

# STONE, CRUSHED

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**Domestic survey data and tables were prepared by Susan M. Copeland and John G. Durand, statistical assistants.**

Crushed stone, one of the most accessible natural resources, is a major basic raw material used by construction, agriculture, and other industries that use complex chemical and metallurgical processes. Despite the low 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.

A total of 1.54 billion metric tons of crushed stone was produced for consumption in the United States in 1999, a 30-million-metric-ton (Mt) increase, or 2.0%, compared with the total production of 1998. This tonnage represents the highest production level ever recorded in the United States, indicating a continued increase in the demand for construction aggregates (table 1).

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

Foreign trade of crushed stone continued to remain small. Exports decreased by 5.7% to 4.1 Mt, and the value decreased by 25.8% to \$30.8 million compared with that of 1998 (table 25).

Imports of crushed stone, including calcium carbonate, decreased by 9.6% to 12.3 Mt, and the value decreased by 8.6% to \$106 million (table 26). Domestic apparent consumption of crushed stone, which is defined as production for consumption (sold or used) plus imports minus exports, was 1.55 billion tons (tables 1, 25-26).

## Legislation

On September 3, 1999, the Mine Safety and Health Administration (MSHA) published "Health Standards for Occupational Noise Exposure - 30 CFR Parts 56, 57, 62, 70, and 71." This final comprehensive rule replaces MSHA's existing standards for occupational noise exposure in coal mines and metal and nonmetal mines. The final rule establishes uniform requirements to protect the Nation's miners from occupational noise-induced hearing loss. The rule is derived in part from existing MSHA noise standards and from the Department of Labor's existing occupational noise exposure standard for general industry promulgated by the Occupational Safety and Health Administration. As a result of the Agency's ongoing review of its safety and health standards, MSHA determined that its noise standards, which are more than 20 years old, do not adequately protect miners from occupational noise-induced hearing loss. The final rule became effective on September 13, 2000.

On September 30, 1999, MSHA published a final rule regarding "Training and Retraining of Miners Engaged in Shell Dredging or Employed at Sand, Gravel, Surface Stone, Surface Clay, Colloidal Phosphate, or Surface Limestone Mines - 30 CFR Part 46 and 48." Two corrections to the final rule were published on September 13, 1999, and on November 8, 2000. This final rule amends MSHA's existing health and safety training regulations by establishing new training requirements for shell dredging, sand, gravel, surface stone, surface clay, colloidal phosphate, and surface limestone mines. This final rule implements the training requirements of section 115 of the Federal Mine Safety and Health Act of 1997 and provides for effective miner training at the affected mines. At the same time, the final rule allows mine operators the flexibility to tailor their training programs to the specific needs of their miners and operations. This regulation becomes effective on October 2, 2000.

Under a broad Bureau of Land Management (BLM) proposal that will impose new environmental and financial responsibility requirements at surface mining operations on public lands, sand, gravel, and building stone operations would be restricted. The intent of the new rules is to prevent undue degradation of public land resources. The provisions affecting "common variety minerals" will apply to mining claims located on public lands on or after July 23, 1955, and would restrict mining of sand, gravel, and building stone until BLM has prepared a mineral examination report. Requiring a mineral report before allowing companies to extract common variety minerals "would help ensure the public interest and the federal treasury are protected because it would avoid giving away for free what the law on common varieties says must be disposed of for fair market value" (Rock Products, 1999a).

## Production

Domestic production data for crushed stone are derived by the U.S. Geological Survey (USGS) from voluntary surveys of U.S. producers. Of the 4,270 crushed stone operations on the mailing list, 3,467 operations with 3,803 quarries owned by 1,475 companies were active. Of the 3,467 active operations, 2,673 operations with 2,989 quarries, representing 77.1% of the total number of active operations, reported to the USGS. Their total production represented 85.6% of the total U.S. crushed stone output. Of the 2,673 reporting operations, 839 operations with 940 quarries owned by 171 companies did not report a breakdown by end use. Their production represented 28.1% of the U.S. total and is included in table 13 under "Unspecified, reported" uses. The nonrespondents' production was estimated

by using employment data and/or adjusted production reports from prior years. The estimated production from 794 nonresponding operations with 814 quarries owned by 597 companies represented 14.4% of the U.S. total and is included in table 13 under "Unspecified, estimated" uses.

A total of 80 underground mines that are included in the total number of active operations produced 47.3 Mt of crushed stone in 1999. Underground mines were in 16 States. The leading States were, in descending order of tonnage, Kentucky, Nebraska, Iowa, Missouri, and Indiana. Their production represented 25.8% of the total U.S. crushed stone produced from underground mines.

A total of 875 quarries were either idle or presumed to have been idle in 1999 because no information was available to estimate their production. Since the 1998 survey, 117 operations were closed down. Most of the idle or closed operations were small, temporary quarries, some of them operated by State or local governments. Operations in U.S. territories are not included in the above count.

Of the total 1.54 billion tons of crushed stone produced for consumption in the United States in 1999, 1.08 Mt, or 70.4%, was limestone and dolomite; 246 Mt, or 16.0%, was granite; and 114 Mt, or 7.4%, was traprock. The remaining 96 Mt, or 6.2%, was shared, in descending order of quantity, by sandstone and quartzite, miscellaneous stone, marble, slate, calcareous marl, shell, and volcanic cinder and scoria (table 2).

A comparison of the four geographic regions of the United States indicates that, in 1999, the South continued to lead the Nation in the production of crushed stone with 722 Mt, or 46.9%, of the total; followed by the Midwest with 453 Mt, or 29.4%; and the Northeast with 198.6 Mt, or 12.9%. About 76% of the total U.S. crushed stone output was produced in the South and the Midwest (table 3).

Of the nine geographic divisions, as shown in figure 1, the South Atlantic led the Nation in the production of crushed stone with 370 Mt, or 24.0%, of the U.S. total. It was followed by the East North Central division with 287 Mt, or 18.6%, and the West South Central with 177 Mt, or 11.5%.

A comparison of the production data by the nine geographic divisions for 1998 and 1999 indicates that the output of crushed stone increased in all divisions except New England and Middle Atlantic. The largest percentage increases were recorded in the Mountain division, 8.7%; the Pacific division, 5.7%; and the West North Central division, 4.4%.

Crushed stone was produced in every State except Delaware. The 10 leading producing States, in descending order of tonnage, were Texas, Pennsylvania, Florida, Illinois, Georgia, Missouri, Ohio, North Carolina, Virginia, and Tennessee. Their combined production represented 51.2% of the national total.

Crushed stone was produced by 1,475 companies at 3,467 operations with 3,803 quarries. Information regarding the number of active operations, active quarries, type of processing plants, and number of sales yards by State is provided in table 24. Leading U.S. producing companies in descending order of tonnage, were Vulcan Materials Co., Martin Marietta Aggregates, Hanson Building Materials America, Oldcastle, Inc./Materials Group, and Lafarge Corporation.

A review of production by size of operation at the national level indicates that in 1999, 833.6 Mt, or 54.1% of total crushed stone was produced by 478 operations reporting more than 1 million metric tons per year (Mt/yr), 367.5 Mt, or 23.9%, was produced by 561 operations reporting between 500,000 and 999,999 Mt/yr, and 338.5 Mt or 22.0%, was produced by operations reporting less than 500,000 Mt/yr (table 7).

In 1999, consolidation in the aggregates industry continued. The majority of the acquisitions were made by the major producers of aggregates, most of which were publicly owned. These companies tried to expand their base of operations in new areas of the country or acquired operations or companies with significant amounts of reserves. Stricter environmental and permitting regulations make it more difficult to start a new operation than to acquire an existing one. Some of the acquired companies continue to operate as semi-independent organizations, but with the benefit of financial and management support provided by the larger new owner.

In an effort to unify its corporate structure, Hanson PLC of London, UK, announced in January that it changed the name of its U.S. subsidiary Cornerstone Construction and Materials Inc. to Hanson Building Materials America. One of its divisions, Hanson Aggregates is the third largest aggregates producing company in the United States. (Rock Products, 1999b).

Pioneer USA of Houston, TX, a subsidiary of Australia based Pioneer International, Ltd., announced that it changed the names of Davison Sand & Gravel Co. and Beckley Stone to Pioneer Mid-Atlantic. Davison has operations in Pennsylvania, South Carolina and West Virginia and (Rock Products, 1999d).

In February, Vulcan Materials Co., of Birmingham, AL, completed the purchase of five stone quarries in Arkansas from Rock Products Inc. The operations will become part of Vulcan's southern division. Vulcan also completed the purchase from Southdown, Inc., of Houston, TX, of a quarry near Lenoir, NC. This operation will become part of Vulcan's Mideast Division (Rock Products, 1999e).

In March, Pioneer announced the purchase of one quarry in Prescott, AZ, and another quarry near Salt Lake City, UT. In the last 18 months, Pioneer acquired 11 quarries and 40 concrete plants located mainly in the southwest (Rock Products, 1999c). Also in March, Vulcan purchased from Maryland Stone Co., a granite quarry near Spruce Pine, NC. The quarry will be part of Vulcan's Mideast Division, headquartered in Winston-Salem, NC (Rock Products, 1999c).

In April, Material Services Corp., Chicago, IL, a subsidiary of General Dynamics, purchased from Ward Stone Co. two quarries in the northwestern part of Indiana (Rock Products, 1999d).

In July, Hanson Building Materials America of Neptune, NJ, acquired an aggregates quarry in Opelika, AL, from Opelika Materials L.L.C., a privately held company based in Birmingham, AL. The Opelika Quarry, in Lee County, will complement Hanson's existing aggregates operation of Alexander City, AL. In another transaction, Hanson acquired a stone quarry in Greenwood County, SC, from Morgan Corp. (Pit & Quarry, 1999b).

In August, Martin Marietta Aggregates of Raleigh, NC,

announced the purchase of a limestone quarry located near Lewisburg, WV, from Acme Limestone Co., Inc. The transaction also includes three rail distribution yards (Pit & Quarry, 1999a).

**Limestone.**—The 1999 output of crushed limestone, including some dolomite, increased by 3% to 978 Mt valued at \$4.8 billion compared with the revised 1998 totals (table 2).

Only limestone was produced by 836 companies at 1,972 operations with 2,067 quarries in 48 States. In addition, 36 companies with 50 operations and 53 quarries reported producing limestone and dolomite from the same quarries. Their production of 27.8 Mt, is included with the limestone shown in table 2. The limestone totals shown 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, Florida, Missouri, Ohio, and Kentucky; these five States accounted for 39% of the total U.S. output (table 8). The leading producers were, in descending order of tonnage, Vulcan Materials Co., Martin Marietta Aggregates, Hanson Building Materials America, Rogers Group, Inc., and Southdown, Inc.

**Dolomite.**—Production of dolomite increased by 1% to 106 Mt valued at \$549 million, compared with the revised 1998 totals (table 2). Crushed dolomite was reportedly produced by 104 companies at 186 operations with 194 quarries in 29 States. An additional undetermined amount of dolomite is included in the total crushed limestone, as explained above.

The leading producing States were, in descending order of tonnage, Illinois, Indiana, Pennsylvania, Michigan, and Ohio; these five States accounted for 56% of the total U.S. output (table 8). The leading producers were Oldcastle, Inc./Materials Group, Hanson Building Materials America, General Dynamics Corp., S.E. Johnson Companies, Inc., and Vulcan Materials Co.

**Marble.**—Production of crushed marble increased by 27.1% to 10.6 Mt valued at \$140 million, compared with that of 1998 (table 2). Crushed marble was produced by 17 companies with 27 operations and 41 quarries in 12 States (table 9). The leading producers of crushed marble were, in descending order of tonnage, Florida Rock Industries, Inc., Dry Branch Kaolin, ECC International, Pluess Staufer, Inc., and Vulcan Materials Co.

**Calcareous Marl.**—Output of marl increased by 6.5% to 3.6 Mt valued at \$16 million compared with the revised 1998 totals (table 2). Marl was produced by eight companies with eight operations and eight quarries in six States (table 9). The leading producers were, in descending order of tonnage, Holderbank/Holman, Inc., Capitol Aggregates Inc., and Giant Group Ltd.

**Shell.**—Shell is derived mainly from fossil reefs or oyster shell. The output of crushed shell increased by 10.2% to 2.7 Mt, valued at \$12.4 million compared with the revised 1998 totals (table 2). Crushed shell was produced by 12 companies with 13 operations in 6 States. The leading producers were, in descending order of tonnage, Schroeder Manatee, Inc., Caloosa Shell Corp., and Southwest Aggregates.

**Granite.**—The output of crushed granite decreased by only 1.2% to 246 Mt, valued at \$1.5 billion, compared with the revised 1998 totals (table 2). Crushed granite was produced by 142 companies at 361 operations with 402 quarries in 35 States.

The leading States were, in descending order of tonnage, Georgia, North Carolina, Virginia, South Carolina, and California; these five States accounted for 71% of the U.S. output (table 10). The leading producers were, in descending order of tonnage, Vulcan Materials Co., Martin Marietta Aggregates, Hanson Building Materials America, Meridian Aggregates Co., and Florida Rock Industries, Inc.

**Traprock.**—Production of crushed traprock increased by 6.5% to 114 Mt, valued at \$722 million, compared with the revised 1998 total (table 2). Traprock was produced by 246 companies at 366 operations with 497 quarries in 24 States.

The leading States were, in descending order of tonnage, Oregon, Virginia, New Jersey, California, and Washington; these five States accounted for 62.2% of U.S. output (table 10). Leading producers were, in descending order of tonnage, Oldcastle, Inc./Materials Group, Vulcan Materials Co., Luck Stone Corp., Eucon Co., and Stavola, Inc.

**Sandstone and Quartzite.**—The combined output of crushed sandstone and quartzite increased by 3.4% to 39.6 Mt, valued at \$231 million compared with the revised 1998 totals (table 2). Crushed sandstone was produced by 118 companies at 153 operations with 157 quarries in 27 States, and crushed quartzite was produced by 39 companies at 47 operations with 51 quarries in 19 States.

The leading producing States were, in descending order of tonnage of sandstone and quartzite, Arkansas, Pennsylvania, California, South Dakota, and Oklahoma; their combined production accounted for 56% of the U.S. output (table 10). The leading producers of sandstone were, in descending order of tonnage, Ashland Oil, Inc./ APAC, Inc., Meridian Aggregates Co., and Martin Marietta Aggregates; leading producers of quartzite were Martin Marietta Aggregates, Sweetman Construction Co., and County Line Quarry, Inc.

**Slate.**—The output of crushed slate decreased by 12.9% to 4.2 Mt, valued at \$27.9 million, compared with the revised 1998 totals (table 2). Crushed slate was produced by 15 companies at 17 operations with 21 quarries in 11 States.

Most of the crushed slate was produced in North Carolina. The leading producers were, in descending order of tonnage, Martin Marietta Aggregates, Vulcan Materials Co., and Gohman Asphalt & Construction, Inc.

**Volcanic Cinder and Scoria.**—Production of volcanic cinder and scoria decreased 17.9% to 2.1 Mt, valued at \$13.3 million compared with the revised 1998 totals (table 2). Volcanic cinder and scoria were produced by 25 companies from 39 operations with 41 quarries in 13 States.

The leading producing States were, in descending order of tonnage, New Mexico, Arizona, and California; their combined production accounted for 35% of the total U.S. output (table 11). Leading producers were, in descending order of tonnage, Martin Marietta Aggregates, H.G. Byley & Sons Construction, Inc., and Peter Kiewit & Sons, Inc.

**Miscellaneous Stone.**—Output of other kinds of crushed stone decreased by 7.1% to 33.8 Mt, valued at \$181 million, compared with the revised 1998 totals (table 2). Miscellaneous stone was produced by 127 companies at 227 operations with 256 quarries in 29 States.

The leading producing States were, in descending order of tonnage, Pennsylvania, California, and Washington; their combined production accounted for 44% of the total U.S. output. Leading producers were, in descending order of tonnage, U.S. Bureau of Land Management, Hanson Building Materials America, Better Materials Corp., Peter Kiewit & Sons, Inc., U.S. Department of Agriculture Forest Service, and U.S. Silica Co.

## Consumption and Uses

Crushed stone production reported to the USGS is actually material that was either sold or 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 “Unspecified, reported” use. The estimated production of nonrespondents is included in “Unspecified, estimated” use.

In 1999, U.S. consumption of crushed stone was 1.54 billion tons, a 2.0% increase compared with that of 1998. This total is slightly different from the “apparent consumption” of crushed stone that is defined as “U.S. production plus imports minus exports.” Of the 1.54 billion tons of crushed stone consumed, 655 Mt, or 42.5% of the total, was “Unspecified, reported and estimated” uses. Of the remaining 886 Mt reported by uses, about 83.9% was used as construction aggregates, mostly for highway and road construction and maintenance; 13.4% for chemical and metallurgical uses, including cement and lime manufacture; 1.7% for agricultural uses; and 0.8% for special uses and products (table 13). To provide a more accurate estimation of the consumption patterns for crushed stone, the “Unspecified” uses are not included in the above percentages. In any use pattern study or marketing analysis, the quantities included in “Unspecified” uses should be distributed among the reported uses by applying the above percentages to the “Unspecified” uses, total.

**Limestone.**—Of the 978 Mt of crushed limestone consumed, 402 Mt, or 41.1%, was “Unspecified, reported and estimated” uses. Of the remaining 577 Mt of crushed limestone reported by uses, 77.1% was used as construction aggregates; 19.7%, for chemical and metallurgical applications including cement and lime manufacturing; 2.2%, for agricultural uses; and 0.8%, for special uses and products (table 14).

**Dolomite.**—Of the 106 Mt of crushed dolomite consumed, 49.9 Mt, or 47.1%, was “Unspecified, reported and estimated” uses. Of the remaining 56.1 Mt of crushed dolomite reported by uses, 91.5% was used as construction aggregates; 4.5% for chemical and metallurgical applications, and 3.8%, for agricultural uses. An additional undefined amount of dolomite consumed in a variety of uses, mostly construction aggregates,

is reported with the limestone (table 14).

**Marble.**—Of the 10.6 Mt of crushed marble consumed, 6.7 Mt, or 63.2%, was reported as “Unspecified, reported and estimated” uses. Of the remaining 3.9 Mt of crushed marble reported by uses, 1.9 Mt, or 48.7%, was used for special and miscellaneous uses, including fillers and extenders, and 1.8 Mt, or 47.5%, was used as construction aggregates (table 16).

**Calcareous Marl.**—Of the 3.6 Mt of crushed calcareous marl consumed, 2.5 Mt, or 69.4%, was reported as “Unspecified, reported and estimated” uses. Of the remaining crushed calcareous marl consumed, 1 Mt, or 29%, was used for cement manufacturing.

**Shell.**—Of the 2.7 Mt of crushed shell consumed, 765,000 tons, or 28.4%, was reported as “Unspecified, reported and estimated” uses. Of the remaining 1.9 Mt, most was used as construction aggregates.

**Granite.**—Of the 246 Mt of crushed granite consumed, 97.7 Mt, or 39.7%, was reported as “Unspecified, reported and estimated” uses. Of the remaining 148 Mt, most was used as construction aggregates (table 17).

**Traprock.**—Of the 114 Mt of crushed traprock consumed, 49.9 Mt, or 43.8%, was reported as “Unspecified, reported and estimated” uses. Of the remaining 63.7 Mt, most was used as construction aggregates (table 17).

**Sandstone and Quartzite.**—Of the 28.1 Mt of crushed sandstone consumed, 14.4 Mt, or 51.2%, was reported as “Unspecified, reported and estimated” uses. Of the remaining 13.4 Mt of crushed sandstone reported by uses, 12.7 Mt, or 94.8%, was used as construction aggregates (table 18).

Of the 11.5 Mt of crushed quartzite consumed, 4.7 Mt, or 41%, was reported as “Unspecified, reported and estimated” uses. Of the remaining 6.7 Mt of crushed quartzite reported by uses, 5.9 Mt, or 87.9%, was used as construction aggregates (table 18).

**Volcanic Cinder and Scoria.**—Of the 2.1 Mt of volcanic cinder and scoria consumed, 940,000 tons, or 45.6%, was reported as “Unspecified, reported and estimated” uses. Most of the remaining 1.1 Mt of crushed volcanic cinder and scoria was used as construction aggregates (table 19).

**Miscellaneous Stone.**—Of the 33.8 Mt of miscellaneous crushed stone consumed, 22.5 Mt, or 66.6%, was reported as “Unspecified, reported and estimated” uses. Of the remaining 11.3 Mt reported by uses, most of it was used as construction aggregates and 439,000 t, or 3.9%, was used for cement manufacturing.

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

As the recycling of most waste materials increases, aggregates producers are recycling more cement concrete and asphalt concrete materials recovered from construction projects to produce concrete aggregates and asphalt aggregates. The annual survey of crushed stone producers now collects information on recycling of cement and asphalt concretes

produced by the crushed stone producers only. Information on recycling of these materials by construction or demolition companies is not collected by the USGS.

**Asphalt Concrete.**—A total of 1.5 Mt of asphalt concrete, valued at \$7.7 million, was recycled by 52 companies in 22 States. This volume represents a 5.8% increase compared with that of 1998, despite the fact that the number of companies and States reporting recycling decreased compared with 1998 (tables 20-21). The leading recycling States were, in descending order of tonnage, New Jersey, California, and Pennsylvania. The leading recycling companies were, in descending order of tonnage produced, Oldcastle Inc./Materials Group, Stone Industries, Inc., and Mt. Hope Rock Products, Inc.

**Cement Concrete.**—A total of 1.7 tons of cement concrete, valued at \$9.6 million, was recycled by 48 companies in 23 States. This tonnage represents a 8.2% increase compared with that of 1998 (tables 20-22). The leading recycling States were, in descending order of tonnage, New Jersey, California, and Connecticut. The leading companies were, in descending order of tonnage produced, Vulcan Materials Co., Stone Industries, Inc. and Oldcastle Inc./Materials Group.

## Prices

Prices in this chapter are average f.o.b. plant, usually at the first point of sale or captive use, as reported by the 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.

The average unit price per ton of crushed stone decreased by 0.5% to \$5.35, compared with that of 1998. The average unit prices, by kind of stone, decreased between 1.1% for miscellaneous stone and 3.4% for marble, and increased between 0.2% for sandstone and quartzite and 10.7% calcareous marl (table 2).

## Transportation

For 744 Mt, or 48.3%, of the 1.54 billion tons of crushed stone produced for consumption in 1999, no means of transportation was reported by the producers. Of the remaining 796 Mt of crushed stone, 616 Mt, or 77.4%, was reported as being transported by truck from the processing plant or quarry to the first point of sale or use; 6% by rail and 4.8% by waterway. About 8.6% of the specified production was reported as not having been transported and, therefore, is assumed to have been used on-site. Information regarding means of transportation used by the producers to ship crushed stone in each geographic region is provided in table 23.

## Foreign Trade

The widespread distribution of domestic crushed stone deposits and the high cost of transportation limits foreign trade

to mostly local transactions across international boundaries. U.S. imports and exports are small, representing less than 1% of the domestic consumption. Shipments of crushed stone by water from Canada and especially Mexico, however, continue to increase.

**Exports.**—Exports of crushed stone decreased by 5.7% to 4.1 Mt compared with those of 1998, and the value decreased by 25.8% to \$30.8 million. About 95.9% of the exported crushed stone was limestone. Canada was the major destination with 99.5% of the total crushed stone (table 25).

**Imports.**—Imports of crushed stone, including calcium carbonate fines, decreased by 9.6% to 12.3 Mt compared with those of 1998, and the value decreased by 8.6% to \$106 million. About 83.4% of the imported crushed stone was limestone. Imports of natural calcium carbonate fines decreased from 3,000 to 1,000 tons (table 26).

Shipments of crushed stone from The Bahamas, Canada, and Mexico into the United States continued in 1999. The imported crushed stone was used mostly as construction aggregates or for cement manufacturing. This trend is expected to continue, and the volume of imports, especially from Mexico, is expected to increase.

## Outlook

The demand for crushed stone in 2000 is expected to be about 1.6 billion tons, or a 3.9% increase over that of 1999. Gradual increases in demand for construction aggregates are anticipated after 2000 as well on the basis of the expected volume of work on the infrastructure that will be financed by the new Transportation Equity Act for the 21<sup>st</sup> Century and the U.S. economy in general. The projected increases will be influenced by construction activity in the public, as well as the private, construction sectors.

Crushed stone f.o.b. prices are not expected to increase significantly. The delivered prices of crushed stone are, however, expected to increase, especially in and near metropolitan areas, mainly because more aggregates are transported from distant sources.

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<sup>1</sup>Prior to January 1996, published by the U.S. Bureau of Mines.

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TABLE 1  
SALIENT CRUSHED STONE STATISTICS 1/

(Thousand metric tons and thousand dollars)

	1995	1996	1997	1998	1999
Sold or used by producers:					
Quantity 2/	1,260,000	1,330,000	1,410,000	1,510,000	1,540,000
Value 2/	\$6,740,000	\$7,180,000	\$7,970,000	\$8,130,000	\$8,240,000
Exports value	\$39,300	\$36,300	\$42,700	\$41,500	\$30,800
Imports 3/ do.	\$91,900	\$91,800	\$106,000	\$116,000	\$106,000

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

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

3/ Excludes precipitated calcium carbonate.

TABLE 2  
CRUSHED STONE SOLD OR USED IN THE UNITED STATES, BY KIND 1/ 2/

Kind	1998				1999			
	Number of quarries	Quantity (thousand metric tons)	Value (thousands)	Unit value	Number of quarries	Quantity (thousand metric tons)	Value (thousands)	Unit value
Limestone 3/	2,143 r/	952,000 r/	\$4,810,000 r/	\$5.05 r/	2,117	978,000	\$4,840,000	\$4.94
Dolomite	189 r/	105,000 r/	532,000 r/	5.08 r/	194	106,000	549,000	5.17
Marble	61 r/	8,340 r/	114,000 r/	13.70 r/	41	10,600	140,000	13.23
Shell	13	2,440 r/	10,400 r/	4.26 r/	14	2,690	12,400	4.59
Granite	393 r/	249,000 r/	1,520,000 r/	6.08 r/	402	246,000	1,510,000	6.15
Traprock	500 r/	107,000 r/	669,000 r/	6.25	498	114,000	722,000	6.34
Sandstone and quartzite 4/	204 r/	38,300 r/	223,000 r/	5.82 r/	208	39,600	231,000	5.83
Slate	17 r/	4,820 r/	30,400 r/	6.31	21	4,200	27,900	6.64
Calcareous marl	8 r/	3,360 r/	13,500 r/	4.03 r/	8	3,580	16,000	4.46
Volcanic cinder and scoria	45 r/	2,510	15,500 r/	6.20 r/	41	2,060	13,300	6.44
Miscellaneous stone	229 r/	36,400 r/	197,000 r/	5.41 r/	256	33,800	181,000	5.35
Total	XX	1,510,000	8,130,000	5.38	XX	1,540,000	8,240,000	5.35

r/ Revised. XX Not applicable.

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

2/ Does not include American Samoa, Guam, Puerto Rico, nor the U.S. Virgin Islands.

3/ Includes limestone-dolomite reported with no distinction between the two.

4/ Includes sandstone/quartzite.

TABLE 3  
CRUSHED STONE SOLD OR USED IN THE UNITED STATES, BY REGION 1/ 2/

(Thousand metric tons and thousand dollars)

Region/Division	1998		1999	
	Quantity	Value	Quantity	Value
Northeast:				
New England	36,600	260,000	34,600	226,000
Middle Atlantic	165,000	944,000	164,000	919,000
Midwest:				
East North Central	284,000 r/	1,300,000	287,000	1,270,000
West North Central	159,000	837,000	166,000	814,000
South:				
South Atlantic	360,000	2,110,000	370,000	2,180,000
East South Central	173,000	1,050,000	175,000	1,070,000
West South Central	175,000 r/	735,000 r/	177,000	759,000
West:				
Mountain	52,000 r/	265,000 r/	56,500	295,000
Pacific	105,000	637,000	111,000	712,000
Total	1,510,000	8,130,000	1,540,000	8,240,000

r/ Revised.

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

2/ Does not include American Samoa, Guam, Puerto Rico, nor the U.S. Virgin Islands.

TABLE 4  
CRUSHED STONE SOLD OR USED BY PRODUCERS IN THE UNITED STATES IN 1999,

	Quantity 1st quarter (thousand metric tons)	change 3/	Quantity (thousand metric tons)	Percentage change 3/	3d quarter metric tons)	Percentage	Quantity 4th quarter (thousand metric tons)	change 3/	(thousand	Value total 2/ (thousands)
Northeast:										
	3,200	5.0	11,000	2.9	12,200	-2.1	9,900	-5.7	36,300	\$264,000
Middle Atlantic	21,000	-4.8	49,100	10.3	55,300	0.3	42,900	-2.2	168,000	983,000
Midwest:										
East North Central	35,400	-4.1	82,400	5.2	91,800	1.8	80,600	2.3	290,000	1,360,000
West North Central	27,200	2.4	43,200	-2.6	51,200	7.5	43,000	6.7	165,000	889,000
South:										
South Atlantic	77,700	14.7	98,400	5.9	98,900	-2.5	93,500	0.2	369,000	2,210,000
East South Central	32,400	0.3	47,500	5.8	50,900	0.1	44,900	0.4	176,000	1,100,000
West South Central	45,300	22.2	47,500	2.6	50,500	5.1	47,600	13.1	191,000	833,000
West:										
Mountain	11,700	16.2	14,400	-5.4	15,800	2.3	12,600	4.4	54,500	284,000
Pacific 4/	20,400	6.5	26,600	6.9	27,900	-0.6	26,100	2.0	101,000	607,000
Total 5/	274,000	7.6	420,000	4.5	455,000	1.2	401,000	2.5	1,560,000	8,630,000

1/ As published in the "Crushed Stone and Sand and Gravel in the Fourth Quarter of 1999 Mineral Industry Surveys."

2/ Data may not add to totals shown because of independent rounding and differences between projected totals by States and regions.

3/ All percentage changes are calculated by using unrounded totals. Percentage changes are based on the corresponding quarter of the previous year.

4/ Does not include Alaska and Hawaii.

5/ Includes Alaska, Hawaii, and "Other;" see table 6.

TABLE 5  
CRUSHED STONE SOLD OR USED BY PRODUCERS IN THE UNITED STATES, BY STATE 1/ 2/

State	1998			1999		
	Quantity (thousand metric tons)	Value (thousands)	Unit value	Quantity (thousand metric tons)	Value (thousands)	Unit value
Alabama	48,900	\$383,000	\$7.83	49,400	\$358,000	\$7.24
Alaska 3/	1,700 4/ 5/ 6/	9,970 4/ 5/ 6/	5.86	1,800 4/ 5/ 6/	9,900 4/ 5/ 6/	5.51
Arizona	8,080	44,800	5.54	9,010	54,100	6.00
Arkansas	35,700	180,000	5.05	30,700	145,000	4.73
California	55,100	344,000	6.25	60,300	388,000	6.44
Colorado	12,000	63,800	5.34	13,200	75,500	5.71
Connecticut	7,660	69,400	9.06	7,170	57,400	8.01
Florida	81,400 r/ 7/	378,000 r/ 7/	4.64 r/	92,300	469,000	5.08
Georgia	74,200 8/	440,000 8/	5.93	74,200 8/	448,000 8/	6.03
Hawaii	5,500	53,900	9.79	5,870	55,500	9.45
Idaho	4,180	18,400	4.39	4,220	19,000	4.49
Illinois	72,100 9/	371,000 9/	5.14	76,700 9/	387,000 9/	5.05
Indiana	61,800 r/ 10/	283,000 10/	4.58	59,500	273,000	4.59
Iowa	41,800	219,000	5.25	42,100	212,000	5.03
Kansas	21,800	115,000	5.28	23,600	116,000	4.92
Kentucky	59,500 11/	291,000 11/	4.88	60,500 11/	310,000 11/	5.13
Louisiana	W 9/	W 9/	W	W 9/ 12/	W 9/ 12/	W
Maine	4,120	23,000	5.58	3,990	23,900	5.98
Maryland	24,300 6/ 8/ 10/	141,000 6/ 8/ 10/	5.78	22,200 6/ 8/ 10/	121,000 6/ 8/ 10/	5.47
Massachusetts	12,800	96,900	7.59	11,600	89,900	7.73
Michigan	43,700 7/ 11/	167,000 7/ 11/	3.82	42,500 7/ 11/	146,000 7/ 11/	3.43
Minnesota	13,600 9/	71,500 9/	5.26	13,400 9/	65,700 9/	4.90
Mississippi	789 7/	2,790 7/	3.54	1,760 7/	15,900 7/	9.00
Missouri	68,400	356,000	5.21	73,400	349,000	4.76
Montana	3,880	15,100	3.88	3,440	13,300	3.87
Nebraska	7,490	49,800	6.65	7,090	44,500	6.28
Nevada	6,320	34,000	5.38	7,090	37,900	5.34
New Hampshire	4,190 9/	27,500 9/	6.58	4,290 9/	19,700 9/	4.59
New Jersey	23,900	161,000	6.77	24,500	160,000	6.54
New Mexico	4,940 9/ 10/	21,000 9/ 10/	4.25	3,720	22,200	5.98
New York	47,200	279,000	5.91	46,700	268,000	5.75
North Carolina	69,700	480,000	6.89	67,000	459,000	6.85
North Dakota	W r/ 11/ 13/	W r/ 11/ 13/	W	W 11/ 12/ 13/	W 11/ 12/ 13/	W
Ohio	74,900 r/	348,000 r/	4.64 r/	73,200	328,000	4.47
Oklahoma	38,500	152,000	3.95	36,300	145,000	4.00
Oregon	23,200	118,000	5.08	23,800	112,000	4.72
Pennsylvania	94,500	504,000	5.34	92,500	490,000	5.30
Rhode Island	2,240	14,200	6.35	2,070	12,200	5.90
South Carolina	28,000	182,000	6.50	29,200	193,000	6.60
South Dakota	5,720	24,600	4.31	6,020	26,500	4.40
Tennessee	63,600	370,000	5.83	63,100	382,000	6.05
Texas	100,000 r/	401,000 r/	3.99 r/	109,000	449,000	4.13
Utah	6,970 r/	35,900 r/	5.15 r/	8,780	45,300	5.15
Vermont	5,590	28,500	5.10	5,400	22,800	4.23
Virginia	65,900	390,000	5.92	66,400	389,000	5.86
Washington	19,400	111,000	5.74	19,500	146,000	7.52
West Virginia	12,300 14/	68,100 14/	5.55	13,000 14/	58,500 14/	4.50
Wisconsin	31,200	127,000	4.07	34,500	137,000	3.98
Wyoming	5,580	31,600	5.66	6,970	27,600	3.96
Other	5,200 r/	31,500 r/	6.06 r/	8,110	63,100	7.78
Total	1,510,000	8,130,000	5.38	1,540,000	8,240,000	5.35

r/ Revised. W Withheld to avoid disclosing company proprietary data; included with "Other." 6,617

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

2/ To avoid disclosing company proprietary data, certain State totals do not include all kinds of stone produced within the State; the portion not shown has been included with "Other."

3/ Data derived, in part, from the Alaska Division of Geological and Geophysical Surveys information.

4/ Excludes limestone-dolomite.

5/ Excludes slate.

6/ Excludes shell.

7/ Excludes calcareous marl.

8/ Excludes marble.

9/ Excludes sandstone.

10/ Excludes traprock.

11/ Excludes miscellaneous stone.

12/ Excludes limestone.

13/ Excludes volcanic cinder and scoria.

14/ Excludes dolomite.

TABLE 6  
CRUSHED STONE SOLD OR USED BY PRODUCERS IN THE UNITED STATES IN 1999,  
BY QUARTER AND STATE 1/ 2/

State	Quantity 1st quarter (thousand metric tons)	Percentage change 4/	Quantity 2d quarter (thousand metric tons)	Percentage change 4/	Quantity 3d quarter (thousand metric tons)	Percentage change 4/	Quantity 4th quarter (thousand metric tons)	Percentage change 4/	Total 3/ (thousand metric tons)	Value total 3/ (thousands)
Alabama	12,000	13.5	14,100	11.2	15,200	11.3	13,400	12.2	54,700	\$439,000
Alaska 5/ 6/	--	--	--	--	--	--	--	--	1,790	10,800
Arizona 7/	--	--	--	--	--	--	--	--	8,110	46,100
Arkansas	7,200	-3.3	9,100	-10.0	10,000	-1.4	8,900	11.5	35,200	182,000
California	10,300	-4.6	14,200	4.1	15,600	-0.9	14,400	-3.6	54,500	349,000
Colorado	2,600	6.0	3,600	-1.7	3,500	3.0	2,700	9.9	12,400	68,000
Connecticut	400	33.2	2,800	1.1	2,500	1.8	1,600	-23.7	7,320	68,000
Delaware 5/	--	--	--	--	--	--	--	--	--	--
Florida 6/	21,800	10.8	22,000	7.2	21,800	7.4	22,400	9.2	88,000	419,000
Georgia 6/	17,800	25.2	20,800	8.3	21,400	0.5	18,800	-3.6	78,800	479,000
Hawaii 5/	--	--	--	--	--	--	--	--	5,700	57,300
Idaho 6/	700	56.1	800	11.0	1,300	0.9	1,000	-40.0	3,840	17,300
Illinois	10,100	16.7	21,100	13.3	24,200	2.8	22,700	7.0	78,200	503,000
Indiana 6/	8,600	-10.5	17,100	8.0	19,700	1.8	15,700	-6.5	61,100	287,000
Iowa	5,200	-10.0	12,400	4.4	14,400	13.0	11,100	-2.8	43,100	232,000
Kansas	4,800	6.1	5,300	-18.7	5,900	0.1	5,600	15.5	21,600	117,000
Kentucky 6/	11,500	7.5	17,200	14.7	18,700	5.4	15,700	-2.3	63,100	316,000
Louisiana 6/ 7/	--	--	--	--	--	--	--	--	--	--
Maine	600	29.9	1,200	7.8	1,400	-12.7	900	-11.1	4,030	23,000
Maryland 6/	3,900	0.6	6,500	1.1	6,800	-9.1	7,000	7.1	24,200	143,000
Massachusetts 6/	1,200	-2.0	3,800	3.3	4,200	3.1	3,700	-2.4	12,900	101,000
Michigan 6/	3,100	-7.7	12,800	-7.4	13,300	-0.5	12,600	-4.7	41,700	163,000
Minnesota	700	23.0	3,800	-7.3	5,500	-2.1	3,800	16.9	13,900	74,800
Mississippi 6/ 7/	--	--	--	--	--	--	--	--	800	5,740
Missouri	14,700	5.8	18,200	5.1	22,100	15.7	20,000	10.0	74,900	400,000
Montana 7/	--	--	--	--	--	--	--	--	3,950	15,700
Nebraska	1,400	-0.3	1,900	-15.7	2,000	-5.9	1,700	-1.5	6,980	47,600
Nevada	1,100	-10.7	1,900	-1.9	2,200	20.6	1,500	9.7	6,650	36,700
New Hampshire 6/	300	-10.1	1,100	-4.4	1,300	-7.7	1,200	-4.2	3,940	26,600
New Jersey	3,600	-1.1	7,000	12.6	7,000	-5.0	6,800	0.6	24,300	169,000
New Mexico 6/	900	-17.9	1,300	-27.1	1,100	-25.9	600	-8.0	3,850	16,700
New York	3,700	-10.4	14,100	5.1	18,100	3.1	11,600	-4.4	47,500	288,000
North Carolina	14,500	14.7	19,400	3.8	19,300	-5.1	18,000	-0.9	71,100	502,000
North Dakota 5/	--	--	--	--	--	--	--	--	80	268
Ohio	10,000	-15.6	21,400	-0.6	22,400	-5.6	19,400	4.2	73,100	349,000
Oklahoma 6/	9,400	21.2	9,600	-1.8	9,400	-8.2	8,700	-19.6	37,000	150,000
Oregon	3,800	-11.2	6,400	2.5	7,100	-3.0	6,600	24.1	23,900	125,000
Pennsylvania	13,600	-4.1	28,100	12.4	30,400	-0.1	24,500	-1.9	96,500	528,000
Rhode Island 5/	--	--	--	--	--	--	--	--	2,500	16,300
South Carolina	6,400	9.5	7,500	4.5	7,600	-1.0	6,900	-5.7	28,400	189,000
South Dakota	600	-1.0	1,700	-2.6	1,800	-9.3	1,300	-2.6	5,450	24,100
Tennessee	10,100	-4.2	18,000	7.2	19,000	-2.5	17,300	3.2	64,400	\$385,000
Texas	30,100	38.1	30,400	13.8	33,000	18.3	31,700	38.2	125,000	513,000
Utah	1,700	11.9	2,000	-10.5	2,700	12.2	2,400	48.1	8,850	45,800

See footnotes at end of table.

TABLE 6 -- Continued  
 CRUSHED STONE SOLD OR USED BY PRODUCERS IN THE UNITED STATES IN 1999,  
 BY QUARTER AND STATE 1/ 2/

State	Quantity 1st quarter		Quantity 2d quarter		Quantity 3d quarter		Quantity 4th quarter		Total 3/ (thousand metric tons)	Value total 3/ (thousands)
	(thousand metric tons)	Percentage change 4/								
Vermont 7/	--	--	--	--	--	--	--	--	5,980	\$31,300
Virginia	11,700	14.2	18,300	5.6	17,500	-12.7	17,500	-4.3	65,000	395,000
Washington	8,100	96.9	6,900	29.9	5,300	5.6	5,400	9.0	25,700	151,000
West Virginia 6/	1,900	5.9	4,000	14.7	4,500	12.2	3,300	8.9	13,700	77,700
Wisconsin	3,500	15.4	10,700	28.5	14,000	30.5	11,400	26.3	39,700	166,000
Wyoming	1,500	67.1	1,500	-0.9	1,600	-4.5	1,300	-12.2	5,920	34,400
Other	--	--	--	--	--	--	--	--	5,740	32,900
Total	XX	XX	XX	XX	XX	XX	XX	XX	1,560,000	8,630,000

XX Not applicable. -- Zero.

1/ As published in the "Crushed Stone and Sand and Gravel in the Fourth Quarter of 1999 Mineral Industry Surveys."

2/ Quarterly totals shown are estimates based on a sample survey. Estimated quantities for prior quarters have been recalculated.

3/ Data may not add to totals shown because of independent rounding and differences between projected totals by States and regions.

4/ All percentage changes are calculated by using unrounded totals. Percentage changes are based on the corresponding quarter of the previous year.

5/ State not included in quarterly survey.

6/ To avoid disclosing proprietary data, certain State totals do not include all types of stone produced within the State; the portion not shown has been included with "Other."

7/ Owing to the low number of companies, no production estimates by quarter were generated.

TABLE 7  
CRUSHED STONE SOLD OR USED IN THE UNITED STATES IN 1999,  
BY REGION AND SIZE OF OPERATION 1/

Size range (metric tons)	Northeast				Midwest				South			
	Number of operations	Percentage of total	Quantity (thousand metric tons)	Percentage of total	Number of operations	Percentage of total	Quantity (thousand metric tons)	Percentage of total	Number of operations	Percentage of total	Quantity (thousand metric tons)	Percentage of total
Less than 25,000	41	9.0	415	0.2	159	13.8	1,550	0.3	93	8.1	701	0.1
25,000 to 49,999	31	6.8	1,070	0.5	98	8.5	3,360	0.7	48	4.2	1,660	0.2
50,000 to 99,999	37	8.1	2,520	1.3	156	13.6	10,600	2.3	106	9.2	7,390	1.0
100,000 to 199,999	58	12.7	7,760	3.9	176	15.3	22,700	5.0	124	10.8	16,800	2.3
200,000 to 299,999	60	13.1	13,500	6.8	131	11.4	29,300	6.5	100	8.7	22,700	3.1
300,000 to 399,999	43	9.4	13,500	6.8	89	7.7	28,300	6.3	102	8.9	32,100	4.4
400,000 to 499,999	38	8.3	15,500	7.8	47	4.1	19,300	4.3	74	6.5	30,600	4.2
500,000 to 599,999	25	5.5	12,400	6.3	44	3.8	22,100	4.9	81	7.1	40,400	5.6
600,000 to 699,999	24	5.3	14,100	7.1	36	3.1	21,300	4.7	47	4.1	27,900	3.9
700,000 to 799,999	13	2.8	8,790	4.4	32	2.8	21,600	4.8	39	3.4	26,800	3.7
800,000 to 899,999	13	2.8	9,920	5.0	28	2.4	21,400	4.7	36	3.1	27,600	3.8
900,000 to 999,999	19	4.2	16,600	8.4	30	2.6	25,900	5.7	39	3.4	33,600	4.7
1,000,000 to 1,499,999	33	7.2	35,300	17.8	61	5.3	66,800	14.8	128	11.2	143,000	19.8
1,500,000 to 1,999,999	11	2.4	16,700	8.4	29	2.5	46,000	10.2	66	5.8	102,000	14.1
2,000,000 to 2,499,999	3	0.7	6,130	3.1	12	1.0	24,300	5.4	28	2.4	56,500	7.8
2,500,000 to 4,999,999	8	1.8	24,100	12.2	14	1.2	44,100	9.8	25	2.2	77,100	10.7
5,000,000 and over	--	--	--	--	7	0.6	43,500	9.6	11	1.0	75,900	10.5
Total	457	100.0	198,000	100.0	1,149	100.0	452,000	100.0	1,147	100.0	722,000	100.0

  

Size range (metric tons)	West				U.S. total			
	Number of operations	Percentage of total	Quantity (thousand metric tons)	Percentage of total	Number of operations	Percentage of total	Quantity (thousand metric tons)	Percentage of total
Less than 25,000	216	30.3	1,580	0.9	509	14.7	4,240	0.3
25,000 to 49,999	80	11.2	2,670	1.6	257	7.4	8,760	0.6
50,000 to 99,999	115	16.1	7,670	4.6	414	11.9	28,200	1.8
100,000 to 199,999	96	13.4	12,600	7.5	454	13.1	59,800	3.9
200,000 to 299,999	53	7.4	11,900	7.1	344	9.9	77,500	5.0
300,000 to 399,999	28	3.9	8,840	5.3	262	7.6	82,800	5.4
400,000 to 499,999	29	4.1	11,800	7.0	188	5.4	77,200	5.0
500,000 to 599,999	14	2.0	7,230	4.3	164	4.7	82,100	5.3
600,000 to 699,999	12	1.7	7,130	4.2	119	3.4	70,400	4.6
700,000 to 799,999	7	1.0	4,750	2.8	91	2.6	62,000	4.0
800,000 to 899,999	9	1.3	6,850	4.1	86	2.5	65,800	4.3
900,000 to 999,999	13	1.8	11,200	6.7	101	2.9	87,200	5.7
1,000,000 to 1,499,999	23	3.2	24,800	14.8	245	7.1	270,000	17.5
1,500,000 to 1,999,999	5	0.7	7,880	4.7	111	3.2	172,000	11.2
2,000,000 to 2,499,999	4	0.6	7,710	4.6	47	1.4	94,600	6.1
2,500,000 to 4,999,999	10	1.4	33,100	19.7	57	1.6	178,000	11.6
5,000,000 and over	--	--	--	--	18	0.5	119,000	7.7
Total	714	100.0	168,000	100.0	3,467	100.0	1,540,000	100.0

-- Zero.

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

TABLE 8  
CRUSHED LIMESTONE AND DOLOMITE SOLD OR USED BY PRODUCERS IN  
THE UNITED STATES IN 1999, BY STATE 1/

(Thousand metric tons and thousand dollars)

State	Limestone		Dolomite	
	Quantity	Value	Quantity	Value
Alabama	41,400 2/	233,000 2/	2,430	19,700
Alaska 3/	W 2/	W 2/	--	--
Arizona	4,420	24,300	--	--
Arkansas	8,420	38,100	2,240	10,800
California	26,500 2/	148,000 2/	356	2,510
Colorado	2,570	12,500	--	--
Connecticut	W	W	W	W
Florida	87,500 2/	440,000 2/	2,350	17,800
Georgia	8,700	54,000	1,210	7,970
Hawaii	277	2,580	--	--
Idaho	1,020	4,130	--	--
Illinois	60,500 2/	309,000 2/	16,200	78,800
Indiana	46,100 2/	211,000 2/	12,900	59,600
Iowa	42,000 2/	211,000 2/	53	190
Kansas	22,800 2/	112,000 2/	--	--
Kentucky	59,600	305,000	915	5,760
Louisiana	W	W	--	--
Maine	W	W	W	W
Maryland	17,900	92,900	--	--
Massachusetts	814 2/	8,130 2/	--	--
Michigan	32,700	110,000	9,710	35,500
Minnesota	7,050	28,600	3,300	20,500
Mississippi	W	W	--	--
Missouri	67,000 2/	315,000 2/	4,250	20,000
Montana	2,710	10,600	--	--
Nebraska	7,090	44,500	--	--
Nevada	4,690	17,400	63	5,170
New Jersey	W	W	--	--
New Mexico	2,000	7,750	--	--
New York	27,400 2/	151,000 2/	8,760	55,600
North Carolina	6,070	40,700	354	2,360
North Dakota	W	W	--	--
Ohio	63,600 2/	283,000 2/	9,100	42,300
Oklahoma	28,000	111,000	1,700	5,630
Oregon	W	W	--	--
Pennsylvania	57,000	298,000	11,400	65,500
Rhode Island	W	W	--	--
South Carolina	W	W	--	--
South Dakota	3,190	12,300	--	--
Tennessee	56,500	345,000	5,920	33,300
Texas	102,000 2/	421,000 2/	1,480	5,820
Utah	5,000 2/	31,100 2/	2,800	8,810
Vermont	2,440	10,400	883	3,330
Virginia	20,600 2/	108,000 2/	3,470	22,000
Washington	W 2/	W 2/	W	W
West Virginia	W	W	W	W
Wisconsin	26,800 2/	109,000 2/	2,440	9,310
Wyoming	W 2/	W 2/	W	W
Other	25,700 2/	179,000 2/	1,960	10,600
Total	978,000	4,840,000	106,000	549,000

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

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

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

3/ Data derived in part from the Alaska Division of Geological and Geophysical Surveys information.

TABLE 9  
 CRUSHED CALCAREOUS MARL AND MARBLE SOLD OR USED BY  
 PRODUCERS IN THE UNITED STATES IN 1999, BY STATE 1/

(Thousand metric tons and thousand dollars)

State	Calcareous marl		Marble	
	Quantity	Value	Quantity	Value
Alabama	--	--	3,450	91,100
California	--	--	15	105
Pennsylvania	--	--	584	4,050
Vermont	--	--	1,680	7,390
Other	3,580 2/	16,000 2/	4,850 3/	37,300 3/
Total	3,580	16,000	10,600	140,000

-- Zero.

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

2/ Includes data for Michigan, Mississippi, North Carolina, Oregon, South Carolina, and Texas.

3/ Includes data for Arizona, Georgia, Maryland, New York, South Carolina, Texas, Virginia, and Wyoming.

TABLE 10  
CRUSHED GRANITE, TRAPROCK, AND SANDSTONE AND QUARTZITE SOLD OR USED BY PRODUCERS  
IN THE UNITED STATES IN 1999, BY STATE 1/

(Thousand metric tons and thousand dollars)

State	Granite		Traprock		Sandstone and quartzite	
	Quantity	Value	Quantity	Value	Quantity	Value
Alabama	W	W	--	--	1,010	6,220
Alaska 2/	W	W	W	W	--	--
Arizona	1,980	14,500	W	W	W	W
Arkansas	12,500	58,200	--	--	7,070	35,300
California	12,900	82,900	12,100	89,000	3,120	31,200
Colorado	7,400	40,000	W	W	779	6,670
Connecticut	234	1,970	W	W	--	--
Florida	W	W	--	--	--	--
Georgia	63,900	384,000	--	--	W	W
Hawaii	--	--	5,220	49,400	W	W
Idaho	156	563	1,830	7,620	W	W
Illinois	--	--	--	--	W	W
Kansas	--	--	--	--	W	W
Louisiana	--	--	--	--	W	W
Maine	W	W	W	W	W	W
Maryland	4,180	27,600	W	W	W	W
Massachusetts	W	W	7,480	56,100	--	--
Michigan	--	--	--	--	12	195
Minnesota	W	W	--	--	W	W
Missouri	W	W	W	W	W	W
Montana	238	846	W	W	W	W
Nevada	W	W	118	456	--	--
New Hampshire	W	W	W	W	W	W
New Jersey	10,500	58,200	13,600	97,100	--	--
New Mexico	W	W	--	--	--	--
New York	2,900	16,400	W	W	1,830	13,700
North Carolina	50,000	343,000	5,810	41,600	W	W
Ohio	--	--	--	--	W	W
Oklahoma	W	W	--	--	2,490	11,100
Oregon	421	1,650	20,100	96,200	14	62
Pennsylvania	5,330	27,600	3,840	19,500	6,820	35,200
Rhode Island	1,610	9,450	W	W	--	--
South Carolina	22,300	154,000	--	--	--	--
South Dakota	W	W	--	--	2,730	13,800
Tennessee	W	W	--	--	W	W
Texas	W	W	W	W	942	3,480
Utah	--	--	--	--	W	W
Vermont	W	W	--	--	W	W
Virginia	25,400	162,000	13,800	80,100	1,620	7,100
Washington	W	W	11,300	65,500	W	W
West Virginia	--	--	--	--	1,020	4,990
Wisconsin	1,260	5,150	W	W	W	W
Wyoming	W	W	--	--	W	W
Other	22,600	124,000	18,500	119,000	10,200	62,100
Total	246,000	1,510,000	114,000	722,000	39,600	231,000

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

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

2/ Data derived, in part, from the Alaska Division of Geological and Geophysical Surveys information.

TABLE 11  
 CRUSHED VOLCANIC CINDER AND SCORIA AND CRUSHED  
 MISCELLANEOUS STONE SOLD OR USED BY PRODUCERS  
 IN THE UNITED STATES IN 1999, BY STATE 1/

(Thousand metric tons and thousand dollars)

State	Volcanic cinder and scoria		Miscellaneous stone 2/	
	Quantity	Value	Quantity	Value
Alabama	--	--	W	W
Alaska 3/	--	--	1,280	7,200
Arizona	232	917	1,900	10,300
Arkansas	--	--	428	2,560
California	221	2,270	5,030	32,200
Colorado	W	W	1,870	10,100
Connecticut	--	--	W	W
Florida	--	--	2,390	10,500
Hawaii	W	W	W	W
Idaho	--	--	647	2,570
Illinois	--	--	W	W
Indiana	--	--	W	W
Kansas	--	--	W	W
Kentucky	--	--	W	W
Maine	--	--	576	2,470
Maryland	--	--	W	W
Massachusetts	--	--	330	2,750
Michigan	--	--	W	W
Montana	--	--	140	473
Nevada	W	W	W	W
New Mexico	269	3,090	364	2,060
New York	--	--	1,360	7,810
North Carolina	W	W	3,630	23,000
North Dakota	W	W	W	W
Oklahoma	--	--	1,660	7,920
Oregon	W	W	1,730	6,860
Pennsylvania	--	--	7,510	39,600
Texas	208	747	2,370	10,000
Utah	W	W	327	1,490
Vermont	--	--	W	W
Virginia	--	--	1,180	7,500
Washington	W	W	2,800	11,900
Wyoming	W	W	280	1,550
Other	1,130	6,240	2,880	19,900
Total	2,060	13,300	40,700	221,000

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

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

2/ Includes shell and slate.

3/ Data derived, in part, from Alaska Division of Geological and Geophysical Surveys information.

TABLE 12  
KIND OF CRUSHED STONE PRODUCED AND/OR DISTRIBUTED IN THE UNITED STATES IN 1999, BY STATE

State	Lime- stone	Dolo- mite	Marble	Calcareous marl	Shell	Granite	Trap- rock	Sand- stone	Quartzite	Slate	Volcanic cinder and scoria	Miscella- neous
Alabama	X	X	X			X		X		X		X
Alaska 1/	X				X		X			X		X
Arizona	X		X			X		X	X		X	X
Arkansas	X	X				X		X	X			X
California	X	X	X		X	X	X	X	X	X	X	X
Colorado	X					X	X	X	X		X	X
Connecticut	X	X				X	X					X
Florida	X	X			X	X						
Georgia	X	X	X			X			X			
Hawaii	X						X	X			X	X
Idaho	X				X	X	X		X			X
Illinois	X	X						X				X
Indiana	X	X								X		
Iowa	X	X										
Kansas	X							X	X			X
Kentucky	X	X										X
Louisiana	X							X				
Maine	X	X				X	X		X	X		X
Maryland	X		X		X	X	X	X				
Massachusetts	X					X	X					X
Michigan	X	X		X				X				X
Minnesota	X	X				X		X	X			
Mississippi	X			X								
Missouri	X	X				X	X	X				
Montana	X					X	X	X	X			X
Nebraska	X											
Nevada	X	X				X	X				X	X
New Hampshire						X	X	X				
New Jersey	X					X	X					
New Mexico	X					X					X	X
New York	X	X	X			X	X	X		X		X
North Carolina	X	X		X		X	X		X	X	X	X
North Dakota	X										X	X
Ohio	X	X						X				
Oklahoma	X	X				X		X				X
Oregon	X			X	X	X	X	X			X	X
Pennsylvania	X	X	X			X	X	X	X	X		X
Rhode Island	X					X	X					
South Carolina	X		X	X		X						
South Dakota	X					X			X			
Tennessee	X	X				X		X				
Texas	X	X	X	X	X	X	X	X	X		X	X
Utah	X	X				X		X	X		X	X
Vermont	X	X	X			X			X	X		
Virginia	X	X	X			X	X	X	X	X		X
Washington	X	X				X	X	X		X	X	X
West Virginia	X	X						X				
Wisconsin	X	X				X	X	X	X			
Wyoming	X	X	X			X			X		X	X

1/ Data derived, in part, from Alaska Division of Geological and Geophysical Surveys information.

TABLE 13  
CRUSHED STONE SOLD OR USED BY PRODUCERS IN THE UNITED  
STATES IN 1999, BY USE 1/

Use	Quantity (thousand metric tons)	Value (thousands)	Unit value
Coarse aggregate (+1 1/2 inch):			
Macadam	7,370	\$41,600	\$5.64
Riprap and jetty stone	15,000	106,000	7.03
Filter stone	6,830	43,300	6.35
Other coarse aggregate	12,600	60,400	4.80
Coarse aggregate, graded:			
Concrete aggregate, coarse	100,000	621,000	6.18
Bituminous aggregate, coarse	79,400	506,000	6.37
Bituminous surface-treatment aggregate	20,100	132,000	6.58
Railroad ballast	16,000	90,700	5.68
Other graded coarse aggregate	83,000	490,000	5.90
Fine aggregate (-3/8 inch):			
Stone sand, concrete	24,000	131,000	5.46
Stone sand, bituminous mix or seal	19,800	108,000	5.43
Screening, undesignated	27,900	146,000	5.26
Other fine aggregate	18,000	101,000	5.59
Coarse and fine aggregates:			
Graded road base or subbase	169,000	805,000	4.77
Unpaved road surfacing	21,300	112,000	5.27
Terrazzo and exposed aggregate	1,340	14,000	10.50
Crusher run or fill or waste	43,900	200,000	4.55
Roofing granules	1,640	15,300	9.37
Other coarse and fine aggregates	65,100	322,000	4.95
Other construction materials 2/	11,400	66,700	5.83
Agricultural:			
Agricultural limestone	11,800	63,900	5.43
Poultry grit and mineral food	1,920	12,800	6.66
Other agricultural uses	1,260	12,800	10.16
Chemical and metallurgical:			
Cement manufacture	91,200	358,000	3.92
Lime manufacture	17,200	76,200	4.42
Dead-burned dolomite manufacture	295	1,300	4.42
Flux stone	8,080	37,000	4.58
Chemical stone	517	4,360	8.44
Glass manufacture	W	W	18.21
Sulfur oxide removal	1,660	9,330	5.61
Special:			
Mine dusting or acid water treatment	363	5,940	16.36
Asphalt fillers or extenders	1,930	16,200	8.41
Whiting or whiting substitute	1,830	78,300	42.73
Other fillers or extenders	2,970	63,800	21.52
Other miscellaneous uses:			
Abrasives	W	W	3.58
Flour (slate)	W	W	49.60
Sugar refining	238	3,130	13.14
Other specified uses not listed	1,330	13,900	10.44
Unspecified: 3/			
Reported	433,000	2,300,000	5.31
Estimated	222,000	1,070,000	4.84
Total	1,540,000	8,240,000	5.35

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

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

2/ Includes acid neutralization, building products, drain fields, lightweight aggregate (slate), and pipe bedding.

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

TABLE 14  
CRUSHED LIMESTONE AND DOLOMITE SOLD OR USED BY PRODUCERS IN THE  
UNITED STATES IN 1999, BY USE 1/

(Thousand metric tons and thousand dollars)

Use	Limestone 2/		Dolomite	
	Quantity	Value	Quantity	Value
<b>Coarse aggregate (+1 1/2 inch):</b>				
Macadam	3,380	17,400	544	3,020
Riprap and jetty stone	8,420	49,300	617	4,390
Filter stone	3,970	21,300	164	990
Other coarse aggregate	8,690	40,300	528	2,970
<b>Coarse aggregate, graded:</b>				
Concrete aggregate, coarse	63,700	365,000	7,310	43,300
Bituminous aggregate, coarse	47,300	288,000	7,410	42,800
Bituminous surface-treatment aggregate	11,100	56,800	1,890	12,400
Railroad ballast	2,020	10,000	445	2,320
Other graded coarse aggregate	51,600	276,000	3,230	21,100
<b>Fine aggregate (-3/8 inch):</b>				
Stone sand, concrete	16,100	82,200	1,860	10,200
Stone sand, bituminous mix or seal	10,100	49,700	1,660	11,100
Screening, undesignated	15,600	75,200	1,800	10,100
Other fine aggregate	10,400	58,600	529	2,680
<b>Coarse and fine aggregates:</b>				
Graded road base or subbase	106,000	472,000	12,400	60,100
Unpaved road surfacing	15,400	79,100	1,310	5,730
Terrazzo and exposed aggregate	236	2,070	7	33
Crusher run or fill or waste	24,100	96,700	1,880	9,840
Other coarse and fine aggregates	40,300	197,000	7,250	31,500
Roofing granules	267	1,710	17	96
Other construction materials 3/	6,040	28,500	519	3,520
<b>Agricultural:</b>				
Agricultural limestone	9,950	52,800	1,810	11,100
Poultry grit and mineral food	1,630	8,800	--	--
Other agricultural uses	858	5,550	300	6,360
<b>Chemical and metallurgical:</b>				
Cement manufacture	88,900	350,000	20	66
Lime manufacture	16,700	73,800	563	2,350
Dead-burned dolomite manufacture	295	1,300	--	--
Flux stone	5,720	25,400	1,960	8,190
Chemical stone	517	4,360	--	--
Sulfur oxide removal	1,660	9,330	--	--
<b>Special:</b>				
Mine dusting or acid water treatment	200	3,240	--	--
Asphalt fillers or extenders	1,740	14,200	W	W
Whiting or whiting substitute	472	10,800	--	--
Other fillers or extenders	2,480	52,400	91	813
<b>Other miscellaneous uses:</b>				
Sugar refining	238	3,130	--	--
Other specified uses not listed	675	3,790	W	W
<b>Unspecified: 4/</b>				
Reported	252,000	1,250,000	38,500	189,000
Estimated	150,000	701,000	11,400	51,500
<b>Total</b>	<b>978,000</b>	<b>4,840,000</b>	<b>106,000</b>	<b>549,000</b>

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

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

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

3/ Includes acid neutralization, drain fields, and pipe bedding.

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

TABLE 15  
CRUSHED LIMESTONE AND DOLOMITE SOLD OR USED BY PRODUCERS  
IN 1999, BY STATE AND USE 1/

(Thousand metric tons and thousand dollars)

State	Concrete aggregate		Bituminous aggregate		Roadstone and coverings		Riprap and railroad ballast		Other construction uses	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Alabama	4,230	21,400	8,550	52,200	1,370	8,800	262	1,870	6,790	38,800
Alaska 3/	--	--	--	--	--	--	--	--	--	--
Arizona	--	--	W	W	--	--	--	--	W	W
Arkansas	524	2,500	1,130	6,530	1,630	7,560	234	1,390	913	4,640
California	579	3,330	W	W	652	3,490	144	1,430	308	2,030
Colorado	--	--	--	--	--	--	--	--	--	--
Connecticut	W	W	W	W	W	W	W	W	W	W
Florida	25,500	167,000	14,400	79,300	17,900	67,500	150	995	10,000	45,200
Georgia	1,450	8,840	2,010	14,600	1,100	5,930	66	630	854	5,550
Hawaii	89	1,070	W	W	84	645	W	W	7	62
Idaho	--	--	--	--	--	--	--	--	--	--
Illinois	7,150	41,300	8,870	53,300	16,100	77,000	819	6,120	4,700	21,100
Indiana	4,960	23,900	8,370	38,200	5,380	26,700	W	W	5,180	20,700
Iowa	977	5,540	860	5,150	5,830	31,600	162	1,110	1,680	7,360
Kansas	685	4,020	1,330	6,170	1,560	6,820	147	1,150	1,970	9,150
Kentucky	4,360	23,100	12,200	69,500	7,080	35,700	389	2,270	4,960	23,500
Louisiana	W	W	W	W	W	W	--	--	W	W
Maine	W	W	W	W	--	--	--	--	--	--
Maryland	577	3,340	2,610	11,900	1,150	4,530	199	1,080	1,220	5,650
Massachusetts	--	--	25	189	38	332	1	14	252	3,110
Michigan	2,960	12,200	2,990	12,100	3,540	13,500	124	1,560	1,990	8,190
Minnesota	196	1,150	1,150	8,560	1,340	6,140	61	598	1,150	6,330
Mississippi	W	W	W	W	W	W	--	--	W	W
Missouri	3,230	19,800	5,550	32,500	10,700	52,300	2,680	10,400	3,020	14,600
Montana	--	--	--	--	W	W	W	W	20	66
Nebraska	W	W	W	W	274	1,920	56	460	673	3,910
Nevada	--	--	--	--	W	W	--	--	492	542
New Jersey	W	W	W	W	--	--	--	--	W	W
New Mexico	153	584	W	W	145	681	W	W	26	134
New York	1,940	12,500	7,040	50,000	4,050	24,300	153	1,150	5,970	31,900
North Carolina	197	1,570	W	W	94	563	W	W	340	2,370
North Dakota	1	4	1	5	1	2	2	6	--	--
Ohio	3,880	17,500	4,780	23,900	15,200	63,500	910	4,530	11,500	48,900
Oklahoma	3,710	17,400	6,880	26,000	2,490	9,910	494	2,780	5,910	22,300
Oregon	--	--	--	--	W	W	W	W	W	W
Pennsylvania	6,820	36,700	11,700	69,500	8,480	43,400	707	4,810	7,830	35,700
Rhode Island	--	--	--	--	--	--	--	--	W	W
South Carolina	--	--	--	--	W	W	--	--	--	--
South Dakota	W	W	W	W	W	W	W	W	W	W
Tennessee	4,750	29,700	17,600	114,000	14,200	77,300	1,480	8,850	6,940	43,300
Texas	16,100	79,400	9,330	49,700	15,500	58,300	782	4,130	8,870	28,000
Utah	W	W	W	W	737	1,680	63	515	957	3,210
Vermont	W	W	W	W	253	907	W	W	W	W
Virginia	2,000	12,000	3,260	19,000	2,310	11,300	258	1,690	3,060	13,900
Washington	--	--	W	W	W	W	W	W	W	W
West Virginia	80	461	255	1,370	W	W	14	102	132	665
Wisconsin	1,120	5,470	1,840	7,970	7,580	30,800	142	698	2,900	13,100
Wyoming	W	W	W	W	W	W	W	W	W	W
Total	98,200	552,000	133,000	752,000	147,000	673,000	10,500	60,300	101,000	464,000
Total withheld	1,630	10,600	3,120	20,900	1,570	7,220	1,010	5,740	1,480	14,000
Grand total	99,900	562,000	136,000	773,000	148,000	680,000	11,500	66,000	102,000	478,000

See footnotes at end of table.

TABLE 15--Continued  
 CRUSHED LIMESTONE AND DOLOMITE SOLD OR USED BY PRODUCERS  
 IN 1999, BY STATE AND USE 1/

(Thousand metric tons and thousand dollars)

State	Cement manufacture		Agricultural uses		Lime manufacture		Other uses		Total by State	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Alabama	3,930	13,500	245	1,470	4,180	14,600	14,300	100,000	43,900 2/	253,000 2/
Alaska 3/	--	--	--	--	--	--	W	W	(4/)	(4/)
Arizona	W	W	--	--	W	W	1,160	6,380	4,420	24,300
Arkansas	W	W	234	1,410	W	W	4,350	20,900	10,700	48,900
California	9,200	49,700	260	2,310	W	W	15,500	87,100	26,800 2/	151,000 2/
Colorado	W	W	--	--	--	--	W	W	2,570	12,500
Connecticut	--	--	W	W	--	--	W	W	(4/)	(4/)
Florida	3,900	16,600	600	3,750	--	--	17,300	77,700	89,900 2/	458,000 2/
Georgia	W	W	W	W	--	--	2,720	16,800	9,910	62,000
Hawaii	--	--	W	W	--	--	W	W	277	2,580
Idaho	W	W	62	206	492	2,550	W	W	1,020	4,130
Illinois	2,520	14,900	2,040	8,810	--	--	34,400	165,000	76,700 2/	387,000 2/
Indiana	3,750	13,900	1,970	7,880	W	W	28,600	134,000	59,000 2/	270,000 2/
Iowa	1,130	4,380	1,300	5,210	--	--	30,100	151,000	42,100 2/	212,000 2/
Kansas	2,390	9,370	W	W	W	W	14,600	74,300	22,800 2/	112,000 2/
Kentucky	W	W	752	3,000	W	W	29,400	149,000	60,500	310,000
Louisiana	--	--	--	--	--	--	W	W	(4/)	(4/)
Maine	W	W	--	--	W	W	650	3,850	(4/)	(4/)
Maryland	2,620	9,910	--	--	--	--	9,490	56,500	17,900	92,900
Massachusetts	--	--	W	W	W	W	118	1,740	814 2/	8,130 2/
Michigan	6,360	11,700	100	842	634	2,150	23,800	83,200	42,400	145,000
Minnesota	--	--	290	1,660	--	--	6,150	24,600	10,400	49,000
Mississippi	695	2,360	W	W	--	--	W	W	(4/)	(4/)
Missouri	6,300	19,500	W	W	W	W	37,300	176,000	71,200 2/	335,000 2/
Montana	W	W	--	--	W	W	1,470	5,030	2,710	10,600
Nebraska	W	W	444	3,190	--	--	3,290	20,100	7,090	44,500
Nevada	W	W	W	W	W	W	1,230	5,970	4,750	22,600
New Jersey	--	--	W	W	--	--	W	W	(4/)	(4/)
New Mexico	W	W	W	W	--	--	623	2,450	2,000	7,750
New York	4,180	13,100	W	W	W	W	12,700	71,700	36,100 2/	206,000 2/
North Carolina	--	--	7	40	--	--	W	W	6,430	43,000
North Dakota	--	--	--	--	--	--	W	W	(4/)	(4/)
Ohio	1,850	8,730	W	W	W	W	32,900	150,000	72,700 2/	325,000 2/
Oklahoma	W	W	W	W	--	--	8,240	30,400	29,700	117,000
Oregon	1,020	3,790	--	--	--	--	238	3,130	(4/)	(4/)
Pennsylvania	7,500	36,200	W	W	W	W	24,200	129,000	68,400	364,000
Rhode Island	--	--	W	W	--	--	W	W	(4/)	(4/)
South Carolina	1,170	5,000	--	--	--	--	W	W	(4/)	(4/)
South Dakota	1,110	1,820	--	--	W	W	W	W	3,190	12,300
Tennessee	W	W	512	3,120	W	W	15,300	89,500	62,400	378,000
Texas	9,150	28,700	532	3,210	1,760	6,290	41,600	169,000	104,000 2/	427,000 2/
Utah	W	W	36	564	W	W	2,180	17,100	7,790 2/	39,900 2/
Vermont	--	--	--	--	--	--	2,480	10,600	3,330	13,800
Virginia	W	W	1,550	9,160	W	W	9,500	54,600	24,100 2/	130,000 2/
Washington	--	--	W	W	W	W	2,350	49,200	(4/)	(4/)
West Virginia	W	W	W	W	--	--	10,700	48,300	(4/)	(4/)
Wisconsin	W	W	333	2,780	W	W	15,100	56,400	29,300 2/	118,000 2/
Wyoming	W	W	--	--	--	--	W	W	(4/)	(4/)
Total	68,800	263,000	11,300	58,600	7,060	25,500	454,000	2,240,000	XX	XX
Total withheld	20,200	86,800	3,280	26,000	10,500	52,000	11,500	73,800	XX	XX
Grand total	89,000	350,000	14,500	84,600	17,500	77,500	465,000	2,320,000	1,080,000	5,390,000

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

1/ Data are rounded to three significant digits; may not add to totals shown.

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

3/ Data derived, in part, from the Alaska Division of Geological and Geophysical Surveys information.

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

TABLE 16  
CRUSHED MARBLE SOLD OR USED BY PRODUCERS IN  
THE UNITED STATES IN 1999, BY USE 1/

(Thousand metric tons and thousand dollars)

Use	Quantity	Value
Coarse aggregate (+1-1/2-inch):		
Macadam	W	W
Riprap and jetty stone	43	469
Filter stone	W	W
Other coarse aggregate	416	2,820
Coarse aggregate, graded:		
Concrete aggregate, coarse	(2/)	(2/)
Bituminous aggregate, coarse	(2/)	(2/)
Bituminous surface-treatment aggregate	(2/)	(2/)
Other graded coarse aggregate	577	4,790
Fine aggregate (-3/8-inch):		
Stone sand, concrete	(3/)	(3/)
Stone sand, bituminous mix or seal	(3/)	(3/)
Screening, undesignated	307	7,790
Other fine aggregate	57	468
Coarse and fine aggregates:		
Graded road base or subbase	275	1,640
Terrazzo and exposed aggregate	(4/)	(4/)
Crusher run (select material or fill)	118	916
Other coarse and fine aggregates	46	454
Agricultural:		
Poultry grit and mineral food	(5/)	(5/)
Other agricultural uses	148	1,540
Special:		
Mine dusting or acid water treatment	163	2,700
Whiting or whiting substitute	1,360	67,500
Other fillers or extenders	363	10,000
Unspecified: 6/		
Reported	4,470	28,100
Estimated	2,230	10,700
Total	10,600	140,000

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

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

2/ Included in "Other graded coarse aggregate."

3/ Included in "Other fine aggregate."

4/ Included in "Other coarse and fine aggregates."

5/ Included in "Other agricultural uses."

6/ Reported and estimated production without a breakdown by end use.

TABLE 17  
CRUSHED GRANITE AND TRAPROCK SOLD OR USED BY PRODUCERS  
IN THE UNITED STATES IN 1999, BY USE 1/

(Thousand metric tons and thousand dollars)

Use	Granite		Traprock	
	Quantity	Value	Quantity	Value
<b>Coarse aggregate (+1-1/2-inch):</b>				
Macadam	2,690	15,700	420	3,330
Riprap and jetty stone	3,380	29,300	1,580	13,400
Filter stone	1,400	12,800	1,060	6,830
Other coarse aggregate	1,670	9,750	1,070	4,380
<b>Coarse aggregate, graded:</b>				
Concrete aggregate, coarse	20,500	146,000	6,710	47,100
Bituminous aggregate, coarse	17,200	124,000	4,550	32,000
Bituminous surface-treatment aggregate	2,810	23,200	3,500	30,800
Railroad ballast	7,610	41,800	4,290	24,900
Other graded coarse aggregate	22,100	154,000	3,090	20,400
<b>Fine aggregate (-3/8-inch):</b>				
Stone sand, concrete	4,570	26,000	743	8,010
Stone sand, bituminous mix or seal	5,640	30,500	1,350	10,500
Screening, undesignated	6,700	33,800	2,130	13,900
Other fine aggregate	5,000	28,100	663	3,970
<b>Coarse and fine aggregates:</b>				
Graded road base or subbase	24,200	137,000	16,000	88,800
Unpaved road surfacing	1,220	7,860	2,750	16,200
Terrazzo and exposed aggregate	667	6,980	W	W
Crusher run or fill or waste	12,200	66,800	4,040	17,900
Other coarse and fine aggregates	7,010	35,000	6,950	42,800
Other construction materials	756	3,760	2,110	17,900
Other specified uses not listed	W	W	W	W
<b>Agricultural:</b>				
Poultry grit and mineral food	W	W	--	--
Other agricultural uses	W	W	W	W
<b>Special:</b>				
Asphalt fillers or extenders	--	--	W	W
Roofing granules	505	4,740	677	7,290
<b>Unspecified: 2/</b>				
Reported	80,500	482,000	25,800	176,000
Estimated	17,200	92,300	24,100	134,000
<b>Total</b>	<b>246,000</b>	<b>1,510,000</b>	<b>114,000</b>	<b>722,000</b>

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

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

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

TABLE 18  
CRUSHED SANDSTONE AND QUARTZITE SOLD OR USED BY PRODUCERS IN THE  
UNITED STATES IN 1999, BY USE 1/ 2/

(Thousand metric tons and thousand dollars)

Use	Sandstone		Quartzite	
	Quantity	Value	Quantity	Value
<b>Coarse aggregate (+1-1/2-inch):</b>				
Riprap and jetty stone	511	5,540	134	1,010
Filter stone	49	316	48	254
Other coarse aggregate	164	926	123	629
<b>Coarse aggregate, graded:</b>				
Concrete aggregate, coarse	979	7,110	226	1,420
Bituminous aggregate, coarse	1,090	7,250	522	3,510
Bituminous surface-treatment aggregate	176	2,500	127	1,100
Railroad ballast	132	792	542	3,550
Other graded coarse aggregate	972	7,530	861	4,980
<b>Fine aggregate (-3/8-inch):</b>				
Stone sand, concrete	506	3,280	23	113
Stone sand, bituminous mix or seal	467	2,690	245	1,690
Screening, undesignated	628	2,710	122	523
Other fine aggregate	742	3,330	590	3,500
<b>Coarse and fine aggregates:</b>				
Graded road base or subbase	3,790	21,100	504	3,090
Unpaved road surfaces	332	1,980	W	W
Terrazzo and exposed aggregate	W	W	89	1,220
Crusher run or fill or waste	781	3,630	299	1,630
Other coarse and fine aggregates	1,190	5,890	1,040	4,670
Other construction materials	194	1,310	424	1,710
<b>Agricultural:</b>				
Poultry grit and mineral food	W	W	W	W
Other agricultural uses	W	W	--	--
<b>Chemical and metallurgical:</b>				
Cement manufacture	372	1,540	344	2,110
Flux stone	W	W	384	3,100
Glass manufacture	W	W	--	--
<b>Special:</b>				
Asphalt fillers or extenders	W	W	--	--
Other fillers or extenders	W	W	--	--
Roofing granules	--	--	W	W
<b>Other miscellaneous uses:</b>				
Abvasives	W	W	--	--
Building products	W	W	--	--
Other uses not listed	323	7,210	86	894
<b>Unspecified: 3/</b>				
Reported	9,130	48,600	3,650	17,500
Estimated	5,250	25,200	1,070	4,920
<b>Total</b>	<b>28,100</b>	<b>168,000</b>	<b>11,500</b>	<b>63,500</b>

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

1/ Includes sandstone--quartzite.

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

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

TABLE 19  
CRUSHED VOLCANIC CINDER AND SCORIA AND CRUSHED MISCELLANEOUS STONE  
SOLD OR USED BY PRODUCERS IN THE UNITED STATES IN 1999, BY USE 1/

(Thousand metric tons and thousand dollars)

Use	Volcanic cinder and scoria		Miscellaneous stone 2/	
	Quantity	Value	Quantity	Value
<b>Coarse aggregate (+1-1/2-inch):</b>				
Riprap and jetty stone	W	W	300	2,060
Filter stone	W	W	41	201
Other coarse aggregate	--	--	318	1,360
<b>Course aggregate, graded:</b>				
Concrete aggregate, coarse	W	W	830	9,580
Bituminous aggregate, coarse	--	--	1,230	7,440
Bituminous surface-treatment aggregate	--	--	390	3,860
Railroad ballast	--	--	922	7,390
Other graded coarse aggregate	51	215	956	5,210
<b>Fine aggregate (-3/8-inch):</b>				
Stone sand, concrete	--	--	190	862
Stone sand, bituminous mix or seal	--	--	422	1,500
Screening, undesignated	38	336	559	2,120
Other fine aggregate	10	36	74	328
<b>Coarse and fine aggregates:</b>				
Graded road base or subbase	291	1,210	4,930	20,500
Unpaved road surfacing	73	252	177	235
Terrazzo and exposed aggregate	317	3,450	W	W
Crusher run or fill or waste	W	W	402	2,160
Other coarse and fine aggregates	--	--	1,290	5,390
Other construction materials	138	1,150	205	874
<b>Agricultural:</b>				
Poultry grit and mineral food	--	--	W	W
Other agricultural uses	--	--	W	W
Chemical and metallurgical, cement manufacture	--	--	1,480	3,990
<b>Special:</b>				
Other fillers or extenders	--	--	W	W
Roofing granules	W	W	W	W
<b>Other miscellaneous uses:</b>				
Light weight aggregate (slate)	--	--	1,040	7,740
Flour (slate)	--	--	W	W
Other specified uses not listed	W	W	20 3/	131
<b>Unspecified: 4/</b>				
Reported	728	4,240	18,100	99,100
Estimated	211	901	10,100	51,100
<b>Total</b>	<b>2,060</b>	<b>13,300</b>	<b>44,200</b>	<b>236,000</b>

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

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

2/ Includes calcareous marl, shell, and slate.

3/ Includes abrasives and drain fields.

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

TABLE 20  
 RECYCLED ASPHALT AND CONCRETE SOLD OR USED BY PRODUCERS IN THE UNITED STATES, BY REGION 1/

Region/Division	Recycled asphalt						Recycled concrete					
	1998			1999			1998			1999		
	Quantity (thousand metric tons)	Value (thousands)	Unit value									
Northeast:												
New England	358 r/	\$1,720 r/	\$4.81 r/	128	\$610	\$4.77	23	\$115	\$5.00	84	\$570	\$6.79
Middle Atlantic	182	1,260	6.95	829	4,110	4.96	173	906	5.24	727	3,660	5.03
Midwest:												
East North Central	86	329	3.83	69	557	8.07	539	2,350	4.36	236	1,350	5.71
West North Central	201	943	4.69	W	W	W	83	342	4.12	W	W	W
South:												
South Atlantic	W	W	W	W	W	W	329	2,170	6.58	238	1,840	7.74
East South Central	W	W	W	--	--	--	W	W	W	W	W	W
West South Central	140 r/	814 r/	5.81 r/	--	--	--	--	--	--	--	--	--
West:												
Mountain	2	7	3.50	97	900	9.28	W	W	W	15	58	3.87
Pacific	352	1,890	5.37	250	1,120	4.50	396	2,350	5.92	340	1,730	5.09
Total	1,370 r/	7,170 r/	5.25 r/	1,450	7,700	5.32	1,590	8,410 r/	5.30	1,720	9,560	5.57

r/ Revised. W Withheld to avoid disclosing company proprietary data; included in "Total." -- Zero.  
 1/ Data are rounded to no more than three significant digits; may not add to totals shown.

TABLE 21  
 RECYCLED ASPHALT SOLD OR USED BY PRODUCERS IN THE UNITED STATES, BY STATE 1/

State	1998			1999		
	Quantity (thousand metric tons)	Value (thousands)	Unit value	Quantity (thousand metric tons)	Value (thousands)	Unit value
Alabama	W	W	\$3.26	--	--	--
Alaska 2/	3	\$38	12.67	1	\$26	\$26.00
California	319	1,740	5.44	211	933	4.42
Colorado	--	--	--	W	W	9.65
Connecticut	W	W	5.00	W	W	4.46
Florida	W	W	6.67	W	W	5.56
Hawaii	W	W	4.53	W	W	3.60
Idaho	1	6	6.00	11	72	6.55
Illinois	24	98	4.08	27	132	4.89
Indiana	--	--	--	W	W	10.84
Iowa	1	6	6.00	--	--	--
Kansas	W	W	6.04	--	--	--
Louisiana	W	W	11.11	--	--	--
Maine	108 r/	653 r/	6.05 r/	22	155	7.05
Massachusetts	160 r/	543 r/	3.39 r/	4	24	6.00
Minnesota	W	W	5.00	--	--	--
Missouri	W	W	4.46	--	--	--
Montana	W	W	1.00	--	--	--
New Hampshire	28	161	5.75	62	253	4.08
New Jersey	67	357	5.33	718	3,530	4.92
New Mexico	--	--	--	5	36	7.20
New York	W	W	15.97	W	W	5.50
North Dakota	--	--	--	W	W	W
Ohio	W	W	3.50	W	W	W
Oregon	W	W	1.60	33	147	4.45
Pennsylvania	76	300	3.95	105	546	5.20
Rhode Island	W	W	5.56	--	--	--
South Dakota	W	W	4.41	W	W	5.26
Tennessee	18	100	5.56	--	--	--
Texas	W	W	3.31	--	--	--
Vermont	W	W	7.00	4	13	3.25
Washington	9	40	4.44	--	--	--
Wisconsin	60	224	3.73	3	15	5.00
Total	1,370 r/	7,170 r/	5.25 r/	1,450	7,700	5.32

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

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

2/ Data derived, in part, from Alaska Division of Geological and Geophysical Surveys information.

TABLE 22  
RECYCLED CONCRETE SOLD OR USED BY PRODUCERS IN THE UNITED STATES, BY STATE 1/

State	1998			1999		
	Quantity (thousand metric tons)	Value (thousands)	Unit value	Quantity (thousand metric tons)	Value (thousands)	Unit value
Alabama	W	W	\$4.10	W	W	\$4.13
Alaska 2/	1	\$6	6.00	2	\$16	8.00
California	378	2,260	5.97	318	1,620	5.08
Colorado	--	--	--	W	W	W
Connecticut	W	W	5.00	54	421	7.80
Florida	--	--	--	W	W	W
Georgia	W	W	9.66	--	--	--
Hawaii	W	W	5.00	W	W	6.00
Illinois	W	W	5.60 r/	W	W	5.99
Indiana	W	W	3.82	W	W	3.33
Kansas	W	W	5.86	--	--	--
Maine	W	W	4.00	20	88	4.40
Massachusetts	W	W	5.50	9	55	6.11
Minnesota	W	W	3.93	--	--	--
Mississippi	(3/)	(3/)	(3/)	W	W	15.00
New Hampshire	1	6	6.00	2	6	3.00
New Jersey	W	W	4.38	589	3,190	5.42
New Mexico	W	W	4.17	15	58	3.87
New York	W	W	5.27	W	W	3.32
North Carolina	--	--	--	W	W	11.44
North Dakota	--	--	--	2	14	7.00
Ohio	2	4	2.00	W	W	3.09
Oregon	W	W	3.00	W	W	4.40
Pennsylvania	9	62	6.89	15	60	4.00
South Dakota	W	W	4.60	W	W	4.90
Virginia	226	1,160	5.14	W	W	6.56
Washington	2 r/	8 r/	4.00	--	--	--
Wisconsin	289	979	3.39	--	--	--
Total	1,590	8,410 r/	5.30	1,720	9,560	5.57

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

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

2/ Data derived, in part, from Alaska Division of Geological and Geophysical Surveys information.

3/ Revised to zero.

TABLE 23  
CRUSHED STONE SOLD OR USED BY PRODUCERS IN THE UNITED STATES IN 1999,  
BY REGION AND METHOD OF TRANSPORTATION 1/

(Thousand metric tons)

Region/Division	Truck	Rail	Water	Other	Not transported	Not specified	Total
Northeast:							
New England	6,080	W	--	W	4,320	23,800	34,600
Middle Atlantic	75,400	W	--	W	6,990	76,500	164,000
Midwest:							
East North Central	107,000	4,270	23,700	2,800	10,500	139,000	287,000
West North Central	49,400	W	W	2,780	2,420	101,000	166,000
South:							
South Atlantic	152,000	18,900	W	W	15,800	178,000	370,000
East South Central	81,700	2,930	W	W	14,800	72,800	175,000
West South Central	77,900	10,700	--	4,400	5,390	79,000	177,000
West:							
Mountain	26,700	2,080	--	2,990	4,700	20,000	56,500
Pacific	40,200	4,460	1,770	6,950	3,390	54,500	111,000
Total	616,000	48,000	38,000	26,700	68,300	744,000	1,540,000

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

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

TABLE 24  
CRUSHED AND BROKEN STONE OPERATIONS IN THE UNITED STATES IN 1999, BY STATE

State	Active operations	Active quarries	Dredging operations	Processing plants				Sales yards
				Stationary	Portable	Stationary and portable	None or unspecified	
Alabama	74	75	--	59	7	--	8	8
Alaska 1/	16	17	--	2	10	2	2	--
Arizona	49	51	--	17	25	--	7	--
Arkansas	74	74	--	33	28	4	9	2
California	155	159	1	77	52	10	16	3
Colorado	29	31	--	13	10	5	1	--
Connecticut	23	23	--	18	4	1	--	1
Florida	96	111	1	46	29	8	13	9
Georgia	85	87	--	77	3	2	3	4
Hawaii	28	30	--	12	10	4	2	--
Idaho	52	57	--	10	34	3	5	--
Illinois	149	151	--	87	45	8	9	9
Indiana	94	96	--	75	3	8	8	8
Iowa	208	212	--	35	167	1	5	4
Kansas	104	124	--	23	76	3	2	--
Kentucky	100	100	--	86	6	6	2	2
Louisiana	15	12	--	--	--	--	15	10
Maine	20	22	--	10	9	--	1	--
Maryland	29	30	1	22	4	--	3	2
Massachusetts	36	36	--	24	7	3	2	3
Michigan	31	31	--	18	8	1	4	--
Minnesota	53	63	--	7	39	2	5	--
Mississippi	11	11	--	3	1	--	7	7
Missouri	201	202	--	100	86	10	5	1
Montana	15	25	--	7	6	1	1	--
Nebraska	11	11	--	7	2	2	--	--
Nevada	16	18	--	12	2	1	1	--
New Hampshire	14	18	--	8	3	1	2	--
New Jersey	26	26	--	16	2	8	--	--
New Mexico	39	43	--	12	19	3	5	--
New York	104	105	--	77	10	14	3	--
North Carolina	106	106	--	87	9	1	9	6
North Dakota	5	7	--	--	1	--	4	--
Ohio	117	118	1	86	17	10	4	3
Oklahoma	61	61	--	45	5	10	1	1
Oregon	151	296	2	35	94	5	17	--
Pennsylvania	205	211	1	147	19	20	19	1
Rhode Island	9	9	--	8	1	--	--	--
South Carolina	41	41	--	31	2	1	7	8
South Dakota	11	11	--	9	2	--	--	--
Tennessee	117	119	--	105	6	3	3	1
Texas	163	183	--	91	43	13	16	12
Utah	34	39	--	15	16	2	1	--
Vermont	19	19	--	12	4	1	2	--
Virginia	122	128	--	89	14	10	9	10
Washington	114	146	--	36	48	9	21	--
West Virginia	54	54	--	39	7	4	4	9
Wisconsin	160	186	--	28	119	4	9	--
Wyoming	14	15	--	6	7	--	1	--
Total	3,467	3,803	7	1,862	1,121	204	273	124

1/ Data derived, in part, from the Alaska Division of Geological and Geophysical Surveys. -- Zero.

TABLE 25  
U.S. EXPORTS OF CRUSHED STONE IN 1999, BY DESTINATION 1/

(Metric tons)

Destination	Limestone for cement manufacturing	Other	Chalk, crude	Granules, chippings	Total
<b>North America:</b>					
Bahamas, The	142	--	--	36	178
Barbados	--	--	35	14	49
Bermuda	1	--	--	41	42
British Virgin Island	14	--	--	--	14
Canada	3,930,000	1,710	1,990	114,000	4,050,000
Cayman Islands	265	--	--	--	265
Costa Rica	--	4	--	1	5
Dominican Republic	41	103	--	--	144
Guadeloupe	1	--	--	--	1
Guatemala	--	--	22	137	159
Jamaica	--	--	--	448	448
Mexico	2,440	309	54	5,040	7,840
Panama	36	--	5	23	64
St. Lucia	20	--	--	--	20
Total	3,940,000	2,130	2,110	120,000	4,060,000
<b>South America:</b>					
Argentina	1	--	6	1,720	1,730
Brazil	47	1	--	5	53
Chile	--	--	--	40	40
Colombia	41	--	--	1	42
Ecuador	--	--	91	6	97
Peru	--	--	--	623	623
Suriname	7,990	--	--	--	7,990
Venezuela	8	--	21	593	622
Total	8,090	1	118	2,990	11,200
<b>Europe:</b>					
Austria	--	--	1	--	1
Belgium	--	--	--	6	6
France	--	1	--	1,980	1,980
Germany	1	1,670	2	15	1,690
Ireland	1	31	--	--	32
Italy	--	--	--	959	959
Netherlands	--	375	--	4,460	4,830
Spain	19	--	--	465	484
Sweden	11	--	--	--	11
Switzerland	--	--	--	54	54
Turkey	--	--	2	--	2
United Kingdom	1	757	3	2,090	2,850
Total	33	2,840	9	10,000	12,900
<b>Asia:</b>					
China	867	152	--	--	1,020
Hong Kong	40	--	--	92	132
India	--	--	--	14	14
Indonesia	--	13	--	--	13
Japan	94	99	--	28	221
Korea, Republic of	570	12	--	315	897
Malaysia	60	--	--	6	66
Singapore	32	8	10	36	86
Sri Lanka (Ceylon)	--	--	--	15	15
Taiwan	165	4	--	1,970	2,140
Thailand	--	--	--	3	3
Total	1,830	288	10	2,480	4,600
<b>Oceania:</b>					
Australia	116	42	7	31,700	31,900
New Zealand	--	--	1	--	1
Total	116	42	8	31,700	31,900
<b>Middle East:</b>					
Qatar	--	--	--	17	17
Saudi Arabia	15	--	--	445	460
Total	15	--	--	462	477
Grand total	3,950,000	5,300	2,250	167,000	4,120,000
Total value (thousands)	\$12,800	\$4,310	\$1	\$13,700	\$30,800

-- Zero.

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

Source: U.S. Census Bureau.

TABLE 26  
U.S. IMPORTS OF CRUSHED STONE AND CALCIUM CARBONATE FINES, BY TYPE 1/

(Thousand metric tons and thousand dollars)

Type	1998			1999		
	Quantity	C.i.f. value	Unit value	Quantity	C.i.f. value	Unit value
<b>Crushed stone and chips:</b>						
Limestone	8,260	66,700	\$8.08 r/	6,720	62,200	\$9.26
Limestone for flux or cement manufacturing	3,970	34,400	8.68 r/	3,540	25,000	7.07
Quartzite	(2/)	305	XX	1	395	395.00
Other	1,400	13,400	9.57 r/	2,060	17,600	8.57
<b>Total</b>	<b>13,600</b>	<b>115,000</b>	<b>XX</b>	<b>12,300</b>	<b>105,000</b>	<b>XX</b>
<b>Calcium carbonate fines: 3/</b>						
Natural chalk	(2/)	312	XX	--	--	--
Calcium carbonates other chalk	3	1,040	347.67 r/	1	330	330.00
<b>Total</b>	<b>3</b>	<b>1,360</b>	<b>XX</b>	<b>1</b>	<b>330</b>	<b>XX</b>
<b>Grand total</b>	<b>13,600</b>	<b>116,000</b>	<b>XX</b>	<b>12,300</b>	<b>106,000</b>	<b>XX</b>

r/ Revised. XX Not applicable. -- Zero.

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

2/ Less than 1/2 unit.

3/ Excludes precipitated calcium carbonates.

Source: U.S. Census Bureau.

FIGURE 1  
 PRODUCTION OF CRUSHED STONE IN THE UNITED STATES IN 1999, BY GEOGRAPHIC DIVISION

