

**STONE (CRUSHED)<sup>1</sup>**(Data in million metric tons, unless otherwise noted)<sup>2</sup>

**Domestic Production and Use:** Crushed stone valued at \$7.7 billion was produced by 1,500 companies operating 3,700 active quarries in 48 States. Leading States, in order of production, were Pennsylvania, Texas, Florida, Missouri, Illinois, Ohio, Georgia, Virginia, Kentucky, and North Carolina, together accounting for about 51% of the total output. It is estimated that, of the 1.39 billion tons of crushed stone produced in 1997, about 42% was for unspecified uses. Of the remaining total, about 83% was used as construction aggregates mostly for highway and road construction and maintenance; 14% for chemical and metallurgical uses, including cement and lime manufacture; 2% for agricultural uses; and 1% for special uses and products. To provide a more accurate estimate of the consumption patterns for crushed stone, the "unspecified uses" are not included in the above percentages. Of the total crushed stone produced in 1997, about 72% was limestone and dolomite; 15%, granite; 7%, traprock; and the remaining 6%, was shared, in descending order of quantity, by sandstone and quartzite, miscellaneous stone, marble, calcareous marl, slate, 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 1997 was 1.03 billion tons, which represents an increase of about 6.5% compared with the same period of 1996. 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.

<b><u>Salient Statistics—United States:</u></b>	<b><u>1993</u></b>	<b><u>1994</u></b>	<b><u>1995</u></b>	<b><u>1996</u></b>	<b><u>1997<sup>e</sup></u></b>
Production	1,120	1,230	1,260	1,330	1,390
Imports for consumption	8	9	11	11	11
Exports	5	5	6	3	4
Consumption, apparent	1,123	1,234	1,265	1,338	1,397
Price, average value, dollars per metric ton	5.30	5.39	5.36	5.40	5.55
Stocks, yearend	NA	NA	NA	NA	NA
Employment, quarry and mill, number <sup>e 3</sup>	76,000	77,000	77,200	77,500	78,000
Net import reliance <sup>4</sup> 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 (1993-96):** Canada, 53%; Mexico, 27%; The Bahamas, 10%; and other, 10%.

<b>Tariff:</b>	<b>Item</b>	<b>Number</b>	<b>Most favored nation (MFN) <u>12/31/97</u></b>	<b>Non-MFN<sup>5</sup> <u>12/31/97</u></b>
	Crushed and broken stone	2517.10.0000	Free	30% ad val.

**Depletion Allowance:** (Domestic and Foreign) 14% for chemical and metallurgical uses; 5% if used for riprap, ballast, road material, concrete aggregate, and similar purposes.

**Government Stockpile:** None.

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**Events, Trends, and Issues:** Crushed stone output increased 4.5% in 1997. It is estimated that 1998 domestic production and U.S. apparent consumption will be about 1.45 billion tons each, a 4% increase.

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. This is expected to continue to cause a relocation of crushed stone quarries away from high-population centers.

### **World Mine Production, Reserves, and Reserve Base:**

	<b>Mine production</b>		<b>Reserves and reserve base<sup>6</sup></b>
	<b>1996</b>	<b>1997<sup>e</sup></b>	
United States	1,330	1,390	Adequate except where special types are needed or where local shortages exist.
Other countries	<u>NA</u>	<u>NA</u>	
World total	NA	NA	

**World Resources:** Stone resources of the world are very large. High-purity limestone and dolomite suitable for chemical and metallurgical use are limited in many geographical 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 aggregate include sand and gravel, slag, sintered or expanded clay or shale, and perlite or vermiculite.

<sup>e</sup>Estimated. NA Not available.

<sup>1</sup>See also Stone (Dimension).

<sup>2</sup>See Appendix A for conversion to short tons.

<sup>3</sup>Excluding office staff.

<sup>4</sup>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.

<sup>5</sup>See Appendix B.

<sup>6</sup>See Appendix D for definitions.