



AVIATION FUEL EXEMPTIONS

EVALUATION SUMMARY | APRIL 2022 | 2022-TE14

EXPENDITURE	JET FUEL EXCISE TAX EXEMPTION	AVIATION GASOLINE EXCISE TAX EXEMPTION
TAX TYPE	Excise	Excise
YEAR ENACTED	1988	1988
REPEAL/EXPIRATION DATE	None	None
REVENUE IMPACT (TAX YEAR 2019)	\$16.7 million	\$0
NUMBER OF TAXPAYERS (TAX YEAR 2019)	Could not determine	None

KEY CONCLUSION: The Jet Fuel Excise Tax Exemption effectively defines the State’s tax structure for aviation fuel, with commercial aviation operators commonly using it to avoid paying the excise tax on jet fuel and instead paying a jet fuel sales tax. However, we found that few, if any, aviation operators use the Aviation Gasoline Excise Tax Exemption.

WHAT DO THESE TAX EXPENDITURES DO?

JET FUEL EXCISE TAX EXEMPTION [SECTION 39-27-102.5(2.5)(a)(I), C.R.S.]—Provides scheduled air carriers and commuter air carriers that are exempt from the federal excise tax an exemption from the State’s jet fuel excise tax (\$0.04/gal)

AVIATION GASOLINE EXCISE TAX EXEMPTION [SECTION 39-27-102.5(2.5)(a)(II) and (III), C.R.S.]—Provides commercial airlines, commuter air carriers, and public chartered flights with an exemption from the State’s aviation gasoline excise tax (\$0.06/gal).

WHAT IS THE PURPOSE OF THESE TAX EXPENDITURES?

Statute and the enacting legislation for the exemptions do not explicitly state their purpose; therefore, we could not definitively determine the

General Assembly’s original intent. Based on our review of legislative audio, conversations with the Division of Aeronautics within the Colorado Department of Transportation, and statutory language, for the purposes of our evaluation we considered the following potential purpose: to exempt commercial aviation operators from the State’s excise tax, since a majority instead pay the State’s sales tax on jet fuel.

WHAT POLICY CONSIDERATIONS DID THE EVALUATION IDENTIFY?

The General Assembly may want to consider:

- Establishing a statutory purpose and performance measures for the exemptions.
- Consider repealing the Aviation Gasoline Excise Exemption.

AVIATION FUEL EXEMPTIONS

EVALUATION RESULTS

WHAT ARE THESE TAX EXPENDITURES?

In Colorado, sales of aviation fuel are subject to tax based on the type of fuel, which can either be jet fuel or aviation gasoline. According to Department of Transportation, Division of Aeronautics (Division) staff, more than 90 percent of aircraft use jet fuel, which is used for aircraft with turbo propeller or jet engines, such as large commercial aircraft, as well as smaller commuter and private aircraft. Aviation gasoline is used for small aircraft without turbo propeller or jet engines, such as airplanes used for private transportation, recreation, or aerial work. Colorado levies three taxes on aviation fuel: a \$0.04 per gallon excise tax on jet fuel, a 2.9 percent sales tax on jet fuel, and a \$0.06 per gallon excise tax on aviation gasoline. These taxes provide revenue to the Aviation Fund, which is administered by the Division to fund Colorado's aviation system.

This report covers the following two excise tax exemptions, referred to in this report collectively as the Aviation Fuel Exemptions:

JET FUEL EXCISE TAX EXEMPTION [SECTION 39-27-102.5(2.5)(a)(I), C.R.S.]—Provides commercial airlines and commuter air carriers with an exemption from the jet fuel excise tax. To qualify, the aircraft must provide regular scheduled air service or be a commuter air carrier eligible for the federal excise tax exemption on jet fuel.

AVIATION GASOLINE EXCISE TAX EXEMPTION [SECTION 39-27-102.5(2.5)(a)(II) and (III), C.R.S.]—Provides commercial airlines, commuter air carriers, and public chartered flights with an exemption from the aviation gasoline excise tax. To qualify, the aircraft must

provide regular scheduled air service or provide service as a public charter.

EXHIBIT 1 provides summary information on the State’s aviation fuel taxes and the Aviation Fuel Exemptions.

EXHIBIT 1. AVIATION FUEL TAXES AND EXEMPTIONS		
JET FUEL		
Tax Type	Rate	Exemptions
Excise Tax	\$0.04 per gallon	Jet Fuel Excise Tax Exemption: <ul style="list-style-type: none"> ▪ Scheduled air carriers (i.e., commercial airlines) ▪ Commuter air carriers exempt from the federal fuel excise tax (i.e., aircraft with 60 or less seats that provide regional air service)
Sales Tax	2.9% of retail price of purchase	None
AVIATION GASOLINE		
Tax Type	Rate	Exemptions
Excise Tax	\$0.06 per gallon	Aviation Gasoline Excise Tax Exemption: <ul style="list-style-type: none"> ▪ Scheduled air carriers (i.e., commercial airlines) ▪ On-demand air carriers providing scheduled commuter flights (i.e., commuter air carriers, small non-turbo propeller or non-jet engine aircraft with 9 or less seats) ▪ Public chartered flights
SOURCE: Sections 39-26-715(1)(a)(I), and 102.5(a), C.R.S.		

The Aviation Fuel Exemptions were created in 1988 by House Bill 88-1250, which also established the jet fuel and aviation gasoline excise taxes. The bill made significant changes to the way the State funds its programs that support aviation, created the Aviation Fund, and repealed the ownership tax for aircraft and registration fee that existed at the time. Additionally, the bill established the Division and the Aeronautical Board (Board), which are tasked with managing the Aviation Fund, with the intent of “promot[ing] the safe operation and

accessibility of general aviation in the state ...” Since they were established in 1988, the Aviation Fuel Exemptions have had one significant change with House Bill 03-1073, which clarified the definitions of the aviation operators who are eligible for the exemptions.

The Aviation Fuel Exemptions are applied by the fuel vendor by not collecting an excise tax when selling fuel to an exempt operator. Vendors record the amount of fuel purchased and the airport where the fuel was sold on the Distributor Schedule of Disbursements Worksheet (Form DR 7056) when selling to an exempt operator. If an operator is charged an excise tax on their fuel, they can apply for a refund under Section 39-27-103(2.5) C.R.S. by submitting a Gasoline/Special Fuel Tax Refund Permit Application (Form DR 7189) and accompanying Fuel Tax Refund Claim (Form DR 7118).

WHO ARE THE INTENDED BENEFICIARIES OF THE TAX EXPENDITURES?

Based on the statutory language, operation of the tax expenditures, and discussions with the Department of Revenue (Department), the intended beneficiaries of the exemptions are commercial aviation operators, mainly those that provide regularly scheduled air transportation service. Commercial operators are the primary consumers of aviation fuel, mainly jet fuel, sold in the state, and pay most of the taxes collected on aviation fuel through the jet fuel sales tax.

WHAT IS THE PURPOSE OF THESE TAX EXPENDITURES?

Statute and the enacting legislation do not explicitly state the purpose for the Aviation Fuel Exemptions; therefore, we could not definitively determine the General Assembly’s original intent. Based on our review of legislative testimony, conversations with the Division, and the operation of the exemptions, we considered the following potential purpose: to exempt commercial aviation operators from the jet fuel and aviation gasoline excise taxes, since a majority pay the sales tax on jet fuel. As discussed, the General Assembly created the exemptions through House Bill 88-1250, which also established the excise taxes on

jet fuel and aviation gasoline. Therefore, it appears that the exemptions were intended to define the tax base for the newly created excise taxes as being limited to private, non-commercial aviation operators that do not provide regularly scheduled service. At the time the exemptions were created, most commercial aviation operators were already paying the jet fuel sales tax, which was created in 1963. Therefore, excluding commercial aviation operators that provide regularly scheduled service from the excise tax base appears to have been intended to ensure that commercial operators would only pay the jet fuel sales tax.

ARE THE TAX EXPENDITURES MEETING THEIR PURPOSE AND WHAT PERFORMANCE MEASURES WERE USED TO MAKE THIS DETERMINATION?

We could not definitively determine whether the Aviation Fuel Exemptions are meeting their purpose because no purpose is provided for them in statute or their enacting legislation. Based on the potential purpose we considered in order to conduct this evaluation, we found that the Jet Fuel Excise Tax Exemption is meeting its purpose because eligible aviation operators are aware of the exemption and use it to exempt their purchases of fuel from the jet fuel excise tax. However, the Aviation Gasoline Excise Tax Exemption is not meeting its purpose because it has limited applicability and has not been recently used.

Statute does not provide quantifiable performance measures for the exemptions. Therefore, we created and applied the following performance measure to determine if the exemptions are meeting the potential purpose we considered for this evaluation.

PERFORMANCE MEASURE: *To what extent are taxpayers using the Aviation Fuel Exemptions to avoid paying excise tax on eligible purchases?*

RESULTS: Based on information reported in the Division's 2020 *Aviation Economic Impact Study*, in Fiscal Year 2019 there were roughly 664 million gallons of jet fuel sold in the state, of which 94 percent (625 million gallons) qualified to be exempt from excise tax under the Jet Fuel

Excise Tax Exemption. Additionally stakeholders, including commercial airlines that purchase a majority of exempt jet fuel, indicated that industry members are aware of and use the Jet Fuel Excise Tax Exemption. Stakeholders did not identify any issues with the exemption's administration and indicated that purchases are exempted by vendors at the point of sale. They also indicated that a similar exemption is available in most states and that knowledge and use of these exemptions is widespread.

According to Department data, the Aviation Gasoline Excise Tax Exemption was not used in Calendar Year 2019, the only year with available data. According to Division staff, nearly all commercial aviation operators use aircraft that require jet fuel. Therefore, it appears that the exemption may not be used because there are likely few, if any, commercial aviation operators that would qualify for the exemption and who purchase aviation gasoline.

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

According to Department data, the Jet Fuel Excise Tax Exemption had a revenue impact to the State of about \$16.7 million in Calendar Year 2019. As discussed, the Aviation Gas Excise Tax Exemption was not used in Calendar Year 2019 and it had no revenue impact. In comparison, in Fiscal Year 2019 the Department collected a combined \$33 million from the State's aviation fuel taxes, with most of the revenue coming from the sales tax on jet fuel.

The Jet Fuel Excise Tax Exemption has the effect of reducing the after-tax cost of fuel purchased by commercial aviation operators while decreasing state revenue that would otherwise be available to fund aviation activities in the state. Specifically, aviation fuel taxes are distributed to the Aviation Fund, and the disbursements are managed by the Division and Board pursuant to Sections 43-10-110 C.R.S. Roughly two-thirds of the tax revenue from aviation fuel sales must be disbursed to the airport where the fuel sale occurred. Most of the remaining revenue is used for discretionary grants, which the Board

typically awards for projects at smaller airports that do not collect as much fuel tax disbursement revenue. Additionally, no more than 5 percent of the tax revenue is used to fund the administration of the Division.

WHAT IMPACT WOULD ELIMINATING THE TAX EXPENDITURES HAVE ON BENEFICIARIES?

Eliminating the Aviation Fuel Exemptions would result in excise taxes of \$0.04 or \$0.06 per gallon being applied, respectively, to all purchases of jet fuel and aviation gasoline. As discussed, commercial aviation operators who are eligible for the exemptions typically only purchase jet fuel and do not use the Aviation Gasoline Excise Tax Exemption. Therefore, only the repeal of the Jet Fuel Excise Tax Exemption would have an impact on current beneficiaries. Eliminating this exemption would increase fuel taxes for commercial aviation operators by about \$0.04 per gallon (i.e., the rate for the jet fuel excise tax), which would be levied in addition to the 2.9 percent jet fuel sales tax. As discussed, this exemption provided a \$16.7 million benefit to aviation operators in Calendar Year 2019, which would no longer be available if it were repealed. Although jet fuel prices can fluctuate substantially based on market conditions, according to data from the U.S. Bureau of Transportation Statistics, commercial airlines paid an average of about \$2 per gallon for jet fuel during Calendar Year 2021. Therefore, we estimate that if the exemption was not in place during 2021, commercial airlines would have paid about 2 percent more for jet fuel and Colorado's combined tax rate on jet fuel, including the sales tax, would have been 4.9 percent. Commercial aviation stakeholders mentioned that having to pay both taxes might influence their fuel purchasing decisions. For example, they might purchase and store less fuel at the State's airports if it was possible to purchase fuel at a lower after-tax cost in another state. However, considering that several other states with major airports tax jet fuel at rates higher than 4.9 percent and most aircraft are filled with enough fuel to meet their specific flight needs to maximize fuel efficiency, they would be limited to a certain extent in changing their purchasing decisions. It is also possible that commercial

air carriers would pass the increased after-tax fuel cost to their customers or absorb the additional cost to remain competitive, which is common when market prices for jet fuel fluctuate.

Additionally, if the exemptions were repealed, the State would be limited in how it could use the additional revenue. Under Article X Section 18 of the Colorado Constitution, the aviation fuel excise taxes can only be used for aviation purposes and the additional revenue would therefore increase the funds available in the Aviation Fund, most of which is disbursed to the airport where the fuel was sold.

ARE THERE SIMILAR TAX EXPENDITURES IN OTHER STATES?

There are a variety of approaches across states regarding the taxation of aviation fuel. Aviation fuel purchases are typically assessed one or more of the following taxes or fees: excise tax, sales tax, environmental fee, and/or inspection fee. Overall, 38 states have either a tax/fee or a combination of an excise tax, environmental fee or inspection fee on aviation fuel and 38 states exempt the sales from sales tax.

Because Denver International Airport is ranked as the fifth busiest airport in the country based on Bureau of Transportation Statistics passenger data, we also compared the State's aviation fuel tax policies with those in states that have a similarly high level of commercial aviation. EXHIBIT 2 provides the tax policies for the states with one of the top five busiest airports in the country. As shown, most of these states apply a sales tax to the purchase of jet fuel, ranging from 2 percent in Georgia to 7.25 in California. Similar to Colorado, none of the states with jet fuel excise taxes levy the tax on commercial aviation operators, although three states charge an environmental fee in addition to the sales tax. Additionally, Texas does not apply any taxes to purchases of aviation fuel.

**EXHIBIT 2. AVIATION FUEL STATE TAXES, FEES, AND EXEMPTIONS IN STATES
WITH THE TOP FIVE BUSIEST AIRPORTS IN THE U.S.**

State (Airport)	Jet Fuel Excise Tax (per gallon)	Aviation Gasoline Excise Tax (per gallon)	Sales Tax Levied on Aviation Fuel?	Commercial Exemptions for Aviation Fuel?	Environmental or Inspection Fees
Georgia (ATL)	None	\$0.01	Jet fuel only, 2%	None	Environmental Fee, \$0.005/gallon
California (LAX)	\$0.02	\$0.18	Jet fuel only, 7.25%	Commercial aviation is exempt from the excise tax	Environmental Fee, \$0.0215/gallon
Illinois (ORD)	None	None	Both jet fuel and aviation gasoline 5%	None	Environmental Fee, \$0.011/gallon, but commercial aviation is exempt
Texas (DFW)	None	None	No	None	None
Colorado (DIA)	\$0.04	\$0.06	Jet fuel only, 2.9%	Commercial aviation is exempt from the excise tax	None

SOURCE: Office of the State Auditor analysis of State Tax Policies and Energy Information Administration data.

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

We identified one state-level tax expenditure and several federal tax expenditures that may benefit aviation operators in the state:

AGRICULTURAL APPLICATOR AIRCRAFT FUEL TAX EXEMPTION [SECTION 39-27-103 (2.7)(d), C.R.S.]—Allows agricultural aviation operators to receive a 50 percent refund for any fuel excise taxes paid on the purchase of aviation fuel that is used for agricultural purposes.

FEDERAL AVIATION FUEL EXCISE TAX EXEMPTIONS—The federal excise tax for aviation gasoline is \$0.194 per gallon and \$0.219 per gallon for jet fuel. Commercial aviation operators pay a reduced jet fuel excise tax

rate of \$0.044. Additionally, there are federal excise tax exemptions for aviation fuel when used in certain operations, including:

- Use on a farm for farming purposes
- Foreign trade
- Commercial aviation (aviation gasoline only)
- Exclusive use by a qualified blood collector organization
- Exclusive use by a nonprofit educational organization
- Exclusive use by a state, or political subdivision of a state
- In an aircraft owned by an aircraft museum
- In military aircraft.

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

We did not identify any data constraints that affected our evaluation.

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 AVIATION FUEL EXEMPTIONS. Statute and the enacting legislation for the exemptions do not state the exemptions' purpose or provide performance measures for evaluating their effectiveness. Therefore, for the purposes of this evaluation we considered the following potential purpose: to exempt commercial aviation operators from the jet fuel and aviation gasoline excise taxes, since a majority pay the sales tax on jet fuel. We identified this purpose based on discussions with the Division, the operation of the exemption, and legislative testimony. 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).

THE GENERAL ASSEMBLY COULD CONSIDER REPEALING THE AVIATION GASOLINE EXEMPTION. As discussed, this exemption, which only applies to sales of aviation gasoline, but not jet fuel, was not used in Calendar Year 2019. Aviation gasoline accounts for less than one percent of all aviation fuel purchases, and according to Division staff, few, if any, of the commercial aviation operators that would qualify for the exemption use aircraft that require aviation gasoline. Instead, they typically only use aircraft that require jet fuel, which is exempt under the Jet Fuel Excise Tax Exemption. Therefore, it is likely that there are no eligible operators that use the Aviation Gasoline Exemption and the General Assembly may want to consider repealing it.