

SILVER

By Henry E. Hilliard

In 1996, domestic mine production of silver increased for the second consecutive year. The United States remained the third largest mine producer of silver, accounting for 10% of world mine output. About 76 mines in 16 States produced silver during the year. In descending order, Nevada, Idaho, and Arizona, were the largest silver-producing States, accounting for nearly two-thirds of the production. The 14 largest mines accounted for more than three-fourths of domestic production. The value of domestic production was \$263 million.

Commercial-grade silver is a material that is at least 99.9%-pure silver. In the United States, about 20 companies produced commercial-grade silver from either primary or recycled material. Although most of these companies were headquartered in the Northeast, many had collection sites or plants in locations throughout the country. Aiding in the recycling of silver were many other companies. These companies, located throughout the country, collected the material for recycling, and some produced a semirefined product that could be converted to commercial-grade silver.

Many companies and probably thousands of artisans scattered throughout the country consumed silver in 1996. The 30 largest companies probably accounted for more than 90% of the silver consumed in arts and industry. About 50% of the commercial-grade silver consumed in the United States was used in the manufacture of photographic products; 20% in electrical and electronic products; 10% in electroplated ware, sterlingware, and jewelry; and 20% in other uses.

Analysts estimated that world fabrication demand for silver increased slightly in 1996, owing primarily to increased consumption in India and Mexico. Total world fabrication demand, including that of China and the former U.S.S.R., was put at about 25,000 tons in 1996, compared with a revised estimate of 23,900 tons in 1995 (The Silver Institute, 1997).

Production

Silver was produced from precious-metal ores at 46 lode mines and from base metal ores at 30 lode mines. In 1996, 14 mines each produced more than 30 tons of silver; their aggregated production equaled 79% of total domestic production. Probably fewer than 10 placer operations recovered silver in 1996, and the quantity recovered was less than 1% of total domestic production.

Domestic mine production data for silver were developed by the U.S. Geological Survey from three separate, voluntary surveys of U.S. operations. Typical of these surveys was the lode mine production survey of copper, gold, lead, silver, and zinc. Of the 78 silver-producing lode mines to which a survey

form was sent, 76 responded, accounting for an estimated 99% of the total U.S. mine production shown in tables 1, 2, and 6.

Alaska.—The Greens Creek silver-zinc-lead-gold mine resumed mining in July. For the year, workers at Greens Creek milled nearly 131,000 tons of ore and recovered nearly 87 tons of silver, 11,600 tons of zinc, 5,200 tons of lead, and 323 kilograms of gold, (Hecla Mining Co., 1997). The mine had closed in April 1993, reportedly in response to low silver prices.

At the Red Dog Mine, Cominco Alaska Inc. began construction of a number of projects expected to result in a 40% increase in production capacity by 1998. The project will require construction of a new crushing plant, semiautogenous grinding and ball mills, additional filtering and flotation capacity, and expansion of the port facilities on the Chukchi Sea. Improved operations at the concentrator resulted in higher recoveries for lead, silver, and zinc.

Idaho.—Production resumed at the Coeur Mine in May. The Coeur Mine, an underground silver-copper-gold mine, was placed on standby in April 1991 in response to low silver prices. For the second half of 1996, Coeur milled nearly 142,000 tons of ore and recovered nearly 1,300 tons of copper and 88 tons of silver (Coeur d'Alene Mines Corp., 1997).

Silver production at the Kinross-DeLamar Mine declined in 1996, reportedly owing in part to lower than expected ore grades, unscheduled mill repairs, and severe weather conditions. For the year, workers at DeLamar processed nearly 1.3 million tons of ore and recovered nearly 37 tons of silver and more than 1 ton of gold (Kinross Gold Corp., 1997). In 1995, the mine had produced more than 56 tons of silver and 819 kilograms of gold.

Production at the Lucky Friday Mine increased in 1996. Company officials attributed the higher production in part to the use of jumbo platform drills as part of the continuing effort to mechanize the mine. During 1996, Hecla Mining Co. milled more than 171,000 tons of ore at Lucky Friday and recovered 29 kilograms of gold, 19,000 tons of lead, 59 tons of silver, and 3,300 tons of zinc. In 1995, workers at the mine had processed 144,000 tons of ore and recovered 26 kilograms of gold, 15,400 tons of lead, 52 tons of silver, and 2,720 tons of zinc (Hecla Mining Co., 1997).

Silver production at the Sunshine Mine increased for the first time in the past 6 years, and by yearend, the mine was operating at 75% of capacity (680 tons per day). For the year, the Sunshine Mine processed nearly 109,000 tons of ore and recovered 79 tons of silver, nearly 1,200 tons of lead, and 305 tons of copper (Sunshine Mining and Refining Co., 1997). The lead production reportedly was the first significant lead production at the mine in decades. In 1995, the Sunshine Mine

had recovered nearly 54 tons of silver and 278 tons of copper from 91,600 tons of ore.

Montana.—Silver production at the Montana Tunnels Mine declined for the fourth consecutive year, despite the start of operations at Diamond Hill. Diamond Hill, a small underground operation, is a satellite deposit to the Montana Tunnels operation. As in 1995, the mill at Montana Tunnels processed more than 5 million tons of ore. Metal production for 1996 was approximately 3 tons of gold, nearly 29 tons of silver, 7,000 tons of lead, and 18,300 tons of zinc (Pegasus Gold Inc., 1997). For 1995, Montana Tunnels had milled more than 5 million tons of ore and recovered nearly 3 tons of gold, 33 tons of silver, 7,400 tons of lead, and 21,600 tons of zinc.

Nevada.—Although ore grades were lower than expected, increased mining activity resulted in significantly higher gold and silver production at the Candelaria Mine. For 1996, the mine produced 120 tons of silver and 468 kilograms of gold (Kinross Gold Corp., 1997). Corresponding production for 1995 was 88 tons and 331 kilograms of silver and gold respectively.

Both gold and silver production increased at the Denton-Rawhide Mine in 1996, owing in part to productivity gains. For the year, the heap-leach operation recovered more than 3,950 kilograms of gold and 33 tons of silver (Kinross Gold Corp., 1997). In 1995, the mine had produced 3,800 kilograms and 31 tons of gold and silver, respectively.

A project to expand the capacity of the mill serving the McCoy-Cove Mine was completed in April, enabling the mill to treat 6,800 tons of ore per day. Silver production at the McCoy-Cove Mine decreased significantly, owing primarily to the mining of lower grade ore. For 1996, the mine heap leached nearly 6 million tons of ore and recovered nearly 2,100 kilograms of gold and 16 tons of silver. Milling 3 million tons of ore produced an additional 6,370 kilograms of gold and 205 tons of silver (Echo Bay Mines Ltd., 1997). Corresponding data for 1995 were the heap leaching of 4 million tons yielding 1,860 kilograms and 27 tons of gold and silver, respectively, and the milling of 2.4 million tons yielding 7,780 kilograms of gold and 343 tons of silver.

Although gold production at the Rochester Mine increased during 1996, silver production declined slightly. The increased gold production was attributed in part to the completion of a new ore conveyor system in 1995 and to a decline in the waste-to-ore strip ratio in 1996. For the year, workers mined 7.3 million tons of ore and produced more than 2 tons of gold and 194 tons of silver (Coeur d'Alene Mines Corp., 1997). Corresponding data for 1995 included the mining of 7.5 million tons of ore and the production of nearly 2 tons and 202 tons of gold and silver, respectively.

Amex Gold Inc. completed mining operations at its Sleeper gold-silver mine during the first quarter. Although milling operations were terminated in August, residual heap leaching continued through yearend. Reclamation of the open pit site was under way by yearend and was expected to be completed by the year 2000.

World Review

Gold Fields Mineral Services Ltd. estimated that world fabrication demand for silver increased to nearly 25,000 tons in 1996, from 23,900 tons in 1995.

Mexico.—Continuing as the leading producer of silver, with 16% of world production, Mexico lifted ore containing 2,500 tons of silver from its mines in 1996, essentially unchanged from the revised output of 1995. More than 80% of Mexico's silver is usually produced by six States: Chihuahua, Durango, Guanajuato, Hidalgo, Sonora, and Zacatecas.

Most Mexican refined silver came from facilities that also refined lead and zinc. The Peñoles facility at Torreón, Coahuila, and the Grupo Mexico plant, in Chihuahua, refined lead concentrates and produced large quantities of silver in the process. Silver was also produced from zinc concentrates at both of these facilities. The Cobre de Mexico refineries in Mexico City and Celaya, Guanajuato, extracted silver electrolytically from copper anodes. Real del Monte, in Pachuca, has a precious metal refinery that processed silver and gold from the mine's own concentrates as well as from concentrates of other mines.

Peru.—With a silver production of 1,968 tons, Peru remained the world's second largest producer after Mexico. The state-owned corporation, Empresa Minera del Centro del Peru, led Peruvian silver producers in output, with 653 tons. Cía. de Minas Buenaventura S.A. and its subsidiary, Orcopampa, dominated the medium-sized silver-mining sector with more than 200 tons.

Outlook

Byproduct silver from the processing of other nonferrous metals such as copper, gold, lead, and zinc remains the dominant component of domestic and world silver supply. As a result, the quantity of silver produced is in many instances more dependent on the price of the principal metal mined than on the price of silver. Although domestic silver production will continue to respond to price movements for other nonferrous metals, it is believed that domestic production of silver will increase slightly in the near term, but remain in the range of 1,400 to 2,000 tons. Worldwide, mine production of silver should remain at about 15,000 tons.

During the next few years, the domestic demand for silver will likely follow the general economy, either upward or downward, but remain at approximately 3,700 tons. Similarly, local economic conditions are expected to be the major determinant of silver demand in other countries, although demand could increase slightly as new markets in less-developed countries are gradually developed.

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¹Prior to January 1996, published by the U.S. Bureau of Mines.

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TABLE 1
SALIENT SILVER STATISTICS 1/

		1992	1993	1994	1995	1996
United States:						
Mine production	metric tons	1,800	1,640	1,490	1,560 r/	1,570
Value	thousands	\$229,000	\$227,000	\$253,000	\$259,000 r/	\$263,000
Refinery production:						
Domestic and foreign ores and concentrates	metric tons	2,160	1,790	1,810	(2/)	(2/)
Scrap (old and new)	do.	1,760	2,020	1,700	(2/)	(2/)
Exports: Refined	do.	911	705	868	2,810	2,900
Imports for consumption: Refined	do.	2,660	2,180	2,060	2,630	2,580
Stocks, Dec. 31:						
Industry	do.	677	735	929	(2/)	(2/)
Futures exchanges	do.	9,380	10,500	10,400	6,290	4,550
Department of the Treasury	do.	775	NA	NA	NA	NA
Department of Defense	do.	29	34	15	13	NA
National Defense Stockpile	do.	2,260	1,850	1,670	1,450	1,450
Coinage	do.	NA	NA	NA	NA	NA
Price, average per troy ounce 3/		\$3.94	\$4.30	\$5.29	\$5.15	\$5.19
Employment 4/		1,600	1,100	1,000	1,200	1,400
World: Mine production	metric tons	14,900 r/	14,400 r/	14,200 r/	15,100 r/	15,200 e/

e/ Estimated. r/ Revised. NA Not available.

1/ Data are rounded to three significant digits, except prices.

2/ Data under review.

3/ Price data are from Platt's Metals Week Annual Handy & Harman quotation.

4/ Employment data are from Mine Safety and Health Administration.

TABLE 2
MINE PRODUCTION OF SILVER IN THE UNITED STATES, BY STATE 1/

(Kilograms)

State	1995	1996
Alaska	109,000	W
Arizona	220,000	188,000
California	13,600 r/	21,600
Colorado	W	7,430
Idaho	182,000	229,000
Montana	76,700 r/	W
Nevada	693,000 r/	605,000
New Mexico	19,900	W
South Dakota	4,030	4,890
Other States 2/	247,000	517,000
Total	1,560,000 r/	1,570,000

r/ Revised. W Withheld to avoid disclosing company proprietary data; included with "Other States."

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Includes Illinois, Michigan, Missouri, New York, South Carolina, Tennessee, Utah, Wisconsin, and States indicated by symbol "W."

TABLE 3
 TWENTY-FIVE LEADING SILVER-PRODUCING MINES IN THE UNITED STATES IN 1996, IN ORDER OF OUTPUT

Rank	Mine	County and State	Operator	Source of silver
1	McCoy - Cove	Lander, NV	Echo Bay Mines	Gold ore.
2	Rochester	Pershing, NV	Coeur Rochester Inc.	Do.
3	Bingham Canyon	Salt Lake, UT	Kennecott-Utah Copper Co.	Copper ore.
4	Red Dog	NW Arctic, AK	Cominco Alaska Inc.	Lead-zinc ore.
5	Candelaria	Mineral, NV	Kinross Delamar Mining Co.	Gold ore.
6	Greens Creek	Southeastern Alaska, AK	Kennecott Minerals Co.	Zinc ore.
7	Sunshine	Shoshone, ID	Sunshine Mining and Refining Co.	Silver ore.
8	Mission Unit 1/	Pima, AZ	ASARCO Incorporated	Copper ore.
9	Lucky Friday	Shoshone, ID	Hecla Mining Co.	Lead-zinc ore.
10	Coeur	do.	ASARCO Incorporated	Silver ore.
11	Morenci	Greenlee, AZ	Phelps Dodge Corp.	Copper ore.
12	Montana Tunnels	Jefferson, MT	Pegasus Gold Inc.	Zinc ore.
13	Denton-Rawhide	Mineral, NV	Kennecott Rawhide Mining Co.	Gold ore.
14	Kinross Delamar	Owyhee, ID	Kinross Delamar Mining Co.	Do.
15	Continental	Silver Bow, MT	Montana Resources Inc.	Copper ore.
16	Sierrita	Pima, AZ	Cyprus Minerals Co.	Do.
17	Bagdad	Yavapai, AZ	do.	Do.
18	Flambeau	Rusk, WI	Kennecott Corp.	Do.
19	Ray Unit	Pinal, AZ	ASARCO Incorporated	Do.
20	Robinson	White Pine, NV	BHP Copper	Do.
21	San Manuel	Pinal, AZ	do.	Do.
22	Casteel 2/	Iron, MO	The Doe Run Co.	Lead-zinc ore.
23	Buick	do.	do.	Do.
24	Chino	Grant, NM	Phelps Dodge Corp.	Copper ore.
25	Grouse Creek	Custer, ID	Hecla Mining Co.	Gold ore.

1/ Includes Eisenhower, Mission, Pima, and San Xavier Mines.

2/ Includes Brushy Creek Mill.

TABLE 4
U.S. EXPORTS OF SILVER, BY COUNTRY 1/ 2/

Year and country	Ore and concentrates 3/		Dore and precipitates		Refined bullion		Total		Waste and scrap	
	Quantity (kilograms, contained silver)	Value (thousands)	Quantity (kilograms, contained silver)	Value (thousands)	Quantity (kilograms, contained silver)	Value (thousands)	Quantity (kilograms, contained silver)	Value (thousands)	Quantity (kilograms, gross weight)	Value (thousands)
1995	741	\$233	72,100	\$23,500	2,810,000	\$497,000	2,890,000	\$521,000	1,580,000	\$304,000
1996:										
Belgium	--	--	--	--	141,000	28,300	141,000	28,300	243,000	39,700
Brazil	--	--	356	82	--	--	356	82	--	--
Canada	211	38	31	5	15,200	2,530	15,400	2,570	469,000	62,200
China	5	3	16	3	--	--	21	6	87,400	12,000
Denmark	--	--	--	--	49,800	19,500	49,800	19,500	36	5
France	250	45	--	--	--	--	250	45	39,200	6,870
Germany	--	--	3	6	61	11	64	17	59,700	16,400
Hong Kong	34	6	--	--	20,100	3,280	20,100	3,290	2,890	382
India	--	--	--	--	41	5	41	5	773	101
Israel	710	128	--	--	--	--	710	128	337	48
Italy	--	--	--	--	143	20	143	20	785	125
Japan	--	--	18,300	3,230	145,000	24,500	163,000	27,800	166,000	23,400
Korea, Republic of	--	--	--	--	11,900	2,120	11,900	2,120	188	38
Romania	--	--	--	--	--	--	--	--	163	21
Singapore	--	--	--	--	112,000	18,400	112,000	18,400	--	--
Sweden	--	--	--	--	--	--	--	--	39,200	6,950
Switzerland	--	--	8,650	1,610	750,000	136,000	758,000	138,000	487	1,910
Taiwan	--	--	13,100	2,560	9,710	2,130	22,800	4,690	2,160	442
Thailand	240	84	--	--	34,800	6,380	35,000	6,460	--	--
United Arab Emirates	--	--	--	--	493,000	87,500	493,000	87,500	--	--
United Kingdom	55	9	2,740	520	1,100,000	200,000	1,100,000	201,000	164,000	64,900
Uruguay	--	--	--	--	19,400	4,330	19,400	4,330	--	--
Other	17	3	113	15	1,230	225	1,360	243	1,040	716
Total	1,520	316	43,300	8,030	2,900,000	536,000	2,950,000	544,000	1,280,000	236,000

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Bullion also moves in both directions between U.S. markets and foreign stocks on deposit in the Federal Reserve Bank. Monetary silver excluded.

3/ Includes base metal ores, concentrates, and matte imported for refining.

Source: Bureau of the Census.

TABLE 5
U.S. IMPORTS FOR CONSUMPTION OF SILVER, BY COUNTRY 1/ 2/

Year and country	Ore and concentrates 3/		Dore and precipitates		Refined bullion		Total		Waste and scrap	
	Quantity (kilograms, contained silver)	Value (thousands)	Quantity (kilograms, contained silver)	Value (thousands)	Quantity (kilograms, contained silver)	Value (thousands)	Quantity (kilograms, contained silver)	Value (thousands)	Quantity (kilograms, gross weight)	Value (thousands)
1995	225,000	\$37,400	395,000	\$124,000	2,630,000	\$428,000	3,250,000	\$590,000	2,140,000	\$55,000
1996:										
Argentina	--	--	--	--	--	--	--	--	45	66
Australia	--	--	--	--	--	--	--	--	22,500	554
Brazil	--	--	--	--	5,530	1,100	5,530	1,100	68	179
Canada	7,970	1,050	50,100	9,040	1,100,000	188,000	1,160,000	198,000	243,000	10,100
Chile	--	--	202,000	78,300	58,300	9,840	260,000	88,200	1,780	1,090
Colombia	--	--	1,480	248	--	--	1,480	248	--	--
Costa Rica	--	--	247	37	--	--	247	37	--	--
Denmark	--	--	--	--	--	--	--	--	15,000	49
Dominican Republic	--	--	2,720	4,330	73,500	16,600	76,200	20,900	2,960	1,580
El Salvador	--	--	--	--	--	--	--	--	6,850	156
Estonia	--	--	--	--	--	--	--	--	778	2,870
France	--	--	--	--	--	--	--	--	7,780	1,750
Germany	--	--	(4/)	8	--	--	(4/)	8	566,000	3,170
Ireland	--	--	--	--	--	--	--	--	236	1,680
Israel	--	--	--	--	--	--	--	--	6,910	456
Italy	--	--	--	--	--	--	--	--	8,930	279
Japan	--	--	--	--	--	--	--	--	18,000	702
Malaysia	--	--	--	--	--	--	--	--	290,000	15,500
Mexico	145,000	24,400	5,670	938	942,000	156,000	1,090,000	182,000	17,200	5,950
Netherlands	--	--	--	--	--	--	--	--	116,000	517
Nicaragua	--	--	590	100	--	--	590	100	--	--
Panama	--	--	117	19	415	57	532	76	133	20
Peru	--	--	17,700	3,020	378,000	66,100	396,000	69,200	--	--
Philippines	--	--	--	--	--	--	--	--	74,300	1,220
Poland	--	--	--	--	16,000	2,750	16,000	2,750	--	--
Portugal	--	--	--	--	--	--	--	--	21,000	48
Russia	--	--	--	--	93	16	93	16	714	303
Singapore	--	--	--	--	--	--	--	--	6,380	117
South Africa	--	--	165	30	52	8	217	38	39	118
Switzerland	--	--	--	--	729	117	729	117	3	12
Thailand	--	--	--	--	--	--	--	--	351	665
United Kingdom	--	--	8	3	788	67	796	70	381,000	2,150
Other	--	--	1,080	194	(4/)	5	1,080	199	1,130	1,130
Total	153,000	25,500	281,000	96,300	2,580,000	441,000	3,010,000	562,000	1,810,000	52,500

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Bullion also moves in both directions between U.S. markets and foreign stocks on deposit in the Federal Reserve Bank. Monetary silver excluded.

3/ Includes base metal ores, concentrates, and matte imported for refining.

4/ Less than 1/2 unit.

Source: Bureau of the Census.

TABLE 6
SILVER: WORLD MINE PRODUCTION, BY COUNTRY 1/ 2/

(Metric tons)

Country	1992	1993	1994	1995	1996 e/
Algeria e/	4	4	4	3	4
Argentina	45	43	38 r/	48 r/	48
Australia	1,218	1,092	1,045	939 r/	1,020 3/
Austria	2	--	2 r/	2 r/	1
Bolivia	282	333	352	425 r/	380
Brazil 4/	162	108 r/	50 r/	50 r/	50
Bulgaria e/	35	35	30	35	35
Burma	5	2	6	4	4
Canada (shipments)	1,220	896	740	1,245 r/	1,228 p/
Chile	1,029	970	983	1,032	1,035
China e/	800 r/	840 r/	810 r/	910 r/	930
Colombia 5/	8	7	6	6	7 3/
Costa Rica e/	(6/)	(6/)	(6/) 3/	(6/)	(6/)
Croatia e/	1	1	1	--	--
Czech Republic e/ 7/	XX	1	(6/)	-- 3/	--
Czechoslovakia e/ 8/	6	XX	XX	XX	XX
Dominican Republic	15	1 e/	2 e/	21 r/	21
Ecuador e/	(6/)	(6/)	(6/)	(6/)	(6/)
Fiji	1	1	1	2	2
Finland 9/	27	29	26	27 e/	26
France	13	10	1	1	1
Germany e/	1 r/ 3/	-- r/	-- r/	-- r/	--
Ghana e/	2	2	2	3	3
Greece	62	59	45	33 r/	30
Honduras	43	24	25	25 e/	29 3/
India	47	51	50	38 r/	40
Indonesia	100	90	107	183 r/	185
Iran e/	50	60	60	60	60
Ireland	13	13	17	14 r/	14
Italy 10/	12	5	14	12 e/	12
Japan	178	137	133	100	85 3/
Kazakstan e/ 5/	500 r/	500 r/	500 r/	489 r/ 3/	480
Korea, North e/	50	50	50	50	50
Korea, Republic of 5/	333	215	257 r/	299 r/	254 3/
Macedonia e/	10	10	10	10	10
Malaysia	15	14	13	11	10 3/
Mali e/	(6/)	(6/)	(6/)	(6/)	(6/)
Mexico	2,098	2,420	2,330	2,496 r/	2,500
Morocco	213	309	328	330 e/	300
Namibia	89	72	62	66	42 3/
New Zealand	22	26	28 r/	28 r/	30
Nicaragua	2	2	2 e/	2 e/	2
Papua New Guinea	95	96	66 r/	65	59 3/
Peru	1,614	1,631	1,742	1,909 r/	1,968 3/
Philippines	33	28	30	27	20
Poland	798	767	1,064	1,001	1,100
Portugal	39	36	32	39 r/	38
Romania e/	73	70	70 3/	60	60
Russia e/	800	800	800	700	700
Saudi Arabia	16	18	17	18 e/	17
Serbia and Montenegro	66	25	18	31 r/	30
Slovenia e/	(6/)	--	--	--	--
Solomon Islands	(6/)	(6/)	--	--	--
South Africa	183	192	196	174	167 3/
Spain	206 r/	158 r/	136 r/	102 r/	100
Sweden	210	255	276	268	270
Tunisia e/	1	1	1	1	1
Turkey e/	103	103	65	65	65
United States	1,800	1,640	1,490	1,560 r/	1,570 3/
Uzbekistan e/	55	60	65	65	70
Zaire e/	18 r/	18 r/	12 r/	8 r/	10

See footnotes at end of table.

TABLE 6--Continued
SILVER: WORLD MINE PRODUCTION, BY COUNTRY 1/ 2/

(Metric tons)

Country 3/	1992	1993	1994	1995	1996 e/
Zambia 11/	21	16	12 r/	8 r/	11
Zimbabwe	17	12	11	16 r/	16
Total	14,900 r/	14,400 r/	14,200 r/	15,100 r/	15,200

e/ Estimated. p/ Preliminary. r/ Revised. XX Not applicable.

1/ World totals, U.S. data, and estimated data are rounded to three significant digits; may not add to totals shown.

2/ Recoverable content of ores and concentrates produced unless otherwise specified. Table includes data available through June 13, 1997.

3/ Reported figure.

4/ Includes the following quantities, in kilograms, identified as secondary silver: 1992--21,170 (revised); 1993--42,500 (revised); 1994--30,000 (revised); 1995--35,000 (revised); and 1996--35,000 (estimated).

5/ Smelter and/or refinery production.

6/ Less than 1/2 unit.

7/ Formerly part of Czechoslovakia; data were not reported separately until 1993.

8/ Dissolved Dec. 31, 1992.

9/ Metal content.

10/ Includes production from imported ores.

11/ Year beginning Apr. 1 of that stated.