## STONE (CRUSHED) ${ }^{1}$

(Data in million metric tons, unless otherwise noted) ${ }^{2}$
Domestic Production and Use: Crushed stone valued at $\$ 8.7$ billion was produced by 1,500 companies operating 3,800 active quarries in 49 States. Leading States, in order of production, were Texas, Florida, Pennsylvania, Illinois, Georgia, Missouri, Ohio, North Carolina, Virginia, and Tennessee, together accounting for $51 \%$ of the total output. It is estimated that, of the 1.6 billion tons of crushed stone produced in 2000, about $43 \%$ was for unspecified uses with $14 \%$ estimated for nonrespondents. Of the remaining 866 million tons, $84 \%$ was used as construction aggregates mostly for highway and road construction and maintenance; $13 \%$ for chemical and metallurgical uses, including cement and lime manufacture; $2 \%$ for agricultural uses; and $1 \%$ for special and miscellaneous uses and products. To provide a more accurate estimate of the consumption patterns for crushed stone, the "unspecified uses" as defined in the U.S. Geological Survey (USGS) Minerals Yearbook, are not included in the above percentages. Of the total crushed stone produced in 2000, about $70 \%$ was limestone and dolomite; $16 \%$, granite; $7 \%$, traprock; and the remaining $7 \%$, was shared, in descending order of quantity, by sandstone and quartzite, miscellaneous stone, marble, slate, calcareous marl, shell, and volcanic cinder and scoria.

The estimated output of crushed stone in the 48 conterminous States shipped for consumption in the first 9 months of 2000 was 1.2 billion tons, which represents an increase of $3.1 \%$ compared with the same period of 1999 . The estimated output of construction sand and gravel produced for consumption in the first 9 months of 2000 was 860 million metric tons, an increase of $4.1 \%$ compared with the same period of 1999. Additional production information, by quarter for each State, geographic division, and the United States, is published in the USGS quarterly Mineral Industry Surveys for Crushed Stone and Sand and Gravel.

| Salient Statistics-United States: | 1996 | 1997 | 1998 | 1999 | $\underline{2000}{ }^{\text {e }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Production | 1,330 | 1,410 | 1,510 | 1,540 | 1,590 |
| Imports for consumption | 11 | 12 | 14 | 12 | 12 |
| Exports | 3 | 4 | 4 | 4 | 4 |
| Consumption, apparent | 1,338 | 1,418 | 1,520 | 1,548 | 1,598 |
| Price, average value, dollars per metric ton | 5.40 | 5.64 | 5.39 | 5.35 | 5.40 |
| Stocks, yearend | NA | NA | NA | NA | NA |
| Employment, quarry and mill, number ${ }^{\text {e }}$ | 76,000 | 77,600 | 78,500 | 79,000 | 79,000 |
| Net import reliance ${ }^{4}$ as a percent of apparent consumption | - | - | - | - |  |

Recycling: Road surfaces made of asphalt and crushed stone and, to a lesser extent, cement concrete surfaces and structures were recycled on a limited but increasing basis in most States.

Import Sources (1996-99): Canada, 54\%; Mexico, 31\%; The Bahamas, 8\%; and other, 7\%.

| Tariff: | Item | Number |
| :--- | :---: | :---: |
| Crushed stone | 2517.10 .00 | Normal Trade Relations |
| $\frac{12 / 31 / 00}{\text { Free. }}$ |  |  |

Depletion Allowance: For some special uses, $14 \%$ (Domestic and foreign); if used as riprap, ballast, road material, concrete aggregate, and similar purposes, $5 \%$ (Domestic and foreign).

Government Stockpile: None.

## STONE (CRUSHED)

Events, Trends, and Issues: Crushed stone output increased $3.9 \%$ in 2000 to 1.6 billion tons. It is estimated that in 2001, domestic production and apparent consumption will be about 1.65 billion tons each, a $3.8 \%$ increase. The Transportation Equity Act for the $21^{\text {st }}$ Century (Public Law 105-178) appropriated $\$ 205$ billion through 2003, a $44 \%$ increase compared to the previous Intermodal Surface Transportation Efficiency Act legislation. The law guarantees that $\$ 165$ billion will be obligated for highways and $\$ 35$ billion for transit work. The guaranteed amounts are linked to actual Highway Trust Fund receipts, and can only be used for highways and highway safety programs. The States are also guaranteed a return of at least $90.5 \%$ of their contributions to the Highway Trust Fund. The legislation also established timetables for determining if States are complying with the U.S. Environmental Protection Agency's new air quality standards for particulate matter, also known as PM 2.5 .

The crushed stone industry continued to be concerned with safety regulations and environmental restrictions. Shortages in some urban and industrialized areas were expected to continue to increase, owing to local zoning regulations and land-development alternatives. These problems are expected to continue to cause a relocation of crushed stone quarries away from high-population centers.

|  | Mine production |  | Reserves and reserve base ${ }^{5}$ |
| :---: | :---: | :---: | :---: |
|  | 1999 | $\underline{2000}{ }^{\text {e }}$ |  |
| United States | 1,540 | 1,590 | Adequate except where special |
| Other countries | NA | NA | types are needed or where |
| World total | NA | NA | local shortages exist. |

World Resources: Stone resources of the world are very large. High-purity limestone and dolomite suitable for specialty uses are limited in many geographic areas. The largest resources of high-purity limestone and dolomite in the United States are in the central and eastern parts of the country.

Substitutes: Crushed stone substitutes for roadbuilding include sand and gravel and slag. Substitutes for construction aggregates include sand and gravel, slag, sintered or expanded clay or shale, and perlite or vermiculite.

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[^0]:    ${ }^{e}$ Estimated. NA Not available.
    ${ }^{1}$ See also Stone (Dimension).
    ${ }^{2}$ See Appendix A for conversion to short tons.
    ${ }^{3}$ Including office staff.
    ${ }^{4}$ Defined as imports - exports + adjustments for Government and industry stock changes. Changes in stocks were assumed to be zero in the net import reliance and apparent consumption calculations because data on stocks were not available.
    ${ }^{5}$ See Appendix C for definitions.

