

CRUSHED STONE

By Valentin V. Tepordei

Crushed stone is one of the most accessible natural resources and a major basic raw material used by a wide range of industries from construction to agriculture, chemicals, and industrial processes. Despite the relative lowvalue of its basic products, the crushed stone industry is a major contributor to and an indicator of the economic well-being of the Nation.

A total of 1.23 billion metric tons of crushed stone was produced for consumption in the United States in 1994, a 9.8% increase compared with the total production of 1993. This tonnage represents the highest production level ever recorded in the United States, indicating a continued increase in the demand for construction aggregates in 1994. (*See table 1.*)

About three-quarters of the crushed stone production continued to be limestone and dolomite, followed by granite, traprock, sandstone and quartzite, miscellaneous stone, calcareous marl, marble, volcanic cinder and scoria, slate, and shell, in order of volume. (*See table 2.*)

Foreign trade of crushed stone continued to remain relatively small in 1994. Exports increased 7.3% to 5.2 million tons, while value decreased 3% to \$38.1 million compared with that of 1993. Imports of crushed stone, including calcium carbonate, increased 5.8% to 8.9 million tons, while the value increased 4.7% to \$77.8 million. Domestic apparent consumption of crushed stone was 1.23 billion tons. (*See tables 1, 22 and 23.*)

Legislation and Government Programs

Department of Transportation and Related Agencies Appropriation Act of 1994, (Public Law 103-122), was signed by the President on October 27, 1994. The Act appropriates \$20.6 billion for new highway spending, a \$2 billion increase from the fiscal year 1993 total. The Act also includes a \$2.2 billion appropriation in grants for airport construction, and provision for a one-year delay in the imposition of the "crumb rubber" use in highway construction as required by the ISTEA Act of 1991.

Production

Domestic production data for crushed stone

are developed by the U.S. Bureau of Mines (USBM) from voluntary surveys of U.S. producers. In response to the customers' requests to provide better statistical information on construction aggregates, the USBM reintroduced the annual surveys on crushed stone beginning with 1994 calendar year, in addition to the quarterly survey of crushed stone and sand and gravel.

Of the 5,127 crushed stone operations surveyed in 1994, 3,238 operations with 3,897 quarries were active. Of these, 2,523 operations with 3,118 quarries representing 77.9% of the total number of operations reported to the USBM survey and their total production, represented 89.2% of the total U.S. crushed stone output. The nonrespondent's production was estimated using employment data and/or adjusted prior years' production reports. Of the 2,523 reporting operations, 510 operations with 803 quarries did not report a breakdown by end use. Their production represented 21.4% of the U.S. total and is included in table 13 under "Unspecified uses, actual." The estimated production of 715 nonresponding operations represented 10.8% of the U.S. total and is included in table 13 under "Unspecified uses, estimated." A total of 751 quarries were either idle or presumed to have been idle in 1994 because no information was available to estimate their production. A total of 943 operations were closed down since 1993, the last year when a full survey of crushed stone producers was conducted. Most of the idle or closed operations were small temporary quarries operated by the State or local governments.

A total of 1.23 billion tons of crushed stone was produced for consumption in the United States in 1994, a 9.8% increase compared with that of 1993. This tonnage represents the highest production level ever recorded in the United States. (*See table 1.*) Of this total, 881 million tons or 71.7% was limestone and dolomite, 178 million tons or 14.5% was granite, and 91 million tons or 7.4% was traprock. The remaining 6.4% was shared, in descending order of quantity, by sandstone and quartzite, miscellaneous stone, calcareous marl, marble, slate, volcanic cinder and scoria, and shell. (*See table 2.*)

A comparison of the four major geographic regions indicates that in 1994 the South continued to lead the Nation in the production

of crushed stone with 562.8 million tons or 45.8% of the total, followed by the Midwest with 380.1 million tons or 30.9%, and the Northeast with 162.0 million tons or 13.2%. Approximately 77% of the total U.S. crushed stone output was produced in two major geographic regions, the South and the Midwest. (*See table 3.*)

Of the nine geographic regions, the South Atlantic led the Nation in the production of crushed stone with 292.7 millions tons or 23.8% of the U.S. total. Next was the East North Central region with 228.7 or 18.7% of the total, followed by the West North Central with 150.4 million tons or 12.2%.

A comparison between the 1993 and 1994 production data by regions indicates that the output of crushed stone increased in all regions except the Mountain. The largest increases were recorded in the West North Central region, +20.9%; the New England, +19.7%; and the East South Central, +13.1%.

Crushed stone was produced in every State except Delaware and North Dakota. The 10 leading States in the production of crushed stone, in order of volume, were Pennsylvania, Texas, Missouri, Florida, Illinois, Virginia, Ohio, Kentucky, Georgia, and North Carolina. Their combined production represented 51.2% of the national total. Crushed stone was produced by 1,584 companies at 3,238 operations with 3,897 quarries. Leading U.S. producers in order of volume were, Vulcan Materials Co., Cornerstone Construction & Materials, Inc./Hanson Industries, Martin-Marietta Aggregates, CSR America Inc., and Rogers Group, Inc.

Effective June 1, 1994, English China Clay's Construction Materials Division of Cheltenham, Gloucestershire, England, was "demerged" from the English China Clay PLC Group and a new company, CAMAS PLC, was created. These changes affected its U.S. subsidiary, the ECC Construction Materials America, Inc. of Lakewood, CO, that became CAMAS America, Inc.

In July, Tarmac America, Inc. of Herndon, VA, announced the reorganization of its operations into three product line groups: aggregates and cement, ready-mixed concrete, and concrete products. The company headquarters also were moved to Norfolk, VA.

In the second half of the year, Martin

Marietta Aggregates of Raleigh, NC, purchased Dravo Corp.'s construction aggregates business. Included in the acquisition were 22 production facilities located in nine States and the Bahamas that became the Martin Marietta Central Region Division.

Limestone.—The 1994 output of crushed limestone, including some dolomite, increased 10.8% to 788 million tons valued at \$3.9 billion, compared with the 1993 totals. (See table 2.) In addition to the quarries reporting only limestone, 64 operations with 76 quarries reported producing both limestone and dolomite, without making a distinction between the two kinds of stone. Their production, 25.7 million tons, was included with the limestone, and therefore, the limestone totals shown in this chapter include an undetermined amount of dolomite, in addition to the dolomite reported separately.

Limestone was produced by 917 companies at 1,896 operations with 1,996 quarries in 47 States. In addition, 46 companies with 64 operations and 67 quarries reported producing limestone and dolomite from the same quarries. Leading States, in order of tonnage, were Texas, Florida, Missouri, Kentucky, and Pennsylvania; these five States accounted for 37% of the total U.S. output. (See table 8.)

Leading U.S. producers were, in order of volume, Vulcan Materials Co., Cornerstone Construction & Materials, Inc./Hanson Industries, CSR America, Inc., Martin Marietta Aggregates, and Rogers Group, Inc.

Dolomite.—Production of dolomite increased 14.0% to 92.7 million tons valued at \$479 million, compared with that of 1993. (See table 2.) Crushed dolomite was reportedly produced by 93 companies at 164 operations with 174 quarries in 26 States. An additional undetermined amount of dolomite is included in the total crushed limestone. Leading States in the production of dolomite, in order of tonnage, were Pennsylvania, Ohio, New York, Michigan, and Indiana; these five States accounted for 37.0% of the total U.S. output. (See table 8.)

Leading U.S. producers were Vulcan Materials Co.; Cornerstone Construction & Materials, Inc./Hanson Industries; Glasgow, Inc.; S. E. Johnson Companies/Stoneco, Inc.; and Asarco-American Limestone Co.

Marble.—Production of crushed marble increased 74.5% to 6.1 million tons valued at \$65 million. (See table 2.) Crushed marble was produced by 13 companies with 26 operations and 45 quarries in 10 States.

Leading producers of crushed marble, in order of tonnage, were Georgia Marble Co., Columbia River Carbonates, and CAMAS America, Inc.

Calcareous Marl.—Output of marl increased 17.2% to 6.2 million tons valued at 32.2 million. (See table 2.) Marl was produced by 14 companies with 14 operations at 16 quarries in 8 States. South Carolina accounted for 52% of total U.S. output. (See table 9.)

Leading producers, in order of tonnage, were Holderbank Holnam Inc., Capitol Aggregates Inc., and Medusa Corp./Medusa Cement Co.

Shell.—Shell is mainly derived from fossil reefs or oyster shell. The output of crushed shell decreased 10.1% to 1.8 million tons valued at \$10.3 million. (See table 2.) The decrease was mostly owing to the restrictions imposed on the industry in Louisiana as a result of concerns that shell dredging produces irreversible damage to the environment. Crushed shell was produced by 11 companies from 11 operations in 5 States.

Leading producers, in order of tonnage, were Dravo Basic Materials Co., Quality Aggregates, Inc., and Leisey Shell Corp.

Granite.—The 1994 output of crushed granite increased 6.0% to 178 million tons valued at \$1.1 billion. (See table 2.) Crushed granite was produced by 153 companies at 324 operations with 397 quarries in 33 States. Leading States, in order of tonnage, were Georgia, North Carolina, Virginia, South Carolina, and New Jersey; these five States accounted for 74.8% of the U.S. output. (See table 10.)

Leading U.S. producers, in order of tonnage, were Vulcan Materials Co., Martin Marietta Aggregates, Cornerstone Construction & Materials, Inc./Hanson Industries, Florida Rock Industries Inc., and Blue Circle America, Inc./Blue Circle Aggregates.

Traprock.—Production of crushed traprock increased 3.9% to 91.0 million tons valued at \$576 million. (See table 2.) Traprock was produced by 265 companies at 379 operations with 591 quarries in 27 States. Leading States, in order of tonnage, were Oregon, Virginia, Washington, New Jersey, and Hawaii; these five States accounted for 60.9% of U.S. output. (See table 10.)

Leading U.S. producers, in order of tonnage, were Vulcan Materials Co., Luck Stone Corp., Stavola, Inc./Traprock Industries, Meridian Aggregates Co., and Cornerstone Construction & Materials, Inc./Hanson Industries.

Sandstone and Quartzite.—The combined output of crushed sandstone and quartzite increased 5.5% to 34.3 million tons valued at \$212 million. (See table 2.) Crushed sandstone was produced by 110 companies at 138 operations with 193 quarries in 27 States, while crushed quartzite was produced by 33 companies at 34 operations with 37 quarries in

17 States. Leading States in the production of sandstone and quartzite in order of tonnage were Pennsylvania, Arkansas, and South Dakota; their combined production represented 43.6% of the U.S. output. (See table 10.)

Leading producers of sandstone and quartzite, in order of tonnage, were Ashland Oil, Inc.; APAC, Inc./Arkola Sand and Gravel Co., Western Mobile, Inc., and Oldcastle Inc./Callanan Industries, Inc.

Slate.—The 1994 output of crushed slate increased 30.6% to 2.7 million tons valued at \$18.9 million. (See table 2.) Crushed slate was produced by 13 companies at 15 quarries in 6 States. Most of the crushed slate was produced in North Carolina.

Leading producers, in order of tonnage, were Martin Marietta Aggregates, Carolina Stalite Co., and Mariposa Aggregates Co.

Volcanic Cinder and Scoria.—Production of volcanic cinder and scoria decreased in 1994 13.5% to 2 million tons valued at \$12.6 million. (See table 2.) Volcanic cinder and scoria were produced by 27 companies from 45 operations with 133 quarries in 14 States. Leading States, in order of volume were, California, New Mexico, and Hawaii; their combined production accounted for 44.5% of the total U.S. output. (See table 11.)

Leading producers, in order of tonnage, were Martin Marietta Aggregates, Stoney Point Rock Quarry Inc., and Byley H. G. & Sons Construction Co., Inc.

Miscellaneous Stone.—Output of other kinds of crushed stone increased 11.8% to 25.6 million tons valued at \$150 million. (See table 2.) Miscellaneous stone was produced by 105 companies from 129 operations with 223 quarries in 28 States. Leading States, in order of volume, were Pennsylvania, California, and North Carolina; their combined production accounted for 38.2% of the total U.S. output. (See table 11.)

Consumption

Crushed stone production reported to the USBM is actually material that was either sold or used by producers. Stockpiled production is not included in the reported quantities. Therefore, the "sold or used" tonnage 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 "Other unspecified uses, actual." The estimated production of nonrespondents is included in "Other unspecified uses, estimated."

In 1994, U.S. consumption of crushed stone

was 1.2 billion tons valued at \$6.6 billion, a 9.8% increase compared with that of 1993. Of the 1.2 billion tons of crushed stone consumed in 1994, 396 million tons or 32.2% of the total was unspecified uses - actual and estimated. Of the remaining 832 million tons, about 83.2% was used as construction aggregates, mostly for highway and road construction and maintenance; 13.6% for chemical and metallurgical uses, including cement and lime manufacture; 2% for agricultural purposes; and 1% for special uses and products. (See table 13.) To provide a more accurate estimation of the consumption patterns for crushed stone, the "Unspecified uses" are not included in the above percentages. It is recommended that in any use pattern or marketing analysis the quantities included in "Unspecified uses" be distributed among the reported uses by applying the above percentages to the "Unspecified uses total."

Limestone.—Of the 788 million tons of crushed limestone consumed, 245 million tons or 31.1% was "Unspecified uses - actual and estimated." Of the remaining 543 million tons of crushed limestone reported by uses by the producers, 77.1% was used as construction aggregates, 19% for chemical and metallurgical uses including cement and lime manufacturing, 2.6% for agricultural purposes, and 1.1% for special uses and products. (See table 14.)

Dolomite.—Of the 93 million tons of crushed dolomite consumed, 6 million tons or 6.4% was "Unspecified uses - actual and estimated." Of the remaining 87 million tons of crushed dolomite reported by uses by the producers, 90.1% was used as construction aggregates, 5.6% for chemical and metallurgical uses, and 2.6% for agricultural purposes. An additional undefined amount of dolomite consumed in a variety of uses, mostly construction aggregates, is reported with the limestone. (See table 14.)

Marble.—Of the 6.1 million tons of crushed marble consumed, 3.3 million tons or 54.9% was reported as "Other unspecified uses." Of the remaining 2.8 million tons of crushed marble reported by uses by the producers, 1.6 million tons or 56.5% was used as miscellaneous uses, including fillers and extenders, and 1.1 million tons or 41.8% as construction aggregates. (See table 16.)

Calcareous Marl.—Of the 6.2 million tons of crushed calcareous marl consumed, 2.6 million tons or 42% was reported as "Other unspecified uses." Of the remaining 3.6 million tons of crushed marl reported by uses by the producers, 79.2% was used for cement manufacturing, and the remaining 20.8% as construction aggregates and for agricultural

purposes.

Shell.—Of the 1.8 million tons of crushed shell consumed, 115,000 tons or 6.4% was reported as "Other unspecified uses." Of the remaining 1.7 million tons of crushed shell reported by uses by the producers, 98.8% was used as construction aggregates.

Granite.—Of the 178 million tons of crushed granite consumed, 71 million tons or 39.9% was reported as "Other unspecified uses." Most of the remaining 107 million tons of crushed granite reported by uses by the producers was used as construction aggregates. (See table 17.)

Traprock.—Of the 91 million tons of crushed traprock consumed, 33 million tons or 36.4% was reported as "Other unspecified uses." Most of the remaining 58 million tons of crushed traprock reported by uses by the producers was used as construction aggregates. (See table 17.)

Sandstone and Quartzite.—Of the 27.4 million tons of crushed sandstone consumed, 13.3 million tons or 48.4% was reported as "Other unspecified uses." Most of the remaining 14.2 million tons of crushed sandstone reported by uses by the producers, was used as construction aggregates. (See table 18.)

Of the 6.8 million tons of crushed quartzite consumed, 3.1 million tons or 45.6% was reported as "Other unspecified uses." Most of the remaining 3.7 million tons of crushed quartzite reported by uses by the producers was used as construction aggregates. (See table 18.)

Volcanic Cinder and Scoria.—Of the 2.1 million tons of volcanic cinder and scoria consumed, 794,000 tons or 38.6% was reported as "Other unspecified uses." Most of the remaining 1.3 million tons of crushed volcanic cinder and scoria reported by uses by the producers was used as construction aggregates. (See table 19.)

Miscellaneous Stone.—Of the 36.3 million tons of miscellaneous crushed stone consumed, 20.7 million tons or 56.9% was reported as "Other unspecified uses." Of the remaining 15.6 million tons reported by uses by the producers, 81.8% was used as construction aggregates and 18.2% was used for cement manufacturing. (See table 19.)

Prices

Prices in this chapter are f.o.b. plant, usually at the first point of sale or captive use. 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 1994 average unit price per ton of crushed stone increased 1.6% to \$5.38, compared with that of 1993. By kind of stone, the average unit prices showed modest increases of 4.3% for calcareous marl and miscellaneous stone, 4.2% for granite, 3.7% for sandstone and quartzite, 3.6% for traprock, 3.1% for slate, 2% for limestone, and 0.5% for volcanic cinder and scoria. At the same time, the average unit prices decreased for marble 49.6%, for shell 8.2%, and for dolomite 4%. (See table 2.)

Transportation

No means of transportation was reported by the producers for 424 million tons or 34.5% of the total 1.23 billion tons of crushed stone produced for consumption in 1994. Of the remaining 806 million tons of crushed stone, 582 million tons or 72.2% was reported as transported by truck from the processing plant or quarry to the first point of sale or use, 6.8% was transported by rail, and 7.1% by waterway. About 11.3% of the total production was reported as not transported and therefore used on-site. Information regarding means of transportation used by the producers to ship crushed stone in each geographic regions is also provided. (See table 20.)

Foreign Trade

The widespread distribution of domestic crushed stone deposits and the high cost of transportation limits foreign trade mostly to local transactions across international boundaries. U.S. imports and exports are small, representing less than 0.5% of the domestic consumption. However, shipments of crushed stone by water from Canada and especially Mexico are increasing.

Exports.—Exports of crushed stone increased 7.3% to 5.2 million tons compared with that of 1993, while value decreased 3% to \$38.1 million. About 96.3% of the exported crushed stone was limestone, Canada being the major destination with 87.8% of the total crushed stone exported. (See table 22.)

Imports.—Imports of crushed stone increased 5.8% to 8.9 million tons compared with that of 1993, while the value increased 4.7% to \$77.8 million. About 93.5% of the imported crushed stone was limestone.

Imports of natural calcium carbonate fines decreased significantly from 44,000 tons to 5,000 tons. (See table 23.)

Shipments of crushed stone from the Bahamas, Canada, and Mexico into the United States continued in 1993. The imported crushed stone was used mostly as construction aggregates or for cement manufacturing. This

trend is expected to continue, and the volume of imports, especially from Mexico, to increase.

Outlook

The demand for crushed stone in 1995 is expected to be about 1.3 billion tons, a 5% increase compared with that of 1994. Gradual increases in demand for construction aggregates are anticipated after 1995 as well, based on the volume of work on the infrastructure that is being financed by the Intermodal Surface Transportation Efficiency Act of 1991 and the U.S. economy in general. The projected increases will be influenced by construction activity primarily in the public as well as the private construction sector.

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

OTHER SOURCES OF INFORMATION

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Pit & Quarry.

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TABLE 1
SALIENT U.S. CRUSHED STONE STATISTICS 1/

	1990	1991	1992	1993	1994	
Sold or used by producers:						
Quantity 2/	thousand metric tons	1,110,000	997,000	1,050,000	1,120,000	1,230,000
Value 2/	thousands	\$5,590,000 e/	\$5,140,000	\$5,590,000 e/	\$5,930,000 r/	\$6,620,000
Exports	value, thousands	\$41,400	\$33,000	\$43,400	\$39,300	\$38,100
Imports3/	do.	\$35,300	\$38,600	\$60,700	\$74,300	\$77,800

e/Estimated. r/Revised.

1/Previously published and 1994 data are rounded by the U.S. Bureau of Mines to three significant digits.

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

3/Excludes precipitated calcium carbonate.

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

Kind	1993 r/				1994			
	Number of quarries	Quantity (thousand metric tons)	Value (thousands)	Unit value	Number of quarries	Quantity (thousand metric tons)	Value (thousands)	Unit value
Limestone 2/	2,090	711,000	\$3,480,000	\$4.90	2,070	788,000	\$3,940,000	\$5.00
Dolomite	160	81,300	438,000	5.38	174	92,700	479,000	5.17
Marble	36	3,490	73,900	21.17	45	6,090	65,100	10.68
Calcareous marl	13	5,280	26,400	4.99	16	6,190	32,200	5.20
Shell	15	1,990	12,500	6.27	11	1,790	10,300	5.75
Granite	469	168,000	1,010,000	6.04	398	178,000	1,120,000	6.29
Traprock	600	87,600	535,000	6.11	591	91,000	576,000	6.33
Sandstone and quartzite	230	32,500	194,000	5.96	230	34,300	212,000	6.18
Slate	13	2,090	14,100	6.73	15	2,730	18,900	6.94
Volcanic cinder and scoria	126	2,380	14,500	6.10	133	2,060	12,600	6.13
Miscellaneous stone	165	22,900	129,000	5.61	224	25,600	150,000	5.85
Total	XX	1,120,000	5,930,000	5.30	XX	1,230,000	6,620,000	5.39

r/ Revised. XX Not applicable.

1/ Previously published and 1994 data are rounded by the U.S. Bureau of Mines to three significant digits, except prices; may not add to totals shown.

2/ Includes "Limestone-dolomite," reported with no distinction between the two.

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

(Thousand metric tons and thousand dollars)

Region	1993		1994	
	Quantity	Value	Quantity	Value
Northeast:				
New England	21,800	169,000	26,100	207,000
Middle Atlantic	126,000	788,000	136,000	854,000
Midwest:				
East North Central	208,000	923,000	230,000	1,040,000
West North Central	124,000	602,000	150,000	758,000
South:				
South Atlantic	270,000 r/	1,560,000 r/	293,000	1,750,000
East South Central	124,000	637,000	140,000	697,000
West South Central	123,000 r/	526,000 r/	130,000	572,000
West:				
Mountain	37,200 r/	209,000 r/	35,800	199,000
Pacific	83,300 r/	516,000 r/	87,600	541,000
Total	1,120,000	5,930,000 r/	1,230,000	6,620,000

r/ Revised.

1/ Includes volcanic cinder and scoria.

2/ Previously published and 1994 data are rounded by the U.S. Bureau of Mines to three significant digits; may not add to totals shown.

TABLE 4
CRUSHED STONE SOLD OR USED BY PRODUCERS IN THE UNITED STATES IN 1994,
BY QUARTER AND REGION 1/

(Thousand metric tons and thousand dollars)

Region	Quantity 1st quarter	Percent change 2/	Quantity 2nd quarter	Percent change 2/	Quantity 3rd quarter	Percent change 2/	Quantity 4th quarter	Percent change 2/	Total 3/	Value total 3/
Northeast:										
New England	900	-10.5	6,300	2.2	7,900	5.3	7,100	10.6	22,200	176,700
Middle Atlantic	11,700	-11.9	38,100	4.5	45,700	7.4	38,100	18.2	133,600	858,200
Midwest:										
East North Central	25,000	5.7	64,800	13.8	71,700	5.2	64,500	9.2	226,000	1,032,200
West North Central	22,100	20.4	36,500	11.8	42,500	10.9	33,900	0.1	134,900	673,000
South:										
South Atlantic	54,900	10.6	82,000	11.2	85,000	13.3	78,700	16.1	300,600	1,788,200
East South Central	23,800	10.7	37,700	13.7	41,400	13.1	37,300	15.7	140,300	744,800
West South Central	30,000	17.7	33,700	7.8	37,300	9.4	31,400	9.4	132,400	582,400
West:										
Mountain	6,700	-1.4	9,900	-2.8	11,300	-7.4	9,000	9.6	36,800	213,600
Pacific 4/	15,600	23.0	18,700	11.5	20,600	0.2	19,700	-2.6	74,600	471,200
Total 3/	190,700	10.6	327,600	10.2	363,500	8.5	319,700	10.7	1,224,600 5/	6,724,600 5/

1/ As published in the "Crushed Stone and Sand and Gravel in the Fourth Quarter of 1994" Mineral Industry Survey.

2/ All percentage changes are calculated using unrounded totals.

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

4/ Does not include Alaska and Hawaii.

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

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

State	1993			1994		
	Quantity (thousand metric tons)	Value (thousands)	Unit value	Quantity (thousand metric tons)	Value (thousands)	Unit value
Alabama	28,900	\$176,000	\$6.08	32,500	\$164,000	\$5.07
Alaska 3/	3,530 r/ 4/	25,000 r/ 4/	7.07	3,870	24,100	6.24
Arizona	6,240 r/	35,600 r/	5.71	4,970	25,000	5.03
Arkansas	22,200 r/ 5/	108,000 5/ 6/	4.86	20,800 6/ 7/	122,000 6/ 7/	5.83
California	38,700 r/	252,000 r/	6.51	41,100	258,000	6.29
Colorado	10,300	62,000	5.96	8,600	53,600	6.23
Connecticut	4,600 4/ 8/	39,500 4/ 8/	8.59	5,710	51,000	8.93
Florida	64,900	313,000 9/	4.83	67,000	343,000	5.13
Georgia	49,400	292,000	5.92	54,600	331,000	6.07
Hawaii	8,460 8/	81,400 8/	9.63	8,170	82,300	10.08
Idaho	4,600	20,800	4.51	4,160	20,300	4.89
Illinois	61,500 4/	315,000 4/	5.13	62,600 8/	353,000 8/	5.64
Indiana	36,900	166,000	4.50	45,900	211,000	4.61
Iowa	30,500	169,000	5.53	36,600 8/	211,000 5/ 8/	5.75
Kansas	18,800 4/	90,700 4/	4.81	21,500	103,000	4.82
Kentucky	49,000 4/	226,000 4/	4.61	56,300	259,000	4.61
Louisiana	W	W 7/ 8/ 10/	10.91 r/	707 8/ 10/	7,710 8/ 10/	10.91
Maine	1,830	10,400	5.65	2,740	15,500	5.65
Maryland	21,000 r/	139,000 r/	6.60	24,100 8/	162,000 8/	6.73
Massachusetts	9,460 5/ 8/	76,300 5/ 8/	8.07	10,500	97,300	9.29
Michigan	31,000	112,000	3.60	35,000	113,000	3.23
Minnesota	9,420	37,700	4.00	10,900	47,100	4.33
Mississippi	2,100	8,120	3.86	1,900	7,500	3.95
Missouri	53,400	239,000	4.48	68,900	330,000	4.80
Montana	2,820	10,400	3.68	2,320	8,830	3.80
Nebraska	6,760	38,900	5.75	6,890	41,600	6.04
Nevada	1,610	12,500	7.80	2,310	20,600	8.93
New Hampshire	1,390	7,790	5.61	1,390 7/	7,470 7/	5.39
New Jersey	16,700 4/ 7/	138,000 4/ 7/	8.25	19,800	154,000	7.80
New Mexico	3,580 r/	19,000 r/	5.31	3,550 6/ 11/	20,000 6/ 11/	5.62
New York	38,400	223,000 6/	5.81	39,400	239,000	6.05
North Carolina	47,800 11/ 12/ 13/A: F	298,000 11/ 12/ 13/	6.23	53,900	351,000	6.51
North Dakota	W 13/	W 13/	W 13/	--	--	--
Ohio	51,800 r/	227,000 r/	4.37	56,400	251,000	4.45
Oklahoma	27,100	114,000	4.21	29,900	125,000	4.18
Oregon	18,900	84,700	4.48	18,900	90,100	4.76
Pennsylvania	70,100 r/	409,000 r/	5.83	76,700	462,000	6.02
Rhode Island	1,290	9,250	7.17	1,610	12,200	7.58
South Carolina	19,800	121,000	6.12	20,000 14/	128,000 14/	6.39
South Dakota	4,230 4/ 8/	18,700 4/ 8/	4.42	5,470 8/	24,500 8/	4.47
Tennessee	43,500	227,000	5.20	49,200	265,000	5.39
Texas	71,700 r/	281,000 r/	3.96	76,100	300,000	3.95
Utah	4,560	29,400	6.45	4,540	19,800	4.37
Vermont	2,520	12,900	5.12	4,170	23,700	5.68
Virginia	51,000	292,000	5.73	56,700	327,000	5.77
Washington	13,200	68,600	5.20	15,500	86,100	5.54
West Virginia	10,300 5/	79,700	7.72	12,300 5/	99,300	8.10
Wisconsin	26,200	98,000	3.73	28,500	114,000 11/	4.01
Wyoming	3,460	19,800	5.74	5,080	30,000	5.91
Other	12,400 r/	98,000 r/	7.92	8,800	24,700	2.81
Total	1,120,000	5,930,000 r/	5.29	1,230,000	6,620,000	5.39

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

1/ Previously published and 1994 data are rounded by the U.S. Bureau of Mines to three significant digits, except prices; may not add to totals shown.

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

3/ Data derived in part from the Alaska Geological Survey.

4/ Excludes sandstone.

5/ Excludes dolomite.

6/ Excludes traprock.

7/ Excludes limestone.

8/ Excludes other.

9/ Excludes limestone-dolomite.

10/ Excludes shell.

11/ Excludes quartzite.

12/ Excludes slate.

13/ Excludes volcanic cinder.

14/ Excludes marble.

TABLE 6
CRUSHED STONE SOLD OR USED BY PRODUCERS IN THE UNITED STATES IN 1994,
BY QUARTER AND STATE 1/

(Thousand metric tons and thousand dollars)

State	Quantity 1st quarter	Percent change 2/	Quantity 2nd quarter	Percent change 2/	Quantity 3rd quarter	Percent change 2/	Quantity 4th quarter	Percent change 2/	Total	Value total
Alabama	6,600	14.3	8,200	4.4	8,600	5.6	8,200	15.4	31,600	193,700
Alaska 4/	--	--	--	--	--	--	--	--	2,500	11,900
Arizona	1,500	3.1	1,600	3.2	1,800	-2.0	1,700	8.7	6,600	38,300
Arkansas 5/	4,600	7.2	6,500	15.7	8,000	26.4	6,200	12.0	25,300	122,700
California	9,000	33.2	9,600	5.6	10,300	-5.7	10,500	-7.1	39,400	262,000
Colorado	1,500	-14.0	2,500	-12.3	2,800	-21.2	2,100	-7.9	8,900	54,300
Connecticut 5/	200	42.8	1,300	1.3	2,100	27.0	1,800	15.9	5,400	47,300
Delaware 4/	--	--	--	--	--	--	--	--	--	--
Florida	17,800	10.2	19,200	14.8	19,800	23.9	18,400	14.2	75,200	376,000
Georgia	10,900	14.8	14,500	6.3	15,200	7.4	14,400	18.9	55,000	330,000
Hawaii 4/ 5/	--	--	--	--	--	--	--	--	8,700	84,000
Idaho 6/	--	--	--	--	--	--	--	--	3,700	17,000
Illinois 5/	7,600	7	18,900	13.9	21,400	5.9	19,100	8.0	67,000	355,100
Indiana	6,300	22.7	12,600	30.3	12,600	6.5	12,200	19.3	43,700	205,400
Iowa	4,100	8.9	8,700	-3.8	9,300	-2.1	7,500	-8.5	29,600	165,800
Kansas 5/	3,900	11.2	5,300	6.6	6,400	19.5	4,300	-13.3	19,900	98,500
Kentucky 5/	8,600	-1.1	15,200	19.6	16,200	10.9	14,300	10.5	54,300	260,600
Louisiana 5/ 6/	--	--	--	--	--	--	--	--	--	--
Maine	200	-14.0	600	8.0	700	44.1	600	2.4	2,100	12,300
Maryland	3,200	10.9	7,000	7.2	7,600	9.8	7,500	12.2	25,300	172,000
Massachusetts 5/	200	-31.8	2,800	-1.8	2,800	-19.6	2,700	-5.0	8,500	68,900
Michigan	1,800	-7.1	8,900	-6.2	10,800	3.1	10,900	19.9	32,400	118,300
Minnesota	600	47.3	2,800	12.7	4,100	2.0	2,800	9.9	10,300	44,800
Mississippi 6/	--	--	--	--	--	--	--	--	1,800	7,000
Missouri	12,800	33.4	16,400	21.9	19,200	34.0	17,900	11.9	66,300	314,900
Montana	300	-19.3	700	11.3	600	-51.7	500	-7.7	2,100	8,000
Nebraska	1,300	22.5	2,000	30.4	2,200	-13.0	1,400	-10.8	6,900	40,700
Nevada	400	6.4	700	78.6	100	-61.1	500	7.1	1,700	13,400
New Hampshire	100	32.6	500	45.6	700	37.4	800	86.9	2,100	12,200
New Jersey 5/	1,400	-34.3	5,100	8.7	5,600	13.1	6,100	20.8	18,200	153,800
New Mexico 5/	600	3.4	900	14.1	1,100	2.2	700	-29.6	3,300	18,000
New York	2,700	-17.2	11,300	-2.4	15,100	8.7	10,000	4.1	39,100	228,700
North Carolina 5/	9,400	10.8	14,600	7.3	15,200	9.8	13,700	15.5	52,900	343,900
North Dakota 5/ 6/	--	--	--	--	--	--	--	--	--	--
Ohio	6,700	-1.8	16,300	15.8	17,000	2.3	13,800	-5.1	53,900	250,600
Oklahoma	7,200	21.2	7,500	3.5	8,700	26.0	7,900	12.3	31,300	139,300
Oregon	3,700	7.2	4,700	5.2	5,900	9.7	5,400	-3.4	19,700	92,600
Pennsylvania 5/	7,700	-2.5	21,800	7.8	25,000	5.1	22,000	26.0	76,500	455,200
Rhode Island 6/	--	--	--	--	--	--	--	--	1,700	12,300
South Carolina	4,400	10.4	5,900	6.4	5,600	8.2	5,300	3.1	21,200	132,300
South Dakota 5/	500	-16.8	1,400	25.2	1,300	-8.7	1,100	4.0	4,300	19,600
Tennessee	7,900	23.5	14,100	17.4	16,400	22.6	14,400	21.9	52,800	287,800
Texas	18,000	18.5	19,800	7.9	20,800	-1.3	17,300	7.2	75,900	315,000
Utah	1,500	27.4	1,000	-13.7	1,800	56.7	1,300	22.8	5,600	37,500
Vermont 6/	--	--	--	--	--	--	--	--	2,600	13,900
Virginia	8,200	3.3	17,300	20.4	17,400	14.3	16,200	21.1	59,100	351,600
Washington	2,800	11.8	4,600	47.1	4,600	6.3	3,900	21.2	15,900	86,700
West Virginia 5/	1,800	16.4	4,000	37.9	5,000	52.3	3,600	43.3	14,400	114,500
Wisconsin	2,400	-15.9	7,900	15.1	10,100	11.8	7,900	5.6	28,300	114,600
Wyoming	400	2.9	1,200	-6.2	1,500	24.2	1,100	92.8	4,200	25,000
Other	--	--	--	--	--	--	--	--	12,000	96,600
Total 3/	XX	XX	XX	XX	XX	XX	XX	XX	1,224,600	6,724,600

XX Not applicable.

1/ As published in the "Crushed Stone and Sand and Gravel in the Fourth Quarter of 1994" Mineral Industry Survey.

2/ All percentage change are calculated using unrounded totals.

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

4/ State not included in quarterly survey.

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

6/ Due to low number of companies, no production estimates by quarter were generated.

TABLE 7
CRUSHED STONE SOLD OR USED IN THE UNITED STATES IN 1994,
BY REGION AND SIZE OF OPERATION 1/

Size range (Metric tons)	Northeast				Midwest				South			
	Number of operations	Percent of total	Quantity (thousand metric tons)	Percent of total	Number of operations	Percent of total	Quantity (thousand metric tons)	Percent of total	Number of operations	Percent of total	Quantity (thousand metric tons)	Percent of total
Less than 25,000	54	12.0	390	--	226	19.0	2,060	--	69	7.0	736	--
25,000 to 49,999	14	3.0	466	--	127	10.0	4,200	1.0	44	4.0	1,490	--
50,000 to 99,999	40	9.0	2,760	1.0	155	13.0	10,500	2.0	78	8.0	5,310	--
100,000 to 199,999	67	15.0	9,220	5.0	184	15.0	24,300	6.0	116	12.0	15,700	2.0
200,000 to 299,999	52	12.0	11,900	7.0	120	10.0	26,800	7.0	90	9.0	20,200	3.0
300,000 to 399,999	43	10.0	13,300	8.0	77	6.0	24,400	6.0	65	6.0	20,800	3.0
400,000 to 499,999	34	8.0	14,000	8.0	67	5.0	27,400	7.0	67	7.0	27,300	4.0
500,000 to 599,999	21	4.0	10,500	6.0	28	2.0	13,900	3.0	68	7.0	33,900	6.0
600,000 to 699,999	15	3.0	8,780	5.0	24	2.0	14,100	3.0	54	5.0	32,000	5.0
700,000 to 799,999	15	3.0	10,300	6.0	27	2.0	18,300	4.0	45	4.0	30,500	5.0
800,000 to 899,999	18	4.0	13,800	8.0	26	2.0	20,100	5.0	35	3.0	27,300	4.0
900,000 to 999,999	11	2.0	9,460	5.0	23	1.0	19,900	5.0	30	3.0	26,000	4.0
1,000,000 to 1,499,999	29	6.0	30,500	18.0	52	4.0	57,300	15.0	107	11.0	119,000	21.0
1,500,000 to 1,999,999	5	1.0	7,710	4.0	21	1.0	32,600	8.0	42	4.0	67,400	12.0
2,000,000 to 2,499,999	--	--	--	--	10	--	20,500	5.0	12	1.0	24,500	4.0
2,500,000 to 4,999,999	7	1.0	18,800	11.0	11	--	34,100	9.0	22	2.0	65,600	11.0
5,000,000 and over	--	--	--	--	5	--	29,600	7.0	6	--	45,300	8.0
Total	425	100.0	162,000	100.0	1,180	100.0	380,000	100.0	950	100.0	563,000	100.0
	West				U.S. total							
	Number of operations	Percent of total	Quantity (thousand metric tons)	Percent of total	Number of operations	Percent of total	Quantity (thousand metric tons)	Percent of total				
Less than 25,000	232	34.0	1,730	1.0	581	17.0	4,910	--				
25,000 to 49,999	97	14.0	3,270	2.0	282	8.0	9,430	--				
50,000 to 99,999	109	16.0	7,060	5.0	382	11.0	25,700	2.0				
100,000 to 199,999	88	12.0	11,500	9.0	455	14.0	60,700	4.0				
200,000 to 299,999	43	6.0	9,560	7.0	305	9.0	68,500	5.0				
300,000 to 399,999	26	3.0	8,080	6.0	211	6.0	66,600	5.0				
400,000 to 499,999	18	2.0	7,170	6.0	186	5.0	76,000	6.0				
500,000 to 599,999	8	1.0	3,870	3.0	125	3.0	62,100	5.0				
600,000 to 699,999	10	1.0	5,910	4.0	103	3.0	60,800	5.0				
700,000 to 799,999	11	1.0	7,560	6.0	98	3.0	66,600	5.0				
800,000 to 899,999	7	1.0	5,410	4.0	86	2.0	66,600	5.0				
900,000 to 999,999	6	--	5,160	4.0	70	2.0	60,500	4.0				
1,000,000 to 1,499,999	8	1.0	8,570	6.0	196	6.0	215,000	17.0				
1,500,000 to 1,999,999	7	1.0	10,700	8.0	75	2.0	118,000	9.0				
2,000,000 to 2,499,999	7	1.0	13,800	11.0	29	--	58,900	4.0				
2,500,000 to 4,999,999	5	--	13,900	11.0	45	1.0	132,000	10.0				
5,000,000 and over	--	--	--	--	11	0.9	74,900	6.0				
Total	682	100.0	123,000	100.0	3,240	100.0	1,230,000	100.0				

1/ Data rounded by the U.S. Bureau of Mines to three significant digits; may not add to totals shown.

TABLE 8
CRUSHED LIMESTONE AND DOLOMITE SOLD OR USED BY PRODUCERS IN
THE UNITED STATES IN 1994, BY STATE 1/

(Thousand metric tons and thousand dollars)

State	Limestone		Dolomite	
	Quantity	Value	Quantity	Value
Alabama	28,300 2/	117,000 2/	W	W
Arizona	2,710	10,500	--	--
Arkansas	6,870	33,500	W	W
California	23,300	149,000	208	1,550
Colorado	2,550	13,900	--	--
Connecticut	W	W	408	W
Florida	64,200 2/	330,000 2/	W	W
Georgia	5,090 2/	31,000 2/	--	--
Hawaii	W	10,500	--	--
Idaho	W	1,400	--	--
Illinois	47,600 2/	276,000 2/	W	W
Indiana	40,000 2/	183,000 2/	5,840	28,000
Iowa	36,600 2/	211,000 2/	33	
Kansas	20,600 2/	98,500 2/	--	--
Kentucky	56,100 2/	257,000 2/	--	--
Maine	1,530	9,450	--	--
Maryland	16,900	114,000	--	--
Massachusetts	1,710 2/	19,000 2/	W	W
Michigan	27,900 2/	90,000 2/	6,810	22,200
Minnesota	7,670	32,700	W	W
Mississippi	W	W	--	--
Missouri	64,400 2/	303,000 2/	2,960	13,600
Montana	1,410	6,010	--	--
Nebraska	6,890	41,600	--	--
Nevada	W	13,000	W	W
New Hampshire	W	W	--	--
New Jersey	W	W	--	--
New Mexico	1,880	8,660	--	--
New York	27,400 2/	142,000 2/	7,540	55,800
North Carolina	W	W	245	1,680
Ohio	41,700 2/	190,000	14,500	59,900
Oklahoma	22,600	91,200	1,820	7,550
Oregon	W	W	--	--
Pennsylvania	44,000 2/	256,000	14,700	90,000
Rhode Island	W	W	--	--
South Carolina	W	W	--	--
South Dakota	2,850	9,520	--	--
Tennessee	43,500 2/	237,000	W	W
Texas	72,000	285,000	W	W
Utah	1,980 2/	12,300	W	W
Vermont	1,800	11,200	234	1,220
Virginia	16,300	89,800	3,650	27,800
Washington	2,140 2/	23,600 2/	W	W
West Virginia	10,200	66,000	W	19,200
Wisconsin	21,900 2/	89,200 2/	W	W
Wyoming	1,520 2/	6,120 2/	--	--
Other	14,000 2/	73,300 2/	33,800	151,000
Total	788,000	3,940,000	92,700	479,000

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

1/ Data rounded by the U.S. Bureau of Mines to three significant digits; may not add to totals shown.

2/ Includes "limestone/dolomite," reported with no distinction between the two.

TABLE 9
CRUSHED CALCAREOUS MARL AND MARBLE SOLD OR USED BY
PRODUCERS IN THE UNITED STATES IN 1994, BY STATE 1/

(Thousand metric tons and thousand dollars)

State	Calcareous Marl		Marble	
	Quantity	Value	Quantity	Value
Alabama	--	--	W	W
Arizona	--	--	593	3,730
Florida	W	W	--	--
Georgia	W	W	W	W
Maine	W	W	--	--
Michigan	W	W	--	--
Mississippi	26	203	--	--
New York	--	--	87	1,610
North Carolina	111	738	--	--
Pennsylvania	--	--	476	3,210
South Carolina	3,220	21,500	W	W
Texas	W	W	W	W
Vermont	--	--	839	4,730
Washington	--	--	W	W
Wyoming	--	--	93	3,250
Other	2,840	9,750	4,010	48,600
Total	6,190	32,200	6,090	65,100

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

1/ Data rounded by the U.S. Bureau of Mines to three significant digits; may not add to totals shown.

TABLE 10
CRUSHED GRANITE, TRAPROCK, AND SANDSTONE AND QUARTZITE SOLD OR USED BY PRODUCERS
IN THE UNITED STATES IN 1994, BY STATE 1/

(Thousand metric tons and thousand dollars)

State	Granite		Traprock		Sandstone and quartzite	
	Quantity	Value	Quantity	Value	Quantity	Value
Alabama	W	W	--	--	--	--
Alaska 2/	W	W	1,280	5,520	W	W
Arizona	1,330	7,870	W	W	W	W
Arkansas	7,090	52,600	W	W	5,290	25,300
California	4,880	23,400	6,090	43,500	1,120	6,310
Colorado	3,180	16,500	--	--	W	W
Connecticut	119	1,350	3,750	30,100	--	--
Georgia	47,200	287,000	--	--	W	W
Hawaii	--	--	6,150	61,100	--	--
Idaho	281	1,110	2,230	9,440	556	4,800
Illinois	--	--	--	--	W	W
Kansas	--	--	--	--	W	W
Kentucky	--	--	--	--	W	W
Louisiana	--	--	--	--	707	7,710
Maine	W	W	W	W	--	--
Maryland	4,940	31,600	W	W	242	2,000
Massachusetts	2,850	W	5,860	48,700	--	--
Michigan	--	--	19	43	W	W
Minnesota	W	W	W	W	W	W
Missouri	W	W	--	--	W	W
Montana	W	W	W	W	W	W
Nevada	W	W	W	W	--	--
New Hampshire	1,060	5,070	W	W	--	--
New Jersey	7,460	58,200	10,600	78,600	W	W
New Mexico	1,250	8,620	W	W	W	W
New York	2,430	20,400	W	W	798	5,420
North Carolina	41,300	265,000	3,930	25,800	W	W
Ohio	--	--	--	--	232	832
Oklahoma	W	W	W	W	W	W
Oregon	54	235	15,200	71,500	W	W
Pennsylvania	2,570	15,800	2,650	21,700	7,030	45,500
Rhode Island	W	W	W	W	--	--
South Carolina	15,200	97,600	--	--	--	--
South Dakota	--	--	--	--	2,620	15,000
Tennessee	W	W	--	--	W	W
Texas	4	W	W	W	524	3,840
Utah	--	--	--	--	189	1,190
Vermont	W	W	--	--	W	W
Virginia	22,200	127,000	12,700	71,800	1,330	7,460
Washington	234	1,030	10,700	47,900	W	W
West Virginia	--	--	--	--	2,070	14,100
Wisconsin	1,200	2,340	W	W	W	W
Wyoming	3,410	W	--	--	W	W
Other	7,990	97,800	9,780	59,900	11,600	72,400
Total	178,000	1,120,000	91,000	576,000	34,300	212,000

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

1/ Data rounded by the U.S. Bureau of Mines to three significant digits; may not add to totals shown.

2/ Data derived in part from the Alaska Geological Survey.

TABLE 11
 CRUSHED VOLCANIC CINDER AND SCORIA AND CRUSHED
 MISCELLANEOUS STONE 1/ SOLD OR USED BY PRODUCERS
 IN THE UNITED STATES IN 1994, BY STATE 2/

(Thousand metric tons and thousand dollars)

State	Volcanic cinder and scoria		Miscellaneous stone	
	Quantity	Value	Quantity	Value
Alabama	--	--	W	W
Alaska 3/	--	--	2,480	18,000
Arizona	45	94	W	W
Arkansas	--	--	1,580	10,200
California	487	2,100	4,960	32,800
Colorado	W	W	W	W
Florida	--	--	1,820	7,930
Georgia	--	--	W	W
Hawaii	143	1,080	876	9,650
Idaho	W	W	679	3,520
Illinois	--	--	W	W
Iowa	--	--	W	W
Louisiana	--	--	W	W
Maine	--	--	W	W
Maryland	--	--	W	W
Massachusetts	--	--	W	W
Michigan	--	--	W	W
Mississippi	--	--	26	203
Montana	5	12	W	W
Nevada	54	W	W	W
New Mexico	285	2,000	W	W
New York	--	--	W	W
North Carolina	W	W	3,590	24,700
Oklahoma	--	--	W	W
Oregon	W	W	2,650	13,700
Pennsylvania	--	--	5,310	29,300
South Carolina	--	--	3,220	W
South Dakota	--	--	W	W
Tennessee	--	--	W	W
Texas	W	W	2,630	6,530
Utah	4	4	--	--
Vermont	--	--	W	W
Virginia	--	--	563	W
Washington	W	W	475	2,560
Wyoming	W	W	W	W
Other	1,030	7,320	5,430	52,000
Total	2,060	12,600	36,300	211,000

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

1/ Includes marl, shell, slate, and other stone.

2/ Data rounded by the U.S. Bureau of Mines to three significant digits; may not add to totals shown.

3/ Data derived in part from the Alaska Geological Survey.

TABLE 12
KIND OF CRUSHED STONE PRODUCED IN THE UNITED STATES IN 1994, BY STATE

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

1/ Data derived in part from the Alaska Geological Survey.

TABLE 13
CRUSHED STONE SOLD OR USED BY PRODUCERS IN THE UNITED
STATES IN 1994, BY USE 1/

Use	Quantity (thousand metric tons)	Value (thousands)	Unit value
Coarse aggregate (+1 1/2 inch):			
Macadam	5,260	\$26,500	\$5.05
Riprap and jetty stone	23,300	127,000	5.44
Filter stone	7,780	42,200	5.43
Other coarse aggregate	7,450	40,700	5.46
Coarse aggregate, graded:			
Concrete aggregate, coarse	112,000	627,000	5.58
Bituminous aggregate, coarse	89,600	511,000	5.70
Bituminous surface-treatment aggregate	21,300	128,000	6.00
Railroad ballast	16,300	88,100	5.41
Other graded coarse aggregate	24,100	141,000	5.84
Fine aggregate (-3/8 inch):			
Stone sand, concrete	23,100	130,000	5.63
Stone sand, bituminous mix or seal	23,800	128,000	5.37
Screening, undesignated	29,700	141,000	4.75
Other fine aggregate	4,550	26,800	5.89
Coarse and fine aggregates:			
Graded road base or subbase	181,000	800,000	4.41
Unpaved road surfacing	29,200	139,000	4.75
Terrazzo and exposed aggregate	2,430	20,600	8.48
Crusher run or fill or waste	48,400	209,000	4.32
Other coarse and fine aggregates	27,700	160,000	5.77
Roofing granules	4,230	48,500	11.47
Other construction materials 2/	10,600	66,000	6.25
Agricultural:			
Agricultural limestone	13,600	91,400	6.73
Poultry grit and mineral food	2,040	27,100	13.26
Other agricultural uses	1,280	6,790	5.29
Chemical and metallurgical:			
Cement manufacture	85,200	303,000	3.55
Lime manufacture	17,800	92,800	5.21
Dead-burned dolomite manufacture	526	1,680	3.20
Flux stone	4,990	26,700	5.36
Chemical stone	779	3,800	4.88
Glass manufacture	680	7,150	10.52
Sulfur oxide removal	2,680	13,300	4.96
Special:			
Mine dusting or acid water treatment	479	9,070	18.94
Asphalt fillers or extenders	1,780	16,900	9.53
Whiting or whiting substitute	1,810	75,500	41.71
Other fillers or extenders	4,500	98,700	21.95
Other miscellaneous uses:			
Abrasives	W	W	6.13
Flour (slate)	W	W	44.09
Sugar refining	W	W	10.18
Other specified uses not listed 3/	1,660	10,900	5.70
Unspecified: 4/			
Actual	263,000	1,470,000	5.59
Estimated	133,000	766,000	5.75
Total	1,230,000	6,620,000	5.39

W Withheld to avoid disclosing company proprietary data; included with "Other specified uses not listed."

1/ Data rounded by the U.S. Bureau of Mines to three significant digits, except prices; may not add to totals shown.

2/ Includes building products, drain fields, pipe bedding and waste material.

3/ Includes disinfectant and animal sanitation, flour (slate), and sugar refining.

4/ Includes production reported without a breakdown by end use and estimates for nonrespondents.

TABLE 14
CRUSHED LIMESTONE 1/ AND DOLOMITE SOLD OR USED BY PRODUCERS IN THE
UNITED STATES IN 1994, BY USE 2/

(Thousand metric tons and thousand dollars)

Use	Limestone		Dolomite	
	Quantity	Value	Quantity	Value
Coarse aggregate (+1 1/2 inch):				
Macadam	2,100	9,820	1,420	6,860
Riprap and jetty stone	16,400	78,500	1,230	6,960
Filter stone	5,420	27,400	193	1,240
Other coarse aggregate	3,910	19,200	319	1,510
Coarse aggregate, graded:				
Concrete aggregate, coarse	73,700	384,000	13,100	69,500
Bituminous aggregate, coarse	54,400	282,000	11,300	64,200
Bituminous surface-treatment aggregate	13,600	73,100	2,350	14,400
Railroad ballast	4,510	19,300	1,740	8,010
Other graded coarse aggregate	11,200	59,900	5,870	29,100
Fine aggregate (-3/8 inch):				
Stone sand, concrete	13,900	72,500	3,920	16,900
Stone sand, bituminous mix or seal	14,800	71,200	3,000	17,900
Screening, undesignated	18,600	84,000	2,230	11,300
Other fine aggregate	2,270	11,600	680	4,420
Coarse and fine aggregates:				
Graded road base or subbase	118,000	485,000	16,000	73,200
Unpaved road surfacing	16,500	84,800	6,300	26,400
Terrazzo and exposed aggregate	1,460	9,880	73	289
Crusher run or fill or waste	29,500	121,000	3,360	11,400
Other coarse and fine aggregates	14,000	67,200	5,000	29,000
Roofing granules	397	3,600	--	--
Other construction materials 3/	3,890	21,900	315	1,540
Agricultural:				
Agricultural limestone	11,500	73,400	2,120	18,100
Poultry grit and mineral food	1,910	25,800	9	137
Other agricultural uses	620	3,040	165	1,270
Chemical and metallurgical:				
Cement manufacture	81,400	278,000	W	W
Lime manufacture	15,500	82,000	2,320	9,680
Dead-burned dolomite manufacture	151	374	376	1,310
Flux stone	2,170	9,770	2,190	10,900
Chemical stone	777	3,790	W	W
Glass manufacture	654	6,720	W	W
Sulfur oxide removal	2,630	13,100	W	W
Special:				
Mine dusting or acid water treatment	347	5,560	W	W
Asphalt fillers or extenders	1,040	11,500	686	4,950
Whiting or whiting substitute	1,650	68,100	W	W
Other fillers or extenders	3,080	72,400	379	5,400
Other miscellaneous uses:				
Abrasives	W	W	--	--
Sugar refining	W	W	--	--
Other uses not listed 4/	1,300	6,790	127	2,120
Unspecified: 5/				
Actual	158,000	822,000	3,350	19,700
Estimated	86,900	474,000	2,540	11,800
Total	788,000	3,940,000	92,700	479,000

W Withheld to avoid disclosing company proprietary data; included with "Other uses not listed."

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

2/ Data rounded by the U.S. Bureau of Mines to three significant digits; may not add to totals shown.

3/ Includes building products, drain fields, pipe bedding, and waste material.

4/ Includes disinfectant and animal sanitation.

5/ Includes production reported without a breakdown by end use and estimates for nonrespondents.

TABLE 15
CRUSHED LIMESTONE 1/ AND DOLOMITE SOLD OR USED BY PRODUCERS
IN 1994, BY STATE AND USE 2/

(Thousand metric tons and thousand dollars)

State	Concrete aggregate		Bituminous aggregate		Roadstone and coverings		Riprap and rail-road ballast		Other construction uses	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Alabama	4,320	16,900	6,050	24,400	3,590	14,600	901	4,560	4,530	19,200
Arizona	--	--	--	--	--	--	--	--	--	--
Arkansas	286	1,270	599	3,810	1,250	4,990	221	853	667	2,990
California	961	5,970	1,640	9,270	1,330	5,240	164	634	537	2,810
Colorado	--	--	--	--	--	--	--	--	W	W
Connecticut	27	W	73	W	--	--	--	--	136	W
Florida	17,000	113,000	7,740	45,200	14,700	56,300	W	W	9,940	43,700
Georgia	1,050	6,720	771	4,790	666	3,540	49	383	1,400	8,310
Hawaii	205	2,520	--	--	107	1,260	W	W	337	3,630
Idaho	--	--	--	--	--	--	--	--	--	--
Illinois	6,660	34,000	6,930	41,400	12,800	57,000	1,020	5,640	1,490	6,360
Indiana	5,290	20,600	5,100	21,000	7,370	34,200	1,440	6,280	2,720	12,400
Iowa	1,200	8,510	1,790	9,540	5,650	31,000	342	2,130	768	3,790
Kansas	844	4,960	1,180	7,320	2,940	13,400	W	W	2,000	10,400
Kentucky	4,010	19,500	9,310	44,700	11,500	51,600	4,710	19,900	7,000	27,200
Maine	W	825	--	--	--	--	--	--	--	--
Maryland	2,330	12,700	3,650	24,300	1,850	12,100	W	W	3,130	20,900
Massachusetts	--	--	W	W	W	W	--	W	W	W
Michigan	5,810	18,400	4,250	13,000	4,110	15,000	276	1,730	580	1,920
Minnesota	333	1,480	366	1,470	2,370	8,910	115	558	442	2,260
Mississippi	W	W	W	W	W	W	W	W	W	W
Missouri	3,730	25,800	4,220	22,700	13,800	57,900	4,350	15,000	4,340	20,400
Montana	--	--	--	--	--	--	W	W	--	9
Nebraska	763	5,400	W	W	526	3,770	271	2,240	705	4,250
Nevada	--	--	--	--	W	W	--	--	--	--
New Hampshire	W	W	--	--	--	--	W	W	--	--
New Jersey	W	W	W	W	W	W	--	--	W	W
New Mexico	261	1,290	97	129	229	380	W	W	58	160
New York	2,990	22,200	11,000	71,700	6,290	34,200	524	3,280	6,370	28,100
North Carolina	141	1,090	W	W	175	1,010	48	336	460	2,980
Ohio	9,540	37,500	4,080	18,000	14,200	58,900	2,610	10,200	1,800	7,330
Oklahoma	7,610	35,100	1,410	7,120	1,700	6,250	911	5,390	6,520	21,700
Oregon	--	--	--	--	--	--	--	--	--	--
Pennsylvania	6,610	38,300	14,000	86,500	11,900	61,900	811	5,090	6,560	38,200
Rhode Island	--	--	--	--	--	--	--	--	3	W
South Carolina	--	--	--	--	--	--	--	--	--	--
South Dakota	W	W	W	W	W	W	W	W	W	W
Tennessee	4,870	25,200	14,700	78,200	12,000	59,700	1,690	8,390	7,310	36,600
Texas	15,700	73,200	10,800	47,100	20,700	61,300	835	4,670	4,350	12,200
Utah	--	--	W	W	W	W	W	W	W	W
Vermont	76	418	W	W	153	769	--	--	W	W
Virginia	2,020	12,000	2,540	15,600	2,690	13,400	535	3,270	3,680	18,500
Washington	--	W	9	W	--	W	W	W	W	W
West Virginia	1,030	5,860	2,680	14,500	787	4,530	437	2,450	3,300	17,900
Wisconsin	1,400	6,180	1,310	5,920	7,560	27,900	W	W	1,300	5,560
Wyoming	W	W	W	W	W	W	W	W	W	W
Total	107,000	557,000	116,000	618,000	163,000	701,000	22,300	103,000	82,400	380,000
Total withheld	376	1,760	1,760	9,960	1,600	5,540	1,630	9,840	1,980	10,500
Grand total	107,000	559,000	118,000	628,000	165,000	706,000	23,900	113,000	84,400	390,000

See footnotes at end of table.

TABLE 15-Continued
CRUSHED LIMESTONE 1/ AND DOLOMITE SOLD OR USED BY PRODUCERS
IN 1994, BY STATE AND USE 2/

(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	W	W	W	W	1,400	7,270	9,790	42,900	30,600	130,000
Arizona	W	W	W	W	--	--	2,710	10,500	2,710	10,500
Arkansas	W	W	255	2,410	W	W	4,840	22,100	8,120	38,400
California	12,600	43,900	W	W	W	W	6,250	82,300	23,500	150,000
Colorado	1,280	6,550	--	--	--	--	W	W	2,550	13,900
Connecticut	--	--	29	W	--	--	1,580	19,600	1,850	19,600
Florida	W	W	951	8,500	--	--	14,800	68,900	65,100	335,000
Georgia	W	W	W	W	--	--	W	W	5,090	31,000
Hawaii	278	2,170	W	W	--	--	73	884	1,000	10,500
Idaho	W	W	W	W	--	--	407	1,400	407	1,400
Illinois	2,130	7,540	2,300	10,900	--	--	29,200	190,000	62,600	353,000
Indiana	3,510	6,110	1,410	6,010	--	--	19,000	105,000	45,900	211,000
Iowa	2,810	20,100	1,190	10,600	W	W	22,900	125,000	36,600	211,000
Kansas	W	W	209	931	--	--	13,400	61,500	20,600	98,500
Kentucky	W	W	1,540	7,310	W	W	18,000	87,100	56,100	257,000
Maine	W	W	--	--	W	W	1,530	8,630	1,530	9,450
Maryland	2,030	4,670	W	W	--	--	3,880	39,600	16,900	114,000
Massachusetts	W	W	W	W	W	W	1,720	19,000	1,720	19,000
Michigan	5,980	11,400	W	W	W	W	13,700	50,800	34,700	112,000
Minnesota	--	--	167	607	--	--	4,610	19,600	8,400	34,900
Mississippi	747	W	29	215	--	--	W	W	1,870	7,290
Missouri	6,880	21,000	2,130	19,700	363	1,820	27,500	132,000	67,300	317,000
Montana	869	3,250	W	W	W	W	541	2,740	1,410	6,010
Nebraska	W	W	286	2,400	--	--	4,340	23,600	6,890	41,600
Nevada	--	--	81	1,420	W	W	1,560	13,100	1,640	14,600
New Hampshire	--	--	--	--	--	--	W	W	W	W
New Jersey	--	--	W	W	--	--	W	W	W	W
New Mexico	W	W	--	--	--	--	1,240	6,700	1,880	8,660
New York	4,150	16,200	99	912	--	--	3,500	21,600	35,000	198,000
North Carolina	--	--	10	53	--	--	W	W	4,540	31,600
Ohio	1,700	7,020	W	W	W	W	22,200	111,000	56,100	250,000
Oklahoma	W	W	W	W	--	--	6,240	23,200	24,400	98,800
Oregon	W	W	--	--	--	--	W	W	W	W
Pennsylvania	4,920	26,800	819	9,350	583	4,140	12,400	75,900	58,600	346,000
Rhode Island	--	--	9	W	--	--	W	W	W	W
South Carolina	--	--	--	--	--	--	1,610	8,710	1,610	8,710
South Dakota	W	W	--	--	W	W	W	W	2,850	9,520
Tennessee	W	W	708	5,690	W	W	7,060	47,400	48,400	261,000
Texas	9,610	23,900	483	3,050	2,780	11,600	7,080	48,600	72,300	286,000
Utah	W	W	W	W	W	W	4,350	18,600	4,350	18,600
Vermont	--	--	--	--	--	--	1,800	11,200	2,030	12,400
Virginia	1,480	4,920	978	12,600	1,550	6,350	4,470	30,700	19,900	118,000
Washington	--	--	W	W	W	W	2,420	24,700	2,430	24,700
West Virginia	W	W	W	W	W	W	5,620	39,900	13,800	85,200
Wisconsin	--	--	414	3,180	W	W	11,700	47,700	23,700	96,400
Wyoming	--	--	39	275	--	--	1,480	5,840	1,520	6,120
Total	61,000	205,000	14,100	106,000	6,680	31,200	295,000	1,650,000	878,000	4,410,000
Total withheld	20,400	72,800	2,170	15,700	11,600	62,200	9,990	66,300	2,030	14,900
Grand total	81,400	278,000	16,300	122,000	18,300	93,400	XX	XX	881,000	4,420,000

W Withheld to avoid disclosing company proprietary data; included with "Total withheld" and "Other uses." XX Not applicable.

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

2/ Data rounded by the U. S. Bureau of Mines to three significant digits; may not add to totals shown.

TABLE 16
CRUSHED MARBLE SOLD OR USED BY PRODUCERS IN
THE UNITED STATES IN 1994, BY USE 1/

(Thousand metric tons and thousand dollars)

Use	Quantity	Value
Coarse aggregate (+1 1/2 inch):		
Riprap and jetty stone	23	250
Filter stone	(2/)	3
Coarse aggregate, graded:		
Bituminous aggregate, coarse	136	938
Other graded coarse aggregate	9	155
Coarse and fine aggregates:		
Unpaved road surfacing	2	13
Terrazzo and exposed aggregate	88	2,690
Roofing granules	1	25
Other construction materials 3/	888	6,060
Chemical and metallurgical:		
Lime manufacture	50	1,100
Other specified uses not listed 4/	1,550	33,300
Unspecified: 5/		
Actual	1,000	7,300
Estimated	2,340	13,300
Total	6,090	65,100

1/ Data rounded by the U.S. Bureau of Mines to three significant digits; may not add to totals shown.

2/ Less than 1/2 unit.

3/ Includes concrete aggregate (coarse), bituminous surface treatment aggregate, screening-undesignated, graded roadbase or subbase, and crusher run (select material or fill).

4/ Includes mine dusting or acid water, other agricultural uses, other fillers or extenders, and whiting or whiting substitute.

5/ Includes production reported without a breakdown by end use and estimates for respondents.

TABLE 17
CRUSHED GRANITE AND TRAPROCK SOLD OR USED BY PRODUCERS
IN THE UNITED STATES IN 1994, BY USE 1/

(Thousand metric tons and thousand dollars)

Use	Granite		Traprock	
	Quantity	Value	Quantity	Value
<u>Coarse aggregate (+1 1/2 inch):</u>				
Macadam	1,540	8,380	187	1,470
Riprap and jetty stone	3,350	25,700	1,370	10,300
Filter stone	1,080	7,220	649	3,980
Other coarse aggregate	1,350	7,970	1,480	9,380
<u>Coarse aggregate, graded:</u>				
Concrete aggregate, coarse	15,800	107,000	7,150	52,200
Bituminous aggregate, coarse	16,600	113,000	4,860	36,300
Bituminous surface-treatment aggregate	2,150	19,100	2,210	14,200
Railroad ballast	7,670	46,600	1,860	11,100
Other graded coarse aggregate	4,190	29,300	2,210	18,600
<u>Fine aggregate (-3/8 inch):</u>				
Stone sand, concrete	2,880	19,800	1,520	15,100
Stone sand, bituminous mix or seal	3,750	21,700	1,570	12,800
Screening, undesignated	4,850	23,700	2,710	15,300
Other fine aggregate	1,100	7,320	452	3,210
<u>Coarse and fine aggregates:</u>				
Graded road base or subbase	20,300	107,000	15,500	79,600
Unpaved road surfacing	1,460	4,890	3,340	13,800
Terrazzo and exposed aggregate	302	2,230	(2/)	(2/)
Crusher run or fill or waste	11,100	52,600	2,810	16,600
Other coarse and fine aggregates	2,670	20,600	4,880	37,000
Roofing granules	2,350	25,700	(2/)	(2/)
Other construction materials	2,280	16,600	3,030 3/	25,800 3/
<u>Agricultural:</u>				
Poultry grit and mineral food	(4/)	(4/)	--	--
Other agricultural uses	293	650	--	--
<u>Special:</u>				
Asphalt fillers or extenders	(5/)	(5/)	--	--
Other fillers or extenders	--	--	(5/)	(5/)
Other uses not listed	18	295	99	854
<u>Unspecified: 6/</u>				
Actual	61,600	394,000	16,300	94,100
Estimated	9,380	58,900	16,700	104,000
Total	178,000	1,120,000	91,000	576,000

1/ Data rounded by the U.S. Bureau of Mines to three significant digits; may not add to totals shown.

2/ Included with "Other construction materials."

3/ Includes pipe bedding.

4/ Included with "Other agricultural uses."

5/ Included with "Other uses not listed."

6/ Includes production reported without a breakdown by end use and estimates for nonrespondents.

TABLE 18
CRUSHED SANDSTONE AND QUARTZITE SOLD OR USED BY PRODUCERS IN THE
UNITED STATES IN 1994, BY USE 1/

(Thousand metric tons and thousand dollars)

Use	Sandstone		Quartzite	
	Quantity	Value	Quantity	Value
Coarse aggregate (+1 1/2 inch):				
Macadam	W	W	--	--
Riprap and jetty stone	558	3,240	196	1,040
Filter stone	253	1,440	34	190
Other coarse aggregate	34	235	112	629
Coarse aggregate, graded:				
Concrete aggregate, coarse	1,620	9,260	330	2,000
Bituminous aggregate, coarse	1,460	9,790	271	1,360
Bituminous surface-treatment aggregate	700	5,310	79	480
Railroad ballast	93	519	323	1,740
Other graded coarse aggregate	202	1,310	173	900
Fine aggregate (-3/8 inch):				
Stone sand, concrete	755	5,120	153	605
Stone sand, bituminous mix or seal	513	2,980	116	630
Screening, undesignated	966	5,360	78	375
Other fine aggregate	W	W	--	--
Coarse and fine aggregates:				
Graded road base or subbase	3,880	17,600	509	2,630
Unpaved road surfaces	417	3,220	205	905
Terrazzo and exposed aggregate	72	862	8	129
Crusher run or fill or waste	1,000	4,630	68	393
Other coarse and fine aggregates	600	3,240	204 2/	904
Other construction materials	91	434	--	--
Agricultural:				
Other agricultural uses	--	--	1	6
Chemical and metallurgical:				
Cement manufacture	821	4,480	171	1,220
Flux stone	--	--	632	6,060
Glass manufacture	--	--	(3/)	(3/)
Special:				
Mine dusting or acid water treatment	(3/)	(3/)	--	--
Asphalt fillers or extenders	(3/)	(3/)	--	--
Other uses not listed 4/	124	822	54	696
Unspecified: 5/				
Actual	8,730	56,700	2,880	16,600
Estimated	4,550	34,100	231	1,570
Total	27,400	171,000	6,830	41,100

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

1/ Data rounded by the U.S. Bureau of Mines to three significant digits; may not add to totals shown.

2/ Includes pipe bedding.

3/ Included with "Other uses not listed."

4/ Includes poultry grit and mineral food.

5/ Includes production reported without breakdown by end use and estimates for nonrespondents.

TABLE 19
CRUSHED VOLCANIC CINDER AND SCORIA AND CRUSHED MISCELLANEOUS STONE 1/
SOLD OR USED BY PRODUCERS IN THE UNITED STATES IN 1994, BY USE 2/

(Thousand metric tons and thousand dollars)

Use	Volcanic cinder and scoria		Miscellaneous stone	
	Quantity	Value	Quantity	Value
Coarse aggregate (+1 1/2 inch):				
Riprap and jetty stone	9	40	135	509
Filter stone	101	454	48	246
Other coarse aggregate	46	252	199	1,310
Course aggregate, graded:				
Concrete aggregate, coarse	119	493	457	1,900
Bituminous aggregate, coarse	6	35	572	2,750
Bituminous surface-treatment aggregate	--	--	8	39
Railroad ballast	--	--	W	W
Other graded coarse aggregate	--	--	238	1,400
Fine aggregate (-3/8 inch):				
Stone sand, concrete	13	171	W	W
Stone sand, bituminous mix or seal	--	--	61	304
Screening, undesignated	1	9	304	797
Coarse and fine aggregates:				
Graded road base or subbase	362	1,680	6,480	28,700
Unpaved road surfacing	87	207	931	4,380
Terrazzo and exposed aggregate	266	2,650	140	1,360
Crusher run or fill or waste	83	327	381	689
Other coarse and fine aggregates	--	--	379	1,790
Roofing granules	W	W	492	6,420
Other construction materials	73	453	1,900	10,300
Agricultural:				
Poultry grit and mineral food	--	--	(3/)	(3/)
Other agricultural uses	38	333	41	244
Chemical and metallurgical:				
Cement manufacture	--	--	2,840	17,200
Other specified uses not listed	61	602	42 4/	764
Unspecified: 5/				
Actual	750	4,640	10,200	53,000
Estimated	44	261	10,400	68,600
Total	2,060	12,600	36,300	211,000

W Withheld to avoid disclosing company proprietary data; included with "Other construction materials" and/or "Total."

1/ Includes marl, shell, slate, and other stone.

2/ Data rounded by U.S. Bureau of Mines to three significant digits; may not add to totals shown.

3/ Included with "Other specified uses not listed."

4/ Includes flour (slate).

5/ Includes production reported without a breakdown by end use and estimates for nonrespondents.

TABLE 20
CRUSHED STONE SOLD OR USED BY PRODUCERS IN THE UNITED STATES IN 1994,
BY REGION AND METHOD OF TRANSPORTATION 1/

(Thousand metric tons)

Region	Truck	Rail	Water	Other	Not transported	Not specified	Total
Northeast:							
New England	9,450	491	(2/)	(2/)	2,220	13,900	26,100
Middle Atlantic	80,300	1,700	3,810	719	15,200	34,200	136,000
Midwest:							
East North Central	99,200	6,180	26,500	715	13,300	83,800	230,000
West North Central	59,500	2,130	7,490	7	11,000	70,200	150,000
South:							
South Atlantic	138,000	14,200	4,240	153	21,100	115,000	293,000
East South Central	78,400	3,530	12,500	1,960	9,170	34,200	140,000
West South Central	67,400	21,000	2,400	4,190	11,300	24,000	130,000
West:							
Mountain	14,400	4,190	(2/)	1,490	2,350	13,400	35,800
Pacific	34,900	1,470	377	10,500	5,300	35,100	87,600
Total	582,000	54,900	57,300	19,700	91,000	424,000	1,230,000

1/ Data rounded by the U.S. Bureau of Mines to three significant digits; may not add to totals shown.

2/ Less than 1/2 unit.

TABLE 21
NUMBER OF CRUSHED AND BROKEN STONE OPERATIONS AND PROCESSING
PLANTS IN THE UNITED STATES IN 1994, BY STATE 1/

State	Mining operations on land					Total active operations
	Stationary	Portable	Stationary and portable	No. plants or unspecified	Dredging operations	
Alabama	37	3	--	1	--	41
Alaska 2/	3	11	1	7	--	21
Arizona	16	7	2	7	1	33
Arkansas	26	8	2	5	--	41
California	59	29	9	31	1	129
Colorado	6	6	6	7	--	25
Connecticut	15	2	--	--	--	17
Florida	35	28	7	11	5	86
Georgia	66	2	--	3	--	71
Hawaii	19	8	3	6	--	36
Idaho	6	35	5	3	--	49
Illinois	86	53	10	5	--	154
Indiana	71	4	4	1	--	80
Iowa	23	198	--	6	2	229
Kansas	18	87	2	4	--	111
Kentucky	79	5	2	6	--	92
Louisiana	1	--	--	4	3	8
Maine	6	6	1	2	--	15
Maryland	22	7	2	2	--	33
Massachusetts	23	5	3	4	--	35
Michigan	18	12	1	4	2	37
Minnesota	10	33	1	12	--	56
Mississippi	4	1	--	--	--	5
Missouri	94	95	8	12	--	209
Montana	11	4	--	1	--	16
Nebraska	6	4	2	--	--	12
Nevada	10	6	2	--	--	17
New Hampshire	7	2	1	2	--	12
New Jersey	12	1	8	--	--	21
New Mexico	21	21	2	4	--	48
New York	64	12	15	11	--	102
North Carolina	85	7	4	3	--	99
Ohio	82	17	6	2	1	108
Oklahoma	42	6	7	2	--	57
Oregon	33	89	7	20	1	150
Pennsylvania	130	24	20	23	--	197
Rhode Island	7	--	--	--	--	7
South Carolina	28	1	1	1	--	31
South Dakota	10	--	1	--	--	11
Tennessee	104	6	4	2	--	116
Texas	62	47	13	5	1	128
Utah	9	11	1	--	--	21
Vermont	7	6	2	4	--	19
Virginia	91	5	5	--	--	100
Washington	30	60	5	27	--	121
West Virginia	28	10	2	2	--	42
Wisconsin	25	134	--	19	--	176
Wyoming	8	6	--	--	--	14
Total	1,660	1,120	177	271	17	3,240

1/ Data rounded by the U.S. Bureau of Mines to three significant digits; may not add to totals shown.

2/ Data derived in part from the Alaska Geological Survey.

TABLE 22
U.S. EXPORTS OF CRUSHED STONE IN 1994, BY DESTINATION 1/

(Metric tons)

Destination	Limestone for cement manufacturing	Other	Chalk, crude	Granules, chippings	Total
North America:					
Aruba	--	--	--	2	2
Bahamas, The	198	--	--	--	198
Barbados	--	--	27	--	27
Bermuda	37	--	--	--	37
British Virgin Islands	9	--	--	--	9
Canada	4,380,000	277	1,970	168,000	4,550,000
Cayman Islands	--	--	--	323	323
Jamaica	7,680	--	--	16	7,700
Mexico	2,300	235	462	5,340	8,340
Netherlands Antilles	--	--	--	1	1
Panama	--	--	54	461	515
Trinidad and Tobago	--	--	18	--	18
Total	4,390,000	512	2,530	174,000	4,570,000
South America:					
Argentina	20	--	1	61	82
Brazil	6,650	63	--	--	6,710
Colombia	--	5	--	20	25
Ecuador	--	--	92	2	94
Guyana	--	--	2	--	2
Venezuela	920	18	37	36	1,010
Total	7,590	86	132	119	7,930
Europe:					
Austria	4,700	--	--	--	4,700
Belgium	50,700	--	--	--	50,700
Denmark	180	--	--	--	180
Finland	--	--	--	21	21
France	11,700	71	12	61	11,900
Germany	161,000	2,230	--	276	163,000
Greece	--	--	--	32	32
Hungary	1,680	--	--	--	1,680
Ireland	416	374	--	--	790
Italy	96,700	47	--	45	96,800
Netherlands	900	221	6	34	1,160
Norway	--	--	4	--	4
Poland	--	146	--	--	146
Russia	--	--	--	22	22
Spain	--	12	--	--	12
Sweden	8,100	1	--	--	8,100
Switzerland	2,100	23	--	121	2,240
United Kingdom	75,800	55	30	121	76,000
Total	414,000	3,180	51	733	418,000
Asia:					
China	35,600	14	132	--	35,700
Hong Kong	132	40	1	19	192
Indonesia	20,900	11	--	--	20,900
Japan	79,000	90	2	519	79,600
Korea, Republic of	5,400	25	--	757	6,180
Malaysia	160	49	--	33	242
Philippines	73	--	12	--	85
Singapore	--	28	--	57	85
Sri Lanka (Ceylon)	18	--	--	34	52
Taiwan	31,800	19	--	108	31,900
Thailand	820	--	16	--	836
Total	174,000	276	163	1,530	176,000

See footnotes at end of table.

TABLE 22 - CONTINUED
U.S. EXPORTS OF CRUSHED STONE IN 1994, BY DESTINATION

(Metric tons)

Destination	Limestone for cement manufacturing	Other	Chalk, crude	Granules, chippings	Total
Oceania:					
Australia	4,790	1	131	79	5,000
Total	4,790	1	131	79	5,000
Middle East:					
Israel	--	604	95	--	699
Saudi Arabia	68	--	--	139	207
United Arab Emirates	--	--	--	11	11
Total	68	604	95	150	917
Africa:					
Egypt	--	--	10	611	621
Total	--	--	10	611	621
Grand total	4,990,000	4,660	3,110	177,000	5,180,000
Total value (thousands)	\$25,300	\$3,820	\$1	\$9,010	\$38,100

1/ Data rounded by the U.S. Bureau of Mines to three significant digits; may not add to totals shown.

Source: U.S. Bureau of the Census.

TABLE 23
U.S. IMPORTS OF CRUSHED STONE AND CALCIUM CARBONATE FINES, BY TYPE 1/

(Thousand metric tons and thousand dollars)

Type	1993		1994		Unit price
	Quantity	C.i.f. value 2/	Quantity	C.i.f. value 2/	
Crushed stone and chips:					
Limestone 2/	4,980	41,100	5,100	41,500	\$8
Limestone for flux or cement manufacturing	3,070	21,400	3,250	23,800	\$7
Quartzite	(2/)	343	(2/)	156	\$591
Other	353	6,230	583	9,030	\$15
Total	8,400	69,000	8,930	74,500	XX
Calcium carbonate fines: 3/					
Natural chalk	(4/)	255	(4/)	1,940	\$8,160
Calcium carbonates other chalk	44	5,060	5	1,440	\$300
Total	44	5,310	5	3,380	XX
Grand total	8,440	74,300	8,930	77,800	XX

XX Not applicable.

1/ Previously published and 1994 data are rounded by the U.S. Bureau of Mines to three significant digits; may not add to totals shown.

2/ Excludes limestone for cement manufacturing.

3/ Excludes precipitated calcium carbonates.

4/ Less than 1/2 unit.

Source: U.S. Bureau of the Census.