

STONE (CRUSHED)¹(Data in million metric tons, unless otherwise noted)²

Domestic Production and Use: Crushed stone valued at \$9 billion was produced by 1,400 companies operating 3,700 active quarries in 49 States. Leading States, in order of production, were Texas, Pennsylvania, Florida, Ohio, Illinois, Georgia, Missouri, Virginia, North Carolina, and California, together accounting for 52.5% of the total output. It is estimated that, of the 1.6 billion tons of crushed stone produced in 2001, about 44% was for unspecified uses of which 15% was estimated for nonrespondents. Of the remaining 869 million tons, 82% was used as construction aggregates mostly for highway and road construction and maintenance; 15% 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 meaningful 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 2001, 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, calcareous marl, slate, 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 2001 was 1.2 billion tons, which represents an increase of 5.5% compared with the same period of 2000. The estimated output of construction sand and gravel produced for consumption in the first 9 months of 2001 was 845 million metric tons, an increase of only 0.9% compared with the same period of 2000. 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:	1997	1998	1999	2000	2001^e
Production	1,410	1,510	1,530	1,560	1,620
Imports for consumption	12	14	12	13	15
Exports	4	4	4	4	4
Consumption, apparent	1,418	1,520	1,548	1,569	1,631
Price, average value, dollars per metric ton	5.64	5.39	5.35	5.39	5.53
Stocks, yearend	NA	NA	NA	NA	NA
Employment, quarry and mill, number ^{e 3}	77,600	78,500	79,000	78,800	79,200
Net import reliance ⁴ as a percentage of apparent consumption	1	1	1	1	1

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 (1997-2000): Canada, 53%; Mexico, 33%; The Bahamas, 8%; and other, 6%.

Tariff: Item	Number	Normal Trade Relations 12/31/01
Crushed stone	2517.10.00	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.

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Events, Trends, and Issues: Crushed stone output increased 3.8% in 2001 to 1.6 billion tons. It is estimated that in 2002, domestic production and apparent consumption will be about 1.65 billion tons each, a 2% increase. The Transportation Equity Act for the 21st 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 Aviation Investment and Reform Act for the 21st Century (Public Law 106-181) was signed into law on April 5, 2000. The law is a 3-year reauthorization of Federal Aviation Administration programs that released an estimated \$3.2 billion in fiscal year 2001 funding that will increase to \$3.3 billion in fiscal year 2002 and to \$3.4 billion in fiscal year 2003.

The crushed stone industry continues to be concerned with safety regulations and environmental restrictions. Local zoning regulations and land-development alternatives that discourage quarrying are expected to continue to cause a relocation of crushed stone quarries away from high-population centers. Shortages of crushed stone in some urban and industrialized areas are expected to continue to increase.

World Mine Production, Reserves, and Reserve Base:

	Mine production		Reserves and reserve base ⁵
	2000	2001 ^e	
United States	1,560	1,620	Adequate except where special types are needed or where local shortages exist.
Other countries	NA	NA	
World total	NA	NA	

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.

^eEstimated. NA Not available.

¹See also Stone (Dimension).

²See Appendix A for conversion to short tons.

³Including office staff.

⁴Defined 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.

⁵See Appendix C for definitions.