STONE, CRUSHED

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Stone is one of the most accessible natural resources of the Earth and one of the fundamental building blocks of our society. It has been used from the earliest times of our 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 mostly for the construction industry, as well as agriculture, and other industries that use complex chemical and metallurgical processes. Despite the relatively low 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. Crushed stone and construction sand and gravel combined are defined as construction aggregates. The construction sand and gravel industry is reviewed in a separate chapter, and both mineral commodities should be included in any review of the national, State, or local aggregates industry. All percentages in this report were calculated using rounded data.

A total 1.59 billion metric tons (Gt) of crushed stone was produced for consumption in the United States in 2004, a 60-million-metric-ton (Mt), or 3.9%, increase compared with the total production of 2003. This tonnage equals the production reported in 2001 and represents the highest production level ever recorded in the United States. The value of the total crushed stone produced in the United States in 2004 was \$9.6 billion, a 5.8% increase compared with the revised 2003 total (table 1).

About 70.2% of crushed stone production continued to be limestone and dolomite followed by, in descending order of tonnage, granite, traprock, sandstone and quartzite, miscellaneous stone, marble, volcanic cinder and scoria, calcareous marl, slate, and shell (table 2).

Foreign trade of crushed stone remained small. Exports increased in 2004 to 1.3 Mt, or by 26.7%, compared with the total of 1 Mt in 2003, while the value increased to \$54.5 million, or by 19.5%, compared with the total of \$45.6 million in 2003 (table 26).

Imports of crushed stone, including calcium carbonate, increased by 4.2% to 16 Mt, and the value increased by 4.2% to \$149 million compared with the 2003 totals (table 27). Apparent domestic consumption of crushed stone, which is defined as production for consumption (sold or used) plus imports minus exports was 1.61 Gt (tables 1, 26-27).

Production

Domestic production data for crushed stone are derived by the U.S. Geological Survey (USGS) from voluntary surveys of U.S. producers. In 2004, a total of 1,329 companies produced or sold crushed stone from 3,128 operations with 3,170 quarries and 187 sales/distribution sites. Of the 3,128 active operations, 2,364 operations reported their production or sales to the USGS,

and their total production was 1.34 Gt, or 84.1% of the U.S. total. Of the 2,364 reporting operations with 2,386 quarries, 951 operations with 888 quarries and 94 sales yards owned by 117 companies did not report a breakdown by end use. Their total production was 580 Mt, or 36.5% of the U.S. total, and is included in table 13 under "Unspecified, reported" uses.

Production of nonrespondents was estimated using employment data and/or adjusted production reports from prior years. The estimated output of 764 nonrespondent operations with 784 quarries and 9 sales yards owned by 545 companies was 253 Mt, or 15.9% of the U.S. total, and is included in table 13 under "Unspecified, estimated" uses.

A total of 187 sales yards in 31 States were active in 2004, an increase from 182 sales yards in 29 States in 2003. The total output sold through the sales/distribution yards was 48.7 Mt. Information regarding the number of active operations, active quarries, type of processing plants, and number of sales yards by State is provided in table 25.

Crushed stone was produced in every State except Delaware. The 10 leading producing States, in descending order of tonnage, were Texas, Pennsylvania, Florida, Georgia, Illinois, Ohio, Virginia, North Carolina, Missouri, and Tennessee. Their combined production was about 843 Mt, or 52.9% of the national total.

The 71 underground mines that are included in the total number of active operations produced 47.7 Mt of crushed stone in 2004. Active underground mines were located in 16 States. The five leading States, in descending order of tonnage, were Kentucky, Indiana, Iowa, Illinois, and Missouri. Their combined production was 34.1 Mt, or 71.5% of the total U.S. crushed stone produced underground.

A total of 696 operations were either idle or presumed to have been idle in 2004 because no employment information was available to estimate their production. Since the 2003 survey, 271 operations were 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 1.59 Gt of crushed stone produced for consumption in the United States in 2004, 1.1 Gt, or 70.2%, was limestone and dolomite; 256 Mt, or 16.1%, was granite; and 126 Mt, or 7.9%, was traprock. The remaining 90 Mt, or 6%, was shared, in descending order of quantity, by sandstone and quartzite (3.2%), miscellaneous stone (1.7%), marble (0.6%), volcanic cinder and scoria (0.3%), calcareous marl (0.2%), slate (0.2%), and shell (0.1%) (table 2).

A comparison of the four geographic regions of the United States indicates that in 2004, the production for consumption of crushed stone increased in all regions (table 3). The largest increases, in percentages, compared with 2003 were in the West

(4.9%) and the Northeast (4.5%). In 2004, the South continued to lead the Nation in the production of crushed stone with 775 Mt, or 48.7% of the total, followed by the Midwest with 433 Mt, or 27.2%, and the Northeast with 230 Mt, or 14.4%. The South and Midwest regions together accounted for about 76% of the total U.S. crushed stone output.

A comparison of the nine geographic divisions of the United States indicates that, in 2004, the production for consumption of crushed stone increased in seven divisions compared with 2003. The major increases in percentages were recorded in the Mountain (13.6%), the South Atlantic (8.7%), and New England (7.9%) divisions. Of the nine geographic divisions, the South Atlantic led the Nation in the production of crushed stone with 411 Mt, or 25.9% of the U.S. total, followed by the East North Central with 284 Mt, or 17.9%, and the West South Central with 199 Mt, or 12.5% (table 3). Decreases in production for consumption of crushed stone were recorded in the West South Central (-2.5%), and the West North Central (-2%).

The leading U.S. producing companies in 2004, in descending order of tonnage, were Vulcan Materials Co.; Martin Marietta Aggregates; Hanson Building Materials America, Inc.; Oldcastle, Inc./Materials Group; Lafarge North America Inc.; Rinker Materials Corp.; Rogers Group, Inc.; Florida Rock Industries, Inc.; CEMEX, Inc.; and Luck Stone Corp. The combined production of the top 10 companies was 720 Mt, or 45.3% of the national total. There was no change in the ranking of the five leading producing companies compared with the previous year.

A review of production by size of operation at the national level indicates that in 2004, 917 Mt of crushed stone or 57.5% of the total crushed stone, was produced by 513 operations reporting more than 1 million metric tons per year; 371 Mt, or 23.3%, was produced by 570 operations reporting between 500,000 and 999,999 metric tons per year (t/yr); and 276 Mt, or 17.3%, was produced by 1,147 operations reporting between 100,000 and 500,000 t/yr. The production by size of operation information also indicates that 80.7% of total crushed stone produced in the U.S. in 2004 came from operations that produced more than 500,000 t/yr (table 7A). By geographic regions, in 2004, the South had 1,117 active operations, followed by the Midwest with 1,016 active operations and the West with 590 active operations (table 7B).

The merger and acquisition activity in the U.S. crushed stone industry remained at a relatively low level in 2004. In April, privately-held Rogers Group announced the acquisition of the Rock Springs Quarry from Liter's Inc., of Louisville, KY, and the Nashville, Harriman, and Ten Mile quarries located in Tennessee from Martin Marietta Materials, Inc. of Raleigh, NC (Aggregates Manager, 2004).

In November, Knife River Corp. (a subsidiary of MDU Resources Group, Inc. of Bismarck, ND), announced the purchase of the Pohakulepo Quarry located on the island of Maui, Hawaii. Hawaiian Cement Co. (a subsidiary of Knife River Corp.) will operate the quarry (Rock Products, 2004b).

Also in November, CEMEX S.A. de C.V. of Monterrey, Mexico, announced the acquisition of worldwide assets of RMC Group PLC. The transaction was completed at the beginning of 2005. The combined company will be one of the world's

leading building materials companies. CEMEX operates 13 crushed stone quarries in the United States while RMC operates six quarries in the United States (Rock Products, 2004a).

Calcareous Marl.—Output of marl decreased by 27% to 3.7 Mt valued at \$16.1 million compared with the 2003 totals (table 2). Marl was produced by six companies with seven quarries in four States. The leading producers, in descending order of tonnage, were Capitol Aggregates, Ltd.; Lafarge; and Giant Group, Ltd.

Dolomite.—Production of dolomite decreased by 0.2% to 95.5 Mt valued at \$567 million compared with the revised 2003 totals (table 2). Crushed dolomite was reportedly produced by 88 companies at 189 operations with 211 quarries in 26 States. An additional undetermined amount of dolomite is included in the total crushed limestone, as explained below.

The leading producing States, in descending order of tonnage, were Illinois, Pennsylvania, and New York; the total production of these three States was 46.9 Mt, or 50.9% of the total U.S. output (table 8). The leading producers, in descending order of tonnage, were Oldcastle, Material Services Corp., Hanson, Oglebay Norton Co., and Martin Marietta. Their combined total production was 46.3 Mt, or 48.5% of the U.S. dolomite total.

Granite.—The output of crushed granite increased by 5.8% to 256 Mt valued at \$1.83 billion compared with the revised 2003 totals (table 2). Crushed granite was produced by 123 companies at 359 operations with 336 quarries in 35 States. The leading States, in descending order of tonnage, were Georgia, North Carolina, Virginia, South Carolina, and California; the total production of these five States was 183 Mt, or 71.6% of the U.S. output (table 9). The leading producers, in descending order of tonnage, were Vulcan Materials, Martin Marietta, Hanson, Luck Stone, and Florida Rock Industries. Their combined total production was 159 Mt, or 62.1% of the U.S. granite total.

Limestone.—The 2004 output of crushed limestone, including some dolomite, increased by 4.6% to 1 Gt valued at \$5.7 billion compared with the revised 2003 total of 975 Mt valued at \$5.3 billion (table 2). Limestone was produced by 666 companies at 1,808 operations with 1,819 quarries in 45 States. In addition, 33 companies with 49 operations and 49 quarries reported producing limestone and dolomite from the same quarries. Their production of about 29 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, in descending order of tonnage, were Texas, Florida, Ohio, Pennsylvania, and Missouri; the total production of these five States was 418 Mt, or 41% of the total U.S. output (table 8). The leading producers of limestone, in descending order of tonnage, were Vulcan Materials, Martin Marietta, Hanson, Rinker Materials, and Lafarge. Their combined total production was 321 Mt, or 31.5% of the U.S. total.

Marble.—Production of crushed marble increased by 9.3% to 9.7 Mt valued at \$68.4 million compared with the totals for 2003 (table 2). Crushed marble was produced by 15 companies with 25 operations and 26 quarries in 15 States. The leading

producers of crushed marble, in descending order of tonnage, were Imerys Marble, Inc.; Omya, Inc.; Florida Rock Industries; Pluess Staufer Industries; and Vulcan Materials. Their combined total production represented 82.2% of the U.S. marble total.

Miscellaneous Stone.—Output of other kinds of crushed stone increased by 7.1% to 27.3 Mt valued at \$163 million compared with the revised 2003 totals (table 2). Miscellaneous stone was produced by 81 companies at 138 operations with 134 quarries in 31 States. The leading producing States, in descending order of tonnage, were Pennsylvania, California, Oregon, Texas, and Alaska; their combined production was 17.4 Mt, or 63.9% of the total U.S. output. Leading producers, in descending order of tonnage, were the U.S. Bureau of Land Management, Hanson, and the U.S. Forest Service. Their combined total production was 9.5 Mt, or 30.9% of the U.S. miscellaneous stone total.

Sandstone and Quartzite.—The output of crushed sandstone and quartzite decreased by 3.2% to 51.2 Mt valued at \$324 million compared with the revised 2003 totals (table 2). Crushed sandstone was produced by 98 companies with 120 quarries in 22 States, while quartzite was produced by 35 companies with 42 quarries in 19 States.

The leading producing States, in descending order of combined tonnage of sandstone and quartzite, were Pennsylvania, Arkansas, South Dakota, Oklahoma, and New York, and their combined total production was 29 Mt, or 56.6% of the U.S. output (table 9). The leading producers of sandstone and quartzite, in descending order of tonnage, were Martin Marietta, Lafarge, Ashland, Oldcastle, and New Enterprise Stone & Lime Co., Inc. Their combined total production was 18.5 Mt, or 36.1% of the U.S. sandstone and quartzite total.

Shell.—Shell is derived mainly from fossil reefs or oyster shell banks. The output of crushed shell decreased by 4% to 1.45 Mt valued at \$8.2 million compared with the 2003 totals (table 2). Crushed shell was produced by eight companies with seven quarries in six States. The leading producers, in descending order of tonnage, were Blackhawk Construction Co., Caloosa Shell Corp., and Langenfelder & Sons, Inc.

Slate.—The output of crushed slate increased by 4.8% to 3.5 Mt valued at \$26.8 million compared with the revised 2003 totals (table 2). Crushed slate was produced by 15 companies at 16 quarries in 11 States. Most of the crushed slate was produced in North Carolina. The leading producers, in descending order of tonnage, were Martin Marietta; NAPA Development Corp., Inc.; and McCartney Construction. Their combined total production was 2.6 Mt, or 74.8% of the U.S. slate total.

Traprock.—Production of crushed traprock increased by 9.6% to 126 Mt valued at \$887 million compared with the revised 2003 totals (table 2). Traprock was produced by 199 companies at 331 operations with 376 quarries in 23 States. The leading producing States, in descending order of tonnage, were Oregon, New Jersey, Virginia, California, and Massachusetts; these five States produced 72.7 Mt, or 57.7% of U.S. output (table 9). Leading producers, in descending order of tonnage, were Oldcastle, Luck Stone, Vulcan Materials, MDU Resource Group, Inc., and Stavola Inc. Their combined total production was 53.2 Mt, or 42.2% of the U.S. traprock total.

Volcanic Cinder and Scoria.—Production of volcanic cinder and scoria increased by 101% to 4.5 Mt valued at \$33.4 million compared with the revised 2003 total (table 2). Volcanic cinder and scoria were produced by 20 companies from 36 operations with 36 quarries in 13 States. Owing to the small numbers of companies (only one or two) operating in most States, no State totals could be published for those States, and therefore leading producing States could not be identified (table 11). The leading producers, in descending order of tonnage, were Wake Stone Corp., Martin Marietta, and Rinker Materials. Their combined production accounted for 70.1% of the U.S. volcanic cinder and scoria total.

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. The estimated production of nonrespondents is included in the "Unspecified, estimated" use.

In 2004, U.S. apparent consumption of crushed stone which is defined as U.S. production plus imports minus exports was 1.61 Gt, a 5.2% increase compared with the apparent consumption of 2003. Of the 1.61 Gt of crushed stone consumed, 580 Mt, or 36.5% of the total, was "Unspecified, reported," and 253 Mt, or 15.9% of the total, was "Unspecified, estimated." Of the remaining 757 Mt, reported by uses by producers, 83.7% was used as construction aggregates, mostly for highway and road construction and maintenance as well as residential construction, sewers, etc.; 13.4%, for chemical and metallurgical uses, including cement and lime manufacture; 1.5%, for agricultural uses; and 1.9%, for special and miscellaneous uses and products (table 13). Unspecified uses are not included in the calculation of the above percentages. It is recommended that, in any marketing analysis or use-pattern study, the quantities included in unspecified uses be prorated and added to the reported uses by applying the above percentages calculated for the reported quantities. Using this procedure, the analyst assumes that the breakdown by uses of the unspecified uses is similar to that of the reported uses.

In 2004, the free on board (f.o.b.) value of the U.S. consumption of crushed stone increased by 5.7% to \$9.68 billion which was lower than the 11.1% increase in the value of the total construction put in place to \$1,028 billion, as reported by the U.S. Census Bureau (2005§¹). The value of total private construction increased by 13.7% to \$798 billion, while the value of total public construction increased by only 2.7% to \$229 billion. The increases in the total value of the private construction were a reflection of continued low mortgage and general interest rates, while the slower growth recorded in the

¹A reference that includes a section mark (§) is found in the Internet Reference Cited section.

public construction sector was the result of limited availability of Federal and State funds for public projects.

In 2004, there was also a 6.6% increase in the U.S. consumption of portland cement to 117.3 Mt, compared to the 2003 total consumption of 110 Mt, another indication of increased construction activity at the national level.

Calcareous Marl.—Of the 3.7 Mt of crushed calcareous marl consumed, 1.5 Mt or 40.5% of the total was in "Unspecified, uses." Most of the remaining 2.2 Mt was used for cement manufacturing.

Dolomite.—Of the 95.5 Mt of crushed dolomite consumed, 35.1 Mt or 36.8% of the total, was in "Unspecified, reported" uses, and 7.2 Mt, or 7.5% of the total, was in "Unspecified, estimated" uses. Of the remaining 53.2 Mt of crushed dolomite reported by uses by the producers, 45.1, or 84.8%, was used as construction aggregates; 4.3 Mt, or 8%, was used for chemical and metallurgical applications; 1.5 Mt, or 2.9%, was used for special applications, and 1.3 Mt, or 2.4%, for agricultural uses. An additional undefined amount of dolomite consumed in a variety of uses, mostly construction aggregates, is reported with limestone (table 14).

Additional detailed information for total combined limestone and dolomite by State and major uses is provided in table 15.

Granite.—Of the 256 Mt of crushed granite consumed, 119 Mt, or 46.5%, was in "Unspecified, reported" uses, and 25.1 Mt, or 9.8%, was in "Unspecified, estimated" uses. Most of the remaining 111.7 Mt was used as construction aggregates (table 17).

Limestone.—Of the 1,020 Mt of crushed limestone consumed, 338 Mt, or 33.1% of the total, was in "Unspecified, reported" uses, and 178 Mt, or 17.5% of the total, was in "Unspecified, estimated" uses. Of the remaining 504 Mt of crushed limestone, reported by uses by the producers, 384.6 Mt, or 76.3%, was used as construction aggregates; 93.9 Mt, or 18.6%, was used for chemical and metallurgical applications, including cement and lime manufacturing; 10.6 Mt, or 2.1%, for special and miscellaneous uses and products; and 9.3 Mt or 1.8% for agricultural uses. The remaining 6.05 Mt or 1.2% was used in chemical stone, sugar refining, and refractory stone (table 14).

Marble.—Of the 9.7 Mt of crushed marble consumed, 1.8 Mt, or 18.8% of the total, was in "Unspecified, reported," and 4 Mt, or 40.7%, was in "Unspecified, estimated." Of the remaining 3.9 Mt of crushed marble reported by uses by the producers, 2.7 Mt, or 69.5%, was used as construction aggregates; 434,000 metric tons (t), or 11%, was used for chemical and metallurgical processes, 412,000 t, or 10.5%, was used for special uses including fillers and extenders, and 314,000 t, or 8%, for agricultural uses (table 16).

Miscellaneous Stone.—Of the 27.3 Mt of miscellaneous crushed stone consumed, 15.1 Mt, or 55.3% of the total, was in "Unspecified, reported" uses, and 6.2 Mt, or 22.7% of the total, was in "Unspecified, estimated" uses. Most of the remaining 5.9 Mt reported by uses by the producers was used as construction aggregates.

Sandstone and Quartzite.—Of the 36.3 Mt of crushed sandstone consumed, 15.3 Mt, or 42.2%, was in "Unspecified, reported" uses, and 10 Mt or 27.6%, in "Unspecified,

estimated." Most of the remaining 11 Mt of crushed sandstone reported by uses by the producers was used as construction aggregates (table 18).

Of the 14.9 Mt of crushed quartzite consumed in the United States, 6.6 Mt, or 44.4% of the total, was in "Unspecified, reported" uses, and 813,000 t, or 5.5% of the total, was in "Unspecified, estimated" uses. Most of the remaining 7.5 Mt of crushed quartzite reported by uses by the producers was used as construction aggregates (table 18).

Shell.—Of the 1.5 Mt of crushed shell consumed, 249,000 t, or 17.2%, was reported as "Unspecified, estimated" uses. Most of the remaining 1.2 Mt was used as construction aggregates.

Slate.—Of the 3.5 Mt of crushed slate consumed, 1.3 Mt, or 37.4% of the total, was in "Unspecified, reported" uses, and 1 Mt, or 27.1% of the total, was in "Unspecified, estimated" uses. Most of the remaining 1.3 Mt reported by uses by the producers was used as construction aggregates including roofing granules.

Traprock.—Of the 126 Mt of crushed traprock consumed, 44.7 Mt, or 35.5%, was in "Unspecified, reported" uses, and 19.8 Mt, or 15.7%, was in "Unspecified, estimated" uses. Most of the remaining 61.5 Mt was used as construction aggregates (table 17).

Volcanic Cinder and Scoria.—Of the 4.5 Mt of volcanic cinder and scoria consumed, 1.1 Mt, or 25.2% of the total, was in "Unspecified, reported" uses, and 405,000 t, or 9% of the total, was in "Unspecified, estimated" uses. Most of the remaining 3 Mt of crushed volcanic cinder and scoria was used as construction aggregates (table 19).

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 and asphalt aggregates and other 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 is recycled mostly at the construction sites. The annual survey of crushed stone producers collects information on recycling of cement and asphalt concretes produced by the crushed stone producers only. These amounts represent a small percentage of the total recycled cement and asphalt concretes because the recycling of these materials is done mostly by construction or demolition companies, and those companies are not surveyed by the USGS.

Asphalt Concrete.—A total of 2.3 Mt of asphalt concrete valued at \$14.6 million was recycled in 2004 by 62 companies in 27 States. The volume of recycled asphalt concrete increased by 51.7% compared with the revised 2003 total (tables 20, 21). The leading recycling geographic regions, in descending order of tonnage, were the Northeast with 811,000 t, the Midwest with 589,000 t, and the South, with 572,000 t (table 20). The leading recycling States, in descending order of tonnage, were Florida, New Jersey, Missouri, California, and Pennsylvania. Their

combined total represented 57.5% of the U.S. total. The leading recycling companies, in descending order of tonnage produced, were Vecellio & Grogan, Inc.; Stavola Construction Co.; and Fred Weber, Inc.

Cement Concrete.—A total of 3.3 Mt of cement concrete valued at \$21.4 million was recycled by 48 companies in 23 States. This tonnage represents a 17.6% decrease compared with the revised 2003 total (tables 22, 23). The leading recycling geographic regions, in descending order of tonnage, were the Midwest with 2.1 Mt, the West with 744,000 t, and the South with 532,000 t. The leading recycling States, in descending order of tonnage, were Illinois, California, Virginia, Wisconsin, and Colorado. Their combined total represented 82.2% of the U.S. total. The leading companies, in descending order of tonnage produced, were Vulcan Materials, Wingra Stone Co., and Raisch Products.

Prices

Prices in this chapter are the average annual f.o.b. 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. The average unit price of crushed stone increased by 1.4% to \$6.01 per metric ton compared with the revised unit price of 2003. The average unit prices, by kind of stone, increased by between 0.4% for crushed traprock, and 21.8% for crushed marble, and decreased between 0.5% for crushed dolomite and 15.5% for crushed volcanic cinder and scoria (table 2). It should be noted that a good number of companies report only production and no f.o.b. values of their production. For those operations, the unit values of total production or specific end uses are being estimated usually based on what other operations in the same State reported.

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 as well as in the USGS Minerals Yearbook, volume II, Area Reports: Domestic.

Transportation

For 902 Mt, or 56.7%, of the 1.59 Gt of crushed stone produced for consumption in 2004, no means of transportation was reported by the producers. Of the remaining 688 Mt of crushed stone, 548 Mt, or 79.7%, was reported as being transported by truck from the quarry or the processing plant to the first point of sale or use; 40.7 Mt, or 5.9%, by rail; and 28.1, Mt or 4.1%, by waterway. About 3.3% of the specified production was reported as not having been transported and, therefore, is assumed to have been used onsite (table 24).

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 couple of years and the increase in the volume of crushed stone going through these sites have had a positive impact on the industry as well as the communities they serve. Distribution sites located

near metropolitan areas significantly reduce the distance most trucks have to travel to pick up and deliver crushed stone. Therefore the transportation costs are reduced, as is the impact of heavy traffic on the environment. Sales yards serve both to distribute products and increasingly as recycling sites. This provides efficiency for the industry while helping to protect the environment.

Information regarding means of transportation used by the producers to ship crushed stone from the production site to the consumer in each geographic region is provided in table 24.

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. Shipments of crushed stone by water, especially from Canada, the Caribbean, and Mexico, continue to increase. U.S. imports and exports continue to be small, representing less than 1% of domestic consumption.

Exports.—Exports of crushed stone increased in 2004 by 26.7% to 1.3 Mt compared with the total of 1 Mt of 2003, and the value increased by 19.5% to \$54.5 million. Most of this increase is owing to a significant increase in the amount of limestone for cement manufacturing exported to Canada. In 2004, about 76.2% of the exported crushed stone was limestone for cement manufacturing valued at an average unit price of \$12.62 per ton, and 6.6% of the exported crushed stone was limestone used as construction aggregates valued at an average unit value of \$13.35 per ton (table 26).

Imports.—Imports of crushed stone increased by 4.6% to 16 Mt compared with those of 2003, and the value increased by 4.2% to \$149 million. About 77.4% of the imported crushed stone was limestone used as construction aggregates, as flux stone, and for cement manufacturing.

Imports of natural calcium carbonate fine decreased in value by 20.1% to \$286,000 in 2004 from \$358,000 in 2003 (table 27)

The total amount of imported crushed stone represents a very small volume compared with the total U.S. production. While imports of crushed stone are expected to increase in the future, they will continue to represent a very small percentage of total U.S. consumption.

Outlook

The demand for crushed stone in 2005 is expected to increase to about 1.65 Gt, or 3.8%, compared with 2004. Gradual increases in demand for construction aggregates are anticipated after 2005 based on the expected volume of work on the infrastructure that will be financed by the new Safe, Accountable, Flexible, and Efficient Transportation Equity Act of 2003, the new Flight 100—Century of Aviation Reauthorization Act, and the expanding U.S. economy in general. The long-term projected increases will be influenced by the construction activity in the public and private construction sectors as well as the new construction work related

to security measures being implemented around the Nation and reconstruction of some areas of the country devastated by natural disasters. Crushed stone f.o.b. prices are not expected to increase significantly, but the delivered prices of crushed stone are expected to increase, especially in and near metropolitan areas, mainly because more aggregates are transported from more distant sources.

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Stone, Crushed. Ch. in Industrial Minerals and Rocks, (6th ed.), Society for Mining, Metallurgy, and Exploration, Inc., 1994.

TABLE 1 SALIENT CRUSHED STONE STATISTICS¹

(Thousand metric tons and thousand dollars)

	2000	2001	2002	2003	2004
Sold or used by producers: ²					
Quantity	1,550,000	1,590,000	1,510,000	1,530,000	1,590,000
Value	8,290,000	8,870,000	8,650,000	9,060,000 ^r	9,590,000
Exports, value	29,700	35,600	54,000	45,600	54,500
Imports, value ³	105,000	110,000	124,000	143,000	149,000
-					

rRevised

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

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

³Excludes precipitated calcium carbonate.

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

		2003	1			2004		
		Quantity				Quantity		
	Number	(thousand	Value	Unit	Number	(thousand	Value	Unit
Kind	of quarries	metric tons)	(thousands)	value	of quarries	metric tons)	(thousands)	value
Limestone ³	1,855 ^r	975,000 ^r	\$5,330,000 °	\$5.46 ^r	1,868	1,020,000	\$5,660,000	\$5.57
Dolomite	215 ^r	95,700 ^r	571,000 ^r	5.96 ^r	211	95,500	567,000	5.93
Marble	26	8,890	51,300	5.77	26	9,720	68,400	7.03
Calcareous marl	6	5,120	18,500	3.62	7	3,740	16,100	4.30
Shell	7 ^r	1,510	9,390	6.24	7	1,450	8,240	5.67
Granite	341 ^r	242,000	1,730,000 ^r	7.16 ^r	336	256,000	1,830,000	7.16
Traprock	442 ^r	115,000	808,000 ^r	7.02 ^r	376	126,000	887,000	7.05
Sandstone and quartzite ⁴	163 ^r	52,900 ^r	341,000 ^r	6.44 ^r	162	51,200	324,000	6.32
Slate	15 ^r	3,370	24,500 ^r	7.27 ^r	16	3,530	26,800	7.58
Volcanic cinder and scoria	33	2,250 ^r	19,700 ^r	8.76 ^r	36	4,520	33,400	7.40
Miscellaneous stone	126 ^r	25,500 ^r	162,000 ^r	6.34 ^r	134	27,300	163,000	5.98
Total or average	XX	1,530,000	9,060,000 ^r	5.93 ^r	XX	1,590,000	9,590,000	6.01

^rRevised. XX Not applicable.

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

(Thousand metric tons and thousand dollars)

	20	003	20	004
Region/division	Quantity	Value	Quantity	Value
Northeast:				
New England	36,600 ^r	272,000 ^r	39,500	281,000
Middle Atlantic	183,000	1,130,000 ^r	190,000	1,170,000
Midwest:				
East North Central	267,000	1,310,000 ^r	284,000	1,410,000
West North Central	152,000	880,000 ^r	149,000	888,000
South:				
South Atlantic	378,000 ^r	2,530,000 ^r	411,000	2,810,000
East South Central	160,000 ^r	1,000,000	165,000	1,070,000
West South Central	204,000	1,020,000 ^r	199,000	984,000
West:				
Mountain	50,900 ^r	278,000 ^r	57,800	336,000
Pacific	97,600 ^r	643,000 ^r	97,900	640,000
Total or average	1,530,000	9,060,000 ^r	1,590,000	9,590,000

rRevised.

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.

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

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

 ${\rm TABLE}~4$ CRUSHED STONE SOLD OR USED BY PRODUCERS IN THE UNITED STATES, BY ${\rm STATE}^{1,\,2}$

		2003			2004	
	Quantity			Quantity		
	(thousand	Value	Unit	(thousand	Value	Unit
State	metric tons)	(thousands)	value	metric tons)	(thousands)	value
Alabama	49,300	\$286,000	\$5.80	49,100	\$303,000	\$6.17
Alaska ³	2,640	15,300	5.81	2,230	13,900	6.22
Arizona	9,950	49,100	4.94 ^r	11,100	57,200	5.16
Arkansas	29,700 ^r	145,000 ^r	4.87	32,900	161,000	4.89
California	55,500	371,000 ^r	6.69 ^r	55,400	365,000	6.60
Colorado	10,400	64,000 ^r	6.18	11,000	67,300	6.12
Connecticut	10,400	81,800	7.88	10,000	75,700	7.53
Florida	97,100 ^r	587,000 ^r	6.04 ^r	105,000	675,000	6.42
Georgia	75,200	519,000	6.91	79,500	544,000	6.85
Hawaii	5,620 ^r	65,400 ^r	11.63 ^r	5,190	58,900	11.34
Idaho	3,160	15,700	4.95	3,320	17,400	5.25
Illinois ⁴	76,000	453,000	5.96	76,500	465,000	6.08
Indiana	50,500	237,000 ^r	4.69 r	56,800	253,000	4.46
Iowa	35,600	207,000	5.82	36,800	215,000	5.85
Kansas	20,700 ^r	111,000	5.36 ^r	19,800	109,000	5.49
Kentucky	52,400 ^r	326,000 ^r	6.22 r	55,600	347,000	6.24
Louisiana ⁵	W	W	10.99	W	W	11.25
Maine	3,530 ^r	22,500 ^r	6.38 ^r	4,370	29,500	6.75
Maryland ⁶	26,200	165,000	6.28	29,900	185,000	6.19
Massachusetts	13,000	111,000	8.59	13,600	109,000	7.98
Michigan ⁷	33,600	123,000 ^r	3.67 ^r	35,800	140,000	3.91
Minnesota	9,880	61,800	6.25	10,900	68,300	6.27
Mississippi ⁸	2,850 ^r	33,900 ^r	11.90 ^r	2,760	34,200	12.40
Missouri	71,500 ^r	426,000 ^r	5.96 ^r	69,100	415,000	6.02
Montana	3,060	12,200 ^r	3.99 ^r	4,090	17,500	4.27
Nebraska	6,960	49,200	7.07	6,900	51,900	7.52
Nevada	7,830	48,500	6.20	9,760	72,800	7.46
New Hampshire	4,110	21,400	5.20	4,750	24,000	5.06
New Jersey	24,800	179,000 ^r	7.23 ^r	25,500	186,000	7.28
New Mexico	3,730 ^r	26,000 ^r	6.97 ^r	3,430	24,400	7.11
New York	53,700	352,000	6.56	52,700	349,000	6.62
North Carolina	67,100	505,000 ^r	7.52 ^r	72,300	548,000	7.59
North Dakota ⁹	W	W	4.44 ^r	W	W	3.97
Ohio	70,500	339,000 ^r	4.80 ^r	76,400	385,000	5.03
Oklahoma	40,100 ^r	193,000	4.80	40,200	195,000	4.84
Oregon	21,800 ^r	117,000 ^r	5.35 ^r	22,800	126,000	5.52
Pennsylvania	104,000 ^r	597,000	5.73 ^r	112,000	635,000	5.67
Rhode Island	1,340	10,700	8.00	1,600	12,400	7.74
South Carolina	27,300	184,000	6.75	31,300	210,000	6.70
South Dakota	6,880	24,700	3.58	5,370	27,000	5.03
Tennessee	55,100	354,000	6.42	57,900	382,000	6.59
	126,000	595,000 ^r	4.72 ^r	122,000	582,000	4.79
Texas Utah	7,820	40,100 ^r	5.12 ^r	8,020	44,900	5.59
						
Virginia	4,290 66,500 ^r	23,900 ^r	5.57 ^r	5,110 72,500	30,800 546,000	6.03
Virginia		481,000 ^r	7.23		546,000	7.54
Washington Wast Vincinia	12,000	73,700 ^r	6.14 ^r	12,300	76,100	6.19
West Virginia	14,100	69,100 ^r	4.91 ^r	14,700	73,100	4.98
Wisconsin	35,900 ^r	160,000 ^r	4.47 ^r	38,600	167,000	4.32
Wyoming	5,020 ^r	22,600 ^r	4.50 °	7,150	34,500	4.82
Other	12,500	108,000	8.64 r	10,100	76,100	7.57
Total or average	1,530,000	9,060,000 ^r	5.71 ^r	1,590,000	9,590,000	6.01

See footnotes at end of table.

TABLE 4—Continued

CRUSHED STONE SOLD OR USED BY PRODUCERS IN THE UNITED STATES, BY STATE $^{1,\,2}$

^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.

²To 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."

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

⁴Excludes sandstone

⁵A significant amount of sold or used material was shipped in from other States. Excludes sandstone, limestone, and miscellaneous stone.

⁶Excludes marble, shell, and traprock.

⁷Excludes calcareous marl and miscellaneous stone.

⁸A significant amount of sold or used material was shipped in from other States.

⁹Excludes granite and traprock (2003), limestone (2004), miscellaneous stone, volcanic cinder and scoria.

CRUSHED STONE SOLD OR USED BY PRODUCERS IN THE UNITED STATES IN 2004, BY QUARTER AND GEOGRAPHIC DIVISION $^{1,\,2}$

	Quantity,		Quantity,		Quantity,		Quantity,		Tc	Total ⁴
	1st quarter		2d quarter		3d quarter		4th quarter		Quantity	
	(thousand	Percentage	(thousand	Percentage	(thousand	Percentage	(thousand	Percentage	(thousand	Value
Region/division	metric tons)	change ³	metric tons)	(thousands)						
Northeast:										
New England	3,100	2.3	11,300	0.9	13,700	11.7	11,100	3.3	39,200	\$292,000
Middle Atlantic	23,900	24.3	56,400	8.1	69,400	14.8	49,500	-3.3	199,000	1,260,000
Midwest:	ı									
East North Central	37,200	29.9	81,300	11.4	95,300	7.5	79,400	3.3	293,000	1,490,000
West North Central	25,500	1.9	44,600	0.2	49,600	6.5	39,700	10.5	159,000	959,000
South:										
South Atlantic	86,100	18.3	109,000	10.2	109,000	1.9	104,000	9.0	409,000	2,840,000
East South Central	34,200	14.5	45,600	8.4	50,900	7.8	43,000	3.1	174,000	1,100,000
West South Central	43,100	1.4	48,300	-8.3	54,500	1.8	47,200	-1.0	193,000	1,010,000
West:	ı									
Mountain	10,200	11.4	15,200	-0.5	17,300	15.3	11,900	3.0	54,600	303,000
Pacific ⁵	17,700	-10.3	23,800	4.5	26,200	4.2	22,700	3.4	90,400	573,000
Total or average ⁴	288,000	13.3	438,000	0.9	484,000	6.1	413,000	4.2	1,650,000 ⁶	1,650,000 6 10,000,000 6

As published in the "Crushed Stone and Sand and Gravel in the Fourth Quarter of 2004" Mineral Industry Surveys.

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

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

⁴Data may not add to totals shown because of independent rounding and differences between projected totals by States and region.

⁵Does not include Alaska and Hawaii.

⁶Includes Alaska, Hawaii, and "Other" which are detailed in table 6.

 ${\rm TABLE}~6$ CRUSHED STONE SOLD OR USED BY PRODUCERS IN THE UNITED STATES IN 2004, BY QUARTER AND STATE $^{\rm 1,2}$

	Quantity,		Quantity,		Quantity,		Quantity,		Tot	al ⁺
	1st quarter		2d quarter		3d quarter		4th quarter		Quantity	
	(thousand	Percentage	(thousand	Percentage	(thousand	Percentage	(thousand	Percentage	(thousand	Value
State	metric tons)	change ³	metric tons)	change ³	metric tons)	change ³	metric tons)	change ³	metric tons)	(thousands)
Alabama	_ 11,800	13.9	13,300	5.3	13,900	-1.3	12,200	-0.7	51,100	\$303,000
Alaska	(5, 6)	(5, 6)	(5, 6)	(5, 6)	(5, 6)	(5, 6)	(5, 6)	(5, 6)	(5, 6)	(5, 6)
Arizona		(7)	(7)	(7)	(7)	(7)	(7)	(7)	10,700	53,800
Arkansas	_ 6,560	26.9	8,300	4.2	9,240	-1.4	7,650	2.2	31,800	158,000
California	_ 11,300	-7.9	14,100	-1.3	15,300	-0.3	14,000	2.6	54,700	368,000
Colorado	_ 1,630	-9.9	3,240	-9.7	3,470	12.1	2,280	21.3	10,600	66,900
Connecticut	_ 723	-3.8	2,880	-2.8	3,610	5.6	3,030	-6.7	10,200	82,000
Delaware		(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)
Florida	_ 26,500	12.8	27,000	1.7	26,000	-0.1	28,400	32.0	108,000	669,000
Georgia	18,200	15.7	20,600	6.9	20,700	-1.9	18,900	-1.2	78,400 ⁶	553,000
Hawaii	_ (5, 6)	(5, 6)	(5, 6)	(5, 6)	(5, 6)	(5, 6)	(5, 6)	(5, 6)	(5, 6)	(5, 6)
Idaho	_ 874	111.2	594	-48.7	773	10.9	1,020	14.3	3,260	16,500
Illinois	_ 9,260	15.7	19,900	-0.1	24,700	-2.5	22,600	-0.4	76,500 ⁶	464,000
Indiana	_ 8,280	26.5	16,300	15.9	19,200	22.9	14,200	-0.4	58,000	276,000
Iowa	4,330	20.5	11,200	-3.1	12,000	5.0	10,300	14.4	37,800	224,000
Kansas	4,230	7.5	5,480	-3.7	5,720	1.6	4,900	-8.9	20,300	111,000
Kentucky	9,950	13.3	15,400	9.0	18,700	16.9	14,800	1.4	58,900	372,000
Louisiana	(6, 7)	(6, 7)	(6, 7)	(6, 7)	(6, 7)	(6, 7)	(6, 7)	(6, 7)	(6, 7)	(6, 7)
Maine	_ 465	4.1	1,470	108.9	1,770	18.0	1,190	22.7	4,900	31,900
Maryland	4,950	35.0	8,480	16.2	8,580	15.7	7,820	0.1	29,800 6	191,000
Massachusetts	1,220	6.9	4,130	8.1	4,550	6.4	3,910	4.9	13,800	121,000
Michigan	3,430	49.4	11,000	12.9	12,300	1.2	10,200	8.4	36,900 ⁶	139,000
Minnesota		4.8	3,480	10.0	4,090	-1.7	2,330	10.0	10,400	66,400
Mississippi	(6, 7)	(6, 7)	(6, 7)	(6, 7)	(6, 7)	(6, 7)	(6, 7)	(6, 7)	2,230	24,100
Missouri	14,800	-3.0	21,200	6.9	23,800	13.5	18,800	16.1	78,500	484,000
Montana	(7)	(7)	(7)	(7)	(7)	(7)	(7)	(7)	3,220	12,400
Nebraska	1,180	-10.2	1,330	-32.8	2,100	6.3	1,930	14.2	6,540	47,200
Nevada	2,250	41.2	2,510	18.5	2,570	25.4	1,900	-8.3	9,220	58,300
New Hampshire	293	-12.0	1,380	-0.1	1,710	49.5	1,340	6.8	4,720	25,100
New Jersey	2,740	-6.4	6,610	-0.9	9,230	17.7	8,110	9.9	26,700	187,000
New Mexico	785	-5.9	1,110	12.9	1,040	-3.1	589	-31.9	3,530	25,000
New York	4,290	4.5	15,900	1.6	20,200	-1.1	10,700	-20.7	51,100	342,000
North Carolina	13,300	11.6	19,700	13.0	19,600	-2.5	18,700	6.6	71,400	568,000
North Dakota	(5, 6)	(5, 6)	(5, 6)	(5, 6)	(5, 6)	(5, 6)	(5, 6)	(5, 6)	(5, 6)	(5, 6)
Ohio	11,100	39.9	22,100	16.9	24,800	7.5	21,500	4.1	79,400	381,000
Oklahoma	9,710	14.4	9,240	-13.5	11,100	-3.0	9,660	0.1	39,700	195,000
Oregon	4,110	-16.7	6,430	22.6	7,340	10.3	5,350	1.0	23,200	126,000
Pennsylvania	18,200	41.9	34,400	15.5	40,100	28.8	32,000	3.9	125,000	729,000
Rhode Island	_ (7)		(7)	(7)			(7)		1,270	10,400
South Carolina	7,310	(7) 24.1	8,800	26.1	9,030	(7) 21.2	8,420	(7) 21.4	33,600	231,000
South Dakota	- 7,310 733	6.3	2,410	7.1	2,330	-6.6	1,610	11.0	7,080	25,900
	11,600	17.0	16,200	11.4	17,900	9.6	15,500	7.3	61,100	400,000
Tennessee	_			-5.9						659,000
Texas	_ 27,700	-3.2	32,200		35,700	9.0	31,000	1.4	127,000 9,140	
Utah Vermont	_ 1,660	28.0	2,560	23.1	3,220	23.9	1,700	-7.9		43,100
		(7)	(7)	(7)	(7)	(7)	(7)	(7)	4,020	21,500
Virginia	_ 14,400	31.7	20,400	12.3	20,800	2.9	19,400	8.7	75,000	553,000
Washington	_ 2,260	-10.4	3,400	0.9	3,710	16.5	3,340	14.1	12,700	79,400
West Virginia	_ 2,330	27.0	4,090	16.1	4,300	-3.7	3,760	-11.3	14,500	72,200
Wisconsin	_ 4,070	15.6	11,400	9.7	15,700	13.8	11,200	26.9	42,400	232,000
Wyoming	_ 798	3.8	1,450	0.7	1,800	14.5	1,230	-1.6	5,280	26,500
Other	XX	XX	XX	XX	XX	XX	XX	XX	13,000	114,000
Total	XX	XX	XX	XX	XX	XX	XX	XX	1,650,000	10,000,000

See footnotes at end of table.

XX Not applicable.

TABLE 7A $\label{eq:crushed} \mbox{CRUSHED STONE SOLD OR USED IN THE UNITED STATES IN 2004, } \\ \mbox{BY SIZE OF OPERATION}^1$

		U.S	. total	
			Quantity	
Size range	Number of	Percentage	(thousand	Percentage
(metric tons)	operations	of total	metric tons)	of total
Less than 25,000	382	12.2	3,200	0.2
25,000 to 49,999	225	7.2	7,620	0.5
50,000 to 99,999	291	9.3	19,600	1.2
100,000 to 199,999	422	13.5	56,900	3.6
200,000 to 299,999	300	9.6	68,300	4.3
300,000 to 399,999	239	7.6	75,400	4.7
400,000 to 499,999	186	5.9	75,600	4.7
500,000 to 599,999	156	5.0	77,900	4.9
600,000 to 699,999	146	4.7	86,500	5.4
700,000 to 799,999	98	3.1	66,700	4.2
800,000 to 899,999	82	2.6	63,600	4.0
900,000 to 999,999	88	2.8	75,800	4.8
1,000,000 to 1,499,999	251	8.0	280,000	17.5
1,500,000 to 1,999,999	114	3.6	178,000	11.1
2,000,000 to 2,499,999	53	1.7	105,000	6.6
2,500,000 to 4,999,999	- 79	2.5	240,000	15.1
5,000,000 and more	16	0.5	114,000	7.2
Total	3,128	100.0	1,590,000	100.0

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

¹As published in the "Crushed Stone and Sand and Gravel in the Fourth Quarter of 2004" Mineral Industry Surveys.

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

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

⁴Data may not add to totals shown because of independent rounding and differences between projected totals by States and regions.

⁵State not included in quarterly survey.

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

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

TABLE 7B CRUSHED STONE SOLD OR USED IN THE UNITED STATES IN 2004, BY REGION AND SIZE OF OPERATION $^{\rm l}$

		Nor	theast			Mic	dwest	
			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	24	5.9	244	0.1	130	12.8	1,310	0.3
25,000 to 49,999	16	4.0	552	0.2	87	8.6	2,900	0.7
50,000 to 99,999	23	5.7	1,630	0.7	128	12.6	8,360	1.9
100,000 to 199,999	47	11.6	6,360	2.8	152	15.0	20,700	4.8
200,000 to 299,999	38	9.4	8,630	3.8	108	10.6	24,800	5.7
300,000 to 399,999	46	11.4	14,200	6.2	73	7.2	23,300	5.4
400,000 to 499,999	34	8.4	13,700	5.9	56	5.5	22,700	5.2
500,000 to 599,999	38	9.4	19,300	8.4	36	3.5	17,800	4.1
600,000 to 699,999	25	6.2	15,000	6.5	52	5.1	30,700	7.1
700,000 to 799,999	16	4.0	10,900	4.7	22	2.2	15,000	3.5
800,000 to 899,999	12	3.0	9,170	4.0	21	2.1	16,300	3.8
900,000 to 999,999	9	2.2	7,730	3.4	21	2.1	18,100	4.2
1,000,000 to 1,499,999	41	10.1	44,500	19.4	65	6.4	72,600	16.7
1,500,000 to 1,999,999	16	4.0	24,700	10.8	28	2.8	43,500	10.0
2,000,000 to 2,499,999	8	2.0	15,800	6.9	12	1.2	23,800	5.5
2,500,000 to 4,999,999	11	2.7	32,700	14.2	21	2.1	65,000	15.0
5,000,000 and more	1	0.2	4,660	2.0	4	0.4	26,600	6.1
Total	405	100.0	230,000	100.0	1,016	100.0	433,000	100.0

		Sc	outh			W	est	
			Quantity				Quantity	
	Number of operations	Percentage of total	(thousand metric tons)	Percentage of total	Number of operations	Percentage of total	(thousand metric tons)	Percentage of total
Less than 25,000	68	6.1	540	0.1	160	27.1	1,110	0.7
25,000 to 49,999	53	4.7	1,810	0.2	69	11.7	2,360	1.5
50,000 to 99,999	70	6.3	4,850	0.6	70	11.9	4,720	3.0
100,000 to 199,999	131	11.7	18,200	2.3	92	15.6	11,600	7.5
200,000 to 299,999	111	9.9	25,200	3.3	43	7.3	9,660	6.2
300,000 to 399,999	89	8.0	28,000	3.6	31	5.3	9,910	6.4
400,000 to 499,999	69	6.2	28,400	3.7	27	4.6	10,800	7.0
500,000 to 599,999	63	5.6	31,500	4.1	19	3.2	9,280	6.0
600,000 to 699,999	59	5.3	34,900	4.5	10	1.7	5,850	3.8
700,000 to 799,999	48	4.3	32,700	4.2	12	2.0	8,060	5.2
800,000 to 899,999	43	3.8	33,500	4.3	6	1.0	4,650	3.0
900,000 to 999,999	52	4.7	44,700	5.8	6	1.0	5,230	3.4
1,000,000 to 1,499,999	121	10.8	137,000	17.6	24	4.1	26,100	16.8
1,500,000 to 1,999,999	62	5.6	97,100	12.5	8	1.4	12,400	8.0
2,000,000 to 2,499,999	26	2.3	51,300	6.6	7	1.2	14,000	9.0
2,500,000 to 4,999,999	42	3.8	128,000	16.5	5	0.8	14,400	9.2
5,000,000 and more	10	0.9	77,700	10.0	1	0.2	5,510	3.5
Total	1,117	100.0	775,000	100.0	590	100.0	156,000	100.0

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

TABLE 8 ${\it CRUSHED LIMESTONE AND DOLOMITE SOLD OR USED BY PRODUCERS } \\ {\it IN THE UNITED STATES IN 2004, BY STATE}^1$

(Thousand metric tons and thousand dollars)

	Lime	estone	Dolo	mite
State	Quantity	Value	Quantity	Value
Alabama	41,300	244,000	W	W
Arizona	5,630 ²	22,900 ²		
Arkansas	10,500	48,300	W	W
California	26,300 ²	124,000 ²	895	4,930
Colorado	1,800	10,800	W	W
Connecticut	W ²	\mathbf{W}^{2}	W	W
Florida	103,000 ²	663,000 ²	1,030	6,490
Georgia	8,450	60,100		
Hawaii	W	W		
Idaho	W	W		
Illinois	56,300 ²	335,000 ²	20,200	130,000
Indiana	48,900 ²	212,000 ²	7,900	41,600
Iowa	34,800 ²	202,000 2	W	W
Kansas	19,300	107,000		
Kentucky	54,600 ²	340,000 ²	W	W
Louisiana ³	W	W		
Maine	1,680	10,300		
Maryland	21,400 ²	132,000 ²		
Massachusetts	983 ²	15,300 ²	W	W
Michigan	27,900	105,000	7,860	35,300
Minnesota	4,300	24,300	W	W
Mississippi ³	2,760	34,200		
Missouri	64,200 ²	336,000 ²	3,060	16,800
Montana	2,960	13,600		
Nebraska	6,900	51,900		
Nevada	4,330	29,900	W	W
New Mexico	2,120	11,500		
New York	30,500 ²	194,000 ²	10,700	77,100
North Carolina	W	W	W	W
Ohio	69,400 ²	354,000 ²	6,570	28,000
Oklahoma	33,500 ²	163,000 ²		
Oregon	W	W		
Pennsylvania	65,500 ²	368,000 ²	16,000	89,800
Rhode Island	W	W		
South Carolina	6,410	32,600		
South Dakota	1,950	9,150		
Tennessee	55,600 ²	365,000 ²	W	W
Texas	116,000	552,000	W	W
Utah	3,810	25,700	W	W
Vermont	W ²	\mathbf{W}^{2}	W	W
Virginia	19,100 ²	137,000 ²	3,440	19,700
Washington	2,000 ²	12,700 ²	W	W
West Virginia	13,400	64,700		
Wisconsin	32,500 ²	139,000 ²	1,100	4,980
Wyoming	2,900 ²	14,700 ²	· 	
Other	12,800	97,900	16,800	112,000
Total	1,020,000	5,660,000	95,500	567,000
			/* * * * ·	.,

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.

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.

TABLE 9 CRUSHED GRANITE, TRAPROCK, AND SANDSTONE AND QUARTZITE SOLD OR USED BY PRODUCERS IN THE UNITED STATES IN 2004, BY STATE $^{\rm I}$

(Thousand metric tons and thousand dollars)

	Gra	anite	Tra	prock	Sandstone as	nd quartzite ²
State	Quantity	Value	Quantity	Value	Quantity	Value
Alabama	W	W			1,530	8,250
Alaska ³	W	W	W	W		
Arizona	3,030	17,700	W	W	W	W
Arkansas	9,620	45,200			10,500	56,100
California	11,400	91,100	11,800	102,000	1,650	15,900
Colorado	5,230	33,900			W	W
Connecticut	277	2,230	W	W		
Florida					W	W
Georgia	67,800	461,000			W	W
Hawaii			4,640	53,600		
Idaho	452	2,600	1,880	9,130	W	W
Illinois					W	W
Kansas					W	W
Louisiana ⁴					W	W
Maine	W	W			W	W
Maryland	8,320	52,500	W	W	W	W
Massachusetts	W	W	8,320	59,100		
Minnesota	W	W			W	W
Missouri	W	W	W	W	W	W
Montana	W	W	W	W	W	W
Nevada	W	W				
New Hampshire	1,840	8,750	2,900	15,200		
New Jersey	8,620	61,600	16,800	124,000		
New Mexico	W	W				
New York	W	W	W	W	2,070	17,700
North Carolina	51,800	396,000	7,280	53,500	W	W
North Dakota	W	W	W	W		
Ohio					W	W
Oklahoma	3,670	18,400			2,620	11,400
Oregon	W	W	19,100	107,000		
Pennsylvania	5,120	29,300	5,710	34,000	10,600	63,000
Rhode Island	W	W	W	W		
South Carolina	22,200	163,000				
South Dakota	W	W			3,170	17,000
Tennessee	W	W			W	W
Texas	W	W	W	W	1,030	5,290
Utah					767	4,870
Vermont	258	2,250			W	W
Virginia	30,200	237,000	16,700	128,000	W	W
Washington	W	W	8,260	52,600	W	W
West Virginia					1,330	8,460
Wisconsin	1,820	7,570	1,780	9,030	W	W
Wyoming	W	W	W	W		
Other	24,200	203,000	20,600	139,000	15,900	116,000
Total	256,000	1,830,000	126,000	887,000	51,200	324,000

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.

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

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

⁴A significant amount of sold or used material was shipped in from other States.

TABLE 10 CRUSHED CALCAREOUS MARL AND MARBLE SOLD OR USED BY PRODUCERS IN THE UNITED STATES IN 2004, BY STATE $^{\rm I}$

(Thousand metric tons and thousand dollars)

	Calcareo	us marl	Mar	ble
State	Quantity	Value	Quantity	Value
Alabama			W	W
Arizona			W	W
California			W	W
Colorado			W	W
Georgia			W	W
Maryland			W	W
Michigan	W	W		
Montana			W	W
New York			W	W
North Carolina	W	W		
Pennsylvania			178	1,090
South Carolina	2,230	9,920	W	W
Texas	W	W	W	W
Vermont			W	W
Virginia			W	W
Washington			W	W
Wyoming			W	W
Other	1,500	6,150	9,550	67,300
Total	3,740	16,100	9,720	68,400

W Withheld to avoid disclosing company proprietary data, included in "Other." -- Zero.

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

 ${\it TABLE~11}$ CRUSHED VOLCANIC CINDER AND SCORIA AND CRUSHED MISCELLANEOUS STONE SOLD OR USED BY PRODUCERS IN THE UNITED STATES IN 2004, BY STATE 1

(Thousand metric tons and thousand dollars)

	Volcanic cind	er and scoria	Miscellane	eous stone
State	Quantity	Value	Quantity	Value
Alabama			W	W
Alaska ²			1,760	10,300
Arizona	W	W	1,310	6,480
Arkansas			801	3,870
California	172	1,970	2,880	22,000
Colorado	W	W	W	W
Connecticut			W	W
Hawaii	W	W	W	W
Idaho			148	800
Maine			W	W
Maryland			W	W
Massachusetts			W	W
Michigan			W	W
Montana	W	W	W	W
Nevada	W	W	W	W
New Jersey			W	W
New Mexico	196	1,520	W	W
New York			W	W
North Carolina	W	W	W	W
North Dakota	W	W	W	W
Oklahoma			W	W
Oregon	41	203	2,420	11,900
Pennsylvania			8,160	46,800
Texas			2,220	10,800
Utah	W	W	576	3,660
Virginia			W	W
Washington	W	W	W	W
Wyoming	W	W	1,430	7,510
Other	4,110	29,700	5,550	38,800
Total	4,520	33,400	27,300	163,000

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.

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

 ${\it TABLE~12}$ KIND OF CRUSHED STONE PRODUCED AND/OR DISTRIBUTED IN THE UNITED STATES IN 2004, BY STATE

Alaska ¹ Arizona Arkansas California	Limestone X	Dolomite X	Marble	marl								
Alaska ¹ Arizona Arkansas California		X		111411	Shell	Granite	Traprock	Sandstone	Quartzite	Slate	scoria	Miscellaneou
Arizona Arkansas California	v		X			X		X		X		X
Arkansas California	37				X	X	X					X
California	X		X			X	X	X	X		X	X
	X	X				X		X	X	X		X
	X	X	X		X	X	X	X	X	X	X	X
Colorado	X	X	X			X		X	X		X	X
Connecticut	X	X				X	X					X
Florida	X	X			X			X				
Georgia	X		X			X			X			
Hawaii	X						X				X	X
Idaho	X				X	X	X		X			X
Illinois	X	X						X				X
Indiana	X	X										
Iowa	X	X										
Kansas	X								X			
Kentucky	X	X										
Louisiana	X	71						X				X
Maine	X					X		Λ	X	X		X
Maryland	X		X		X	X	X	X	Λ	Λ		X
Massachusetts	X	X	Λ		Λ	X	X	Λ				X
		X		X		Λ	Λ					X
Michigan	X			Λ		37			37			X
Minnesota	X	X				X			X			
Mississippi	X											
Missouri	X	X				X	X	X				
Montana	X		X			X	X	X	X		X	X
Nebraska	X											
Nevada	X	X				X					X	X
New Hampshire						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	X
Ohio	X	X						X				
Oklahoma	X					X		X	X			X
Oregon	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	X		
Tennessee	X	X				X		X				
Texas	X	X	X	X	X	X	X	X	X			X
Utah	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	71	X	X	X
West Virginia	X	Λ	Λ			Λ	Λ	X		Λ	Λ	Α
Wisconsin	X	X				X	X	X	X			X
Wyoming	X	Λ	X			X	X	Λ	Λ		X	X

¹Data 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 2004, BY USE $^{\rm I}$

	Quantity		
	(thousand	Value	Unit
Use	metric tons)	(thousands)	valu
Construction:			
Coarse aggregate (+1½ inch):	_		
Macadam	5,000	\$32,600	\$6.5
Riprap and jetty stone	15,400	139,000	9.0
Filter stone	6,760	48,800	7.2
Other coarse aggregate	20,400	130,000	6.3
Coarse aggregate, graded:	_		
Concrete aggregate, coarse	75,700	579,000	7.6
Bituminous aggregate, coarse	53,800	423,000	7.8
Bituminous surface-treatment aggregate	14,300	115,000	8.0
Railroad ballast	10,400	77,500	7.4
Other graded coarse aggregate	78,400	595,000	7.0
Fine aggregate $(-\frac{3}{8})$ inch:			
Stone sand, concrete	16,000	110,000	6.8
Stone sand, bituminous mix or seal	14,300	91,900	6.4
Screening, undesignated	21,300	127,000	5.9
Other fine aggregate	36,600	244,000	6.
Coarse and fine aggregates:			
Graded road base or subbase	137,000	782,000	5.
Unpaved road surfacing	13,300	80,800	6.0
Terrazzo and exposed aggregate	1,270	16,100	12.
Crusher run or fill or waste	24,400	131,000	5
Roofing granules	4,430	73,500	16.
Other coarse and fine aggregates	80,100	505,000	6.3
Other construction materials ²	4,960	27,500	5.5
Agricultural:			
Agricultural limestone		62,600	6.9
Poultry grit and mineral food	1,450	12,800	8.8
Other agricultural uses	602	4,690	7.
Chemical and metallurgical:	_		
Cement manufacture	82,500	335,000	4.0
Lime manufacture	11,700	90,900	7.
Dead-burned dolomite manufacture	W	W	5.
Flux stone	4,700	22,500	4.
Chemical stone	W	W	11.3
Glass manufacture	604	4,090	6.
Sulfur oxide removal		11,100	5.3
Special:			
Mine dusting or acid water treatment	178	921	5.1
Asphalt fillers or extenders	1,190	10,200	8.3
Whiting or whiting substitute	115	1,480	12.8
Other fillers or extenders	3,500	30,100	8.6
Other miscellaneous uses:			
Chemicals	W	W	30.8
Lightweight aggregrate (slate)	150	3,400	22.6
Flour (slate)	W	W	50.7
Refractory stone	W	W	2.3
Sugar refining	W	W	5.5
Other specified uses not listed	8,930	54,100	6.0
Unspecified: ³	_		
Reported	580,000	3,240,000	5.5
Estimated	253,000	1,370,000	5.4
Total or average	1,590,000	9,590,000	6.0

See footnotes at end of table.

TABLE 13—Continued CRUSHED STONE SOLD OR USED BY PRODUCERS IN THE UNITED STATES IN 2004, BY USE $^{\rm I}$

TABLE 14 CRUSHED LIMESTONE AND DOLOMITE SOLD OR USED BY PRODUCERS IN THE UNITED STATES IN 2004, BY USE $^{\rm I}$

(Thousand metric tons and thousand dollars)

	Limes	tone ²	Dolomite	
Use	Quantity	Value	Quantity	Value
Construction:				
Coarse aggregate (+1½ inch):				
Macadam	2,940	18,500	1,560	11,100
Riprap and jetty stone	8,030	57,700	1,620	16,400
Filter stone	2,940	19,500	1,430	9,240
Other coarse aggregate	13,200	81,000	512	3,490
Coarse aggregate, graded:				
Concrete aggregate, coarse	41,400	288,000	5,880	37,700
Bituminous aggregate, coarse	31,900	239,000	4,550	33,400
Bituminous surface-treatment aggregate	5,620	40,500	2,030	16,900
Railroad ballast	1,450	9,040	853	5,120
Other graded coarse aggregate	62,200	463,000	3,150	21,200
Fine aggregate (-3/8 inch):				
Stone sand, concrete	6,380	42,500	1,360	7,240
Stone sand, bituminous mix or seal	5,840	39,000	1,450	8,480
Screening, undesignated	11,300	62,900	1,490	5,520
Other fine aggregate	31,400	209,000	907	6,540
Coarse and fine aggregates:				
Graded road base or subbase	82,500	433,000	7,940	39,500
Unpaved road surfacing	9,280	55,900	1,050	4,980
Terrazzo and exposed aggregate	73	497	W	W
Crusher run or fill or waste	15,800	83,100	1,820	10,300
Roofing granules	529	3,480	W	W
Other coarse and fine aggregates	48,200	288,000	7,170	38,900
Other construction materials ³	3,570	20,000	345	1,380
Agricultural:				
Agricultural limestone	7,660	47,400	1,300	15,200
Poultry grit and mineral food	1,420	12,100		
Other agricultural uses	242	2,250	W	W
Chemical and metallurgical:				
Cement manufacture	79,300	321,000		
Lime manufacture	9,900	82,800	1,850	8,090
Dead-burned dolomite manufacture			W	W
Flux stone	2,260	5,610	2,420	10,400
Chemical stone	W	W		
Glass manufacture	391	3,050		
Sulfur oxide removal	2,090	16,200		
See footnotes at end of table				

See footnotes at end of table.

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

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

²Includes building products, drain fields, and pipe bedding.

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

$\label{thm:continued} TABLE~14\\ --Continued$ CRUSHED LIMESTONE AND DOLOMITE SOLD OR USED BY PRODUCERS IN THE UNITED STATES IN 2004, BY USE 1

(Thousand metric tons and thousand dollars)

	Lime	stone ²	Dolomite	
Use	Quantity	Value	Quantity	Value
Special:				
Mine dusting or acid water treatment	178	2,200		
Asphalt fillers or extenders	654	7,780	531	2,910
Whiting or whiting substitute	99	6,140	W	W
Other fillers or extenders	1,900	30,900	987	7,040
Other miscellaneous uses:				
Chemicals	34	1,040		
Refractory stone (including ganister)	W	W		
Sugar refining	W	W		
Other specified uses not listed	7,740	45,300	W	W
Unspecified: ⁴				
Reported	338,000	1,720,000	35,100	200,000
Estimated	178,000	919,000	7,190	39,100
Total or average	1,020,000	5,660,000	95,500	567,000

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

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.

³Includes building products and pipe bedding.

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

 ${\it TABLE~15}$ CRUSHED LIMESTONE AND DOLOMITE SOLD OR USED BY PRODUCERS IN 2004, BY STATE AND USE $^{\rm I}$

(Thousand metric tons and thousand dollars)

	Concrete	aggregate	Bituminou	s aggregate	Roadstone a	nd coverings	Riprap and railroad ballast		Other constr	uctions uses
State	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Alabama	3,790	21,700	10,200	66,200	3,170	19,200	151	1,030	6,530	41,900
Arizona									W	W
Arkansas	703	4,180	945	6,150	2,280	12,100	119	719	1,270	5,460
California	W	W	146	1,170	381	2,680	33	402	416	3,160
Colorado					W	W	W	W	W	W
Connecticut	W	W	W	W	W	W			W	W
Florida	16,600	126,000	14,200	155,000	17,700	80,100	240	2,070	4,870	28,600
Georgia	W	W	W	W	W	W	W	W	W	W
Hawaii										
Idaho					W	W			W	W
Illinois	12,000	85,700	12,000	87,900	19,000	105,000	2,600	25,000	6,490	32,200
Indiana	4,340	20,500	6,000	28,200	5,080	26,200	833	4,990	2,360	12,400
Iowa	895	7,750	436	3,130	3,290	21,800	102	1,080	1,820	10,000
Kansas	W	W	484	3,870	972	4,630	128	1,290	954	6,110
Kentucky	3,790	25,800	10,100	77,700	5,380	37,200	218	1,910	6,170	42,700
Louisiana ²	W	W	W	W	W	W			W	W
Maine	W	W			W	W			281	2150
Maryland	835	5,410	864	6,650	1,670	13,000	256	1,660	3,480	19,900
Massachusetts		·			W	W			335	5,030
Michigan	4,690	23,000	1,710	8,630	4,560	18,800	471	3790	1,380	5,810
Minnesota	195	1,190	1,050	8,690	497	2,940	57	846	2,330	14,000
Mississippi ²	W	W	W	W	W	W			W	W
Missouri	3,340	21,800	5,410	33,200	5,490	31,600	204	1,310	6,010	29,900
Montana	W	W	·	·	W	W	W	W	16	76
Nebraska	W	W	W	W	W	W	W	W	W	W
Nevada					W	W				
New Mexico	128	1260	W	W	112	603	W	W	W	W
New York	2,780	24,100	3,850	32,600	2,820	20,200	156	1,260	7,920	50,500
North Carolina	W	W	W	W	W	W	W	W	W	W
Ohio	3,560	18,100	4,060	22,700	6,450	32,900	2,720	13,900	4,340	22,800
Oklahoma	825	4,960	10,500	59,500	423	2,360	248	1,680	6,460	29,200
Oregon										
Pennsylvania	3,900	26,200	9,490	59,300	4,200	24,500	756	5,310	6,660	34,200
Rhode Island		,								
South Carolina	W	W	W	W	W	W			W	W
South Dakota										
Tennessee	4,260	34,400	14,200	103,000	12,800	74,500	1,280	8,890	5,840	38,200
Texas	14,100	89,300	5,630	47,700	10,500	45,000	266	1,800	11,200	52,700
Utah					W	W	W	W	W	W
Vermont	W	W	W	W	W	W			W	W
Virginia	1,900	13,800	2,760	29,500	2,010	12,500	218	2,000	2,400	15,300
Washington	W	W	W	W	W	W	W	W		
West Virginia	148	913	448	2,470	400	2,210	101	658	389	2,030
Wisconsin	1,690	9,860	602	3,290	6,440	34,300	298	2040	2,060	12,100
Wyoming	W	y,660 W	W	3,270 W	W	¥,300	W	W	2,000 W	W
Total	84,500	566,000	115,000	845,000	116,000	624,000	11,500	83,600	92,000	516,000
Total withheld	2,800	25,400	2,860	26,100	3,330	23,400	499	4,710	2,820	27,400
Grand total	87,300	591,000	118,000	871,000	119,000	648,000	11,900	88,300	94,800	544,000
Granu total	07,500	371,000	110,000	071,000	117,000	0-0,000	11,700	30,500	77,000	577,000

See footnotes at end of table.

${\it TABLE~15--Continued}$ CRUSHED LIMESTONE AND DOLOMITE SOLD OR USED BY PRODUCERS IN 2004, BY STATE AND USE $^{\rm l}$

(Thousand metric tons and thousand dollars)

	Cement m	anufacture	Agricultu	ıral uses	Lime ma	anufacture	Oth	ner uses	To	otal
State	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Alabama	2,550	6,180	323	2,180	W	W	15,600	91,300	(3)	(3)
Arizona	W	W	W	W	W	W	2,380	9,090	5,630 4	22,900 4
Arkansas			129	696			6,370	25,700	(3)	(3)
California	7,150	26,100	164	2,670			18,900	92,400	27,200 4	129,000 4
Colorado	W	W	W	W			1,270	7,380	(3)	(3)
Connecticut							1,620	12,800	(3) 4	(3) 4
Florida	4,960	22,100	401	2,820			45,200	253,000	104,000 4	669,000 4
Georgia	W	W	W	W			4,060	26,400	8,450	60,100
Hawaii							W	W	(3)	(3)
Idaho	W	W	W	W			W	W	(3)	(3)
Illinois	W	W	2,250	8,440	W	W	20,000	103,000	76,500 ⁴	465,000 4
Indiana	W	W	1,210	5,260			36,000	152,000	56,800 ⁴	253,000 4
Iowa			880	5,390	W	W	28,900	164,000	(3) 4	(3) 4
Kansas	1,910	12,000	24	114			14,800	78,400	19,300	107,000
Kentucky		,	397	2,050			29,600	160,000	(3) 4	(3) 4
Louisiana ²							W	W	(3)	(3)
Maine	W	W			W	W	W	W	1,680	10,300
Maryland	W	W					13,400	79,500	21,400 4	132,000 4
Massachusetts			W	W	W	W	325	7,480	(3) 4	(3) 4
Michigan	W	W	242	1500	W	W	16,600	63,800	35,800	140,000
Minnesota			162	919			3,670	20,900	(3)	(3)
Mississippi ²	W	W	W	W			846	7,830	2,760	34,200
Missouri	5,960	23,400	418	1,970	W	W	40,300	208,000	67,300 ⁴	352,000 ⁴
	3,900 W	23,400 W	W	1,970 W	W	W	1,770	5,980	2,960	13,600
Montana Nebraska	W	W	342	3,960			3,440	22,800	6,900	51,900
	W	W	342 W	3,900 W	 W/	 W/	1,890			
Nevada New Maying					W	W	1,370	7,600	(3) 2,120	(3) 11,500
New Mexico	4 220			 672				7,950		
New York	4,320	22,500	90	673			19,200	120,000	41,100 4	271,000 4
North Carolina				2.520			W	W	(3)	(3)
Ohio	W	W	633	3,520	W	W	47,500	233,000	75,900 ⁴	382,000 ⁴
Oklahoma	2,710	9,450	83	605	W	W	11,900	53,200	33,500 4	163,000 4
Oregon	W	W				2.500	W	W	(3)	(3)
Pennsylvania	7,270	26,900	971	9,840	618	2,580	47,700	269,000	81,600 4	457,000 4
Rhode Island			W	W			W	W	(3)	(3)
South Carolina	W	W					2,680	17,000	6,410	32,600
South Dakota	W	W					W	W	1,950	9,150
Tennessee	W	W	279	2,110	W	W	16,200	95,000	(3) 4	(3) 4
Texas	10,700	33,600	397	3,410	W	W	61,800	274,000	(3)	(3)
Utah	W	W	13	368	W	W	3,260	13,400	(3)	(3)
Vermont							1,870	12,700	(3) 4	(3) 4
Virginia	1,680	5,550	564	4,590	W	W	10,900	72,600	22,500 4	156,000 4
Washington	W	W	W	W	W	W	1,920	11,500	(3) 4	(3) 4
West Virginia			W	W			11,900	56,300	13,400	64,700
Wisconsin	W	W	337	3,250			21,900	79,300	33,600 4	144,000 4
Wyoming	W	W					W	W	2,900 4	14,700 4
Total	49,200	188,000	10,300	66,300	618	2,580	567,000	2,910,000	XX	XX
Total withheld	30,100	133,000	316	10,600	11,500	90,600	11,000	78,400	XX	XX
Grand total	79,300	321,000	10,600	77,000	12,200	93,200	578,000	2,990,000	1,110,000	6,230,000

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

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

³Withheld to avoid disclosing company proprietary data; included in "Grand total."

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

TABLE 16 ${\it CRUSHED MARBLE SOLD OR USED BY PRODUCERS IN } \\ {\it THE UNITED STATES IN 2004, BY USE}^1$

(Thousand metric tons and thousand dollars)

Use	Quantity	Value
Construction:		
Coarse aggregate (+1½ inch):	_	
Macadam	W	W
Riprap and jetty stone	W	W
Filter stone	W	W
Other coarse aggregate	14	124
Coarse aggregate, graded:		
Concrete aggregate, coarse	W	W
Bituminous aggregate, coarse	W	W
Bituminous surface-treatment aggregate	18	107
Other graded coarse aggregate	38	343
Fine aggregate $(-\frac{3}{8}$ inch):		
Stone sand, concrete	W	W
Screening, undesignated	_ W	W
Other fine aggregate	37	205
Coarse and fine aggregates:	_	
Graded road base or subbase	_ 280	1,790
Terrazzo and exposed aggregate	61	1,140
Crusher run or fill or waste	_ 24	131
Other coarse and fine aggregates	1,860	23,800
Other construction materials	8	52
Agricultural, other agricultural uses	314	2,250
Chemical and metallurgical, cement manufacture	_ 434	1,290
Special, other fillers or extenders	412	3,170
Other miscellaneous uses and other specified uses not listed	39	213
Unspecified: ²	_	
Reported	1,830	10,300
Estimated	3,960	20,000
Total	9,720	68,400

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

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

 $^{^2\}mbox{Reported}$ 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 2004, BY USE $^{\rm I}$

(Thousand metric tons and thousand dollars)

	Gra	anite	Traprock	
Use	Quantity	Value	Quantity	Value
Construction:				
Coarse aggregate (+1 ½ inch):				
Macadam	281	1,330	187	1,260
Riprap and jetty stone	3,570	41,500	1,120	12,100
Filter stone	807	7,060	1,170	10,200
Other coarse aggregate	5,020	33,200	1,300	9,310
Coarse aggregate, graded:				
Concrete aggregate, coarse	19,000	171,000	7,180	63,800
Bituminous aggregate, coarse	11,500	102,000	3,520	27,100
Bituminous surface-treatment aggregate	3,090	28,800	2,860	22,700
Railroad ballast	4,930	36,100	2,150	18,300
Other graded coarse aggregate	6,740	59,400	3,880	32,900
Fine aggregate $(-\frac{3}{8})$ inch):				
Stone sand, concrete	5,580	36,900	2,190	19,800
Stone sand, bituminous mix or seal	3,710	23,600	2,060	13,000
Screening, undesignated	4,240	28,200	3,590	26,400
Other fine aggregate	1,800	10,700	499	4,970
Coarse and fine aggregates:				
Graded road base or subbase	25,500	170,000	14,300	97,200
Unpaved road surfacing	722	5,560	1,900	12,000
Terrazzo and exposed aggregate	668	8,690	107	1,050
Crusher run or fill or waste	3,620	19,900	2,300	12,400
Roofing granules	3,290	66,300	369	2,570
Other coarse and fine aggregates	7,650	48,500	10,300	70,600
Other construction materials	21	192	157	721
Agricultural, other agricultural uses	24	97		
Special:				
Asphalt fillers or extenders			1	2
Other fillers or extenders			17	168
Other miscellaneous uses and specified uses not listed	15	84	11	392
Unspecified: ²				
Reported	119,000	786,000	44,700	294,000
Estimated	25,100	148,000	19,800	133,000
Total	256,000	1,830,000	126,000	887,000

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

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

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

TABLE 18 CRUSHED SANDSTONE AND QUARTZITE SOLD OR USED BY PRODUCERS IN THE UNITED STATES IN 2004, BY USE $^{\rm 1,2}$

(Thousand metric tons and thousand dollars)

	Sand	stone	Quartzite	
Use	Quantity	Value	Quantity	Value
Construction:				
Coarse aggregate (+1½ inch):	<u> </u>			
Riprap and jetty stone	265	2,330	116	1,200
Filter stone	187	1,120	58	600
Other coarse aggregate	234	1,610	124	821
Coarse aggregate, graded:				
Concrete aggregate, coarse	596	4,090	447	3,450
Bituminous aggregate, coarse	1,100	10,600	650	5,910
Bituminous surface-treatment aggregate	166	1,180	255	2,610
Railroad ballast	45	289	736	5,410
Other graded coarse aggregate	1,050	9,100	926	6,790
Fine aggregate (- ³ / ₈ inch):				
Stone sand, concrete	253	1,640	W	W
Stone sand, bituminous mix or seal	690	4,350	389	2,810
Screening, undesignated	351	1,880	W	W
Other fine aggregate	918	6,910	1,040	5,530
Coarse and fine aggregates:				
Graded road base or subbase	2,910	20,000	828	6,440
Unpaved road surfacing	145	1,110	W	W
Terrazzo and exposed aggregate			W	W
Crusher run or fill or waste	392	2,110	138	844
Roofing granules	W	W		
Other coarse and fine aggregates	1,120	7,410	527	2,690
Other construction materials ³	122	1,090		
Agricultural:				
Poultry grit and mineral food			W	W
Other agricultural uses			8	15
Chemical and metallurgical:				
Cement manufacture	W	W	67	762
Flux stone	W	W		
Glass manufacture	W	W		_
Special, other fillers or extenders			W	W
Other miscellaneous uses:				
Refractory stone			(4)	W
Other specified uses not listed		448	517	4,130
Unspecified: ⁵			51,	.,
Reported	15,300	95,500	6,610	34,700
Estimated	10,000	52,400	813	5,550
Total	36,300	227,000	14,900	96,700

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

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

 $^{^2 \}mbox{Includes}$ sandstone-quartzite reported with no distinction between the two kinds of stone.

³Includes drain fields.

⁴Less than ½ unit.

⁵Reported 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 2004, BY USE $^{\rm I}$

(Thousand metric tons and thousand dollars)

	Volcanic cind	ler and scoria	Miscellaneous stone		
Use	Quantity	Value	Quantity	Value	
Construction:					
Coarse aggregate (+1½ inch):					
Riprap and jetty stone	W	W	556	6,690	
Filter stone	W	W	125	728	
Other coarse aggregate	(2)	5	76	442	
Coarse aggregate, graded:					
Concrete aggregate, coarse	W	W	350	2,900	
Bituminous aggregate, coarse			294	2,260	
Bituminous surface-treatment aggregate			209	2,030	
Railroad ballast	W	W	W	W	
Other graded coarse aggregate	105	930	47	367	
Fine aggregate $(-3/8)$ inch):					
Stone sand, concrete	W	W	134	846	
Stone sand, bituminous mix or seal			W	W	
Screening, undesignated	145	1,090	113	711	
Other fine aggregate			5	41	
Coarse and fine aggregates:					
Graded road base or subbase	W	W	861	4,060	
Unpaved road surfacing	W	W	46	298	
Terrazzo and exposed aggregate	W	W			
Crusher run or fill or waste			327	2,590	
Other coarse and fine aggregates	933	5,960	1,940	16,800	
Other construction materials			33	167	
Agricultural, other agricultural uses	6	31			
Chemical and metallurgical, cement manufacture			355	1,520	
Special, other fillers or extenders			7	109	
Other miscellaneous uses and other specified uses not listed	44	356	2	10	
Unspecified: ³					
Reported	1,140	7,010	15,100	80,900	
Estimated	405	2,940	6,200	35,500	
Total	4,520	33,400	27,300	163,000	

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

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

²Less than ½ unit.

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

 ${\it TABLE~20}$ RECYCLED ASPHALT SOLD OR USED BY PRODUCERS IN THE UNITED STATES, BY GEOGRAPHIC DIVISION $^{\rm I}$

		2003			2004	
	Quantity			Quantity		
	(thousand	Value	Unit	(thousand	Value	Unit
Region/division	metric tons)	(thousands)	value	metric tons)	(thousands)	value
Northeast:						
New England	216 ^r	\$1,310 °	\$6.08 r	172	\$967	\$5.62
Middle Atlantic	600	5,010	8.36	639	4,000	6.26
Midwest:						
East North Central	164	1,050	6.40	260	1,710	6.57
West North Central	75	336	4.48	329	1,790	5.45
South:						
South Atlantic	9	100	11.11	357	2,360	6.62
East South Central	54	1,080	20.00	72	781	10.85
West South Central	60	281	4.68	143	770	5.38
West:						
Mountain	12	88 ^r	7.33 ^r	9	57	6.33
Pacific	315 ^r	2,140 ^r	6.81 ^r	311	2,130	6.84
Total or average	1,510 ^r	11,400 ^r	7.57 ^r	2,290	14,600	6.35

Revised.

 ${\it TABLE~21}$ RECYCLED ASPHALT SOLD OR USED BY PRODUCERS IN THE UNITED STATES, BY STATE $^{\rm l}$

		2003			2004	
	Quantity			Quantity		
	(thousand	Value	Unit	(thousand	Value	Unit
State	metric tons)	(thousands)	value	metric tons)	(thousands)	value
Alabama				45	\$250	\$5.55
Alaska				2	33	16.50
Arkansas	1	\$6	\$6.00			
California	285 ^r	1,830 ^r	6.41 ^r	211	1,150	5.45
Connecticut	56	263	4.70	38	187	4.92
Florida	9	100	11.11	357	2,360	6.62
Hawaii				73	800	10.95
Idaho	6	70	11.67			
Illinois	54	330	6.11	107	687	6.42
Indiana	57	545	9.56	42	459	10.93
Iowa	2	8	4.00	1	5	5.00
Kansas	47	209	4.45	(2)	3	3.00
Kentucky	54	1,080	20.00	27	531	19.66
Louisiana ³				20	167	8.35
Maine	149 ^r	957	6.42 ^r	104	616	5.92
Massachusetts	3	4 ^r	1.33 ^r	19	90	4.74
Michigan	3	27	9.00			
Minnesota	25	113	4.52	56	298	5.32
Missouri				253	1,390	5.50
Montana	5	18 ^r	3.60 ^r			
Nevada				9	57	6.33
New Hampshire	1	5	5.00	1	4	4.00
New Jersey	211	1,280	6.08	342	1,890	5.52
New York	217	2,790	12.85	142	1,270	8.93
North Dakota	1	6	6.00			
Ohio	23	60	2.61			
Oregon	20	266	13.30	20	107	5.35
Pennsylvania	172	941	5.47	154	840	5.45

See footnotes at end of table.

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

TABLE 21—Continued RECYCLED ASPHALT SOLD OR USED BY PRODUCERS IN THE UNITED STATES, BY STATE $^{\rm l}$

		2003		2004			
	Quantity			Quantity			
	(thousand	Value	Unit	(thousand	Value	Unit	
State	metric tons)	(thousands)	value	metric tons)	(thousands)	value	
Rhode Island	7	\$85	\$12.14				
South Dakota				18	\$96	\$5.33	
Texas	59	275	4.66	123	603	4.90	
Vermont				11	70	6.36	
Washington	10	51	5.10	6	35	5.83	
Wisconsin	26	87	3.35	112	563	5.02	
Total or average	1,510 ^r	11,400 ^r	7.57 ^r	2,290	14,600	6.35	

Revised. -- Zero.

TABLE 22 RECYCLED CONCRETE SOLD OR USED BY PRODUCERS IN THE UNITED STATES, BY GEOGRAPHIC DIVISION $^{\rm I}$

		2003	2004			
	Quantity			Quantity		
	(thousand	Value	Unit	(thousand	Value	Unit
Region/division	metric tons)	(thousands)	value	metric tons)	(thousands)	value
Northeast:						
New England	134	\$913	\$6.81	60	\$296	\$4.93
Middle Atlantic	660	3,900	5.92	178	993	5.58
Midwest:						
East North Central	2,120	10,700	5.05	1,910	11,800	6.18
West North Central	181	884	4.88	158	784	4.96
South:						
South Atlantic	352	2,080	5.91	423	3,540	8.37
East South Central	25	159	6.36	(2)	(2)	6.26
West South Central				109	524	4.81
West:						
Mountain	3	15	5.00	254	(2)	1.30
Pacific	561 ^r	3,740 ^r	6.66 ^r	490	3,490	7.11
Total or average	4,040 ^r	22,400 r	5.55 ^r	3,330	21,400	6.43

^rRevised. -- Zero.

 ${\rm TABLE~23}$ RECYCLED CONCRETE SOLD OR USED BY PRODUCERS IN THE UNITED STATES, BY ${\rm STATE}^1$

		2003		2004			
	Quantity			Quantity			
	(thousand	Value	Unit	(thousand	Value	Unit	
State	metric tons)	(thousands)	value	metric tons)	(thousands)	value	
Alabama	25	\$159	\$6.39	111	(2)	\$6.26	
Alaska	293 ^r	3 ^r	10.24	5	\$58	11.60	
California	521 ^r	3,510 ^r	7.54 ^r	352	2,200	6.24	
Colorado				254	(2)	1.30	
Connecticut	111	815	7.34	36	191	5.31	
Florida	202	1,460	7.22	152	1,330	8.76	

See footnotes at end of table.

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

²Less than ½ unit.

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

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

²Less than ½ unit.

TABLE 23—Continued RECYCLED CONCRETE SOLD OR USED BY PRODUCERS IN THE UNITED STATES, BY STATE $^{\rm l}$

		2003		2004				
	Quantity			Quantity				
	(thousand	Value	Unit	(thousand	Value	Unit		
State	metric tons)	(thousands)	value	metric tons)	(thousands)	value		
Georgia	137	515	3.76					
Hawaii	5	44	8.80	96	1,040	10.78		
Idaho	3	15	5.00					
Illinois	1,480	7,690	5.20	1,590	9,610	6.03		
Indiana	538	2,370	4.41	50	276	5.52		
Iowa	80	433	5.41					
Louisiana ³				5	36	7.20		
Maine	6	31	5.17	11	50	4.55		
Massachusetts	17	67	3.94	13	55	4.23		
Minnesota	100	449	4.49	138	682	4.94		
New Jersey	482	3,180	6.60	61	395	6.48		
New York	174	692	3.98	113	568	5.03		
North Carolina	6	42	7.00	1	(2)	8.58		
North Dakota	1	2	2.00					
Ohio	3	11	3.67					
Oregon	21	102	4.86	18	101	5.61		
Pennsylvania	3	33	11.00	5	29	5.80		
South Dakota				21	102	4.86		
Texas				104	488	4.69		
Virginia	8	63	7.88	271	2,210	8.14		
Washington	14	79	5.64	19	94	4.95		
Wisconsin	102	636	6.24	270	1,930	7.14		
Total or average	4,040 ^r	22,400 ^r	5.55 ^r	3,330	21,400	6.43		

Revised. -- Zero.

TABLE 24 CRUSHED STONE SOLD OR USED BY PRODUCERS IN THE UNITED STATES IN 2004, BY GEOGRAPHIC DIVISION AND METHOD OF TRANSPORTATION 1

(Thousand metric tons)

					Not	Not	
Region/division	Truck	Rail	Water	Other	transported	specified	Total
Northeast:							
New England	5,500	140		136	4,690	29,000	39,500
Middle Atlantic	67,100	3,070		4,610	5,240	110,000	190,000
Midwest:							
East North Central	90,700	8,210	18,700	1,490	8,660	157,000	284,000
West North Central	39,900	1,170	1,710	2,300	3,930	100,000	149,000
South:							
South Atlantic	148,000	11,900	2,180	5,900	9,760	233,000	411,000
East South Central	88,800	2,900	4,830	1,190	5,730	62,100	165,000
West South Central	61,600	10,600	313	2,390	2,140	122,000	199,000
West:							
Mountain	19,400	1,950		2,600	5,180	28,700	57,800
Pacific	27,700	766	393	1,920	6,780	60,300	97,900
Total	548,000	40,700	28,100	22,500	52,100	902,000	1,590,000

⁻⁻ Zero.

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

²Less than ½ unit.

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

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

 ${\it TABLE~25}$ CRUSHED AND BROKEN STONE OPERATIONS IN THE UNITED STATES IN 2004, BY STATE

					Proce	ssing plants		
	Active	Active	Dredging			Stationary	None or	Sales
State	operations	quarries	operations	Stationary	Portable	and portable	unspecified	yards
Alabama	82	71		61	6	3	1	11
Alaska ¹	12	12			8	3	1	
Arizona	40	39		15	17	6	1	1
Arkansas	60	57		30	13	8	6	3
California	145	149	1	86	42	10	5	1
Colorado	32	32		16	10	5	1	
Connecticut	22	21		16	3	2		1
Florida	99	86	1	33	34	11	4	16
Georgia	83	80		76	1		2	4
Hawaii	19	20		9	9	1		
Idaho	37	47		7	22	4	3	1
Illinois	139	131		80	44	6		9
Indiana	93	92		74	7	8		5
Iowa	189	196		26	154	1	2	6
Kansas	92	108		17	69	3	2	1
Kentucky	89	87		71	7	9	1	2
Louisiana	16							16
Maine	17	15		10	5			2
Maryland	31	30	1	20	4	2	2	2
Massachusetts	33	31		20	6	5		2
Michigan	31	29		18	6	1	3	3
Minnesota	36	46		5	25	1	5	
Mississippi	16	3		2	1			13
Missouri	179	184		96	68	10	5	1
Montana	16	20		8	8		1	
Nebraska	9	9		6	2	1		
Nevada	15	16		13	2			
New Hampshire	15	15		13	2			
New Jersey	23	22		13	2	7		1
New Mexico	24	24		8	13	2	1	
New York	93	94	1	76	7	7	2	
North Carolina	112	104		92	10	1	1	8
North Dakota	6	6		1	3		3	
Ohio	104	105		77	16	4	2	5
Oklahoma	54	55		43	6	5		
Oregon	128	156		38	85		5	1
Pennsylvania	179	181		141	13	17	8	
Rhode Island	7	7		7				
South Carolina	37	33		27		3	2	5
South Dakota	11	15		10		1		
Tennessee	120	116		102	8	1	2	6
Texas	163	134		79	41	10	2	31
Utah	27	29		11	15	1		
Vermont	15	15		8	4	1	3	
Virginia	111	96		84	3	4	2	18
Washington	84	116		28	36	8	12	1
West Virginia	44	36		28	1	4	1	10
Wisconsin	129	178		25	90	4	9	1
Wyoming	10	22		5	3	1	1	
			4	1,731		181		187
Total	3,128	3,170	4	1,/31	931	101	101	187

⁻⁻ Zero.

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

 ${\it TABLE~26} \\ {\it U.S.~EXPORTS~OF~CRUSHED~STONE~IN~2004,~BY~DESTINATION}^{1}$

			Limestone				
			for cement	Chalk,	Granules,		
Destina	tion	Limestone	manufacturing	crude	chippings	Other	Total
North America	metric tons	83,700	970,000	935	121,000	39,000	1,210,000
South America	do.	4	46	9,260	2,470	348	12,100
Europe	do.	80	190	20	572	27,300	28,200
Asia	do.	62	4,290	336	1,670	3,390	9,750
Oceania	do.			23	340	5	368
Middle East	do.		12		19,100	428	19,500
Africa	do.					141	141
Total:							
Quantity	do.	83,900	975,000	10,600	145,000	70,600	1,280,000
Value	thousands	\$1,120	\$12,300 ²	\$3 ²	\$18,000	\$23,100	\$54,500

⁻⁻ Zero.

Source: U.S. Census Bureau.

 $\label{eq:table 27} \text{U.S. IMPORTS OF CRUSHED STONE AND CALCIUM CARBONATE FINES, BY TYPE}^1$

		2003			2004	
	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	7,970	70,700	\$8.88	7,670	65,700	\$8.56
Limestone for flux or cement manufacturing	4,370	32,400	7.42	4,710	37,000	7.85
Quartzite	2	1,070	649.91	2	905	474.57
Other	2,980	38,100	12.77	3,590	45,000	12.54
Total or average	15,300	142,000	XX	16,000	149,000	XX
Calcium carbonate fines: ³						
Natural chalk	(4)	9	205	(4)	11	95.47
Calcium carbonates, other chalk	(4)	349	662.24	1	275	325.06
Total or average	(4)	358	XX	1	286	XX
Grand total or average	15,300	143,000	XX	16,000	149,000	XX

XX Not applicable.

Source: U.S. Census Bureau.

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

²All or part of these data have been referred to the U.S. Census Bureau for verification.

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

²Cost, insurance, and freight value.

³Excludes precipitated calcium carbonate.

⁴Less than ½ unit.

FIGURE 1
PRODUCTION OF CRUSHED STONE IN THE UNITED STATES IN 2004, BY GEOGRAPHIC REGION

