	14,700	131,000	8.92
West Virginia	15,200	127,000	8.36	12,500	126,000	10.04
Wisconsin	25,900 ²	238,000	9.16^{-2}	22,900	198,000	8.63
Wyoming	12,100 ²	57,100 ²	4.72^{-2}	16,000	75,400	4.71
Other	8,760	128,000	14.56 ²	6,550	102,000	15.59
U.S. total or average	1,460,000	13,600,000	9.36	1,170,000	11,300,000	9.68
Territory						
American Samoa ⁴	(5)	(5)	(5)	(5)	(5)	(5)
Guam	325 ²	3,780 ²	$11.62\ ^2$	296	3,380	11.41
Puerto Rico	11,000	96,000	8.74	8,370	68,700	8.22
Virgin Islands	(5)	(5)	(5)	(5)	(5)	(5)
Grand total or average	1,470,000	13,700,000	9.35	1,180,000	11,400,000	9.69

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

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

²Data not revised.

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."

 ${\rm TABLE~5A}$ CRUSHED STONE SOLD OR USED IN THE UNITED STATES IN 2009, BY SIZE OF OPERATION $^{1,\,2}$

		U.S	S. total	
			Quantity	
Size range	Number of	Percentage	(thousand	Percentage
(metric tons)	operations	of total	metric tons)	of total
Less than 25,000	602	15.8	4,950	0.4
25,000 to 49,999	343	9.0	11,500	1.0
50,000 to 99,999	524	13.7	34,600	3.0
100,000 to 199,999	614	16.1	80,500	6.9
200,000 to 299,999	430	11.3	97,600	8.4
300,000 to 399,999	307	8.0	96,500	8.3
400,000 to 499,999	247	6.5	101,000	8.7
500,000 to 599,999	160	4.2	78,900	6.8
600,000 to 699,999	134	3.5	78,700	6.7
700,000 to 799,999	87	2.3	58,800	5.0
800,000 to 899,999	68	1.8	52,200	4.5
900,000 to 999,999	41	1.1	35,200	3.0
1,000,000 to 1,499,999	143	3.7	157,000	13.4
1,500,000 to 1,999,999	45	1.2	69,000	5.9
2,000,000 to 2,499,999	29	0.8	58,700	5.0
2,500,000 to 4,999,999	36	0.9	111,000	9.5
5,000,000 and more	7	0.2	40,100	3.4
Total	3,817	100.0	1,170,000	100.0

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 5B CRUSHED STONE SOLD OR USED IN THE UNITED STATES IN 2009, 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	83	14.1	773	0.5	147	13.4	1,460	0.4
25,000 to 49,999	63	10.7	2,050	1.2	102	9.3	3,460	1.1
50,000 to 99,999	67	11.4	4,330	2.6	150	13.7	10,100	3.1
100,000 to 199,999	99	16.9	13,300	7.9	185	16.9	24,400	7.5
200,000 to 299,999	59	10.1	13,300	7.9	130	11.9	29,300	9.0
300,000 to 399,999	55	9.4	17,300	10.3	104	9.5	32,300	9.9
400,000 to 499,999	38	6.5	15,400	9.1	85	7.8	34,700	10.7
500,000 to 599,999	35	6.0	17,200	10.2	39	3.6	19,100	5.9
600,000 to 699,999	23	3.9	13,300	7.9	33	3.0	19,300	6.0
700,000 to 799,999	13	2.2	8,770	5.2	19	1.7	12,900	4.0
800,000 to 899,999	12	2.0	9,070	5.4	17	1.6	13,000	4.0
900,000 to 999,999	3	0.5	2,540	1.5	13	1.2	11,300	3.5
1,000,000 to 1,499,999	25	4.3	27,500	16.3	38	3.5	42,100	13.0
1,500,000 to 1,999,999	7	1.2	10,600	6.3	12	1.1	18,400	5.7
2,000,000 to 2,499,999		0.3	3,980	2.4	8	0.7	16,400	5.0
2,500,000 to 4,999,999	3	0.5	9,470	5.6	9	0.8	26,000	8.0
5,000,000 and more					2	0.2	10,300	3.2
Total	587	100.0	169,000	100.0	1,093	100.0	325,000	99.9

-					,			
		So	outh			\	West	
			Quantity				Quantity	
	Number of	Percentage	(thousand	Percentage	Number of	Percentage	(thousand	Percentage
	operations	of total	metric tons)	of total	operations	of total	metric tons)	of total
Less than 25,000	113	8.5	833	0.2	259	32.3	1,880	1.4
25,000 to 49,999	77	5.8	2,630	0.5	101	12.6	3,330	2.4
50,000 to 99,999	165	12.4	11,200	2.1	142	17.7	8,990	6.5
100,000 to 199,999	199	14.9	26,100	4.9	131	16.4	16,700	12.2
200,000 to 299,999	190	14.2	43,400	8.1	51	6.4	11,600	8.4
300,000 to 399,999	125	9.4	39,600	7.4	23	2.9	7,380	5.4
400,000 to 499,999	96	7.2	39,600	7.4	28	3.5	11,500	8.3
500,000 to 599,999	73	5.5	36,100	6.8	13	1.6	6,470	4.7
600,000 to 699,999	67	5.0	39,600	7.4	11	1.4	6,500	4.7
700,000 to 799,999	52	3.9	35,000	6.5	3	0.4	2,050	1.5
800,000 to 899,999	34	2.5	26,200	4.9	5	0.6	3,880	2.8
900,000 to 999,999	21	1.6	18,000	3.4	4	0.5	3,360	2.4
1,000,000 to 1,499,999	66	4.9	71,700	13.4	14	1.7	15,200	11.1
1,500,000 to 1,999,999	21	1.6	32,000	6.0	5	0.6	8,020	5.8
2,000,000 to 2,499,999	15	1.1	30,500	5.7	4	0.5	7,800	5.7
2,500,000 to 4,999,999	18	1.3	57,300	10.7	6	0.7	18,200	13.3
5,000,000 and more	4	0.3	25,100	4.7	1	0.1	4,610	3.4
Total	1,336	100.0	535,000	100.0	801	100.0	138,000	100.0

⁻⁻ 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 2009, BY STATE 1

	Limes	tone	Dolomite		Calcareous marl		Marble	
State	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Alabama	30,400 ²	279,000 2					1,680	13,600
Alaska								
Arizona	3,700 ²	36,800 ²					35	408
Arkansas	10,600	68,800	820	6,930				
California	16,400 ²	105,000 2	131	1,300			2,490	30,700
Colorado	507 ²	5,400 ²						
Connecticut	1,160 ²	23,800 ²						
Delaware								
Florida	46,300 ²	620,000 ²	171	1,370				
Georgia	5,100	59,700					1,050	31,800
Hawaii								
Idaho	237	3,430						
Illinois	44,700 ²	384,000 ²	11,100	123,000				
Indiana	40,200 ²	259,000 ²	3,830	30,200				
Iowa	32,600 ²	297,000 ²						
Kansas	16,900	141,000						
Kentucky	44,300	389,000						
Louisiana								
Maine	1,540	12,200						
Maryland	13,100 ²	110,000 ²						
Massachusetts	1,560 ²	28,100 ²						
Michigan	15,700 ²	93,400 ²	3,860	19,900				
Minnesota	2,720 ²	33,200 ²	1,600	22,400				
Mississippi ³	3,080	62,700						
Missouri	61,800 ²	460,000 ²	2,350	17,100				
Montana	1,570	16,600						
Nebraska	6,130	58,500						
Nevada	2,890 ²	36,300 ²						
New Hampshire								
New Jersey								
New Mexico	3,690	21,200						
New York	19,400 ²	195,000 ²	9,870	114,000			96	950
North Carolina	4,110 ²	59,400 ²						
North Dakota								
Ohio	40,400 ²	368,000 ²	1,530	11,300				
Oklahoma	31,300 ²	262,000 ²						
Oregon								
Pennsylvania	46,200 ²	479,000 ²	10,200	98,800				
Rhode Island								
South Carolina	2,130	22,000			2,480	14,000		
South Dakota	2,470	14,200			2,400	14,000		
Tennessee	38,600 ²	408,000 ²						
Texas	99,700 ²	708,000 ²					86	4,180
Utah	3,430 ²	29,700 ²						4,100
Vermont	1,800 ²	29,700 ²						
	15,300 ²	17,700 ² 189,000 ²						
Virginia	15,300 -	189,000 -						

TABLE 6—Continued LIMESTONE, DOLOMITE, CALCAREOUS MARL, AND MARBLE SOLD OR USED BY PRODUCERS IN THE UNITED STATES IN 2009, BY STATE 1

(Thousand metric tons and thousand dollars)

	Limes	Limestone		Dolomite		Calcareous marl		ole
State	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Washington	988 ²	9,150 ²	102	454				
West Virginia	11,400	113,000						
Wisconsin	19,100 ²	119,000 ²	117	789				
Wyoming	3,420 ²	21,800 ²						
Total	747,000	6,620,000	45,700	447,000	2,480	14,000	5,450	81,700

⁻⁻ Zero.

 ${\it TABLE~7}$ GRANITE, TRAPROCK, SANDSTONE AND QUARTZITE, AND SLATE SOLD OR USED BY PRODUCERS IN THE UNITED STATES IN 2009, BY STATE 1

(Thousand metric tons and thousand dollars)

	Gran	ite	Trapro	ock	Sandstone and	d quartzite ²	Slate	
State	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Alabama	2,210	20,300			1,220	11,300	781	6,340
Alaska	290	4,270						
Arizona	2,310	19,900			744	7,400		
Arkansas	6,040	46,300			11,000	84,400		
California	9,780	101,000	4,540	48,900	1,120	11,500	102	1,180
Colorado	4,560	33,800			1,040	8,570		
Connecticut	459	4,900	5,110	56,300				
Delaware								
Florida								
Georgia	38,100	417,000						
Hawaii			5,180	88,000				
Idaho	283	1,390	1,710	8,660				
Illinois					653	5,930		
Indiana								
Iowa								
Kansas								
Kentucky								
Louisiana								
Maine	1,260	12,000			404	3,610		
Maryland	5,160	45,500	3,250	35,900	93	1,290		
Massachusetts	3,240	34,000	4,510	46,700				
Michigan								
Minnesota	2,640	32,400			1,570	21,000		
Mississippi								
Missouri	1,200	101,000	2,160	15,800				
Montana								
Nebraska								
Nevada	189	1,430			670	7,380		

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.

³A significant amount of sold or used material was shipped in from other States.

	Gran	ite	Trapro	ock	Sandstone and quartzite ²		Slate	
State	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
New Hampshire	2,720	27,000	1,600	16,700	181	1,820		
New Jersey	5,770	51,000	8,660	71,800				
New Mexico					208	1,630		
New York	1,110	13,300	2,840	45,200	2,190	24,400	167	1,640
North Carolina	28,300	432,000	4,290	66,300				
North Dakota					655	2,310		
Ohio					426	3,870		
Oklahoma	2,810	24,400			861	7,350		
Oregon	564	4,500	6,930	55,500				
Pennsylvania	2,780	28,700	5,190	185,000	11,300	113,000	888	10,000
Rhode Island								
South Carolina	13,100	159,000						
South Dakota				-	1,970	15,000		
Tennessee					1,070	18,100		
Texas					2,480	9,870		
Utah					239	2,940		
Vermont					897	10,900	237	2,330
Virginia	17,400	258,000	7,130	99,400	1,070	15,200	202	1,230
Washington	885	8,630	5,810	49,000	717	13,000		
West Virginia					1,130	12,300		
Wisconsin	1,780	7,880	1,420	67,400				
Wyoming								
Total	155,000	1,890,000	70,300	957,000	43,900	414,000	2,380	22,800

⁻⁻ Zero.

TABLE 8 SHELL, VOLCANIC CINDER AND SCORIA, AND MISCELLANEOUS STONE SOLD OR USED BY PRODUCERS IN THE UNITED STATES IN 2009, BY STATE 1

(Thousand metric tons and thousand dollars)

	She	:11	Volcanic cinde	er and scoria	Miscellaneous stone		
State	Quantity	Value	Quantity	Value	Quantity	Value	
Alabama					84	844	
Alaska					1,650	30,600	
Arizona			99	794	2,230	14,800	
Arkansas					1,560	10,700	
California			333	4,360	6,460	72,900	
Colorado					862	15,400	
Connecticut					1,310	15,500	
Delaware ²					W	W	
Florida	414	5,310			1,670	16,000	
Georgia					855	9,060	

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.

TABLE 8—Continued

SHELL, VOLCANIC CINDER AND SCORIA, AND MISCELLANEOUS STONE SOLD OR USED BY PRODUCERS IN THE UNITED STATES IN 2009, BY STATE $^{\rm 1}$

(Thousand metric tons and thousand dollars)

	She	11	Volcanic cinde	r and scoria	Miscellaneo	laneous stone		
State	Quantity	Value	Quantity	Value	Quantity	Value		
Hawaii			121	1,540	623	11,500		
Idaho					2,180	17,400		
Illinois					42	245		
Indiana					89	550		
Iowa					37	270		
Kansas					291	2,570		
Kentucky								
Louisiana ²					W	W		
Maine					392	3,800		
Maryland					784	6,930		
Massachusetts					1,230	13,300		
Michigan					791	1,960		
Minnesota					131	1,330		
Mississippi ²					45	664		
Missouri					259	3,830		
Montana					417	3,800		
Nebraska					204	1,230		
Nevada			149	1,440	4,390	44,000		
New Hampshire					183	1,580		
New Jersey					107	908		
New Mexico			290	2,640	1,940	14,800		
New York					1,520	15,900		
North Carolina					1,810	26,300		
North Dakota			294	1,490	36	183		
Ohio					326	4,060		
Oklahoma					1,840	14,200		
Oregon			4	30	8,310	58,900		
Pennsylvania					6,460	59,900		
Rhode Island					1,820	20,200		
South Carolina					418	5,520		
South Dakota					3	20		
Tennessee					454	4,920		
Texas					7,940	59,200		
Utah					1,160	6,770		
Vermont					2,500	24,000		
Virginia					1,050	14,200		
Washington					6,220	51,100		
West Virginia					36	321		
Wisconsin					466	2,640		
Wyoming			6,880	34,400	5,710	19,300		
Other					6,550	102,000		
Total	414	5,310	8,170	46,700	85,400	806,000		

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.

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

 ${\it TABLE~9}$ CRUSHED STONE SOLD OR USED BY PRODUCERS IN THE UNITED STATES IN 2009, BY USE 1

`		Unit
metric tons)	(thousands)	value
	* * * * * * * * * *	440.00
· · · · · · · · · · · · · · · · · · ·		\$10.83
		10.42
3,590		10.21
17,400	195,000	11.22
29,800	292,000	9.82
19,100	188,000	9.80
6,490	80,300	12.38
9,540	88,700	9.30
94,700	1,130,000	11.89
4,530	54,300	11.99
6,240	62,400	10.01
9,420	85,800	9.11
44,300	514,000	11.62
56,000	420,000	7.50
12,200	91,900	7.56
328	8,040	24.52
14,900	112,000	7.49
2,590	313,000	121.27
75,900	728,000	9.60
6,540	50,200	7.67
7,810	74,500	9.53
970	19,900	20.56
585	21,800	37.31
52,900	276,000	5.21
11,700	101,000	8.60
2,490	15,300	6.14
W	W	W
896	22,000	24.59
5,690	45,800	8.05
149	7,080	47.53
687	8,320	12.10
W	W	W
		15.99
		19.27
_,0	,,,,,	17.21
207.000	3,050,000	9.93
307,000 346,000	3,020,000	8.74
	29,800 19,100 6,490 9,540 94,700 4,530 6,240 9,420 44,300 56,000 12,200 328 14,900 2,590 75,900 6,540 7,810 970 585 52,900 11,700 2,490 W 896 5,690	(thousand metric tons) Value (thousands) 1,650 \$17,900 9,580 99,900 3,590 36,600 17,400 195,000 29,800 292,000 19,100 188,000 6,490 80,300 9,540 88,700 94,700 1,130,000 4,530 54,300 6,240 62,400 9,420 85,800 44,300 514,000 56,000 420,000 12,200 91,900 328 8,040 14,900 112,000 2,590 313,000 75,900 728,000 6,540 50,200 7,810 74,500 970 19,900 585 21,800 52,900 276,000 11,700 101,000 2,490 15,300 W W 896 22,000 5,690

 ${\it TABLE~10}$ LIMESTONE AND DOLOMITE SOLD OR USED BY PRODUCERS IN THE UNITED STATES IN 2009, BY USE 1

Use Construction: Coarse aggregate (+1½ inch): Macadam Riprap and jetty stone Filter stone Other coarse aggregate Coarse aggregate, graded: Concrete aggregate, coarse Bituminous aggregate, coarse Bituminous surface-treatment aggregate Railroad ballast	1,200 6,960 2,260 12,300 19,100 10,200 3,340 2,120 64,600	Value 13,300 70,500 20,600 120,000 187,000 94,900 36,000 17,900	Quantity 16 204 107 1,070 3,020 1,360 853	Value 139 2,250 1,010 12,000 22,100 13,300 8,560
Coarse aggregate (+1½ inch): Macadam Riprap and jetty stone Filter stone Other coarse aggregate Coarse aggregate, graded: Concrete aggregate, coarse Bituminous aggregate, coarse Bituminous surface-treatment aggregate	6,960 2,260 12,300 19,100 10,200 3,340 2,120	70,500 20,600 120,000 187,000 94,900 36,000 17,900	204 107 1,070 3,020 1,360 853	2,250 1,010 12,000 22,100 13,300
Macadam Riprap and jetty stone Filter stone Other coarse aggregate Coarse aggregate, graded: Concrete aggregate, coarse Bituminous aggregate, coarse Bituminous surface-treatment aggregate	6,960 2,260 12,300 19,100 10,200 3,340 2,120	70,500 20,600 120,000 187,000 94,900 36,000 17,900	204 107 1,070 3,020 1,360 853	2,250 1,010 12,000 22,100 13,300
Riprap and jetty stone Filter stone Other coarse aggregate Coarse aggregate, graded: Concrete aggregate, coarse Bituminous aggregate, coarse Bituminous surface-treatment aggregate	6,960 2,260 12,300 19,100 10,200 3,340 2,120	70,500 20,600 120,000 187,000 94,900 36,000 17,900	204 107 1,070 3,020 1,360 853	2,250 1,010 12,000 22,100 13,300
Filter stone Other coarse aggregate Coarse aggregate, graded: Concrete aggregate, coarse Bituminous aggregate, coarse Bituminous surface-treatment aggregate	2,260 12,300 19,100 10,200 3,340 2,120	20,600 120,000 187,000 94,900 36,000 17,900	107 1,070 3,020 1,360 853	1,010 12,000 22,100 13,300
Other coarse aggregate Coarse aggregate, graded: Concrete aggregate, coarse Bituminous aggregate, coarse Bituminous surface-treatment aggregate	12,300 19,100 10,200 3,340 2,120	120,000 187,000 94,900 36,000 17,900	1,070 3,020 1,360 853	12,000 22,100 13,300
Coarse aggregate, graded: Concrete aggregate, coarse Bituminous aggregate, coarse Bituminous surface-treatment aggregate	19,100 10,200 3,340 2,120	187,000 94,900 36,000 17,900	3,020 1,360 853	22,100 13,300
Concrete aggregate, coarse Bituminous aggregate, coarse Bituminous surface-treatment aggregate	10,200 3,340 2,120	94,900 36,000 17,900	1,360 853	13,300
Bituminous aggregate, coarse Bituminous surface-treatment aggregate	10,200 3,340 2,120	94,900 36,000 17,900	1,360 853	13,300
Bituminous surface-treatment aggregate	3,340 2,120	36,000 17,900	853	
	2,120	17,900		8,560
Railroad ballast			0.5	
	64,600		95	777
Other graded coarse aggregate		691,000	5,110	60,800
Fine aggregate (- 3/8 inch):				
Stone sand, concrete	2,400	24,300	84	711
Stone sand, bituminous mix or seal	2,740	26,100	703	7,210
Screening, undesignated	5,560	50,300	313	2,380
Other fine aggregate	23,600	261,000	3,460	41,600
Coarse and fine aggregates:				
Graded road base or subbase	39,200	284,000	1,830	13,800
Unpaved road surfacing	8,370	66,800	817	6,340
Terrazzo and exposed aggregate	82	1,450		
Crusher run or fill or waste	8,350	52,400	1,330	10,800
Roofing granules	325	3,960		
Other coarse and fine aggregates	44,400	397,000	2,570	20,700
Other construction materials	2,550	23,400	30	185
Agricultural:				
Agricultural limestone	7,050	67,300	732	6,930
Poultry grit and mineral food	814	10,300		
Other agricultural uses	285	18,000		
Chemical and metallurgical:				
Cement manufacture	48,900	259,000		
Lime manufacture	11,600	100,000		
Dead-burned dolomite manufacture				
Flux stone	738	6,440	1,670	7,350
Chemical stone	227	2,040		
Glass manufacture	63	1,260		
Sulfur oxide removal	5,560	43,300		

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

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

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

 ${\it TABLE~10-Continued}$ LIMESTONE AND DOLOMITE SOLD OR USED BY PRODUCERS IN THE UNITED STATES IN 2009, BY USE 1

	Limesto	one ²	Dolomite		
Use	Quantity	Value	Quantity	Value	
Special:					
Mine dusting or acid water treatment	120	5,970			
Asphalt fillers or extenders	404	5,550			
Whiting or whiting substitute	100	2,600			
Other fillers or extenders	1,440	13,900	60	571	
Other miscellaneous uses and specified uses not listed	186	2,540	63	340	
Unspecified: ³					
Reported	167,000	1,610,000	14,200	158,000	
Estimated	242,000	2,030,000	5,990	48,900	
Total	747,000	6,620,000	45,700	447,000	

⁻⁻ Zero.

 ${\it TABLE~11}$ LIMESTONE AND DOLOMITE SOLD OR USED BY PRODUCERS IN 2009, BY STATE AND USE 1

(Thousand metric tons and thousand dollars)

	Concrete a	ggregate	Bituminous	aggregate	Roadstone an	d coverings	Riprap and ra	ilroad ballast	Other construction uses	
State	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Alabama	1,770	15,700	5,440	52,200	2,970	28,100	492	4,760	6,010	67,800
Alaska										
Arizona	3	48			3	31				
Arkansas	545	4,210	444	4,040	2,050	13,400	144	1,100	1,970	12,800
California	W	W	W	W	W	W	W	W	911	7,960
Colorado			W	W	W	W	W	W	W	W
Connecticut	10	135	29	392	41	331	W	W	W	W
Delaware										
Florida	4,180	76,200	4,430	109,000	3,440	26,700	55	838	3,510	39,400
Georgia	W	W	W	W	W	W			940	9,980
Hawaii										
Idaho					23	101				
Illinois	5,920	56,300	9,170	82,800	5,300	40,400	387	4,260	2,950	22,600
Indiana	5,060	34,100	6,930	50,100	5,280	33,000	W	W	1,060	6,490
Iowa	1,160	13,900	705	9,070	6,790	65,300	366	6,710	1,200	11,100
Kansas	368	3,570	945	9,270	1,440	9,400	49	576	1,140	8,330
Kentucky	2,380	21,100	7,590	72,500	3,000	24,900	1,100	11,900	4,290	37,000
Louisiana										
Maine	19	58	25	130	W	W				
Maryland	770	6,410	1,950	18,800	297	2,630	14	203	844	6,510
Massachusetts										

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

²Includes a minor amount of limestone-dolomite reported without a distinction between the two.

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

 $\label{total continued} \mbox{LIMESTONE AND DOLOMITE SOLD OR USED BY PRODUCERS IN 2009, BY STATE AND USE 1} \mbox{}$

	Concrete a	ggregate	Bituminous	aggregate	Roadstone an	nd coverings	Riprap and ra	ilroad ballast	Other constru	iction uses
State	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Michigan	2,820	22,800	1,080	6,950	1,880	13,300	119	1,750	778	5,560
Minnesota	W	W	W	W	444	5,100	W	W	W	W
Mississippi ²	W	W	W	W	W	W	W	W	W	W
Missouri	2,170	19,700	930	7,330	6,070	40,400	2,070	16,500	1,490	9,250
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	185	2,090	696	3,320	61	798	11	232	32	253
New York	3,840	46,500	4,680	54,300	1,620	19,900	168	1,880	3,420	32,200
North Carolina	W	W	W	W	W	W	W	W	W	W
North Dakota										
Ohio	1,070	9,110	6,240	54,000	1,960	14,400	40	429	2,050	15,600
Oklahoma	3,060	38,400	3,480	28,100	771	6,410	149	1,920	1,480	11,000
Oregon									, 	·
Pennsylvania	3,760	37,800	7,500	72,900	4,220	39,400	764	8,590	5,210	42,600
Rhode Island					,					
South Carolina	W	W	W	W	W	W			W	W
South Dakota	_									
Tennessee	2,510	34,300	8,480	104,000	2,490	24,000	525	5,370	8,410	81,700
Texas	6,440	49,200	10,800	116,000	8,850	50,100	967	9,070	12,800	80,100
Utah					3	12	W	W	45	307
Vermont	W	W	W	W	73	430	W	W	215	1,500
Virginia	1,310	15,400	1,780	19,000	1,080	10,400	228	2,870	2,730	24,400
Washington			W	W	W	W		2,070	2,730	21,100
West Virginia	293	2,850	2,230	19,000	1,100	20,800	52	546	405	3,130
Wisconsin	- 426	2,830	1,220	6,530	2,220	10,300	494	1,390	2,470	11,600
Wyoming	– 420 W	2,820 W	W	0,530 W	2,220 W	10,300 W		1,370	2,470	
Total	50,100	513,000	86,800	900,000	63,500	500,000	8,190	80,900	66,300	549,000
Total withheld	1,690					14,800	1,180	10,600	1,620	
Grand total	51,700	24,200 537,000	2,580 89,300	43,700 944,000	1,200 64,700	515,000	9,370	91,500	67,900	35,400 585,000
Grand total	Cement ma	•	Agricultu		Lime man		9,370 Other		67,900 Tota	
	-				-					Value
A1.1	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity 20, 400 3	
Alabama	1,540	9,790	W	W	W	W	10,100	81,400	30,400 ³	279,000 ³
Alaska		16 200					2 000	10.700	2.700 3	26,000,3
Arizona	1,580	16,300	W	W	W	W	2,080	19,700	3,700 ³	36,800 ³
Arkansas	_ W	W	W	W			4,850	36,700	11,400	75,700
California	8,930	30,400	W	W			5,810	55,800	16,600 ³	107,000 ³
Colorado							441	4,710	507 ³	5,400 ³
Connecticut			7	55			W	W	1,160 ³	23,800 ³
Delaware										
Florida	W	W	W	W			30,300	365,000	46,500 ³	622,000 ³
Georgia			W	W			3,010	35,500	5,100	59,700
Hawaii										

 ${\it TABLE~11-\!\!-\!Continued}$ LIMESTONE AND DOLOMITE SOLD OR USED BY PRODUCERS IN 2009, BY STATE AND USE 1

	Cement ma	nufacture	Agricultu	ral uses	Lime man	ufacture	Othe	Other uses		al
State	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Idaho			W	W			W	W	237	3,430
Illinois	W	W	W	W			28,800	275,000	55,800 ³	507,000 ³
Indiana	W	W	1,370	7,560	12	60	21,900	146,000	44,000 ³	290,000 3
Iowa	2,050	4,300	W	W	W	W	19,400	180,000	32,600 ³	297,000 3
Kansas	W	W	W	W			12,100	103,000	16,900	141,000
Kentucky	W	W	354	2,240	W	W	20,500	175,000	44,300	389,000
Louisiana	-									
Maine	W	W					1,070	9,590	1,540	12,200
Maryland	W	W	W	W			9,130	75,700	13,100 ³	110,000 3
Massachusetts							1,560	28,100	1,560 ³	28,100 ³
Michigan	2,320	4,210	120	781			10,500	58,000	19,600 ³	113,000 ³
Minnesota	-		112	1,120			2,330	27,800	4,320 3	55,600 ³
Mississippi ²	-		W	W			986	17,400	3,080	62,700
Missouri	W	W	548	2,750	W	W	45,600	354,000	64,100 ³	477,000 ³
Montana	574	7,910	W	W	W	W	W	W	1,570	16,600
Nebraska	W	W	673	8,590			4,150	38,600	6,130	58,500
Nevada	W	W	W	W	W	W	1,430	14,600	2,890	36,300
New Hampshire										
New Jersey										
New Mexico	-						2,700	14,500	3,690	21,200
New York	W	W	101	1,140	W	W	14,800	146,000	29,200 ³	309,000 3
North Carolina			W	W			3,970	56,900	4,110 3	59,400 ³
North Dakota	-									
Ohio	- 		305	2,560			30,300	284,000	41,900 3	380,000 3
Oklahoma	W	W	W	W			21,300	171,000	31,300 3	262,000 ³
Oregon	-									
Pennsylvania	1,870	24,900	W	W	W	W	31,600	331,000	56,400 ³	578,000 ³
Rhode Island	-									
South Carolina	- 		56	500			1,730	18,400	2,130	22,000
South Dakota	625	1,810					1,850	12,400	2,470	14,200
Tennessee	W	W	W	W			15,500	154,000	38,600 ³	408,000 ³
Texas	11,600	50,300	W	W	W	W	47,800	351,000	99,700 ³	708,000 3
Utah	1,650	14,400	W	W	W	W	1,240	10,600	3,430 3	29,700 ³
Vermont	- 		W	W			1,440	15,200	1,800 3	17,700 ³
Virginia	-		W	W	W	W	6,790	90,300	15,300 ³	189,000 ³
Washington	W	W	W	W	W	W	355	4,220	1,090 3	9,600 ³
West Virginia	W	W	W	W			6,710	61,700	11,400	113,000
Wisconsin	- 		411	4,320			12,000	82,800	19,200 ³	120,000 ³
Wyoming	- 677	4,190					2,730	17,500	3,420 ³	21,800 ³
Total	33,400	169,000	4,050	31,600	12	60	439,000	3,920,000	XX	XX
Total withheld	15,600	90,500	4,920	72,400	11,600	99,900	1,000	10,600	XX	XX
Grand total	49,000	259,000	8,970	104,000	11,600	100,000	440,000	3,930,000	792,000	7,070,000

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.

³Includes limestone-dolomite reported with no distinction between the two kinds of stone.

 ${\it TABLE~12}$ GRANITE, TRAPROCK, SANDSTONE AND QUARTZITE SOLD OR USED BY PRODUCERS IN THE UNITED STATES IN 2009, BY USE 1

	Grani	te	Trapro	ock	Sandstone and quartzite ²	
Use	Quantity	Value	Quantity	Value	Quantity	Value
Construction:						
Coarse aggregate (+1½ inch):						
Macadam	158	1,760	164	1,290	100	1,190
Riprap and jetty stone	600	7,690	267	4,190	1,290	11,100
Filter stone	635	8,270	317	3,580	150	1,490
Other coarse aggregate	1,830	31,300	1,070	19,500	289	2,860
Coarse aggregate, graded:						
Concrete aggregate, coarse	3,610	40,200	1,390	15,900	901	8,320
Bituminous aggregate, coarse	3,020	27,200	2,180	19,400	906	9,650
Bituminous surface-treatment aggregate	982	15,700	473	4,400	367	5,290
Railroad ballast	4,090	40,400	1,020	9,520	164	1,760
Other graded coarse aggregate	17,200	260,000	4,480	66,400	944	11,200
Fine aggregate (- 3/8 inch):						
Stone sand, concrete	391	4,160	254	6,500	640	7,490
Stone sand, bituminous mix or seal	1,030	10,000	682	7,100	477	5,250
Screening, undesignated	2,050	21,400	608	4,740	459	3,190
Other fine aggregate	11,800	143,000	3,390	46,500	1,060	12,700
Coarse and fine aggregates:						
Graded road base or subbase	4,250	42,000	3,900	28,400	2,330	19,200
Unpaved road surfacing	370	4,210	686	4,490	680	4,180
Terrazzo and exposed aggregate	133	2,530			7	90
Crusher run or fill or waste	1,840	19,100	919	8,000	680	5,930
Roofing granules					6	183
Other coarse and fine aggregates	17,600	191,000	5,490	51,100	1,060	8,770
Other construction materials	38	333	8	65	2,160	9,560
Agricultural:						
Agricultural limestone						
Poultry grit and mineral food						
Other agricultural uses						
Chemical and metallurgical:						
Cement manufacture					457	2,710
Lime manufacture						
Dead-burned dolomite manufacture						
Flux stone					83	1,490
Chemical stone						
Glass manufacture					833	20,800
Sulfur oxide removal						
Special:						
Mine dusting or acid water treatment						
Asphalt fillers or extenders						
Whiting or whiting substitute						
Other fillers or extenders						

TABLE 12—Continued

GRANITE, TRAPROCK, SANDSTONE AND QUARTZITE SOLD OR USED BY PRODUCERS IN THE UNITED STATES IN 2009, BY USE $^{\mathrm{l}}$

(Thousand metric tons and thousand dollars)

	Granite		Trapro	ock	Sandstone and quartzite ²	
Use	Quantity	Value	Quantity	Value	Quantity	Value
Other miscellaneous uses and specified uses not listed	1,120	102,000	1,560	211,000	1,330	18,700
Unspecified: ³						
Reported	58,100	676,000	22,600	251,000	8,400	73,000
Estimated	24,200	242,000	18,900	194,000	18,100	168,000
Total	155,000	1,890,000	70,300	957,000	43,900	414,000

⁻⁻ Zero.

 ${\it TABLE~13}$ MARBLE, VOLCANIC CINDER AND SCORIA, AND MISCELLANEOUS STONE SOLD OR USED BY PRODUCERS IN THE UNITED STATES IN 2009, BY USE 1

(Thousand metric tons and thousand dollars)

	Mark	ole	Volcanic cinde	r and scoria	Miscellaneous stone	
Use	Quantity	Value	Quantity	Value	Quantity	Value
Construction:						
Coarse aggregate (+1½ inch):						
Macadam					16	227
Riprap and jetty stone			4	67	251	4,070
Filter stone					112	1,600
Other coarse aggregate			10	111	936	10,700
Coarse aggregate, graded:						
Concrete aggregate, coarse					1,650	18,400
Bituminous aggregate, coarse					1,410	22,700
Bituminous surface-treatment aggregate					456	10,100
Railroad ballast					2,050	18,300
Other graded coarse aggregate			96	842	2,230	34,200
Fine aggregate (- 3/8 inch):						
Stone sand, concrete					711	10,700
Stone sand, bituminous mix or seal					601	6,750
Screening, undesignated					436	3,650
Other fine aggregate			37	482	829	8,250
Coarse and fine aggregates:						
Graded road base or subbase					4,300	31,600
Unpaved road surfacing					1,010	4,070
Terrazzo and exposed aggregate	25	3,250	20	250	57	454
Crusher run or fill or waste			26	269	1,370	12,300
Roofing granules						
Other coarse and fine aggregates			118	1,540	4,540	57,500
Other construction materials	149	1,940	137	984	1,820	14,700
Agricultural:						
Agricultural limestone					2	11
Poultry grit and mineral food					25	2,860
Other agricultural uses	189	7,080			99	939
See feetnetes at and of table						

 $^{^{1}\}mathrm{Data}$ 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—Continued

MARBLE, VOLCANIC CINDER AND SCORIA, AND MISCELLANEOUS STONE SOLD OR USED BY PRODUCERS IN THE UNITED STATES IN 2009, BY USE 1

(Thousand metric tons and thousand dollars)

	Marb	le	Volcanic cinde	r and scoria	Miscellaneous stone	
Use	Quantity	Value	Quantity	Value	Quantity	Value
Chemical and metallurgical:						
Cement manufacture					1,070	4,520
Lime manufacture						
Dead-burned dolomite manufacture						
Flux stone						
Chemical stone						
Glass manufacture						
Sulfur oxide removal					128	2,520
Special:						
Mine dusting or acid water treatment						
Asphalt fillers or extenders						
Whiting or whiting substitute					73	364
Other fillers or extenders					73	454
Other miscellaneous uses and specified uses not listed	2,910	44,600	96	945	341	4,650
Unspecified: ²						
Reported			6,970	34,800	29,300	245,000
Estimated	2,170	24,900	653	6,390	29,600	274,000
Total	5,450	81,700	8,170	46,700	85,400	806,000

⁻⁻ Zero.

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

		2008			2009	
	Quantity			Quantity		
	(thousand	Value	Unit	(thousand	Value	Unit
State	metric tons)	(thousands)	value	metric tons)	(thousands)	value
Alabama	112	\$2,090	\$18.62	126	\$2,520	\$20.02
Alaska	105 r	1,770 °	16.81 ^r	57	1,200	21.02
Arizona	137	820	5.99	227	1,370	6.02
Arkansas				85	908	10.68
California	1,550 ^r	12,500 ^r	8.11 ^r	1,700	11,600	6.82
Colorado	514 ^r	4,950	9.62 ^r	362	4,050	11.18
Connecticut	133	530	3.98	124	517	4.17
Delaware		35	17.50	2	35	17.50
Florida	415	5,980	14.40 ^r	903	12,300	13.66
Georgia	96	2,770	28.89	196	4,280	21.83
Hawaii	73	1,040	14.25	73	1,030	14.16
Idaho	88	659	7.49	94	587	6.24

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.

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

		2008		2009				
	Quantity			Quantity				
	(thousand	Value	Unit	(thousand	Value	Unit		
State	metric tons)	(thousands)	value	metric tons)	(thousands)	value		
Illinois	843	8,210	9.74	1,460	12,500	8.57		
Indiana	172 ^r	1,640 ^r	9.54 ^r	225	1,870	8.30		
Iowa	37	290	7.84	26	209	8.04		
Kansas	1,140	30,900	27.02 ^r	1,290	33,200	25.74		
Kentucky	49	928	18.94	49	928	18.94		
Louisiana	147	908	6.18	134	757	5.65		
Maine	176	1,380	7.82	139	1,130	8.14		
Maryland	194	999	5.15	145	702	4.84		
Massachusetts	305	1,960	6.42	287	2,410	8.40		
Michigan	315	1,540	4.88	532	3,010	5.67		
Minnesota	805 r	7,240 ^r	8.99 r	528	5,430	10.29		
Mississippi	81	1,570	19.35	136	1,780	13.09		
Missouri	208	922	4.43	164	693	4.23		
Montana	75	338	4.51	8	89	11.13		
Nebraska	32	745	23.28	83	1,090	13.14		
Nevada	49	275	5.61	275	1,500	5.46		
New Hampshire	256	3,420	13.34	296	3,480	11.74		
New Jersey	 154	1,120	7.24	155	1,350	8.70		
New Mexico	195	1,410	7.25	771	9,850	12.78		
New York	256	1,630	6.36	380	2,840	7.47		
North Carolina	318	2,300	7.23	874	7,850	8.98		
North Dakota		126	4.50	40	450	11.25		
Ohio	68	249	3.66	179	1,090	6.10		
Oklahoma	103	1,540	14.98	118	1,570	13.33		
Oregon		1,940 ^r	8.26 ^r	216	1,580	7.29		
Pennsylvania	1,120	10,700	9.54	1,020	10,100	9.97		
Rhode Island		920	13.33	66	202	3.06		
South Carolina	— 191 ^r	4,010 ^r	21.02 r	204	4,420	21.65		
South Dakota	80	446	5.58	120	751	6.26		
Tennessee	54	409	7.57	197	1,450	7.36		
Texas	700	7,280	10.40	616	4,650	7.54		
Utah	— 431 ^r	2,440 ^r	5.66 ^r	234	1,560	6.67		
Vermont	30	242	8.07	28	425	15.18		
Virginia	955	1,310 ^r	1.37 ^r	233	2,980	12.79		
Washington		1,080	5.53	168	499	2.97		
West Virginia								
Wisconsin		4,980	6.67	624	4,290	6.87		
Wyoming		360	12.41	14	205	14.64		
U.S. total or average	14,100 ^r	141,000 ^r	9.99 r	16,000	169,000	10.60		
Territory		,		,	~~,~~~			
Puerto Rico	45	169	3.75	45	169	3.75		
Grand total or average	14,100 ^r	141,000 ^r	9.97 ^r	16,000	170,000	10.58		
Thereiand 7-	1.,100	- 11,000		10,000	-70,000	20.50		

^rRevised. -- Zero.

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

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

		2008		2009				
	Quantity			Quantity				
	(thousand	Value	Unit	(thousand	Value	Unit		
State	metric tons)	(thousands)	value	metric tons)	(thousands)	value		
Alabama	45	\$317	\$7.04	51	\$377	\$7.39		
Alaska	64 ^r	304 ^r	4.75 ^r	25	124	4.96		
Arizona	192	1,050	5.48	70	485	6.93		
Arkansas				42	193	4.60		
California	2,270 ^r	17,000 ^r	7.51 ^r	1,770	14,300	8.07		
Colorado	767	5,010	6.53	644	4,500	6.99		
Connecticut	90	310	3.44	41	328	8.00		
Delaware	7	75	10.71	7	75	10.71		
Florida	233	3,640	15.63	424	4,830	11.40		
Georgia	10	57	5.70	83	274	3.30		
Hawaii	23	252	10.96	22	215	9.77		
Idaho	27	190	7.04	32	192	6.00		
Illinois	1,410	10,600	7.55	1,180	8,820	7.51		
Indiana	105	717	6.83	139	752	5.41		
Iowa	34	248	7.29	28	238	8.50		
Kansas	25	311	12.44	297	2,230	7.51		
Kentucky	440	4,370	9.93	441	4,370	9.92		
Louisiana	29	434	14.97	7	71	10.14		
Maine	28	163	5.82	39	294	7.54		
Maryland	254	1,160	4.55	389	2,030	5.21		
Massachusetts	300	2,260	7.55	192	1,610	8.39		
Michigan	520	2,520	4.85	1,010	7,180	7.13		
Minnesota	1,290	6,850	5.30	765	4,700	6.14		
Mississippi	71	1,540	21.75	71	1,550	21.82		
Missouri	1	2	2.00	1	2	2.00		
Montana	81	378	4.67	20	155	7.75		
Nebraska	98	877	8.95	122	1,120	9.19		
Nevada	151	804	5.32	93	560	6.02		
New Hampshire	11	93	8.45	12	109	9.08		
New Jersey	381	2,740	7.19	583	4,730	8.11		
New Mexico	171	1,840	10.74	1	2	2.00		
New York	399 ^r	2,850 ^r	7.15 ^r	338	2,620	7.75		
North Carolina	139	1,810	13.03	143	1,850	12.94		
North Dakota	9	61	6.78	17	187	11.00		
Ohio	225	1,590	7.05	337	2,230	6.61		
Oklahoma	225	2,940	13.08	224	2,940	13.13		
Oregon	80	747	9.34	101	882	8.73		
Pennsylvania	429	2,350	5.48	420	2,450	5.82		
Rhode Island	32	301	9.41	127	176	1.39		
South Carolina	235	3,400	14.46	216	3,630	16.81		
South Dakota	158	699	4.42	109	534	4.90		
Tennessee				25	149	5.96		
Texas	1,660	12,400	7.49	859	6,750	7.86		
Utah	381 ^r	3,060 ^r	8.04 ^r	223	1,890	8.48		

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

		2008			2009	
	Quantity			Quantity		
	(thousand	Value	Unit	(thousand	Value	Unit
State	metric tons)	(thousands)	value	metric tons)	(thousands)	value
Vermont	16	81	5.06	22	102	4.64
Virginia	588	5,440	9.25	631	5,680	9.01
Washington	407	2,220	5.46	216	1,330	6.14
West Virginia						
Wisconsin	645	3,580	5.55	369	1,940	5.24
Wyoming	236	1,640	6.95	59	339	5.75
U.S. total or average	15,000 ^r	112,000 ^r	7.47 ^r	13,000	102,000	7.83
Territory	<u> </u>					
Puerto Rico						
Grand total or average	15,000 ^r	112,000 ^r	7.45 ^r	13,000	102,000	7.83

^rRevised. -- Zero.

 ${\it TABLE~16}$ CRUSHED AND BROKEN STONE OPERATIONS IN THE UNITED STATES IN 2009, BY ${\it STATE}^1$

					Processi	ng plants		
	Active	Active	Dredging			Stationary	None or	Sales
State	operations	quarries	operations	Stationary	Portable	and portable	unspecified	yards
Alabama	84	74		61	9	3	1	10
Alaska	28	28		6	16	2	2	2
Arizona	70	70		31	28	5		6
Arkansas	89	91		40	36	7	3	3
California	164	151	1	85	37	12	4	25
Colorado	47	49		15	19	1	5	7
Connecticut	39	38		21	15	2		1
Delaware	6							6
Florida	118	97	3	43	40	6	2	24
Georgia	93	83		72	6	1	3	11
Hawaii	30	30		11	17	1		1
Idaho	46	76		10	28	1	7	
Illinois	161	140		80	50	7	2	22
Indiana	102	95		84	3	3	4	8
Iowa	183	216	1	29	146	2	3	2
Kansas	86	100		24	50	6	1	5
Kentucky	90	88		69	10	9		2
Louisiana		4		2	1	1		20
Maine		23		14	6	3		4
Maryland	42	29		22	4	1	1	14
Massachusetts	43	42		29	8	4		2
Michigan	42	42		22	7	1	1	11
Minnesota	53	60		12	29	1	3	8
Mississippi	24	6		4	1	1		18
Missouri	225	230		129	76	13	4	3
Montana	25	42		8	17			
Nebraska	17	13	2	7	3	1		4
Nevada		30		19	8		1	1

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

 $\label{thm:continued} TABLE~16\\ --Continued$ CRUSHED AND BROKEN STONE OPERATIONS IN THE UNITED STATES IN 2009, BY STATE 1

					Processi	ng plants		
	Active	Active	Dredging			Stationary	None or	Sales
State	operations	quarries	operations	Stationary	Portable	and portable	unspecified	yards
New Hampshire	28	26		17	8	1		2
New Jersey	25	20		12	1	6	1	5
New Mexico	49	48		12	31	2	3	1
New York	134	152	1	87	27	14	2	3
North Carolina	128	113		100	10	2		16
North Dakota		8			7		1	2
Ohio	112	101		69	21	8	3	11
Oklahoma	77	77		56	12	4	3	2
Oregon	171	185		49	112	3	3	4
Pennsylvania	262	260		195	28	11	20	8
Rhode Island	8	6		6				2
South Carolina	44	32		28	1	3		12
South Dakota	10	8		8				2
Tennessee	134	130		116	10	1	3	4
Texas	268	252		141	74	12	6	35
Utah	31	35		12	15		2	2
Vermont	45	44		21	16	3	4	1
Virginia	126	105		86	7	6	1	26
Washington	131	143		45	59	6	15	6
West Virginia	44	40		33	2	3	1	5
Wisconsin	152	210		49	87	4	6	6
Wyoming		26		8	15	3		2
Total	4,004	3,968	8	2,099	1,213	186	121	377

⁻⁻ Zero.

 $\label{eq:table 17} \text{U.S. EXPORTS OF CRUSHED STONE IN 2009, BY DESTINATION}^1$

			Limestone				
			for cement	Chalk,	Granules,		
Destin	ation	Limestone	manufacturing	crude	chippings	Other	Total
North America	metric tons	24,700	662,000	1,610	112,000	423,000	1,220,000
South America	do.	820	1,980		270	1,470	4,550
Europe	do.	181	4,070	49	421	3,580	8,310
Asia	do.	79	13,200	55	2,380	2,740	18,500
Oceania	do.		34	39		51	124
Middle East	do.				9	2,780	2,790
Africa	do.				4,570	86	4,660
Total:							
Quantity	do.	25,800	681,000	1,750	120,000	433,000	1,260,000
Value	thousands	\$2,430	\$17,000	\$2	\$21,800	\$17,000	\$58,300

do. Ditto. -- Zero.

Source: U.S. Census Bureau.

¹Includes recycling plants.

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

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

		2008			2009	
	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	11,700	\$96,100	\$8.24	3,900	\$36,900	\$9.45
Limestone for flux or cement manufacturing	1,880	20,300	10.77	1,040	9,490	9.15
Other	7,260	112,000	15.39	7,260	125,000	17.21
Total or average	20,800	228,000	XX	12,200	171,000	XX
Calcium carbonate fines: ³						
Natural chalk	90	2,540	28.07	25	1,300	53.05
Calcium carbonates, other chalk	1	1,430	1,149.68	2	1,600	930.30
Total or average	91	3,960	XX	27	2,900	XX
Grand total or average	20,900	232,000	XX	12,200	174,000	XX

XX Not applicable.

Source: U.S. Census Bureau.

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 $\label{eq:table_producers}$ THE TOP 100 PRODUCERS OF CRUSHED STONE IN THE UNITED STATES IN 2009 1

Ra	ınk	_	Rank		_
2009	2008	Company	2009	2008	Company
1	1	Vulcan Materials Co.	51	51	McGeorge Contracting Co.
2	2	Martin Marietta Aggregates	52	69	Mining International LLC
3	3	Lehigh Hanson, Inc.	53	47	Anchor Stone Co.
4	4	Oldcastle Materials, Inc.	54	54	The Kraemer Co.
5	5	CEMEX S.A.B. de C.V.	55	64	Laurel Sand & Gravel, Inc.
6	6	Lafarge North America Inc.	56	63	The Heritage Group
7	7	Rogers Group, Inc.	57	49	Norris Aggregate Products Co.
8	8	Holcim Group/Aggregate Industries Management, Inc.	58	55	Trap Rock Industries, Inc.
9	9	Carmeuse Lime & Stone	59	46	Mathy Construction Co.
10	10	New Enterprise Stone & Lime Co., Inc.	60	73	Columbia Quarry Co.
11	11	Chemical Lime Co.	61	74	Pete Lien & Sons, Inc.
12	12	Luck Stone Corp.	62	65	ISP Minerals, Inc.
13	13	Dolese Bros. Co.	63	58	Maryland Materials, Inc.
14	52	U.S. Forest Service	64	62	Alamo Cement Co.
15	15	Ash Grove Cement Co.	65	48	Stavola Construction Materials, Inc.
16	16	Ready Mix USA Holding Co.	66	94	RiverStone Group, Inc.
17	22	Mulzer Crushed Stone, Inc.	67	70	Imerys
18	18	Buzzi Unicem USA Inc.	68	91	Wendling Quarries Inc.
19	20	Fred Weber, Inc.	69	67	The Melvin Stone Co.
20	14	Texas Industries, Inc.	70	56	Greer Industries, Inc.
21	24	Eucon Corp.	71	53	Granite Construction, Inc.
22	25	National Lime & Stone Co.	72	60	MGQ Aggregates, Inc.
23	17	MDU Resources Group, Inc.	73	79	Pine Bluff Sand & Gravel Co.
24	23	The H&K Group	74	_	The DePaul Group
25	19	Graymont Ltd.	75	68	United States Lime and Minerals, Inc.
26	21	Vecellio & Grogan, Inc.	76	78	Unimin Corp.
27	27	Mississippi Lime Co.	77	_	Jobe Materials, L.P.
28	33	Titan America LLC	78	87	Basic Energy Services, Inc.
29	29	Tower Rock Stone Co.	79	83	Midwest Minerals, Inc.
30	38	Bureau of Land Management	80	66	Bruening Rock Products, Inc.
31	28	Eagle Materials Inc.	81	80	Graniterock Co.
32	26	Texas Crushed Stone Co., Inc.	82	_	Pounding Mill Quarry Corp.
33	30	Boxley Materials Co.	83	86	N.R. Hamm Quarry, Inc.
34	44	Colas Inc.	84	88	Laurel Aggregates, Inc.
35	36	Franklin Industries, Inc.	85	_	Votorantim Cement North America
36	59	Capitol Aggregates, Ltd.	86	95	Snyder Associated Cos., Inc.
37	35	3M Co.	87	61	Palm Beach Aggregates, Inc.
38	82	Mitsubishi Cement Corp.	88	98	Syar Industries Inc.
39	39	Omya Inc.	89	85	Kerford Limestone Co.
40	37	ESSROC Cement Corp.	90	100	B.V. Hedrick Gravel & Sand Co., Inc.
41	40	Wake Stone Corp.	91	92	River Products Co., Inc.
42	50	Glenn O. Hawbaker, Inc.	92	75	Chantilly Crushed Stone, Inc.
43	31	Hunter Industries, Inc.	93	71	Leo Journagan Construction Co.
44	32	CalPortland Co.	94	72	BMC Aggregates, L.C.
45	42	Schildberg Construction Co., Inc.	95	96	Weldon Materials, Inc.
46	46	Hoover, Inc.	96	-	Paul Niemann Construction Co.
47	41	American Infrastructure	97	_	Ronnie Duffield Gravel Co.
48	41	Great Lakes Aggregates, Inc.	98		Frontera Materials, Inc.
					*
49	57	Hinkle Contracting Corp.	99	- 02	Mertens Construction Co., Inc.
50	43	Irving Materials, Inc.	100	93	Glasgow, Inc.

[—] Not in the top 100 producers of crushed stone in the United States in 2008.

¹In descending order of tonnage produced.