SAND AND GRAVEL (CONSTRUCTION) STATISTICS 1 U.S. GEOLOGICAL SURVEY

 $[All\ values\ in\ metric\ tons\ (t)\ gross\ weight\ unless\ otherwise\ noted]$

Last modification: November 21, 2012

| | | | | Apparent | | Unit value | World |
|------|-------------|-----------|---------|-------------|--------|------------|------------|
| Year | Production | Imports | Exports | consumption | (\$/t) | (98\$/t) | production |
| 1902 | 452,000 | NA | NA | 452,000 | 0.71 | 13.30 | NA |
| 1903 | 747,000 | NA | NA | 747,000 | 0.80 | 14.50 | NA |
| 1904 | 5,280,000 | NA | NA | 5,280,000 | 0.47 | 8.50 | NA |
| 1905 | 16,400,000 | NA | NA | 16,400,000 | 0.45 | 8.14 | NA |
| 1906 | 24,400,000 | NA | NA | 24,400,000 | 0.35 | 6.33 | NA |
| 1907 | 32,100,000 | NA | NA | 32,100,000 | 0.31 | 5.41 | NA |
| 1908 | 30,000,000 | NA | NA | 30,000,000 | 0.34 | 6.15 | NA |
| 1909 | 49,000,000 | NA | NA | 49,000,000 | 0.30 | 5.42 | NA |
| 1910 | 56,900,000 | NA | NA | 56,900,000 | 0.29 | 5.06 | NA |
| 1911 | 53,700,000 | NA | NA | 53,700,000 | 0.30 | 5.24 | NA |
| 1912 | 53,800,000 | NA | NA | 53,800,000 | 0.33 | 5.56 | NA |
| 1913 | 65,100,000 | NA | NA | 65,100,000 | 0.29 | 4.77 | NA |
| 1914 | 65,500,000 | NA | NA | 65,500,000 | 0.29 | 4.71 | NA |
| 1915 | 61,800,000 | NA | NA | 61,800,000 | 0.30 | 4.82 | NA |
| 1916 | 71,800,000 | NA | NA | 71,800,000 | 0.32 | 4.78 | NA |
| 1917 | 60,400,000 | NA | NA | 60,400,000 | 0.42 | 5.34 | NA |
| 1918 | 47,000,000 | 503,000 | NA | 47,500,000 | 0.54 | 5.84 | NA |
| 1919 | 56,300,000 | 542,000 | NA | 56,900,000 | 0.62 | 5.84 | NA |
| 1920 | 64,800,000 | 1,110,000 | NA | 65,900,000 | 0.76 | 6.18 | NA |
| 1921 | 67,300,000 | 823,000 | NA | 68,100,000 | 0.73 | 6.65 | NA |
| 1922 | 78,100,000 | 409,000 | 162,000 | 78,300,000 | 0.68 | 6.61 | NA |
| 1923 | 117,000,000 | 431,000 | 250,000 | 117,000,000 | 0.65 | 6.21 | NA |
| 1924 | 132,000,000 | 630,000 | 142,000 | 133,000,000 | 0.64 | 6.10 | NA |
| 1925 | 145,000,000 | 481,000 | 193,000 | 146,000,000 | 0.65 | 6.05 | NA |
| 1926 | 155,000,000 | 852,000 | 193,000 | 156,000,000 | 0.63 | 5.81 | NA |
| 1927 | 169,000,000 | 658,000 | 191,000 | 169,000,000 | 0.61 | 5.73 | NA |
| 1928 | 179,000,000 | 675,000 | 334,000 | 180,000,000 | 0.58 | 5.52 | NA |
| 1929 | 190,000,000 | 1,510,000 | 221,000 | 191,000,000 | 0.62 | 5.90 | NA |
| 1930 | 171,000,000 | 1,640,000 | 147,000 | 173,000,000 | 0.62 | 6.05 | NA |
| 1931 | 134,000,000 | 350,000 | 98,800 | 134,000,000 | 0.60 | 6.42 | NA |
| 1932 | 105,000,000 | 169,000 | 43,600 | 105,000,000 | 0.51 | 6.09 | NA |
| 1933 | 93,000,000 | 85,500 | 37,400 | 93,100,000 | 0.51 | 6.42 | NA |
| 1934 | 100,000,000 | 100,000 | 15,200 | 100,000,000 | 0.54 | 6.58 | NA |
| 1935 | 106,000,000 | 114,000 | 17,000 | 106,000,000 | 0.50 | 5.94 | NA |
| 1936 | 153,000,000 | 295,000 | 22,600 | 154,000,000 | 0.52 | 6.12 | NA |
| 1937 | 162,000,000 | 438,000 | 30,500 | 163,000,000 | 0.52 | 5.90 | NA |
| 1938 | 159,000,000 | 605,000 | 16,100 | 159,000,000 | 0.50 | 5.79 | NA |
| 1939 | 197,000,000 | 229,000 | 12,600 | 197,000,000 | 0.49 | 5.75 | NA |
| 1940 | 207,000,000 | 399,000 | NA | 207,000,000 | 0.47 | 5.47 | NA |
| 1941 | 249,000,000 | 388,000 | NA | 249,000,000 | 0.52 | 5.76 | NA |
| 1942 | 262,000,000 | 503,000 | NA | 262,000,000 | 0.64 | 6.41 | NA |
| 1943 | 197,000,000 | 348,000 | NA | 197,000,000 | 0.66 | 6.22 | NA |
| 1944 | 161,000,000 | 251,000 | NA | 161,000,000 | 0.63 | 5.84 | NA |
| 1945 | 163,000,000 | 253,000 | NA | 163,000,000 | 0.66 | 5.98 | NA |
| 1946 | 216,000,000 | 314,000 | NA | 216,000,000 | 0.68 | 5.68 | NA |
| 1947 | 245,000,000 | 431,000 | NA | 245,000,000 | 0.77 | 5.62 | NA |
| 1948 | 274,000,000 | 385,000 | NA | 275,000,000 | 0.82 | 5.55 | NA |
| 1949 | 277,000,000 | 383,000 | NA | 277,000,000 | 0.80 | 5.47 | NA |
| 1950 | 320,000,000 | 396,000 | NA | 321,000,000 | 0.82 | 5.55 | NA |
| 1951 | 346,000,000 | 426,000 | NA | 347,000,000 | | 5.34 | NA |
| 1952 | 379,000,000 | 367,000 | NA | 380,000,000 | 0.84 | 5.16 | NA |

SAND AND GRAVEL (CONSTRUCTION) STATISTICS 1 U.S. GEOLOGICAL SURVEY

 $[All\ values\ in\ metric\ tons\ (t)\ gross\ weight\ unless\ otherwise\ noted]$

Last modification: November 21, 2012

| | | | | Apparent | | Unit value | World |
|------|---------------|-----------|-----------|---------------|-----------------|------------|---------------|
| Year | Production | Imports | Exports | consumption | (\$/t) | (98\$/t) | production |
| 1953 | 383,000,000 | 363,000 | NA | 383,000,000 | 0.87 | 5.30 | NA |
| 1954 | 490,000,000 | 248,000 | NA | 490,000,000 | 0.94 | 5.70 | NA |
| 1955 | 519,000,000 | 290,000 | NA | 519,000,000 | 0.94 | 5.72 | NA |
| 1956 | 548,000,000 | 301,000 | NA | 549,000,000 | 0.98 | 5.88 | NA |
| 1957 | 556,000,000 | 277,000 | NA | 556,000,000 | 0.98 | 5.68 | NA |
| 1958 | 607,000,000 | 295,000 | NA | 607,000,000 | 1.00 | 5.64 | NA |
| 1959 | 645,000,000 | 409,000 | NA | 645,000,000 | 1.04 | 5.82 | NA |
| 1960 | 627,000,000 | 347,000 | NA | 628,000,000 | 1.06 | 5.83 | NA |
| 1961 | 666,000,000 | 343,000 | NA | 666,000,000 | 1.04 | 5.67 | NA |
| 1962 | 686,000,000 | 306,000 | NA | 687,000,000 | 1.06 | 5.71 | NA |
| 1963 | 726,000,000 | 306,000 | 907,000 | 726,000,000 | 1.07 | 5.70 | NA |
| 1964 | 767,000,000 | 402,000 | 1,250,000 | 766,000,000 | 1.07 | 5.62 | NA |
| 1965 | 801,000,000 | 615,000 | 1,360,000 | 800,000,000 | 1.09 | 5.63 | NA |
| 1966 | 824,000,000 | 572,000 | 2,110,000 | 824,000,000 | 1.09 | 5.47 | NA |
| 1967 | 800,000,000 | 534,000 | 2,170,000 | 798,000,000 | 1.12 | 5.47 | NA |
| 1968 | 808,000,000 | 661,000 | 2,130,000 | 806,000,000 | 1.15 | 5.39 | 6,090,000,000 |
| 1969 | 824,000,000 | 776,000 | 1,910,000 | 823,000,000 | 1.18 | 5.25 | 6,640,000,000 |
| 1970 | 830,000,000 | 739,000 | 1,090,000 | 830,000,000 | 1.22 | 5.12 | 6,700,000,000 |
| 1971 | 811,000,000 | 605,000 | 472,000 | 811,000,000 | 1.30 | 5.23 | 6,690,000,000 |
| 1972 | 803,000,000 | 646,000 | 700,000 | 803,000,000 | 1.36 | 5.30 | 7,860,000,000 |
| 1973 | 866,000,000 | 682,000 | 815,000 | 866,000,000 | 1.44 | 5.28 | NA |
| 1974 | 803,000,000 | 315,000 | 1,030,000 | 803,000,000 | 1.61 | 5.32 | 6,880,000,000 |
| 1975 | 691,000,000 | 298,000 | 951,000 | 691,000,000 | 1.72 | 5.21 | 6,760,000,000 |
| 1976 | 776,000,000 | 265,000 | 1,030,000 | 775,000,000 | 2.07 | 5.93 | NA |
| 1977 | 815,000,000 | 318,000 | 1,120,000 | 814,000,000 | 2.23 | 6.00 | NA |
| 1978 | 874,000,000 | 525,000 | 1,290,000 | 873,000,000 | 2.35 | 5.87 | NA |
| 1979 | 858,000,000 | 319,000 | 807,000 | 857,000,000 | 2.50 | 5.62 | NA |
| 1980 | 692,000,000 | 455,000 | 1,160,000 | 692,000,000 | 2.89 | 5.72 | NA |
| 1981 | 626,000,000 | 302,000 | 1,150,000 | 625,000,000 | 3.08 | 5.52 | NA |
| 1982 | 539,000,000 | 168,000 | 1,020,000 | 538,000,000 | 3.11 | 5.25 | NA |
| 1983 | 594,000,000 | 112,000 | 1,180,000 | 593,000,000 | 3.20 | 5.24 | NA |
| 1984 | 702,000,000 | 137,000 | 1,670,000 | 701,000,000 | 3.20 | 5.02 | NA |
| 1985 | 726,000,000 | 223,000 | 1,370,000 | 725,000,000 | 3.36 | 5.09 | NA |
| 1986 | 801,000,000 | 186,000 | 1,060,000 | 800,000,000 | | | NA |
| 1987 | 813,000,000 | 257,000 | 1,030,000 | 812,000,000 | 3.69 | 5.29 | NA |
| 1988 | 838,000,000 | 318,000 | 875,000 | 837,000,000 | 3.74 | 5.15 | NA |
| 1989 | 814,000,000 | 387,000 | 1,020,000 | 813,000,000 | 3.99 | 5.25 | NA |
| 1990 | 829,000,000 | 1,580,000 | 425,000 | 831,000,000 | 3.92 | 4.89 | NA |
| 1991 | 708,000,000 | 1,330,000 | 1,030,000 | 708,000,000 | 3.96 | 4.74 | NA |
| 1992 | 834,000,000 | 1,310,000 | 1,420,000 | 834,000,000 | 4.01 | 4.66 | NA NA |
| 1993 | 869,000,000 | 1,320,000 | 1,130,000 | 869,000,000 | 4.06 | 4.58 | NA NA |
| 1994 | 891,000,000 | 1,500,000 | 1,050,000 | 891,000,000 | 4.20 | 4.62 | NA NA |
| 1995 | 907,000,000 | 1,120,000 | 1,300,000 | 907,000,000 | 4.30 | 4.60 | NA |
| 1996 | 914,000,000 | 1,260,000 | 1,530,000 | 914,000,000 | 4.38 | 4.55 | NA |
| 1997 | 952,000,000 | 1,610,000 | 1,740,000 | 952,000,000 | 4.47 | 4.54 | NA |
| 1998 | 1,070,000,000 | 1,120,000 | 2,340,000 | 1,070,000,000 | 4.59 | 4.59 | NA |
| 1999 | 1,110,000,000 | 1,920,000 | 1,650,000 | 1,110,000,000 | | 4.63 | NA |
| 2000 | 1,120,000,000 | 2,870,000 | 2,410,000 | 1,120,000,000 | 4.81 | 4.55 | NA NA |
| 2001 | 1,130,000,000 | 3,820,000 | 3,060,000 | 1,130,000,000 | | 4.62 | NA |
| 2002 | 1,130,000,000 | 4,310,000 | 3,240,000 | 1,130,000,000 | | 4.61 | NA |
| 2003 | 1,160,000,000 | 4,410,000 | 1,770,000 | 1,160,000,000 | 5.16 | 4.57 | NA |

SAND AND GRAVEL (CONSTRUCTION) STATISTICS 1 U.S. GEOLOGICAL SURVEY

 $[All\ values\ in\ metric\ tons\ (t)\ gross\ weight\ unless\ otherwise\ noted]$

Last modification: November 21, 2012

| | | | | Apparent | Unit value | Unit value | World |
|------|---------------|-----------|---------|---------------|-----------------|------------|------------|
| Year | Production | Imports | Exports | consumption | (\$/t) | (98\$/t) | production |
| 2004 | 1,240,000,000 | 4,760,000 | 677,000 | 1,240,000,000 | 5.32 | 4.59 | NA |
| 2005 | 1,280,000,000 | 7,160,000 | 519,000 | 1,290,000,000 | 5.86 | 4.89 | NA |
| 2006 | 1,340,000,000 | 4,960,000 | 515,000 | 1,340,000,000 | 6.47 | 5.23 | NA |
| 2007 | 1,250,000,000 | 4,420,000 | 365,000 | 1,250,000,000 | 7.06 | 5.55 | NA |
| 2008 | 1,060,000,000 | 5,430,000 | 392,000 | 1,060,000,000 | 7.44 | 5.63 | NA |
| 2009 | 831,000,000 | 2,980,000 | 439,000 | 834,000,000 | 7.51 | 5.71 | NA |
| 2010 | 795,000,000 | 3,000,000 | 400,000 | 798,000,000 | 7.31 | 5.46 | NA |
| 2011 | 802,000,000 | 3,000,000 | 400,000 | 805,000,000 | 7.50 | 5.43 | NA |

NA Not available.

Data are calculated, estimated, or reported. See notes for more information.

¹Compiled by K.E. Porter (retired) and W.P. Bolen.

Sand and Gravel (Construction) Worksheet Notes

Data Sources

The sources of data for the construction sand and gravel worksheet are the mineral statistics publications of the U.S. Bureau of Mines and the U.S. Geological Survey—Minerals Yearbook (MYB) and its predecessor, Mineral Resources of the United States (MR), and Mineral Commodity Summaries (MCS) and its predecessor, Commodity Data Summaries (CDS). The years of publication and corresponding years of data coverage are listed in the References section below.

Production

U.S. production data collection and reporting did not start for construction sand and gravel until 1902. Before 1902, sand was included with stone and included only silica sand for glassmaking. Construction and industrial sand and gravel production were reported together in the salient statistics table in the MR and the MYB through 1958, and were split between "commercial" and "government" (State, county, municipalities, and Federal). Categories were split between construction and industrial according to the following guidelines: Construction sand included building, paving, railroad ballast, and other (excluding ground sand). The reporting of gravel production prior to 1959 did not indicate any industrial applications, therefore the assumption is made that all gravel production data were for construction applications. After 1958, some gravel was used for industrial applications, such as filtration, ferrosilicon, and nonmetallic flux for sulfur production. Industrial sand includes sand for glass, molding, grinding and polishing (also blast sand), fire or furnace, engine, and filter (ground sand is included in the "other" category and is separated out for inclusion with industrial). Construction and industrial sand and gravel statistics were reported separately in a combined chapter starting with the 1959 MYB and later in separate chapters starting with the 1988 MYB.

Imports

U.S. import data for construction sand and gravel were reported in tables starting with the 1922 MR and continue to be reported in the MYB and the MCS.

Exports

Export data for combined sand and gravel (construction) and sand and gravel (industrial) were reported in the foreign trade section text starting with the 1922 MR and continuing in the MYB through 1939. Construction and industrial sand and gravel export data were split 50:50 for 1922–39 based on the average for 1971 to the most recent year when more complete export data were available. Sand and gravel (construction) export data were not available for 1940–62. Export data for 1963 to the most recent year are from the CDS, the MCS, and the MYB.

Apparent Consumption

Apparent consumption is defined as follows:

APPARENT CONSUMPTION = PRIMARY PRODUCTION + IMPORTS – EXPORTS.

Export data are not available for 1940–62 and are not included for the purpose of estimating apparent consumption. Import and export data have very little effect on apparent consumption because of their relative insignificance compared to primary production. The net imports account for less than 0.2 percent of primary production for 1940 to the most recent year.

Unit Value (\$/t)

Unit values were estimated by summing the values for different types of sand and gravel (construction) and dividing by total primary production quantity. Imports and exports were not considered in determining unit value because quantities are insignificant compared to primary production and values were not available. Data for quantities and values from which unit values are estimated are from the MR and the MYB.

Unit Value (98\$/t)

The Consumer Price Index conversion factor, with 1998 as the base year, is used to adjust unit value in current U.S. dollars to the unit value in constant 1998 U.S. dollars.

World Production

World production data for sand and gravel (construction) are not available for most of the period for 1902 to the most recent year owing to the lack of data collection by many of the producing countries. World production data are available for 1969–72, 1974, and 1975 from the MCS.

References

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U.S. Geological Survey, [year of last update, e.g., 2005], [Mineral commodity, e.g., Gold] statistics, *in* Kelly, T.D., and Matos, G.R., comps., Historical statistics for mineral and material commodities in the United States: U.S. Geological Survey Data Series 140, accessed [date], at http://pubs.usgs.gov/ds/2005/140/.

For more information, please contact:

USGS Construction Sand and Gravel Commodity Specialist