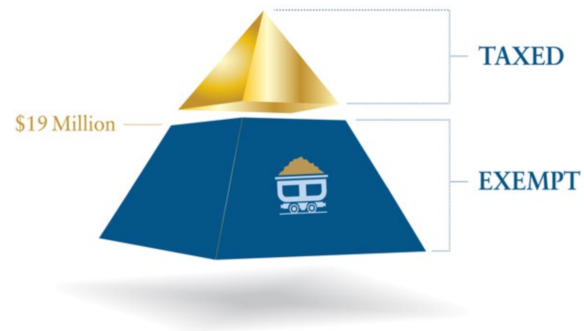
METALLIC MINERALS THRESHOLD EXEMPTION

EVALUATION SUMMARY | JANUARY 2021 | 2021-TE1

TAX TYPE	Severance
YEAR ENACTED	1977
REPEAL/EXPIRATION DATE	None
REVENUE IMPACT (TAX YEAR 2017)	$477,000
NUMBER OF TAXPAYERS	4



KEY CONCLUSION: The exemption has completely eliminated the severance tax liabilities of small metal mines; however, most of the tax benefit likely went to a single large metal mine.

WHAT DOES THIS TAX EXPENDITURE DO?

The Metallic Minerals Threshold Exemption allows taxpayers to deduct up to $19 million from gross income that they earned at each metal mining operation in Colorado prior to applying the metallic minerals severance tax rate.

WHAT IS THE PURPOSE OF THIS TAX EXPENDITURE?

Statute and the enacting legislation do not state the exemption's purpose; therefore, we could not definitively determine the General Assembly's original intent. Based on our review of statutory language and legislative history, our evaluation considered a potential purpose: to prevent the severance tax from negatively impacting small mines' ability to stay profitable.

WHAT POLICY CONSIDERATIONS DID THE EVALUATION IDENTIFY?

- The General Assembly may want to consider establishing a statutory purpose and performance measures for the exemption.
- If the General Assembly determines that the purpose of the exemption is to prevent the severance tax from negatively impacting small mines' ability to stay profitable, then the General Assembly may want to consider making changes to the exemption to improve its cost effectiveness.

METALLIC MINERALS THRESHOLD EXEMPTION

EVALUATION RESULTS

WHAT IS THE TAX EXPENDITURE?

Colorado imposes severance taxes on the extraction of several types of natural resources in the state, including metallic minerals, such as gold, silver, and uranium. According to statute [Section 39-29-102(5), C.R.S.], "metallic minerals" is defined as all minerals aside from certain exceptions listed in statute, which include coal, molybdenum (a metal, but subject to its own state severance tax), oil and gas, rock, sand, and gravel, among others.

Colorado's metallic minerals severance tax is assessed on the gross income of metal mining operations at a rate of 2.25 percent. Statute [Section 39-29-102(3)(b), C.R.S.] defines "gross income" as "the value of the ore immediately after its removal from the mine." This does not include any value added by subsequent treatment processes, transportation, or marketing.

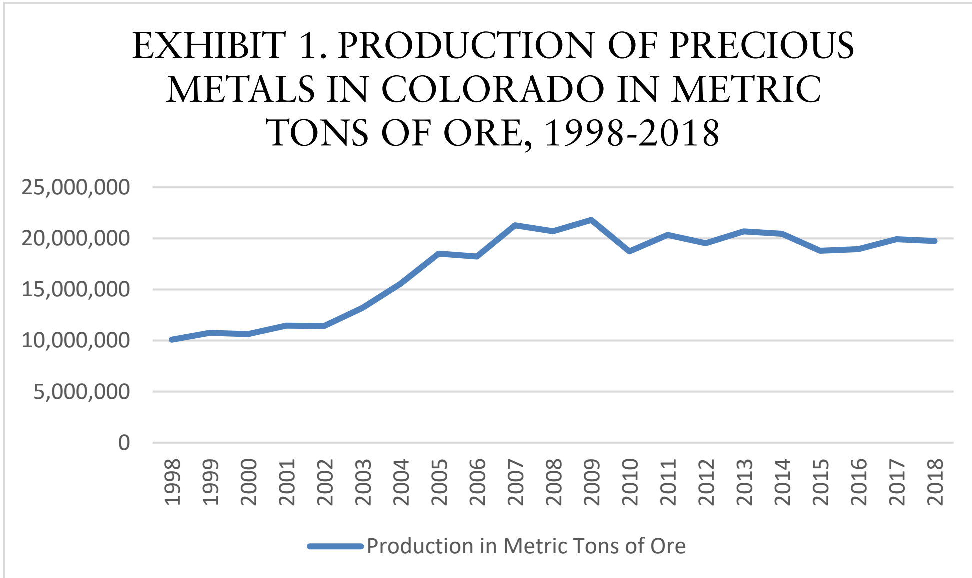
The Metallic Minerals Threshold Exemption [Section 39-29-103(1)(b), C.R.S.] allows taxpayers to deduct up to $19 million from gross income that they earned in the taxable year at each metal mining operation prior to applying the severance tax rate. It was enacted along with the metallic minerals severance tax in 1977 by House Bill 77-1076, and the only substantive change to the exemption since its enactment was an increase in the amount allowed for the exemption from $11 million to $19 million, which occurred in 1999.

The exemption is claimed on Line 2 of the Colorado Metallic Minerals Severance Tax Return (Form DR 0020A), which must be filed annually by the owner and/or operator of any mining operation that is liable for the severance tax.

WHO ARE THE INTENDED BENEFICIARIES OF THE TAX EXPENDITURE?

Statute does not directly state the intended beneficiaries of the Metallic Minerals Threshold Exemption. Based on our review of statutory language, we inferred that the intended beneficiaries are small mining operations that extract metals in Colorado. Historically, a variety of metals have been extracted in the state, such as gold, silver, copper, lead, uranium, vanadium, and zinc. Currently, Colorado's metal mining industry is much smaller than it was in the past, with at most four active metal mines operating as of Calendar Year 2017 compared to more than 20 in 1976. This is similar to the trend in other mining states, since the metal mining industry has experienced a significant decline in the United States in recent decades.

During the past 20 years, gold has been the only metal extracted in significant quantities in the state, with nearly all of this production occurring at one large mine. Despite the broader trend of fewer mines operating in the state since the Metallic Minerals Threshold Exemption was enacted, overall metal ore production in Colorado has increased since 1998 as a result of increased gold ore production and has remained relatively stable over the last 10 years. EXHIBIT 1 shows the production of all precious metals in Colorado from Calendar Year 1998 to 2018.



SOURCE: Colorado Division of Property Taxation Annual Reports, 1998-2018.

WHAT IS THE PURPOSE OF THE TAX EXPENDITURE?

Statute and the enacting legislation for the Metallic Minerals Threshold Exemption do not state its purpose; therefore, we could not definitively determine the General Assembly's original intent. Based on our review of statutory language and legislative history, we considered a potential purpose: to prevent the severance tax from negatively impacting small metal mines' ability to stay profitable. Specifically, the exemption was created by the same bill, House Bill 77-1076, that established a metallic minerals severance tax in the state. Legislators' discussions in committee hearings for the bill suggest that the General Assembly was concerned that the new severance tax could be particularly burdensome to smaller mines, so the exemption appears to be intended to avoid applying the tax to mines with lower gross incomes, which could help them remain profitable.

IS THE TAX EXPENDITURE MEETING ITS PURPOSE AND WHAT PERFORMANCE MEASURES WERE USED TO MAKE THIS DETERMINATION?

We could not definitively determine whether the Metallic Minerals Threshold Exemption is meeting its purpose because no purpose is provided for it in statute or its enacting legislation. However, we found that it is meeting the potential purpose we considered in order to conduct this evaluation because the exemption has eliminated the severance tax liabilities of small metal mines with lower gross incomes.

Statute does not provide quantifiable performance measures for this exemption. Therefore, we created and applied the following performance measure to determine the extent to which the exemption is meeting its potential purpose:

PERFORMANCE MEASURE: *To what extent has the Metallic Minerals Threshold Exemption reduced the severance tax liabilities of small mining operations that extract metals in Colorado?*

RESULT: We determined that the Metallic Minerals Threshold Exemption is likely eliminating the severance tax liabilities of Colorado's small metal mines and, thus, is preventing the severance tax from imposing an additional burden on these mines' abilities to stay profitable.

We were unable to release the Department of Revenue data quantifying the extent to which the exemption has reduced taxpayers' severance tax liabilities because there are too few taxpayers claiming it to report the information without violating confidentiality requirements. Therefore, we evaluated this performance measure using publicly available data found in annual reports from the Division of Property Taxation, within the Department of Local Affairs, which include the number of mines, production quantities, and assessed land values by county.

Based on the Division of Property Taxation's annual reports, we determined that up to four mines in Colorado may have extracted metal in 2017 and, thus, would have been eligible for the Metallic Minerals Threshold Exemption. Three of these mines were smaller operations and likely had gross incomes far below the exemption's $19 million cap, so the exemption would have allowed them to pay no severance tax. We estimated that, combined, these three mines would have owed about $50,000 in severance tax without the exemption.

Although the releasable data we reviewed does not indicate whether the mines claimed the exemption, representatives of Colorado's mining industry generally reported that mine operators are aware of the exemption and claim it when they extract metal in Colorado. Therefore, we determined that the exemption is likely being used by eligible mines.

Finally, although the exemption prevents the metallic minerals severance tax from placing an additional financial burden on small mines, it likely has a limited impact on their ability to remain profitable, given the significant fluctuations in metal prices that appear to be common to the market. For example, between 2000 and 2019, the average annual increase in prices for gold (in years when there was an increase) was 14 percent and the average annual decrease (in years when there was a decrease) was 9 percent. With these fluctuations in annual prices, the maximum benefit from the exemption of 2.25 percent would only partially temper the effects of market volatility on mines' financial situations.

WHAT ARE THE ECONOMIC COSTS AND BENEFITS OF THE TAX EXPENDITURE?

We estimated that the Metallic Minerals Threshold Exemption had a revenue impact of about $477,000 in Tax Year 2017. EXHIBIT 2 provides the estimated amount exempted, summarized by county, and the total revenue impact to the State in Tax Year 2017, which we estimated by multiplying the total amount exempted and the State's 2.25 percent metallic minerals severance tax rate.

EXHIBIT 2. METALLIC MINERALS THRESHOLD EXEMPTION'S ESTIMATED IMPACT TO STATE REVENUE, TAX YEAR 2017		
COUNTY ESTIMATES		
County[1]	Park	Teller
Number of mines, 2018	3	1
Estimated amount of Exemption, 2017	$2,179,000	$19,000,000
STATEWIDE ESTIMATES		
Total estimated amount of Exemption	$21,179,000	
Metallic minerals severance tax rate	2.25%	
Estimated revenue impact	$477,000	

SOURCE: Office of the State Auditor analysis of the Division of Property Taxation's 2018 annual report.
[1]There was also a small amount of assessed land value reported in Moffat County in 2018. The Division of Property Taxation indicated that this was a reporting error; therefore, we have not included this amount in our calculations.

Although the Department of Revenue collects the data necessary to determine the exemption's revenue impact, this data has not been releasable during recent years due to taxpayer confidentiality requirements. Therefore, we used Division of Property Taxation annual reports on Colorado property values in order to estimate the exemption's impact to state revenue. Specifically, these reports provide the assessed land values of Colorado's metal mines, summarized by county, which are calculated based on the mines' proceeds from metals extracted during the previous year. "Gross proceeds" for property assessment purposes and "gross income" for severance tax purposes are both effectively defined in statute as the value of the ore immediately after it is removed from the earth, not including any value added by treatment processes or transportation after the ore has been mined. Therefore, we used 2018 assessed land values to estimate the total gross proceeds, and thus the total gross income, of metal mining properties in 2017. We then determined the estimated amount allowable under the Metallic Minerals Threshold Exemption in each of the counties that reported assessed land values for metal mines in 2018 and applied the severance tax rate to this total in order to estimate the amount of revenue forgone as a result of the exemption. Due to the limited number of taxpayers who could have used the exemption, we excluded the details of our calculations from this report to minimize the release of taxpayer-specific information.

We also determined that the Metallic Minerals Threshold Exemption could be more cost effective in achieving its inferred purpose of preventing the severance tax from negatively impacting small mines. As demonstrated in EXHIBIT 3, we estimated that only 10 percent of the forgone revenue from the exemption benefits small mines. The remaining 90 percent benefits the one large metal mine in Colorado.

EXHIBIT 3. COMPARISON OF METALLIC MINERAL THRESHOLD EXEMPTION'S IMPACT TO SMALL AND LARGE MINES

	SMALL MINES	LARGE MINES
Number of mines	3	1
Average estimated reduction in severance tax liability per mine resulting from Exemption	$16,300	$427,500
Total estimated reduction in severance tax liability resulting from Exemption	$49,000	$427,500
Percent reduction in severance tax liability per mine resulting from Exemption	100%	7%
Percentage of total revenue impact	10%	90%

SOURCE: Office of the State Auditor analysis of the Division of Property Taxation's 2018 annual report.

Since the gross income at small mines has been well below the exemption's $19 million cap, the exemption could be significantly lower, which would reduce its revenue impact while still providing the same benefit to small mines. For example, if the threshold were limited to $3.5 million, the three smaller mines would likely still be completely exempt from severance tax, and the exemption's revenue impact to the State would decrease by about $349,000, or 73 percent.

However, the exemption may provide additional economic benefits beyond effectively exempting smaller mines from the severance tax. As shown in EXHIBIT 1.3, we estimated that the exemption reduced the severance tax liability of the large mine by about 7 percent. Additionally, a representative from this mine indicated that the exemption may be an important factor with respect to investment decisions. Thus, the exemption may also serve to support larger mining operations in the state and could help attract investment to the state's mining industry.

WHAT IMPACT WOULD ELIMINATING THE TAX EXPENDITURE HAVE ON BENEFICIARIES?

Eliminating the Metallic Minerals Threshold Exemption would increase the severance tax liability of all mining operations that extract metal in Colorado since the metallic minerals severance tax would then be applied to all gross income from the extraction of metal. For the state's largest metal mine, which has had annual gross incomes of more than $19 million in recent years, the severance tax liability would increase by $427,500. Smaller operations with annual gross incomes less than or equal to $19 million would incur new severance tax liabilities equal to their gross income multiplied by the severance tax rate (2.25 percent).

Since the exemption may provide some financial support to mines, in particular smaller mines that are operating at the margins of profitability, eliminating it would remove this support and may result in mines reducing or closing their operations sooner than they would have otherwise. One industry representative reported that the loss of this financial support would be particularly challenging for mines when commodity prices are lower. Some also stated that the competition for limited capital between different operations can be intense, especially when prices are low, and an increase in costs for a given operation can affect the operation's investment opportunities. Finally, taxpayer compliance costs may increase for smaller operations that had not previously been liable for severance tax, since taxpayers are only required to file the Metallic Minerals Severance Tax Return if they have incurred severance tax liability.

ARE THERE SIMILAR TAX EXPENDITURES IN OTHER STATES?

Since gold is likely the only metal that has been produced in large quantities in Colorado over the past 20 years, we examined the severance tax treatment of metal extraction in the four other leading states for gold mining: Nevada, Alaska, California, and Utah. With the exception of California, all of these states assess a severance tax or similar tax on gold extracted. As demonstrated in EXHIBIT 4, only Utah provides a threshold exemption for metals mined, allowing up to $40,000 in taxable value to be exempted prior to applying the tax rate.

EXHIBIT 4. SEVERANCE TAXATION OF METALS IN THE TOP FIVE GOLD-PRODUCING STATES

State	Percentage of U.S. Gold Production	Severance or Similar Tax?	Threshold Exemption?
Nevada	73%	Yes	No
Alaska	11%	Yes	No. However, taxpayers with net incomes less than $40,000 are not liable for severance tax.
Colorado	6%	Yes	Yes
California[1]	3%	No	Not applicable
Utah	2%	Yes	Yes. Up to $40,000 in the taxable value of metals may be exempt from tax, depending on whether the metal is sold as ore and whether it is sold or shipped out of state.

SOURCE: Office of the State Auditor analysis of other states' statutes, regulatory codes, and government websites.
[1]California assesses a fee of $5 per ounce of gold extracted and 10 cents per ounce of silver extracted. However, this is not considered to be a severance tax.

ARE THERE OTHER TAX EXPENDITURES OR PROGRAMS WITH A SIMILAR PURPOSE AVAILABLE IN THE STATE?

As with the Metallic Minerals Threshold Exemption, the Threshold Exemptions for Molybdenum Ore and Coal [Sections 39-29-104(1) and 106(2)(b), C.R.S.] and the Oil Shale Non-Commercial Production Exemption [Section 39-29-107(3), C.R.S.] each have a threshold below which their respective severance taxes do not apply. For molybdenum ore, the first 625,000 tons of ore extracted each quarter are exempt from the molybdenum ore severance tax. For coal, the first 300,000 tons extracted each quarter are exempt from the coal severance tax. For oil shale, the first 15,000 tons per day of oil shale rock or 10,000 barrels per day of shale oil liquid, whichever is greater, are exempt from the oil shale severance tax.

WHAT DATA CONSTRAINTS IMPACTED OUR ABILITY TO EVALUATE THE TAX EXPENDITURE?

The Metallic Minerals Threshold Exemption is itemized on the Colorado Metallic Minerals Severance Tax Return (Form DR 0020A), and the Department of Revenue reported that this data is extractable from GenTax, the Department's tax processing system. However, data for the exemption has not been releasable in recent years due to taxpayer confidentiality requirements. Statutes [Sections 39-21-113(4)(a), 113(5), and 305(2)(b), C.R.S.] prohibit the Department from publishing any information that would allow the identification of any particular tax return and require our office to follow the same requirement for our tax expenditure evaluations. As a result of this data constraint, we were unable to use Department data to determine the revenue impact of the exemption.

Furthermore, since metal mining operations are only required to file a severance tax return if they have incurred severance tax liability, the Department's data may not include all taxpayers benefitting from the exemption if the exemption resulted in the complete elimination of one or more taxpayers' severance tax liabilities. In order to collect complete data on the exemption, the Department would need to require all metal mining operations to file a severance tax return, including those without tax liability. This would create additional reporting requirements for mining operations that are not currently required to file the form and could increase their administrative burden and compliance costs.

WHAT POLICY CONSIDERATIONS DID THE EVALUATION IDENTIFY?

THE GENERAL ASSEMBLY MAY WANT TO CONSIDER AMENDING STATUTE TO ESTABLISH A STATUTORY PURPOSE AND PERFORMANCE MEASURES FOR THE METALLIC MINERALS THRESHOLD EXEMPTION. As discussed, statute and the enacting legislation for the exemption do not state the exemption's purpose or provide performance measures for evaluating its effectiveness. Therefore, for the purposes of our evaluation, we considered a potential purpose for the exemption: to prevent the severance tax from negatively impacting small metal mines' ability to stay profitable. We identified this purpose based on our review of the following sources:

- STATUTORY LANGUAGE. Due to its structure, the Metallic Minerals Threshold Exemption confers the most benefit (measured as a percentage of gross income) to small mines with annual gross incomes no greater than $19 million, which is the maximum amount that may be exempted from the metallic minerals severance tax as a result of the exemption [Section 39-29-103(1)(b), C.R.S.].

- LEGISLATIVE HISTORY. We listened to audio recordings of the legislative committee meetings in which legislators discussed the enacting legislation [House Bill 77-1076], and these discussions suggest that the General Assembly was concerned that the new severance tax could be particularly burdensome to smaller mines.

We also developed a performance measure to assess the extent to which the exemption is meeting this potential purpose. However, the General Assembly may want to clarify its intent for the exemption by providing a purpose statement and corresponding performance measure(s) in statute. This would eliminate potential uncertainty regarding the exemption's purpose and allow our office to more definitively assess the extent to which the exemption is accomplishing its intended goal(s).

IF THE GENERAL ASSEMBLY DETERMINES THAT THE PURPOSE OF THE METALLIC MINERALS THRESHOLD EXEMPTION IS TO PREVENT THE SEVERANCE TAX FROM NEGATIVELY IMPACTING SMALL MINES' ABILITY TO STAY PROFITABLE, THEN THE GENERAL ASSEMBLY MAY WANT TO CONSIDER MAKING CHANGES TO THE EXEMPTION TO IMPROVE ITS COST EFFECTIVENESS. As discussed, we found that the exemption is meeting its potential purpose of preventing the severance tax from negatively impacting small mines' ability to stay profitable. However, we also determined that the exemption could be more cost effective in achieving this purpose. Specifically, about 90 percent ($427,500) of the forgone revenue resulting from the exemption benefits one large mine that produces most of Colorado's extracted metals rather than smaller mines whose severance tax liabilities are completely eliminated by the exemption.

Therefore, the General Assembly could make changes to the exemption to reduce its revenue impact while still accomplishing the potential purpose we identified. For example, it could consider lowering the exemption's threshold below the current $19 million and/or limiting the exemption's availability to mines with gross incomes below its threshold. We estimated that Colorado's small metal mines had an average gross income of about $726,000 in 2017 and maximum gross incomes of no more than $3.5 million; thus, these mines would have been exempt from the metallic minerals severance tax with a substantially lower exemption threshold. If the exemption threshold had been set at $3.5 million in 2017, we estimated that the exemption's impact on state revenue would have been $128,000 (27 percent of the estimated actual revenue impact of $477,000).

Conversely, the current exemption threshold amount would allow smaller mines to remain exempt even if their production levels and/or metal prices increased substantially in the future. Furthermore, a representative of the large mine indicated that the current exemption may be an important factor with respect to investment decisions, while another industry representative stated that the loss of the exemption's financial support would be particularly challenging for mines when commodity prices are low. Therefore, the General Assembly may wish to leave the current exemption unchanged since it provides a general support to the State's mining industry.