## STONE (CRUSHED)<sup>1</sup>

## (Data in million metric tons unless otherwise noted)<sup>2</sup>

**Domestic Production and Use:** Crushed stone valued at \$9.7 billion was produced by 1,200 companies operating 3,200 active quarries and 180 sale/distribution yards in 49 States. Leading States, in order of production, were Texas, Pennsylvania, Florida, Georgia, Illinois, Missouri, Ohio, Virginia, North Carolina, and Tennessee, together accounting for 53.1% of the total output. Of the total crushed stone produced in 2004, about 70% was limestone and dolomite; 16%, granite; 8%, traprock; and the remaining 6% was shared, in descending order of quantity, by sandstone and quartzite, miscellaneous stone, marble, calcareous marl, slate, shell, and volcanic cinder and scoria. It is estimated that of the 1.6 billion tons of crushed stone consumed in 2004, 33% was for unspecified uses, and 15% was estimated for nonrespondents to the U.S. Geological Survey (USGS) canvasses. Of the remaining 806 million tons reported by uses, 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 accurate estimate of the consumption patterns for crushed stone, the "unspecified uses—reported and estimated" as defined in the USGS Minerals Yearbook, are not included in the above percentages.

The estimated output of crushed stone in the 48 conterminous States shipped for consumption in the first 9 months of 2004 was 1.21 billion tons, a 7.7% increase compared with the same period of 2003. The third quarter shipments for consumption increased by 5.6% compared with the same period of 2003. Additional production information, by quarter for each State, geographic division, and the United States, is reported in the USGS quarterly Mineral Industry Surveys for Crushed Stone and Sand and Gravel.

Salient Statistics—United States:	2000	<u>2001</u>	<u>2002</u>	2003	<u>2004<sup>e</sup></u>
Production	1,550	1,590	1,510	1,530	1,600
Imports for consumption	13	14	14	15	15
Exports	4	4	3	1	2
Consumption, apparent <sup>3</sup>	1,560	1,600	1,530	1,540	1,610
Price, average value, dollars per metric ton	5.39	5.57	5.71	5.98	6.08
Stocks, yearend	NA	NA	NA	NA	NA
Employment, quarry and mill, number <sup>e, 4</sup>	78,800	79,200	79,000	78,500	78,700
Net import reliance <sup>5</sup> as a percentage of					<u> </u>
apparent consumption	( <sup>6</sup> )				

**<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 (2000-03): Canada, 45%; Mexico, 40%; The Bahamas, 13%; and other, 2%.

<u>Tariff</u> : Item	Number	Normal Trade Relations 12-31-04
Crushed stone	2517.10.00	Free.

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

Government Stockpile: None.

## **STONE (CRUSHED)**

**Events, Trends, and Issues:** Crushed stone output increased 4.6% in 2004 to 1.6 billion tons compared with 2003. It is estimated that in 2005, domestic production and apparent consumption will be about 1.65 billion tons, a 3.1% increase. Gradual increases in demand for construction aggregates are anticipated after 2005 based on the expected volume of work on the infrastructure and an expanding U.S. economy. Long-term projected increases will be influenced by activity in the public and private construction sectors as well as by construction work related to security measures being implemented around the Nation. Crushed stone f.o.b. prices are not expected to increase significantly, but the delivered prices of crushed stone are expected to increase, especially in and near metropolitan areas, mainly because more aggregates are being transported longer distances.

The crushed stone industry continued to be concerned with safety and health and environmental regulations. Shortages in some urban and industrialized areas are expected to continue to increase, owing to local zoning regulations and land-development alternatives. These issues are expected to continue and to cause crushed stone quarries to relocate away from large-population centers.

World Mine Production, Reserves, and Reserve Base:							
	Mine pro	oduction	Reserves and reserve base <sup>7</sup>				
	2003	<u>2004<sup>e</sup></u>					
United States	1,530	1,600	Adequate except where special				
Other countries <sup>8</sup>	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.

<u>Substitutes</u>: Crushed stone substitutes for roadbuilding include sand and gravel and slag. Substitutes for crushed stone used as construction aggregates include sand and gravel, iron and steel 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>Data rounded to no more than three significant digits.

<sup>4</sup>Including office staff.

<sup>5</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>6</sup>Less than ½ unit.

<sup>7</sup>See Appendix C for definitions.

<sup>8</sup>No reliable production information for other countries is available, owing to a wide variation of ways in which countries report their crushed stone production. Some countries do not report production for this mineral commodity. Production information for some countries is available in the country chapters of the USGS Minerals Yearbook.