# LEAD STATISTICS<sup>1</sup> U.S. GEOLOGICAL SURVEY

## [All values are in metric tons (t) lead content unless otherwise noted]

Last modification: November 9, 2012

	Primary	Secondary			Government		Apparent	Unit value	Unit value	World
Year		production	Imports	Exports	shipments	Stocks	consumption	( <b>\$/t</b> )	(98\$/t)	production
1900	343,000	NA	410	90,000	NA	63,800	253,000	100	2,000	749,000
1901	341,000	NA	490	91,000	NA	54,700	260,000	97	1,900	NA
1902	342,000	NA	1,400	74,000	NA	63,800	260,000	90	1,700	NA
1903	343,000	NA	1,600	87,000	NA	32,200	289,000	93	1,700	NA
1904	367,000	NA	630	77,000	NA	9,700	313,000	95	1,700	NA
1905	366,000	NA	890	55,000	NA	10,400	311,000	99	1,800	NA
1906	378,000	NA	11,000	300	NA	11,700	387,000	126	2,300	1,040,000
1907	410,000	23,400	8,400	59,000	NA	4,200	390,000	119	2,100	993,000
1908	422,000	16,800	2,500	90,000	NA	16,800	339,000	93	1,700	1,280,000
1909	426,000	37,300	3,200	90,000	NA	15,800	378,000	95	1,700	1,060,000
1910	449,000	50,200	32,000	78,000	NA	32,600	436,000	97	1,700	1,100,000
1911	465,000	49,200	2,400	120,000	NA	4,070	425,000	97	1,700	1,110,000
1912	457,000	61,000	250	74,000	NA	9,520	439,000	99	1,700	1,160,000
1913	455,000	66,100	38	50,000	NA	4,820	476,000	97	1,600	1,150,000
1914	524,000	55,400	150	81,000	NA	6,960	496,000	86	1,400	NA
1915	544,000	71,600	410	120,000	NA	11,000	492,000	104	1,680	NA
1916	517,000	87,400	5,100	110,000	NA	11,200	499,000	152	2,270	NA
1917	597,000	84,800	5,300	90,000	NA	2,440	606,000	190	2,420	NA
1918	611,000	88,100	4,800	95,000	NA	428	611,000	157	1,700	NA
1919	452,000	111,000	4,600	58,000		212	510,000	128	1,210	764,000
1920	506,000	113,000	32,000	24,000		1,200	626,000	181	1,470	804,000
1921	412,000	94,100	28,000	33,000	NA	315	502,000	104	945	783,000
1922	501,000	145,000	3,200	36,000		NA	613,000	126	1,220	972,000
1923	581,000	176,000	19,000	52,000	NA	2,370	724,000	163	1,550	1,080,000
1924	657,000	186,000	74,000	75,000	NA	4,580	840,000	183	1,740	1,220,000
1925	711,000	206,000	9,500	95,000	NA	7,410	829,000	201	1,880	1,410,000
1926	744,000	252,000	74,000	65,000	NA	9,720	1,000,000	186	1,710	NA
1927	736,000	250,000	0	110,000	NA	8,590	877,000	150	1,400	1,540,000
1928	735,000	280,000	0	110,000	NA	9,720	904,000	139	1,320	1,680,000
1929	724,000	282,000	0	67,000	NA	NA	939,000	151	1,440	1,610,000
1930	603,000	232,000	0	44,000	NA	144,000	791,000	122	1,200	1,520,000
1931	419,000	213,000	9	20,000		198,000	558,000	94	1,010	1,260,000
1932	278,000	180,000	40	21,000	NA	239,000	396,000	70	833	1,050,000
1933	263,000	204,000	99	21,000	NA	268,000		85	1,070	
1934	295,000	189,000	257	5,400	NA	285,000	462,000	85	1,030	1,200,000
1935	308,000	245,000	1,200	6,300		285,000		90		
1936	371,000	239,000	2,350	18,000		223,000		104	1,220	1,470,000
1937	447,000	250,000	4,450	18,000		189,000		132	1,490	NA
1938	367,000	204,000	2,940	42,000		190,000	528,000	104	1,200	1,700,000
1939	457,000	191,000	6,480	68,000		200,000	577,000	111	1,300	
1940	508,000	206,000	137,000	68,000		222,000	,	114	1,330	
1941	551,000	345,000	249,000			182,000		128	1,420	NA
1942	558,000	280,000	332,000	8,800		178,000		143	1,430	
1943	481,000	282,000	222,000	22,000		234,000	973,000	143	1,350	
1944	470,000	296,000	202,000	14,000		201,000		143	1,320	
1945	450,000	281,000	206,000					143		
1946	350,000	313,000	105,000	640				179		
1947	474,000	403,000	145,000	1,400			1,090,000	323	2,360	
1948	455,000	393,000	224,000	370				398	2,690	
1949	515,000	330,000	250,000	880	_	271,000		339	2,320	
1950	510,000	388,000	401,000	2,500		252,000	1,330,000	293	1,980	

# LEAD STATISTICS<sup>1</sup> U.S. GEOLOGICAL SURVEY

## [All values are in metric tons (t) lead content unless otherwise noted]

Last modification: November 9, 2012

Vear   Production   Production   Exports   Shipments   Stocks   Consumption   (\$I')   (\$98\)   Pr   1951   434,000   441,000   162,000   1,200   NA   266,000   1,050,000   366   2,230   1953   477,000   339,000   349,000   730   NA   NA   1,460,000   297   1,810   1,934   493,000   386,000   251,000   540   NA   237,000   901,000   310   314   2,040   1955   490,000   408,000   240,000   370   NA   NA   1,390,000   334   2,040   1955   594,000   404,000   238,000   4,200   96,400   201,000   1,060,000   353   2,110   1957   502,000   392,000   294,000   4,500   141,000   248,000   1,280,000   353   1,880   1958   441,000   311,000   334,000   2,800   3,37,800   334,000   9975,000   267   1,510   1959   321,000   354,000   239,000   3,600   4,000   4,000   270,000   937,000   267   1,510   1,50	World	Unit value	Unit value	Apparent		Government			Secondary	Primary	
951   434,000   401,000   162,000   1,000   NA   206,000   1,050,000   386   2,410   1952   478,000   374,000   463,000   1,600   NA   247,000   1,290,000   363   2,230   1953   477,000   389,000   349,000   730   NA   NA   1,460,000   297   1,810   1954   493,000   386,000   240,000   540   NA   237,000   901,000   310   1,880   1880   1955   490,000   404,000   240,000   370   NA   NA   1,300,000   334   2,040   1956   504,000   404,000   238,000   4,200   96,400   201,000   1,060,000   353   2,110   1957   502,000   392,000   294,000   4,500   141,000   248,000   1,280,000   323   1,880   1958   441,000   311,000   334,000   2,800   -37,800   324,000   975,000   267   1,510   1959   321,000   356,000   239,000   3,600   40,800   270,000   937,000   269   1,500   1960   210,000   370,000   187,000   5,400   NA   315,000   720,000   263   1,450   1961   430,000   354,000   233,000   3,600   4,000   218,000   1,300,000   240   1,310   1962   366,000   342,000   353,000   3,600   4,000   218,000   1,000,000   246   1,310   1963   366,000   424,000   205,000   3,600   4,000   218,000   1,000,000   224   1,310   1964   408,000   424,000   205,000   3,600   4,000   218,000   1,000,000   224   1,150   1965   385,000   450,000   250,000   1,000   36,000   179,000   997,000   300   1,580   1966   410,000   440,000   259,000   5,400   88,000   187,000   1,000,000   333   1,670   1967   386,000   433,000   330,000   5,400   \$8,000   187,000   1,000,000   333   1,670   1967   386,000   448,000   250,000   5,400   88,000   187,000   1,200,000   391   1,510   1968   487,000   488,000   220,000   1,000   1,000,000   333   1,670   1977   366,000   452,000   36,000   40,000   24,000   1,300,000   391   1,510   1968   487,000   455,000   360,000   36,	production	(98\$/t)	( <b>\$/t</b> )		Stocks		Exports	Imports	production	·	Year
1953   477,000   389,000   349,000   730   NA   NA   1,460,000   297   1,810   1954   493,000   386,000   251,000   540   NA   237,000   901,000   310   1,880   1955   490,000   408,000   240,000   370   NA   NA   1,390,000   333   2,040   1956   504,000   404,000   238,000   4,200   96,400   201,000   1,060,000   353   2,110   1957   502,000   392,000   294,000   4,500   141,000   248,000   1,280,000   323   1,880   1958   441,000   311,000   334,000   2,800   43,500   414,000   248,000   1,280,000   323   1,880   1959   321,000   356,000   239,000   3,600   40,800   270,000   937,000   269   1,500   1960   210,000   370,000   370,000   5,400   NA   315,000   720,000   263   1,450   1961   430,000   354,000   233,000   11,000   NA   328,000   1,000,000   240   1,310   1962   366,000   357,000   233,000   6,400   NA   365,000   1,000,000   240   1,310   1963   366,000   426,000   36,000   4,000   218,000   1,000,000   246   1,310   1964   408,000   426,000   189,000   21,000   36,000   179,000   997,000   300   1,580   1965   385,000   426,000   189,000   21,000   36,000   179,000   997,000   300   1,580   1965   385,000   430,000   259,000   5,400   58,000   187,000   1,100,000   353   1,830   1966   410,000   440,000   259,000   5,400   58,000   187,000   1,100,000   333   1,670   1967   386,000   433,000   330,000   5,900   25,000   186,000   1,300,000   329   1,460   1970   626,000   459,000   253,000   6,000   1,360,000   1,360,000   329   1,460   1970   626,000   459,000   253,000   6,000   1,360,000   1,360,000   329   1,460   1971   604,000   444,000   259,000   5,000   8,000   26,000   186,000   1,200,000   331   1,290   1971   604,000   444,000   270,000   1,000   400,000   1,360,000   346   1,4450   1971   626,000   459,000   250,000   19,000   1,360,000   346   1,4450   1971   626,000   459,000   250,000   360,000   1,400,000   346   1,4450   1973   579,000   597,000   590,000   1,000   0,000   1,360,000   3,300   329   1,460   1971   579,000   579,000   590,000   1,000   1,000   1,400,000   474	1,600,000	2,410	386	1,050,000	206,000	NA			401,000	434,000	1951
1955   493,000   386,000   251,000   5.40   NA   237,000   901,000   310   1,880   1955   490,000   408,000   240,000   370   NA   NA   1,390,000   334   2,040   1956   504,000   404,000   238,000   4,200   96,400   201,000   1,060,000   363   2,110   1957   502,000   392,000   294,000   4,500   141,000   248,000   1,280,000   323   1,880   1958   441,000   311,000   334,000   2,800   -37,800   324,000   975,000   267   1,510   1959   321,000   356,000   239,000   3,600   40,800   270,000   937,000   266   1,500   1960   210,000   370,000   187,000   5,400   NA   315,000   720,000   236   1,450   1961   430,000   354,000   233,000   11,000   NA   328,000   1,030,000   240   1,310   1962   366,000   357,000   233,000   11,000   NA   238,000   1,030,000   212   1,150   1963   366,000   354,000   233,000   6,400   NA   263,000   1,030,000   240   1,310   1964   408,000   426,000   189,000   21,000   36,000   179,000   997,000   300   1,580   1965   385,000   450,000   22,000   11,000   49,000   176,000   1,000,000   353   1,830   1966   410,000   440,000   229,000   5,400   58,000   187,000   1,100,000   333   1,670   1967   386,000   488,000   259,000   5,400   58,000   187,000   1,100,000   333   1,670   1968   487,000   488,000   259,000   5,400   58,000   186,000   1,200,000   291   1,370   1969   594,000   468,000   259,000   5,400   58,000   186,000   1,200,000   291   1,370   1969   594,000   468,000   253,000   6400   20,000   NA   1,320,000   399   1,460   1977   626,000   459,000   253,000   6400   20,000   NA   1,300,000   346   1,450   1977   626,000   459,000   253,000   6400   20,000   NA   1,210,000   366   1,230   1977   552,000   545,000   107,000   10,000   19,000   1,430,000   474   1,440   1976   596,000   659,000   129,000   5,000   NA   150,000   1,430,000   366   1,460   1977   552,000   659,000   159,000   10,000   10,000   1,430,000   474   1,440   1978   596,000   659,000   159,000   10,000   10,000   1,400,000   477   1,400   1988   348,000   578,000   100,000   10,000   NA   130,000	1,810,000	2,230	363	1,290,000	247,000	NA	1,600	463,000	374,000	478,000	1952
1954   493,000   386,000   251,000   540   NA   237,000   901,000   310   1.880   1955   490,000   408,000   240,000   370   NA   NA   1.390,000   334   2.040   1956   504,000   404,000   238,000   4.200   96,400   201,000   1.060,000   353   2.110   1957   502,000   392,000   294,000   4.500   141,000   248,000   1.280,000   323   1.880   1.958   441,000   311,000   334,000   2.800   37,800   324,000   975,000   267   1.510   1958   321,000   370,000   235,000   336,000   3.6000   40,800   270,000   937,000   269   1.500   1960   210,000   370,000   187,000   5.400   NA   315,000   720,000   246   1.310   1962   366,000   357,000   233,000   11,000   NA   328,000   1.000,000   240   1.310   1962   366,000   357,000   233,000   11,000   NA   238,000   1.030,000   212   1.150   1963   366,000   424,000   206,000   3,600   4.000   218,000   1,040,000   246   1.310   1964   408,000   426,000   189,000   21,000   36,000   179,000   997,000   353   1.880   1965   385,000   450,000   222,000   11,000   49,000   176,000   1,000,000   353   1.830   1966   410,000   440,000   225,000   5,400   58,000   187,000   1,000,000   353   1,830   1966   410,000   440,000   259,000   5,400   58,000   187,000   1,100,000   333   1,670   1967   386,000   438,000   325,000   36,000   187,000   1,100,000   333   1,670   1968   487,000   488,000   255,000   196,000   1,130,000   394   1,460   1970   626,000   489,000   253,000   196,000   1,300,000   291   1,370   1971   604,000   444,000   177,000   210,000   9,000   NA   1,320,000   346   1,450   1971   604,000   444,000   177,000   110,000   191,000   1,430,000   364   1,450   1972   617,000   452,000   222,000   11,000   190,000   1,360,000   331   1290   1977   552,000   545,000   107,000   56,000   318,000   1,200,000   378,000   378,000   378,000   379,000   300,000   NA   1320,000   367,000   360,000   380,000   380,000   380,000   380,000   380,000   380,000   380,000   380,000   380,000   380,000   380,000   380,000   380,000   380,000   380,000   380,000   380,000   380,0	1,870,000	1,810	297	1,460,000	NA	NA	730	349,000	389,000	477,000	1953
1955   490,000   408,000   240,000   370   NA   NA   1,390,000   334   2,040   1956   504,000   404,000   238,000   4,200   96,400   201,000   1,060,000   333   2,110   1957   502,000   32,000   294,000   4,500   141,000   248,000   1,280,000   323   1,880   1958   441,000   311,000   334,000   2,800   -37,800   324,000   975,000   267   1,510   1959   321,000   356,000   239,000   3,600   -40,800   270,000   937,000   269   1,500   1960   210,000   376,000   187,000	2,000,000		310		237,000	NA	540	251,000		493,000	1954
1956   504,000   404,000   228,000   4,200   96,400   201,000   1,060,000   353   2,110   1957   502,000   392,000   294,000   4,500   141,000   248,000   1,280,000   323   1,880   1,958   441,000   311,000   334,000   2,800   373,800   324,000   975,000   267   1,510   1,959   321,000   356,000   239,000   3,600   40,800   270,000   937,000   269   1,500   1,960   210,000   370,000   187,000   5,400   NA   315,000   720,000   263   1,450   2,800   1,960   210,000   370,000   11,000   NA   328,000   1,000,000   240   1,310   1,962   366,000   357,000   233,000   6,400   NA   263,000   1,030,000   212   1,150   1,963   366,000   426,000   280,000   21,000   3,600   4,000   218,000   1,040,000   246   1,310   1,964   408,000   426,000   189,000   21,000   36,000   179,000   997,000   300   1,580   1,966   410,000   440,000   259,000   5,400   5,8000   187,000   1,100,000   333   1,830   1,966   410,000   440,000   259,000   5,400   5,8000   187,000   1,100,000   333   1,870   1,967   386,000   428,000   307,000   8,200   25,000   196,000   1,130,000   309   1,510   1,968   487,000   428,000   307,000   8,200   25,000   186,000   1,200,000   291   1,370   1,968   487,000   459,000   222,000   11,000   41,000   296,000   1,320,000   329   1,460   1,970   626,000   459,000   222,000   11,000   11,000   296,000   1,360,000   346   1,450   1,971   604,000   444,000   177,000   21,000   9,000   NA   1,320,000   331   1,290   1,972   617,000   459,000   222,000   11,000   11,000   194,000   1,400,000   359   1,320   1,370	2,010,000	· · · · · · · · · · · · · · · · · · ·		,				240,000	408,000	,	1955
1957   502,000   392,000   294,000   4,500   141,000   248,000   1,280,000   323   1,880   1,988   441,000   311,000   334,000   2,800   -37,800   324,000   975,000   267   1,510   252,000   256,000   239,000   3,600   40,800   270,000   937,000   269   1,500   296   1,500   210,000   370,000   370,000   370,000   187,000   5,400   NA   315,000   720,000   263   1,450   1961   430,000   354,000   233,000   11,000   NA   328,000   1,000,000   240   1,310   1962   366,000   357,000   233,000   1,000   NA   263,000   1,030,000   212   1,150   1963   366,000   424,000   206,000   3,600   4,000   218,000   1,040,000   246   1,310   1964   408,000   424,000   206,000   3,600   4,000   218,000   1,040,000   246   1,310   1965   385,000   450,000   220,000   11,000   49,000   176,000   1,000,000   353   1,830   1966   410,000   440,000   259,000   5,400   58,000   187,000   1,100,000   333   1,670   1967   386,000   430,000   330,000   5,900   25,000   16,000   1,130,000   309   1,510   1968   487,000   428,000   307,000   8,200   25,000   186,000   1,200,000   291   1,370   1970   626,000   448,000   253,000   6,400   20,000   NA   1,320,000   329   1,460   1971   604,000   444,000   277,000   21,000   9,000   NA   1,200,000   346   1,450   1971   604,000   444,000   177,000   21,000   9,000   NA   1,210,000   306   1,230   1972   617,000   452,000   220,000   11,000   11,000   14,000   1,400,000   346   1,450   1975   579,000   545,000   170,000   56,000   241,000   1,400,000   474   1,440   1976   596,000   659,000   230,000   8,000   NA   150,000   1,280,000   379   1,860   1977   578,000   677,000   230,000   8,000   NA   150,000   1,280,000   371,850   1981   498,000   578,000   600,000   8,000   NA   150,000   1,280,000   371,850   1981   498,000   578,000   600,000   8,000   NA   150,000   1,280,000   371,850   1,460   1975   579,000   677,000   30,000   30,000   30,000   30,000   30,000   30,000   30,000   30,000   30,000   30,000   30,000   30,000   30,000   30,000   30,000   30,000   30,000   30,000   30,0	2,400,000							ŕ		,	
1958	2,380,000					· ·				,	
1959   321,000   356,000   239,000   3,600   -40,800   270,000   937,000   269   1,500   1,960   210,000   370,000   187,000   5,400   NA   315,000   720,000   263   1,450   2,400   243,000   354,000   233,000   11,000   NA   328,000   1,000,000   240   1,310   1,962   366,000   357,000   233,000   6,400   NA   263,000   1,030,000   212   1,150   2,400   1,963   366,000   424,000   206,000   3,600   4,000   218,000   1,040,000   246   1,310   1,965   385,000   450,000   202,000   11,000   49,000   176,000   1,000,000   353   1,830   1,965   385,000   450,000   220,000   11,000   49,000   176,000   1,000,000   353   1,830   1,966   410,000   440,000   259,000   5,400   58,000   187,000   1,100,000   333   1,670   1,968   487,000   428,000   307,000   8,200   25,000   186,000   1,200,000   291   1,370   1,968   487,000   488,000   253,000   6,400   20,000   NA   1,320,000   329   1,460   1,970   626,000   449,000   257,000   1,1000   296,000   1,360,000   329   1,460   1,971   604,000   444,000   177,000   21,000   90,000   NA   1,210,000   336   1,450   1,971   604,000   444,000   177,000   21,000   90,000   NA   1,210,000   336   1,450   1,971   604,000   444,000   177,000   21,000   90,000   NA   1,210,000   366   1,230   1,973   624,000   489,000   100,000   191,000   140,000   1,400,000   346   1,450   1,973   624,000   489,000   10,000   190,000   1,400,000   1,400,000   346   1,450	2,350,000	· · · · · · · · · · · · · · · · · · ·		, ,						,	
1960   210,000   370,000   187,000   5,400   NA   315,000   720,000   263   1,450   2161   430,000   354,000   233,000   11,000   NA   238,000   1,000,000   240   1,310   1962   366,000   357,000   233,000   6,400   NA   263,000   1,000,000   240   1,310   1963   366,000   424,000   206,000   3,600   4,000   218,000   1,040,000   246   1,310   1964   408,000   426,000   189,000   21,000   36,000   179,000   997,000   300   1,580   1965   385,000   450,000   202,000   11,000   49,000   176,000   1,000,000   333   1,670   1965   385,000   440,000   259,000   5,400   58,000   187,000   1,100,000   333   1,670   1967   386,000   433,000   30,000   5,900   25,000   196,000   1,130,000   309   1,510   1968   487,000   428,000   307,000   8,200   26,000   186,000   1,200,000   291   1,370   1969   594,000   468,000   253,000   6,400   20,000   NA   1,320,000   329   1,460   1970   626,000   459,000   222,000   11,000   11,000   296,000   1,360,000   346   1,450   1971   604,000   444,000   177,000   21,000   41,000   240,000   NA   1,320,000   336   1,230   1972   617,000   482,000   170,000   110,000   110,000   14,000   1,260,000   331   1,290   1973   624,000   489,000   170,000   110,000   191,000   14,4000   1,260,000   331   1,290   1975   579,000   597,000   9,000   10,4000   1,420,000   359   1,320   1974   620,000   545,000   170,000   10,000   56,000   241,000   174,000   1,430,000   474   1,440   1976   596,000   659,000   230,000   9,000   NA   150,000   1,280,000   509   1,460   1977   552,000   637,000   230,000   9,000   NA   150,000   1,280,000   509   1,460   1977   552,000   637,000   230,000   8,000   NA   150,000   1,280,000   773   1,850   1978   586,000   650,000   230,000   8,000   NA   174,000   1,180,000   677   1,820   1978   586,000   650,000   230,000   8,000   NA   174,000   1,130,000   478   782   1988   396,000   581,000   850,000   164,000   NA   175,000   1,140,000   478   782   1988   396,000   575,000   130,000   10,000   NA   175,000   1,140,000   478   782   1988   396,000   575,	2,320,000			,		,	· ·				
1961	2,390,000			,		,		,		,	
1962   366,000   357,000   233,000   6,400   NA   263,000   1,030,000   212   1,150   1,150   3,150   3,150   3,150   4,000   218,000   1,040,000   246   1,310   1,150   1,040,000   246   1,310   1,040,000   246,000   189,000   1,040,000   970,000   300   1,580   1,055   3,000   450,000   202,000   11,000   49,000   176,000   1,000,000   353   1,830   1,670   1,066   410,000   440,000   259,000   5,400   58,000   187,000   1,100,000   333   1,670   1,066   410,000   433,000   330,000   5,900   25,000   1,06,000   1,130,000   399   1,510   1,068   487,000   428,000   307,000   8,200   25,000   166,000   1,200,000   291   1,370	2,390,000			/							
1963   366,000   424,000   206,000   3,600   4,000   218,000   1,040,000   246   1,310   2	2,510,000			, ,							
1964   408,000   426,000   189,000   21,000   36,000   179,000   997,000   300   1,580   20   1965   385,000   450,000   202,000   11,000   49,000   176,000   1,000,000   353   1,830   1,800   1,800   1,800   1,800   1,800   1,800   1,800   1,800   1,8	2,560,000										
1965	2,530,000					· ·					
1966	2,700,000									/	
1967   386,000   433,000   330,000   5,900   25,000   196,000   1,130,000   309   1,510   1968   487,000   428,000   307,000   8,200   26,000   186,000   1,200,000   291   1,370   31969   594,000   468,000   253,000   6,400   20,000   NA   1,320,000   329   1,460   31970   626,000   459,000   222,000   11,000   11,000   296,000   1,360,000   346   1,450   31971   604,000   444,000   177,000   21,000   9,000   NA   1,210,000   306   1,230   31972   617,000   452,000   220,000   40,000   41,000   240,000   1,260,000   331   1,290   31973   624,000   489,000   170,000   110,000   191,000   194,000   1,420,000   359   1,320   31974   620,000   545,000   107,000   56,000   241,000   174,000   1,430,000   496   1,640   1975   579,000   597,000   90,000   190,000   189,000   1,040,000   474   1,440   1976   596,000   659,000   129,000   5,000   NA   150,000   1,280,000   509   1,460   1977   552,000   637,000   230,000   9,000   NA   127,000   1,180,000   677   1,820   1978   568,000   650,000   230,000   8,000   NA   134,000   1,220,000   743   1,860   1979   578,000   673,000   100,000   230,000   NA   191,000   1,130,000   1,160   2,600   1980   548,000   581,000   85,000   164,000   NA   172,000   906,000   937   1,850   1980   548,000   581,000   85,000   164,000   NA   172,000   906,000   937   1,850   1981   498,000   578,000   100,000   23,300   NA   195,000   977,000   805   1,440   1982   512,000   521,000   95,000   55,600   NA   171,000   1,110,000   562   949   1983   515,000   575,000   180,000   24,400   NA   175,000   1,140,000   478   782   1984   396,000   586,000   162,000   16,600   NA   175,000   1,140,000   478   782   1987   374,000   658,000   160,000   NA   100,000   1,200,000   791   1,140   1988   396,000   586,000   160,000   NA   100,000   1,200,000   791   1,140   1988   396,000   586,000   160,000   NA   100,000   1,200,000   791   1,140   1988   396,000   586,000   160,000   10,000   NA   100,000   1,200,000   791   1,140   1988   396,000   586,000   100,000   10,000   NA   100,000	2,850,000			, ,		,		,		,	
1968	2,870,000	· · · · · · · · · · · · · · · · · · ·		, ,	,	,					
1969	3,010,000	· · · · · · · · · · · · · · · · · · ·				· ·					
1970   626,000   459,000   222,000   11,000   11,000   296,000   1,360,000   346   1,450   1971   604,000   444,000   177,000   21,000   9,000   NA   1,210,000   306   1,230   306   1,230   306   1,230   306   306   1,230   306   30	3,240,000	,									
1971   604,000   444,000   177,000   21,000   9,000   NA   1,210,000   306   1,230   1972   617,000   452,000   220,000   40,000   41,000   240,000   1,260,000   331   1,290   31,320   32,000   489,000   170,000   110,000   191,000   194,000   1,420,000   359   1,320   32,000   32,000   545,000   107,000   56,000   241,000   174,000   1,430,000   496   1,640   1975   579,000   597,000   90,000   19,000   6,000   189,000   1,040,000   474   1,440   1976   596,000   659,000   129,000   5,000   NA   150,000   1,280,000   509   1,460   1977   552,000   637,000   230,000   9,000   NA   127,000   1,180,000   677   1,820   1978   568,000   650,000   230,000   8,000   NA   134,000   1,220,000   743   1,860   1979   578,000   673,000   190,000   11,000   NA   191,000   1,130,000   1,160   2,600   1980   548,000   581,000   85,000   164,000   NA   172,000   906,000   937   1,850   1981   498,000   578,000   100,000   23,300   NA   195,000   977,000   805   1,440   1982   512,000   521,000   95,000   55,600   NA   171,000   1,110,000   562   949   1983   515,000   452,000   180,000   24,400   NA   175,000   1,140,000   478   782   1984   396,000   586,000   162,000   16,600   NA   178,000   1,140,000   564   885   1985   487,000   570,000   134,000   27,300   NA   195,000   1,140,000   485   721   1988   392,000   691,000   150,000   14,000   NA   105,000   1,300,000   421   638   31986   366,000   575,000   140,000   12,600   NA   104,000   1,300,000   381   1,130   1988   396,000   842,000   150,000   14,000   NA   105,000   1,300,000   381   1,140   1988   392,000   691,000   150,000   14,000   NA   105,000   1,300,000   384   10990   305,000   842,000   120,000   34,000   NA   105,000   1,300,000   1,010   1,260   1991   346,000   874,000   90,900   64,000   NA   105,000   1,300,000   1,010   1,260   1991   346,000   874,000   90,900   64,000   NA   105,000   1,300,000   1,010   1,260   1991   346,000   874,000   90,900   64,000   NA   103,000   1,270,000   774   899   351,000   874,000   874,000   90,900   64,000	3,390,000					,					
1972	3,490,000	· · · · · · · · · · · · · · · · · · ·				· ·	- /	ŕ		,	
1973	3,450,000	· · · · · · · · · · · · · · · · · · ·				· ·	- /	ŕ			
1974   620,000   545,000   107,000   56,000   241,000   174,000   1,430,000   496   1,640   1975   579,000   597,000   90,000   19,000   6,000   189,000   1,040,000   474   1,440   3   1976   596,000   659,000   129,000   5,000   NA   150,000   1,280,000   509   1,460   3   1977   552,000   637,000   230,000   9,000   NA   127,000   1,180,000   677   1,820   3   1978   568,000   650,000   230,000   8,000   NA   134,000   1,220,000   743   1,860   3   1979   578,000   673,000   190,000   11,000   NA   191,000   1,130,000   1,160   2,600   3   1980   548,000   581,000   85,000   164,000   NA   172,000   906,000   937   1,850   3   1981   498,000   578,000   100,000   23,300   NA   195,000   977,000   805   1,440   3   1982   512,000   521,000   95,000   55,600   NA   171,000   1,110,000   562   949   3   1983   515,000   452,000   180,000   24,400   NA   159,000   1,140,000   478   782   3   1984   396,000   586,000   162,000   16,600   NA   178,000   1,140,000   564   885   1985   487,000   575,000   140,000   12,600   NA   178,000   1,130,000   421   638   1986   366,000   575,000   140,000   12,600   NA   104,000   1,200,000   791   1,140   1988   392,000   691,000   150,000   14,000   NA   105,000   1,230,000   818   1,130   1989   396,000   842,000   120,000   34,000   NA   105,000   1,300,000   1,010   1,260   1990   404,000   874,000   90,900   64,000   NA   103,000   1,230,000   869   1,140   1990   404,000   874,000   90,900   64,000   NA   103,000   1,230,000   779   884   1992   305,000   861,000   191,000   70,000   NA   103,000   1,270,000   774   899   1993   335,000   843,000   196,000   58,500   19,000   94,800   1,340,000   699   788   1994   351,000   858,000   231,000   53,500   67,100   76,700   1,490,000   820   902   1995   374,000   963,000   264,000   57,000   34,000   93,800   1,570,000   933   998   25,000   100,000   100,000   100,000   100,000   100,000   100,000   100,000   100,000   100,000   100,000   100,000   100,000   100,000   100,000   100,000   100,000   100,000   100,000	3,490,000	· · · · · · · · · · · · · · · · · · ·				,		ŕ			
1975   579,000   597,000   90,000   19,000   6,000   189,000   1,040,000   474   1,440   1976   596,000   659,000   129,000   5,000   NA   150,000   1,280,000   509   1,460   1977   552,000   637,000   230,000   9,000   NA   127,000   1,180,000   677   1,820   3   1978   568,000   650,000   230,000   8,000   NA   134,000   1,220,000   743   1,860   3   1979   578,000   673,000   190,000   11,000   NA   191,000   1,130,000   1,160   2,600   3   1980   548,000   581,000   85,000   164,000   NA   172,000   906,000   937   1,850   1981   498,000   578,000   100,000   23,300   NA   195,000   977,000   805   1,440   1982   512,000   521,000   95,000   55,600   NA   171,000   1,110,000   562   949   1983   515,000   452,000   180,000   24,400   NA   159,000   1,140,000   478   782   1984   396,000   586,000   162,000   16,600   NA   142,000   1,140,000   564   885   1985   487,000   570,000   134,000   27,300   NA   178,000   1,130,000   421   638   1986   366,000   575,000   140,000   12,600   NA   104,000   1,200,000   791   1,140   1988   392,000   691,000   150,000   14,000   NA   105,000   1,200,000   791   1,140   1988   392,000   691,000   150,000   14,000   NA   105,000   1,330,000   869   1,140   1990   404,000   874,000   90,900   64,000   NA   103,000   1,230,000   1,010   1,2600   1990   404,000   874,000   90,900   64,000   NA   103,000   1,230,000   1,010   1,2600   1990   346,000   800,000   117,000   102,000   NA   103,000   1,230,000   1,010   1,2600   1,090   1,000	3,490,000	· · · · · · · · · · · · · · · · · · ·		, ,		· ·					
1976	3,440,000	· · · · · · · · · · · · · · · · · · ·		, ,		· ·			,		
1977   552,000   637,000   230,000   9,000   NA   127,000   1,180,000   677   1,820   3   1978   568,000   650,000   230,000   8,000   NA   134,000   1,220,000   743   1,860   3   1979   578,000   673,000   190,000   11,000   NA   191,000   1,130,000   1,160   2,600   3   1980   548,000   581,000   85,000   164,000   NA   172,000   906,000   937   1,850   3   1981   498,000   578,000   100,000   23,300   NA   195,000   977,000   805   1,440   3   1982   512,000   521,000   95,000   55,600   NA   171,000   1,110,000   562   949   3   1983   515,000   452,000   180,000   24,400   NA   159,000   1,140,000   478   782   3   1984   396,000   586,000   162,000   16,600   NA   142,000   1,140,000   564   885   3   1985   487,000   570,000   134,000   27,300   NA   178,000   1,130,000   421   638   3   1986   366,000   575,000   140,000   12,600   NA   104,000   1,200,000   791   1,140   3   1987   374,000   658,000   190,000   14,000   NA   100,000   1,200,000   791   1,140   3   1988   392,000   691,000   150,000   14,000   NA   105,000   1,330,000   818   1,130   3   1989   396,000   842,000   120,000   34,000   NA   105,000   1,330,000   869   1,140   3   1990   404,000   874,000   90,900   64,000   NA   103,000   1,270,000   739   884   3   1992   305,000   861,000   191,000   70,000   NA   103,000   1,270,000   774   899   3   1993   335,000   843,000   196,000   58,500   19,000   94,800   1,340,000   699   788   2   1994   351,000   858,000   231,000   53,500   67,100   76,700   1,490,000   820   902   2   1995   374,000   963,000   264,000   57,000   34,000   93,800   1,570,000   933   998   2   1995   374,000   963,000   264,000   57,000   34,000   93,800   1,570,000   933   998   2   1995   374,000   963,000   264,000   57,000   34,000   93,800   1,570,000   933   998   2   1995   374,000   963,000   264,000   57,000   34,000   93,800   1,570,000   933   998   2   1995   374,000   963,000   264,000   57,000   34,000   93,800   1,570,000   933   998   2   1995   374,000   963,000   264,000   57,000   34,000	3,690,000	· · · · · · · · · · · · · · · · · · ·		, ,		- ,					
1978     568,000     650,000     230,000     8,000     NA     134,000     1,220,000     743     1,860     3       1979     578,000     673,000     190,000     11,000     NA     191,000     1,130,000     1,160     2,600     3       1980     548,000     581,000     85,000     164,000     NA     172,000     906,000     937     1,850     3       1981     498,000     578,000     100,000     23,300     NA     195,000     977,000     805     1,440     3       1982     512,000     521,000     95,000     55,600     NA     171,000     1,110,000     562     949     3       1983     515,000     452,000     180,000     24,400     NA     159,000     1,140,000     478     782     3       1984     396,000     586,000     162,000     16,600     NA     178,000     1,140,000     421     638     3       1985     487,000     575,000     140,000     12,600	3,410,000							,			
1979     578,000     673,000     190,000     11,000     NA     191,000     1,130,000     1,160     2,600     3       1980     548,000     581,000     85,000     164,000     NA     172,000     906,000     937     1,850     3       1981     498,000     578,000     100,000     23,300     NA     195,000     977,000     805     1,440     3       1982     512,000     521,000     95,000     55,600     NA     171,000     1,110,000     562     949     3       1983     515,000     452,000     180,000     24,400     NA     159,000     1,140,000     478     782     3       1984     396,000     586,000     162,000     16,600     NA     142,000     1,140,000     564     885     3       1985     487,000     570,000     134,000     27,300     NA     178,000     1,130,000     421     638     3       1987     374,000     658,000     190,000     10,000	3,460,000							,			
1980     548,000     581,000     85,000     164,000     NA     172,000     906,000     937     1,850     3       1981     498,000     578,000     100,000     23,300     NA     195,000     977,000     805     1,440     3       1982     512,000     521,000     95,000     55,600     NA     171,000     1,110,000     562     949     3       1983     515,000     452,000     180,000     24,400     NA     159,000     1,140,000     478     782     3       1984     396,000     586,000     16,600     NA     142,000     1,140,000     564     885     3       1985     487,000     570,000     134,000     27,300     NA     178,000     1,130,000     421     638     3       1986     366,000     575,000     140,000     12,600     NA     104,000     1,150,000     485     721     3       1987     374,000     658,000     190,000     10,000     NA     <	3,510,000							,			
1981     498,000     578,000     100,000     23,300     NA     195,000     977,000     805     1,440     3       1982     512,000     521,000     95,000     55,600     NA     171,000     1,110,000     562     949     3       1983     515,000     452,000     180,000     24,400     NA     159,000     1,140,000     478     782     3       1984     396,000     586,000     162,000     16,600     NA     142,000     1,140,000     564     885     3       1985     487,000     570,000     134,000     27,300     NA     178,000     1,130,000     421     638     3       1986     366,000     575,000     140,000     12,600     NA     104,000     1,200,000     485     721     3       1987     374,000     658,000     190,000     10,000     NA     110,000     1,200,000     791     1,140     3       1988     392,000     691,000     150,000     14,000	3,520,000		•					,	· ·		
1982     512,000     521,000     95,000     55,600     NA     171,000     1,110,000     562     949     3       1983     515,000     452,000     180,000     24,400     NA     159,000     1,140,000     478     782     3       1984     396,000     586,000     162,000     16,600     NA     142,000     1,140,000     564     885     3       1985     487,000     570,000     134,000     27,300     NA     178,000     1,130,000     421     638     3       1986     366,000     575,000     140,000     12,600     NA     104,000     1,150,000     485     721     3       1987     374,000     658,000     190,000     10,000     NA     104,000     1,200,000     791     1,140     3       1988     392,000     691,000     150,000     14,000     NA     105,000     1,230,000     818     1,130     3       1989     396,000     842,000     120,000     34,000	3,350,000							,	/		
1983     515,000     452,000     180,000     24,400     NA     159,000     1,140,000     478     782     3       1984     396,000     586,000     162,000     16,600     NA     142,000     1,140,000     564     885     3       1985     487,000     570,000     134,000     27,300     NA     178,000     1,130,000     421     638     3       1986     366,000     575,000     140,000     12,600     NA     104,000     1,150,000     485     721     3       1987     374,000     658,000     190,000     10,000     NA     110,000     1,200,000     791     1,140     3       1988     392,000     691,000     150,000     14,000     NA     105,000     1,230,000     818     1,130     3       1989     396,000     842,000     120,000     34,000     NA     98,000     1,330,000     869     1,140     3       1991     346,000     874,000     90,900     64,000	3,450,000			· · · · · · · · · · · · · · · · · · ·							
1984     396,000     586,000     162,000     16,600     NA     142,000     1,140,000     564     885     3       1985     487,000     570,000     134,000     27,300     NA     178,000     1,130,000     421     638     3       1986     366,000     575,000     140,000     12,600     NA     104,000     1,150,000     485     721     3       1987     374,000     658,000     190,000     10,000     NA     110,000     1,200,000     791     1,140     3       1988     392,000     691,000     150,000     14,000     NA     105,000     1,230,000     818     1,130     3       1989     396,000     842,000     120,000     34,000     NA     98,000     1,330,000     869     1,140     3       1990     404,000     874,000     90,900     64,000     NA     112,000     1,300,000     1,010     1,260     3       1991     346,000     830,000     117,000     102,000	3,350,000							,			
1985     487,000     570,000     134,000     27,300     NA     178,000     1,130,000     421     638     3       1986     366,000     575,000     140,000     12,600     NA     104,000     1,150,000     485     721     3       1987     374,000     658,000     190,000     10,000     NA     110,000     1,200,000     791     1,140     3       1988     392,000     691,000     150,000     14,000     NA     105,000     1,230,000     818     1,130     3       1989     396,000     842,000     120,000     34,000     NA     98,000     1,330,000     869     1,140     3       1990     404,000     874,000     90,900     64,000     NA     112,000     1,300,000     1,010     1,260     3       1991     346,000     830,000     117,000     102,000     NA     80,800     1,230,000     739     884     3       1992     305,000     861,000     191,000     70,000<	3,200,000							,	,		
1986     366,000     575,000     140,000     12,600     NA     104,000     1,150,000     485     721     3       1987     374,000     658,000     190,000     10,000     NA     110,000     1,200,000     791     1,140     3       1988     392,000     691,000     150,000     14,000     NA     105,000     1,230,000     818     1,130     3       1989     396,000     842,000     120,000     34,000     NA     98,000     1,330,000     869     1,140     3       1990     404,000     874,000     90,900     64,000     NA     112,000     1,300,000     1,010     1,260     3       1991     346,000     830,000     117,000     102,000     NA     80,800     1,230,000     739     884     3       1992     305,000     861,000     191,000     70,000     NA     103,000     1,270,000     774     899     3       1993     335,000     843,000     196,000     58,500<	3,390,000							,			
1987     374,000     658,000     190,000     10,000     NA     110,000     1,200,000     791     1,140     3       1988     392,000     691,000     150,000     14,000     NA     105,000     1,230,000     818     1,130     3       1989     396,000     842,000     120,000     34,000     NA     98,000     1,330,000     869     1,140     3       1990     404,000     874,000     90,900     64,000     NA     112,000     1,300,000     1,010     1,260     3       1991     346,000     830,000     117,000     102,000     NA     80,800     1,230,000     739     884     3       1992     305,000     861,000     191,000     70,000     NA     103,000     1,270,000     774     899     3       1993     335,000     843,000     196,000     58,500     19,000     94,800     1,340,000     699     788     2       1994     351,000     858,000     231,000     53,5	3,240,000			, ,							
1988     392,000     691,000     150,000     14,000     NA     105,000     1,230,000     818     1,130     3       1989     396,000     842,000     120,000     34,000     NA     98,000     1,330,000     869     1,140     3       1990     404,000     874,000     90,900     64,000     NA     112,000     1,300,000     1,010     1,260     3       1991     346,000     830,000     117,000     102,000     NA     80,800     1,230,000     739     884     3       1992     305,000     861,000     191,000     70,000     NA     103,000     1,270,000     774     899     3       1993     335,000     843,000     196,000     58,500     19,000     94,800     1,340,000     699     788     2       1994     351,000     858,000     231,000     53,500     67,100     76,700     1,490,000     820     902     2       1995     374,000     963,000     264,000     57,	3,430,000							·			
1989     396,000     842,000     120,000     34,000     NA     98,000     1,330,000     869     1,140     3       1990     404,000     874,000     90,900     64,000     NA     112,000     1,300,000     1,010     1,260     3       1991     346,000     830,000     117,000     102,000     NA     80,800     1,230,000     739     884     3       1992     305,000     861,000     191,000     70,000     NA     103,000     1,270,000     774     899     3       1993     335,000     843,000     196,000     58,500     19,000     94,800     1,340,000     699     788     2       1994     351,000     858,000     231,000     53,500     67,100     76,700     1,490,000     820     902     2       1995     374,000     963,000     264,000     57,000     34,000     93,800     1,570,000     933     998     2	3,420,000										
1990     404,000     874,000     90,900     64,000     NA     112,000     1,300,000     1,010     1,260     3       1991     346,000     830,000     117,000     102,000     NA     80,800     1,230,000     739     884     3       1992     305,000     861,000     191,000     70,000     NA     103,000     1,270,000     774     899     3       1993     335,000     843,000     196,000     58,500     19,000     94,800     1,340,000     699     788     2       1994     351,000     858,000     231,000     53,500     67,100     76,700     1,490,000     820     902     2       1995     374,000     963,000     264,000     57,000     34,000     93,800     1,570,000     933     998     2	3,400,000							·			
1991     346,000     830,000     117,000     102,000     NA     80,800     1,230,000     739     884     3       1992     305,000     861,000     191,000     70,000     NA     103,000     1,270,000     774     899     3       1993     335,000     843,000     196,000     58,500     19,000     94,800     1,340,000     699     788     2       1994     351,000     858,000     231,000     53,500     67,100     76,700     1,490,000     820     902     2       1995     374,000     963,000     264,000     57,000     34,000     93,800     1,570,000     933     998     2	3,370,000							·			
1992 305,000 861,000 191,000 70,000 NA 103,000 1,270,000 774 899 3   1993 335,000 843,000 196,000 58,500 19,000 94,800 1,340,000 699 788 2   1994 351,000 858,000 231,000 53,500 67,100 76,700 1,490,000 820 902 2   1995 374,000 963,000 264,000 57,000 34,000 93,800 1,570,000 933 998 2	3,260,000			, ,				·			
1993 335,000 843,000 196,000 58,500 19,000 94,800 1,340,000 699 788 2   1994 351,000 858,000 231,000 53,500 67,100 76,700 1,490,000 820 902 2   1995 374,000 963,000 264,000 57,000 34,000 93,800 1,570,000 933 998 2	3,200,000							·			
1994 351,000 858,000 231,000 53,500 67,100 76,700 1,490,000 820 902 2   1995 374,000 963,000 264,000 57,000 34,000 93,800 1,570,000 933 998 2	2,900,000						,				
1995 374,000 963,000 264,000 57,000 34,000 93,800 1,570,000 933 998 2	2,800,000										
	2,710,000							·			
	2,920,000		1,080		79,900		61,000	268,000	1,030,000	326,000	1996
	3,100,000										
	3,060,000							·			
	3,080,000										
	3,200,000							·			
	3,120,000		962		100,000		38,100	284,000	1,090,000	290,000	2001

# LEAD STATISTICS<sup>1</sup> U.S. GEOLOGICAL SURVEY

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

Last modification: November 9, 2012

	Primary	Secondary			Government		Apparent	Unit value	Unit value	World
Year	production	production	<b>Imports</b>	<b>Exports</b>	shipments	Stocks	consumption	( <b>\$/t</b> )	(98\$/t)	production
2002	262,000	1,100,000	218,000	43,400	6,000	111,000	1,530,000	961	871	2,850,000
2003	245,000	1,140,000	183,000	123,000	60,000	84,600	1,490,000	965	855	3,200,000
2004	148,000	1,130,000	208,000	82,600	52,600	59,000	1,470,000	1,220	1,050	3,150,000
2005	143,000	1,150,000	310,000	64,600	29,000	46,800	1,480,000	1,350	1,130	3,470,000
2006	153,000	1,160,000	343,000	68,500	24,000	56,000	1,580,000	1,710	1,380	3,630,000
2007	123,000	1,180,000	267,000	56,500	0	51,600	1,540,000	2,730	2,150	3,710,000
2008	135,000	1,140,000	314,000	74,800	0	72,500	1,490,000	2,650	2,010	3,880,000
2009	103,000	1,110,000	253,000	82,000	0	63,300	1,410,000	1,920	1,460	3,870,000
2010	115,000	1,140,000	272,000	83,500	0	64,800	1,400,000	2,400	1,790	4,160,000
2011	117,000	1,130,000	315,000	47,200	0	46,600	1,540,000	2,690	1,940	4,700,000

NA Not available.

<sup>&</sup>lt;sup>1</sup>Compiled by C.A. DiFrancesco (retired), G.R. Smith (retired), P.N. Gabby (deceased), and D.E. Guberman. Data are calculated, estimated, or reported. See notes for more information.

#### **Lead Worksheet Notes**

#### **Data Sources**

The sources of data for the lead 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); Mineral Commodity Summaries (MCS); and the Statistical Compendium (SC). The years of publication and corresponding years of data coverage are listed in the References section below.

#### **Primary Production**

Primary U.S. lead production data report the amount of refined lead. Data were from the MYB and MR for 1900–73 and the MCS for 1974 to the most recent year. Antimonial lead was included when available as well as desilverized lead and soft lead for 1900–05.

### **Secondary Production**

U.S. secondary production was equated to old lead scrap (scrap including—but not limited to—metal articles that have been discarded after serving a useful purpose such as auto batteries.). New scrap statistics were not included because they are often included as part of primary smelter statistics. Undifferentiated scrap numbers were used from 1907–38. Data were from the MYB and MR for 1907–73 and the MYB for 1974 to the most recent year. Data were not available for 1900–06.

#### **Imports**

Import data report the amounts of refined lead imported into the United States in various shapes and forms. Import data exclude all manufactured lead products. Data were from the MYB and MR for 1900–73 and the MCS for 1974 to the most recent year.

#### **Exports**

Export data report the amounts of refined lead exported from the United States in various shapes and forms. Export data exclude all manufactured lead products. Data were from the MYB and MR for 1900–73 and the MYB for 1974 to the most recent year.

#### **Government Shipments**

Government shipment data were for shipments from the government stockpile. Negative numbers for government shipments indicate U.S. Government purchases for refined lead. Data for 1943–48, and 1956–59 were from the MYB and MR. Data for 1963–73 were from the SC. Data for 1974–75 and 1993 to the most recent year were from the MCS. Data were not available for 1900–42, 1949–55, 1960–62, and 1976–92.

#### **Stocks**

Stocks for 1900–05 include ore and bullion. Stocks for 1956 and before usually include stocks in transit and in process. Beginning in 1956, consumer stocks of scrap were added to secondary smelter stock and scrap, and secondary smelter metal stocks were included with consumer metal stock. Primary lead stocks were withheld for 2000 to the most recent year, but included in consumer and secondary smelter statistics. Data were from the MYB and MR for 1900–73, the MCS for 1974–99, and the MYB for 2000 to the most recent year. Data were not available for 1922, 1929, 1953, 1955, 1969, and 1971.

#### **Apparent Consumption**

Data for consumption for refined lead were taken from the MYB for 1974 to the most recent year. Apparent consumption data for 1900–73 was estimated using the formula:

APPARENT CONSUMPTION = PRODUCTION + IMPORTS – EXPORTS  $\pm$  CHANGES IN STOCKS  $\pm$  GOVERNMENT SHIPMENTS.

#### Unit Value (\$/t)

Unit value is the value in dollars of 1 metric ton (t) of lead apparent consumption. Lead unit value (\$/t) was estimated in actual dollars from prices for domestic refined lead from the MYB and MR for 1900–73 and the MCS for 1974 to the most recent year.

#### 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 contained lead in world smelter production for 1900–54 and for world mine production for 1955–98. Data were from the MYB and MR for 1900–73 and the MCS for 1974 to the most recent year. World production data were for contained lead in world smelter production originating from ores and may include secondary lead when inseparable. Data were not available for the years 1901–05, 1914–18, 1926, 1937, and 1940–44.

#### References

- U.S. Bureau of Mines, 1927–34, Mineral Resources of the United States, 1924–31.
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- U.S. Bureau of Mines, 1978–95, Mineral Commodity Summaries, 1978–95.
- U.S. Bureau of Mines, 1993, Statistical Compendium.
- U.S. Geological Survey, 1901–27, Mineral Resources of the United States, 1900–23.
- U.S. Geological Survey, 1997–most recent, Mineral Commodity Summaries 1997–most recent. (Available via http://minerals.usgs.gov/minerals.)
- U.S. Geological Survey and U.S. Bureau of Mines, 1996, Mineral Commodity Summaries, 1996.

#### **Recommended Citation Format:**

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:

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