# **Production** Cost Analysis with Circulating Metal Commodity Metal Prices



**United States Mint Department of the Treasury** 

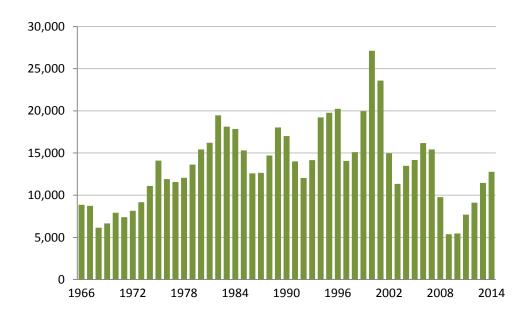
December 2014

As America's sole manufacturer of legal tender coinage, the efficient and effective production and distribution of coinage is the Mint's highest priority.

We mint and issue circulating coins to the Federal Reserve Banks (FRB) in quantities to support their service to commercial banks and other financial institutions. These financial institutions then meet the coinage needs of retailers and the public. The Mint recognizes revenue from the sale of circulating coins at face value when they are shipped to the FRB.

**CIRCULATING RESULTS** FY 2014 circulating coin shipments to the FRB increased by 2.3 billion units (21.9 percent) to a total 13.0 billion coins compared to last year. The year saw a marked 58.5 percent increase in quarter-dollar shipments, which drove increases in revenues and seigniorage.

Total Circulating Coin Production (coins in millions)



Shipment volumes increased for all denominations. As a percentage of total shipments, quarter-dollar shipments increased from 10 percent in FY 2013 to 13 percent in FY 2014. In contrast, the percentage of total shipments for all other denominations decreased 1 percentage point to 61 percent, 17 percent and 9 percent of total shipments for one-cent coins (pennies), dimes and five-cent coins (nickels), respectively.

FY 2014 circulating revenue was \$783.0 million, 35.5 percent higher than \$578.0 million last year, primarily because of a 58.5 percent increase in quarter-dollar revenues. FY 2014 seigniorage was \$289.1 million, 110.4 percent higher than last year, mainly because of increased quarter-dollar shipments and lower metal costs for nickels, dimes, and quarters. Lower metal costs this year compared to last year saved us approximately \$28.8 million in minting and issuing the 13.0 billion coins ordered by the FRB. The Mint also controlled indirect costs, allowing the increased shipments to generate more seigniorage. Plant costs at the production facilities at Denver and Philadelphia increased only 1.7 percent (excluding a one-time establishment of an allowance last year for supplies of \$6.7 million), despite the 21.9 percent increase in coin production. General and administrative costs increased slightly with increased research and development expenses. Seigniorage per \$1 issued was \$0.37 in FY 2014, versus \$0.24 last year.

FY 2014 unit costs decreased for all denominations compared to last year. This was because we increased production for all denominations and reduced metal costs for nickels, dimes, and quarters. By keeping indirect costs down in the face of increased demand, fixed costs were spread among more units. The unit cost for both pennies (1.7 cents) and nickels (8.1 cents) remained above face value for the ninth consecutive fiscal year. Although there was higher demand, lower unit costs generated a smaller FY 2014 loss (\$90.5 million) for these two denominations compared to FY 2013 (\$104.5 million).

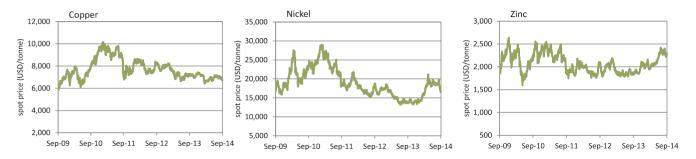
Compared to last year, the average spot prices for zinc prices increased 8.4 percent to \$2,080.92, nickel increased 3.9 percent to \$16,394.01 per tonne, and average copper prices fell 6.9 percent to \$6,993.38.

## UNIT COST OF PRODUCING AND DISTRIBUTING COINS BY DENOMINATION

2014	One-Cent	ent Five Cent Dim		Quarter-Dollar	\$1 Coin
Cost of Goods Sold	\$ 0.0143	\$ 0.0699	\$ 0.0338	\$ 0.0775	\$ 0.0000
Selling, General & Administrative	\$ 0.0021	\$ 0.0102	\$ 0.0049	\$ 0.0109	\$ 0.0000
Distribution to FRB	\$ 0.0002	\$ 0.0008	\$ 0.0004	\$ 0.0011	\$ 0.0000
Total Unit Cost	\$ 0.0166	\$ 0.0809	\$ 0.0391	\$ 0.0895	\$ 0.0000
2013	One-Cent	Five Cent Dime Quarter-Dollar		\$1 Coin	
Cost of Goods Sold	\$ 0.0156	\$ 0.0805	\$ 0.0391	\$ 0.0903	\$ 0.0000
Selling, General & Administrative	\$ 0.0025	\$ 0.0131	\$ 0.0061	\$ 0.0135	\$ 0.0000
Distribution to FRB	\$ 0.0002	\$ 0.0005	\$ 0.0004	\$ 0.0012	\$ 0.0000
Total Unit Cost	\$ 0.0183	\$ 0.0941	\$ 0.0456	\$ 0.1050	\$ 0.0000
2012	One-Cent	Five Cent	Dime	Quarter-Dollar	\$1 Coin
Cost of Goods Sold	\$ 0.0163	\$ 0.0829	\$ 0.0415	\$ 0.0943	\$ 0.1802
Selling, General & Administrative	\$ 0.0034	\$ 0.0173	\$ 0.0080	\$ 0.0171	\$ 0.0288
Distribution to FRB	\$ 0.0003	\$ 0.0007	\$ 0.0004	\$ 0.0016	\$ 0.0021
Total Unit Cost	\$ 0.0200	\$ 0.1009	\$ 0.0499	\$ 0.1130	\$ 0.2111

2011	One-Cent	Five-Cent	Dime	Quarter-Dollar	\$1 Coin	
Cost of Goods Sold	\$ 0.0197	\$ 0.0938	\$ 0.0474	\$ 0.0923	\$ 0.1531	
Selling, General & Administrative	\$ 0.0041	\$ 0.0176	\$ 0.0087	\$ 0.0176	\$ 0.0251	
Distribution to FRB	\$ 0.0003	\$ 0.0004	\$ 0.0004	\$ 0.0015	\$ 0.0021	
Total Unit Cost	\$ 0.0241	\$ 0.1118	\$ 0.0565	\$ 0.1114	\$ 0.1803	

## Base Metal Daily Official Spot Price (prices per metric tonne in dollars)



#### Circulating Seigniorage by Year (\$ Millions) ■ Dollar \$1,000 ■ Quarter ☐ Dime ■ Five-cent \$574 \$800 ■ One-cent \$51 \$600 \$349 \$478 \$400 \$413 \$383 \$319 \$271 \$354 \$283 \$200 \$77 \$154 \$67 \$45 \$61 \$31 \$38 \$(15) \$(27) \$188 \$132 \$135 \$133 \$104 \$16 \$(2) \$(20) \$83 \$61 \$-\$(59) \$(40) \$(57) \$(60) \$(25) \$(22) \$(200) 2006 2007 2008 2009 2010 2011 2012 2013 2014

Shows seigniorage generated by denomination for the last nine years.

## CIRCULATING (coins and dollars in millions except seigniorage per \$1 issued)

		2014		2013		2012		2011		2010	% Change 2013 to 2014
	2014		2013			2012		2011		2010	2013 10 2014
Coin Shipments		13,037		10,696		9,082		7,396		5,399	21.9%
Value of Shipments	\$	783.0	\$	578.0	\$	493.3	\$	776.9	\$	618.2	35.5%
Gross Cost	\$	493.9	\$	440.6	\$	387.4	\$	428.1	\$	317.4	12.1%
Cost of Goods Sold	\$	435.4	\$	383.7	\$	325.8	\$	364.7	\$	239.2	13.5%
Selling, General & Administrative	\$	58.5	\$	56.9	\$	61.6	\$	63.4	\$	78.2	2.8%
Seigniorage	\$	289.1	\$	137.4	\$	105.9	\$	348.8	\$	300.8	110.4%
Seigniorage per \$1 Issued	\$	0.37	\$	0.24	\$	0.21	\$	0.45	\$	0.49	54.2%

# SHIPMENTS, COSTS AND SEIGNIORAGE BY DENOMINATION

(coins and dollars in millions except seigniorage per \$1 issued)

2014	One-Cent		Five- Cent	Dime	Quarter-Dollar		Dollar		Mutilated & Other		Total
Coin Shipments		7,920	1,211	2,223		1,683		-		-	13,037
Value of Shipments	\$	79.2	\$ 60.5	\$222.3	\$	421.0	\$	-	\$	-	\$ 783.0
Gross Cost	\$	132.1	\$ 98.1	\$ 87.1	\$	150.5	\$	_	\$	26.1	\$ 493.9
Cost of Goods Sold	\$	115.3	\$ 85.7	\$ 76.1	\$	132.2	\$	-	\$	26.1	\$ 435.4
Selling, General & Administrative	\$	16.8	\$ 12.4	\$ 11.0	\$	18.3	\$	-	\$	-	\$ 58.5
Seigniorage	\$	(52.9)	\$ (37.6)	\$135.2	\$	270.5	\$	-	\$	(26.1)	\$ 289.1
Seigniorage per \$1 Issued	\$	(0.67)	\$ (0.62)	\$ 0.61	\$	0.64					\$ 0.37
2013	On	e-Cent	Five- Cent	Dime	Qua	rter-Dollar	D	Oollar		itilated Other	Total
Coin Shipments		6,610	1,123	1,901		1,062		-		-	10,696
Value of Shipments	\$	66.1	\$ 56.2	\$190.1	\$	265.6	\$	_	\$	-	\$ 578.0
Gross Cost	\$	121.1	\$ 105.7	\$ 86.6	\$	111.5	\$	_	\$	15.7	\$ 440.6
Cost of Goods Sold	\$	104.7	\$ 91.0	\$ 75.1	\$	97.2	\$	-	\$	15.7	\$ 383.7
Selling, General & Administrative	\$	16.4	\$ 14.7	\$ 11.5	\$	14.3	\$	-	\$	-	\$ 56.9
Seigniorage	\$	(55.0)	\$ (49.5)	\$103.5	\$	154.1	\$	-	\$	(15.7)	\$ 137.4
Seigniorage per \$1 Issued	\$	(0.83)	\$ (0.88)	\$ 0.54	\$	0.58					\$ 0.24
2012	On	e-Cent	Five- Cent	Dime	Quarter-Dollar		Dollar		Mutilated & Other		Total
Coin Shipments		5,835	1,006	1,658		486		97			9,082
Value of Shipments	\$	58.4	\$ 50.3	\$165.8	\$	121.7	\$	97.1	\$	-	\$ 493.3
Gross Cost	\$	116.4	\$ 101.5	\$ 82.7	\$	54.9	\$	20.5	\$	11.4	\$ 387.4
Cost of Goods Sold	\$	96.5	\$ 84.1	\$ 69.5	\$	46.6	\$	17.7	\$	11.4	\$ 325.8
Selling, General & Administrative	\$	19.9	\$ 17.4	\$ 13.2	\$	8.3	\$	2.8	\$	-	\$ 61.6
Seigniorage	\$	(58.0)	\$ (51.2)	\$ 83.1	\$	66.8	\$	76.6	\$	(11.4)	\$ 105.9
Seigniorage per \$1 Issued	\$	(0.99)	\$ (1.02)	\$ 0.50	\$	0.55	\$	0.79	\$	-	\$ 0.21