STONE (CRUSHED)¹

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

Domestic Production and Use: Crushed stone valued at \$8.6 billion was produced by 1,500 companies operating 3,800 active quarries in 49 States. Leading States, in order of production, were Texas, Pennsylvania, Florida, Georgia, Illinois, Missouri, Ohio, North Carolina, Virginia, and Tennessee, together accounting for about 51.3% of the total output. It is estimated that, of the 1.56 billion tons of crushed stone produced in 1999, about 42.4% was for unspecified uses with only 13.6% estimated for nonrespondents. Of the remaining 870 million tons, about 82.4% was used as construction aggregates mostly for highway and road construction and maintenance; 14.7% for chemical and metallurgical uses, including cement and lime manufacture; 1.6% for agricultural uses; and 1.2% 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 Minerals Yearbook, are not included in the above percentages. Of the total crushed stone produced in 1998, 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, volcanic cinder and scoria, and shell.

The estimated output of crushed stone in the 48 conterminous States shipped for consumption in the first 9 months of 1999 was 1.14 billion tons, which represents an increase of 3.3% compared with the same period of 1998. Additional production information by quarters for each State, geographic division, and the United States is published in the Quarterly Mineral Industry Surveys for Crushed Stone and Sand and Gravel.

Salient Statistics—United States:	<u>1995</u>	1996	1997	<u>1998</u>	<u>1999</u> °
Production	1,260	1,330	1,410	1,510	1,560
Imports for consumption	11	11	12	14	14
Exports	6	3	4	4	4
Consumption, apparent	1,265	1,338	1,418	1,520	1,570
Price, average value, dollars per metric ton	5.36	5.40	5.64	5.39	5.53
Stocks, yearend	NA	NA	NA	NA	NA
Employment, quarry and mill, number ^{e 3}	75,900	76,000	77,600	78,500	79,000
Net import reliance ⁴ as a percent of					
apparent consumption	—	—	—	_	—

<u>Recycling</u>: 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 (1995-98): Canada, 53%; Mexico, 30%; The Bahamas, 9%; and other, 8%.

<u>Tariff</u> : Item	Number	Normal Trade Relations
		<u>12/31/99</u>
Crushed stone	2517.10.00	Free.

Depletion Allowance: (Domestic) 15% for some special uses; 5% if used as riprap, ballast, road material, concrete aggregate, and similar purposes.

Government Stockpile: None.

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Events, Trends, and Issues: Crushed stone output increased 3.3% in 1999. It is estimated that in 2000, domestic production and apparent consumption will be about 1.63 billion tons each, a 4.5% increase. The Transportation Equity Act for the 21st Century (Public Law 105-178) appropriated \$205 billion through year 2003, a 44% increase compared to the previous Intermodal Surface Transportation Efficiency Act (ISTEA) 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 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 are expected to continue to cause a relocation of crushed stone quarries away from high-population centers.

World Mine Production, Reserves, and Reserve Base:

	Mine production		Reserves and reserve base ⁶		
	1998	1999°			
United States	1,510	1,560	Adequate except where special		
Other countries	NA	NA	types are needed or where		
World total	NA	NA	local shortages exist.		

<u>World Resources</u>: 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.

<u>Substitutes</u>: 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.