## SAND AND GRAVEL (CONSTRUCTION)1

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

<u>Domestic Production and Use</u>: Construction sand and gravel valued at \$5.1 billion was produced by an estimated 3,800 companies from 5,845 operations in 50 States. Leading States, in order of volume, were California, Texas, Michigan, Ohio, Arizona, Colorado, Minnesota, Washington, and Utah, which combined accounted for about 52% of the total output. It is estimated that about 51% of the 1.08 billion metric tons of construction sand and gravel produced in 1999 was for unspecified uses. Of the remaining total, about 42% was used as concrete aggregates; 25% for road base and coverings and road stabilization; 13% as asphaltic concrete aggregates and other bituminous mixtures; 12% as construction fill; 2% for concrete products such as blocks, bricks, pipes, etc.; 2% for plaster and gunite sands; and the remainder for snow and ice control, railroad ballast, roofing granules, filtration, and other miscellaneous uses.

The estimated output of construction sand and gravel in the 48 conterminous States shipped for consumption in the first 9 months of 1999 was about 816 million tons, which represents an increase of 2.8% compared with the same period of 1998. Additional production information by quarter for each State, geographic region, 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>	<u> 1996</u>	<u> 1997</u>	<u> 1998</u>	<u>1999</u> °
Production	907	<sup>3</sup> 914	952	1,080	1,080
Imports for consumption	1	1	2	1	2
Exports	1	1	2	2	2
Consumption, apparent	907	914	952	1,080	1,080
Price, average value, dollars per ton	4.30	4.38	4.47	4.57	4.69
Stocks, yearend	NA	NA	NA	NA	NA
Employment, quarry and mill, number <sup>e</sup>	33,000	33,200	33,900	35,600	36,300
Net import reliance as a percent of					
apparent consumption	_	_	_	_	_

**Recycling:** Asphalt road surfaces and cement concrete surfaces and structures were recycled on a limited, but increasing, basis.

Import Sources (1995-98): Canada, 72%; The Bahamas, 14%; Mexico, 3%; and other, 11%.

<u>Tariff</u> : Item	Number	Normal Trade Relations 12/31/99
Sand, construction	2505.90.0000	<u>12/31/99</u> Free.
Gravel, construction	2517.10.0000	Free.

**Depletion Allowance**: Common varieties, 5% (Domestic and foreign).

Government Stockpile: None.

## SAND AND GRAVEL (CONSTRUCTION)

**Events, Trends, and Issues:** Construction sand and gravel output increased slightly in 1999. It is estimated that 2000 domestic production and U.S. apparent consumption will be about 1.13 billion tons each, a 4.4% increase. Aggregate consumption should see continued growth because of increased outlays for highway construction and maintenance provided by the Transportation Equity Act for the 21<sup>st</sup> Century (Public Law 105-178). The law guarantees that \$165 billion will be obligated for highways and \$35 billion for transit work through 2003.

The construction sand and gravel industry continued to be concerned with safety and health regulations and environmental restrictions. Shortages in urban and industrialized areas were expected to continue to increase because of local zoning regulations and land development. For these reasons, movement of sand and gravel operations away from highly populated centers is expected to continue.

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

	Mine pro	oduction	Reserves and reserve base⁵	
	<u>1998</u>	<u>1999</u> °		
United States	1,080	1,080	The reserves and reserve base are controlled	
Other countries	<u>NA</u>	<u>NA</u>	largely by land use and/or environmental	
World total	NA	NA	constraints.	

<u>World Resources</u>: Sand and gravel resources of the world are large. However, because of their geographic distribution, environmental restrictions, and quality requirements for some uses, their extraction is sometimes uneconomic. The most important commercial sources of sand and gravel have been river flood plains, river channels, and glacial deposits. Marine deposits are being used presently in the United States, mostly for beach erosion control, and as a source of construction aggregates in other countries.

**Substitutes:** Crushed stone remains the predominant choice for construction aggregate use.

<sup>&</sup>lt;sup>e</sup>Estimated. NA Not available.

<sup>&</sup>lt;sup>1</sup>See also Sand and Gravel (Industrial).

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

<sup>&</sup>lt;sup>3</sup>Excludes Hawaii.

<sup>&</sup>lt;sup>4</sup>Defined as imports - exports + adjustments for Government and industry stock changes; changes in stocks not available and assumed to be zero.

<sup>&</sup>lt;sup>5</sup>See Appendix C for definitions.