

# Annual Data 2014

Copper Supply & Consumption — 1993–2013

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**Copper Development  
Association Inc.**

Copper Alliance

# Preface

Statistical data on the supply and consumption of copper and copper alloys in the United States are available from many governmental and private sources. In this report, original data from these sources are brought together and rationalized by CDA and Global Market Consultants, Inc. (GMC) to provide a set of data on U.S. copper supply and consumption that is both consistent and accurate in all aspects from mine to end-use market.

The main sources of information assembled here are the U.S. Geological Survey in the U.S. Department of the Interior, the Bureau of the Census in the U.S. Department of Commerce, and Copper Development Association Inc. Where data from different sources are conflicting, and where original data appear to be in error, the best judgment has been applied. General sources are shown in the tables throughout the report. Those interested to know the specific sources of any of the data should contact CDA.

The statistics are arranged in a logical sequence to trace the flow of copper in the U.S. economy from mining and scrap collection through smelting, refining and ingot making to the wire rod and wire mills, brass mills, and foundries and then on to the final end-use markets. This flow is shown schematically on pages 4 and 5. On this schematic flow sheet the major statistics of copper supply and consumption in the United States for 2013 appear. Along with each major statistic on the chart, a reference is shown. This reference identifies the table in the report where details on that item, from 1993 through 2013, will be found. Most data for 2013 are preliminary.

There are four major tables in the report. **Table 1** covers the supply of primary copper. **Table 2** presents data on the supply of copper from secondary sources. In **Table 3**, statistics on the consumption of primary and secondary metals by mills, foundries and other industries are summarized. These three tables are provided by GMC.

Finally, **Table 4** details the supply of mill, foundry and powder products and their consumption in the five end-use market areas. In each of these tables, additions to the flow (such as net imports) are indicated as positive numbers, while subtractions from the flow (such as melting losses or net additions to stocks) are shown in parentheses.

The arrangement of the data in the report can be illustrated with an example. Consider Mine Production, the upper left-hand box in the flow sheet on **page 4**. As shown in the box, mine production of copper in the United States totaled 1,367 thousand short tons in 2013. Beneath this figure a number appears referring to Table 1, abbreviated 1 (1). This means that in **Table 1**, on Line (1), mine production is shown for the full period 1993 through 2013. In **Table 1**, on Line (1), a further reference will be found after the item heading Mine Production, directing the reader elsewhere on page 6. In fact, on page 6, a table entitled **Table 1, Item 1** presents the data on mine production by state for 1993 through 2013. In this way all the data on supply and consumption appear in logical sequence proceeding through the report, eliminating the need for explanatory text.

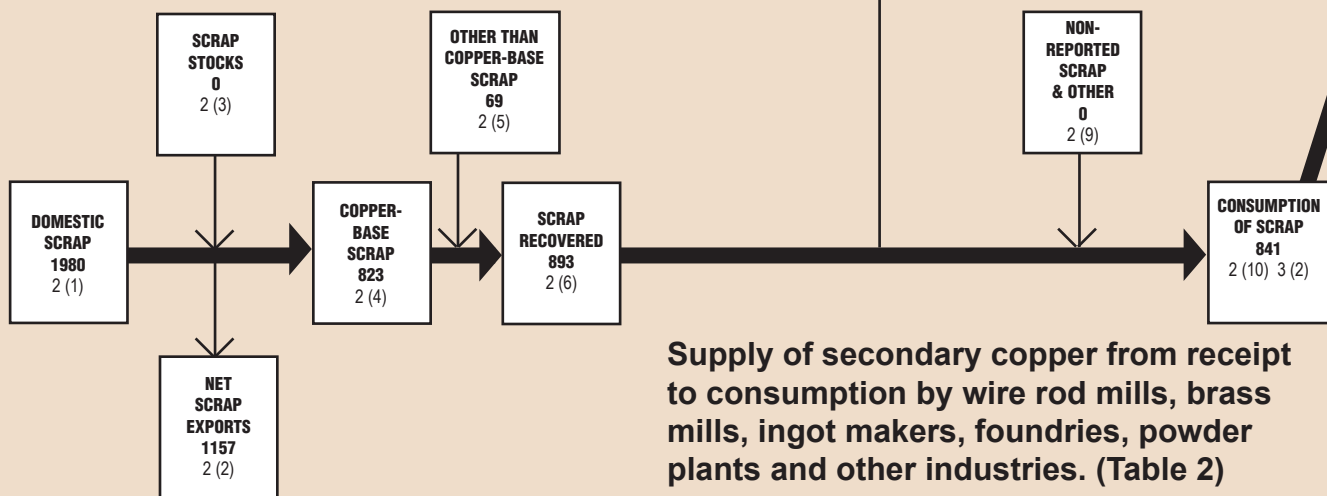
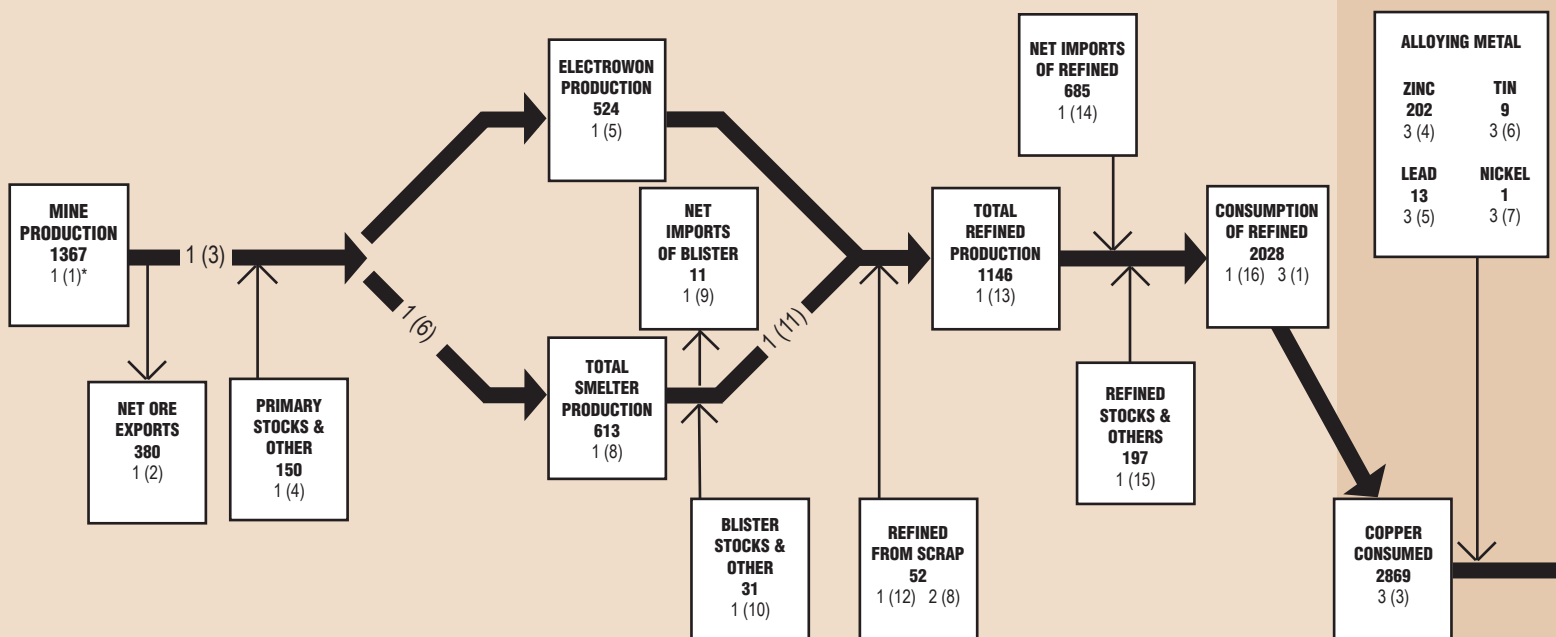
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# Copper supply and consumption in the United States – 2013

Supply of primary copper from mine to consumption by wire rod mills, brass mills, ingot makers, foundries, powder plants and other industries. (Table 1)

COPPER CONTENT, thousands of short tons



Supply of secondary copper from receipt to consumption by wire rod mills, brass mills, ingot makers, foundries, powder plants and other industries. (Table 2)

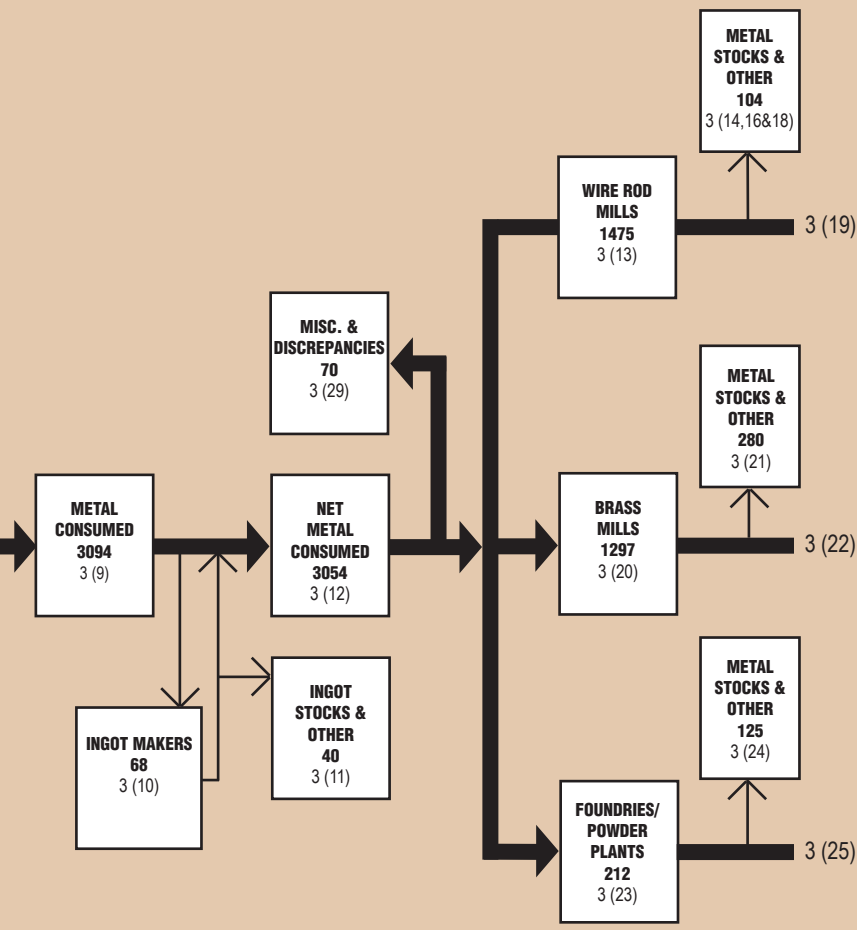
COPPER CONTENT, thousands of short tons

\*1 (1) Refers to table and item in report where data for 1993 through 2013 appear.

Note: Numbers may not sum due to rounding.

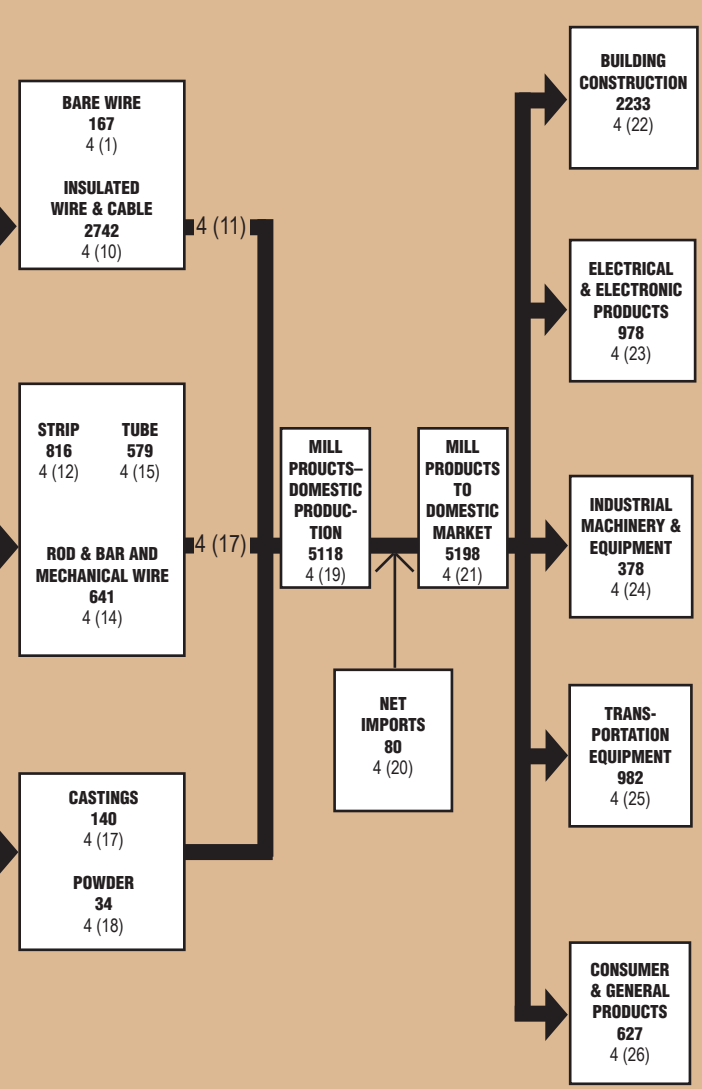
**Consumption of metals by wire rod mills, brass mills, ingot makers, foundries, powder plants and other industries. (Table 3)**

METAL CONTENT, thousands of short tons



**Supply of wire mill, brass mill, foundry and powder products and their consumption in the end-use markets. (Table 4)**

METAL CONTENT, millions of pounds



**Table 1.****Supply of primary copper from mine to consumption by wire rod mills, brass mills, ingot makers, foundries, powder plants and other industries**

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013p	
(1) Mine Production (page 6).....	1,984	2,039	2,040	2,116	2,138	2,051	1,763	1,598	1,477	1,256	1,230	1,275	1,257	1,319	1,287	1,444	1,302	1,224	1,227	1,290	r	1,367
(2) Net Ore/Conc./Matte Imports (page 8) <sup>(a)</sup> .....	(211)	(200)	(159)	(174)	(153)	177	50	(225)	(24)	36	4	(24)	(195)	(222)	(214)	(381)	(166)	(150)	(261)	(325)		(380)
(3) Total Primary.....	1,773	1,839	1,881	1,942	1,985	2,228	1,813	1,373	1,453	1,292	1,234	1,251	1,062	1,097	1,074	1,063	1,136	1,074	966	965		987
(4) Primary Stocks and Other.....	168	148	91	113	248	85	35	185	164	123	12	(10)	126	39	162	127	46	62	120	89	r	150
(5) Electrowon Production.....	541	543	594	633	646	671	646	613	692	662	652	644	611	584	556	560	525	474	493	519		524
(6) Smelter Production from Primary.....	1,400	1,444	1,378	1,422	1,587	1,642	1,202	945	925	753	594	597	577	552	680	630	658	663	593	535		613
(7) Smelter Production from Scrap.....	452	441	390	374	314	256	226	157	88	—	—	—	—	—	—	—	—	—	—	—		—
(8) Total Smelter Production (page 8).....	1,852	1,885	1,768	1,796	1,901	1,898	1,428	1,102	1,013	753	594	597	577	552	680	630	658	663	593	535		613
(9) Net Imports of Blister/Anode (page 8).....	95	72	72	155	123	135	179	178	270	127	144	115	100	167	152	110	49	10	(15)	(15)		(11)
(10) Blister/Anode Stocks and Other (page 9)....	(144)	(177)	(70)	(154)	(133)	(125)	5	(3)	(87)	48	(9)	27	45	24	23	51	(9)	22	23	21		(31)
(11) Refined Production from Blister/Anode.....	1,803	1,780	1,770	1,797	1,891	1,908	1,612	1,277	1,196	928	729	740	721	744	855	791	699	694	601	541		571
(12) Refined Production from Scrap.....	136	135	151	168	180	162	81	87	72	77	59	56	52	49	51	60	51	42	41	44		52
(13) Total Refined Production (page 9).....	2,480	2,458	2,515	2,598	2,717	2,741	2,339	1,977	1,960	1,667	1,440	1,439	1,384	1,378	1,462	1,411	1,275	1,210	1,135	1,104		1,146
(14) Net Imports of Refined (page 9).....	139	338	233	497	611	703	981	1,019	1,295	1,136	622	636	1,023	1,117	861	776	643	581	734	519		685
(15) Refined Stocks and Other (page 10).....	(18)	158	51	(210)	(254)	(263)	(29)	339	(368)	(197)	462	587	99	(168)	33	41	(101)	157	68	317	r	197
(16) Consumption of Refined (page 10).....	<b>2,602</b>	<b>2,954</b>	<b>2,799</b>	<b>2,885</b>	<b>3,074</b>	<b>3,181</b>	<b>3,291</b>	<b>3,335</b>	<b>2,887</b>	<b>2,606</b>	<b>2,524</b>	<b>2,662</b>	<b>2,506</b>	<b>2,327</b>	<b>2,356</b>	<b>2,228</b>	<b>1,817</b>	<b>1,947</b>	<b>1,936</b>	<b>1,940</b>	r	<b>2,028</b>

Source: U.S. Department of the Interior, U.S. Geological Survey

p - preliminary, r - revised

(a) - Included with domestic ore.

Numbers may not sum due to rounding.

**Table 1, Item 1.****Copper content of mine production in the United States<sup>1</sup>**

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013p	
Arizona.....	1,279	1,279	1,290	1,367	1,378	1,312	1,157	1,024	969	845	817	797	761	785	806	923	784	775	828	843	r	865
Other States <sup>(a)</sup> .....	706	761	750	749	760	739	606	574	508	411	413	478	496	535	482	521	518	448	399	446	r	502
<b>TOTAL.....</b>	<b>1,984</b>	<b>2,039</b>	<b>2,040</b>	<b>2,116</b>	<b>2,138</b>	<b>2,051</b>	<b>1,763</b>	<b>1,598</b>	<b>1,477</b>	<b>1,256</b>	<b>1,230</b>	<b>1,275</b>	<b>1,257</b>	<b>1,319</b>	<b>1,287</b>	<b>1,444</b>	<b>1,302</b>	<b>1,224</b>	<b>1,227</b>	<b>1,290</b>	r	<b>1,367</b>

Source: U.S. Department of the Interior, U.S. Geological Survey

p - preliminary, r - revised

(a) - Includes California, Colorado, Idaho, Illinois, Kentucky, Maine, Michigan, Missouri, Montana, Nevada, New Mexico, Oregon, Pennsylvania, Tennessee, Utah and Washington.

(1) Copper content of concentrates, precipitates, or electrowon.

Numbers may not sum due to rounding.

# Table 1, Item 1a.

## Copper content of world mine production<sup>1</sup>

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013p
<b>Australasia</b>																					
Australia.....	443	458	438	603	615	669	792	914	960	968	915	941	1,010	947	960	974	941	959	1,058	1,015 r	1,091
Papua New Guinea.....	224	228	234	205	123	167	207	224	225	233	216	191	213	214	187	176	184	176	144	138	132
<b>Total Australasia.....</b>	<b>667</b>	<b>686</b>	<b>673</b>	<b>808</b>	<b>738</b>	<b>836</b>	<b>999</b>	<b>1,138</b>	<b>1,185</b>	<b>1,201</b>	<b>1,131</b>	<b>1,133</b>	<b>1,223</b>	<b>1,161</b>	<b>1,147</b>	<b>1,150</b>	<b>1,125</b>	<b>1,135</b>	<b>1,202</b>	<b>1,153 r</b>	<b>1,222</b>
<b>Americas</b>																					
Argentina.....	—	—	—	—	34	171	220	160	211	225	219	194	206	199	199	173	158	155	129	150	121
Brazil.....	48	44	53	48	43	42	32	34	33	34	30	109	144	158	227	243	228	236	238	244 r	299
Canada.....	808	681	801	759	727	777	684	699	698	665	615	620	656	665	657	669	540	579	624	638	697
Chile.....	2,266	2,447	2,743	3,435	3,739	4,064	4,840	5,073	5,224	5,049	5,406	5,966	5,865	5,909	6,125	5,873	5,941	5,973	5,801	5,990	6,367
Mexico.....	332	337	368	376	431	424	420	402	409	363	394	447	473	368	372	272	263	298	485	551 r	539
Peru.....	413	397	452	534	560	533	591	611	796	931	929	1,142	1,113	1,156	1,312	1,398	1,407	1,375	1,362	1,431	1,516
United States.....	1,984	2,039	2,040	2,116	2,138	2,051	1,763	1,598	1,477	1,256	1,230	1,275	1,257	1,319	1,288	1,444	1,302	1,224	1,227	1,290 r	1,367
<b>Total Americas.....</b>	<b>5,851</b>	<b>5,944</b>	<b>6,500</b>	<b>7,304</b>	<b>7,714</b>	<b>8,089</b>	<b>8,550</b>	<b>8,577</b>	<b>8,848</b>	<b>8,523</b>	<b>8,823</b>	<b>9,754</b>	<b>9,715</b>	<b>9,774</b>	<b>10,180</b>	<b>10,072</b>	<b>9,838</b>	<b>9,839</b>	<b>9,866</b>	<b>10,294 r</b>	<b>10,906</b>
<b>Europe</b>																					
Bulgaria.....	67	83	85	96	95	93	107	103	107	105	103	104	104	122	121	116	116	116	126	119 r	121
Poland.....	422	415	424	466	457	481	511	501	522	554	546	585	564	548	498	473	484	469	470	471	473
Portugal.....	166	144	143	119	117	126	110	84	91	85	85	105	99	87	99	99	96	82	88	81 r	84
Scandinavia.....	120	106	110	98	112	92	89	99	95	95	108	108	112	110	84	78	76	101	107	119	134
Serbia.....	83	100	82	77	81	78	57	51	30	34	23	13	14	13	18	21	21	0 r	—	—	—
<b>Total Europe.....</b>	<b>856</b>	<b>849</b>	<b>845</b>	<b>856</b>	<b>862</b>	<b>870</b>	<b>873</b>	<b>838</b>	<b>845</b>	<b>873</b>	<b>865</b>	<b>916</b>	<b>893</b>	<b>880</b>	<b>821</b>	<b>786</b>	<b>793</b>	<b>767 r</b>	<b>791</b>	<b>790 r</b>	<b>813</b>
<b>Asia</b>																					
Russian Federation.....	643	632	580	577	557	584	590	584	595	730	694	694	705	744	761	777	745	775	799	794 r	799
China.....	507	568	623	621	687	678	737	795	802	780	816	977	998	1,126	1,043	1,205	1,171	1,300	1,402	1,642 r	1,721
India.....	55	51	51	53	41	44	38	37	38	34	32	33	25	32	36	31	33	36	40	33 r	40
Indonesia.....	341	368	507	579	604	892	866	1,107	1,155	1,282	1,106	929	1,174	900	870	717	1,098	962	599	439 r	561
Iran.....	96	130	112	114	131	141	143	143	146	146	162	161	181	238	269	273	289	283	334	271 r	246
Japan <sup>(2)</sup> .....	11	7	—	—	—	—	—	—	—	—	—	1	1	—	—	—	—	—	—	—	—
Kazakhstan <sup>(3)</sup> .....	290	237	256	276	349	373	412	474	518	522	535	509	443	479	448	465	448	419	479	460 r	493
Mongolia <sup>(4)</sup> .....	—	—	—	—	—	—	—	—	—	—	—	—	—	—	146	143	142	139	137	137	219
Philippines.....	150	128	119	68	54	50	41	35	26	21	22	18	18	19	24	24	52	65	70	72 r	103
<b>Total Asia.....</b>	<b>2,093</b>	<b>2,120</b>	<b>2,248</b>	<b>2,288</b>	<b>2,423</b>	<b>2,762</b>	<b>2,827</b>	<b>3,175</b>	<b>3,280</b>	<b>3,515</b>	<b>3,367</b>	<b>3,323</b>	<b>3,545</b>	<b>3,538</b>	<b>3,598</b>	<b>3,634</b>	<b>3,976</b>	<b>3,979</b>	<b>3,859</b>	<b>3,848 r</b>	<b>4,181</b>
<b>Africa</b>																					
Namibia.....	37	32	25	20	20	7	—	6	17	20	18	15	12	7	11	10	—	—	4	6 r	5
South Africa.....	208	203	208	208	205	207	177	179	123	100	99	96	98	99	107	120	119	113	127	89 r	82
Congo.....	51	33	39	55	44	39	34	36	42	42	70	82	111	141	157	236	332	401	529	619 r	928
Zambia.....	476	424	347	400	383	347	309	275	349	376	384	443	477	523	561	612	614	756	864	766 r	829
<b>Total Africa.....</b>	<b>771</b>	<b>692</b>	<b>619</b>	<b>683</b>	<b>652</b>	<b>600</b>	<b>520</b>	<b>496</b>	<b>531</b>	<b>538</b>	<b>571</b>	<b>636</b>	<b>697</b>	<b>769</b>	<b>836</b>	<b>977</b>	<b>1,065</b>	<b>1,270</b>	<b>1,524</b>	<b>1,480 r</b>	<b>1,844</b>
<b>Other<sup>(5)</sup>.....</b>	<b>198</b>	<b>188</b>	<b>255</b>	<b>335</b>	<b>348</b>	<b>339</b>	<b>333</b>	<b>339</b>	<b>331</b>	<b>320</b>	<b>320</b>	<b>519</b>	<b>547</b>	<b>600</b>	<b>476</b>	<b>509</b>	<b>741</b>	<b>686 r</b>	<b>720</b>	<b>856 r</b>	<b>964</b>
<b>TOTAL WORLD.....</b>	<b>10,435</b>	<b>10,478</b>	<b>11,140</b>	<b>12,274</b>	<b>12,737</b>	<b>13,497</b>	<b>14,103</b>	<b>14,563</b>	<b>15,020</b>	<b>14,970</b>	<b>15,077</b>	<b>16,281</b>	<b>16,621</b>	<b>16,721</b>	<b>17,057</b>	<b>17,127</b>	<b>17,539</b>	<b>17,676 r</b>	<b>17,962</b>	<b>18,421 r</b>	<b>19,930</b>

Sources: International Copper Study Group

p - preliminary r -revised

(1) Copper content of concentrates, precipitates, or electrowon.

(2) Included in "Other" starting in 1995.

(3) Kazakhstan reported separately from the Russian Federation starting in 1992; included with Russian Federation for 1986-1991.

(4) Mongolia no longer included with China starting in 2007.

(5) Includes countries from various continents, making the continent totals somewhat low.

Numbers may not sum due to rounding.

**Table 1, Item 2.****Imports and exports of copper ore, concentrates and matte in the United States**

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013p
Imports (Ore, Concentrate, Matte).....	40	89	143	82	51	242	160	2	52	80	32	27	2	2	3	2	0	2	17	7	4
Exports (Ore, Concentrate, Matte).....	(251)	(289)	(302)	(256)	(204)	(65)	(110)	(227)	(76)	(44)	(28)	(51)	(197)	(224)	(217)	(383)	(166)	(151)	(278)	(332)	(384)
<b>Net Imports (Ore, Concentrate, Matte)<sup>(a)</sup>.....</b>	<b>(211)</b>	<b>(200)</b>	<b>(159)</b>	<b>(174)</b>	<b>(153)</b>	<b>177</b>	<b>50</b>	<b>(225)</b>	<b>(24)</b>	<b>36</b>	<b>4</b>	<b>(24)</b>	<b>(195)</b>	<b>(222)</b>	<b>(214)</b>	<b>(381)</b>	<b>(166)</b>	<b>(150)</b>	<b>(261)</b>	<b>(325)</b>	<b>(380)</b>

Source: U.S. Department of the Interior, U.S. Geological Survey.

p - preliminary, r - revised

(a) - ( ) sign denotes net exports.

Numbers may not sum due to rounding.

**Table 1, Item 8.****Smelter production of copper in the United States**

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2,012	2013p
Smelter Production - Domestic Ore (Table 1, Item 6).....	1,400	1,444	1,378	1,422	1,587	1,642	1,202	945	925	753	594	597	577	552	680	630	658	662	593	535	613
Smelter Production - Foreign Ore	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Smelter Production - Scrap (Table 1, Item 7)	452	441	390	374	314	256	226	157	88	—	—	—	—	—	—	—	—	—	—	—	—
<b>TOTAL SMELTER PRODUCTION.....</b>	<b>1,852</b>	<b>1,885</b>	<b>1,768</b>	<b>1,796</b>	<b>1,901</b>	<b>1,898</b>	<b>1,428</b>	<b>1,102</b>	<b>1,013</b>	<b>753</b>	<b>594</b>	<b>597</b>	<b>577</b>	<b>552</b>	<b>680</b>	<b>630</b>	<b>658</b>	<b>662</b>	<b>593</b>	<b>535</b>	<b>613</b>

Source: U.S. Department of the Interior, U.S. Geological Survey.

p - preliminary, r - revised

(a) - Included with domestic ore.

Numbers may not sum due to rounding.

**Table 1, Item 9.****Imports and exports of blister and anode copper in the United States**

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2,012	2013p
Imports of Blister/Anode Copper.....	108	85	104	181	158	165	213	204	299	163	173	166	146	188	169	136	75	29	1	1	1
Exports of Blister/Anode Copper.....	(13)	(13)	(33)	(26)	(35)	(30)	(34)	(26)	(29)	(36)	(29)	(51)	(46)	(21)	(17)	(26)	(26)	(19)	(16)	(15)	(12)
<b>Net Imports of Blister/Anode Copper.....</b>	<b>95</b>	<b>72</b>	<b>72</b>	<b>155</b>	<b>123</b>	<b>135</b>	<b>179</b>	<b>178</b>	<b>270</b>	<b>127</b>	<b>144</b>	<b>115</b>	<b>100</b>	<b>167</b>	<b>152</b>	<b>110</b>	<b>49</b>	<b>10</b>	<b>(15)</b>	<b>(15)</b>	<b>(11)</b>

Source: U.S. Department of the Interior, U.S. Geological Survey.

p - preliminary, r - revised

Numbers may not sum due to rounding.



## Table 1, Item 10.

### Blister and anode stocks and other

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013p	
End-of-Year Blister/Anode Copper Stocks.....	161..	189	192	191	198	176	152	134	108	49	63	57	49	21	29	27	17	29	14	14	r	14
Net Change <sup>(a)</sup> .....	(22)	28	3	(1)	7	(22)	(24)	(18)	(26)	(59)	14	(6)	(8)	(28)	8	(2)	(10)	12	(15)	(1)	r	0
Apparent Change <sup>(b)</sup> .....	144.....	177	70	154	133	125	(5)	3	87	(48)	9	(27)	(45)	(24)	(23)	(51)	(9)	(22)	(23)	(21)		31

Source: U.S. Department of the Interior, U.S. Geological Survey.

p - preliminary, r - revised

(a) - Net Change - the year-to-year increase (+) or decrease ( ) of blister copper stocks as reported.

(b) - Apparent Change - the difference between Line 11 and the sum of Lines 8 & 9 in Table 1, required to rationalize the CDA flow sheet. Factors other than changes in stocks are included in the apparent change.

The sign of the data + or ( ) is opposite that shown in Table 1.

Numbers may not sum due to rounding.

## Table 1, Item 13.

### Production of refined copper in the United States

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013p	
Refined Production - Primary Sources (Table 1, Items 1,2,4,9 and 10).....	1,893.....	1,883	1,974	2,056	2,223	2,323	2,032	1,733	1,800	1,590	1,381	1,383	1,332	1,328	1,411	1,351	1,224	1,168	1,093	1,060		1,095
Refined Production - Scrap at Smelters (Table 1, Item 7).....	452	441	390	374	314	256	226	157	88	—	—	—	—	—	—	—	—	—	—	—		—
Refined Production - Scrap at Refiners (Table 1, Item 12).....	136	135	151	168	180	162	81	87	72	77	59	56	52	49	51	60	51	42	41	44		52
<b>TOTAL REFINED PRODUCTION.....</b>	<b>2,480.....</b>	<b>2,458.....</b>	<b>2,515</b>	<b>2,598</b>	<b>2,717</b>	<b>2,741</b>	<b>2,339</b>	<b>1,977</b>	<b>1,960</b>	<b>1,667</b>	<b>1,440</b>	<b>1,439</b>	<b>1,384</b>	<b>1,378</b>	<b>1,462</b>	<b>1,411</b>	<b>1,275</b>	<b>1,210</b>	<b>1,135</b>	<b>1,104</b>		<b>1,146</b>

Source: U.S. Department of the Interior, U.S. Geological Survey.

p - preliminary, r - revised

Numbers may not sum due to rounding.

## Table 1, Item 14.

### Imports and exports of refined copper in the United States

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013p	
General Imports of Refined Copper <sup>1</sup> .....	379.....	512	473	684	714	799	1,009	1,126	1,321	1,168	758	776	1,077	1,184	917	798	732	667	739	694		809
Total Exports of Refined Copper.....	(239)..	(174)	(240)	(187)	(103)	(96)	(28)	(107)	(26)	(32)	(136)	(140)	(54)	(67)	(56)	(22)	(89)	(86)	(5)	(175)		(125)
<b>Net Imports of Refined Copper.....</b>	<b>139</b>	<b>338</b>	<b>233</b>	<b>497</b>	<b>611</b>	<b>703</b>	<b>981</b>	<b>1,019</b>	<b>1,295</b>	<b>1,136</b>	<b>622</b>	<b>636</b>	<b>1,023</b>	<b>1,117</b>	<b>861</b>	<b>776</b>	<b>643</b>	<b>581</b>	<b>734</b>	<b>519</b>		<b>685</b>

Source: U.S. Department of the Interior, U.S. Geological Survey.

p - preliminary, r - revised

<sup>1</sup> General Imports measure the total physical arrivals of merchandise from foreign countries, whether such merchandise enters consumption channels immediately or is entered into bonded warehouses or Foreign Trade Zones under Customs custody.

Numbers may not sum due to rounding.

## Table 1, Item 15.

### Refined stocks and other

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013p
End-of year Refined Copper Stocks at:																					
Refineries.....	29	25	42	36	66	49	11	16	32	13	13	11	9	31	24	17	26	11	9	14	17
Wire Rod Mills.....	38	44	27	35	27	41	37	44	41	25	33	22	22	24	23	25	28	22	26	31	35
Brass Mills.....	16	9	8	15	16	23	26	26	28	32	22	24	27	38	11	9	8	7	8	7	7
Other Processors.....	7	11	3	3	4	4	4	5	5	5	5	4	6	6	6	4	5	5	5	5	5
Government.....	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Commodity Exchange.....	74	27	24	29	92	94	92	65	269	399	281	48	7	34	15	36	99	65	88	71	17
London Metal Exchange <sup>1</sup> .....	—	—	75	42	142	376	454	225	680	662	369	39	1	83	67	117	312	313	315	132	204
<b>End-of Year Total.....</b>	<b>164</b>	<b>116</b>	<b>179</b>	<b>160</b>	<b>347</b>	<b>587</b>	<b>624</b>	<b>381</b>	<b>1,055</b>	<b>1,136</b>	<b>723</b>	<b>148</b>	<b>73</b>	<b>216</b>	<b>146</b>	<b>207</b>	<b>478</b>	<b>423</b>	<b>451</b>	<b>260</b>	<b>284</b>
Net Change <sup>(a)</sup> .....	(58)	(48)	64	(19)	187	240	37	(243)	674	81	(413)	(575)	(75)	144	(70)	61	271	(56)	29	(191)	24
Apparent Change <sup>(b)</sup> .....	18	(158)	(51)	210	254	263	29	(339)	368	197	(462)	(587)	(99)	168	(33)	(41)	101	(157)	(68)	(317) r	(197)

Source: U.S. Department of the Interior, U.S. Geological Survey.

p - preliminary, r - revised

(a) - Net Change - the year-to-year increase (+) or decrease ( ) of refined copper stocks as reported.

(b) - Apparent Change - the difference between Line 16 and the sum of Lines 13 and 14 in Table 1, required to rationalize the CDA flow sheet. Factors other than changes in stocks are included in the apparent change. The sign of the data (+) or ( ) is opposite that shown in Table 1.

<sup>1</sup> Prior to 1995 there were no LME warehouses in the USA.

Numbers may not sum due to rounding.

## Table 1, Item 16.

### Consumption of refined copper in the United States

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013p
Consumption of Refined Copper by:																					
Wire Rod Mills.....	2,006	2,271	2,149	2,183	2,362	2,396	2,458	2,469	2,138	1,885	1,809	1,962	1,852	1,731	1,775	1,642	1,257	1,378	1,400	1,411 r	1,455
Brass Mills.....	555	626	588	648	659	727	762	797	687	654	647	632	582	540	525	528	500	506	474	467 r	504
Ingot Makers.....	5	8	9	4	5	6	5	5	5	5	5	5	5	5	5	3	0	0	0	0	0
Foundries and Other Industries.....	14	19	53	50	52	57	66	64	57	62	63	63	67	51	51	55	60	63	62	62 r	69
Powder Plants.....	7	10	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Other Industries.....	15	21	0	0	(4)	(5)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
<b>TOTAL REFINED CONSUMPTION.....</b>	<b>2,602</b>	<b>2,954</b>	<b>2,799</b>	<b>2,885</b>	<b>3,074</b>	<b>3,181</b>	<b>3,291</b>	<b>3,335</b>	<b>2,887</b>	<b>2,606</b>	<b>2,524</b>	<b>2,662</b>	<b>2,506</b>	<b>2,327</b>	<b>2,356</b>	<b>2,228</b>	<b>1,817</b>	<b>1,947</b>	<b>1,936</b>	<b>1,940 r</b>	<b>2,028</b>

Source: U.S. Department of the Interior, U.S. Geological Survey.

p - preliminary, r - revised

(a) - Starting with 1995 Powder Plants data are included with Foundries. Starting in 2008 Ingot Makers data are also included with Foundries.

Numbers may not sum due to rounding.

**Table 2.****Supply of secondary copper from receipt to consumption by brass mills  
ingot makers, foundries, powder plants and other industries**

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013p
(1) Receipts of Domestic Scrap.....	1,570	1,769	1,595	1,534	1,696	1,598	1,542	1,667	1,570	1,423	1,511	1,557	1,511	1,623	1,570	1,755	1,648	1,810	2,064	2,023 r	1,980
(2) Net Scrap Imports (page 12) <sup>(a)</sup> .....	(71)	(154)	(239)	(161)	(154)	(115)	(157)	(312)	(384)	(359)	(538)	(549)	(512)	(628)	(653)	(883)	(850)	(1,033)	(1,246)	(1,202)	(1,157)
(3) Scrap Stocks (page 12).....	6	(18)	24	3	(11)	1	(5)	9	11	3	3	(11)	(9)	(2)	20	0	5	31	0	0	0
(4) Recovery from Copper-Base Scrap (page 13)	1,504	1,597	1,380	1,375	1,531	1,484	1,380	1,364	1,198	1,067	977	996	990	992	937	873	803	808	818	821 r	823
(5) Recovery from Other Scrap (page 13)	51	54	72	79	82	84	86	82	69	68	64	68	61	77	83	67	51	57	67	70 r	69
(6) Total Scrap Recovery (page 13).....	1,555	1,651	1,452	1,454	1,613	1,568	1,466	1,446	1,267	1,135	1,041	1,064	1,051	1,069	1,020	940	854	865	885	891 r	893
(7) Smelter Production from Scrap.....	(452)	(441)	(390)	(374)	(314)	(256)	(226)	(157)	(88)	—	—	—	—	—	—	—	—	—	—	—	—
(8) Refined Production from Scrap.....	(136)	(135)	(151)	(168)	(180)	(162)	(81)	(87)	(72)	(77)	(59)	(56)	(52)	(49)	(51)	(60)	(51)	(42)	(41)	(44)	(52)
(9) Non-Reported Scrap & Other.....	NA	NA	153	162	42	33	55	15	(31)	(2)	8	8	8	8	9	10	9	0	0	0	0
(10) Consumption of Scrap (page 13).....	967	1,075	1,064	1,074	1,161	1,183	1,214	1,217	1,076	1,056	990	1,016	1,006	1,027	978	890	812	823	843	848 r	841

Source: U.S. Department of the Interior, U.S. Geological Survey.

p - preliminary, r - revised

(a) - ( ) sign denotes net exports.

Numbers may not sum due to rounding.

## Table 2, Item 2.

### Imports and exports of copper-base scrap in the United States

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013p
Imports of Copper-Base Scrap.....	167	165	173	196	196	148	119	124	100	89	78	88	100	101	124	117	79	106	121	115	117
Exports of Copper-Base Scrap.....	(238)	(319)	(412)	(357)	(350)	(263)	(276)	(436)	(484)	(448)	(616)	(637)	(612)	(729)	(777)	(1,000)	(929)	(1,139)	(1,367)	(1,317)	(1,274)
<b>Net Imports of Copper-Base Scrap<sup>(a)</sup> .....</b>	<b>(71)</b>	<b>(154)</b>	<b>(239)</b>	<b>(161)</b>	<b>(154)</b>	<b>(115)</b>	<b>(157)</b>	<b>(312)</b>	<b>(384)</b>	<b>(359)</b>	<b>(538)</b>	<b>(549)</b>	<b>(512)</b>	<b>(628)</b>	<b>(653)</b>	<b>(883)</b>	<b>(850)</b>	<b>(1,033)</b>	<b>(1,246)</b>	<b>(1,202)</b>	<b>(1,157)</b>

Source: U.S. Department of the Interior, U.S. Geological Survey.

p - preliminary, r - revised

(a) - The ( ) sign for each year is used to be consistent with the convention used in Tables 1, 2 and 4, namely that imports are **additions** to the domestic flow, and therefore (+), while exports are **subtractions** from the flow, and therefore ( ).

Numbers may not sum due to rounding.

## Table 2, Item 3.

### Copper-base scrap stocks

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013p	
Scrap Copper-Base Stocks at:																						
Brass Mills.....	33	41	36	35	38	46	50	50	43	42	40	51	56	58	40	40	36	1	1	2	r	2
Secondary Smelters & Primary Producers...	31	40	24	23	31	23	23	14	10	8	7	7	12	12	10	11	8	12	10	11	r	11
Foundries.....	6	8	} 6	5	5	4	5	5	5	5	5	4	4	4	4	3	5	5	7	5	r	5
Other Processors.....	2	2																				
<b>End-of Year Total....</b>	<b>72</b>	<b>90</b>	<b>66</b>	<b>63</b>	<b>74</b>	<b>73</b>	<b>78</b>	<b>69</b>	<b>58</b>	<b>55</b>	<b>52</b>	<b>63</b>	<b>72</b>	<b>74</b>	<b>54</b>	<b>54</b>	<b>49</b>	<b>18</b>	<b>18</b>	<b>18</b>	<b>r</b>	<b>18</b>
Net Change <sup>(a)</sup> .....	(6)	18	(24)	(3)	11	(1)	5	(9)	(11)	(3)	(3)	11	9	2	(20)	(0)	(5)	(31)	(0)	(0)		0

Source: U.S. Department of the Interior, U.S. Geological Survey.

p - preliminary, r - revised

(a) - Net Change - the year-to-year increase (+) or decrease ( ) of stocks as reported. The sign of the data (+) or ( ) is opposite that shown in Table 2.

Numbers may not sum due to rounding.

## Table 2, Item 6.

### Recovery of copper from scrap

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013p
Copper Recovered from Copper-Base Scrap.....																						
New Scrap.....	774	820	906	922	941	1,017	1,008	995	1,002	876	885	773	810	805	851	797	726	670	675	681	669 r	655
Old Scrap.....	659	684	691	458	434	514	476	385	362	322	182	204	186	185	141	140	147	132	133	137	152 r	169
<b>Total (Table 2, Item 4).....</b>	<b>1,434</b>	<b>1,504</b>	<b>1,597</b>	<b>1,380</b>	<b>1,375</b>	<b>1,531</b>	<b>1,484</b>	<b>1,380</b>	<b>1,364</b>	<b>1,198</b>	<b>1,067</b>	<b>977</b>	<b>996</b>	<b>990</b>	<b>992</b>	<b>937</b>	<b>873</b>	<b>803</b>	<b>808</b>	<b>818</b>	<b>821 r</b>	<b>824</b>
Copper Recovered from Scrap other than Copper-Base																						
New Scrap.....	25	26	29	41	42	48	47	51	50	42	41	40	43	44	52	50	42	32	33	35	36 r	36
Old Scrap.....	24	25	25	31	37	34	37	35	32	27	27	24	25	17	25	33	26	19	24	32	34 r	33
<b>Total (Table 2, Item 5).....</b>	<b>48</b>	<b>51</b>	<b>54</b>	<b>72</b>	<b>79</b>	<b>82</b>	<b>84</b>	<b>86</b>	<b>82</b>	<b>69</b>	<b>68</b>	<b>64</b>	<b>68</b>	<b>61</b>	<b>77</b>	<b>83</b>	<b>67</b>	<b>51</b>	<b>57</b>	<b>67</b>	<b>70 r</b>	<b>69</b>
Copper Recovered from All Scrap																						
New Scrap.....	799	846	935	963	983	1,065	1,055	1,046	1,052	918	926	813	853	848	902	846	768	703	708	716	706 r	691
Old Scrap.....	683	709	716	489	471	548	513	420	394	349	209	228	211	202	166	173	172	151	158	169	186 r	202
<b>Total Copper Recovered (Table 2, Item 6)...</b>	<b>1,482</b>	<b>1,555</b>	<b>1,651</b>	<b>1,452</b>	<b>1,454</b>	<b>1,613</b>	<b>1,568</b>	<b>1,466</b>	<b>1,446</b>	<b>1,267</b>	<b>1,135</b>	<b>1,041</b>	<b>1,064</b>	<b>1,051</b>	<b>1,069</b>	<b>1,020</b>	<b>940</b>	<b>854</b>	<b>865</b>	<b>885</b>	<b>891 r</b>	<b>893</b>

Source: U.S. Department of the Interior, U.S. Geological Survey

p - preliminary, r - revised

Numbers may not sum due to rounding.

## Table 2, Item 10.

### Consumption of copper scrap in the United States

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013p
Consumption of Copper Scrap by:																						
Wire Rod Mills.....	20	26	24	29	30	33	33	34	35	30	30	28	29	29	30	28	26	24	25	25	20 r	20
Brass Mills.....	597	624	732	757	768	853	861	880	896	771	779	717	748	739	763	710	651	605	608	615	611 r	604
Ingots Makers.....	181	185	183	140	137	138	149	143	130	135	109	101	99	104	91	100	87	83	84	86	84 r	84
Foundries.....	69	66	66	69	59	61	57	83	87	80	79	80	71	74	66	57	59	49	50	51	63 r	63
Powder Plants <sup>(a)</sup> .....	11	11	15	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Chemical Plants <sup>(b)</sup> .....	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)
Non-copper based scrap	57	55	56	72	79	82	84	86	82	69	68	64	68	61	77	83	67	51	57	67	70 r	70
Miscellaneous Adjustments	1	—	(1)	(3)	1	(6)	(1)	(12)	(13)	(9)	(9)	—	—	—	—	—	—	—	—	—	—	—
<b>TOTAL COPPER CONSUMED</b>	<b>936</b>	<b>967</b>	<b>1,075</b>	<b>1,064</b>	<b>1,074</b>	<b>1,161</b>	<b>1,183</b>	<b>1,214</b>	<b>1,217</b>	<b>1,076</b>	<b>1,056</b>	<b>990</b>	<b>1,015</b>	<b>1,007</b>	<b>1,027</b>	<b>978</b>	<b>890</b>	<b>812</b>	<b>823</b>	<b>843</b>	<b>848 r</b>	<b>841</b>

Source: U.S. Department of the Interior, U.S. Geological Survey

p - preliminary, r - revised

(a) - Starting with 1995 Powder Plants data are included with Foundries.

(b) - Chemical Plants data included Foundries.

Numbers may not sum due to rounding.

# Table 3.

## Consumption of metals by wire rod mills, brass mills, ingot makers, foundries, powder plants and other industries

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013p		
(1) Consumption of Refined Copper (Table 1, Item 16)	2,602	2,954	2,799	2,885	3,074	3,181	3,291	3,335	2,887	2,606	2,524	2,662	2,506	2,327	2,356	2,228	1,817	1,947	1,936	1,940	r	2,028	
(2) Consumption of Copper in Scrap (Table 2, Item 10)	967	1,075	1,064	1,074	1,161	1,183	1,214	1,217	1,076	1,056	990	1,016	1,006	1,027	978	890	812	823	843	848	r	841	
<b>(3) Total Copper Consumed (page 15)</b>	<b>3,569</b>	<b>4,029</b>	<b>3,863</b>	<b>3,959</b>	<b>4,235</b>	<b>4,364</b>	<b>4,505</b>	<b>4,552</b>	<b>3,963</b>	<b>3,662</b>	<b>3,514</b>	<b>3,678</b>	<b>3,512</b>	<b>3,354</b>	<b>3,334</b>	<b>3,118</b>	<b>2,628</b>	<b>2,771</b>	<b>2,780</b>	<b>2,788</b>	r	<b>2,869</b>	
(4) Consumption of Zinc.....	346	393	283	292	300	305	312	329	283	296	266	284	273	268	253	226	238	236	186	r	196	r	202
(5) Consumption of Lead.....	27	28	19	19	20	20	19	19	17	15	13	14	11	11	11	13	12	11	13	r	13	r	13
(6) Consumption of Tin.....	13	13	9	8	9	10	9	11	11	10	8	8	9	9	9	8	8	7	11	r	9	r	9
(7) Consumption of Nickel.....	11	12	9	8	7	8	11	11	8	6	6	7	7	6	6	5	5	5	2	r	1	r	1
<b>(8) Total Alloying Metal Consumed (page 16)....</b>	<b>396</b>	<b>446</b>	<b>320</b>	<b>327</b>	<b>336</b>	<b>343</b>	<b>351</b>	<b>370</b>	<b>319</b>	<b>327</b>	<b>293</b>	<b>314</b>	<b>300</b>	<b>295</b>	<b>278</b>	<b>252</b>	<b>263</b>	<b>259</b>	<b>212</b>	r	<b>219</b>	r	<b>225</b>
<b>(9) Total Metal Consumed</b>	<b>3,965</b>	<b>4,475</b>	<b>4,183</b>	<b>4,286</b>	<b>4,571</b>	<b>4,707</b>	<b>4,856</b>	<b>4,922</b>	<b>4,282</b>	<b>3,989</b>	<b>3,807</b>	<b>3,992</b>	<b>3,812</b>	<b>3,649</b>	<b>3,611</b>	<b>3,371</b>	<b>2,891</b>	<b>3,030</b>	<b>2,991</b>	r	<b>3,007</b>	r	<b>3,094</b>
(10) Ingot Consumed (page 17) <sup>(a)</sup>	167	180	134	136	140	125	139	137	126	122	112	109	102	97	90	84	85	83	68		68		68
(11) Ingot Stocks & Other <sup>(a,b)</sup> .....	(89)	(83)	(13)	(38)	(39)	(66)	(40)	(32)	(45)	(16)	(14)	(17)	(27)	(20)	(38)	(30)	(28)	(23)	(41)	r	(40)	r	(40)
<b>(12) Net Metal Consumed (page 17).....</b>	<b>3,877</b>	<b>4,392</b>	<b>4,170</b>	<b>4,248</b>	<b>4,532</b>	<b>4,641</b>	<b>4,816</b>	<b>4,890</b>	<b>4,237</b>	<b>3,972</b>	<b>3,793</b>	<b>3,974</b>	<b>3,785</b>	<b>3,629</b>	<b>3,573</b>	<b>3,341</b>	<b>2,863</b>	<b>3,007</b>	<b>2,950</b>	r	<b>2,967</b>	r	<b>3,054</b>
(13) Wire Rod Mills - Net Metal Consumed (p 17)	2,033	2,295	2,178	2,213	2,395	2,429	2,492	2,504	2,168	1,915	1,837	1,991	1,881	1,760	1,802	1,668	1,281	1,403	1,425	1,431	r	1,475	
(14) Wire Rod Mills - Metal Stocks & Other.....	(129)	(190)	(235)	8	(72)	(53)	(154)	(148)	(114)	32	(29)	(30)	(201)	(13)	(40)	7	(24)	(36)	(47)	(20)	r	(9)	
(15) Wire Rod Mills - Shipments....	1,904	2,105	1,943	2,221	2,323	2,376	2,338	2,356	2,054	1,947	1,808	1,961	1,680	1,747	1,763	1,676	1,257	1,367	1,378	1,411		1,466	
(16) Wire Rod - Net Imports.....	(25)	(54)	(10)	(6)	18	51	197	237	351	339	241	208	486	446	159	77	1	(43)	36	(5)		15	
(17) Wire Mills - Net Metal Consumed.....	1,878	2,051	1,933	2,215	2,341	2,427	2,535	2,593	2,405	2,286	2,049	2,169	2,166	2,193	1,922	1,753	1,257	1,324	1,414	1,406		1,481	
(18) Wire Mills - Metal Stocks & Other.....	(158)	(143)	(136)	(370)	(327)	(320)	(351)	(422)	(439)	(540)	(197)	(151)	(109)	(304)	(181)	(207)	151	77	(134)	r	(67)	r	(110)
(19) Wire Mills - Metal Contained in Products Supplied (Table 4, Item 11)	1,720	1,909	1,797	1,846	2,014	2,108	2,184	2,172	1,966	1,747	1,852	2,018	2,057	1,889	1,741	1,546	1,408	1,401	1,280	r	1,339	r	1,371
(20) Brass Mills - Net Metal Consumed (p 17).....	1,516	1,738	1,599	1,680	1,783	1,867	1,934	1,998	1,717	1,712	1,609	1,637	1,571	1,547	1,455	1,368	1,285	1,298	1,272	r	1,262	r	1,297
(21) Brass Mills - Metal Stocks & Other.....	(12)	(31)	81	104	69	30	52	18	(53)	(46)	(21)	82	128	74	(7)	(94)	(344)	(260)	(261)	r	(279)	r	(280)
(22) Brass Mills - Metal Contained in Products	1,505	1,708	1,680	1,784	1,852	1,897	1,986	2,016	1,664	1,666	1,588	1,720	1,699	1,621	1,448	1,274	941	1,038	1,011	983		1,018	
(23) Foundries - Net Metal Consumed (page 17)....	205	218	287	275	282	267	303	307	283	278	274	270	264	238	223	230	242	250	186	r	204	r	212
(24) Foundries - Metal Stocks & Other.....	(18)	(19)	(77)	(64)	(70)	(54)	(86)	(90)	(113)	(121)	(127)	(130)	(127)	(108)	(103)	(123)	(149)	(159)	(96)	r	(117)	r	(125)
(25) Foundries - Metal Contained in Products Supplied	188	199	211	212	213	214	217	218	171	158	148	140	138	130	120	108	93	91	90		87		87
(26) Powder Plants - Net Metal Consumed <sup>(c)</sup> .....	22	31	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)
(27) Powder Plants - Metal Stocks & Other <sup>(c)</sup> .....	(3)	(8)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)
(28) Contained in Products Supplied	19	23	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)
(29) Other Industries - Net Metal Consumed.....	101	110																					
Miscellaneous and Discrepancies.....			106	80	72	78	87	81	69	67	73	77	70	86	90	74	56	57	67	70	r	70	

Sources: U.S. Department of the Interior, U.S. Geological Survey

p - preliminary, r - revised, NA - not available

(a) - Direct consumption only; not including consumption of copper in ingots from ingot makers.

(b) - Ingot makers consume refined copper, scrap copper and alloying metal and ship to foundries, brass mills, powder plants and other industries.

(c) - Starting with 1995 Powder Plants are combined with "Foundries."

Numbers may not sum due to rounding.

# Table 3, Item 3.

## Consumption of copper by wire rod mills, brass mills, ingot makers, foundries, powder plants and other industries

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013p
Consumption of Copper by:																					
Wire Rod Mills																					
Refined.....	2,006	2,271	2,149	2,183	2,362	2,396	2,458	2,469	2,138	1,885	1,809	1,962	1,852	1,731	1,775	1,642	1,257	1,378	1,400	1,411 r	1,455
Scrap.....	26	24	29	30	33	33	34	35	30	30	28	29	29	30	28	26	24	25	25	20 r	20
Total.....	2,033	2,295	2,178	2,213	2,395	2,429	2,492	2,504	2,168	1,915	1,837	1,991	1,881	1,760	1,802	1,668	1,281	1,403	1,425	1,431 r	1,475
Brass Mills <sup>(a)</sup>																					
Refined.....	555	626	588	648	659	727	762	797	687	654	647	632	582	540	525	528	500	506	474	467 r	504
Scrap.....	624	732	757	768	853	861	880	896	771	779	717	748	739	763	710	651	605	608	615	611 r	604
Total.....	1,179	1,358	1,345	1,416	1,512	1,588	1,642	1,693	1,458	1,433	1,364	1,380	1,321	1,303	1,235	1,179	1,105	1,114	1,089	1,078 r	1,108
Ingot Makers <sup>(b)</sup>																					
Refined.....	5	8	9	4	5	6	5	5	5	5	5	5	5	5	5	3	0	0	0	0	0
Scrap.....	185	183	140	137	138	149	143	130	135	109	101	99	104	91	100	87	83	84	86	84 r	84
Total.....	190	191	149	141	143	155	148	135	140	114	106	104	109	96	105	90	83	84	86	84 r	84
Foundries and Other Industries <sup>(a,c)</sup>																					
Refined.....	14	19	53	50	52	57	66	64	57	62	63	63	67	51	51	55	60	63	62	62 r	69
Scrap.....	66	66	69	59	61	57	70	75	71	70	71	63	65	57	51	52	44	50	51	63 r	63
Total.....	80	85	122	109	113	114	136	139	128	132	134	127	132	109	103	107	104	113	113	125 r	132
Powder Plants <sup>(c)</sup>																					
Refined.....	7	10	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)
Scrap.....	11	15	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)
Total.....	18	25	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)	(c)
Miscellaneous <sup>(d)</sup>																					
Refined.....	15	21	—	—	(4)	(5)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Scrap.....	55	56	69	80	76	83	87	81	69	68	73	77	70	86	89	74	56	57	67	70 r	70
Total.....	70	76	69	80	72	78	87	81	69	68	73	77	70	86	89	74	56	57	67	70 r	70
<b>All Industries</b>																					
<b>Refined (Table 1, Item 16)</b>	<b>2,602</b>	<b>2,954</b>	<b>2,799</b>	<b>2,885</b>	<b>3,074</b>	<b>3,181</b>	<b>3,291</b>	<b>3,335</b>	<b>2,887</b>	<b>2,606</b>	<b>2,524</b>	<b>2,662</b>	<b>2,506</b>	<b>2,327</b>	<b>2,356</b>	<b>2,228</b>	<b>1,817</b>	<b>1,947</b>	<b>1,936</b>	<b>1,940 r</b>	<b>2,028</b>
<b>Scrap (Table 2, Item 10).....</b>	<b>967</b>	<b>1,075</b>	<b>1,064</b>	<b>1,074</b>	<b>1,161</b>	<b>1,183</b>	<b>1,214</b>	<b>1,217</b>	<b>1,076</b>	<b>1,056</b>	<b>990</b>	<b>1,016</b>	<b>1,006</b>	<b>1,027</b>	<b>978</b>	<b>890</b>	<b>812</b>	<b>823</b>	<b>843</b>	<b>848 r</b>	<b>841</b>
<b>TOTAL COPPER CONSUMED (Table 3, Item 3)...</b>	<b>3,569</b>	<b>4,029</b>	<b>3,863</b>	<b>3,959</b>	<b>4,235</b>	<b>4,364</b>	<b>4,505</b>	<b>4,552</b>	<b>3,963</b>	<b>3,662</b>	<b>3,514</b>	<b>3,678</b>	<b>3,512</b>	<b>3,354</b>	<b>3,334</b>	<b>3,118</b>	<b>2,628</b>	<b>2,771</b>	<b>2,780</b>	<b>2,788 r</b>	<b>2,869</b>

Sources: U.S. Department of the Interior, U.S. Geological Survey

p - preliminary, r - revised

(a) - Direct consumption only; not including consumption of copper in ingots from ingot makers.

(b) - Ingot makers consume refined copper, scrap copper and alloying metal and ship to foundries, brass mills, powder plants and other industries.

(c) - Starting with 1995 Powder Plants and Other Industries data are included with "Foundries and Other Industries."

(d) - Miscellaneous - reconciles discrepancies between USGS reports.

Numbers may not sum due to rounding.

# Table 3, Item 8.

## Consumption of alloying metal by brass mills, ingot makers, foundries and powder plants

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013p		
Consumption of Alloying Metal by:																							
Brass Mills <sup>(a)</sup>																							
Zinc:Unalloyed & in Secondary Copper Alloys	302	340	236	246	253	259	269	501	241	263	231	241	236	230	209	179	170	176	173	174	r	179	
Lead:Unalloyed & in Secondary Copper Alloys	8	9	7	8	9	9	9	8	7	7	6	7	4	4	3	3	3	3	4	r	6	r	6
Tin:Unalloyed & in Secondary Copper Alloys...	2	2	2	2	2	3	3	4	3	3	2	2	3	4	3	2	2	2	5	r	3	r	3
Nickel:Unalloyed & in Secondary Copper Alloys	10	11	9	8	7	8	11	11	8	6	6	7	7	6	5	5	5	3	1	r	1	r	1
<b>Total</b>	<b>321</b>	<b>361</b>	<b>254</b>	<b>264</b>	<b>271</b>	<b>279</b>	<b>292</b>	<b>305</b>	<b>259</b>	<b>279</b>	<b>245</b>	<b>256</b>	<b>250</b>	<b>243</b>	<b>221</b>	<b>189</b>	<b>180</b>	<b>184</b>	<b>183</b>	<b>r</b>	<b>184</b>	<b>r</b>	<b>189</b>
Ingot Makers																							
Zinc:Unalloyed & in Secondary Copper Alloys	38	44	19	19	20	20	17	18	16	12	10	12	10	10	12	10	17	10	10	r	13	r	13
Lead:Unalloyed & in Secondary Copper Alloys	18	18	10	9	10	10	9	10	9	7	6	6	6	6	7	9	9	7	8		6	r	6
Tin:Unalloyed & in Secondary Copper Alloys	10	10	6	5	6	6	5	6	6	5	4	4	4	4	5	5	4	4	5	r	4	r	5
Nickel:Unalloyed	1	1	—	—	—	—	—	—	—	—	—	0	0	0	—	0	0	1	0		0	r	0
<b>Total</b>	<b>65</b>	<b>73</b>	<b>35</b>	<b>33</b>	<b>36</b>	<b>36</b>	<b>31</b>	<b>34</b>	<b>31</b>	<b>24</b>	<b>20</b>	<b>22</b>	<b>20</b>	<b>20</b>	<b>24</b>	<b>24</b>	<b>30</b>	<b>22</b>	<b>23</b>	<b>r</b>	<b>23</b>	<b>r</b>	<b>24</b>
Foundries and Other Industries <sup>(a)</sup>																							
Zinc:Unalloyed & in Secondary Copper Alloys	2	3	28	27	27	26	26	29	26	21	25	32	27	28	32	37	51	50	2	r	9	r	9
Lead:Unalloyed & in Secondary Copper Alloys	3	3	2	2	1	1	1	1	1	1	2	1	1	1	0	1	1	1	1	r	1	r	1
Tin:Unalloyed & in Secondary Copper Alloys	2	2	1	1	1	1	1	1	2	2	2	2	2	2	1	1	1	1	2	r	2	r	2
Nickel:Unalloyed	1	1	—	—	—	—	—	—	—	—	—	0	0	0	—	0	0	1	0	r	0	r	0
<b>Total</b>	<b>8</b>	<b>9</b>	<b>31</b>	<b>30</b>	<b>29</b>	<b>28</b>	<b>28</b>	<b>31</b>	<b>29</b>	<b>24</b>	<b>29</b>	<b>35</b>	<b>30</b>	<b>31</b>	<b>33</b>	<b>39</b>	<b>54</b>	<b>53</b>	<b>5</b>	<b>r</b>	<b>12</b>	<b>r</b>	<b>12</b>
Powder Plants <sup>(a)</sup>																							
Zinc-Slab	1	1	} (b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	
Zinc in Scrap	1	1																					
Tin-Refined	1	1																					
<b>Total</b>	<b>2</b>	<b>3</b>																					
<b>All Industries</b>																							
<b>Zinc: Unalloyed &amp; in Secondary Copper Alloys</b>	<b>346</b>	<b>392</b>	<b>283</b>	<b>292</b>	<b>300</b>	<b>305</b>	<b>312</b>	<b>329</b>	<b>283</b>	<b>296</b>	<b>266</b>	<b>284</b>	<b>273</b>	<b>268</b>	<b>253</b>	<b>226</b>	<b>238</b>	<b>236</b>	<b>186</b>	<b>r</b>	<b>196</b>	<b>r</b>	<b>202</b>
<b>Lead: Unalloyed &amp; in Secondary Copper Alloys</b>	<b>27</b>	<b>28</b>	<b>19</b>	<b>19</b>	<b>20</b>	<b>20</b>	<b>19</b>	<b>19</b>	<b>17</b>	<b>15</b>	<b>13</b>	<b>14</b>	<b>11</b>	<b>11</b>	<b>11</b>	<b>13</b>	<b>12</b>	<b>11</b>	<b>13</b>	<b>r</b>	<b>13</b>	<b>r</b>	<b>13</b>
<b>Tin: Unalloyed &amp; in Secondary Copper Alloys</b>	<b>13</b>	<b>13</b>	<b>9</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>9</b>	<b>11</b>	<b>11</b>	<b>10</b>	<b>8</b>	<b>8</b>	<b>9</b>	<b>9</b>	<b>9</b>	<b>8</b>	<b>8</b>	<b>7</b>	<b>11</b>	<b>r</b>	<b>9</b>	<b>r</b>	<b>9</b>
<b>Nickel: Unalloyed &amp; in Secondary Copper Alloys</b>	<b>10</b>	<b>11</b>	<b>9</b>	<b>8</b>	<b>7</b>	<b>8</b>	<b>11</b>	<b>11</b>	<b>8</b>	<b>6</b>	<b>6</b>	<b>7</b>	<b>7</b>	<b>6</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>2</b>	<b>r</b>	<b>1</b>	<b>r</b>	<b>1</b>
<b>TOTAL ALLOYING METAL CONSUMED (Table 3, Item 8)</b>	<b>396</b>	<b>446</b>	<b>320</b>	<b>327</b>	<b>336</b>	<b>343</b>	<b>351</b>	<b>370</b>	<b>319</b>	<b>327</b>	<b>293</b>	<b>314</b>	<b>300</b>	<b>295</b>	<b>278</b>	<b>252</b>	<b>263</b>	<b>259</b>	<b>212</b>	<b>r</b>	<b>219</b>	<b>r</b>	<b>225</b>

Sources: U.S. Department of the Interior, U.S. Geological Survey

p - preliminary, r - revised

(a) - Direct consumption only; not including consumption of alloying metal in ingots from ingot makers.

(b) - Starting with 1995 Powder Plants data are included with "Foundries and Other Industries."

Numbers may not sum due to rounding.



# Table 3, Item 12.

## Net consumption of metals by wire rod mills, brass mills, foundries, powder plants and other industries

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013p
Net Metal Consumed by:																					
Wire Rod Mills - Copper (Table 3, Item 13)	2,033	2,295	2,178	2,213	2,395	2,429	2,492	2,504	2,168	1,915	1,837	1,991	1,881	1,760	1,802	1,668	1,281	1,403	1,425	1,431 r	1,475
Brass Mills																					
Copper.....	1,179	1,358	1,345	1,416	1,512	1,588	1,642	1,693	1,458	1,433	1,364	1,380	1,321	1,303	1,235	1,179	1,105	1,114	1,089	1,078 r	1,108
Alloy.....	321	361	254	264	271	279	292	305	259	279	245	256	250	243	221	189	180	184	183 r	184 r	189
Ingot.....	17	19										2									
Total (Table 3, Item 20).....	1,516	1,738	1,599	1,680	1,783	1,867	1,934	1,998	1,717	1,712	1,609	1,637	1,571	1,547	1,456	1,368	1,285	1,298	1,272 r	1,262 r	1,297
Foundries <sup>(a)</sup>																					
Copper.....	80	85	122	109	113	114	136	139	128	132	134	128	132	110	100	107	104	113	113	125 r	132
Alloy.....	8	9	31	30	29	28	28	31	29	24	28	35	30	31	33	39	54	53	5 r	12 r	12
Ingot.....	117	124	134	136	140	125	139	137	126	122	112	109	102	97	90	84	85	83	68	68	68
Total (Table 3, Item 23)...	205	218	287	275	282	267	303	307	283	278	274	272	264	238	223	230	242	250	186 r	204 r	212
Powder Plants <sup>(a)</sup>																					
Copper.....	18	25	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Alloy.....	2	3	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Ingot.....	2	3	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Total .....	22	31	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Other Industries <sup>(a)</sup>																					
Copper.....	70	76	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Ingot.....	31	34	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Total (Table 3, Item 29)...	101	110	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)	(a)
Miscellaneous and Discrepancies																					
Copper (Table 3, Item 29)...			106	80	72	78	87	81	69	67	73	77	70	86	89	74	56	57	67	70 r	70
Ingot.....																					
<b>All Industries</b>																					
Copper.....	3,379	3,839	3,751	3,818	4,092	4,209	4,357	4,417	3,823	3,547	3,408	3,575	3,403	3,258	3,226	3,029	2,545	2,687	2,694	2,703 r	2,785
Alloy.....	331	373	285	294	300	307	320	336	288	303	273	291	280	274	254	228	233	237	188 r	196 r	201
Ingot (Table 3, Item 10) <sup>(b)</sup>	167	180	134	136	140	125	139	137	126	122	112	109	102	97	90	84	85	83	68	68	68
<b>NET METAL CONSUMED</b>																					
(Table 3, Item 12).....	3,877	4,392	4,170	4,248	4,532	4,641	4,816	4,890	4,237	3,972	3,793	3,974	3,785	3,629	3,571	3,341	2,863	3,007	2,950 r	2,967 r	3,054

Source: U.S. Department of the Interior, U.S. Geological Survey

p - preliminary, r - revised

(a) - Starting with 1995 Powder Plants and Other Industries data are included with "Foundries."

(b) - Total consumption of ingot shown here is less than the consumption of metal by ingot makers shown in the details of Table 3, Item 3, and Table 3, Item 8. The difference, shown as Ingot Stocks & Other in Table 3, is partially melting and other losses in the making of ingot.

Numbers may not sum due to rounding.

**Table 4.****Supply of wire mill, brass mill, foundry and powder products  
and their consumption in the end-use markets**

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013p
(1) Bare Wire.....	213	290	310	290	300	320	330	340	310	290	270	260	255	225	200	175	170	165	160	166	167
(2) Telecommunications Cable.....	491	497	502	563	609	697	628	749	599	384	395	366	375	359	292	225	177	168	160	163	163
(3) Electronic Wire and Cable.....	192	228	207	202	241	241	246	290	232	178	238	255	256	265	290	210	155	150	145	148	151
(4) Building Wire.....	1,114	1,256	1,223	1,172	1,393	1,447	1,562	1,358	1,329	1,270	1,425	1,664	1,700	1,533	1,426	1,259	1,177	1,059	1,005	1,020	1,035
(5) Magnet Wire.....	568	659	672	714	719	700	778	714	615	573	561	570	532	536	493	443	400	380	360	367	380
(6) Power Cable.....	302	281	246	266	267	286	303	333	319	288	294	300	372	315	249	326	352	335	315	326	335
(7) Apparatus Wire and Cordage.....	212	237	184	210	211	229	235	250	216	185	193	140	140	89	86	124	102	100	95	97	98
(8) Automotive Wire and Cable (except Magnet)	368	415	407	401	411	407	442	433	387	407	398	397	391	336	355	330	283	406	443	518	540
(9) Other Insulated Wire and Cable.....	80	85	70	85	89	85	56	69	80	80	82	85	93	119	90	54	43	40	38	39	40
(10) Total Insulated Wire and Cable.....	3,327	3,658	3,511	3,612	3,940	4,092	4,250	4,196	3,776	3,365	3,586	3,777	3,859	3,552	3,281	2,972	2,690	2,638	2,561	2,678	2,742
<b>(11) Total Wire Mill Products<sup>(a)</sup>.....</b>	<b>3,540</b>	<b>3,948</b>	<b>3,821</b>	<b>3,902</b>	<b>4,240</b>	<b>4,412</b>	<b>4,580</b>	<b>4,536</b>	<b>4,086</b>	<b>3,655</b>	<b>3,856</b>	<b>4,037</b>	<b>4,114</b>	<b>3,777</b>	<b>3,481</b>	<b>3,147</b>	<b>2,860</b>	<b>2,803</b>	<b>2,721</b>	<b>2,844</b>	<b>2,909</b>
(12) Strip, Sheet, Plate and Foil.....	995	1,154	1,122	1,178	1,230	1,262	1,356	1,421	1,018	1,019	957	1,068	1,035	1,067	999	928	692	794	740	757	816
(13) Mechanical Wire <sup>(b)</sup> .....	80	85	88	93	96	98	94	99	85	78	72	80	75	72	62	(b)	(b)	(b)	(b)	(b)	(b)
(14) Rod and Bar.....	970	1,085	1,053	1,096	1,193	1,190	1,238	1,247	1,025	1,038	965	1,059	1,032	1,022	882	808	562	675	675	636	641
(15) Tube and Pipe <sup>(c)</sup> .....	964	1,091	1,097	1,200	1,184	1,244	1,285	1,266	1,202	1,197	1,182	1,233	1,256	1,080	953	812	619	607	608	574	579
<b>(16) Total Brass Mill Products (page 19).....</b>	<b>3,009</b>	<b>3,415</b>	<b>3,360</b>	<b>3,567</b>	<b>3,703</b>	<b>3,794</b>	<b>3,973</b>	<b>4,033</b>	<b>3,329</b>	<b>3,332</b>	<b>3,177</b>	<b>3,439</b>	<b>3,397</b>	<b>3,241</b>	<b>2,896</b>	<b>2,548</b>	<b>1,873</b>	<b>2,076</b>	<b>2,023</b>	<b>1,967</b>	<b>2,035</b>
<b>(17) Total Foundry Products.....</b>	<b>375</b>	<b>397</b>	<b>380</b>	<b>381</b>	<b>382</b>	<b>383</b>	<b>384</b>	<b>385</b>	<b>300</b>	<b>270</b>	<b>250</b>	<b>230</b>	<b>225</b>	<b>215</b>	<b>200</b>	<b>180</b>	<b>160</b>	<b>150</b>	<b>145</b>	<b>140</b>	<b>140</b>
<b>(18) Total Powder Products.....</b>	<b>38</b>	<b>46</b>	<b>41</b>	<b>42</b>	<b>43</b>	<b>44</b>	<b>50</b>	<b>50</b>	<b>41</b>	<b>45</b>	<b>45</b>	<b>50</b>	<b>50</b>	<b>45</b>	<b>40</b>	<b>35</b>	<b>27</b>	<b>32</b>	<b>34</b>	<b>34</b>	<b>34</b>
<b>(19) Domestic Products - Total.....</b>	<b>6,962</b>	<b>7,806</b>	<b>7,602</b>	<b>7,892</b>	<b>8,368</b>	<b>8,633</b>	<b>8,986</b>	<b>9,004</b>	<b>7,756</b>	<b>7,302</b>	<b>7,328</b>	<b>7,756</b>	<b>7,786</b>	<b>7,279</b>	<b>6,617</b>	<b>5,910</b>	<b>4,919</b>	<b>5,061</b>	<b>4,923</b>	<b>4,985</b>	<b>5,118</b>
<b>(20) Net Imports of Mill Products (page 20).....</b>	<b>38</b>	<b>135</b>	<b>130</b>	<b>108</b>	<b>126</b>	<b>223</b>	<b>376</b>	<b>568</b>	<b>276</b>	<b>249</b>	<b>265</b>	<b>343</b>	<b>266</b>	<b>319</b>	<b>311</b>	<b>224</b>	<b>108</b>	<b>81</b>	<b>96</b>	<b>149</b>	<b>80</b>
<b>(21) Mill Products to Domestic Market*.....</b>	<b>7,000</b>	<b>7,941</b>	<b>7,732</b>	<b>8,000</b>	<b>8,494</b>	<b>8,856</b>	<b>9,362</b>	<b>9,572</b>	<b>8,033</b>	<b>7,551</b>	<b>7,593</b>	<b>8,099</b>	<b>8,052</b>	<b>7,597</b>	<b>6,928</b>	<b>6,134</b>	<b>5,027</b>	<b>5,142</b>	<b>5,018</b>	<b>5,133</b>	<b>5,198</b>
(22) Building Construction.....	2,825	3,179	3,111	3,221	3,455	3,635	3,900	3,918	3,584	3,532	3,640	4,035	4,071	3,721	3,405	3,025	2,420	2,285	2,193	2,222	2,233
(23) Electrical and Electronic Products.....	1,761	1,934	1,915	2,020	2,170	2,329	2,400	2,517	2,016	1,598	1,582	1,569	1,525	1,533	1,400	1,274	1,018	1,059	1,037	1,024	978
(24) Industrial Machinery and Equipment.....	825	962	919	946	972	965	1,005	965	749	729	697	682	701	682	575	494	432	430	377	358	378
(25) Transportation Equipment.....	878	959	819	841	875	855	915	894	718	754	749	978	961	883	811	702	621	768	819	925	982
(26) Consumer and General Products.....	611	776	741	761	811	875	930	1,085	810	776	773	836	794	778	737	639	536	601	592	605	627

Sources: Copper Development Association; Global Market Consultants, Inc.; U.S. Department of Commerce, Bureau of the Census; Metal Powder Producers Association.

Note: Totals may not sum due to rounding.

p - preliminary, r - revised

(a) - Copper content.

(b) - Rod and bar and mechanical wire data combined starting 2008.

(c) - Commercial tube and plumbing tube data combined.

\* Markets include:

**Building Construction** - Building Wire; Plumbing & Heating; Air Conditioning & Commercial Refrigeration; Builders Hardware; Architectural**Electrical and Electronic Products** - Power Utilities; Telecommunications; Business Electronics; Lighting & Wiring Devices**Industrial Machinery and Equipment** - In-Plant Equipment; Industrial Valves & Fittings; Non-Electrical Instruments; Off-Highway Vehicles; Heat Exchangers**Transportation Equipment** - Automobile; Truck & Bus; Railroad; Marine; Aircraft & Aerospace**Consumer and General Products** - Appliances; Cord Sets; Military & Commercial Ordnance; Consumer Electronics; Fasteners & Closures; Coinage; Utensils & Cultery; Miscellaneous

Numbers may not sum due to rounding.

## Table 4, Item 17.

### Supply of brass mill products in the United States

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013p
Strip, Sheet, Plate and Foil																					
Copper.....	291	343	364	383	405	435	477	531	390	363	341	390	391	394	378	343	224	240	236	234	258
Alloy.....	704	811	758	795	825	827	879	890	628	655	616	677	644	673	621	586	468	554	504	523	558
Total.....	995	1,154	1,122	1,178	1,230	1,262	1,356	1,421	1,018	1,019	957	1,068	1,035	1,067	999	929	692	794	740	757	816
Mechanical Wire																					
Copper.....	18	21	19	21	22	22	22	22	18	16	16	19	18	14	11	(a)	(a)	(a)	(a)	(a)	(a)
Alloy.....	62	64	69	72	74	76	72	77	67	62	56	61	57	58	51	(a)	(a)	(a)	(a)	(a)	(a)
Total.....	80	85	88	93	96	98	94	99	85	78	72	80	75	72	62	(a)	(a)	(a)	(a)	(a)	(a)
Rod and Bar <sup>(a)</sup>																					
Copper.....	145	168	175	183	206	206	217	245	207	177	170	205	212	211	201	188	133	161	167	151	163
Alloy.....	825	917	878	913	987	984	1,021	1,003	818	861	795	854	820	812	681	620	428	515	508	485	478
Total.....	970	1,085	1,053	1,096	1,193	1,190	1,238	1,247	1,025	1,038	965	1,059	1,032	1,022	882	808	562	675	675	636	641
Tube and Pipe <sup>(b)</sup>																					
Copper.....	905	1,028	1,037	1,143	1,129	1,188	1,247	1,234	1,180	1,178	1,168	1,218	1,243	1,066	940	800	610	596	597	565	570
Alloy.....	59	63	60	57	55	56	38	32	22	19	14	15	13	14	13	12	9	11	11	9	8
Total.....	964	1,091	1,097	1,200	1,184	1,244	1,285	1,266	1,202	1,197	1,182	1,233	1,256	1,080	953	812	619	607	608	574	579
<b>All Mill Products</b>																					
<b>Copper.....</b>	<b>1,359</b>	<b>1,560</b>	<b>1,595</b>	<b>1,730</b>	<b>1,762</b>	<b>1,851</b>	<b>1,963</b>	<b>2,032</b>	<b>1,794</b>	<b>1,735</b>	<b>1,695</b>	<b>1,832</b>	<b>1,863</b>	<b>1,685</b>	<b>1,529</b>	<b>1,330</b>	<b>968</b>	<b>996</b>	<b>1,000</b>	<b>951</b>	<b>991</b>
<b>Alloy.....</b>	<b>1,650</b>	<b>1,855</b>	<b>1,765</b>	<b>1,837</b>	<b>1,941</b>	<b>1,943</b>	<b>2,010</b>	<b>2,001</b>	<b>1,535</b>	<b>1,597</b>	<b>1,482</b>	<b>1,607</b>	<b>1,534</b>	<b>1,556</b>	<b>1,367</b>	<b>1,218</b>	<b>906</b>	<b>1,080</b>	<b>1,023</b>	<b>1,016</b>	<b>1,044</b>
<b>TOTAL BRASS MILL PRODUCTS</b>	<b>3,009</b>	<b>3,415</b>	<b>3,360</b>	<b>3,567</b>	<b>3,703</b>	<b>3,794</b>	<b>3,973</b>	<b>4,033</b>	<b>3,329</b>	<b>3,332</b>	<b>3,177</b>	<b>3,439</b>	<b>3,397</b>	<b>3,241</b>	<b>2,896</b>	<b>2,548</b>	<b>1,873</b>	<b>2,076</b>	<b>2,023</b>	<b>1,967</b>	<b>2,035</b>

Sources: Copper Development Association; Global Market Consultants, Inc.

(a)- Copper and alloy rod and bar and mechanical wire data combined starting 2008.

(b) - Commercial tube and plumbing

Numbers may not sum due to rounding.

## Table 4, Item 17a.

### Supply of brass mill products in selected countries

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013p
Benelux.....	251	269	288	285	305	289	327	365	332	292	277	266	266	266	277	278	263	273	276	281	276
France.....	538	1,090	668	584	747	769	742	461	393	369	263	213	201	201	421	382	218	235	251	251	261
Germany.....	1,852	2,115	2,152	1,951	2,196	2,296	2,324	2,620	2,464	2,412	2,328	2,561	2,510	2,585	4,096	3,909	2,982	3,650	3,597	3,306	3,391
Italy.....	1,352	1,556	1,746	1,672	1,337	1,988	1,938	2,186	2,051	1,980	1,957	1,682	1,369	2,020	1,836	1,584	862	1,137	1,106	1,124 r	1,163
Japan.....	2,387	2,532	2,653	2,607	2,611	2,239	2,324	2,559	2,162	2,114	2,175	2,290	2,075	2,195	2,200	1,428	2,752	3,313	3,246	3,173	3,212
Mexico <sup>1</sup> .....	NA	309	208	163	179	329	346	340	311	307	311	319	276	229	258	232	302	251	327	277	259
Scandinavia.....	395	401	438	425	438	453	420	444	429	445	442	469	464	478	381	437	349	383	393	391	381
South Korea.....	569	241	291	307	373	524	640	669	675	708	723	701	720	720	823	757	749	787	736	677	715
Spain.....	178	212	228	211	233	262	285	291	218	250	213	166	194	185	194	198	204	225	215	258	178
Turkey.....	262	214	293	314	134	148	143	176	139	97	88	88	144	160	141	121	46	65	65	66	70
United Kingdom.....	432	463	492	452	440	409	385	403	178	162	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
United States.....	3,009	3,415	3,360	3,567	3,703	3,794	3,973	4,033	3,329	3,332	3,177	3,439	3,397	3,241	2,896	2,548	1,873	2,076	2,023	1,967	2,035

Sources: World Bureau of Metal Statistics; U.S. Department of the Interior

p - preliminary, r - revised, NA - not available

<sup>1</sup> Mexico brass mill supply reported starting in 1994.

Numbers may not sum due to rounding.

# Table 4, Item 21.

## Imports and exports of wire mill, brass mill and powder products

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013p
Imports of:																					
Bare Wire (including Stranded).....	44	12	12	15	24	118	162	200	40	47	50	42	56	39	38	43	29	36	40	44	33
Insulated Wire and Cable.....	104	127	165	176	213	273	305	356	324	297	314	334	405	418	417	362	282	319	331	359	362
<b>Total Wire Mill Products<sup>(1)</sup>.....</b>	<b>148</b>	<b>139</b>	<b>177</b>	<b>191</b>	<b>237</b>	<b>391</b>	<b>468</b>	<b>555</b>	<b>364</b>	<b>344</b>	<b>364</b>	<b>376</b>	<b>461</b>	<b>457</b>	<b>455</b>	<b>405</b>	<b>311</b>	<b>356</b>	<b>371</b>	<b>403</b>	<b>395</b>
Copper-Strip, Sheet, Plate and Foil.....	76	83	85	94	113	113	132	174	168	120	111	135	111	120	84	87	64	85	86	84	70
Rod and Bar.....	10	14	30	31	33	32	46	58	59	40	36	51	49	48	63	48	30	43	48	46	48
Tube and Pipe.....	43	66	76	121	122	123	149	180	166	170	188	227	225	285	259	262	189	158	127	125	133
Alloy-Strip, Sheet, Plate and Foil.....	73	85	81	83	84	99	104	155	120	115	93	118	95	92	74	61	43	65	61	65	75
Mechanical Wire.....	28	31	32	34	37	41	37	48	37	35	37	41	35	36	33	36	22	35	33	41	37
Rod and Bar.....	66	126	147	102	152	128	127	183	107	109	114	139	120	132	115	70	43	70	79	84	86
Tube and Pipe.....	61	71	70	55	60	56	69	75	71	71	68	77	66	59	51	52	32	40	41	38	38
<b>Total Brass Mill Products.....</b>	<b>358</b>	<b>477</b>	<b>520</b>	<b>520</b>	<b>600</b>	<b>591</b>	<b>664</b>	<b>872</b>	<b>729</b>	<b>660</b>	<b>648</b>	<b>790</b>	<b>700</b>	<b>771</b>	<b>679</b>	<b>616</b>	<b>423</b>	<b>496</b>	<b>475</b>	<b>484</b>	<b>485</b>
<b>Total Powder Products.....</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>5</b>	<b>5</b>	<b>4</b>	<b>6</b>	<b>8</b>	<b>6</b>	<b>8</b>	<b>10</b>	<b>10</b>	<b>8</b>	<b>7</b>	<b>9</b>	<b>9</b>	<b>8</b>	<b>8</b>
<b>TOTAL IMPORTS.....</b>	<b>509</b>	<b>620</b>	<b>702</b>	<b>715</b>	<b>842</b>	<b>988</b>	<b>1,137</b>	<b>1,433</b>	<b>1,097</b>	<b>1,010</b>	<b>1,019</b>	<b>1,172</b>	<b>1,169</b>	<b>1,238</b>	<b>1,144</b>	<b>1,028</b>	<b>741</b>	<b>860</b>	<b>855</b>	<b>894</b>	<b>888</b>
Exports of:																					
Bare Wire (including Stranded).....	74	48	32	37	65	71	80	113	93	104	82	99	107	102	103	88	66	88	90	113	156
Insulated Wire and Cable.....	201	198	253	278	316	333	355	398	412	370	362	379	392	423	367	400	336	437	422	392	403
<b>Total Wire Mill Products<sup>(1)</sup>.....</b>	<b>275</b>	<b>247</b>	<b>284</b>	<b>315</b>	<b>381</b>	<b>403</b>	<b>435</b>	<b>511</b>	<b>504</b>	<b>475</b>	<b>444</b>	<b>478</b>	<b>498</b>	<b>525</b>	<b>470</b>	<b>488</b>	<b>402</b>	<b>525</b>	<b>512</b>	<b>505</b>	<b>559</b>
Copper-Strip, Sheet, Plate and Foil.....	25	29	33	33	50	47	65	65	43	32	33	38	34	36	32	30	23	33	33	31	30
Rod and Bar.....	3	4	4	5	11	7	5	5	16	16	9	21	33	37	40	44	26	23	31	32	28
Tube and Pipe.....	42	43	48	55	55	61	58	76	68	71	81	70	80	76	77	48	51	40	48	41	41
Alloy-Strip, Sheet, Plate and Foil.....	39	59	69	79	81	121	73	77	67	52	63	72	96	81	72	71	57	63	54	60	72
Mechanical Wire.....	12	18	18	10	20	18	16	24	19	17	16	20	21	29	34	33	23	27	25	24	24
Rod and Bar.....	55	57	66	61	77	71	70	71	70	71	77	88	95	95	64	50	22	27	25	23	25
Tube and Pipe.....	13	21	39	39	31	23	24	22	20	14	17	21	18	16	18	21	15	16	13	12	12
<b>Total Brass Mill Products.....</b>	<b>189</b>	<b>230</b>	<b>277</b>	<b>281</b>	<b>324</b>	<b>348</b>	<b>311</b>	<b>339</b>	<b>304</b>	<b>273</b>	<b>297</b>	<b>331</b>	<b>377</b>	<b>369</b>	<b>337</b>	<b>297</b>	<b>216</b>	<b>229</b>	<b>229</b>	<b>222</b>	<b>232</b>
<b>Total Powder Products.....</b>	<b>7</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>11</b>	<b>13</b>	<b>15</b>	<b>14</b>	<b>13</b>	<b>14</b>	<b>13</b>	<b>21</b>	<b>27</b>	<b>26</b>	<b>25</b>	<b>19</b>	<b>15</b>	<b>24</b>	<b>18</b>	<b>18</b>	<b>18</b>
<b>TOTAL EXPORTS.....</b>	<b>471</b>	<b>485</b>	<b>571</b>	<b>607</b>	<b>717</b>	<b>764</b>	<b>761</b>	<b>864</b>	<b>821</b>	<b>761</b>	<b>754</b>	<b>829</b>	<b>902</b>	<b>920</b>	<b>833</b>	<b>804</b>	<b>633</b>	<b>778</b>	<b>759</b>	<b>746</b>	<b>808</b>
<b>NET IMPORTS (Table 4, Item 21)</b>	<b>38</b>	<b>135</b>	<b>130</b>	<b>108</b>	<b>126</b>	<b>223</b>	<b>376</b>	<b>568</b>	<b>276</b>	<b>249</b>	<b>265</b>	<b>343</b>	<b>266</b>	<b>319</b>	<b>311</b>	<b>224</b>	<b>108</b>	<b>81</b>	<b>96</b>	<b>149</b>	<b>80</b>

Sources: U.S. Department of Commerce, Bureau of the Census

p - preliminary, r - revised

(1) - In previous additions, wire rod exports were included in the table. Starting with 1999, net wire rod imports are shown as line 16 on table 3, page 14. Appropriate adjustments have been made for all years.

Numbers may not sum due to rounding.



**Copper Development  
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Copper Alliance

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