

METALLIFEROUS MINES LICENSE TAX

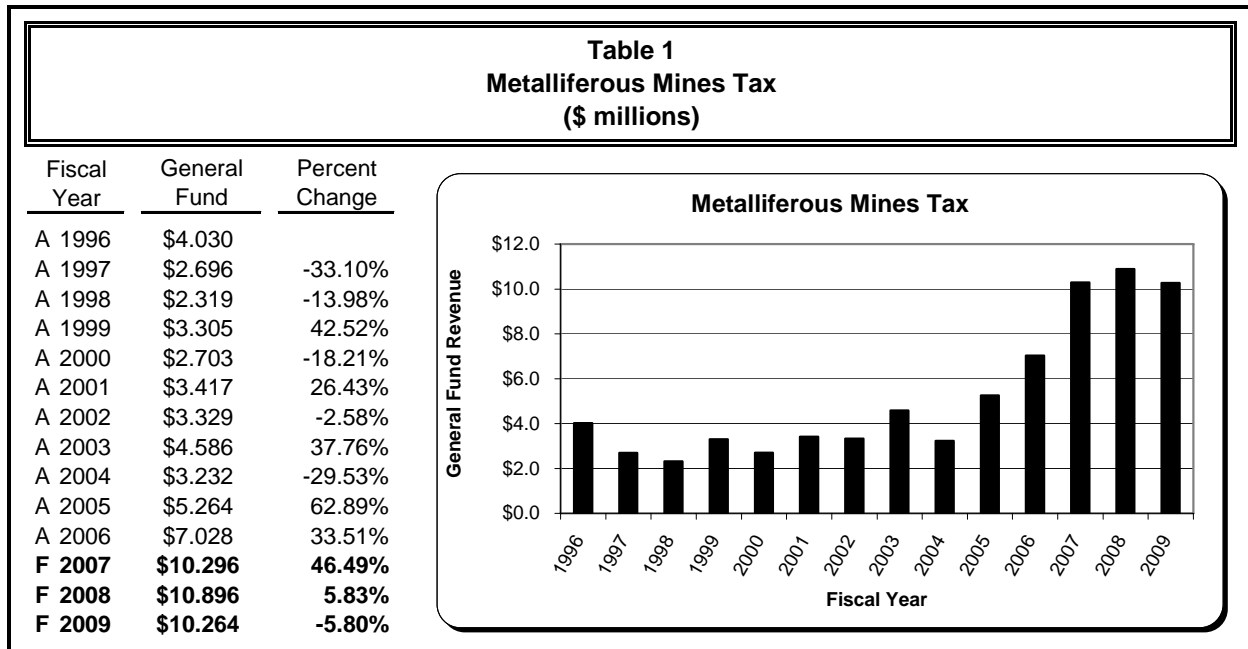
Revenue Description

Montana taxes the gross value of metals mined in the state (15-37-101, MCA). Gross value is the market value of the refined product, less the costs of transporting the unrefined product and refining it (15-23-801, MCA). The first \$250,000 of gross value is exempt from the tax, which exempts small mines from the tax. The tax rate for production beyond \$250,000 depends on the mineral and the amount of processing at the mine. Concentrate, which is unsmelted ore that may have undergone mechanical processing, is taxed at 1.81%. Metals that have been partially or completely separated from impurities by smelting, but may not have had the individual metals separated, are taxed at 1.6% (15-37-103, MCA).

Revenues from the metalliferous mines license tax are divided between the state and counties that have fiscal or economic impacts from large-scale mining. The state general fund currently receives 57% of the revenue. Prior to FY 2006 the general fund received 58%, except for FY 2003 when the general fund received 65% of the tax revenue.

Historical and Projected Revenue

Table 1 shows actual general fund revenue from the metalliferous mines tax for FY 1996 through FY 2006 and forecast revenue for FY 2007 through FY 2009.



Revenue from the metal mines tax has varied across years because of changes in the tax

due date, changes in production, and price variation. Through December 31, 2002, the tax was paid annually. Beginning January 1, 2003, the tax is paid semiannually. This resulted in taxes on eighteen months of production being recorded as revenue in FY 2003. Revenue increased from FY 2004 through FY 2006 due to production increases in FY 2005 and price increases in FY 2006. Revenue is projected to continue increasing through FY 2008 with projected production and mineral price increases. A decrease in production causes the 5.8% decrease of revenue in FY 2009.

Forecast Methodology and Projection Calculation

There are five steps to forecasting metal mines license tax revenues:

1. Forecast production of each metal;
2. Forecast the price of each metal;
3. Forecast the taxable value of production by multiplying production and price;
4. Forecast tax revenue by multiplying taxable value and the tax rate; and
5. Allocate tax revenue between the general fund and other funds.

Revenue was estimated using tax information from each mine. However, the information presented in this report is aggregated for groups of metals.

Metal Production

Forecasts of metal production were obtained from a survey of Montana mines. The active large-scale mines in Montana produce gold, platinum, palladium, copper, and molybdenum as their primary products. Other metals may be considered by-products. In this analysis, all of these metals are aggregated into two groups.

- The gold-silver-platinum group includes the primary metals gold, platinum, and palladium; and the by-products of silver and rhodium. Quantities of these metals are typically measured in ounces.
- The base metals group includes the primary metals copper and molybdenum; and the by-products of nickel, lead, and zinc. These metals are typically measured in pounds.

Table 2 shows the actual and projected annual production of the two metal groups.

Table 2						
Metal Production of Montana Mines by Metal Category						
Metal Group	FY 2004 Actual	FY 2005 Actual	FY 2006 Actual	FY 2007 Projected	FY 2008 Projected	FY 2009 Projected
Gold, Silver, Platinum Group (oz, millions)	1.69	2.57	2.43	3.62	4.61	4.21
Base Metals Group (lbs, millions)	80.91	113.51	105.09	127.83	176.44	139.81

Production in the gold-silver-platinum group fell slightly in FY2006. Production is forecast to increase 49% in FY 2007 and 26% in FY 2008. In FY 2009 production is forecast to decrease slightly to 4.21 million ounces.

The production of base metals also fell slightly in FY 2006. Production is projected to increase significantly in FY 2007 to 127.83 million lbs. This increase is projected to continue through FY 2008 as base metal production reaches 176.44 million lbs. Production of base metals is projected to decrease in FY 2009 to 139.81 lbs due to a planned cease in operations by one mine in December of FY 2009.

Metal Prices

Most metals are traded on organized exchanges, and prices are public. The commodity exchanges also conduct trading in metal futures contracts. These contracts set a price now for metal to be delivered at a specified time and place in the future. The New York Mercantile Exchange (NYMEX) has futures trading in gold, silver, copper, platinum, and palladium. The London Metals Exchange has futures trading in copper, nickel, lead, and zinc.

Futures prices reflect the future price expectations of market participants. Futures prices are used in this forecast to project prices for gold, silver, platinum, palladium, copper, nickel, lead, and zinc in FY 2007, FY 2008, and FY 2009. Futures markets do not exist for rhodium and molybdenum, so the prices of these metals were forecast to continue at their FY 2006 averages in FY 2007 through FY 2009.

Table 3 shows actual average spot prices in FY 2005 and FY 2006, and futures price forecasts for FY 2007 through FY 2009 for metals mined in Montana. The percentage change between years in average prices is shown in Table 3 because it is the change in prices that is applied to the Montana prices. Prices received by mines in Montana differ from the prices established in global markets because of transportation costs, product purity, and contract terms. The forecast uses actual prices reported on FY 2006 tax returns as the starting point. It assumes that the prices received by the mines in FY 2006 will change at the same rate as the forecast global prices.

Table 3
Actual and Projected Market Metal Prices

Metal	FY 2005	%	FY 2006	%	FY 2007	%	FY 2008	%	FY 2009	%
	Actual	Change	Actual	Change	Projected	Change	Projected	Change	Projected	Change
Spot Price / Futures Market Price										
Gold (oz)	\$422.23	8%	\$525.12	24%	\$604.28	15%	\$627.72	4%	\$660.17	5%
Silver (oz)	\$6.94	22%	\$9.25	33%	\$11.86	28%	\$12.36	4%	\$12.50	1%
Platinum (oz)	\$854.52	8%	\$1,017.66	19%	\$1,142.50	12%	\$1,178.00	3%	\$1,178.00	0%
Palladium (oz)	\$201.26	-9%	\$265.57	32%	\$325.15	22%	\$322.87	-1%	\$322.87	0%
Rhodium (oz)	\$1,403.44	160%	\$3,358.49	139%	\$3,358.49	0%	\$3,358.49	0%	\$3,358.49	0%
Molybdenum (lbs)	\$27.36	127%	\$27.39	0%	\$27.00	-1%	\$27.26	1%	\$27.26	0%
Copper (lbs)	\$1.43	21%	\$2.29	60%	\$3.41	49%	\$3.14	-8%	\$2.85	-9%
Nickel (lbs)	\$6.77	22%	\$7.02	4%	\$13.10	87%	\$10.49	-20%	\$10.49	0%
Lead (lbs)	\$0.44	38%	\$0.49	11%	\$0.55	14%	\$0.55	0%	\$0.55	0%
Zinc (lbs)	\$0.53	22%	\$0.96	81%	\$1.53	59%	\$1.35	-12%	\$1.35	0%

Taxable Value of Production

The tax base for the metalliferous mines license tax is the gross value of output as it leaves the mine, less exemptions and deductions. The first \$250,000 of each producer's output is exempt from the tax. Producers are also allowed to deduct certain smelting and refining costs and the costs of transportation to the smelter or refinery.

Table 4 shows the calculation of taxable value. The market values shown are the product of the production estimates in Table 2 and mine prices projected from the global prices in Table 3. The market value for the gold-silver-platinum group is added to the market value of the base metals group market value. Total exemptions and deductions are subtracted from the market values to get total taxable value. Taxable value is projected to increase to over \$1,000 million in FY 2007 and stay above \$1,000 million through FY 2009.

Table 4
Taxable Value of Metal Mines Production
(\$ millions)

Fiscal Year	Market Value Gold, Silver Platinum		Market Value Other Metals		Exemptions and Deductions		Taxable Value
A 2004	\$315.047	+	\$102.772	-	\$35.062	=	\$382.756
A 2005	\$344.799	+	\$310.163	-	\$29.713	=	\$625.249
A 2006	\$376.267	+	\$416.756	-	\$30.668	=	\$762.356
F 2007	\$498.520	+	\$583.797	-	\$34.565	=	\$1,047.752
F 2008	\$499.831	+	\$636.403	-	\$36.228	=	\$1,100.006
F 2009	\$537.676	+	\$546.922	-	\$37.848	=	\$1,046.750

Tax Revenue

Concentrate, which is unsmelted ore that may have undergone mechanical processing, is taxed at a rate of 1.81%. Smelting the ore produces matte, dore, and bullion. In matte, the metal is still chemically combined with other elements. Dore is a mixture of elemental metals. Bullion is pure metal. Matte, dore, and bullion are taxed at a rate of 1.6%.

Future tax liability is estimated by multiplying the total taxable value by the average tax rate of the metals being produced. Table 5 shows this calculation and the total tax revenue. The average tax rate increases each year from FY 2007 through FY 2009 because of increased concentrate production relative to the production of matte, dore, and bullion.

Table 5						
Calculation of Metal Mines Tax Revenue						
(\$ millions)						
<u>Fiscal Year</u>	<u>Taxable Value</u>		<u>Average Tax Rate</u>		<u>Tax Revenue</u>	<u>Percent Change</u>
A 2004	\$382.756	X	1.66%	=	\$6.342	(13.23%)
A 2005	\$625.249	X	1.71%	=	\$10.694	68.62%
A 2006	\$762.356	X	1.72%	=	\$13.102	22.51%
F 2007	\$1,047.752	X	1.72%	=	\$18.063	37.87%
F 2008	\$1,100.006	X	1.74%	=	\$19.116	5.83%
F 2009	\$1,046.750	X	1.72%	=	\$18.007	(5.80%)

Total tax revenue is projected to increase 38% to \$18.063 million in FY 2007 and continue increasing to \$19.116 million in FY 2008. The increase in revenue is primarily due to increased production for the primary metals and higher prices for most metals. Revenue is projected to decrease slightly in FY 2009 to \$18.007 million as one mine plans to cease operation in December FY 2009.

Revenue Allocation

Table 6 shows the actual and projected metal mines license tax and allocations for FY 2006 through FY 2009. The general fund allocation decreased from 58% to 57% in FY 2006, and the impacted counties allocation increased from 24% to 25% (HB 700, 2005 Session).

Table 6
Total Collections and Allocation of Metal Mines Tax
(\$ millions)

Account	Allocation Percentage	Actual FY 2006	Projected FY 2007	Projected FY 2008	Projected FY 2009
General Fund	57.0%	\$7.468	\$10.296	\$10.896	\$10.264
Hard-Rock Mining Impact Trust	2.5%	\$0.328	\$0.452	\$0.478	\$0.450
Impacted Counties	25.0%	\$3.275	\$4.516	\$4.779	\$4.502
Reclamation and Development Grants	7.0%	\$0.917	\$1.264	\$1.338	\$1.260
Hard-Rock Mining Reclamation Debt Service	8.5%	\$1.114	\$1.535	\$1.625	\$1.531
Total Collections	100.0%	<u>\$13.102</u>	<u>\$18.063</u>	<u>\$19.116</u>	<u>\$18.007</u>

General fund revenue from the metal mines license tax is projected be \$10.296 million in FY 2007, \$10.896 million in FY 2008, and \$10.264 million in FY 2009.

Data Sources

Production through FY 2006 is from the metalliferous mines tax returns. Estimates of future production are from the mining companies in the state with operations large enough to pay metal mines license tax. Historical metal spot prices are from the U.S. Geological Survey's Mineral Industry Surveys, the Commodity Exchange in New York (COMEX), and the London Metals Exchange. Futures prices are from the New York Mercantile Exchange (NYMEX) and the London Metals Exchange, as posted on the Internet by the exchanges.