GOLD

(Data in metric tons¹ of gold content unless otherwise noted)

<u>Domestic Production and Use</u>: In 2016, domestic gold mine production was estimated to be about 209 tons, slightly less than that in 2015, and the value was estimated to be about \$8.5 billion. Gold was produced at more than 40 lode mines, at several large placer mines in Alaska, and numerous smaller placer mines (mostly in Alaska and in the Western States). About 6% of domestic gold was recovered as a byproduct of processing domestic base-metal ores, chiefly copper. The top 26 operations yielded more than 99% of the mined gold produced in the United States. Commercial-grade gold was produced at about 15 refineries. A few dozen companies, out of several thousand companies and artisans, dominated the fabrication of gold into commercial products. U.S. jewelry manufacturing was heavily concentrated in the New York, NY, and Providence, RI, areas, with lesser concentrations in California, Florida, and Texas. Estimated domestic uses were jewelry; 40%; electrical and electronics, 35%; official coins, 20%; and other, 5%.

Salient Statistics—United States:	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u> 2015</u>	2016 ^e
Production:					
Mine	235	230	210	214	209
Refinery:					
Primary	218	223	253	248	240
Secondary (new and old scrap)	215	210	135	124	130
Imports for consumption ²	326	315	308	265	400
Exports ²	699	693	511	494	350
Consumption, reported	147	160	152	164	165
Stocks, yearend, Treasury ³	8,140	8,140	8,140	8,140	8,140
Price, dollars per troy ounce ⁴	1,673	1,415	1,269	1,163	1,270
Employment, mine and mill, number⁵	12,700	12,500	12,000	11,900	12,000
Net import reliance ⁶ as a percentage of	_	_	_	_	_
apparent consumption	(⁷)	(⁷)	(⁷)	(⁷)	$(^{7})$

Recycling: In 2016, an estimated 130 tons of new and old scrap was recycled, almost 80% of reported industrial consumption. Following the increase in the price of gold, the domestic supply of gold from recycling increased by 5% compared to 2015 scrap production but was one-half of the alltime high level in 2011.

Import Sources (2012-15): Mexico, 28%; Canada, 22%; Colombia, 14%; Peru, 10%; and other, 26%.

<u>Tariff</u>: Most imports of unwrought gold, including bullion and dore, enter the United States duty free.

Depletion Allowance: 15% (Domestic), 14% (Foreign).

Government Stockpile: The U.S. Department of the Treasury maintains stocks of gold (see salient statistics above), and the U.S. Department of Defense administers a Governmentwide secondary precious-metals recovery program.

Events, Trends, and Issues: The estimated gold price in 2016 was 9% more than the price in 2015 and was 24% lower than the record-high annual price in 2012. The Engelhard daily price of gold in 2016 fluctuated through several cycles. The gold price began the year at the lowest level of the year and trended upward through July, with significant increases in the average monthly prices in January through March. Following the United Kingdom's referendum vote to leave the European Union, the price increased to the year-to-date high (and projected annual high) of \$1,372.98 per troy ounce on July 6. In October, the price dropped significantly, with an investor selloff coinciding with improved economic data in the United States.

The slight decrease in domestic mine production was attributed to lower production from mines that changed ownership and closure of some smaller scale mines in Nevada. Gold production from the Cortez Mine in Nevada, the second leading U.S. producer, increased in 2016 owing to increased ore throughput. In 2016, worldwide gold production was unchanged from that in 2015, because increased production in Canada was offset by a decrease in production in Mexico.

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In 2016, domestic consumption of gold used in the production of coins and bars increased slightly owing to increased investor interest reportedly tied to uncertainty over the U.S. Presidential election. In addition to the U.S. election, political uncertainties in Europe, including the United Kingdom's referendum on leaving the European Union, reportedly spurred a slight increase in global investment consumption of gold. Consumption from industrial and jewelry end uses deceased, primarily owing to the increases in the price of gold.

<u>World Mine Production and Reserves</u>: Reserves for Australia, Canada, China, Ghana, Papua New Guinea, and Peru were revised based on Government or industry reports.

	Mine pr	Mine production		
	<u>2015</u>	<u>2016^e</u>	Reserves ⁸	
United States	214	209	3,000	
Australia	278	270	9,500	
Brazil	81	80	2,400	
Canada	153	170	2,400	
China	450	455	2,000	
Ghana	88	90	990	
Indonesia	97	100	3,000	
Mexico	135	125	1,400	
Papua New Guinea	60	65	1,500	
Peru	145	150	2,400	
Russia	252	250	8,000	
South Africa	145	140	6,000	
Uzbekistan	102	100	1,700	
Other countries	<u>897</u>	900	<u>13,000</u>	
World total (rounded)	3,100	3,100	57,000	

<u>World Resources</u>: An assessment of U.S. gold resources indicated 33,000 tons of gold in identified (15,000 tons) and undiscovered (18,000 tons) resources.⁹ Nearly one-quarter of the gold in undiscovered resources was estimated to be contained in porphyry copper deposits. The gold resources in the United States, however, are only a small portion of global gold resources.

<u>Substitutes</u>: Base metals clad with gold alloys are widely used in electrical and electronic products, and in jewelry to economize on gold; many of these products are continually redesigned to maintain high-utility standards with lower gold content. Generally, palladium, platinum, and silver may substitute for gold.

eEstimated.

¹One metric ton (1,000 kilograms) = 32,150.7 troy ounces.

²Refined bullion, dore, ores, concentrates, and precipitates. Excludes: Waste and scrap, official monetary gold, gold in fabricated items, gold in coins, and net bullion flow (in tons) to market from foreign stocks at the New York Federal Reserve Bank.

³Includes gold in Exchange Stabilization Fund. Stocks were valued at the official price of \$42.22 per troy ounce.

⁴Engelhard's average gold price quotation for the year. In 2016, the price was estimated by the U.S. Geological Survey based on monthly data from January through October.

⁵Data from Mine Safety and Health Administration.

⁶Defined as imports – exports + adjustments for Government and industry stock changes.

⁷In recent years, the United States has been a net exporter; however, large unreported investor stock changes preclude calculation of a meaningful net import reliance.

⁸See Appendix C for resource and reserve definitions and information concerning data sources.

⁹U.S. Geological Survey National Mineral Resource Assessment Team, 2000, 1998 assessment of undiscovered deposits of gold, silver, copper, lead, and zinc in the United States: U.S. Geological Survey Circular 1178, 21 p.