



# 2007 Minerals Yearbook

---

STONE, CRUSHED

---

# STONE, CRUSHED

By Jason Christopher Willett

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

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 for the construction industry, as well as agriculture and other industries that use complex chemical and metallurgical processes. Despite the relatively low, but increasing, unit value of its basic products, the crushed stone industry is a major contributor to and an indicator of the economic well-being of the Nation. Construction aggregates are defined as the combination of crushed stone and construction sand and gravel. The construction sand and gravel industry is reviewed in a separate chapter, and both mineral commodities will probably be included in any review of the national or State aggregates industry.

A total of 1.60 billion metric tons (Gt) of crushed stone was produced for consumption in the United States in 2007, nearly 10% less than the total production of 2006. This was the lowest level of crushed stone produced for consumption in the United States since 2003. The value of the total crushed stone produced in the United States in 2007 was \$13.9 billion, a slight decrease compared with the 2006 total (table 1). The average unit price for crushed stone increase 8% compared with the average unit price for 2006. The increase in unit prices offset the decrease in production to keep the value of the total crushed stone produced at about last year's value.

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

Foreign trade of crushed stone remained small. Exports decreased in 2007 by 10% to 1.02 million metric tons (Mt) compared with 1.14 Mt in 2006, but the value increased by 9% to \$62.5 million compared with \$57.3 million in 2006 (tables 1, 17). Imports of crushed stone, including calcium carbonate fines, decreased slightly to 19.5 Mt, but the value increased by 3% to \$212 million compared with the 2006 totals (tables 1, 18). Apparent domestic consumption of crushed stone, which is defined as production for consumption (sold or used) plus imports minus exports, decreased by 9% to 1.62 Gt compared with 1.79 Gt in 2006 because of the decrease in crushed stone produced for consumption.

## Production

Domestic production data for crushed stone were derived by the U.S. Geological Survey (USGS) from voluntary surveys of U.S. producers. In 2007, a total of 1,447 companies produced

or sold crushed stone from 3,562 operations with 3,710 quarries and 193 sales and/or distribution sites. Of the 3,562 active operations, 2,324 operations reported their production or sales to the USGS, and their total production was 1.28 Gt (80% of the U.S. total). Of the 2,324 reporting operations, 1,007 operations, with 1,002 quarries and 79 sales yards owned by 262 companies, did not report a breakdown by end use. Their total production was 493 Mt (31% of the U.S. total) and is included in table 9 under "Unspecified, reported" uses.

Production of the nonresponding quarries was estimated by using employment data provided by the Mine Safety and Health Administration (MSHA). The estimated output of 1,239 nonrespondent operations with 1,249 quarries and 7 sales yards owned by 827 companies was 324 Mt (20% of the U.S. total) and is included in table 9 under "Unspecified, estimated" uses.

A total of 193 sales yards in 30 States was active in 2007, and their total output was 68.2 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 16.

Crushed stone was produced in every State except Delaware. Starting with 2005, Delaware's production is included in the U.S. total because of sales yards that reported sales of crushed stone in the State. The 10 leading producing States were, in descending order of tonnage, Texas, Pennsylvania, Florida, Missouri, Georgia, Illinois, North Carolina, Ohio, Virginia, and Tennessee. The combined production of the 10 leading States decreased by 10% and was 846 Mt, more than one-half of the national total.

There are 86 underground mines included in the total number of active operations, and they produced 68.6 Mt of crushed stone in 2007. Active underground mines were located in 18 States. The five leading States were, in descending order of tonnage, Kentucky, Missouri, Illinois, Nebraska, and Iowa. Their combined production was 49.6 Mt (72% of the total U.S. crushed stone produced underground).

A total of 806 operations were either idle or presumed to have been idle in 2007 because no production report was received and no employment information was available to estimate their production. Since the 2006 survey, 262 operations have been 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 1.60 Gt of crushed stone produced for consumption in the United States in 2007, 69% was limestone and dolomite, 15% was granite, 7% was traprock, 4% was miscellaneous stone, and 3% was sandstone and quartzite. The remaining 2% was shared, in descending order of tonnage, by marble, volcanic cinder and scoria, slate, shell, and calcareous

marl. These percentages were calculated on the total amount of crushed stone produced for consumption that was reported, including amounts that were withheld to avoid disclosing company proprietary data.

A comparison by geographic region indicates that in 2007 the production for consumption of crushed stone decreased by about 8% to 10% in all four regions (table 3). The largest percentage decrease was in the South (10%) compared with production in 2006. In 2007, the South continued to lead the Nation in the production of crushed stone, with 787 Mt, followed by the Midwest with 413 Mt. The South and Midwest regions, composing 28 of the 48 contiguous States, accounted for 75% of the total U.S. crushed stone output.

A comparison by geographic division indicates that, in 2007, the production for consumption of crushed stone decreased in eight of the nine divisions compared with that of 2006. The major decreases in percentages were recorded in the South Atlantic (16%), New England (14%), and Pacific (12%) divisions. Of the nine geographic divisions, the South Atlantic led the Nation in the production of crushed stone with 384 Mt, followed by the East North Central with 253 Mt and the West South Central with 231 Mt (table 3). A small increase in production for consumption of crushed stone was recorded in the West South Central division.

The leading U.S. producing companies in 2007 were, in descending order of tonnage, Vulcan Materials Co.; Martin Marietta Aggregates; Lehigh Hanson; Oldcastle Materials, Inc.; CEMEX, Inc.; Lafarge North America Inc.; Holcim/Aggregate Industries; Rogers Group, Inc.; Carmeuse North America; and Luck Stone Corp. The combined production of the top 10 companies was 789 Mt (about one-half of the national total). The combined production of the top 100 companies was 1.20 Gt (three-quarters of the national total). This means that the combined production of the companies ranked from 11th to 100th only accounted for about one-half of the production of the top ten.

A review of production by size of operation at the national level indicates that, in 2007, 820 Mt of crushed stone (51% of the total crushed stone) was produced by 472 operations reporting more than 1 million metric tons per year; 396 Mt was produced by 608 operations reporting between 500,000 and 999,999 metric tons per year (t/yr); and 347 Mt was produced by 1,419 operations reporting between 100,000 and 499,999 t/yr. The production by size of operation information also indicates that 76% of total crushed stone produced in the United States in 2007 came from operations that produced more than 500,000 t/yr (table 5a). By geographic region, in 2007, the South had 1,254 active operations, followed by the Midwest with 1,023 active operations, and the West with 793 active operations (table 5b).

Merger and acquisition activity in the U.S. construction aggregates industry included three major purchases in 2007. Foreign companies accounted for most of the industry highlights, completing two of the three deals totaling \$30 billion. The first major acquisition was purchase of Australian based Rinker Group Ltd. by CEMEX, S.A.B. de C.V. of Monterrey, Mexico. Both companies operated large U.S. construction aggregates divisions which, when combined, will probably represented about 4% of the U.S. market.

Second was the acquisition of a British company, Hanson PLC, by a German company, HeidelbergCement AG. The deal was valued at nearly \$16 billion and set the record as the largest purchase in the construction aggregates industry (Aggregates Manager, 2007b). HeidelbergCement has operated a U.S. division since the purchase of Lehigh Cement in 1977. The new U.S. construction aggregates division was named Lehigh Hanson and its headquarters was in Dallas, TX.

The last major transaction of 2007 was the addition of Florida Rock Industries Inc. to Vulcan Materials Co., the leading U.S. aggregates producer. The deal, which took almost a year to complete, was finalized in November 2007. The transaction combined two industry giants with expectations to provide long-term stability and market strength in key growth regions for Vulcan Materials (Aggregates Manager, 2007a). The combination of the two companies also increased the gap between the top and second place positions in the market share of the construction aggregates business.

The aggregate industry also completed a number of small deals in 2007. The year began with Vulcan Materials buying a quarry in North Carolina from Burke County Stone and a quarry in Illinois from Avery Gravel Co. Also in January, Rinker acquired JR & Sons Ready Mix in southern Utah. National Lime and Stone Co. purchased quarries in Ohio and other assets from Suever Stone Co. In August, Florida Rock Industries Inc. purchased Freeport Aggregate Ltd., a Bahamian construction aggregates producer. The acquisition included approximately 25 million tons of reserves and was expected produce up to 300,000 t/yr of construction aggregates (Aggregates Manager, 2007c).

In the fall of 2007, additional acquisitions were completed. The parent company of Oldcastle Materials, Inc. (CRH plc) acquired Cessford Construction Co., Conrad Yelvington Distributors, Inc., Eugene Sand and Gravel, Inc., and McMinn's, Inc. group of companies. Conrad Yelvington is the leading rail distributor of aggregates in the southeast of the United States and has 327 rail-served distribution terminals in Alabama, Florida, Michigan, and Mississippi (Aggregates Manager, 2007d). Cessford Construction, Eugene Sand and Gravel, and McMinn's operated several aggregates mines in addition to asphalt and concrete plants in four States across the country. It was also announced that CRH would spend \$250 million to buy certain assets in Arizona and Florida that Cemex divested during the acquisition of Rinker as required by the U.S. Department of Justice. In September, Lafarge acquired four aggregate quarries from H.B. Mellott Estate, Inc. Near yearend 2007, Carmeuse North America announced the acquisition of Oglebay Norton Co.

Production of crushed stone by type is detailed below.

**Calcareous Marl.**—Output of calcareous marl increased slightly compared with that of 2006 to 2.8 Mt valued at \$18.8 million (table 2). Marl was produced by six companies with six quarries in three States. The leading producers were, in descending order of tonnage, Lafarge, Giant Group Ltd., and Capitol Aggregates, Ltd.

**Dolomite.**—Production of dolomite decreased by 7% compared with the total for 2006 to 72.5 Mt valued at \$562 million (table 2). Crushed dolomite production was reported by

75 companies at 138 operations with 165 quarries in 29 States. An additional undetermined amount of dolomite is included in the total crushed limestone, as explained in the limestone portion of the “Production” section.

The leading producing States were, in descending order of tonnage, Illinois, Pennsylvania, New York, Michigan, and Indiana; the total production of these five States was 56.6 Mt (table 6). The leading producers were, in descending order of tonnage, Lehigh Hanson, Oldcastle, Carmeuse, Vulcan Materials, and Stabler Companies, Inc. Their combined total production was 42.8 Mt.

**Granite.**—The output of crushed granite decreased by 11% compared with that of 2006 to 241 Mt valued at \$2.62 billion (table 2). Crushed granite was produced by 146 companies at 408 operations with 394 quarries in 35 States. The leading producing States were, in descending order of tonnage, Georgia, North Carolina, Virginia, South Carolina, and California; the total production of these five States was 180 Mt (75% of the U.S. output) (table 7). The leading producers were, in descending order of tonnage, Vulcan Materials, Martin Marietta, Lehigh Hanson, Oldcastle, and Lafarge. Their combined total production was 168 Mt (69% of the U.S. granite total).

**Limestone.**—The output of crushed limestone, including some dolomite, decreased by 9% compared with that of 2006 to 1.02 Gt valued at \$8.28 billion (table 2). Limestone was produced by 761 companies at 1,968 operations with 2,052 quarries in 47 States. In addition, 35 companies with 49 operations and 49 quarries reported producing limestone and dolomite from the same quarries. Their production of about 27.6 Mt of limestone and dolomite combined is included with the limestone listed in table 2. The limestone totals listed in this chapter, therefore, include an undetermined amount of dolomite in addition to the dolomite reported separately.

The leading producing States were, in descending order of tonnage, Texas, Florida, Missouri, Ohio, and Tennessee; the total production of these five States was 429 Mt (42% of the total U.S. output) (table 6). The leading producers of limestone were, in descending order of tonnage, Vulcan Materials, Martin Marietta, Lehigh Hanson, Oldcastle, and CEMEX. Their combined total production was 346 Mt.

**Marble.**—Production of crushed marble decreased by 4% compared with the total for 2006 to 7.6 Mt valued at \$71.1 million (table 2). Crushed marble was produced by 16 companies with 25 operations and 24 quarries in 14 States. The leading producers of crushed marble were, in descending order of tonnage, Omya, Inc.; Imerys Marble, Inc.; Boxley Materials Co.; Vulcan Materials; and Huber Engineered Materials. Their combined total production was 83% of the U.S. marble total.

**Miscellaneous Stone.**—This category includes three different types of miscellaneous crushed stone production. The first type is a crushed stone which is reported by the company as “other” on the survey form or as a type of stone not listed on table 2. The second type is production from a company or operation that is new to the survey and the type of stone being mined is unknown. The first year a new operation is on the survey, it usually does not respond and its production must be estimated. The type of stone is updated when a response is received from the operation and the data are revised for the next report. The

third type is production with a known rock type but the amount must be concealed to protect a company’s proprietary data. This concealed amount is added to the quantity of miscellaneous stone produced in that State and then published.

**Sandstone and Quartzite.**—The output of crushed sandstone and quartzite decreased by 11% compared with the total for 2006 to 47.7 Mt valued at \$398 million (table 2). Crushed sandstone was produced by 113 companies at 163 operations with 156 quarries in 26 States, while quartzite was produced by 31 companies at 41 operations with 45 quarries in 17 States.

The leading producing States were, in descending order of combined tonnage of sandstone and quartzite, Pennsylvania, Arkansas, New York, Colorado, and South Dakota. Their combined total production was 34.9 Mt (73% of the U.S. output) (table 7). The leading producers of sandstone and quartzite were, in descending order of tonnage: Oldcastle; Martin Marietta; Haines & Kibblehouse, Inc.; Lafarge; and Pine Bluff Sand and Gravel Co. Their combined total production was 20.4 Mt (43% 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 67% compared with the 2006 total to 2.8 Mt valued at \$24.2 million (table 2). Crushed shell was produced by six companies with seven quarries in three States. The leading producers, in descending order of tonnage, were Schroeder-Manatee Ranch, Inc. and Stewart Mining Industries, Inc.

**Slate.**—The output of crushed slate decreased by 19% compared with that of 2006 to 3.8 Mt valued at \$37.0 million (table 2). Crushed slate was produced by 35 companies at 38 quarries in 12 States. About 40% of the total U.S. output of the crushed slate was produced in Pennsylvania. The leading producers were, in descending order of tonnage, Martin Marietta, McCartney Construction Co., Inc.; and Joseph Zawisky LLC. Their combined total production was 1.6 Mt (36% of the U.S. slate total).

**Traprock.**—Production of crushed traprock decreased by 13% compared with the total for 2006 to 105 Mt valued at \$1.03 billion (table 2). Traprock was produced by 195 companies at 333 operations with 372 quarries in 27 States. The leading producing States were, in descending order of tonnage, Oregon, New Jersey, Virginia, California, and Washington; these five States produced 59.5 Mt (57% of U.S. output) (table 7). Leading producers were, in descending order of tonnage, Oldcastle, Vulcan Materials, Luck Stone, MDU Resources Group, and Trap Rock Industries. Their combined total production was 43.1 Mt (39% of the U.S. traprock total).

**Volcanic Cinder and Scoria.**—Production of volcanic cinder and scoria increased by 7% compared with the total for 2006 to 6.6 Mt valued at \$48.8 million (table 2). Volcanic cinder and scoria were produced by 33 companies from 49 operations with 51 quarries in 13 States. The top producing State was Wyoming which produced 62% of U.S. output (table 8). The two leading producers, in descending order of tonnage, First Energy Service, Inc. and the U.S. Forest Service, accounted for about 60% of the 2007 production of crushed volcanic cinder and scoria.

## Consumption

Crushed stone production reported to the USGS is actually material that was either sold to other companies or consumers or was used by the producers. Stockpiled production is not included in the reported quantities. The “sold or used” tonnage, therefore, represents the amount of production released for domestic consumption or export in a given year. Because some of the crushed stone producers did not report a breakdown by end use, their total production is included in the “Unspecified, reported” use category. The estimated production of nonrespondents is included in the “Unspecified, estimated” use category.

In 2007, U.S. apparent consumption of crushed stone, which is defined as U.S. production plus imports minus exports, was 1.62 Gt, a 9% decrease compared with the apparent consumption in 2006. Of the 1.62 Gt of crushed stone consumed, 493 Mt (31%) was “Unspecified, reported,” and 324 Mt (20%) was “Unspecified, estimated.” Of the remaining 784 Mt reported by uses, 82% was used as construction aggregate, mostly for highway and road construction and maintenance as well as a wide variety of building and other nonbuilding construction; 11% for cement manufacturing; 2% for lime manufacturing; 2% for agricultural uses; and 2% for special and miscellaneous uses and products (table 9). It is indicated that, in marketing analysis or use-pattern studies, the quantities included in unspecified uses 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 2007, the value of the total construction put in place decreased by 3% compared with that of 2006 to \$1,140 billion, as reported by the U.S. Census Bureau (2008). The value of total private construction decreased by 7% to \$850 billion, while the value of total public construction increased by 12% to \$287 billion. The value of private construction dropped to its lowest level since 2004. The increase of 12% in the public construction sector was the largest increase in the past 10 years.

**Dolomite.**—Of the 72.5 Mt of crushed dolomite consumed, 29.4 Mt (41%) was in “Unspecified, reported” uses, and 3.7 Mt (5%) was in “Unspecified, estimated” uses. Of the remaining 39.4 Mt of crushed dolomite reported by uses by the producers, 89% was used as construction aggregates, 5% was used for chemical and metallurgical applications, and 4% was used for agricultural use. An additional undefined amount of dolomite consumed in a variety of uses, mostly construction aggregates, is reported with limestone (table 10).

Additional detailed information for total combined limestone and dolomite by State and major uses is provided in table 11.

**Granite.**—Of the 241 Mt of crushed granite consumed, 103 Mt (43%) was in “Unspecified, reported” uses, and 23.1 Mt (10%) was in “Unspecified, estimated” uses. Nearly all the remaining 114 Mt was used as construction aggregates (table 12).

**Limestone.**—Of the 1.02 Gt of crushed limestone consumed, 274 Mt (27%) was in “Unspecified, reported” uses, and 218 Mt (21%) was in “Unspecified, estimated” uses. Of the

remaining 526 Mt of crushed limestone reported by uses, 76% was used as construction aggregate, 16% was used for cement manufacturing, 3% was used for lime manufacturing, 2% was used for agricultural use, and 2% was used for special and miscellaneous uses and products (table 10).

**Marble.**—Of the 7.6 Mt of crushed marble consumed, 5.7 Mt (76%) was in “Unspecified, estimated uses.” Nearly all of the remaining 1.9 Mt of crushed marble reported by uses by the producers was used as construction aggregates (table 13).

**Miscellaneous Stone.**—Of the 94.1 Mt of miscellaneous crushed stone consumed, 38.3 Mt (41%) was in “Unspecified, reported” uses, and 29.8 Mt (32%) was in “Unspecified, estimated” uses. Construction aggregates accounted for more than 89% of the remaining 26.0 Mt reported by uses by the producers (table 13).

**Sandstone and Quartzite.**—Of the 47.7 Mt of crushed sandstone and quartzite consumed, 10.2 Mt (21%) was in “Unspecified, reported” uses, and 18.6 Mt (39%) in “Unspecified, estimated uses.” Nearly all the remaining 18.9 Mt of crushed sandstone and quartzite reported by uses by the producers was used as construction aggregates (table 12).

**Traprock.**—Of the 105 Mt of crushed traprock consumed, 31.8 Mt (30%) was in “Unspecified, reported” uses, and 21.2 Mt (20%) was in “Unspecified, estimated” uses. Nearly all the remaining 51.9 Mt was used as construction aggregates (table 12).

**Volcanic Cinder and Scoria.**—Of the 6.6 Mt of volcanic cinder and scoria consumed, 4.7 Mt (72%) was in “Unspecified, reported” uses, and 1.2 Mt (18%) was in “Unspecified, estimated” uses. Nearly all the remaining 678,000 metric tons of crushed volcanic cinder and scoria was used as construction aggregates (table 13).

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 3.1 Mt of asphalt concrete valued at \$26.8 million was recycled in 2007 by 58 companies in 29 States. The tonnage of recycled asphalt concrete, reported to the USGS, increased by 92% compared with the 2006 total (tables 14). The leading recycling States were, in descending

order of tonnage, Illinois, Pennsylvania, Florida, Massachusetts, and Texas. Their combined total represented 67% of the U.S. total.

**Cement Concrete.**—A total of 2.5 Mt of portland cement concrete valued at \$17.4 million was recycled by 50 companies in 22 States. This tonnage represents a 15% decrease in the amount reported to the USGS compared with that of 2006 (tables 15). The leading recycling States were, in descending order of tonnage, Minnesota, Illinois, Nevada, California, and Massachusetts. Their combined total represented 77% of the U.S. total.

## Prices

Prices in this chapter are the average annual free on board plant prices, usually at the first point of sale or captive use, as reported by the crushed stone producing companies. This value does not include transportation from the plant or yard to the consumer. It does, however, include all costs of mining, processing, in-plant transportation, overhead costs, and profit. In 2006 and 2007, about three-quarters of the operations responding to the annual survey reported the dollar value of their production. The average unit value for operations reporting production and value in 2007 was \$8.72 per metric ton. This was an increase of 6.5% compared with the average unit value of \$8.19 per ton in 2006. The annual reports of the top U.S. producing companies reported a 7% to 13% price increase in 2007 compared with prices in 2006. For those operations that reported production only, the unit values of total production or specific end uses were estimated based on what other operations in the same State reported. The average unit value for specific end uses within a State was used in the estimation of value for operations reporting specific end uses. The State average was used in the estimation for operations reporting a total production but not total value.

Additional information regarding prices of crushed stone by type of rock and uses in the United States and each State and the State districts may be found throughout the tables included in this chapter as well as in the USGS Minerals Yearbook, volume II, Area Reports: Domestic.

## Transportation

For 865 Mt of the 1.60 Gt of crushed stone produced for consumption in 2007, no means of transportation was reported by the producers. Of the remaining 736 Mt of crushed stone, 79% was reported as being transported by truck from the quarry or the processing plant to the first point of sale or use; 5% by rail and 4% by waterway. About 72.0 Mt of the specified production was reported as not having been transported and, therefore, is assumed to have been used onsite.

Shipment by truck remains the most widely used method of transportation for crushed stone. The significant increase in the number of sales and distribution yards in the past few years, and the increase in the volume of crushed stone going through these sites have had a positive impact on the industry and the communities they serve. Distribution sites located near metropolitan areas significantly reduce the distance most trucks

must travel to pick up and deliver crushed stone. Therefore, the transportation costs are reduced, as is the impact of heavy traffic on the infrastructure and the environment. Sales yards serve both to distribute products and, increasingly, as recycling sites. This provides efficiency for the industry while helping protect the environment.

## Foreign Trade

The widespread distribution of domestic deposits of stone suitable for mining as crushed stone, the large number of existing active operations around the country, and the high cost of transportation limit foreign trade to mostly local transactions across international boundaries. U.S. imports and exports continue to be small, representing slightly more than 1% of domestic consumption.

Information on imports of crushed stone from two sources is used for this report. Import and export data from the U.S. Census Bureau are used (tables 1, 17-18). Companies also provide import data when reporting the amount sold or used for consumption at each operation to the annual survey. The tonnage reported is attributed to the State where it is first sold or used. Crushed stone imported to Florida from Mexico is counted in the total of crushed stone sold or used in Florida (table 4). This is the same process used for large amounts of crushed stone which is transported from one State to another. Crushed stone mined in Kentucky and shipped down the Mississippi River to Louisiana is counted in the total of crushed stone sold or used in Louisiana.

**Exports.**—Exports of crushed stone in 2007 decreased by 10% to 1.02 Mt compared with the total of 1.14 Mt in 2006, but the value increased by 9% to \$62.5 million. In 2007, exports of crushed limestone for cement manufacturing averaged a unit value of \$26.92 per ton (table 17).

**Imports.**—Imports of crushed stone decreased slightly to 19.5 Mt compared with those of 2006, but the value increased slightly to \$212 million. Of the imported crushed stone, 63% was limestone used as construction aggregate, as flux stone, and in cement manufacturing. Imports of natural calcium carbonate fines increased in value to \$1.4 million in 2007 from \$471,000 in 2006 (table 18).

## Outlook

The crushed stone industry is a cyclical business, reacting to the levels of activity in public infrastructure projects, commercial and residential construction markets, and other types of construction. The residential construction slowdown in the United States was well documented and contributed to decreased consumption of crushed stone. The residential construction market was expected to decline further in 2008. Adding stress to the industry were increases in fuel costs, which continued throughout most of the 2007, and the financial instability caused by problems experienced in the residential building and mortgage industries.

Many construction aggregates producers expected that their production levels would be flat or slightly decrease, resulting in a conservative and cautious outlook in 2007. This cautious

outlook was expected to continue into 2008, with the major producing companies making conservative predications for the year. Industry experts indicated that crushed stone consumed in commercial construction combined with the multiyear nature of highway and infrastructure projects would offset continued decreases in residential construction. Production of crushed stone was expected to decrease at a similar rate to what the market experienced in 2007, while prices continued to increase since input costs are not expected to decrease. Consumption of crushed stone is expected to decrease to lower than 1997 levels or 1.34 Gt.

## References Cited

- Aggregates Manager, 2007a, Mergers & acquisitions: *Aggregates Manager*, v. 12, no. 5, May, p. 9.  
 Aggregates Manager, 2007b, Mergers & acquisitions: *Aggregates Manager*, v. 12, no. 7, July, p. 12.  
 Aggregates Manager, 2007c, Mergers & acquisitions: *Aggregates Manager*, v. 12, no. 9, September, p. 10.  
 Aggregates Manager, 2007d, Mergers & acquisitions: *Aggregates Manager*, v. 12, no. 11, November, p. 11.  
 U.S. Census Bureau, 2008, Annual value of construction put in place: U.S. Census Bureau, September 28, p. 1-2. (Accessed September 19, 2008, at <http://www.census.gov/const/www/totpage.html>.)

## GENERAL SOURCES OF INFORMATION

### U.S. Geological Survey Publications

- Construction Stone. Ch. in *United States Mineral Resources*, Professional Paper 820, 1973.  
 Limestone and Dolomite. Ch. in *United States Mineral Resources*, Professional Paper 820, 1973.

- Natural Aggregate—Building America's Future. Circular 1110, 1990.  
 Natural Aggregates—Foundation of America's Future. Fact Sheet 144-97, 1997.  
 Natural Aggregates of the Conterminous United States. Bulletin 1594, 1988.  
 Sand and Gravel, Construction. Ch. in *Mineral Commodity Summaries*, annual.

### Other

- Aggregate Handbook. National Stone Association, 1991.  
 Aggregates Manager.  
 Aggregates—Sand, Gravel, & Crushed Rock Aggregates for Construction Purposes. The Geological Society, 1985.  
 Calcium Carbonate—From the Cretaceous Period into the 21st Century. Tegethoff, F.W., Birkhäuser Verlag, 2001.  
 Concrete Manual, A Water Resources Publication. U.S. Department of the Interior, Bureau of Reclamation, 1975.  
 Construction Aggregates. *Mining Engineering*, annual review of industrial mineral commodities.  
 Crushed Stone. Ch. in *Mineral Facts and Problems*, U.S. Bureau of Mines Bulletin 675, 1985.  
 Geology of Nonmetallics. Metal Bulletin Inc., 1984.  
 Handbook of Concrete Aggregates. Noyes Publications, 1983.  
 Industrial Minerals.  
 Lime and Limestone—Chemistry and Technology, Production and Uses. Wiley-VCH, 1998.  
 National Stone, Sand and Gravel Association.  
 Pit & Quarry.  
 Rock Products.  
 Stone, Crushed. Ch. in *Industrial Minerals and Rocks* (7th ed.), Society for Mining, Metallurgy, and Exploration, Inc., 2006.

TABLE 1  
 SALIENT CRUSHED STONE STATISTICS<sup>1</sup>

(Thousand metric tons and thousand dollars)

	2003	2004	2005	2006	2007
<b>Sold or used by producers:<sup>2</sup></b>					
Quantity	1,530,000	1,630,000	1,700,000	1,770,000 <sup>r</sup>	1,600,000
Value	9,060,000	9,890,000	12,400,000	14,200,000 <sup>r</sup>	13,900,000
<b>Exports:</b>					
Quantity	1,010	1,280	1,260	1,140	1,020
Value	45,600	54,500	50,500	57,300	62,500
<b>Imports for consumption:<sup>3</sup></b>					
Quantity	15,300	18,600	21,000	19,800	19,500
Value	143,000	179,000 <sup>r</sup>	194,000	206,000	212,000

<sup>r</sup>Revised.

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

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

<sup>3</sup>Excludes precipitated calcium carbonate.

TABLE 2  
CRUSHED STONE SOLD OR USED IN THE UNITED STATES, BY TYPE<sup>1,2</sup>

Type	2006 <sup>f</sup>				2007			
	Number of quarries	Quantity (thousand metric tons)	Value (thousands)	Unit value	Number of quarries	Quantity (thousand metric tons)	Value (thousands)	Unit value
Limestone <sup>3</sup>	2,102	1,120,000	\$8,420,000	\$7.52	2,123	1,020,000	\$8,280,000	\$8.13
Dolomite	134	78,000	575,000	7.38	137	72,500	562,000	7.75
Marble	21	7,900	77,600	9.83	21	7,580	71,100	9.38
Calcareous marl	4	2,750	10,500	3.81	3	2,820	18,800	6.68
Shell	5	8,640	73,900	8.55	5	2,850	24,200	8.47
Granite	389	270,000	2,620,000	9.71	384	241,000	2,620,000	10.88
Traprock	331	120,000	1,130,000	9.43	361	105,000	1,030,000	9.82
Sandstone and quartzite <sup>4</sup>	175	53,900	414,000	7.68	188	47,700	398,000	8.35
Slate	34	4,710	43,900	9.33	33	3,820	37,000	9.68
Volcanic cinder and scoria	45	6,190	41,100	6.64	46	6,630	48,800	7.36
Miscellaneous stone	460	97,600	806,000	8.26	435	94,100	781,000	8.30
Total or average	XX	1,770,000	14,200,000	8.04	XX	1,600,000	13,900,000	8.66

<sup>f</sup>Revised. XX Not applicable.

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

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

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

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

TABLE 3  
CRUSHED STONE SOLD OR USED IN THE UNITED STATES, BY GEOGRAPHIC DIVISION<sup>1,2</sup>

(Thousand metric tons and thousand dollars)

Region/division	2006 <sup>f</sup>		2007	
	Quantity	Value	Quantity	Value
Northeast:				
New England	44,500	410,000	38,500	387,000
Middle Atlantic	189,000	1,410,000	176,000	1,530,000
Total	234,000	1,820,000	214,000	1,920,000
Midwest:				
East North Central	281,000	1,750,000	253,000	1,700,000
West North Central	176,000	1,270,000	160,000	1,310,000
Total	457,000	3,020,000	413,000	3,010,000
South:				
South Atlantic	459,000	4,640,000	384,000	4,260,000
East South Central	186,000	1,410,000	173,000	1,440,000
West South Central	228,000	1,450,000	231,000	1,600,000
Total	873,000	7,490,000	787,000	7,290,000
West:				
Mountain	77,600	543,000	76,200	561,000
Pacific	127,000	1,330,000	111,000	1,090,000
Total	205,000	1,870,000	187,000	1,650,000
Grand total	1,770,000	14,200,000	1,600,000	13,900,000

<sup>f</sup>Revised.

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

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



TABLE 4  
CRUSHED STONE SOLD OR USED BY PRODUCERS IN THE UNITED STATES, BY STATE AND TERRITORIES<sup>1</sup>

State	2006 <sup>f</sup>			2007		
	Quantity (thousand metric tons)	Value (thousands)	Unit value	Quantity (thousand metric tons)	Value (thousands)	Unit value
Alabama	57,500	\$387,000	\$6.72	52,500	\$402,000	\$7.66
Alaska	2,180	22,400	10.31	1,620	18,000	11.18
Arizona	14,700	121,000	8.25	15,700	145,000	9.23
Arkansas	36,800	250,000	6.81	32,300	232,000	7.19
California	70,100	777,000	11.07	54,300	568,000	10.46
Colorado	12,100 <sup>2</sup>	87,400	7.23	11,200	77,900	6.93
Connecticut	10,800	99,000	9.19	9,440	92,400	9.79
Delaware <sup>3</sup>	W	W	W	W	W	W
Florida	134,000	1,400,000	10.42	95,700	1,120,000	11.73
Georgia	89,000	802,000	9.01	79,200	811,000	10.24
Hawaii	8,980	138,000	15.42	8,610	135,000	15.73
Idaho	5,270	31,700	6.02	5,860	35,600	6.08
Illinois	78,300	596,000	7.61	74,500	591,000	7.94
Indiana	59,300	352,000	5.94	57,600	387,000	6.71
Iowa	36,400	290,000	7.95	33,700	280,000	8.32
Kansas	23,300	181,000	7.78	21,400	188,000	8.82
Kentucky	60,100	443,000	7.38	55,500	427,000	7.70
Louisiana <sup>3</sup>	W	W	W	W	W	W
Maine	5,340	41,500	7.77	4,710	38,300	8.14
Maryland	33,100	326,000	9.85	31,500	287,000	9.12
Massachusetts	13,600	143,000	10.56	11,200	127,000	11.27
Michigan	34,200	150,000	4.38	27,600	129,000	4.67
Minnesota	11,900	116,000	9.79	10,200	109,000	10.74
Mississippi <sup>3</sup>	3,070	53,700	17.45	3,120	58,900	18.89
Missouri	90,400	576,000	6.37	81,300	612,000	7.52
Montana	4,040	21,800	5.39 <sup>2</sup>	1,780	9,610	5.41
Nebraska	7,480	67,100	8.98	7,720	76,200	9.88
Nevada	10,200 <sup>2</sup>	88,000	8.61 <sup>2</sup>	11,200	97,200	8.68
New Hampshire	6,440	55,400	8.61	5,210	68,600	13.18
New Jersey	24,100	169,000	7.00	20,000	162,000	8.08
New Mexico	4,830	32,900	6.80	5,240	39,100	7.46
New York	52,400	438,000	8.36	46,800	427,000	9.13
North Carolina	78,800	868,000	11.02	70,300	898,000	12.78
North Dakota	147 <sup>2</sup>	683 <sup>2</sup>	4.65 <sup>2</sup>	274	1,270	4.64
Ohio	69,100	431,000	6.23 <sup>2</sup>	67,300	443,000	6.58
Oklahoma	43,800	258,000	5.88 <sup>2</sup>	45,800	294,000	6.43
Oregon	28,900	216,000	7.49	29,000	200,000	6.87
Pennsylvania	113,000	805,000	7.14	109,000	944,000	8.66
Rhode Island	2,570	21,300	8.29	2,240	21,200	9.47
South Carolina	31,200	268,000	8.59	28,100	274,000	9.75
South Dakota	6,320 <sup>2</sup>	41,400	6.55	5,360	44,500	8.30
Tennessee	65,500	523,000	7.98	62,000	547,000	8.83
Texas	139,000	853,000	6.13	145,000	972,000	6.72
Utah	14,000	89,100	6.39	13,300	98,200	7.41
Vermont	5,840	49,900	8.54	5,660	40,100	7.09
Virginia	77,400	845,000	10.91	62,200	693,000	11.14
Washington	16,800	174,000	10.39	17,700	167,000	9.43
West Virginia	14,500 <sup>2</sup>	120,000 <sup>2</sup>	8.25 <sup>2</sup>	15,900	157,000	9.88
Wisconsin	40,000	225,000	5.63	25,600	151,000	5.88
Wyoming	12,500	71,100	5.66 <sup>2</sup>	12,000	58,700	4.89
Other	8,960	97,400	10.86	8,740	113,000	12.96
U.S. total or average	1,770,000	14,200,000	8.04	1,600,000	13,900,000	8.66

See footnotes at end of table.

TABLE 4—Continued  
 CRUSHED STONE SOLD OR USED BY PRODUCERS IN THE UNITED STATES, BY STATE AND TERRITORIES<sup>1</sup>

Territory	2006			2007		
	Quantity (thousand metric tons)	Value (thousands)	Unit value	Quantity (thousand metric tons)	Value (thousands)	Unit value
American Samoa <sup>4</sup>	(5)	(5)	(5)	(5)	(5)	(5)
Guam	900	9,330	10.37	329	3,760	11.41
Puerto Rico	14,800	102,000	6.91	13,500	94,200	7.00
Virgin Islands	(5)	(5)	(5)	(5)	(5)	(5)
Grand total or average	1,780,000	14,300,000	8.03	1,620,000	14,000,000	8.65

<sup>1</sup>Revised. W Withheld to avoid disclosing company proprietary data; included with "Other."

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

<sup>2</sup>Data not revised.

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

<sup>4</sup>Includes Tutuila Island and dependencies.

<sup>5</sup>Withheld to avoid disclosing company proprietary data; included in "Grand total or average."

TABLE 5A  
 CRUSHED STONE SOLD OR USED IN THE UNITED STATES IN 2007,  
 BY SIZE OF OPERATION<sup>1</sup>

Size range (metric tons)	U.S. total			
	Number of operations	Percentage of total	Quantity (thousand metric tons)	Percentage of total
Less than 25,000	411	11.5	3,330	0.2
25,000 to 49,999	230	6.5	8,050	0.5
50,000 to 99,999	422	11.8	27,700	1.7
100,000 to 199,999	515	14.5	70,900	4.4
200,000 to 299,999	360	10.1	80,900	5.0
300,000 to 399,999	283	7.9	90,400	5.6
400,000 to 499,999	261	7.3	105,000	6.6
500,000 to 599,999	172	4.8	85,800	5.4
600,000 to 699,999	135	3.8	79,400	5.0
700,000 to 799,999	105	2.9	71,100	4.4
800,000 to 899,999	106	3.0	82,000	5.1
900,000 to 999,999	90	2.5	77,600	4.8
1,000,000 to 1,499,999	218	6.1	236,000	14.7
1,500,000 to 1,999,999	130	3.6	198,000	12.4
2,000,000 to 2,499,999	41	1.2	82,600	5.2
2,500,000 to 4,999,999	67	1.9	198,000	12.3
5,000,000 and more	16	0.4	105,000	6.6
Total	3,562	100.0	1,600,000	100.0

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

TABLE 5B  
CRUSHED STONE SOLD OR USED IN THE UNITED STATES IN 2007, BY REGION AND SIZE OF OPERATION<sup>1</sup>

Size range (metric tons)	Northeast				Midwest			
	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	32	6.5	198	(2)	108	10.6	1,160	0.3
25,000 to 49,999	38	7.7	1,340	0.6	70	6.8	2,460	0.6
50,000 to 99,999	53	10.8	3,270	1.5	131	12.8	8,630	2.1
100,000 to 199,999	63	12.8	8,290	3.9	155	15.2	23,100	5.6
200,000 to 299,999	55	11.2	12,300	5.8	128	12.5	28,700	6.9
300,000 to 399,999	47	9.6	15,000	7.0	85	8.3	27,000	6.5
400,000 to 499,999	35	7.1	14,000	6.6	93	9.1	37,000	9.0
500,000 to 599,999	37	7.5	18,200	8.5	42	4.1	21,100	5.1
600,000 to 699,999	21	4.3	12,200	5.7	34	3.3	19,900	4.8
700,000 to 799,999	16	3.3	10,900	5.1	30	2.9	20,300	4.9
800,000 to 899,999	14	2.8	10,700	5.0	21	2.1	16,300	4.0
900,000 to 999,999	22	4.5	19,100	8.9	19	1.9	16,500	4.0
1,000,000 to 1,499,999	28	5.7	30,700	14.3	51	5.0	56,000	13.6
1,500,000 to 1,999,999	17	3.5	25,500	11.9	29	2.8	45,300	11.0
2,000,000 to 2,499,999	9	1.8	18,100	8.5	8	0.8	16,200	3.9
2,500,000 to 4,999,999	5	1.0	14,400	6.7	15	1.5	45,500	11.0
5,000,000 and more	--	--	--	--	4	0.4	27,600	6.7
Total	492	100.0	214,000	100.0	1,023	100.0	413,000	100.0

  

Size range (metric tons)	South				West			
	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	70	5.6	577	(2)	201	25.3	1,390	0.7
25,000 to 49,999	50	4.0	1,740	2.4	72	9.1	2,510	1.3
50,000 to 99,999	94	7.5	6,270	0.8	144	18.2	9,500	5.1
100,000 to 199,999	148	11.8	20,200	2.6	149	18.8	19,300	10.3
200,000 to 299,999	121	9.6	27,500	3.5	56	7.1	12,400	6.6
300,000 to 399,999	113	9.0	36,200	4.6	38	4.8	12,100	6.5
400,000 to 499,999	104	8.3	42,300	5.4	29	3.7	11,700	6.2
500,000 to 599,999	73	5.8	36,600	4.6	20	2.5	9,880	5.3
600,000 to 699,999	67	5.3	39,700	5.0	13	1.6	7,590	4.1
700,000 to 799,999	51	4.1	34,600	4.4	8	1.0	5,420	2.9
800,000 to 899,999	61	4.9	47,300	6.0	10	1.3	7,670	4.1
900,000 to 999,999	42	3.3	36,000	4.6	7	0.9	6,030	3.2
1,000,000 to 1,499,999	121	9.6	130,000	16.5	18	2.3	19,300	10.3
1,500,000 to 1,999,999	72	5.7	109,000	13.8	12	1.5	18,700	9.9
2,000,000 to 2,499,999	21	1.7	42,000	5.3	3	0.4	6,230	3.3
2,500,000 to 4,999,999	35	2.8	105,000	13.4	12	1.5	32,600	17.4
5,000,000 and more	11	0.9	72,400	9.2	1	0.1	5,180	2.8
Total	1,254	100.0	787,000	100.0	793	100.0	187,000	100.0

-- Zero.

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

<sup>2</sup>Less than ½ unit.

TABLE 6  
LIMESTONE, DOLOMITE, CALCAREOUS MARL, AND MARBLE SOLD OR USED BY PRODUCERS IN THE UNITED STATES  
IN 2007, BY STATE<sup>1</sup>

(Thousand metric tons and thousand dollars)

State	Limestone		Dolomite		Calcareous marl		Marble	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Alabama	44,400	340,000	1,840	14,000	--	--	2,460	18,800
Alaska	6	43	--	--	--	--	--	--
Arizona	6,520 <sup>2</sup>	69,700 <sup>2</sup>	--	--	--	--	358	3,300
Arkansas	12,800	89,600	591	4,750	--	--	--	--
California	25,800 <sup>2</sup>	240,000 <sup>2</sup>	102	1,200	--	--	--	--
Colorado	1,200	9,420	--	--	--	--	96	676
Connecticut	1,240 <sup>2</sup>	12,500 <sup>2</sup>	--	--	--	--	318	2,590
Delaware	--	--	--	--	--	--	--	--
Florida	92,100 <sup>2</sup>	1,090,000 <sup>2</sup>	234	1,540	--	--	--	--
Georgia	10,700	116,000	--	--	--	--	1,320	22,900
Hawaii	14	225	--	--	--	--	--	--
Idaho	1,020	8,200	--	--	--	--	--	--
Illinois	51,800 <sup>2</sup>	409,000 <sup>2</sup>	21,600	174,000	--	--	--	--
Indiana	50,900 <sup>2</sup>	333,000 <sup>2</sup>	6,720	53,700	--	--	--	--
Iowa	33,700	280,000	--	--	--	--	--	--
Kansas	20,700	183,000	--	--	--	--	--	--
Kentucky	55,500 <sup>2</sup>	427,000 <sup>2</sup>	--	--	--	--	--	--
Louisiana	--	--	--	--	--	--	--	--
Maine	1,780	12,100	--	--	--	--	--	--
Maryland	20,100 <sup>2</sup>	161,000 <sup>2</sup>	--	--	--	--	--	--
Massachusetts	947 <sup>2</sup>	19,600 <sup>2</sup>	--	--	--	--	--	--
Michigan	19,800	84,600	7,120	40,800	--	--	--	--
Minnesota	3,780 <sup>2</sup>	41,000 <sup>2</sup>	2,770	32,600	--	--	--	--
Mississippi <sup>3</sup>	3,010	56,800	--	--	--	--	--	--
Missouri	76,000 <sup>2</sup>	516,000 <sup>2</sup>	2,760	20,200	--	--	--	--
Montana	453	2,450	--	--	--	--	--	--
Nebraska	7,670	75,700	--	--	--	--	--	--
Nevada	3,880	36,100	--	--	--	--	--	--
New Hampshire	--	--	--	--	--	--	--	--
New Jersey	--	--	--	--	--	--	--	--
New Mexico	2,880	21,100	--	--	--	--	--	--
New York	27,500 <sup>2</sup>	243,000 <sup>2</sup>	9,320	86,000	--	--	61	557
North Carolina	7,570	93,300	411	5,260	--	--	--	--
North Dakota	--	--	--	--	--	--	--	--
Ohio	63,200 <sup>2</sup>	425,000 <sup>2</sup>	3,540	14,000	--	--	--	--
Oklahoma	39,600 <sup>2</sup>	253,000 <sup>2</sup>	--	--	--	--	--	--
Oregon	--	--	--	--	--	--	--	--
Pennsylvania	60,500 <sup>2</sup>	556,000 <sup>2</sup>	11,800	93,100	--	--	171	1,460
Rhode Island	--	--	--	--	--	--	--	--
South Carolina	3,360	28,400	--	--	2,820	18,800	--	--
South Dakota	3,200	22,500	--	--	--	--	--	--
Tennessee	60,600 <sup>2</sup>	533,000 <sup>2</sup>	--	--	--	--	--	--
Texas	137,000 <sup>2</sup>	919,000 <sup>2</sup>	--	--	--	--	275	3,150
Utah	6,350	46,300	--	--	--	--	--	--
Vermont	1,510 <sup>2</sup>	11,000 <sup>2</sup>	15	110	--	--	2,130	15,100
Virginia	18,400 <sup>2</sup>	202,000 <sup>2</sup>	2,910	16,800	--	--	--	--
Washington	1,840 <sup>2</sup>	21,100 <sup>2</sup>	159	675	--	--	318	2,090
West Virginia	15,100	152,000	--	--	--	--	--	--
Wisconsin	20,300 <sup>2</sup>	117,000 <sup>2</sup>	547	2,680	--	--	81	471
Wyoming	2,960	18,400	--	--	--	--	--	--
Total	1,020,000	8,280,000	72,500	562,000	2,820	18,800	7,580	71,100

See footnotes at end of table.

TABLE 6—Continued  
LIMESTONE, DOLOMITE, CALCAREOUS MARL, AND MARBLE SOLD OR USED BY PRODUCERS IN THE UNITED STATES  
IN 2007, BY STATE<sup>1</sup>

-- Zero.

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

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

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

TABLE 7  
GRANITE, TRAPROCK, SANDSTONE AND QUARTZITE, AND SLATE SOLD OR USED BY PRODUCERS IN THE UNITED STATES  
IN 2007, BY STATE<sup>1</sup>

(Thousand metric tons and thousand dollars)

State	Granite		Traprock		Sandstone and quartzite <sup>2</sup>		Slate	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Alabama	1,070	7,960	--	--	1,350	11,300	606	4,640
Alaska	244	2,670	129	1,440	--	--	--	--
Arizona	5,030	48,500	271	2,470	535	4,940	--	--
Arkansas	5,340	39,600	--	--	11,100	81,900	--	--
California	13,600	152,000	8,250	94,900	1,700	19,600	394	4,610
Colorado	6,200	39,300	5	22	2,630	19,400	--	--
Connecticut	412	4,150	7,220	70,700	--	--	--	--
Delaware	--	--	--	--	--	--	--	--
Florida	--	--	--	--	256	3,010	--	--
Georgia	66,400	664,000	--	--	771	8,450	--	--
Hawaii	--	--	6,710	106,000	--	--	--	--
Idaho	401	2,120	830	4,090	482	2,950	--	--
Illinois	--	--	--	--	1,030	8,230	--	--
Indiana	--	--	--	--	--	--	--	--
Iowa	--	--	--	--	--	--	--	--
Kansas	--	--	--	--	--	--	--	--
Kentucky	--	--	--	--	--	--	--	--
Louisiana	--	--	--	--	--	--	--	--
Maine	1,810	17,100	--	--	--	--	--	--
Maryland	6,340	62,500	3,910	45,300	--	--	--	--
Massachusetts	4,850	48,500	5,070	54,400	--	--	--	--
Michigan	--	--	--	--	--	--	--	--
Minnesota	3,050	30,800	--	--	--	--	--	--
Mississippi	--	--	--	--	--	--	--	--
Missouri	1,080	65,600	1,310	8,360	74	283	--	--
Montana	100	1,210	--	--	80	410	--	--
Nebraska	--	--	--	--	--	--	--	--
Nevada	2,690	21,900	--	--	55	463	--	--
New Hampshire	1,910	27,000	3,260	41,100	--	--	--	--
New Jersey	6,380	52,400	13,600	109,000	--	--	--	--
New Mexico	--	--	--	--	--	--	--	--
New York	1,590	17,500	--	--	4,040	40,500	86	760
North Carolina	53,700	689,000	6,200	81,100	--	--	928	11,000

See footnotes at end of table.

TABLE 7—Continued  
 GRANITE, TRAPROCK, SANDSTONE AND QUARTZITE, AND SLATE SOLD OR USED BY PRODUCERS IN THE UNITED STATES  
 IN 2007, BY STATE<sup>1</sup>

(Thousand metric tons and thousand dollars)

State	Granite		Traprock		Sandstone and quartzite <sup>2</sup>		Slate	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
North Dakota	--	--	--	--	--	--	--	--
Ohio	--	--	--	--	548	3,600	--	--
Oklahoma	3,100	20,200	--	--	899	7,410	--	--
Oregon	--	--	17,300	118,000	--	--	--	--
Pennsylvania	4,500	38,100	7,210	56,900	15,100	121,000	1,580	13,400
Rhode Island	1,160	11,000	--	--	--	--	--	--
South Carolina	21,300	220,000	--	--	--	--	--	--
South Dakota	190	1,930	--	--	1,970	20,000	1	13
Tennessee	378	3,340	--	--	972	10,400	--	--
Texas	139	1,520	--	--	790	6,420	--	--
Utah	--	--	21	128	210	2,250	--	--
Vermont	--	--	108	768	1,030	7,270	--	--
Virginia	25,200	305,000	12,800	147,000	1,210	13,000	228	2,550
Washington	1,840	19,900	7,530	68,700	--	--	--	--
West Virginia	--	--	--	--	858	5,260	--	--
Wisconsin	1,020	6,630	3,160	20,800	--	--	--	--
Wyoming	--	--	--	--	--	--	--	--
Total	241,000	2,620,000	105,000	1,030,000	47,700	398,000	3,820	37,000

-- Zero.

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

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

TABLE 8  
SHELL, VOLCANIC CINDER AND SCORIA, AND MISCELLANEOUS STONE SOLD OR USED  
BY PRODUCERS IN THE UNITED STATES IN 2007, BY STATE<sup>1</sup>

(Thousand metric tons and thousand dollars)

State	Shell		Volcanic cinder and scoria		Miscellaneous stone	
	Quantity	Value	Quantity	Value	Quantity	Value
Alabama	--	--	--	--	711	5,480
Alaska	--	--	--	--	1,240	13,900
Arizona	--	--	81	684	2,880	14,900
Arkansas	--	--	--	--	2,430	16,400
California	--	--	499	6,130	3,990	49,200
Colorado	--	--	--	--	1,110	9,010
Connecticut	--	--	--	--	250	2,450
Delaware <sup>2</sup>	--	--	--	--	W	W
Florida	2,850	24,200	--	--	296	3,670
Georgia	--	--	--	--	--	--
Hawaii	--	--	512	8,050	1,370	21,500
Idaho	--	--	--	--	3,120	18,300
Illinois	--	--	--	--	--	--
Indiana	--	--	--	--	--	--
Iowa	--	--	--	--	--	--
Kansas	--	--	--	--	604	5,460
Kentucky	--	--	--	--	--	--
Louisiana <sup>2</sup>	--	--	--	--	W	W
Maine	--	--	--	--	1,110	9,180
Maryland	--	--	--	--	1,090	18,000
Massachusetts	--	--	--	--	386	4,340
Michigan	--	--	--	--	679	3,730
Minnesota	--	--	--	--	588	5,010
Mississippi <sup>2</sup>	--	--	--	--	113	2,130
Missouri	--	--	--	--	136	920
Montana	--	--	475	2,540	668	3,000
Nebraska	--	--	--	--	48	481
Nevada	--	--	--	--	4,570	38,800
New Hampshire	--	--	--	--	45	590
New Jersey	--	--	--	--	1	9
New Mexico	--	--	164	1,940	2,210	16,100
New York	--	--	--	--	4,230	39,000
North Carolina	--	--	--	--	1,440	18,200
North Dakota	--	--	274	1,270	--	--
Ohio	--	--	--	--	--	--
Oklahoma	--	--	--	--	2,170	13,300
Oregon	--	--	445	3,350	11,300	78,700
Pennsylvania	--	--	--	--	8,060	64,000
Rhode Island	--	--	--	--	1,080	10,200
South Carolina	--	--	--	--	622	6,840
South Dakota	--	--	--	--	--	--
Tennessee	--	--	--	--	--	--
Texas	--	--	--	--	6,400	41,000
Utah	--	--	24	467	6,650	49,100
Vermont	--	--	--	--	866	5,920
Virginia	--	--	--	--	1,480	6,140
Washington	--	--	62	581	5,940	53,700
West Virginia	--	--	--	--	--	--
Wisconsin	--	--	--	--	548	2,650
Wyoming	--	--	4,100	23,800	4,960	16,500
Other	--	--	--	--	8,740	113,000
Total	2,850	24,200	6,630	48,800	94,100	781,000

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

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

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

TABLE 9  
CRUSHED STONE SOLD OR USED BY PRODUCERS IN THE UNITED STATES  
IN 2007, BY USE<sup>1</sup>

Use	Quantity (thousand metric tons)	Value (thousands)	Unit value
Construction:			
Coarse aggregate (+1½ inch):			
Macadam	3,910	\$27,900	\$7.12
Riprap and jetty stone	9,810	104,000	10.61
Filter stone	4,380	40,900	9.33
Other coarse aggregate	27,900	263,000	9.42
Coarse aggregate, graded:			
Concrete aggregate, coarse	49,200	439,000	8.92
Bituminous aggregate, coarse	28,400	234,000	8.24
Bituminous surface-treatment aggregate	8,110	72,700	8.96
Railroad ballast	8,200	63,400	7.73
Other graded coarse aggregate	136,000	1,450,000	10.67
Fine aggregate (-¾ inch):			
Stone sand, concrete	8,830	98,300	11.13
Stone sand, bituminous mix or seal	10,400	76,900	7.42
Screening, undesignated	13,700	100,000	7.34
Other fine aggregate	54,100	530,000	9.79
Coarse and fine aggregates:			
Graded road base or subbase	99,100	640,000	6.47
Unpaved road surfacing	12,000	88,200	7.37
Terrazzo and exposed aggregate	847	11,600	13.65
Crusher run or fill or waste	26,200	160,000	6.10
Roofing granules	4,650	93,500	20.09
Other coarse and fine aggregates	135,000	1,150,000	8.51
Other construction materials	4,920	43,400	8.81
Agricultural:			
Agricultural limestone	10,800	77,200	7.16
Poultry grit and mineral food	871	9,140	10.49
Other agricultural uses	1,130	31,100	27.55
Chemical and metallurgical:			
Cement manufacture	89,600	533,000	5.95
Lime manufacture	15,600	143,000	9.17
Dead-burned dolomite manufacture	W	W	W
Flux stone	2,920	17,400	5.95
Chemical stone	W	W	W
Glass manufacture	392	3,540	9.04
Sulfur oxide removal	3,740	21,000	5.63
Special:			
Mine dusting or acid water treatment	305	6,350	20.82
Asphalt fillers or extenders	1,100	14,400	13.15
Whiting or whiting substitute	220	5,410	24.59
Other fillers or extenders	3,890	87,100	22.37
Other miscellaneous uses and specified uses not listed	7,740	79,500	10.28
Unspecified: <sup>2</sup>			
Reported	493,000	4,420,000	8.96
Estimated	324,000	2,720,000	8.41
Total or average	1,600,000	13,900,000	8.66

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

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

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



TABLE 10  
LIMESTONE AND DOLOMITE SOLD OR USED BY PRODUCERS IN THE UNITED STATES IN 2007, BY USE<sup>1</sup>

(Thousand metric tons and thousand dollars)

Use	Limestone <sup>2</sup>		Dolomite	
	Quantity	Value	Quantity	Value
<b>Construction:</b>				
Coarse aggregate (+1½ inch):				
Macadam	3,470	23,600	73	1,100
Riprap and jetty stone	6,370	58,700	406	4,650
Filter stone	3,260	29,100	202	1,600
Other coarse aggregate	16,300	136,000	2,140	14,700
Coarse aggregate, graded:				
Concrete aggregate, coarse	37,600	317,000	2,400	20,000
Bituminous aggregate, coarse	16,900	135,000	3,240	26,900
Bituminous surface-treatment aggregate	5,930	52,000	870	7,690
Railroad ballast	1,910	14,100	294	2,480
Other graded coarse aggregate	85,200	832,000	8,380	70,300
Fine aggregate (-¾ inch):				
Stone sand, concrete	3,320	35,000	444	2,640
Stone sand, bituminous mix or seal	6,530	47,100	917	6,710
Screening, undesignated	9,080	63,000	423	1,830
Other fine aggregate	29,400	282,000	2,600	21,800
Coarse and fine aggregates:				
Graded road base or subbase	73,900	450,000	4,360	28,600
Unpaved road surfacing	9,400	70,200	378	2,360
Terrazzo and exposed aggregate	426	3,640	W	W
Crusher run or fill or waste	17,300	103,000	1,870	10,700
Roofing granules	385	3,360	--	--
Other coarse and fine aggregates	70,100	576,000	5,710	38,500
Other construction materials	1,790	13,600	451	1,860
<b>Agricultural:</b>				
Agricultural limestone	9,200	67,900	1,580	9,270
Poultry grit and mineral food	837	8,610	--	--
Other agricultural uses	873	26,400	W	W
<b>Chemical and metallurgical:</b>				
Cement manufacture	84,400	503,000	--	--
Lime manufacture	14,500	139,000	W	W
Dead-burned dolomite manufacture	W	W	W	W
Flux stone	1,800	11,100	992	5,180
Chemical stone	W	W	--	--
Glass manufacture	392	3,540	--	--
Sulfur oxide removal	3,740	21,000	--	--
<b>Special:</b>				
Mine dusting or acid water treatment	305	6,350	--	--
Asphalt fillers or extenders	622	9,020	--	--
Whiting or whiting substitute	166	5,140	--	--
Other fillers or extenders	3,230	74,400	58	747
Other miscellaneous uses and specified uses not listed	6,790	66,000	352	3,610
<b>Unspecified:<sup>3</sup></b>				
Reported	274,000	2,330,000	29,400	240,000
Estimated	218,000	1,750,000	3,740	30,900
Total or average	1,020,000	8,280,000	72,500	562,000

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

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

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

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

TABLE 11  
LIMESTONE AND DOLOMITE SOLD OR USED BY PRODUCERS IN 2007, BY STATE AND USE<sup>1</sup>

(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	2,330	17,300	9,460	75,600	1,920	16,200	145	1,320	8,170	63,200
Alaska	--	--	--	--	6	43	--	--	--	--
Arizona	--	--	--	--	--	--	--	--	--	--
Arkansas	316	2,240	716	6,130	1,800	11,500	47	332	2,510	15,500
California	65	2,000	339	4,500	W	W	W	W	542	8,050
Colorado	W	W	--	--	W	W	40	450	--	--
Connecticut	W	W	W	W	W	W	W	W	W	W
Delaware	--	--	--	--	--	--	--	--	--	--
Florida	13,500	179,000	9,730	181,000	9,740	68,700	104	2,670	10,900	134,000
Georgia	W	W	W	W	W	W	--	--	W	W
Hawaii	--	--	--	--	--	--	--	--	--	--
Idaho	--	--	--	--	102	476	--	--	--	--
Illinois	5,980	52,100	17,400	144,000	6,730	49,600	525	4,540	4,340	26,900
Indiana	4,410	28,700	8,280	49,700	6,210	37,500	699	5,930	6,190	35,400
Iowa	1,460	14,800	920	8,820	6,690	55,700	263	3,130	1,690	12,500
Kansas	W	W	W	W	793	3,680	38	592	1,030	9,310
Kentucky	3,180	25,000	5,300	44,300	6,350	40,300	361	2,760	6,980	53,500
Louisiana	--	--	--	--	--	--	--	--	--	--
Maine	27	88	111	583	11	52	--	--	307	2,630
Maryland	6,360	43,300	1,910	16,300	1,160	8,740	184	1,320	3,560	32,700
Massachusetts	--	--	--	--	W	W	W	W	257	4,590
Michigan	3,330	19,900	1,580	9,550	2,890	15,600	216	2,010	413	2,130
Minnesota	364	4,780	794	12,900	732	8,460	83	1,870	903	8,520
Mississippi <sup>2</sup>	W	W	W	W	W	W	--	--	W	W
Missouri	2,720	18,800	5,680	48,300	6,080	31,800	2,160	15,900	5,810	32,600
Montana	--	--	--	--	--	--	--	--	--	--
Nebraska	W	W	W	W	W	W	W	W	W	W
Nevada	--	--	--	--	--	--	--	--	--	--
New Hampshire	--	--	--	--	--	--	--	--	--	--
New Jersey	--	--	--	--	--	--	--	--	--	--
New Mexico	W	W	382	1,230	205	1,900	98	653	153	1,470
New York	2,140	20,600	4,760	42,700	3,800	30,200	238	3,320	5,220	37,700
North Carolina	W	W	--	--	--	--	--	--	--	--
North Dakota	--	--	--	--	--	--	--	--	--	--
Ohio	2,900	17,500	11,200	68,000	9,200	64,200	571	4,550	5,120	30,800
Oklahoma	4,410	33,400	1,030	7,400	3,210	23,800	116	1,150	3,120	18,800
Oregon	--	--	--	--	--	--	--	--	--	--
Pennsylvania	4,760	40,400	12,500	103,000	8,310	61,400	667	6,770	7,010	45,800
Rhode Island	--	--	--	--	--	--	--	--	--	--
South Carolina	--	--	--	--	W	W	--	--	W	W
South Dakota	--	--	--	--	--	--	--	--	--	--
Tennessee	4,450	42,100	17,400	167,000	3,000	23,000	979	7,460	16,000	126,000
Texas	8,010	65,600	12,900	135,000	22,400	117,000	706	6,460	11,700	78,600
Utah	W	W	W	W	297	1,840	24	301	485	2,620
Vermont	W	W	W	W	W	W	W	W	W	W
Virginia	1,800	15,600	2,350	17,600	2,610	19,000	223	1,610	2,570	17,400
Washington	W	W	--	--	174	683	--	--	W	W
West Virginia	360	2,880	561	3,460	777	4,460	98	670	1,370	10,800
Wisconsin	506	3,900	960	7,670	3,180	15,500	155	470	2,760	12,400
Wyoming	W	W	W	W	W	W	W	W	W	W
Total	75,700	678,000	129,000	1,190,000	110,000	727,000	8,960	79,900	109,000	851,000
Total withheld	2,400	28,000	2,380	32,800	1,610	15,600	215	3,670	2,360	27,200
Grand total	78,100	706,000	131,000	1,220,000	112,000	742,000	9,170	83,500	111,000	879,000

See footnotes at end of table.

TABLE 11—Continued  
LIMESTONE AND DOLOMITE SOLD OR USED BY PRODUCERS IN 2007, BY STATE AND USE<sup>1</sup>

(Thousand metric tons and thousand dollars)

State	Cement manufacture		Agricultural uses		Lime manufacture		Other uses		Total	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Alabama	1,290	9,290	W	W	W	W	19,000	145,000	46,300	354,000
Alaska	--	--	--	--	--	--	--	--	6	43
Arizona	W	W	--	--	W	W	4,240	39,100	6,520 <sup>3</sup>	69,700 <sup>3</sup>
Arkansas	--	--	194	1,280	--	--	7,840	57,300	13,400	94,300
California	10,500	30,300	170	2,960	W	W	13,800	188,000	25,900 <sup>3</sup>	241,000 <sup>3</sup>
Colorado	--	--	--	--	--	--	1,110	8,580	1,200	9,420
Connecticut	--	--	W	W	--	--	1,140	11,200	1,240 <sup>3</sup>	12,500 <sup>3</sup>
Delaware	--	--	--	--	--	--	--	--	--	--
Florida	5,790	33,000	554	5,190	--	--	42,000	488,000	92,300 <sup>3</sup>	1,090,000 <sup>3</sup>
Georgia	W	W	W	W	--	--	5,940	68,000	10,700	116,000
Hawaii	--	--	--	--	--	--	14	225	14	225
Idaho	W	W	W	W	W	W	W	W	1,020	8,200
Illinois	3,010	31,800	2,540	10,400	--	--	32,900	263,000	73,400 <sup>3</sup>	583,000 <sup>3</sup>
Indiana	4,450	23,300	1,460	6,880	W	W	25,900	199,000	57,600 <sup>3</sup>	387,000 <sup>3</sup>
Iowa	W	W	1,030	8,990	W	W	19,300	160,000	33,700	280,000
Kansas	W	W	W	W	--	--	16,500	145,000	20,700	183,000
Kentucky	W	W	511	2,460	W	W	28,300	224,000	55,500 <sup>3</sup>	427,000 <sup>3</sup>
Louisiana	--	--	--	--	--	--	--	--	--	--
Maine	W	W	--	--	--	--	W	W	1,780	12,100
Maryland	W	W	W	W	W	W	5,620	52,100	20,100 <sup>3</sup>	161,000 <sup>3</sup>
Massachusetts	--	--	W	W	W	W	225	8,660	947 <sup>3</sup>	19,600 <sup>3</sup>
Michigan	5,710	6,300	120	1,100	W	W	11,400	61,900	27,000	125,000
Minnesota	--	--	123	1,150	--	--	3,550	36,000	6,550 <sup>3</sup>	73,700 <sup>3</sup>
Mississippi <sup>2</sup>	W	W	W	W	--	--	1,030	18,800	3,010	56,800
Missouri	6,620	25,300	903	4,050	W	W	47,100	350,000	78,700 <sup>3</sup>	537,000 <sup>3</sup>
Montana	--	--	--	--	--	--	453	2,450	453	2,450
Nebraska	W	W	W	W	--	--	4,320	42,300	7,670	75,700
Nevada	W	W	W	W	W	W	W	W	3,880	36,100
New Hampshire	--	--	--	--	--	--	--	--	--	--
New Jersey	--	--	--	--	--	--	--	--	--	--
New Mexico	W	W	--	--	--	--	1,560	11,600	2,880	21,100
New York	W	W	164	1,430	--	--	16,900	155,000	36,800 <sup>3</sup>	329,000 <sup>3</sup>
North Carolina	--	--	--	--	--	--	W	W	7,980	98,500
North Dakota	--	--	--	--	--	--	--	--	--	--
Ohio	3,250	22,100	892	6,310	1,060	4,100	32,600	222,000	66,700 <sup>3</sup>	439,000 <sup>3</sup>
Oklahoma	2,580	7,970	104	529	--	--	25,000	160,000	39,600 <sup>3</sup>	253,000 <sup>3</sup>
Oregon	--	--	--	--	--	--	--	--	--	--
Pennsylvania	5,690	79,000	W	W	W	W	31,400	275,000	72,400 <sup>3</sup>	649,000 <sup>3</sup>
Rhode Island	--	--	--	--	--	--	--	--	--	--
South Carolina	--	--	--	--	--	--	2,410	21,700	3,360	28,400
South Dakota	W	W	--	--	--	--	W	W	3,200	22,500
Tennessee	W	W	220	2,280	W	W	16,900	143,000	60,600 <sup>3</sup>	533,000 <sup>3</sup>
Texas	11,400	37,200	W	W	W	W	69,100	474,000	137,000 <sup>3</sup>	919,000 <sup>3</sup>
Utah	2,300	16,500	6	204	22	622	2,710	20,300	6,350	46,300
Vermont	--	--	W	W	--	--	1,050	7,410	1,530 <sup>3</sup>	11,100 <sup>3</sup>
Virginia	--	--	W	W	W	W	10,600	120,000	21,300 <sup>3</sup>	219,000 <sup>3</sup>
Washington	--	--	W	W	W	W	1,620	17,300	2,000 <sup>3</sup>	21,800 <sup>3</sup>

See footnotes at end of table.

TABLE 11—Continued  
LIMESTONE AND DOLOMITE SOLD OR USED BY PRODUCERS IN 2007, BY STATE AND USE<sup>1</sup>

(Thousand metric tons and thousand dollars)

State	Cement manufacture		Agricultural uses		Lime manufacture		Other uses		Total	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
West Virginia	--	--	12	79	--	--	11,900	130,000	15,100	152,000
Wisconsin	--	--	221	2,620	--	--	13,000	77,700	20,800 <sup>3</sup>	120,000 <sup>3</sup>
Wyoming	W	W	--	--	--	--	1,990	11,700	2,960	18,400
Total	83,100	494,000	10,200	81,400	12,000	120,000	516,000	4,310,000	XX	XX
Total withheld	21,900	181,000	3,400	56,700	14,600	139,000	12,400	138,000	XX	XX
Grand total	105,000	675,000	13,600	138,000	26,500	259,000	528,000	4,450,000	1,090,000	8,840,000

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

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

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

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

TABLE 12  
 GRANITE, TRAPROCK, SANDSTONE AND QUARTZITE SOLD OR USED BY PRODUCERS IN THE UNITED STATES IN 2007, BY USE<sup>1</sup>

(Thousand metric tons and thousand dollars)

Use	Granite		Traprock		Sandstone and quartzite <sup>2</sup>	
	Quantity	Value	Quantity	Value	Quantity	Value
Construction:						
Coarse aggregate (+1½ inch):						
Macadam	W	W	111	1,090	W	W
Riprap and jetty stone	1,380	19,100	608	7,810	512	6,330
Filter stone	313	3,820	323	3,620	152	1,290
Other coarse aggregate	4,390	64,300	3,640	34,400	479	4,480
Coarse aggregate, graded:						
Concrete aggregate, coarse	4,430	51,600	2,620	29,400	854	7,110
Bituminous aggregate, coarse	2,990	25,500	2,960	27,700	1,390	12,400
Bituminous surface-treatment aggregate	609	6,120	275	2,230	244	2,500
Railroad ballast	3,140	26,500	1,140	8,000	44	428
Other graded coarse aggregate	31,600	418,000	6,320	78,800	1,830	18,500
Fine aggregate (-¾ inch):						
Stone sand, concrete	2,810	29,600	651	11,400	1,010	13,600
Stone sand, bituminous mix or seal	1,150	7,830	806	7,900	578	4,840
Screening, undesignated	1,790	17,100	1,160	9,160	667	4,850
Other fine aggregate	15,900	164,000	2,780	28,700	1,070	11,600
Coarse and fine aggregates:						
Graded road base or subbase	5,340	47,300	9,970	77,100	2,470	15,200
Unpaved road surfacing	304	2,430	1,310	9,340	12	127
Terrazzo and exposed aggregate	240	4,400	W	W	W	W
Crusher run or fill or waste	3,760	27,000	1,660	11,600	874	4,650
Roofing granules	W	W	3,430	26,000	--	--
Other coarse and fine aggregates	32,700	309,000	11,900	99,700	5,720	40,700
Other construction materials	553	5,670	108	1,640	456	3,690
Agricultural:						
Agricultural limestone	--	--	--	--	--	--
Poultry grit and mineral food	--	--	--	--	--	--
Other agricultural uses	W	W	W	W	--	--
Chemical and metallurgical:						
Cement manufacture	--	--	--	--	230	1,810
Lime manufacture	--	--	--	--	--	--
Dead-burned dolomite manufacture	--	--	--	--	--	--
Flux stone	--	--	--	--	W	W
Chemical stone	--	--	--	--	--	--
Glass manufacture	--	--	--	--	--	--
Sulfur oxide removal	--	--	--	--	--	--
Special:						
Mine dusting or acid water treatment	--	--	--	--	--	--
Asphalt fillers or extenders	W	W	--	--	--	--
Whiting or whiting substitute	--	--	--	--	--	--
Other fillers or extenders	--	--	3	20	--	--
Other miscellaneous uses and specified uses not listed	17	131	54	719	90	1,340
Unspecified: <sup>3</sup>						
Reported	103,000	1,090,000	31,800	333,000	10,200	84,500
Estimated	23,100	236,000	21,200	221,000	18,600	156,000
Total	241,000	2,620,000	105,000	1,030,000	47,700	398,000

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

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

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

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

TABLE 13  
MARBLE, VOLCANIC CINDER AND SCORIA, AND MISCELLANEOUS STONE SOLD OR USED BY PRODUCERS IN THE UNITED STATES  
IN 2007, BY USE<sup>1</sup>

(Thousand metric tons and thousand dollars)

Use	Marble		Volcanic cinder and scoria		Miscellaneous stone	
	Quantity	Value	Quantity	Value	Quantity	Value
<b>Construction:</b>						
Coarse aggregate (+1½ inch):						
Macadam	W	W	--	--	W	W
Riprap and jetty stone	--	--	--	--	531	7,480
Filter stone	--	--	W	W	134	1,470
Other coarse aggregate	W	W	3	37	963	8,890
Coarse aggregate, graded:						
Concrete aggregate, coarse	131	527	W	W	1,180	13,300
Bituminous aggregate, coarse	W	W	--	--	916	6,050
Bituminous surface-treatment aggregate	--	--	--	--	181	2,110
Railroad ballast	--	--	--	--	1,670	11,900
Other graded coarse aggregate	--	--	199	3,870	2,670	31,500
Fine aggregate (-¾ inch):						
Stone sand, concrete	125	893	--	--	475	5,050
Stone sand, bituminous mix or seal	--	--	--	--	387	2,530
Screening, undesignated	--	--	--	--	537	4,210
Other fine aggregate	W	W	74	1,160	1,120	8,980
Coarse and fine aggregates:						
Graded road base or subbase	79	495	22	150	2,150	15,700
Unpaved road surfacing	--	--	117	494	444	3,180
Terrazzo and exposed aggregate	25	2,150	--	--	139	1,240
Crusher run or fill or waste	--	--	--	--	740	3,150
Roofing granules	191	1,450	--	--	219	967
Other coarse and fine aggregates	W	W	229	2,680	8,520	82,500
Other construction materials	--	--	17	126	280	4,500
<b>Agricultural:</b>						
Agricultural limestone	--	--	--	--	1	5
Poultry grit and mineral food	--	--	--	--	33	526
Other agricultural uses	W	W	16	422	8	86
<b>Chemical and metallurgical:</b>						
Cement manufacture	--	--	--	--	2,120	9,340
Lime manufacture	--	--	--	--	--	--
Dead-burned dolomite manufacture	--	--	--	--	--	--
Flux stone	--	--	--	--	18	125
Chemical stone	--	--	--	--	--	--
Glass manufacture	--	--	--	--	--	--
Sulfur oxide removal	--	--	--	--	--	--
<b>Special:</b>						
Mine dusting or acid water treatment	--	--	--	--	--	--
Asphalt fillers or extenders	--	--	--	--	--	--
Whiting or whiting substitute	54	273	--	--	--	--
Other fillers or extenders	586	11,700	--	--	W	W
Other miscellaneous uses and specified uses not listed	342	4,870	--	--	583	9,590
<b>Unspecified:<sup>2</sup></b>						
Reported	--	--	4,750	28,500	38,300	300,000
Estimated	5,730	43,600	1,210	11,400	29,800	246,000
<b>Total</b>	<b>7,580</b>	<b>71,100</b>	<b>6,630</b>	<b>48,800</b>	<b>94,100</b>	<b>781,000</b>

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

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

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

TABLE 14  
RECYCLED ASPHALT SOLD OR USED BY PRODUCERS IN THE UNITED STATES, BY STATE<sup>1</sup>

State	2006			2007		
	Quantity (thousand metric tons)	Value (thousands)	Unit value	Quantity (thousand metric tons)	Value (thousands)	Unit value
Alabama	--	--	--	--	--	--
Alaska	3	\$55	\$18.33	--	--	--
Arizona	--	--	--	--	--	--
California	126	638	5.06	80	\$576	\$7.20
Colorado	4	35	8.75	61	278	4.56
Connecticut	39	217	5.56	55	303	5.51
Florida	366	2,450	6.70	369	2,470	6.68
Hawaii	--	--	--	73	720	9.86
Illinois	--	--	--	736	6,150	8.36
Indiana	70	710	10.14	23	238	10.35
Iowa	14	81	5.79	8	46	5.75
Kansas	(2)	(2)	--	--	--	--
Kentucky	--	--	--	22	28	1.27
Louisiana	2	30	15.00	17	87	5.12
Maine	70	680	9.71	106	1,040	9.80
Maryland	45	450	10.00	--	--	--
Massachusetts	4	19	4.75	257	1,750	6.79
Michigan	1	4	4.00	--	--	--
Minnesota	8	41	5.13	40	263	6.58
Missouri	236	1,300	5.52	57	315	5.53
Nevada	5	31	6.20	27	177	6.56
New Hampshire	3	17	5.67	121	1,700	14.05
New Jersey	1	4	4.00	3	11	3.67
New Mexico	4	13	3.25	10	42	4.20
New York	129	712	5.52	165	1,080	6.53
North Carolina	--	--	--	9	95	10.56
Ohio	5	22	4.40	54	165	3.06
Oklahoma	9	70	7.78	--	--	--
Oregon	18	130	7.22	27	159	5.89
Pennsylvania	335	2,350	7.02	528	4,640	8.79
Rhode Island	--	--	--	2	19	9.50
South Carolina	--	--	--	--	--	--
South Dakota	14	76	5.43	--	--	--
Tennessee	--	--	--	45	359	7.98
Texas	56	1,380	24.64	204	4,060	19.90
Vermont	11	102	9.27	8	63	7.88
Virginia	2	10	5.00	--	--	--
Washington	19	25	1.32	3	11	3.67
Wisconsin	21	162	7.71	44	244	5.55
Total or average	1,620	11,800	7.30	3,110	26,800	8.63

-- Zero.

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

<sup>2</sup>Less than ½ unit.

TABLE 15  
 RECYCLED CONCRETE SOLD OR USED BY PRODUCERS IN THE UNITED STATES, BY STATE<sup>1</sup>

State	2006			2007		
	Quantity (thousand metric tons)	Value (thousands)	Unit value	Quantity (thousand metric tons)	Value (thousands)	Unit value
Alabama	--	--	--	45	\$317	\$7.04
Alaska	--	--	--	--	--	--
Arizona	5	\$45	\$9.00	--	--	--
California	173	1,310	7.58	185	1,350	7.27
Colorado	3	15	5.00	14	112	8.00
Connecticut	9	51	5.67	18	97	5.39
Florida	13	84	6.46	40	132	3.30
Hawaii	5	44	8.80	22	197	8.95
Illinois	1,600	11,100	6.92	552	4,280	7.76
Indiana	--	--	--	--	--	--
Iowa	--	--	--	--	--	--
Kansas	--	--	--	7	88	12.57
Kentucky	440	4,370	9.93	--	--	--
Louisiana	26	447	17.19	5	76	15.20
Maine	--	--	--	(2)	(2)	--
Maryland	--	--	--	--	--	--
Massachusetts	9	147	16.33	128	1,180	9.25
Michigan	1	6	6.00	--	--	--
Minnesota	5	27	5.40	590	3,530	5.98
Missouri	--	--	--	--	--	--
Nevada	--	--	--	448	2,770	6.18
New Hampshire	--	--	--	--	--	--
New Jersey	61	395	6.48	4	13	3.25
New Mexico	1	2	2.00	--	--	--
New York	90	492	5.47	108	677	6.27
North Carolina	--	--	--	--	--	--
Ohio	13	41	3.15	47	187	3.98
Oklahoma	--	--	--	--	--	--
Oregon	20	141	7.05	22	150	6.82
Pennsylvania	3	26	8.67	23	157	6.83
Rhode Island	--	--	--	7	64	9.14
South Carolina	9	70	7.78	--	--	--
South Dakota	30	163	5.43	--	--	--
Tennessee	--	--	--	--	--	--
Texas	--	--	--	45	475	10.56
Vermont	--	--	--	--	--	--
Virginia	177	1,890	10.66	108	1,240	11.51
Washington	23	30	1.30	9	50	5.56
Wisconsin	206	997	4.84	52	292	5.62
Total or average	2,920	21,900	7.48	2,480	17,400	7.03

-- Zero.

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

<sup>2</sup>Less than ½ unit.



TABLE 16  
CRUSHED AND BROKEN STONE OPERATIONS IN THE UNITED STATES IN 2007, BY STATE

State	Active operations	Active quarries	Dredging operations	Processing plants				Sales yards
				Stationary	Portable	Stationary and portable	None or unspecified	
Alabama	81	73	--	63	7	2	1	8
Alaska	24	24	--	4	13	1	5	1
Arizona	56	62	--	25	29	4	--	--
Arkansas	82	80	--	41	30	6	4	2
California	151	151	1	86	45	9	6	5
Colorado	38	43	--	19	14	2	4	--
Connecticut	27	27	--	19	6	2	--	--
Delaware	3	--	--	--	--	--	--	3
Florida	106	89	1	41	35	10	1	19
Georgia	91	84	1	78	2	--	2	8
Hawaii	30	30	--	10	18	2	1	--
Idaho	44	64	--	10	31	2	2	--
Illinois	140	136	--	79	45	10	--	7
Indiana	96	91	--	80	6	3	4	5
Iowa	170	191	1	31	128	1	6	3
Kansas	85	127	--	23	52	7	2	1
Kentucky	94	92	--	75	5	10	2	2
Louisiana	21	2	--	2	--	--	--	19
Maine	20	20	--	12	7	2	--	--
Maryland	38	30	--	22	6	--	1	9
Massachusetts	32	30	--	20	7	3	--	2
Michigan	36	33	--	23	6	3	1	3
Minnesota	39	54	--	8	26	1	4	--
Mississippi	16	4	--	3	1	--	--	12
Missouri	204	208	--	118	68	12	6	1
Montana	19	28	--	8	10	--	1	--
Nebraska	9	9	--	7	1	1	--	--
Nevada	24	26	--	19	3	1	1	--
New Hampshire	16	16	--	13	3	--	--	--
New Jersey	21	20	--	11	2	8	--	1
New Mexico	37	40	--	14	19	3	1	--
New York	111	112	1	85	21	4	2	--
North Carolina	114	108	--	100	8	1	--	6
North Dakota	2	2	--	--	1	--	1	--
Ohio	108	112	--	77	18	7	2	4
Oklahoma	73	73	--	60	8	2	2	1
Oregon	177	205	--	52	119	1	7	2
Pennsylvania	227	230	--	175	22	16	15	--
Rhode Island	7	7	--	7	--	--	--	--
South Carolina	38	30	--	28	--	2	--	8
South Dakota	9	9	--	9	--	--	--	--
Tennessee	130	125	--	110	8	1	4	7
Texas	221	224	--	120	60	12	4	25
Utah	36	39	--	16	19	1	--	--
Vermont	26	26	--	12	10	2	2	--
Virginia	110	94	--	79	7	4	--	20
Washington	115	138	--	36	55	6	16	2
West Virginia	33	30	--	23	--	4	1	5
Wisconsin	140	226	--	47	85	3	3	2
Wyoming	35	36	--	27	8	--	--	--
Total	3,562	3,710	5	2,027	1,074	171	114	193

-- Zero.

TABLE 17  
U.S. EXPORTS OF CRUSHED STONE IN 2007, BY DESTINATION<sup>1</sup>

Destination		Limestone					Total
		Limestone	for cement manufacturing	Chalk, crude	Granules, chippings	Other	
North America	metric tons	21,900	407,000	3,450	149,000	362,000	943,000
South America	do.	5,360	689	322	746	1,310	8,420
Europe	do.	194	4,330	30	11,100	4,410	20,100
Asia	do.	931	30,600	29	7,600	5,410	44,600
Oceania	do.	--	--	60	20	1,740	1,820
Middle East	do.	1,170	--	1	686	2,130	3,990
Africa	do.	--	3	--	--	2,020	2,030
Total:							
Quantity	do.	29,600	443,000	3,900	169,000	379,000	1,020,000
Value	thousands	\$5,580	\$11,900	\$2	\$24,100	\$20,800	\$62,500

-- Zero.

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

Source: U.S. Census Bureau.

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

Type	2006			2007		
	Quantity (thousand metric tons)	Value, c.i.f. <sup>2</sup> (thousands)	Unit value	Quantity (thousand metric tons)	Value, c.i.f. <sup>2</sup> (thousands)	Unit value
Crushed stone and chips:						
Limestone	9,180	\$72,200	\$7.87	9,510	\$72,700	\$7.64
Limestone for flux or cement manufacturing	3,270	32,000	9.78	2,870	31,100	10.83
Quartzite	21	3,090	147.14	--	--	--
Other	7,350	98,100	13.34	7,120	107,000	15.04
Total or average	19,800	205,000	XX	19,500	211,000	XX
Calcium carbonate fines: <sup>3</sup>						
Natural chalk	( <sup>4</sup> )	15	66.67	7	228	32.57
Calcium carbonates, other chalk	1	456	533.96	1	1,170	971.71
Total or average	1	471	XX	8	1,400	XX
Grand total or average	19,800	206,000	XX	19,500	212,000	XX

-- Zero. XX Not applicable.

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

<sup>2</sup>Cost, insurance, and freight value.

<sup>3</sup>Excludes precipitated calcium carbonate.

<sup>4</sup>Less than ½ unit.

Source: U.S. Census Bureau.