

Table 2. Salient statistics for recycling of selected U.S. metals in 1998, 2000, and 2004.

[Values are in thousands of metric tons and billions of constant 1998 dollars, unrounded, unless otherwise specified. Terms: --, zero; NA, not available. Data are from chapters A–Z of USGS Circular 1196; see list in table 1]

Recycling category	Metal commodity (chapter) and base year													Total or wtd. average ¹³
	Gold	Platinum	Chromium	Zinc	Magnesium	Lead	Iron and steel	Manganese	Columbium ¹ (niobium)	Tantalum	Tin	Molybdenum	Cobalt	
	(A) 1998	(B) 1998	(C) 1998	(D) 1998	(E) 1998	(F) 1998	(G) 1998	(H) 1998	(I) 1998	(J) 1998	(K) 1998	(L) 1998	(M) 1998	
Old scrap:														
Generated ²	0.166	0.043	132	672	108	1,220	75,000	463	2.90	0.30	13	26.7	3.50	
Consumed ³	0.130	0.008	75.3	82	31.8	1,060	35,000	218	1.00	0.09	8	8.0	1.70	
Value of old scrap consumed.....	\$1.234	\$0.11700	\$0.0664	\$0.071	\$0.0721	\$0.263	\$3.79	\$0.12	\$0.02	\$0.008	\$0.065	\$0.07	\$0.04	
Recycling efficiency ⁴ (percent).....	96	76	87	19	39	95	52	53	50	35	75	30	68	
Supply ⁵	0.178	0.048	144	702	112	1,230	78,000	481	3.00	0.37	13	26.8	3.83	
Unrecovered ⁶	0.008	0.009	18	505	68.2	63	38,000	227	1.50	0.24	3	18.7	1.23	
New scrap consumed ⁷	0.045	0.006	28.6	344	44.6	55	18,000	108	0.80	0.12	8	4.0	1.70	
New-to-old-scrap ratio ⁸ (percent).....	25:75	42:58	28:72	81:19	58:42	5:95	34:66	33:67	44:56	57:43	50:50	33:67	50:50	
Recycling rate ⁹ (percent).....	29	16	20	27	33	63	41	37	22	21	22	33	32	
Apparent supply.....	0.60	0.08	519.50	1,577.78	231.52	1,769.84	129,268.29	881.08	8.18	1.00	72.73	36.36	10.63	
U.S. net exports of scrap ¹⁰	0.028	0.014	41	5	7.5	103	2,510	18	0.40	-0.03	5	-0.19	1.20	
Value of U.S. net exports of scrap ¹¹ ...	\$0.272	\$0.2	\$0.154	\$0.012	\$0.022	\$0.0268	\$0.272	\$0.01	\$0.006	(\$0.00270)	NA	(\$0.00180)	\$0.04	
Metal commodity (chapter) and base year														
Recycling category	Silver	Cadmium	Beryllium	Antimony	Tungsten	Vanadium	Selenium	Mercury	Germanium	Aluminum	Copper	Titanium ¹²	Nickel	Total or wtd. average ¹³
	(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)	(V)	(W)	(X)	(Y)	(Z)	
	2000	2000	2000	2000	2000	2004	2004	2000	2000	2000	2004	2004	2004	
Old scrap:														
Generated ²	1.760	2.400	0.130	9	7.300	3.010	NA	0.250	0.009	4,000	1,920.000	28	247.000	83,860
Consumed ³	1.680	0.285	0.005	8	6.200	2.780	NA	0.155	0.005	1,370	230.000	22	95.600	38,223
Value of old scrap consumed.....	\$0.256	\$0.0001	\$0.0017	\$0.011	\$0.033	\$0.0208	NA	\$0.000634	\$0.00538	\$1.7993	\$0.263	NA	\$1.018	\$9
Recycling efficiency ⁴ (percent).....	97	15	7	89	66	94	NA	62	76	42	43	91	56	63
Supply ⁵	1.820	2.400	0.140	9	9.700	3.010	0.030	0.250	0.009	4,625	2,000.000	28	267.000	87,663
Unrecovered ⁶	0.054	2.030	0.130	1	3.300	0.176	NA	0.095	0.002	2,660	1,150.000	3	123.000	42,849
New scrap consumed ⁷	0.530	0.005	0.030	2	1.600	0.069	NA	0.005	0.007	2,080	735.000	NA	13.000	21,427
New-to-old-scrap ratio ⁸ (percent).....	24:76	2:98	86:14	20:80	20:80	02:98	NA	3:97	60:40	60:40	76:24	89:11	12:88	36:64
Recycling rate ⁹ (percent).....	32	14	10	20	46	40	NA	NA	50	36	30	52	41	40
Apparent supply.....	6.91	2.015	0.350	50.00	16.96	6.899	NA	NA	0.023	9,583.33	3,227.42	42.31	264.878	147,579
U.S. net exports of scrap ¹⁰	0.026	0.085	0.005	--	2.940	0.054	0.004	NA	0.002	50	553.000	1	30.200	3,321
Value of U.S. net exports of scrap ¹¹ ...	\$0.004	\$0.00003	\$0.00063	--	\$0.01421	\$0.00119	\$0.00021	NA	\$0.00227	\$0.0909	\$0.59892	\$0.00173	\$0.310	\$2

¹Columbium and niobium are synonyms; in 2008, USGS minerals information reports changed from using "columbium (niobium)" as in Circular 1196–I to using "niobium (columbium)."

²Metal content of products theoretically becoming obsolete in the United States in the base year. Old scrap excludes dissipative uses.

³Metal content of products that were recycled in the base year.

⁴(Old scrap consumed plus old scrap exported) divided by (old scrap generated plus old scrap imported plus old scrap stock decrease or minus old scrap stock increase). Weighted average, as shown in the last column, is 63 percent. Nonweighted average is 61 percent.

⁵Old scrap generated plus old scrap imported plus old scrap stock decrease.

⁶Old scrap supply minus old scrap consumed minus old scrap exported minus old scrap stock increase.

⁷Prompt industrial scrap. Home scrap is excluded.

⁸Ratio of quantities consumed, measured in weight and expressed in percent of new plus old scrap consumed. Weighted average, as shown in the last column, is 36:64. Nonweighted average is 40:60.

⁹Supply fraction that is scrap, on an annual basis. It is defined as (old plus new scrap consumed) divided by apparent supply [primary plus secondary production (old scrap plus new scrap) plus imports minus exports plus adjustment for Government and industry stock changes]. Weighted average, as shown in the last column, is 40 percent. Nonweighted average is 32 percent.

¹⁰For most metal commodities, trade is assumed to be principally old scrap.

¹¹Parenthetical entries for tantalum and molybdenum show values for net imports and are subtracted from values for the total net exports to yield the values in the last column.

¹²Titanium figures are old plus new scrap, as applicable.

¹³Totals are weights in thousands of metric tons or values in billions of constant 1998 U.S. dollars. Weighted (wtd.) averages are percentages.