

TIN STATISTICS

By Carl A. DiFrancesco and James F. Carlin, Jr.

[All values in metric tons (t) unless otherwise noted]

Last modification: July 15, 2004

Year	Primary production	Secondary production	Imports	Exports	Government shipments	Government stocks	Industry stocks	Apparent consumption	Unit value (\$/t)	Unit value (98\$/t)	World production
1900			31,700					31,700	659.2	12,930	
1901			33,800					33,800	368.2	7,220	
1902			38,600				15,000	38,600	590.8	11,150	
1903			37,700				18,400	34,300	619.5	11,260	
1904			37,600				15,000	41,000	617.3	11,220	
1905			40,100					40,100	692.3	12,590	93,600
1906			45,800					45,800	877.4	15,950	98,400
1907			37,400					37,400	842.2	14,780	93,800
1908			37,400					37,400	650.4	11,830	106,000
1909			43,200					43,200	654.8	11,910	106,000
1910			47,700					47,700	751.8	13,190	105,000
1911			48,600					48,600	932.6	16,360	112,000
1912			52,600					52,600	1,016	17,220	122,000
1913			47,500					47,500	976.7	16,090	136,000
1914			43,100					43,100	756.2	12,340	128,000
1915			52,400	346				52,100	851.0	13,730	129,000
1916	2,050		62,600	456				64,200	959.0	14,330	128,000
1917	5,500		65,500	267				70,700	1,362	17,350	135,000
1918	9,330		64,600	258				73,700	1,958	21,140	128,000
1919	11,100		40,700	346				51,500	1,396	13,170	123,000
1920	16,000		57,000	942				72,100	1,065	8,659	126,000
1921	10,500		24,600	1,420				33,700	659.2	5,993	110,000
1922	8,260		61,200	1,120				68,300	718.7	6,978	127,000
1923	6,770		70,000	1,060				75,700	941.4	8,966	130,000
1924	441		66,100	974				65,600	1,107	10,540	142,000
1925			77,900	947				77,000	1,276	11,930	147,000
1926			78,400	2,010				76,400	1,440	13,210	146,000
1927			72,300	2,270				70,000	1,420	13,270	161,000
1928			79,200	1,640				77,600	1,111	10,580	180,000
1929			88,500	1,960				86,500	996.5	9,490	196,000
1930			82,000	2,270				79,700	698.9	6,852	179,000
1931			67,100	1,690				65,400	540.1	5,789	149,000
1932			35,400	1,130				34,300	485.0	5,774	96,500
1933			64,700	1,060				63,600	862.0	10,800	90,400
1934			40,600	1,240			16,800	39,400	1,151	14,000	122,000
1935			65,300	2,330			18,000	61,800	1,111	13,230	137,000

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1936			77,200	392			26,600	68,200	1,023	11,990	182,000
1937			89,500	318			32,300	83,500	1,197	13,560	213,000
1938			50,500	208			27,600	55,000	932.6	10,780	166,000
1939		15,300	71,200	2,140			37,700	74,300	1,109	13,000	180,000
1940	1,410	18,600	127,000	2,710		21,800	79,600	102,000	1,098	12,780	240,000
1941	1,870	26,900	79,300	1,770		50,800	76,600	80,300	1,146	12,710	244,000
1942	16,400	21,600	27,200	416			45,000	96,400	1,146	11,460	124,000
1943	21,800	22,800	12,100	1,800	-14,100		25,300	60,500	1,146	10,810	146,000
1944	31,400	19,400	13,600	857	-16,000	40,500	21,500	51,300	1,146	10,610	102,000
1945	41,100	21,800	8,630	896	0	12,300	16,000	104,000	1,146	10,420	88,400
1946	22,500	15,900	15,800	895	0	22,600	29,900	29,100	1,202	10,020	89,400
1947	33,800	17,200	25,300	427	0	12,300	33,700	82,400	1,717	12,530	115,000
1948	37,300	18,200	50,000	93	0	36,800	27,600	87,000	2,189	14,790	156,000
1949	36,400	15,000	61,200	156	0	22,800	34,000	120,000	2,189	14,990	164,000
1950	33,600	21,900	84,200	812	0	18,900	37,700	139,000	2,105	14,220	172,000
1951	32,100	20,800	28,700	1,540	0	6,860	23,100	107,000	2,802	17,510	172,000
1952	23,200	20,800	81,800	386	0	13,500	29,900	112,000	2,657	16,300	177,000
1953	38,200	19,400	75,900	206	0	18,800	28,200	130,000	2,112	12,880	193,000
1954	27,800	17,300	57,500	835	0	1,370	31,600	116,000	2,024	12,270	192,000
1955	22,700	19,800	65,900	1,120	0	2,320	35,900	102,000	2,088	12,730	200,000
1956	17,900	17,900	63,600	904	0	1,030	37,000	98,700	2,235	13,380	203,000
1957	1,590	14,600	57,100	1,560	0	0	36,300	72,400	2,123	12,340	204,000
1958		13,800	41,800	1,360	0	0	35,200	55,300	2,097	11,850	156,000
1959		13,700	44,300	1,390	0	0	41,900	49,900	2,251	12,580	164,000
1960		12,500	40,200	871	0	0	40,800	52,900	2,235	12,280	183,000
1961		12,000	40,500	813	0		43,200	49,300	2,498	13,650	187,000
1962		11,900	42,100	442	1,420		37,900	60,300	2,526	13,650	190,000
1963		12,900	44,000	1,650	9,470		46,700	55,900	2,571	13,680	194,000
1964		14,000	32,600	4,110	31,700		38,100	82,800	3,477	18,300	197,000
1965	3,150	15,200	41,500	2,870	11,700		41,900	64,900	3,929	20,360	204,000
1966	3,890	15,600	42,300	2,890	15,200		38,600	77,400	3,616	18,170	211,000
1967	3,100	13,700	51,000	3,310	6,190		36,900	72,400	3,382	16,500	218,000
1968	3,510	13,600	58,300	2,480	2,910		36,500	76,200	3,265	15,330	232,000
1969	351	13,900	55,800	2,950	1,680		31,100	74,200	3,624	16,090	229,000
1970		12,100	51,400	4,520	3,520		26,700	66,900	3,838	16,130	232,000
1971	4,060	11,500	47,700	2,300	1,760		25,200	64,200	3,688	14,840	235,000

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1972	4,270	11,400	53,300	1,150	237		25,800	67,500	3,913	15,260	244,000
1973	4,880	11,900	46,600	3,460	12,900		24,400	74,200	5,018	18,420	238,000
1974	6,100	11,700	40,200	8,550	30,700		21,700	82,900	8,737	28,880	233,000
1975	6,500	9,130	44,400	3,600	813		21,600	57,300	7,491	22,690	222,000
1976	5,730	10,100	45,100	2,340	3,640		17,900	65,900	8,373	23,980	218,000
1977	6,720	11,300	47,800	5,480	2,680		21,300	59,600	11,790	31,710	231,000
1978	5,900	13,500	46,800	4,630	345		17,200	66,000	13,880	34,700	241,000
1979	4,600	13,400	48,400	569	0		16,600	66,400	16,220	36,420	245,000
1980	3,000	11,700	46,000	595	25		12,100	64,600	18,650	36,890	245,000
1981	2,000	10,400	45,900	2,360	5,920		11,100	62,900	16,160	28,980	238,000
1982	3,500	10,400	27,900	5,770	4,170		10,300	41,000	14,420	24,360	219,000
1983	2,500	10,800	34,000	1,340	2,870		9,860	49,300	14,440	23,630	197,000
1984	4,000	11,100	41,200	1,430	2,400		9,680	57,500	13,750	21,570	188,000
1985	4,300	10,000	33,800	1,490	3,010		12,400	46,900	13,140	19,910	181,000
1986	4,350	10,200	35,800	1,550	5,490		13,900	76,900	8,448	12,560	173,000
1987	5,280	11,500	41,200	1,320	4,080		14,500	60,100	9,233	13,250	180,000
1988	2,050	11,300	43,500	1,210	2,390		15,000	57,500	9,731	13,410	205,000
1989	1,570	11,000	34,000	904	2,780		14,700	48,800	11,470	15,080	233,000
1990	0	13,200	33,800	658	2,150		17,300	45,900	8,516	10,620	221,000
1991	0	8,800	29,100	970	6,200		13,800	46,600	7,998	9,572	201,000
1992	0	8,900	27,300	1,890	6,310		10,700	43,700	8,871	10,310	191,000
1993		6,900	33,700	2,600	6,020		10,800	43,900	7,712	8,699	190,000
1994	0	7,400	32,400	2,560	5,620		10,400	43,300	8,137	8,950	178,000
1995	0	7,720	33,200	2,790	11,500		11,700	48,300	9,162	9,799	201,000
1996	0	7,710	30,200	3,670	11,800		10,900	46,800	9,092	9,445	220,000
1997	0	7,830	40,600	4,660	11,700		11,200	55,200	8,411	8,542	241,000
1998	0	7,790	44,000	5,020	12,200		10,500	59,700	8,230	8,230	231,000
1999	0	7,720	47,500	6,770	765		10,700	49,000	8,068	7,895	245,000
2000	0	6,600	44,900	6,640	12,000		10,400	57,200	8,161	7,728	278,000
2001	0	6,700	37,500	4,350	5,246		14,800	40,700	6,940	6,390	308,000
2002	0	3,590	42,200	2,940	8,960		9,100	57,500	6,440	5,830	249,000

Tin Worksheet Notes

Data Sources

The sources of data for the tin worksheet were 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); Mineral Commodity Summaries (MCS) and its predecessor, Commodity Data Summaries (CDS); and Metal Prices in the United States through 1998 (MP98). The years of publication and corresponding years of data coverage are listed in the References section below. Blank cells in the worksheet indicate that data either were not available or were withheld because they are proprietary.

Primary Production

Primary U.S. tin production data report the amount of refined tin. Data were from the MR for the years 1916–23 and from the MYB for the years 1924 and 1940–57 and the MCS and CDS for the years 1965–2002. Data were withheld for the years 1958–64 and 1993 in order to avoid disclosing proprietary data. The remaining blanks indicate that data were not available for the years 1900–15 and 1925–39.

Secondary Production

Secondary production includes old scrap (scrap including—but not limited to—metal articles that have been discarded after serving a useful purpose). Data were from the MYB. Blank cells in the worksheet indicate that data were not available for the years 1900–38.

Imports

Import data report the amounts of refined tin imported into the United States in various shapes and forms. Import data exclude all manufactured tin products. Data were from the MYB and MR for the years 1900–54 and the MCS and CDS for the years 1955–2002.

Exports

Export data report the amounts of refined tin exported from the United States in various shapes and forms. Export data exclude all manufactured tin products. Data were from the MYB and MR for the years 1915–54 and the MCS and CDS from 1955–2002. Blank cells in the worksheet indicate that data were not available for the years 1900–14.

Government Shipments

Government shipment data were for shipments from the government stockpile. Negative numbers for government shipments indicate U.S. Government purchases for refined tin. Data were from the MYB for 1943–54 and the MCS and CDS for 1955–2002. Blank cells in the worksheet indicate that data were not available for the years 1900–42.

Government Stocks

Data is for the Reconstruction Finance Corporation—Federal Facilities Corporation (U.S. Government) nonstockpile stocks. Data were from the MYB. Blank cells in the worksheet indicate that data were not available for the years 1900–39, 1942–43, and 1961–2002.

Industry Stocks

Stocks include virgin, secondary old scrap, and shipments of tin. Data were from the MR for 1902–04, the MYB for 1934–54, and the MCS and CDS for 1955–2002. Blank cells in the worksheet indicate that data were not available for the years 1900–01 and 1905–33.

Apparent Consumption

Apparent consumption was estimated for the years 1900–2002 by using the formula:

$$\text{APPARENT CONSUMPTION} = \text{PRODUCTION} + \text{IMPORTS} - \text{EXPORTS} \pm \text{GOVERNMENT SHIPMENTS} \pm (\text{STOCK CHANGES}).$$

Unit Value (\$/t)

Unit value is the value in dollars of 1 metric ton (t) of apparent consumption. Unit value (\$/t) was estimated in actual dollars for 1900–98 from a price series for domestic refined tin from MP98, and from the MYB for the years 1999–2002.

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 were for tin content of mine and mill production. Data were from the MYB and MR. Blank cells in the worksheet indicate that data were not available for the years 1900–04.

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For more information, please contact:

James F. Carlin, Jr.
USGS Tin Commodity Specialist
(703) 648-4985
jcarlin@usgs.gov

Carl A. DiFrancesco
Minerals and Materials Analysis Section, USGS
(303) 236-8747 x 324
difrance@usgs.gov