STONE (CRUSHED)¹

(Data in million metric tons unless otherwise noted)²

<u>Domestic Production and Use:</u> Crushed stone valued at \$12 billion was produced by 1,450 companies operating 3,620 quarries, 86 underground mines, and 193 sales/distribution yards in 50 States. Leading States, in descending order of production, were Texas, Pennsylvania, Missouri, Georgia, Illinois, Virginia, North Carolina, Florida, Indiana, and Ohio, together accounting for 51% of the total crushed stone output. Of the total crushed stone produced in 2008, about 69% was limestone and dolomite; 15%, granite; 7%, traprock; and the remaining 9% was shared, in descending order of tonnage, by miscellaneous stone, sandstone and quartzite, marble, volcanic cinder and scoria, slate, shell, and calcareous marl. It is estimated that of the 1.36 billion tons of crushed stone consumed in the United States in 2008, 49% was reported by use, 31% was reported for unspecified uses, and 20% of the total consumed was estimated for nonrespondents to the U.S. Geological Survey (USGS) canvasses. Of the 666 million tons reported by use, 83% was used as construction aggregates, mostly for highway and road construction and maintenance; 11%, for cement manufacturing; 2%, for lime manufacturing; 2%, for agricultural uses; and 2%, 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 2008 was 926 million tons, a 16% decrease compared with that of the same period of 2007. Third quarter shipments for consumption decreased 18% compared with those of the same period of 2007. 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:	<u>2004</u>	2005	2006	2007	2008 ^e
Production	1,630	1,700	1,770	1,600	1,340
Imports for consumption	19	21	20	20	19
Exports	1	1	1	1	1
Consumption, apparent ³	1,650	1,730	1,790	1,620	1,360
Price, average value, dollars per metric ton	6.08	7.26	8.04	8.66	8.98
Stocks, yearend	NA	NA	NA	NA	NA
Employment, quarry and mill, number ^{e, 4}	79,600	81,000	82,600	81,900	81,000
Net import reliance ⁵ 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 surface layers and structures, were recycled on a limited but increasing basis in most States. Asphalt road surfaces were recycled by 58 companies in 29 States, and concrete was recycled by 50 companies in 22 States. The amount of material recycled increased 25% compared with that in 2007.

Import Sources (2004-07): Canada, 43%; Mexico, 38%; The Bahamas, 17%; and other, 2%.

Tariff: Item Number Normal Trade Relations

Crushed stone 2517.10.00 Free.

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

Government Stockpile: None.

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Events, Trends, and Issues: Crushed stone production was 1.34 billion tons in 2008, a decrease of 16% compared with that of 2007. It is estimated that in 2008, apparent consumption will also decrease by 16% to about 1.36 billion tons. Demand for construction aggregates is anticipated to decrease slightly for 2009 based on the slowdown in activity that some of the principal construction markets have experienced over the last 3 years. Long-term projected increases in construction aggregates demand 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. The underlying factors that would support a rise in f.o.b. and delivered prices of crushed stone are expected to be present in 2009, especially in and near metropolitan areas.

The crushed stone industry continued to be concerned with environmental, health, and safety 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 new crushed stone quarries to locate away from large population centers.

World Mine Production, Reserves, and Reserve Base:					
	Mine production		Reserves and reserve base ⁶		
	<u>2007</u>	<u>2008^e</u>			
United States	1,600	1,340	Adequate except where special		
Other countries ⁷	<u>NA</u>	<u>NA</u>	types are needed or where		
World total	NA	NA	local shortages exist.		

<u>World Resources</u>: Stone resources of the world are very large. Supply of high-purity limestone and dolomite suitable for specialty uses is 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.

^eEstimated. NA Not available.

¹See also Stone (Dimension).

²See Appendix A for conversion to short tons.

³Includes recycled material.

⁴Including office staff.

⁵Defined 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.

⁶See Appendix C for definitions.

⁷Reliable production information is not available for other countries owing to a wide variety 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.