

SAND AND GRAVEL (CONSTRUCTION)¹(Data in million metric tons, unless otherwise noted)²

Domestic Production and Use: Construction sand and gravel valued at \$4.7 billion was produced by 3,642 companies from 5,288 operations in 50 States. Leading States, in order of volume, were California, Texas, Michigan, Ohio, Arizona, Washington, Utah, and Colorado, which combined accounted for about 47% of the total output. It is estimated that about 42% of the 1.02 billion metric tons of construction sand and gravel produced in 1998 was for unspecified uses. Of the remaining total, about 43% was used as concrete aggregates; 23% for road base and coverings and road stabilization; 13% as asphaltic concrete aggregates and other bituminous mixtures; 13% 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 1998 was about 752 million tons, which represents an increase of 7.4% compared with the same period of 1997. 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:	1994	1995	1996³	1997	1998^e
Production	891	907	914	952	1,020
Imports for consumption	1	1	1	2	2
Exports	1	1	1	2	2
Consumption, apparent	891	907	914	952	1,020
Price, average value, dollars per ton	4.20	4.30	4.38	4.47	4.63
Stocks, yearend	NA	NA	NA	NA	NA
Employment, quarry and mill, number ^e	42,500	42,500	42,500	42,500	42,500
Net import reliance ⁴ 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 (1994-97): Canada, 73%; The Bahamas, 15%; Mexico, 3%; and other, 9%.

Tariff: Item	Number	Normal Trade Relations (NTR) 12/31/98	Non-NTR⁵ 12/31/98
Sand, construction	2505.90.0000	Free	Free.
Gravel, construction	2517.10.0000	Free	30% ad val.

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

Government Stockpile: None.

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Events, Trends, and Issues: Construction sand and gravel output increased 7% in 1998. It is estimated that 1999 domestic production and U.S. apparent consumption will be about 1.07 billion tons each, a 4.9% increase. Aggregate consumption should see continued growth because of increased outlays for highway construction and maintenance provided by the Transportation Equity Act for the 21st Century (Public Law 105-178).

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 production		Reserves and reserve base⁶
	<u>1997</u>	<u>1998^e</u>	
United States	952	1,020	The reserves and reserve base are controlled largely by land use and/or environmental constraints.
Other countries	<u>NA</u>	<u>NA</u>	
World total	NA	NA	

World Resources: Sand and gravel resources of the world are large. However, due to 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.

^eEstimated. NA Not available.

¹See also Sand and Gravel (Industrial).

²See Appendix A for conversion to short tons.

³Excludes Hawaii.

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

⁵See Appendix B.

⁶See Appendix D for definitions.