

# The Future of Transportation Funding in Montana

## Task 2 Report: Transportation Funding Forecast

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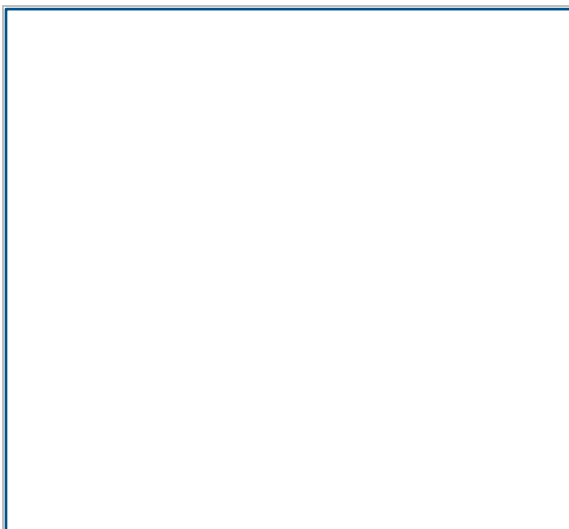
STANDARD CONVERSION TABLE – ENGLISH TO METRIC				
Symbol	To convert from	Multiply by	To determine	Symbol
<b><u>LENGTH</u></b>				
IN	inch	25.4	millimeters	mm
FT	feet	0.3048	meters	m
YD	yards	0.9144	meters	m
MI	miles	1.609344	kilometers	km
<b><u>AREA</u></b>				
SI	square inches	645.16	square millimeters	mm <sup>2</sup>
SF	square feet	0.09290304	square meters	m <sup>2</sup>
SY	square yards	0.83612736	square meters	m <sup>2</sup>
A	acres	0.4046856	hectares	ha
MI <sup>2</sup>	square miles	2.59	square kilometers	km <sup>2</sup>
<b><u>VOLUME</u></b>				
CI	cubic inches	16.387064	cubic centimeters	cm <sup>3</sup>
CF	cubic feet	0.0283168	cubic meters	m <sup>3</sup>
CY	cubic yards	0.764555	cubic meters	m <sup>3</sup>
GAL	gallons	3.78541	liters	L
OZ	fluid ounces	0.0295735	liters	L
MBM	thousand feet board	2.35974	cubic meters	m <sup>3</sup>
<b><u>MASS</u></b>				
LB	pounds	0.4535924	kilograms	kg
TON	short tons (2000 lbs)	0.9071848	metric tons	t
<b><u>PRESSURE AND STRESS</u></b>				
PSF	pounds per square foot	47.8803	pascals	Pa
PSI	pounds per square inch	6.89476	kilopascals	kPa
PSI	pounds per square inch	0.00689476	megapascals	Mpa
<b><u>DISCHARGE</u></b>				
CFS	cubic feet per second	0.02831	cubic meters per second	m <sup>3</sup> /s
<b><u>VELOCITY</u></b>				
FT/SEC	feet per second	0.3048	meters per second	m/s
<b><u>INTENSITY</u></b>				
IN/HR	inch per hour	25.4	millimeters per hour	mm/hr
<b><u>FORCE</u></b>				
LB	pound (force)	4.448222	newtons	N
<b><u>POWER</u></b>				
HP	horsepower	746.0	watts	W
<b><u>TEMPERATURE</u></b>				
°F	degrees Fahrenheit	5 X (°F – 32)/9	degrees Celsius	°C
<b><u>DENSITY</u></b>				
lb/ft <sup>3</sup>	pounds per cubic foot	16.01846	kilograms per cubic meter	kg/m <sup>3</sup>
<b><u>ACCELERATION</u></b>				
g	freefall, standard	9.807	meters per second squared	m/s <sup>2</sup>

TO CONVERT FROM METRIC TO ENGLISH, DIVIDE BY THE ABOVE CONVERSION FACTORS.

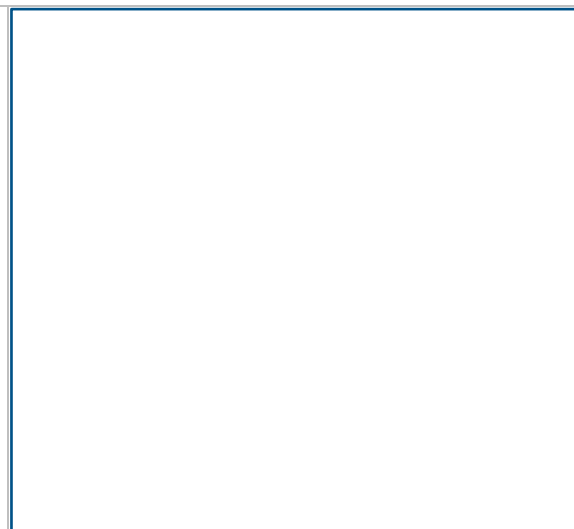
# 1. Introduction

The financial future of Montana’s highways is at a crossroads. Funding for Montana's state transportation system comes primarily from user fees, including the state gasoline tax, special fuel tax, and other motor vehicle fees. Improvements in the fuel efficiency of cars, trucks, and freight vehicles are diluting these fuel tax revenues, even while roadway maintenance and construction costs are experiencing rapid inflation.

The two charts below illustrate these compounding trends. **Figure 1.1** illustrates increasing fuel economy among newer vehicles, resulting in declining gas tax per mile driven.<sup>i</sup> **Figure 1.2** shows that construction costs have more than tripled in nominal terms since 2003.<sup>ii</sup> The combined picture of declining user revenues (relative to demands placed on the system) in an era of rapid construction cost inflation poses a significant challenge to the financial solvency of Montana’s highways.



*Figure 1.1 Increasing Fuel Economy*



*Figure 1.2 Construction Cost Inflation*

This research project, “The Future of Transportation Funding in Montana,” provides the Montana Department of Transportation (MDT) with a roadmap for navigating these funding challenges. The project overall will forecast MDT’s diluting revenues and lay out a menu of funding alternatives that can be used to shore up future shortfalls.

The research project tasks include:

1. Identify and analyze current revenue structures.

2. Develop long-term revenue forecasts for motor fuel taxes and vehicle weight fees, incorporating scenarios for EV growth, commercial vehicle use, statewide vehicle miles traveled, and changes in vehicle fuel efficiency.
3. Identify and evaluate alternative funding mechanisms that are equitable and adaptable to future technological shifts.
4. Develop an implementation report to guide next steps.

This is the first of two reports to be produced through this research effort. This report summarizes the findings of steps #1 and #2, presenting a forecast of future MDT's revenues with contextual information about the revenues and funding mechanisms of peer states. (A second, future report, will address alternative funding mechanisms and considerations for their potential application in Montana.)

## 2. Baseline Forecasts of Montana's Transportation Revenue

This chapter presents baseline forecasts of MDT's primary existing revenue sources. This chapter outlines the methods employed and the forecasted MDT revenue out to 2050.

### Total MDT Revenue

In 2024, MDT received a total of \$254M in the Highways Special Revenue Account (HSSRA) and the Highways Non-Restricted Account (Non-Restricted Account) through the revenue sources analyzed in the Task 1 Report. The HSSRA made up 96% at \$244M, while the remaining \$10M comes from the Non-Restricted Account. Employing baseline forecasts, which are covered in subsections of this chapter, the total MDT revenue is projected to be \$300M by 2050.

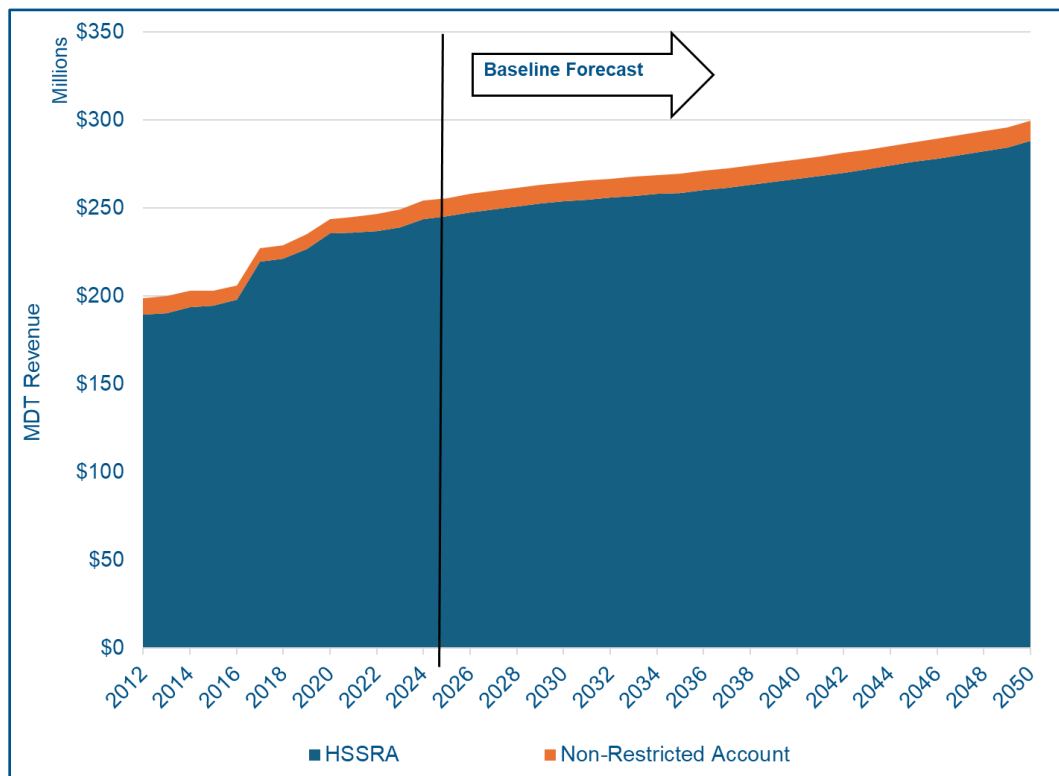


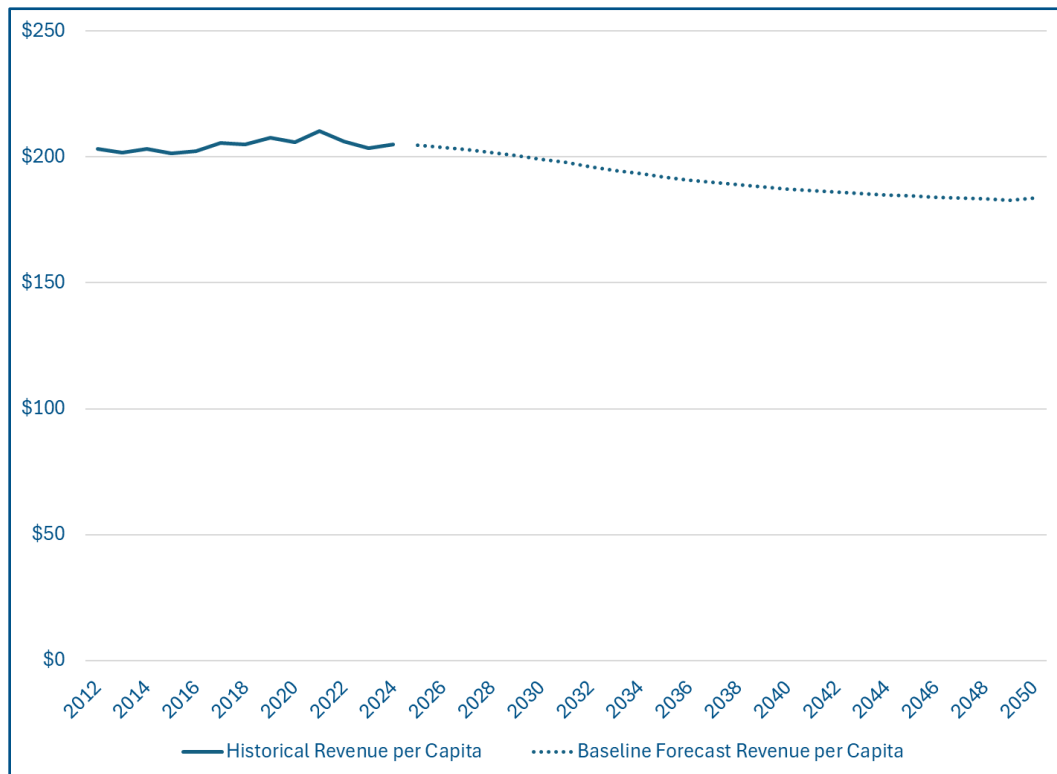
Figure 2.1 MDT Revenue by Fund

The baseline forecast projects a total MDT revenue growth from 2025 through 2050 with a compound annual growth rate (CAGR provides the yearly growth rate of an investment assuming all growth over a period that happened steadily each year) of 0.61%; however, this includes three important caveats. First, this assumes population

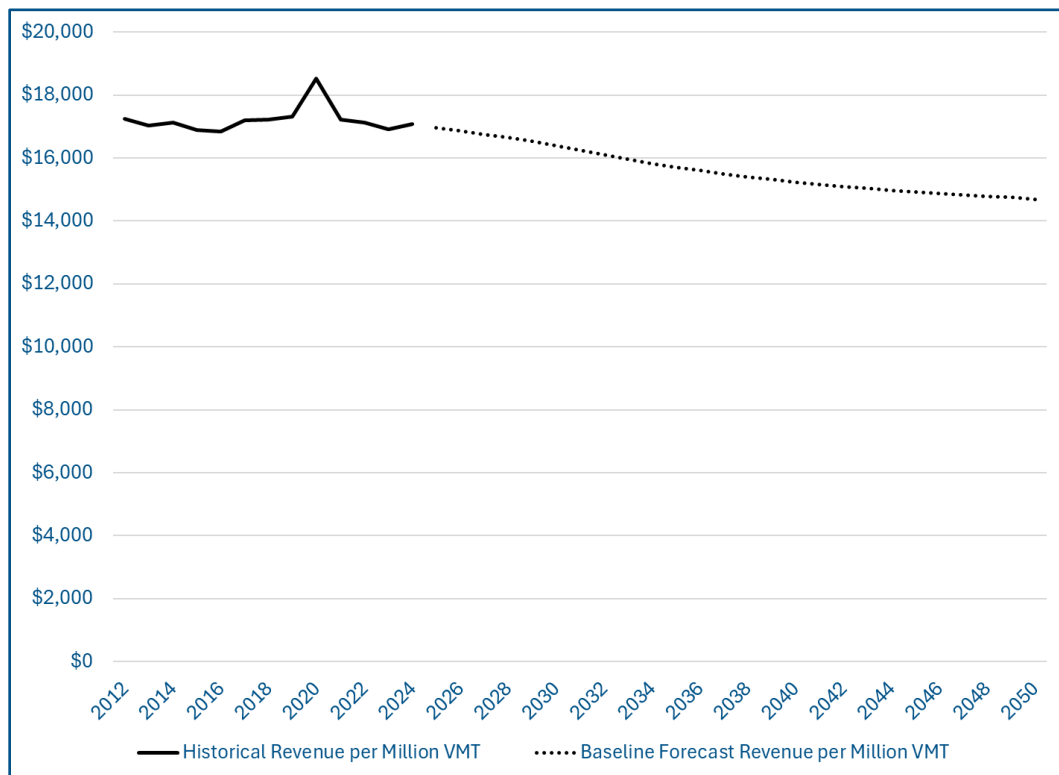


growth will continue on a similar trajectory. The models will be updated to allow for different population growth scenarios and trends to be evaluated in subsequent tasks, as discussed in the **Next Steps Section**.

Second, the total revenues are forecasted to increase, but revenues per capita and per million VMT decrease. This means that while MDT is projected to have more funds, the use and deterioration of the transportation system increases at a faster rate. The revenue per capita declines from \$205 to \$184 and per million VMT declines from \$17,012 to \$14,697, as shown in **Figure 2.2** and **Figure 2.3**, respectively.<sup>iii</sup>



*Figure 2.2 MDT Revenue per Capita*



*Figure 2.3 MDT Revenue per Million VMT*

Third, the revenue forecasts do not consider inflation or cost increases. According to the Federal Highway Administration’s National Highway Construction Cost Index, roadway construction costs have increased by an average of 5.9% per year since 2003. A 0.61% revenue growth rate means that construction costs are rapidly outstripping agency revenues. Therefore, revenue may increase, but inflation will mean MDT can do less despite growing available funds.

## Revenue Source Types

Revenue sources can be grouped by fund destination and type. This allows the proportion of total revenue to be analyzed by each policy lever and to identify the largest revenue contributors. This enables the impact of tax or fee changes on MDT revenue to be understood. For instance, a change to the Gross Vehicle Weight (GVW) fee schedule would impact the International Registration Plan (IRP) revenue that goes to the HSSRA and the Non-Restricted Account, as well as the Form 3 and County revenues, as they all employ the same fee schedule. **Table 2.1** defines the revenue source, type, and fund destination.<sup>iv</sup> Then, **Table 2.2** outlines the revenue source type contribution to MDT revenue for 2024 and 2050.<sup>v</sup> Gas and special fuels tax revenues collectively make up 83% of the revenue, with GVW making up the third largest proportion at 13%.

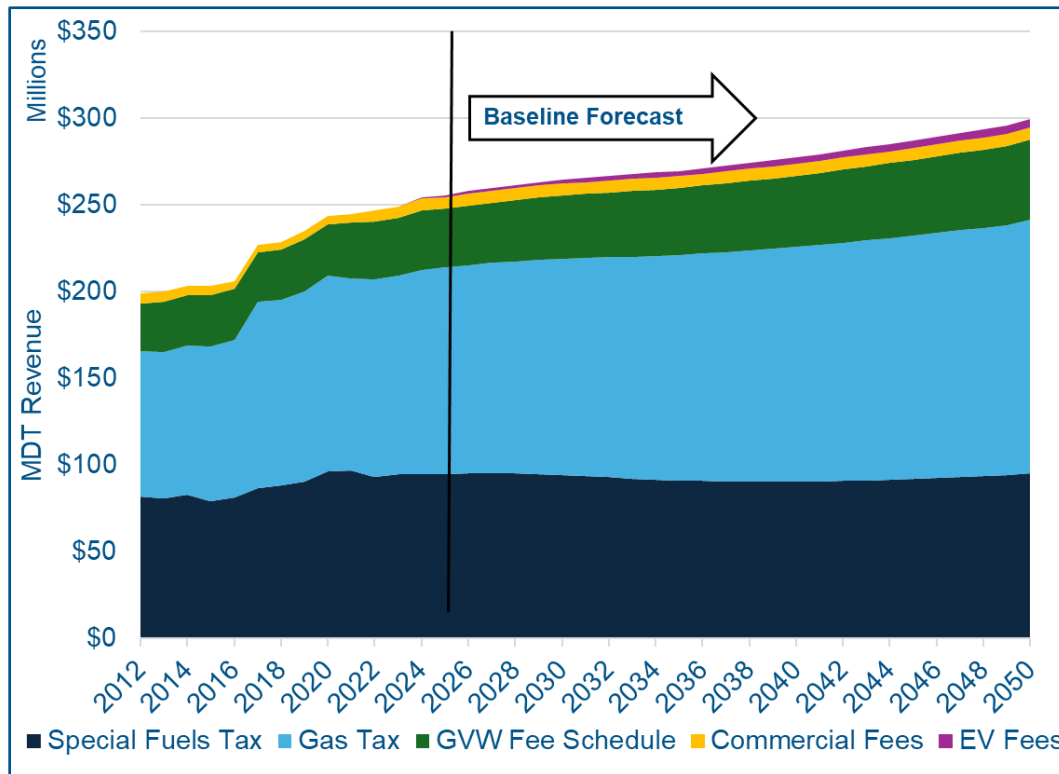
Table 2.1 Revenue Source by Type and Fund<sup>vi</sup>

Revenue Source	Description	Revenue Type	Fund Destination
Gas Tax	Tax on each gallon of gas	Gas tax	HSSRA
Special Fuels Tax	Tax on each gallon of special fuels	Special fuels tax	
EV & PHEV Registration Fee	PHEV & EV annual and permanent weight-based registration fee	EV fees	
Public Charging Station Tax	PHEV and EVs using public charging stations pay a per kWh tax		
In-State GVW	Fees paid by Form 3 and to the Counties	GVW fee schedule	
IRP GVW	GVW portion of IRP revenue		
Other IRP	Registration & Fees in Lieu of Taxes IRP revenue	Non-Restricted Account	
Commercial Fees	Overweight fee and oversize permit		Commercial fees

Table 2.2 MDT Revenue by Source Type

Revenue Source Type	2024 Revenue (2024 USD)	2024 Proportion of Total MDT Revenue	2050 Revenue (2024 USD)	2050 Proportion of Total MDT Revenue
Gas Tax	\$118,143,360	46%	\$146,563,065	49%
Special Fuels Tax	\$94,452,141	37%	\$95,146,186	32%
GVW Fees	\$34,302,962	13%	\$46,211,010	15%
EV Fees	\$780,637	0.3%	\$4,909,581	1.6%
Commercial Fees	\$6,724,829	3%	\$6,888,701	2%

**Figure 2.4** below illustrates the MDT revenue makeup by revenue type.<sup>vii</sup>



*Figure 2.4 MDT Revenue by Source Type*

Special fuels tax appears to have little to no growth while the gas tax revenue is the primary driver of total MDT growth. Considering the revenue source types, changes to the inputs or fees for the gas tax, special fuels tax, and then the GVW fee schedule will have the largest impacts on total MDT revenues.

## Highways Special Revenue Account Total Forecast

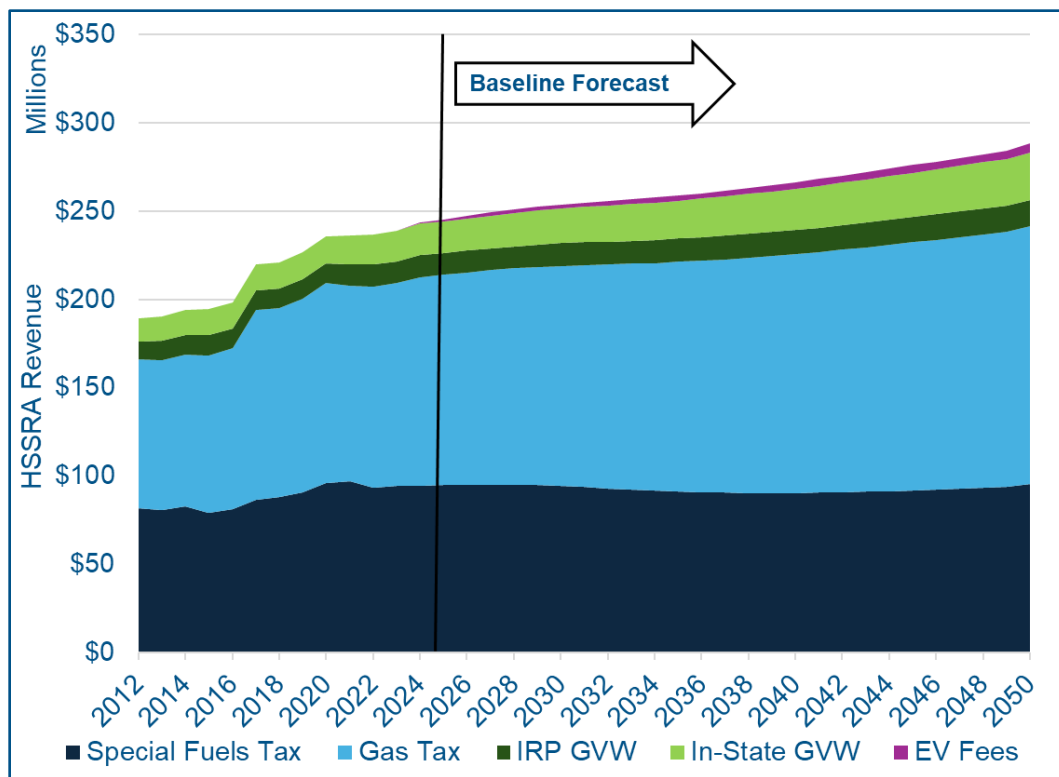
The HSSRA is the largest proportion of MDT's revenue, making up 96% in 2024. The revenue sources that contribute to the HSSRA with their percentage of revenue are listed in **Table 2.3**.<sup>viii</sup>

*Table 2.3 HSSRA Revenues by Source*

Revenue Sources	2024 Revenue (2024 USD)	2024 Proportion of HSSRA Revenue	2050 Revenue (2024 USD)	2050 Proportion of HSSRA Revenue
Gas Tax	\$118,143,360	48%	\$146,563,065	51%

Special Fuels Tax	\$94,452,141	39%	\$95,146,186	33%
In-State GVW Fees	\$12,531,220	5%	\$14,643,069	5%
Out-of-State GVW Fees	\$17,945,671	7%	\$27,050,897	9%
EV Fees	\$780,637	0.3%	\$4,909,581	2%

Considering the HSSRA revenue makeup, changes in the gas and special fuels tax rates and inputs would have the largest impact on MDT's restricted revenue. **Figure 2.5** below illustrates the HSSRA revenue forecast through 2050 based on baseline forecasts of the sources, which assume similar future growth as seen historically.<sup>ix</sup>



*Figure 2.5 HSSRA Revenue by Source*

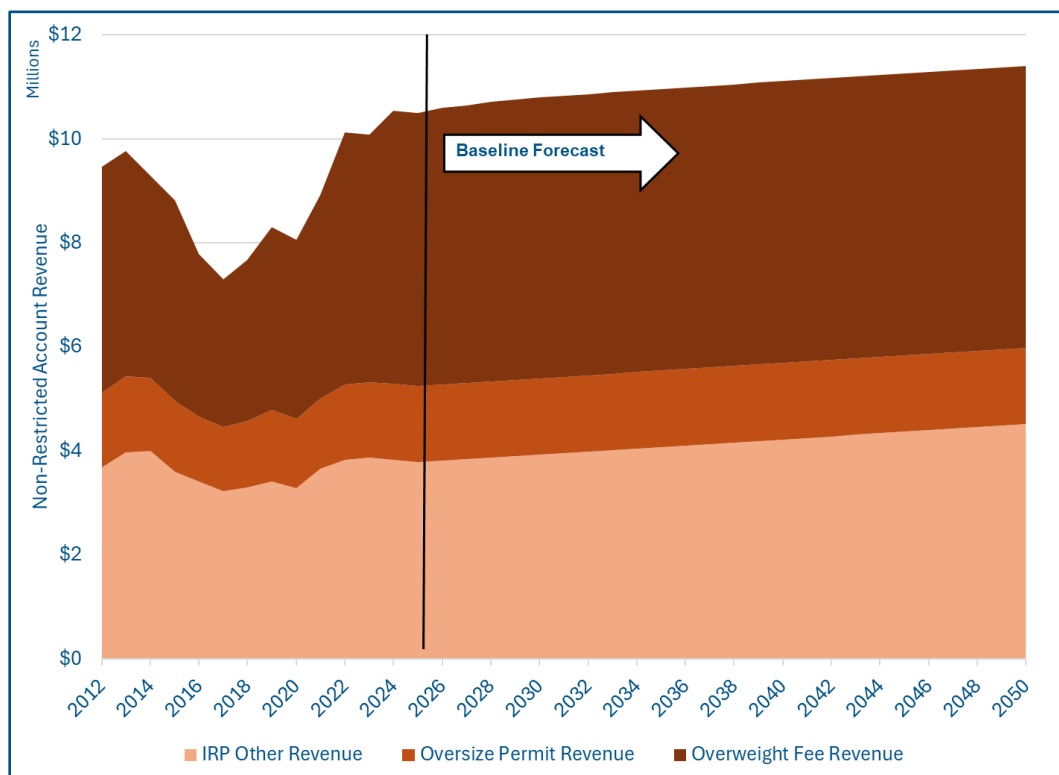
The HSSRA revenue projection has a CAGR of 0.6%. The individual source forecasts are covered individually later in this report.

## Highways Non-Restricted Account Funding Sources

The Non-Restricted Account includes revenues not guaranteed to MDT. This fund makes up only 4% of MDT's total revenues. The fund's revenue sources and their proportion of Non-Restricted Account revenue are outlined in **Table 2.4**.<sup>x</sup> The Overweight Fees are the largest contributor to the Non-Restricted account in 2024 at 50%, followed by Other IRP Fees at 36%. But even then, these revenue sources make up about 3% of total MDT revenues. This breakout is visualized in **Figure 2.6**.<sup>xi</sup>

*Table 2.4 MDT Non-Restricted Account Revenue by Source*

Revenue Sources	2024 Revenue (2024 USD)	2024 Proportion of Non-Restricted Account Revenue	2050 Revenue (2024 USD)	2050 Proportion of Non-Restricted Account Revenue
Other IRP Fees	\$3,826,071	36%	\$4,517,044	40%
Overweight Fees	\$5,258,514	50%	\$5,417,226	47%
Oversize Permits	\$1,466,315	14%	\$1,471,476	13%



*Figure 2.6 Non-Restricted Account Revenue by Source*

The Non-Restricted Account is forecasted to grow slowly with a CAGR of 0.3%, largely due to the growth in other IRP fees revenue. The individual sources are covered below.

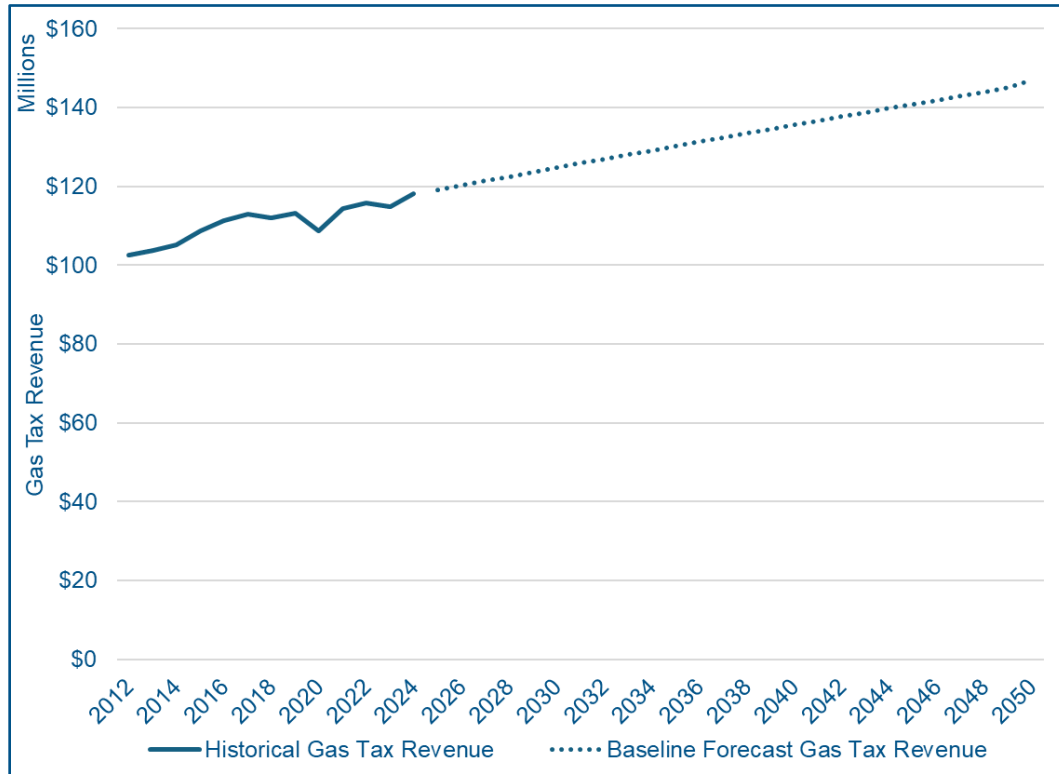
## Revenue Sources

### Gas Tax Revenue Forecast

The gas tax revenue is the largest contributor to MDT revenue: it makes up 46% of total MDT revenue and 48% of HSSRA revenue. Therefore, changes to the gasoline gallonage inputs would have the largest impact on MDT revenue.

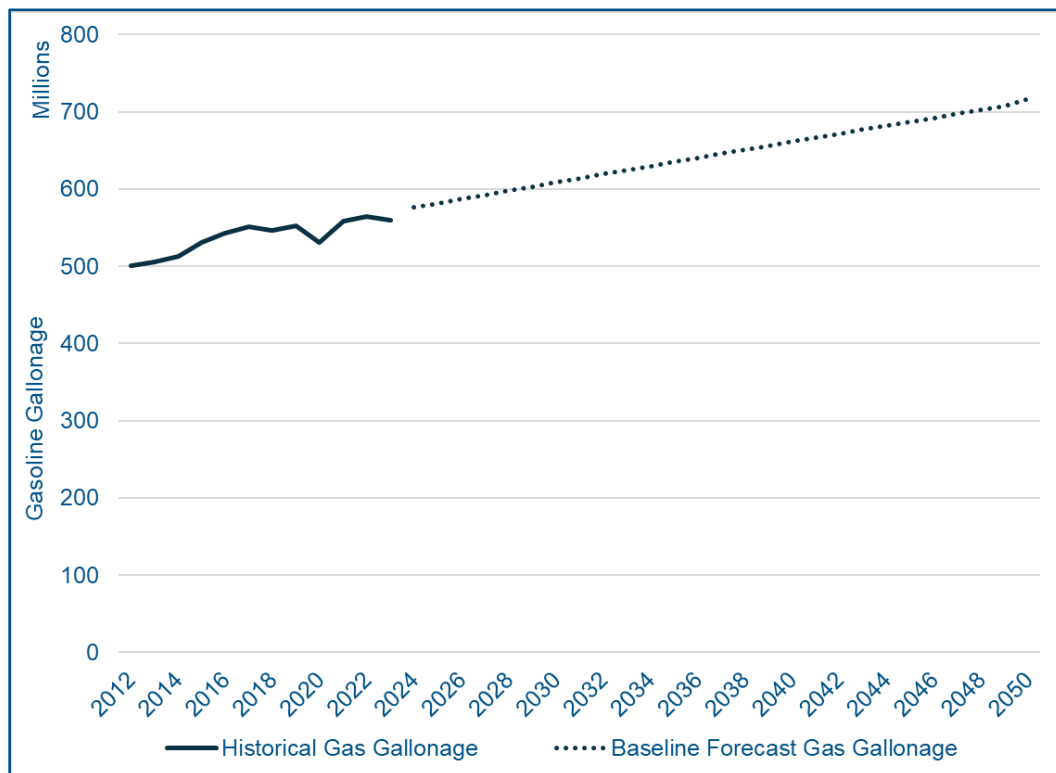
Between 2017 and 2023, the gas tax gradually increased from \$0.27 to \$0.33 per gallon. During this time, changes in how gas tax revenue was distributed led to differences in reported HSSRA revenue. To make historical comparisons clearer, past gas tax revenue has been recalculated using the 2024 allocation rate — 62% of the total \$0.33 tax (after prior distributions, calculated as \$0.22/\$0.33). This 62% proportion is applied to historical gas tax collections and gallonage from 2012 through 2023 to better show the changes in the gas tax and the revenue available to MDT. The same proportion is also used when forecasting future gas tax revenue.

**Figure 2.7** and **Figure 2.8** provide the historical and forecasted gas tax revenue available to MDT and gasoline gallonage.<sup>xii</sup> Both the gas tax revenue and gas gallonage have a CAGR of 0.8% from 2024 through 20250.



*Figure 2.7 MDT Gas Tax Revenue*





*Figure 2.8 Montana Gas Gallonage Consumption*

Gasoline gallonage is forecasted with two inputs, non-commercial vehicle miles traveled (VMT) and non-commercial fleet fuel efficiency forecasts. The complete methodology for calculating and forecasting the gas tax revenue forecast is outlined below:

$$\text{Gas Tax Revenue} = \text{Gas Gallonage} * \text{Gas Tax Rate} * \text{HSSRA Gas Tax Allocation}$$

$$\text{Gasoline Gallonage} = \frac{\text{Non Commercial VMT}}{(\text{Non Commercial Fleet Efficiency})}$$

$$\text{Non Commercial VMT} = \text{Total VMT} * (1 - \text{Commercial VMT}\%) * \text{ICE Registration \%}$$

$$\text{Non Commercial Fleet Efficiency} = \frac{\text{Non Commercial VMT}}{(\text{Gas Gallonage})}$$

The gasoline gallonage inputs are covered below.

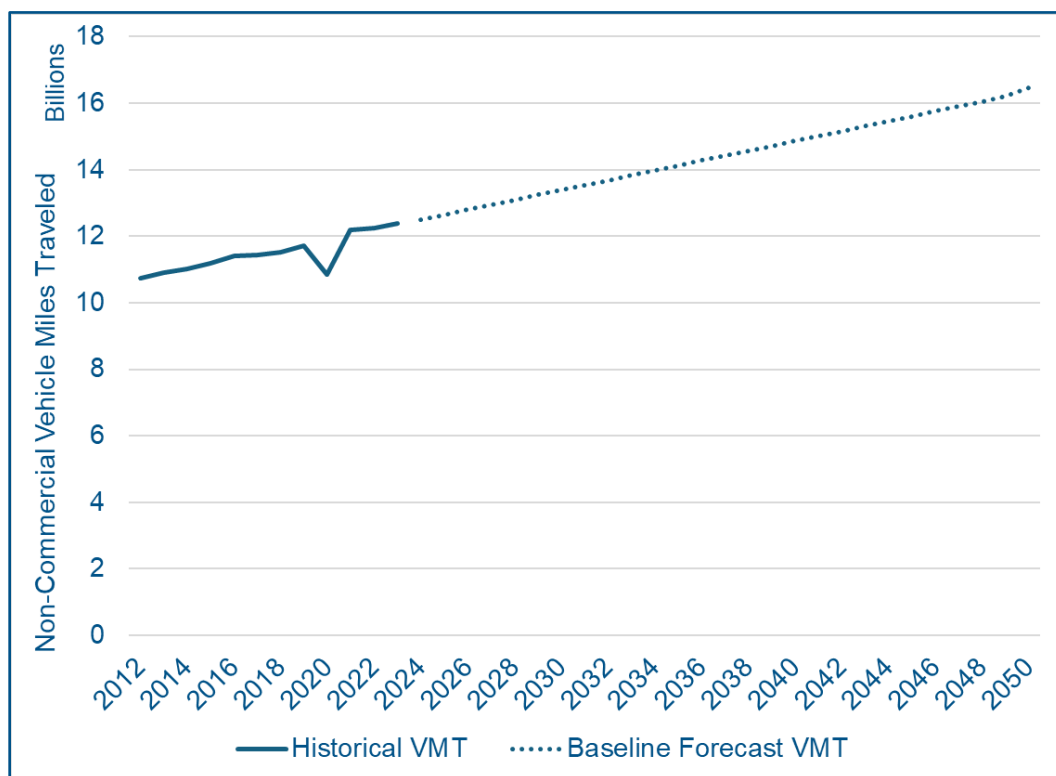
### **Passenger Vehicle Miles Traveled Forecast**

MDT provided annual vehicle miles traveled (VMT) data, broken down by urban and rural areas, and by commercial and non-commercial vehicles. The non-commercial VMT serves as an estimate of the miles driven by passenger vehicles that account for the gasoline consumption.

Since the VMT is employed in a gas gallonage forecast, the model needs to account for miles traveled by non-Internal Combustion Engines vehicles, such as EVs and PHEVs, as they did not result in gas consumption. Therefore, the percentage of total registrations that are EVs and PHEVs are removed from the non-commercial VMT estimates, acting under the assumption that all vehicle types travel the same distance and the Montana registration by vehicle type distribution is equal to all vehicles traveling in Montana.

$$\text{Non Commercial VMT} = \text{Total VMT} * (1 - \text{Commercial VMT}\%) * \text{ICE Registration \%}$$

**Figure 2.9** provides the historical and forecasted non-commercial VMT from 2012 through 2050.<sup>xiii</sup>



**Figure 2.9 Montana Non-Commercial Vehicle Miles Traveled**

Excluding 2020, non-commercial VMT has grown consistently, between 0.4% and 1.9% each year with a compound annual growth rate (CAGR) of 1.3% from 2012 to 2024. The baseline forecast employs a linear growth model from 2012 through 2023 to forecast future VMT, assuming that on average the growth seen in 2012 through 2024 will be seen through 2050. The model projects an increase of 150 million vehicle miles each year for a CAGR of 1.02% from 2024 through 2050.

As a baseline forecast, this provides a benchmark for testing different inputs and scenarios and for understanding the resulting impact on gas tax revenue. Future modeling can incorporate additional inputs to understand the impact of underlying factors, including:

- Montana population
- Different growth in urban vs rural VMT
- Defining reasonable VMT growth bounds

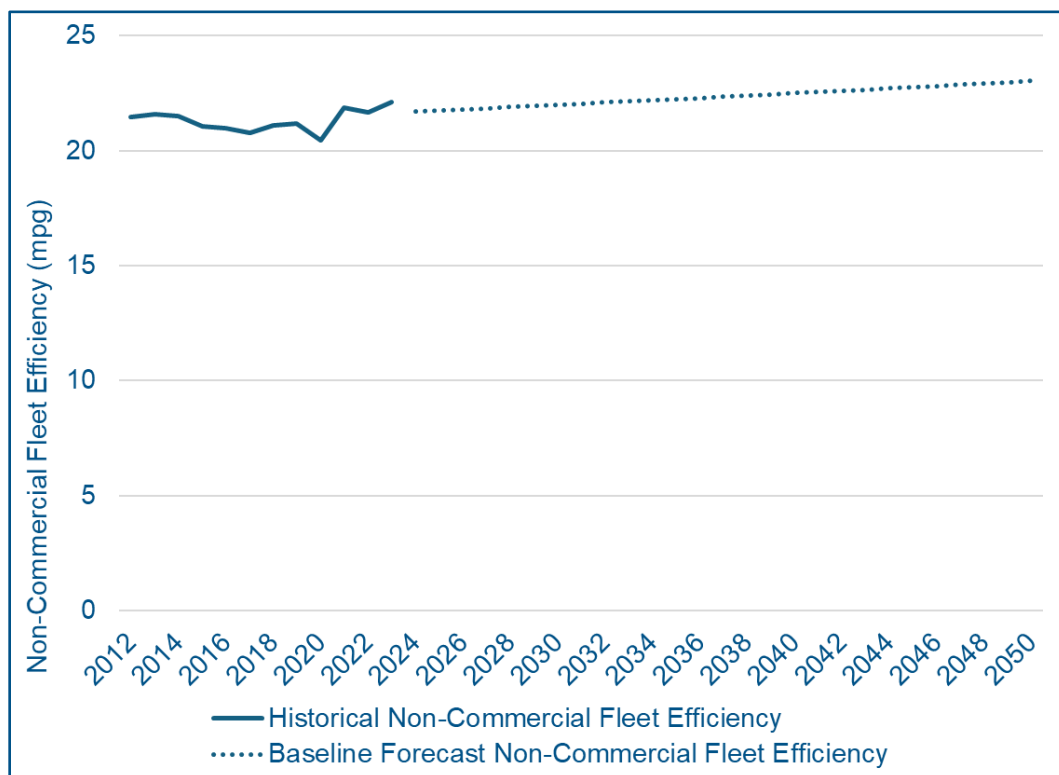
### **Non-Commercial Fleet Efficiency Forecast**

Multiplying fleet fuel efficiency, measured as miles per gallon, by vehicle miles traveled results in gallons consumed. Conversely, the total vehicle miles traveled in the State can be divided by the gallons consumed to estimate the average fleet efficiency of the vehicles. This methodology provides an estimate that can be employed in the gallonage model when other fleet fuel efficiency data is not available.

$$\text{Non Commercial Fleet Efficiency} = \frac{\text{Non Commercial VMT}}{(\text{Gas Gallonage})}$$

Since the COVID-19 disrupted regular travel patterns, 2020 was omitted from the forecast. Yet, even with this omission, the variation does not have a consistent pattern, ranging between changes of -1% and 1.5%. This variation can be caused by types of vehicles being purchased, for instance truck sales increased from 2012 through 2019. Despite the variation, a linear model offered a reliable method for developing a fleet fuel efficiency trend for forecasting.<sup>xiv,xv</sup>

Figure 2.10 depicts the historical estimates and forecasts for the non-commercial fleet fuel efficiency.<sup>xvi</sup>



*Figure 2.10 Montana Non-Commercial Fleet Fuel Efficiency*

The Montana fleet fuel efficiency is forecasted to grow at a CAGR of 0.22%. Since the fleet fuel efficiency improvement growth rate is smaller than the VMT growth rate, gallonage consumption is forecasted to increase.

Note, this forecasts overall non-commercial fleet fuel efficiency. The fuel efficiency of newer vehicles has increased at a faster rate, but these vehicles make up a relatively small share of the overall fleet. According to S&P Global Mobility data, the average age of Montana's non-commercial vehicle fleet as of December 2022, was 17.7 years, (higher than the national average of 12.2 years).<sup>xvii</sup>

The fleet fuel efficiency forecast can be adapted to account for different scenarios. For instance, if new vehicles sales grow, then the fleet efficiency could increase faster than if fewer new vehicles are purchased. Moreover, federal policies could impact purchasing behavior and the efficiency of new vehicles. These scenarios can be captured and tested by establishing a reasonable range of fuel efficiency changes and evaluating the impact on gas gallonage and gas tax revenue.

## Special Fuel Tax Revenue Forecast

The special fuel tax revenue comes from the sale of diesel, biodiesel, and special fuel additive blends. It makes up 37% of MDT's total revenue and 39% of the HSSRA. The

special fuels tax rate increased under the same bill of the gas tax, going from \$0.2775 to \$0.2975 per gallon. To model the historical and projected special fuel gallonage consistently, the percentage of the special fuels tax allocated to the HSSRA in 2024, 99%, was applied to special fuels tax rate.

Calculating special fuel revenue and gallonage employs two inputs, commercial VMT and commercial vehicle fleet efficiency. The formulas are outlined below with commercial fleet efficiency and commercial VMT being covered in the following subsections:

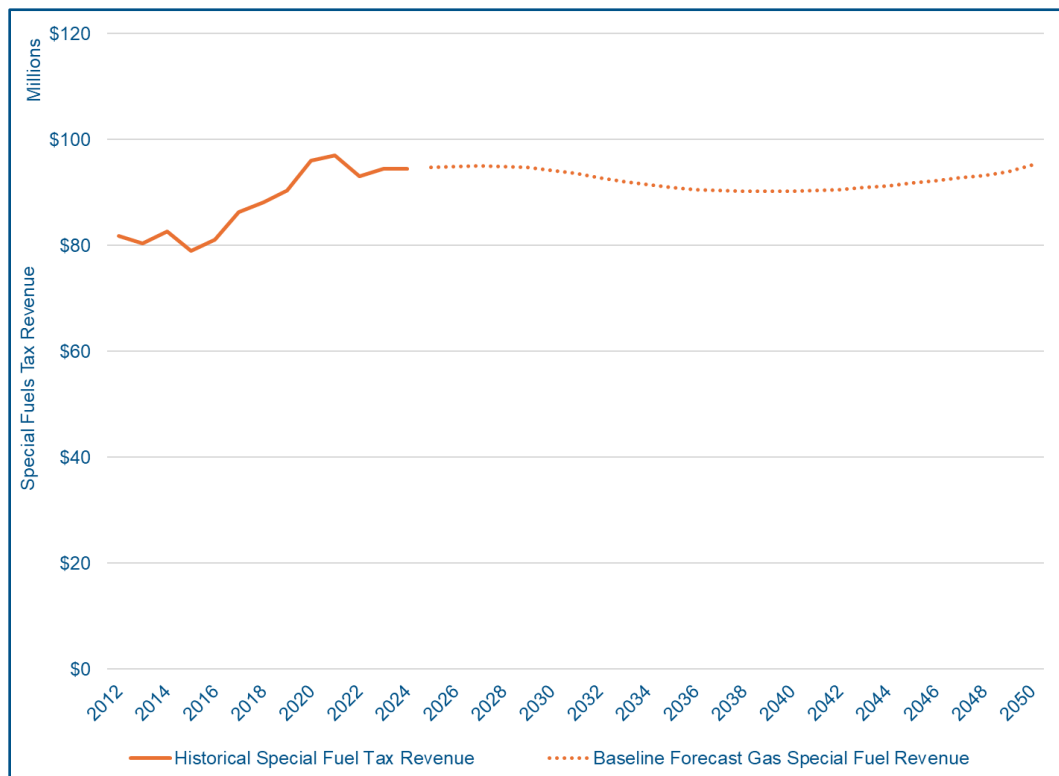
$$\text{HSSRA Special Fuels Revenue} = \text{Special Fuels Tax Allocation} * \text{Special Fuels Gallonage}$$

$$\text{Special Fuels Gallonage} = \frac{\text{Commercial VMT}}{\text{Commercial Fleet Efficiency}}$$

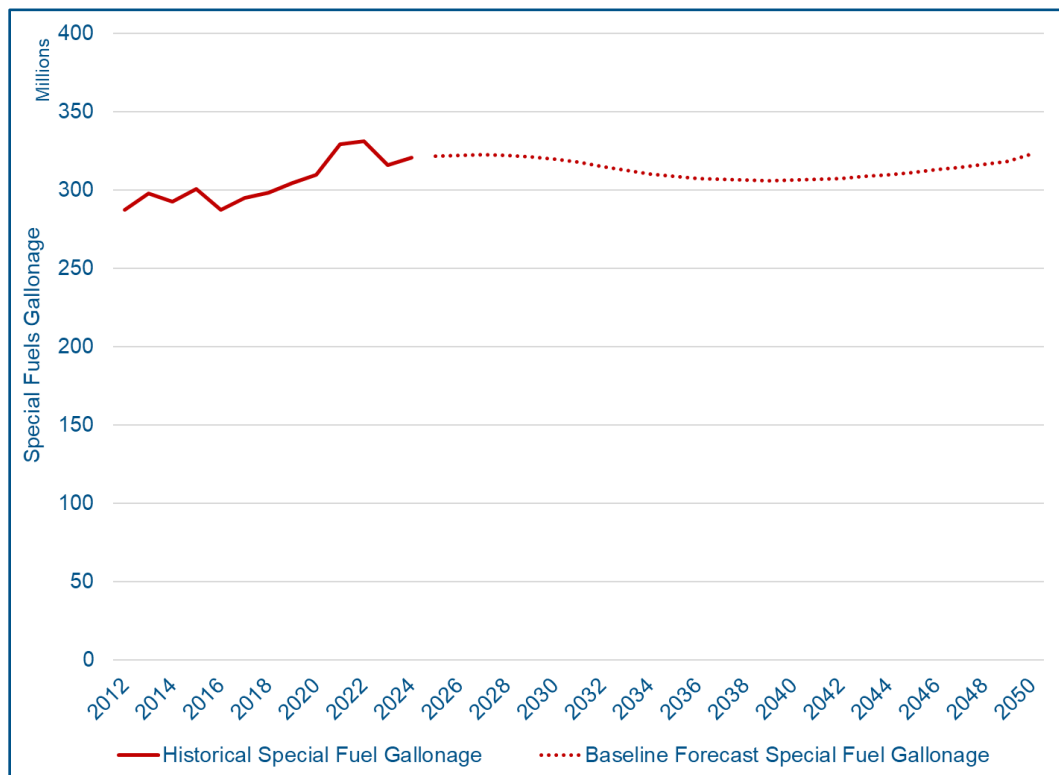
$$\text{Commercial Fleet Efficiency} = \frac{\text{Commercial VMT}}{(\text{Special Fuels Gallonage})}$$

$$\text{Commercial VMT} = \text{Total VMT} * \text{Commercial VMT \%}$$

The special fuel tax revenue and gallonage are displayed in **Figure 2.11** and **Figure 2.11**, respectively.<sup>xviii</sup>



**Figure 2.11 MDT Special Fuel Tax Revenue**

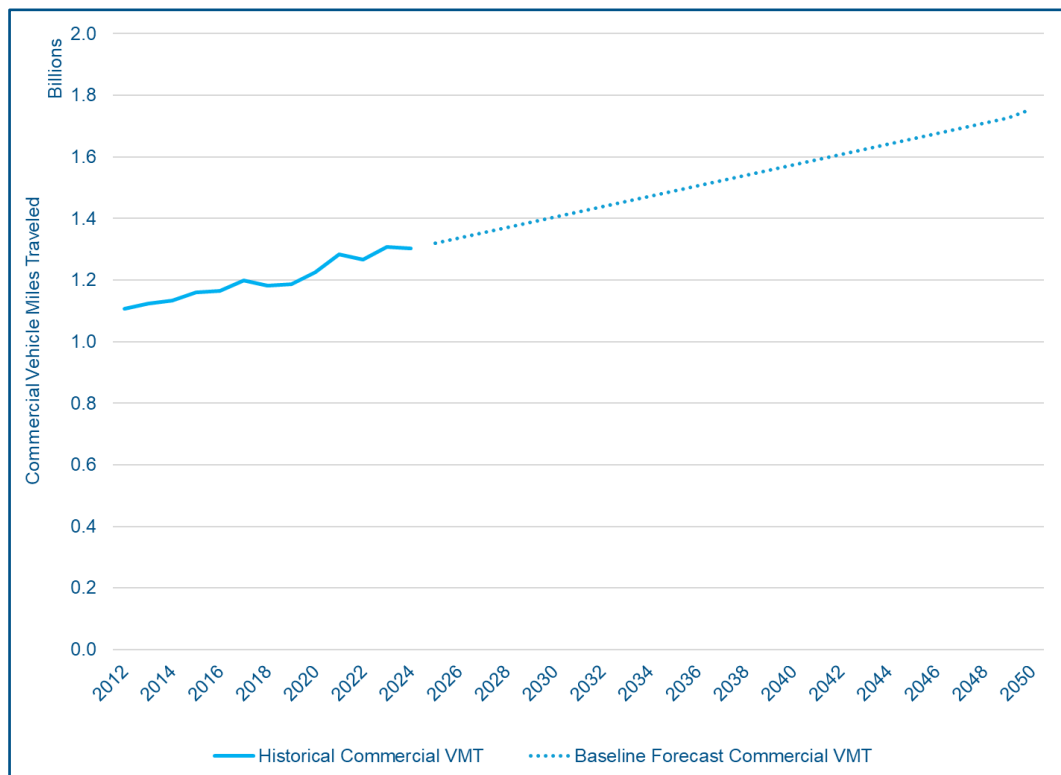


*Figure 2.12 Montana Special Fuel Gallonage Consumption*

The special fuel tax revenue increased with a CAGR of 1.5% from 2012 to 2024, but the baseline model projects a decline and recovery with 2024 to 2050 CAGR of 0.03%. The similar growth in the inputs, commercial fleet fuel efficiency and commercial VMT causes the nominal forecasted growth, which are both addressed in the subsequent subsections.

### **Commercial Vehicle Miles Traveled Forecast**

MDT provided commercial VMT estimates for 2014 through 2023. To fill in earlier years, the average share of VMT categorized as commercial, consistently around 9.5%, was applied to the 2012 and 2013 total VMT. Using the complete dataset from 2012 through 2023 (excluding 2020), a linear model was developed to forecast commercial VMT through 2050. **Figure 2.13** depicts the commercial VMT historical and forecast data.<sup>xix</sup>



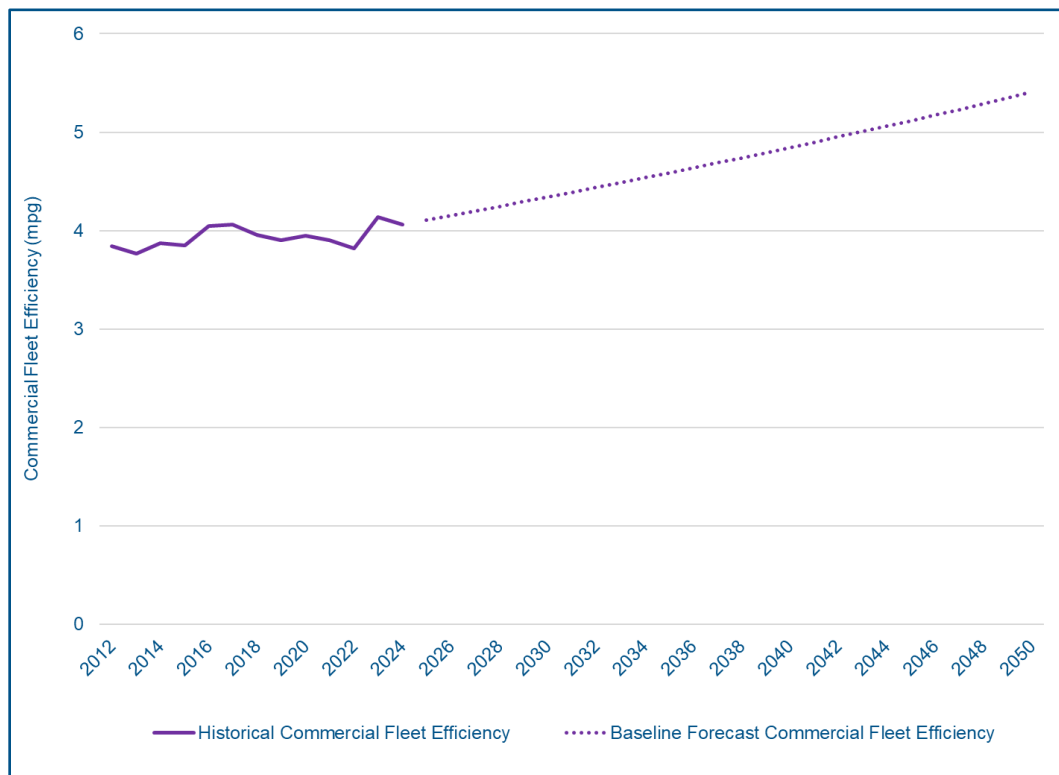
*Figure 2.13 Montana Commercial Vehicle Miles Traveled*

The baseline model forecasts a compound annual growth rate of 1.2% from 2024 through 2025. The projections assume that future growth will follow historical trends. Future modeling can employ a reasonable growth range to allow for testing of the impact of different commercial VMT scenarios on MDT revenue.

### **Commercial Vehicle Fleet Efficiency Forecast**

Similar to the methodology employed for non-commercial vehicles, the commercial vehicle fleet efficiency is estimated by dividing the commercial VMT by the special fuels gallonage. This works under the assumption that commercial vehicles primarily consume the special fuel gallonage.

Historical commercial vehicle fleet efficiency year over year change ranges from -3% to 8%, with a small CAGR of 0.48% from 2012 through 2024. Due to greater variability, an industry trend provided the baseline forecast. The Energy Information Administration (EIA) published the Annual Energy Outlook 2025 (AEO25) in April, which includes forecasts for various vehicle types, including freight vehicles, out to 2050.<sup>xx</sup> The forecasted freight vehicle fuel efficiency year over year growth rate was applied to the historical commercial vehicle fleet efficiency. The historical and projected values are illustrated in **Figure 2.14**.<sup>xxi</sup>



*Figure 2.14 Montana Commercial Fleet Fuel Efficiency*

The EIA projects a CAGR of 1.10% from 2023 through 2050, resulting in a commercial fleet efficiency increase from around 4 mpg to about 5.5 mpg. The actual growth in commercial fleet efficiency could depend on various factors, such as adoption rates of more efficient vehicles and the weight of the freight. The different scenarios and the resulting special fuel tax revenue can be evaluated by modifying the model's rate.

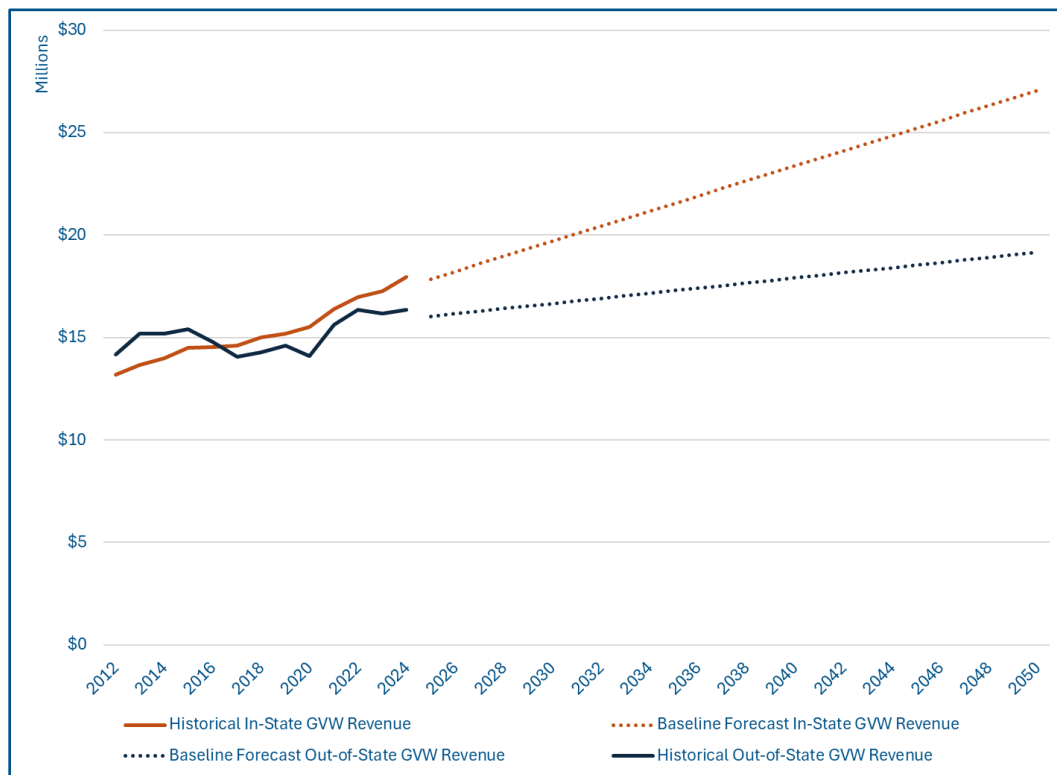
## Gross Vehicle Weight Fee Revenue

As of 2024, 15% of MDT's revenue comes from gross vehicle weight (GVW) fees at \$34 million, which are governed by the GVW fee schedule. The GVW fees can be split into two groups, in-state and out-of-state.

1. **In-state GVW fees** are either Form 3 fees, which are paid directly to MDT, or county fees, which are paid to the counties and then transferred to the State in lump sum payments. All in-state GVW fees are paid to the HSSRA.
2. **Out-of-state GVW fees** come from the International Registration Plan, a voluntary international and multi-state agreement to share permit and GVW fees between states. Around 76% of the IRP revenue is paid to the HSSRA, while the remaining 24% goes to the Non-Restricted Account.

**Figure 2.15** depicts the in-state and out-of-state GVW revenues.<sup>xxii</sup>





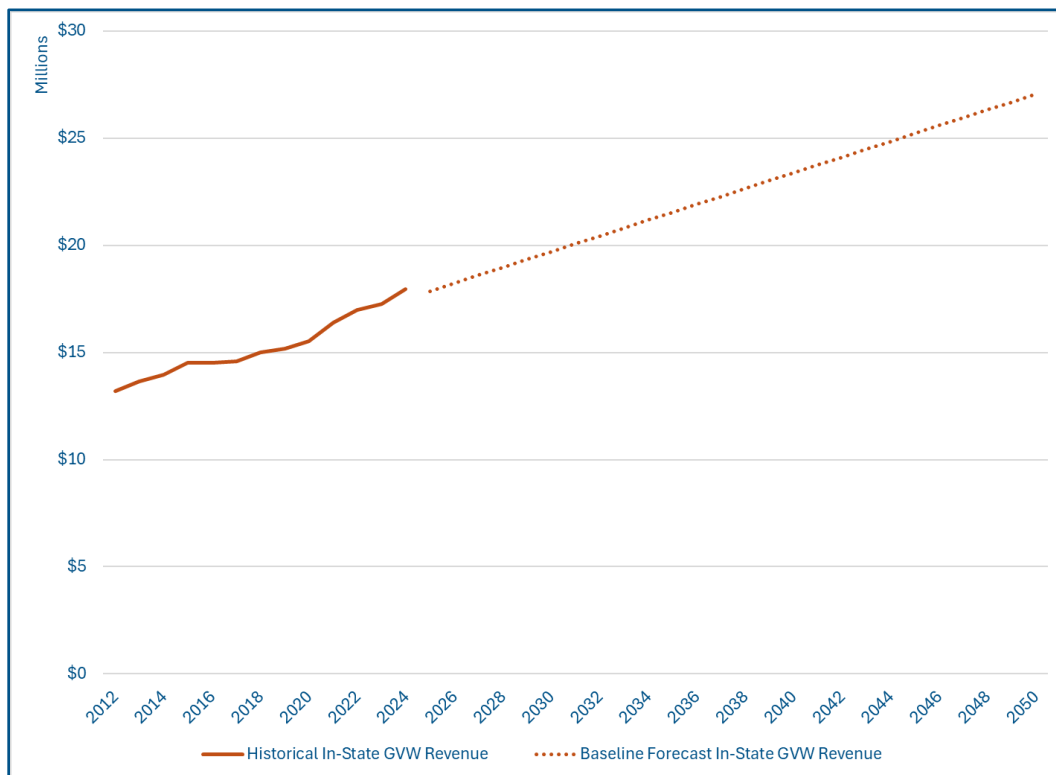
*Figure 2.15 MDT GVW Revenue*

Since the source of the revenues differ, the two GVW revenues are modeled separately and covered below.

### ***In-State Gross Vehicle Weight Fee Revenue***

MDT receives GVW revenue directly from carriers filling out a Form 3. Alternatively, carriers will pay the fees to the counties, who then forward the payments to MDT in lump sums. These GVW fees are paid by the carriers who register in the State, whether they drive only in Montana or through other states. Collectively they made up 5% of HSSRA revenue in 2024.

Since 2012, Form 3 revenues have declined while county revenues have increased. MDT confirmed that a portion of the increase in the county revenues is due to carriers transitioning away from paying MDT directly through Form 3 in favor of paying the counties. Therefore, to account for the payment choice, the Form 3 and county fees were added and forecasted collectively as in-state GVW revenue. **Figure 2.16** illustrates the historical and projected in-state GVW fee revenue.<sup>xxiii</sup>



*Figure 2.16 MDT In-State GVW Revenue*

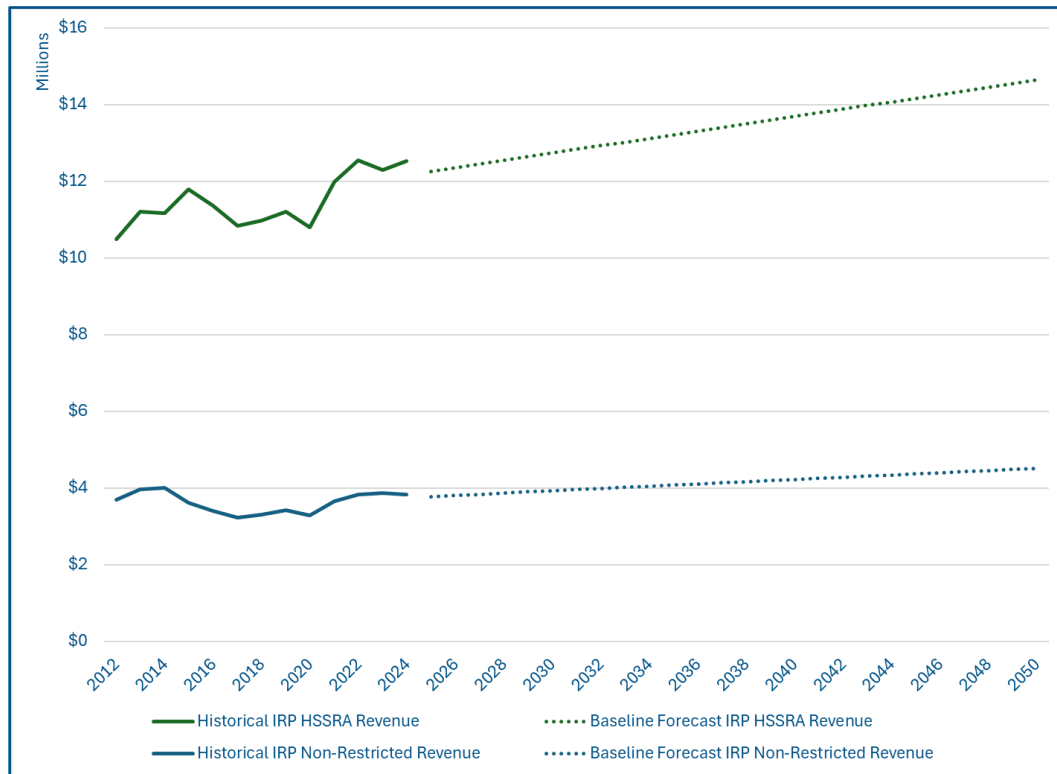
The future change of in-state GVW revenues may differ from historical trends, for instance Montana could experience stronger or weaker freight related industry growth. Considering a range of potential growth rates will allow MDT to explore how this revenue source will impact HSSRA and total MDT revenues.

### **Out-of-State Gross Vehicle Fees Revenue Forecast**

MDT pays IRP fees based on the mileage Montana permitted commercial vehicles drive in other states. Then MDT receives revenue from IRP for the miles driven in Montana by commercial vehicles permitted in other states. Historically, MDT ends up receiving more than they pay.

The IRP fees paid to MDT are distributed between the HSSRA and Non-Restricted Account. Historically, the proportion of revenue paid to the HSSRA and Non-Restricted Account remains relatively consistent. About 76% of the out-of-state GVW Fees are paid to the HSSRA, while the remaining revenue goes to the Non-Restricted Account. In 2024, the IRP GVW comprised 7% of the HSSRA revenue and the other IRP revenues made up 36% of the Non-Restricted Account.

The model forecasts the total IRP revenue and then applies the proportions. The resulting HSSRA & Non-Restricted Account IRP revenues can be seen in **Figure 2.17**.<sup>xxiv</sup>



*Figure 2.17 MDT Out-of-State (IRP) GVW Revenue*

The out-of-state revenue depends on the economic activity occurring regionally, nationally, and internationally. For instance, policies could impact the freight movements from Canada, which is historically Montana's largest international trade partner.<sup>xxv</sup> Adjusting the growth rate based on reasonable bounds can provide insight into the impact of out-of-state GVW fees on total MDT revenue.

## Electric Vehicle Fee Revenue

MDT has two sources of revenue from electric and plug-in hybrid vehicles (EV and PHEV): weight-based registration fee and public charging station tax revenues.

Unlike internal combustion engine (ICE) vehicle registration fees, the EVs and PHEVs weight-based fees go directly to MDT. Annual EV registration fees are \$130 to \$190, based on the vehicle weight. Annual PHEV fees are \$70 to \$100, also based on weight. Vehicles 11 years old or older are eligible for a permanent registration fee. The permanent registration fees are \$260 to \$380 for EVs and \$140 to \$200 for PHEVs, again based on weight.

In addition to the weight-based registration fees, since 2024, Montana has had a \$0.03 tax per kWh of charging at public charging stations, collected by MDT.<sup>xxvi</sup>

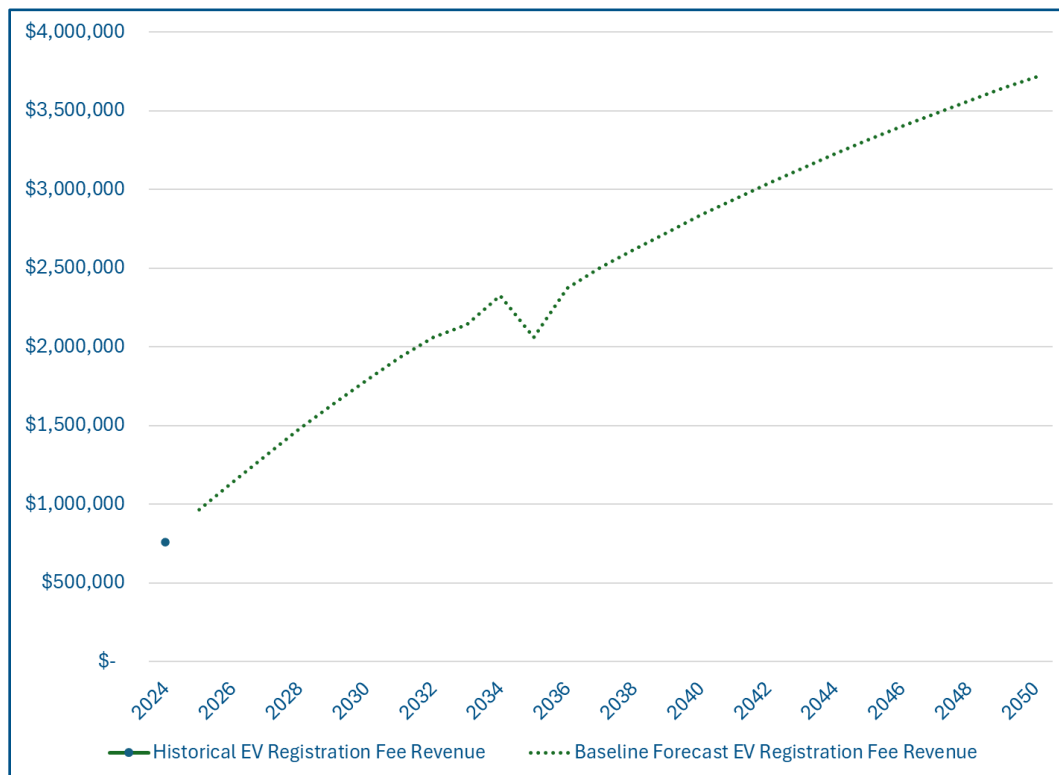
The registration and charging station fees collectively represent only 0.4% of HSSRA revenues in 2024 and are projected to only account for 2% of revenues by 2050. Each of the EV fees are detailed below.

### ***EV & PHEV Annual & Permanent Registration Revenue Forecast***

Because EV and PHEV registration fees began so recently, MDT only has receipts from fiscal year (FY) 2024 and the first two quarters of FY 2025. For modeling revenue, the known revenue is compared to the number of EVs and PHEVs registered in the state during this period. The model employs exponential smoothing to project future EV registrations, using a fleet turnover rate of 4% and maintaining a constant rate of new EV purchases at 0.60% and new PHEV purchases at 2.43% of all vehicles, the rates for 2023. To account for permanent registration fees for vehicles over 10 years old, since the permanent fee is double the annual fee, each vehicle is calculated to pay 12 years of registration fees. The formula used for calculating EV and PHEV registration revenue is shown here:

$$\text{EV \& PHEV Registration Fee Revenue} = \frac{\text{existing registration revenue}}{\text{existing registrations}} \\ * (\text{future registrations} - \text{registrations over 12 years old})$$

**Figure 2.18** below shows the forecast for EV and PHEV annual and permanent registration fees.<sup>xxvii</sup> The overall growth rate is about 6.3% per year. The drop in revenue from 2034 to 2035 is due to a large number of EVs and PHEVs converting from annual to permanent registrations.



*Figure 2.18 MDT EV & PHEV Weight-Based Registration Fee Revenue*

### **Public Charging Station Tax Revenue Forecast**

MDT similarly has figures for only one year of public station charging revenue, from quarter (Q) 2 of FY 2024 to Q1 of FY 2025. Based on these figures, the average charging tax revenue per year per charging station was calculated. Based on analysis from the HB 55 Fiscal Note, it is assumed that 20% of charging revenue comes from Montana residents, while 80% of revenue comes from out-of-state tourists.<sup>xxviii</sup>

For charging tax revenue from Montana residents, it is assumed that tax revenue grows at the same rate as the number of EV and PHEV vehicles registered in the State, as described in the **EV & PHEV Annual & Permanent Registration Revenue Forecast** subsection.

Revenue from tourists takes into account the number of tourists and changing fleet dynamics. Tourism is forecasted to grow 1.1% annually, based on the average rate from 2013 to 2023, excluding 2020 due to the COVID-19 pandemic.<sup>xxix</sup> The rate of EV and PHEV usage among tourists is assumed to be the same as the rate of Montana residents.

The equations below show the formulas used for calculating public charging station tax revenue.

*EV charging tax revenue = resident revenue + tourist revenue*

*Resident revenue*

*= Resident per vehicle charging station rate*

*\* forecasted charging stations \* forecasted EV & PHEV registrations*

*Resident per vehicle charging station rate*

$$= \frac{20\% * \text{historical charging station revenue}}{\text{existing stations} * \text{historical EV \& PHEV registrations}}$$

*Tourist revenue*

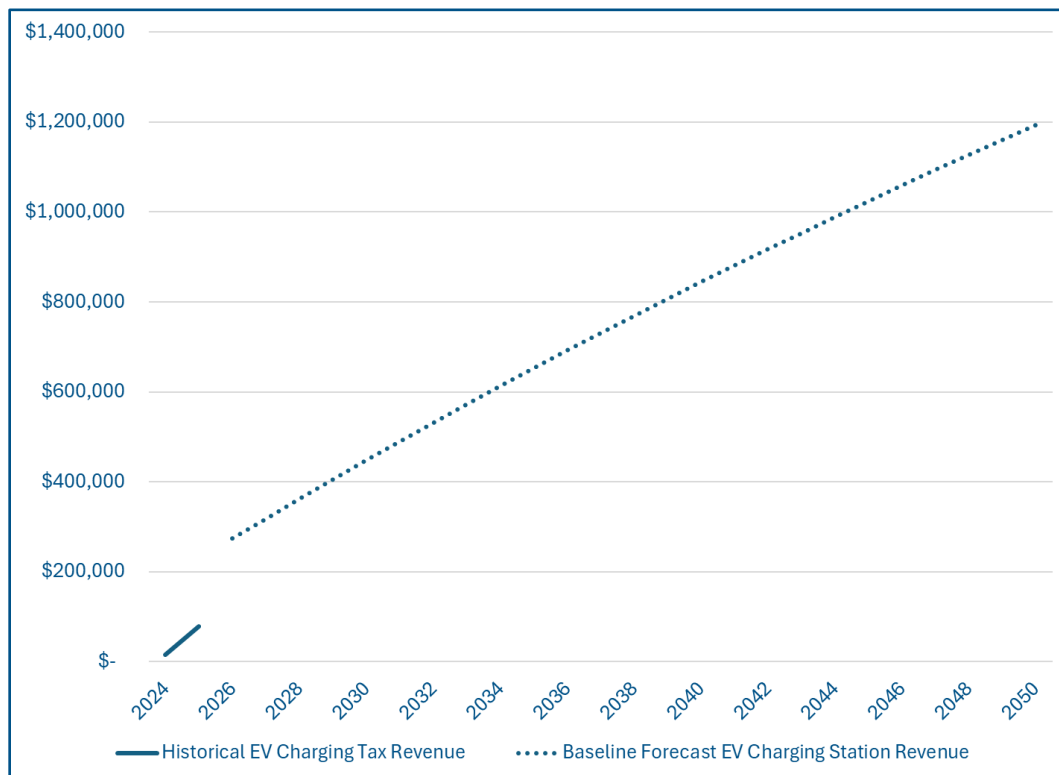
*= Tourist per vehicle charging station rate*

*\* forecasted charging stations \* forecasted EV & PHEV tourists*

*Tourist per vehicle charging station rate*

$$= \frac{80\% * \text{historical charging station revenue}}{\text{existing stations} * \text{historical tourists}} *$$

In addition, the number of charging stations in the state will change. As **Figure 2.19** below shows, the jump in revenue from 2025 to 2026 is caused by the number of public charging stations being taxed increasing from 16 to 47 as the charging stations installed prior to July 1, 2023 will begin to be taxed in FY 2026.<sup>xxx</sup> The annual growth rate after 2026 is approximately 6.3% per year through 2050.



*Figure 2.19 MDT EV Charging Tax Revenue*

## Commercial Vehicle Fees Revenue Forecast

Commercial vehicle carriers may be subject to additional permits or fees depending on the size of the vehicle primary commercial, mainly the overweight fees and oversize permits. While these two commercial vehicle fees make up 50% and 15% of the Non-Restricted Account revenue, respectively, this commercial vehicle revenue collectively contributes only 3% of the total MDT revenue.

The overweight fees and oversize permits have a larger variability than the other revenue sources, in part due to the smaller number of permits compared to GVW fees and as a result are in part more responsive to specific development projects and booms or busts in industries. Due to the variability, an exponential smoothing function was applied to forecast revenues. **Figure 2.20** depicts the historical values and projections of each commercial vehicle fee revenue.<sup>xxxi</sup>

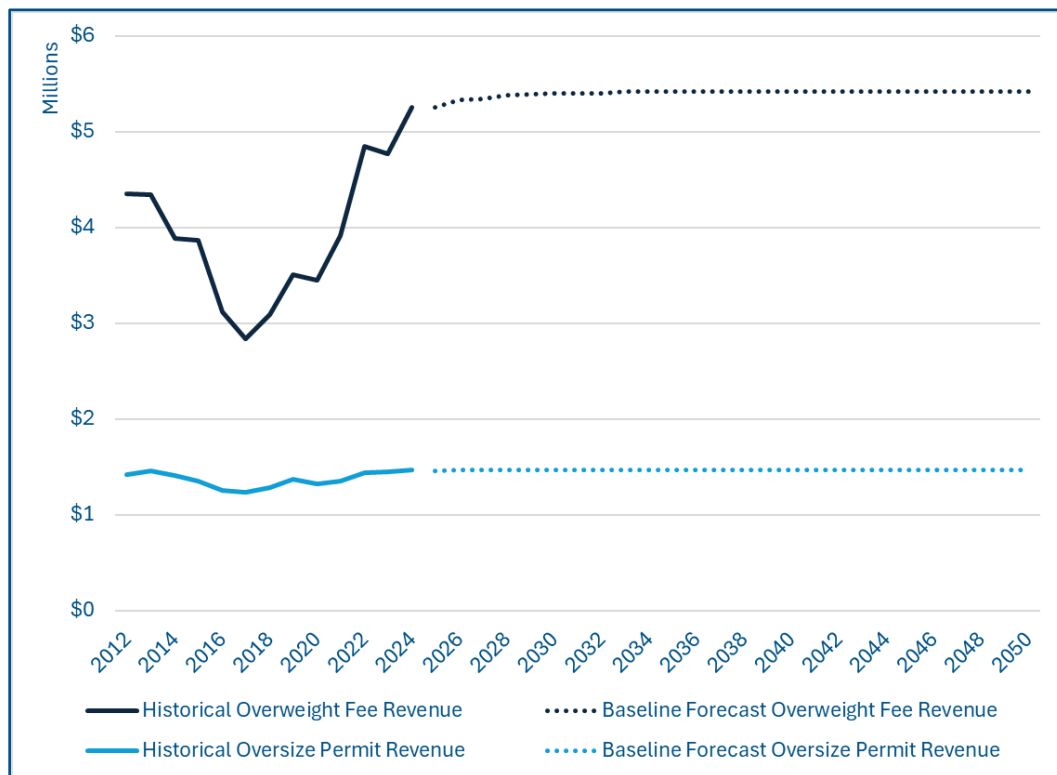


Figure 2.20 MDT Commercial Fee Revenues

While the commercial fees have a small impact on the overall MDT revenues, they are important for modeling the Non-Restricted Account funds. The growth rates can be changed to account for different economic scenarios.

### 3. National Receipt Comparison

This section examines revenue trends in peer states. These peers were identified based on demographic, geographic, and transportation metrics, as well as conversations with MDT. These states provide valuable context for Montana's own policy and funding strategies. Moving beyond this peer group, the following analysis broadens the scope to examine national receipts, using data from the Federal Highway Administration (FHWA). This national comparison highlights how different funding strategies perform across the selected peer states and Montana, outlining trends and challenges in transportation revenue generation.

#### Georgia DOT Revenue Sources Study

The Georgia DOT and FHWA commissioned a study titled *Implications of Alternate Revenue Sources for Transportation Planning* to examine new funding mechanisms that could help offset the decline in fuel tax revenues.<sup>xxxii</sup> This decline has been driven by



increased fuel efficiency and growing public resistance to gas tax increases. Researchers evaluated 36 alternative funding options, such as vehicle miles traveled (VMT) taxes, tolling, parking fees, and congestion pricing. Each option was assessed based on several criteria, including economic efficiency, equity, administrative feasibility, public acceptance, and revenue stability.

**TABLE 5.2**  
**Support and Opposition Levels for Four Revenue Options**  
(Percentages are the sum of those who said they “strongly” or “somewhat” support/oppose each option.)

Revenue Option	Support (%)	Oppose (%)	Don't know (%)
10¢ gas tax increase	31%	66%	3%
15¢ gas tax increase	23%	74%	3%
25¢ gas tax increase	21%	75%	3%
1.35¢ VMT (mileage tax)	33%	60%	7%
1.60¢ VMT (mileage tax)	39%	55%	6%
2.10¢ VMT (mileage tax)	36%	57%	7%
\$2 per month parking fee	45%	45%	10%
\$4 per month parking fee	39%	50%	12%
Toll roads	51%	42%	7%

*Figure 3.1 Survey of Georgia Driver's Preferences for Alternative Revenue Sources for Transportation*

Key findings from a survey of 2,000 Georgia drivers revealed higher public support for toll roads, and state-wide employee-parking lot fees (see **Figure 3.1<sup>xxxiii</sup>**), while increased gas taxes or VMT fees had comparatively lower support. Managed lanes were most appealing of the choice task, with 43% favoring solo use and an average willingness to pay \$5.85. Although gas taxes were initially unpopular, they were preferred over VMT taxes, likely due to familiarity. About 60% said they would drive less if gas taxes rose, while one-third would carpool, rideshare, or use transit more, though many said change would be difficult.

The study also incorporated a lab-based experiment, which found that while respondents expressed willingness to change travel behavior in theory, actual willingness to pay for time savings or congestion relief was relatively modest. These results suggest that successful implementation of new pricing strategies must clearly communicate their value and benefits.

The study concludes that no single solution is sufficient. Instead, a balanced mix of targeted, well-structured revenue sources (aligned with broader transportation goals) will be key to sustainable, long-term infrastructure funding.

## Peer State Revenue Review

A comparative analysis of transportation funding practices was conducted across nine peer states: **Colorado, Idaho, Nebraska, North Dakota, Oregon, South Dakota, Utah, Vermont, and Wyoming**. The goal was to understand how these states fund their systems relative to Montana's transportation funding environment.

Preliminary findings revealed a wide range of approaches, from traditional revenue sources like fuel taxes and registration fees to more innovative strategies, including

general fund transfers, retail delivery fees, EV fees, and road usage charges (RUCs). These variations have important implications for funding stability and adaptability in response to changes in travel behavior and vehicle technology. By identifying these emerging practices, the review provides ideas for Montana's transportation revenue system.

Among the identified peer states, Colorado, Utah, Oregon and Nebraska all have implemented non-traditional approaches to transportation funding. These innovative practices are summarized below.

## Peer State Approaches to Transportation Revenue

### Colorado

- **Road Safety Surcharge:** Applied to every registered vehicle, ranging from \$16 to \$39 depending on vehicle type.<sup>xxxiv</sup>
- **Bridge Safety Surcharge:** A fixed amount that does not adjust for inflation collected through vehicle registrations, with fees based on weight.<sup>xxxv</sup>
- **Retail Delivery Fee:** A fee of \$0.28 (as of FY 2024) per delivery applied to motor vehicle deliveries within Colorado that include at least one item subject to state sales or use tax.<sup>xxxvi</sup>
- **EV Road Usage Equalization Fee:** Created from SB 21-260, the Road Usage Equalization Fee applies to passenger and commercial EVs. This fee will be phased in between FY 2022-23 to FY 2031-32. Beginning in FY 2032-33, this fee will be annually adjusted for inflation based on the National Highway Cost Construction Index. The state began collecting revenue from this fee in April 2023.<sup>xxxvii</sup>
- **Public-Private Partnerships (PPPs):** Colorado DOT manages enterprises like the Colorado Bridge and Tunnel Enterprise and Colorado Transportation Investment Office, generating funds for toll roads, bridges, and clean transit projects.<sup>xxxviii</sup>

### Utah

- **Modified Fuel Tax System:** Utah uses a fuel tax model that adjusts with fuel prices, having shifted from a flat per-gallon tax to a percentage-based system that started in 2016.<sup>xxxix</sup>
- **Tolling:** Utah has implemented tolling on HOV lanes on I-15 and is exploring additional tolling options for canyon roads to reduce congestion and promote public transit use.<sup>xl</sup>
- **RUC Program:** Utah allows electric vehicle owners to either pay a flat fee or enroll in a mileage-based fee program. The RUC program is voluntary but aims

to replace gas taxes as EV adoption increases. Launched in 2020, Utah's RUC program is a voluntary pilot aimed at eventually replacing gas tax revenue. The state plans to expand its reliance on RUC, potentially making it the default by 2031. Beginning in 2024, EV fees and RUC rates are indexed to inflation to keep pace with rising costs.<sup>xli</sup>

- **Sales Tax:** Utah Code §§59-12-2203 & 2219 permits a county-option sales and use tax of 0.25% to fund highways and public transit. Box Elder County, Garfield County, and Kane County will implement this 0.25% tax county-wide for highways and public transit (October 1, 2023).<sup>xlii</sup> Additionally, effective July 1, 2025, Senate Bill 195 increased the earmarked portion of overall state sales tax revenue dedicated to transportation from 17% to 24%.<sup>xliii</sup>

## Oregon

- **Oregon's Road Usage Charge Program (OReGO):** Oregon's (non-pilot) voluntary road usage charge program allows drivers to pay based on the number of miles they drive rather than the amount of fuel they consume, reducing their registration costs and offsetting supplemental fees for electric and high-efficiency vehicles. Drivers enrolled in OReGO pay a per-mile fee and receive credit for any fuel taxes paid at the pump.<sup>xliv</sup>

## Nebraska

- **Variable-Rate Fuel Tax:** Nebraska has implemented a fuel tax that adjusts based on wholesale fuel costs, ensuring revenue stability despite fluctuating fuel prices.<sup>xlv</sup>
- **Sales Tax on Motor Vehicles:** A 5.5% sales and use tax is paid on all motor vehicle purchases in Nebraska. Of this, the first 5% is allocated 53⅓% to the Nebraska DOT, and 23⅓% each to cities and counties. The remaining 0.5% is specifically designated for the Highway Allocation Fund, where it is split evenly between cities and counties to support local road infrastructure.<sup>xlvi,xlvii</sup>
- **Sales Tax:** Under the Build Nebraska Act (2011), Nebraska allocates 0.25% of the state's 5.5% general sales tax to the State Highway Capital Improvement Fund through 2033. This generates about \$80–\$100 million per year for major highway expansion projects.<sup>xlvi</sup>

## Comparison to National Receipts

The National Receipts Comparison builds upon the broader peer state revenue review by providing a more detailed snapshot of the real-world impacts of various transportation revenue streams. This expanded analysis includes Montana alongside the nine established peer states to assess how different funding strategies perform in practice.

Using historical data spanning from **2010 – 2022** from the FHWA Highway Statistics series, the comparison examines reported revenue receipts across several key funding categories, which are outlined in **Table 3.1**<sup>xlix</sup>:

Georgia is included in the peer state policy review due to its relevant research and interest in alternative transportation funding. However, it was excluded from the national receipt comparison due to its significantly higher revenue figures, population, and VMT, which distorted the scale and reduced the clarity of trends across the other states.

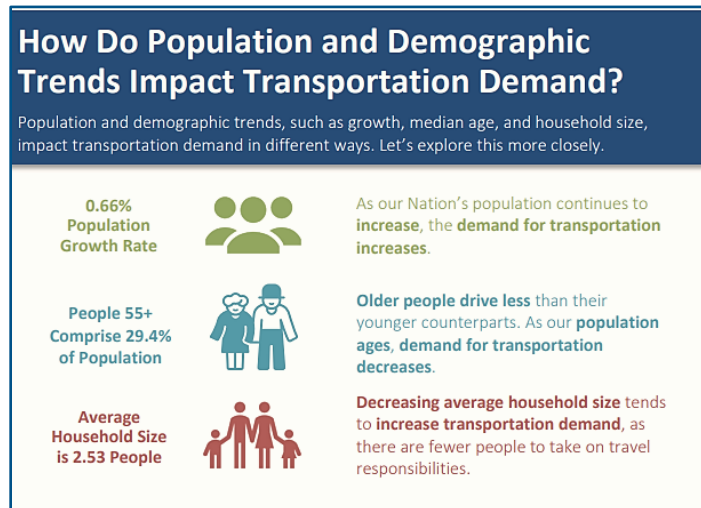
*Table 3.1 FHWA Highway Statistics Series Variables and Tables*

Category	Highway Statistics Series Table
<u>Population</u>	DL-LC
<u>Vehicle Miles Traveled (Total, Rural, Urban)</u>	VM-2
<u>Gasoline Gallonage</u>	MF-21
<u>Special Fuel Gallonage</u>	MF-33SF
<u>General Fund Appropriations</u>	SF-1
<u>Highway User Revenue</u>	SF-1
<u>Disbursements by States for highways (Capital Outlay, State Administered Highways)</u>	SF-2

By analyzing these categories, the study offers a quantifiable view of how each state's revenue strategy translates into actual funding levels.

## Population

Population trends are central to understanding transportation demand and planning for future infrastructure needs (see **Figure 3.2**).<sup>i</sup> Rapidly growing areas often face increased vehicle usage, congestion, and strain on public infrastructure, while states with stagnant or declining populations may struggle to maintain existing systems with limited funding. As populations shift, the demand placed on road networks, transit systems, and supporting infrastructure adjusts accordingly.



*Figure 3.2 Federal Highway Administration*

According to the FHWA, while the U.S. population continues to grow overall, the national growth rate has steadily declined each year since 2015, with most population increases occurring in the West and South.<sup>ii</sup> At the same time, the Bureau of Transportation Statistics (BTS) reports that, rural areas are experiencing different challenges: in 2021, the rural population saw a natural decrease, with deaths exceeding births across more than 73% of U.S. counties. This trend reflects historically low birth rates and an aging population. Looking ahead, future population growth nationally is projected to rely more on immigration and domestic migration than on natural increase.<sup>iii</sup> For rural states like Montana, understanding and adapting to these shifting patterns will be critical for transportation planning and funding strategies.

By examining population data, states can better align revenue strategies with usage patterns. This context is essential when interpreting transportation receipts, as higher revenues may reflect population growth rather than stronger policies, and lower revenues may not necessarily indicate inefficiency. In this analysis, population trends provide a critical lens for evaluating how well transportation funding mechanisms meet real-world demands.

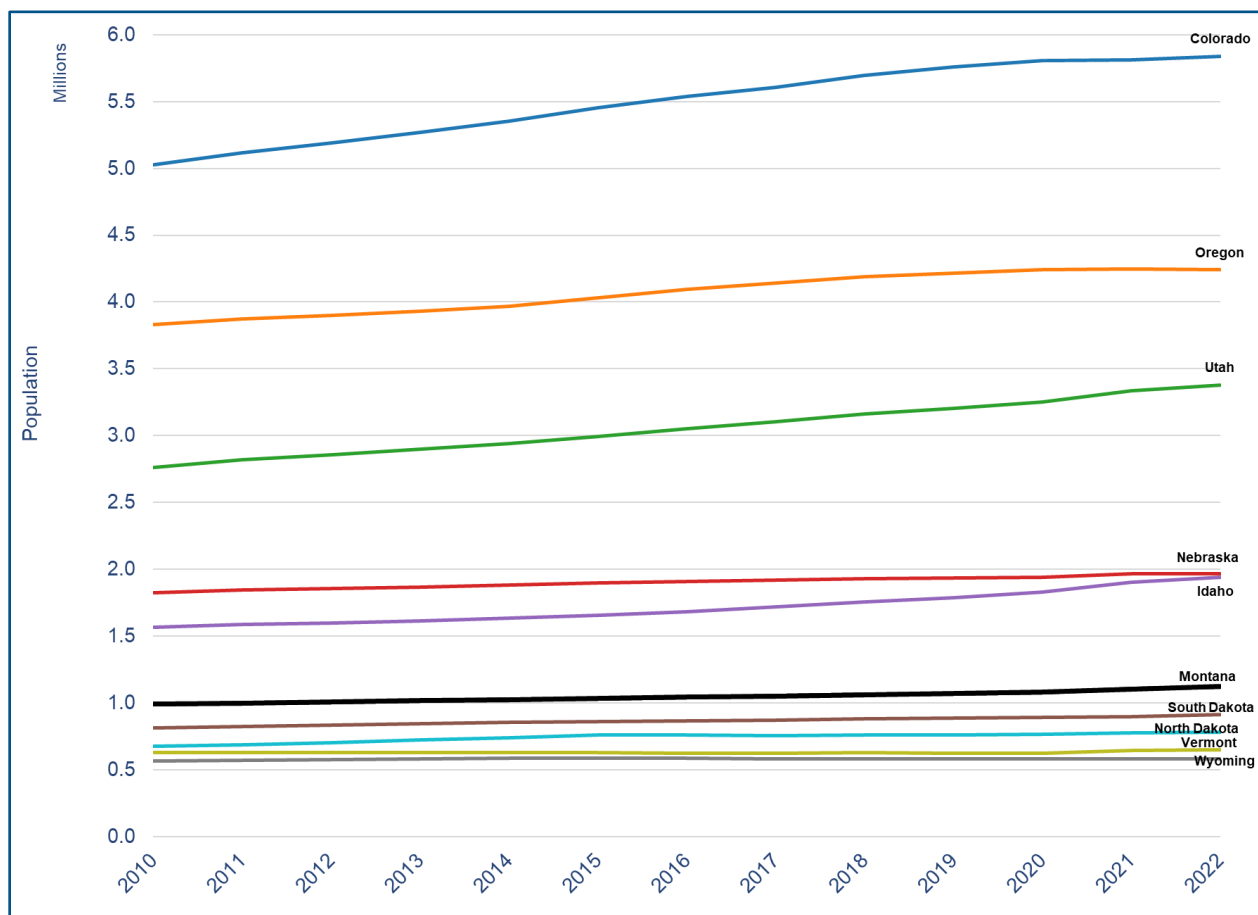


Figure 3.3 Population Trends in Montana and Peer States, 2010–2022

## Population Growth Trends

### Rapid Growth

**Figure 3.3** illustrates population trends from 2010 to 2022.<sup>liii</sup> While Colorado and Oregon lead the peer group in total population, with Colorado exceeding 5.8 million residents by 2022, Idaho and Utah showed the most pronounced upward trajectory in percentage terms. In Utah, a strong economy—particularly in technology and finance, which contributed 7,800 jobs and more than 1 billion in wages in 2023<sup>liv</sup>—has drawn in new residents, while the state’s population continues to drive the highest birth rate in the U.S.<sup>lv</sup> According to the U.S. Census Bureau, Idaho’s population growth has been largely driven by net migration (i.e., new residents arriving from other states). In 2024 alone, in-migration accounted for 80% of the state’s growth.<sup>lvi</sup> Idaho’s rapid expansion has been fueled by its relative affordability, abundant outdoor recreation opportunities, and high quality of life, especially compared to higher-cost states like California.<sup>lvii</sup> The Boise metropolitan area has become a major destination for newcomers seeking a more

affordable opportunistic lifestyle.<sup>lviii</sup> Both states have expanded at a rate nearly three times the national average, making them among the fastest growing in the region.<sup>lix</sup>

Colorado also experienced a prolonged population boom with a 50% population increase over the past 20 years with an additional 50% increase projected in the next 20 years.<sup>lx</sup> This growth can be attributed to strong employment opportunities, outdoor lifestyle appeal, and major metro growth in Denver and along the Front Range.

### **Moderate Growth**

Oregon initially benefited from strong-in-migration earlier in the decade, especially into Portland's growing "Silicon Forest" tech corridor. However, by the late 2010s, housing affordability issues, congestion, and quality-of-life concerns began to slow the inflow of new residents. Recent migration trends show a flattening of Oregon's growth rate, but it remains significantly stronger than states with flat or declining populations.<sup>lxi</sup>

North Dakota, located in the Great Plains, experienced a unique population surge driven by the Bakken oil boom in the early 2010s, making it one of the fastest-growing states during that period.<sup>lxii</sup> However, this growth was short-lived. The state's population spiked rapidly as oil workers flooded in, only to face a decline in more recent years. The most significant population decrease occurred between 2020 and 2021, with a -0.2% decline.<sup>lxiii</sup>

### **Minimal Growth**

States like Nebraska, South Dakota, North Dakota and Wyoming saw more modest growth, with relatively flat trajectories, suggesting limited population change during the period.

Wyoming's economy, heavily dependent on oil, gas, and coal, experienced significant volatility during the 2010s. Following an energy downturn around 2015, the state suffered multiple years of population decline.<sup>lxiv</sup> Even a modest pandemic-era rebound has not been enough to offset broader demographic challenges, including an aging population. In 2022, Wyoming recorded more deaths than births for the first time in decade<sup>lxv</sup>, further limiting organic growth.

Vermont, the smallest state in the group, remained nearly static, highlighting regional differences in growth dynamics. Vermont has one of the oldest median ages in the U.S, and natural decline (i.e., more deaths than births) happens every year. While Vermont brings in some new residents, it's not nearly enough to offset the number of deaths.<sup>lxvi</sup> Between 2022 and 2023, Vermont had about 1,800 more deaths than births, but a net migration gain of around 2,100 barely kept the population stable.<sup>lxvii</sup> Without bigger shifts, Vermont's long-term growth is likely to remain flat.

## ***How Montana Compares***

### **Steady Growth**

Montana, while smaller in absolute terms, demonstrated consistent growth throughout the 12-year span. With a CAGR of 1.06%, Montana outpaced several of its northern plains peers, including South Dakota and Wyoming. Its trend line shows a steady upward slope, indicating gradual population increases likely driven by both natural growth and migration. Much of Montana's growth, particularly in the early 2020s, was fueled by an influx of remote workers during the COVID-19 pandemic.<sup>lxviii</sup>

Montana's position within this group reflects a moderately growing state, balancing stability with momentum. While it does not lead in total population or growth rate, it consistently performs above average among smaller-population rural peers, positioning it well for long-term planning and infrastructure investment tied to population-related demand.

### **Vehicle Miles Traveled (VMT)**

Vehicle Miles Traveled (VMT) measures the total distance traveled by all vehicles within a defined area over a typical one-year period. By aggregating the miles driven across all roadways, VMT provides critical insights into travel behavior. This metric plays a central role in transportation planning, policy development, and revenue forecasting, as it reflects overall demand on the road network.<sup>lxix</sup>



## Total VMT per Capita

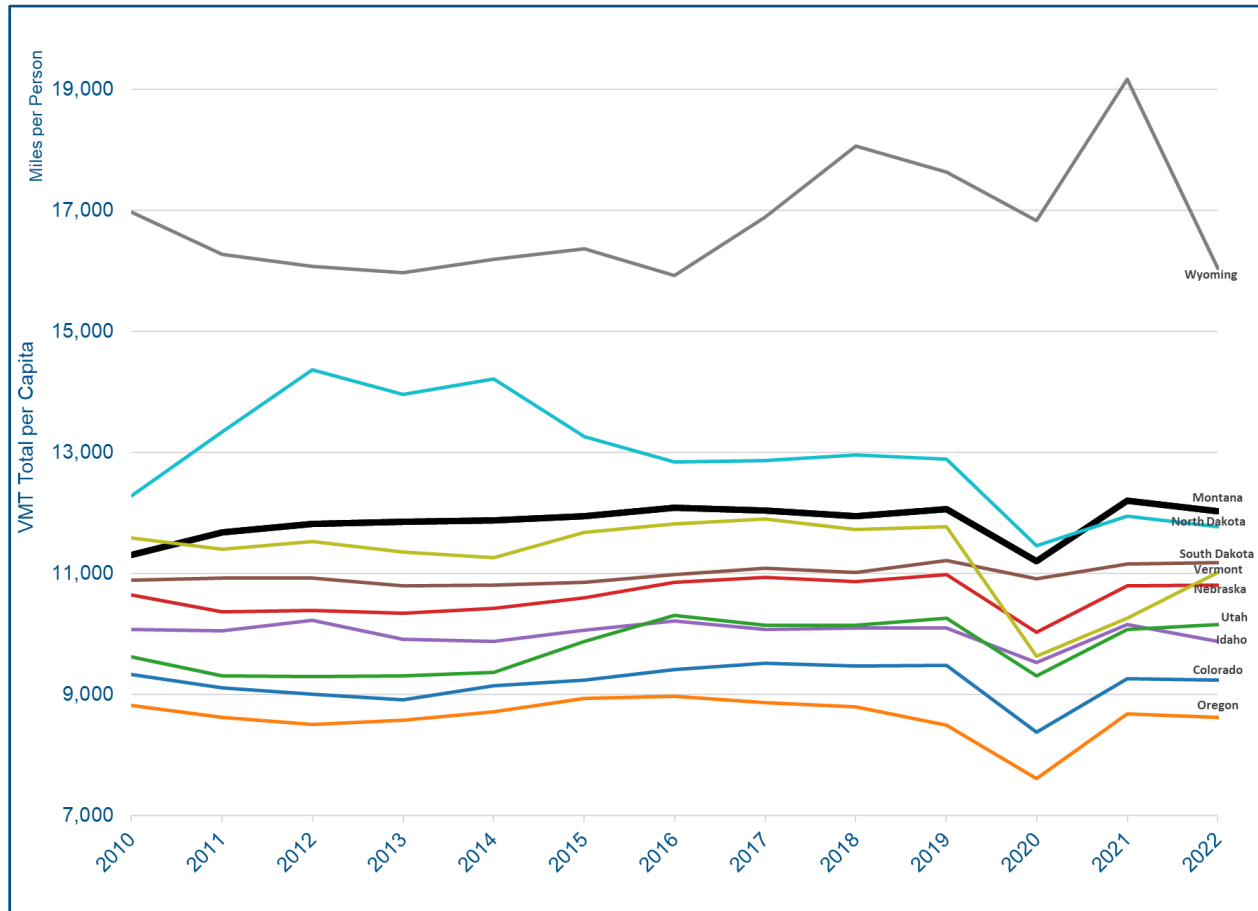


Figure 3.4 Total VMT per Capita by State, 2010–2022

**Figure 3.4<sup>lxx</sup>** shows total VMT per capita from 2010 to 2022 across Montana and peer states. Wyoming consistently leads the group, with values ranging from approximately 16,000 to 19,000 miles per person per year. Montana and North Dakota follow, typically between 11,000 and 13,000 miles per person. South Dakota, Vermont, and Nebraska generally range from 10,000 to 12,000 miles per capita, while Utah and Idaho fall between 9,000 and 10,000.

Colorado and Oregon report the lowest VMT per capita across the group, averaging approximately 8,500 to 9,500 miles per person annually—despite Colorado having one of the highest total VMT volumes overall (see **Figure 3.4**). This is explained by Colorado’s large and growing population: when VMT is averaged per person, the result is lower relative to less populous, more rural states where each individual tends to drive longer distances on average.

### Trends in VMT per Capita

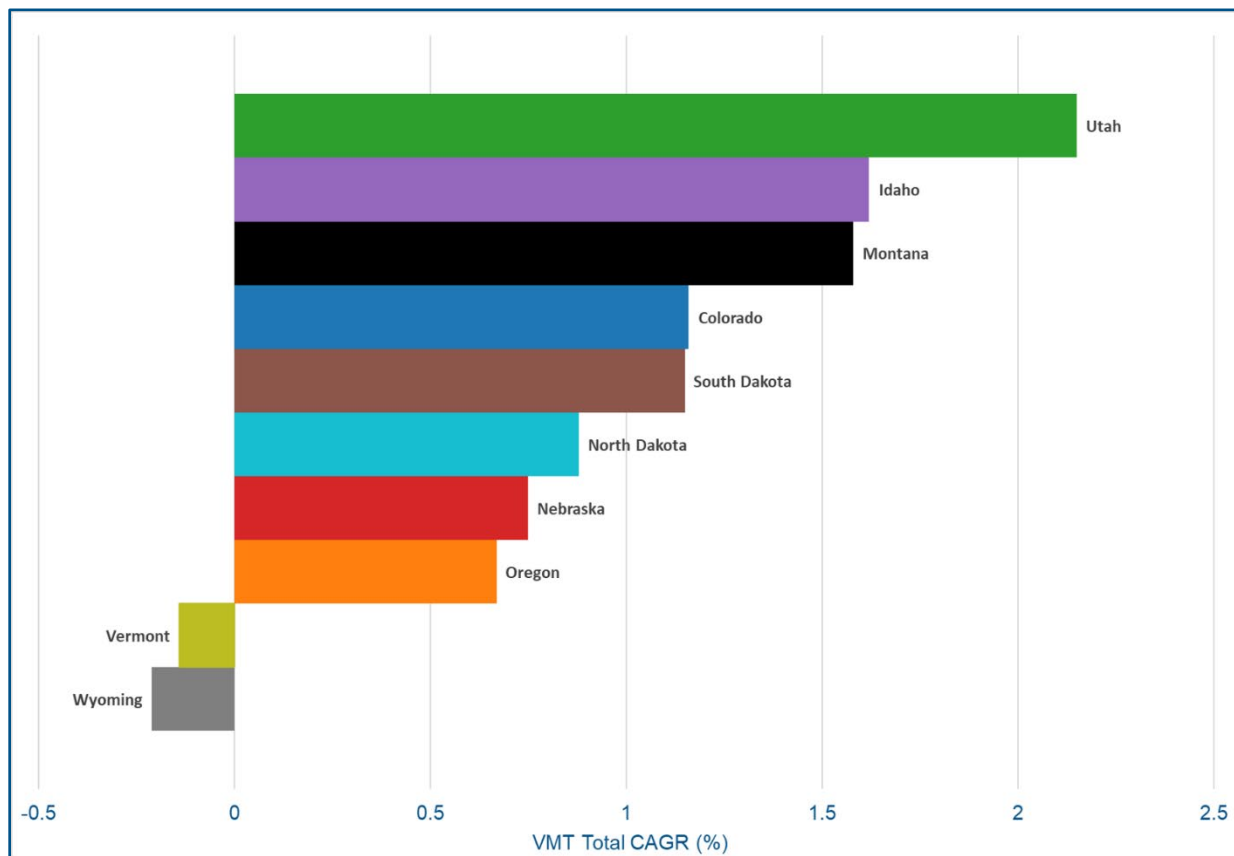
Most states exhibited relatively stable or gradually increasing VMT per capita during the 2010s, reflecting consistent travel demand. In 2020, a clear and sharp decline occurred across all states, corresponding with the onset of the COVID-19 pandemic and related mobility restrictions. This disruption was temporary, as nearly all states experienced a rebound in 2021, though the pace and extent of recovery varied. For example, Wyoming saw a dramatic spike in 2021, reaching its highest level in the 13-year span before dropping sharply in 2022. Montana demonstrated a steady upward trend overall, with only a modest dip in 2020 and full recovery by 2022. States like Idaho, Utah, and Georgia also showed gradual upward movement over the full period, indicating sustained growth in travel activity. In contrast, Oregon displayed a slow but steady decline in VMT per capita over time, even before 2020, with only limited recovery afterward. Colorado followed a similar pattern, with minimal overall growth.

**Table 3.2**<sup>lxxi</sup> below displays Compound Annual Growth Rates (CAGR) across the VMT categories. **Figure 3.5**<sup>lxxii</sup> displays Compound Annual Growth Rate (CAGR) of Total VMT, 2010–2022.

*Table 3.2 CAGR for Rural, Urban, and Total VMT (2010–2022)*

State	VMT Rural CAGR (%)	VMT Urban CAGR (%)	VMT Total CAGR (%)
Montana	0.86	3.47	1.58
Utah	1.76	2.32	2.15
Idaho	1.52	1.75	1.62
Colorado	1.11	1.19	1.16
South Dakota	0.95	1.63	1.15
North Dakota	0.45	1.92	0.88
Nebraska	0.38	1.23	0.75
Oregon	-0.18	1.29	0.67
Vermont	-0.53	0.91	-0.14
Wyoming	-0.22	-0.19	-0.21





*Figure 3.5 Compound Annual Growth Rate (CAGR) of Total VMT, 2010–2022*

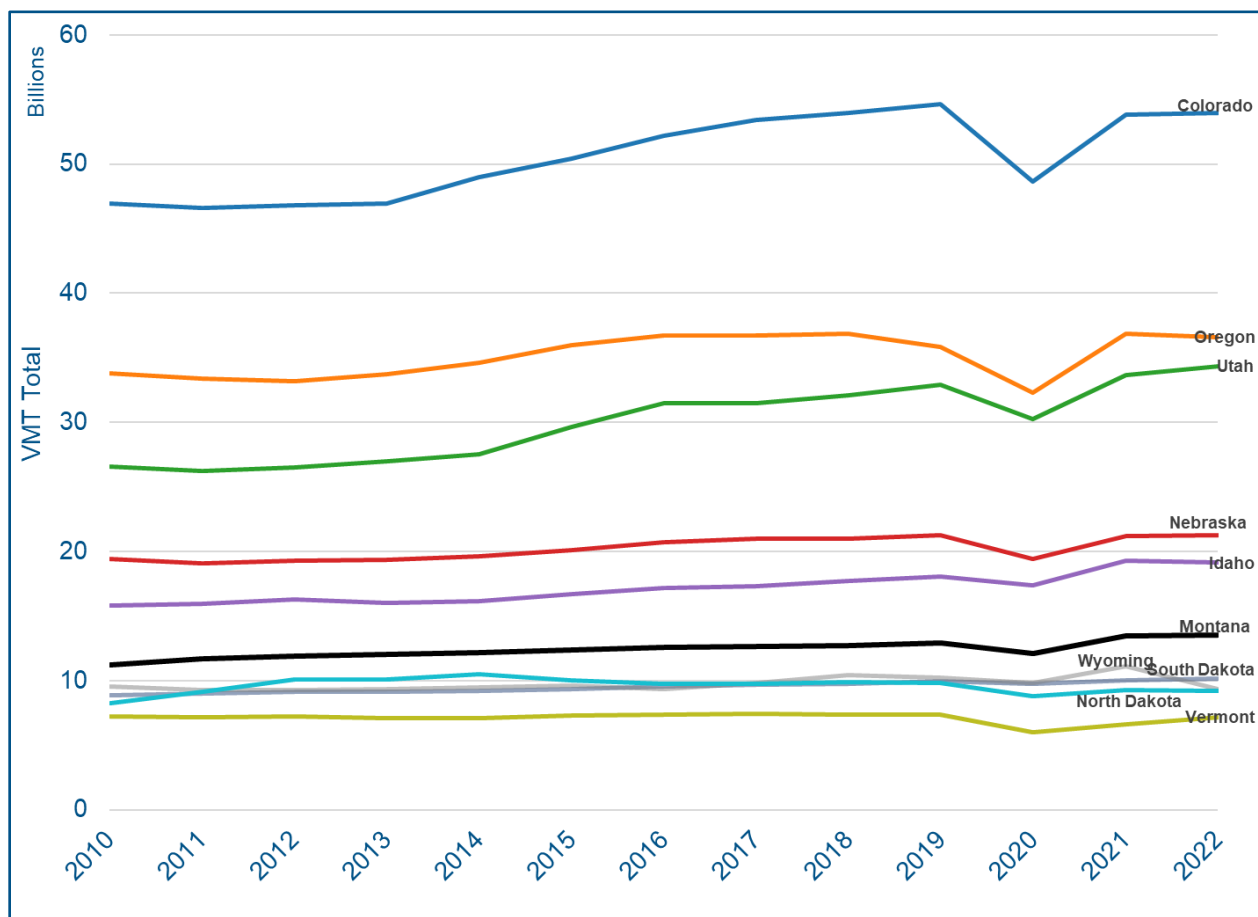


Figure 3.6 Total VMT Trends by Montana and Peer States, 2010–2022

**Figure 3.6** displays the VMT Total (i.e., urban and rural VMT), the main factors influencing VMT growth included population growth, freight and tourism, urban commuting, and highway investments, each of which contributed differently across the selected states.<sup>lxxiii</sup>

### High VMT Growth

Utah experienced rapid VMT growth, particularly in urban areas, with a CAGR of 2.15% over the 2010–2022 period. The state’s growing population and high levels of suburban development contribute to this trend.

Colorado’s rural VMT growth was strong, reflecting the continued development of urban and rural areas. The state’s population growth between 2010 and 2020 pushed Colorado’s VMT to over 53 billion miles by 2022, making it a regional leader in total travel. CDOT reported that VMT in 2023 surpassed pre-pandemic levels from 2019. This rebound reflects increasing pressure on Colorado’s transportation infrastructure and a rising demand for mobility, although patterns of growth vary by region.<sup>lxxiv</sup>

Utah also experienced rapid population growth, leading to an increase in total VMT from 26.6 billion in 2010 to 34.3 billion miles by 2022. This was driven by urban expansion in the Wasatch Front and major investments in transportation infrastructure.

### ***Steady VMT Growth***

Wyoming's VMT remained mostly unchanged, hovering around 9 billion miles. Despite the lack of significant VMT growth, the state's major interstate highways (e.g., I-80, I-90) continue to support freight traffic, ensuring steady long-distance travel.

Oregon's VMT followed a similar pattern to Montana and Wyoming, driven by freight along I-5 and tourism to destinations like the Oregon Coast and the Cascades. While Oregon's rural VMT slightly declined, its high-profile tourist destinations contributed to consistent travel on its rural roads. Oregon, with a population of approximately 4.2 million by 2022, saw moderate growth in VMT, from 33.8 billion to about 36.6 billion miles. The state's VMT increase, while not as pronounced as Utah's or Colorado's, reflects a steady rise, partly driven by population growth in Portland and other urban areas, and the state's tourism industry, especially along its coast and Cascade Range.

### ***Rising VMT Growth***

Urban commuting in Utah, particularly along the Salt Lake City corridor, accounted for much of the state's VMT growth, as suburban expansion and a rapidly growing population led to a surge in travel demand.<sup>lxxv</sup> Utah's rural VMT growth was supported by investments in key infrastructure projects, including the expansion of the I-15 corridor. The state's Transportation Investment Fund (TIF) has played a major role in boosting highway capacity, enabling continued travel growth even as urban congestion grows.<sup>lxxvi</sup>

Idaho's total VMT grew from 15.8 billion miles to 19.2 billion miles between 2010 and 2022. This was fueled by a combination of population growth in urban areas, particularly the Boise metro area, and the increasing role of Idaho as a freight hub in the western U.S. Idaho's rural VMT growth was also driven by investments in rural highway infrastructure. The state's Transportation Expansion & Congestion Mitigation (TECM) Fund projects have significantly expanded the state's rural transportation network, helping to accommodate increasing travel demand across its freight and tourism routes.<sup>lxxvii</sup>

### **How Montana Compares**

Montana's VMT remained relatively steady with moderate growth of 1.58% CAGR. Montana's total VMT grew from 11.2 billion to 13.5 billion miles over the 12-year period, placing it in the middle of the peer group. This growth is moderate when compared to

states like Idaho and Utah, where total VMT rose sharply due to high population growth and infrastructure investments.

Montana's steady VMT increase reflects its reliance on a unique combination of factors:

- **Freight and tourism** continue to drive travel demand, especially on key routes like I-90 and I-15, which are critical for both long-distance freight and access to major national parks.
- **Rural VMT**, while steady, remains an important part of Montana's total, as the state lacks the large urban commuting seen in states like Utah or Idaho.
- **Limited urban commuting** means that most of Montana's travel occurs on rural routes, and significant population growth is not as prominent a factor as it is in other peer states.

In comparison to other states like Utah and Colorado, which have benefited from substantial urban development and infrastructure projects, Montana's VMT growth has been more gradual.

### ***Urban VMT***

The total annual miles of vehicle travel within urbanized areas, which are defined as areas with a population of 50,000 or more, as designated by the Census Bureau.<sup>lxxviii</sup>

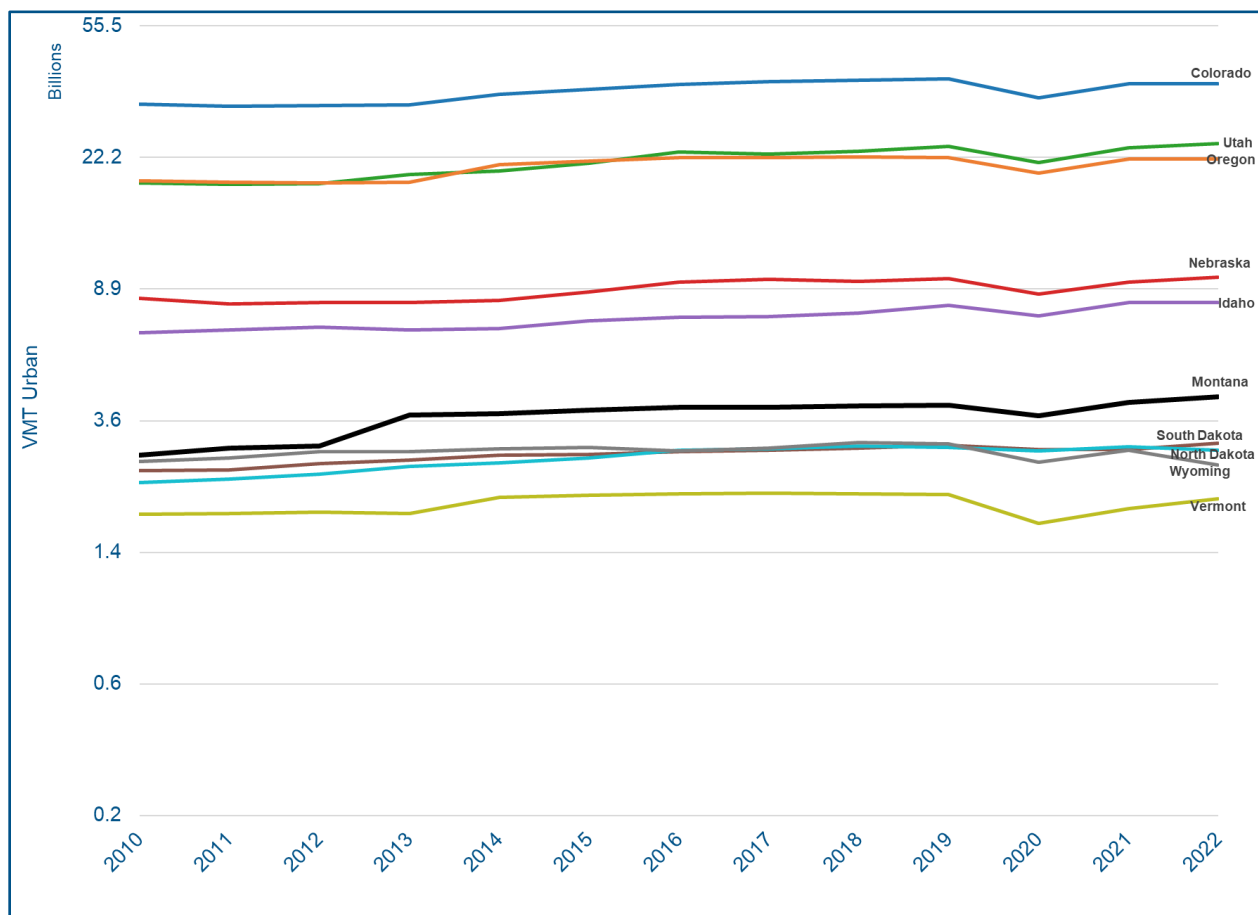


Figure 3.7 Urban VMT Trends by Montana and Peer States, 2010–2022

### Peer State Comparison

Urban VMT varies significantly across Montana’s peer states, see **Figure 3.7**<sup>lxxix</sup>. The primary factors influencing these variations can be attributed to urban population size, infrastructure investments, and transportation policies. States with large and rapidly growing metropolitan areas, such as Colorado, Utah, and Oregon, show significantly higher urban travel figures. In contrast, states with smaller populations, including Montana, Wyoming, and Vermont, report notably lower urban VMT totals.

For example, Colorado’s urban VMT in 2022 reached 37.1 billion miles, a figure that starkly contrasts with Wyoming’s 2.6 billion miles and Vermont’s 2.1 billion miles, both of which reflect the smaller populations in these states (Wyoming: 0.58 million, Vermont: 0.65 million in 2022). Oregon, with a population of about 4.2 million (2022), primarily concentrated in the Portland metro area, demonstrates similarly high urban VMT, corresponding to its urbanized infrastructure.



### **High Urban VMT**

Colorado leads the group with 37.1 billion urban VMT in 2022. This is a direct reflection of the state's large population of 5.8 million and its extensive highway infrastructure, particularly in the Denver metro region. Metro Denver has significantly improved its transportation infrastructure over the past decade, with key developments including the C-470, E-470, and Northwest Parkway toll roads<sup>lxxx</sup> (Connects E-470 at I-25 in north metro Denver to U.S. 36 in Broomfield), as well as the completion of the \$1.67 billion T-REX Project. These upgrades have enhanced the region's highway system, improving the movement of people and goods and supporting increasing transportation demands.<sup>lxxxi</sup> The growth of population and significant investments in highway networks are the driving factors behind the high urban VMT observed in Colorado. These trends are a clear pattern seen in states with large, rapidly developing urban regions.

Utah's urban VMT totals 24.5 billion miles in 2022. The state's population, 3.39 million, has driven significant urban expansion, especially in the Wasatch Front area surrounding Salt Lake City.<sup>lxxxii</sup> Investments in highway improvements, such as I-15 corridor expansion<sup>lxxxiii</sup>, have played a key role in increasing urban VMT in the region.<sup>lxxxiv</sup> Utah's per capita VMT is among the highest in the region due to both population growth and improved road capacity.

Idaho's urban VMT is 8.1 billion miles, while still lower than Colorado and Utah, is notably high for a state with a relatively small population of 1.94 million (2022). Idaho has experienced some of the fastest population growth in the nation (an 8.2% increase since 2020<sup>lxxxv</sup>), largely driven by migration to urban areas like Boise metro area. Infrastructure projects aimed at improving transportation in Boise and the Treasure Valley have further fueled the growth in urban VMT.<sup>lxxxvi</sup>

### **Low Urban VMT**

Wyoming's population of 0.58 million and minimal urbanization lead to similarly low urban VMT figures. With few large cities<sup>lxxxvii</sup> and a greater emphasis on rural travel, Wyoming also reports relatively low urban travel compared to its peers.

Vermont's urban VMT is the lowest of the group, at 2.1 billion miles. With a population of just 0.65 million and a lack of major urban centers, Vermont's urban VMT remains low, with most travel occurring on rural roads or smaller urban streets.

### **How Montana Compares**

Montana exhibits notably low urban VMT compared to its peer states. At 4.2 billion miles in 2022, Montana's urban VMT is significantly lower than those of states like Colorado, Utah, and even Idaho, despite the latter being smaller in population. This pattern reflects Montana's relatively small urban population—about 46.3% of residents

lived in urban areas in 2010, dropping slightly to 44.7% by 2020<sup>lxxxviii</sup>—and its heavy reliance on rural roads. With a statewide population of approximately 1.12 million in 2022, Montana’s travel demand remains concentrated outside of urban areas, helping to explain its comparatively low urban VMT.

While states like Colorado, Utah, and Oregon see high urban VMT figures driven by large populations and significant infrastructure investments, Montana, along with Wyoming and Vermont, shows much lower urban VMT due to its smaller urban populations, limited dense urban areas, and higher reliance on rural road networks.

### Rural VMT

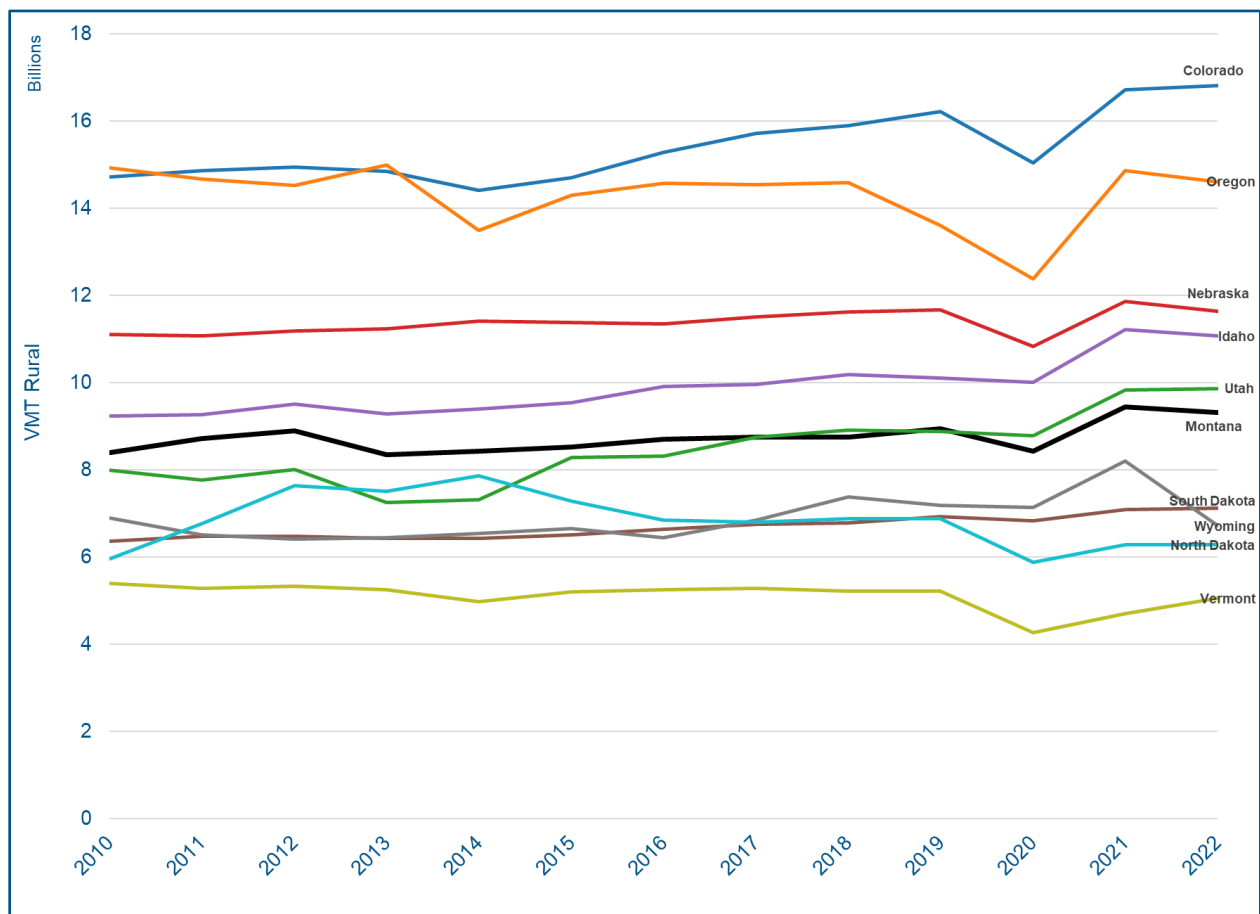


Figure 3.8 Rural VMT Trends by Montana and Peer States, 2010–2022

VMT in rural areas vary widely across peer states (see **Figure 3.8**), shaped by factors such as freight corridors, population changes, tourism, and infrastructure investment.<sup>lxxxix</sup> States with growing freight activity or strong tourism markets often saw increases in rural VMT, while others with static economies or demographic declines

experienced slower growth or even decreases. Examining these trends provides insight into how different forces influence travel demand across rural networks.

## Peer State Comparison

### *Freight and Long-Distance Travel*

- **Colorado** – rural VMT grew by approximately 1.11% CAGR from 2010 to 2022, reflecting heavy interstate freight movement along key mountain corridors such as I-25 and I-70.<sup>xc</sup>
- **Idaho** – rural VMT surged by about 1.52% CAGR, increasing from roughly 9.2 billion to 11.1 billion miles between 2010 and 2022, driven by its role as a critical freight corridor.<sup>xcj</sup>
- **Wyoming** – rural VMT remained essentially flat, declining slightly from 6.9 to 6.7 billion miles.

### *Tourism-Based Travel*

- **Montana and Wyoming** – both states benefit from major national parks (Glacier, Yellowstone in Montana<sup>xcii</sup> and Yellowstone and Grand Teton in Wyoming) that drive large seasonal rural traffic volumes. This tourism helps sustain rural VMT even where overall growth is modest.<sup>xciii</sup>
- **Vermont** – despite the high scenic value from the Green Mountains and fall foliage tourism<sup>xciv</sup>, Vermont's rural VMT declined by approximately -0.53% CAGR.
- **Oregon** – although coastal and Cascade tourist routes support travel<sup>xcv</sup>, Oregon's rural VMT declined slightly by about -0.2% CAGR.

### *Infrastructure Investment*

- **Utah** – aggressive transportation funding, particularly through its dedicated sales-tax Transportation Investment Fund, enabled major highway expansions (e.g., Mountain View Corridor and I-15 expansion)<sup>xcvi</sup>. Rural VMT grew by approximately 1.76% CAGR, reflecting this investment.
- **Idaho** – strong rural VMT growth 1.52% CAGR was supported by rapid population increases and ongoing rural highway construction.
- **Nebraska** – rural VMT increased by about 0.38% CAGR, consistent with slower population growth and more modest highway expansion efforts.
- **South Dakota** – rural VMT grew by roughly 0.95% CAGR, from 6.4 to 7.1 billion miles, supported by agriculture-driven<sup>xcvii</sup> travel demands across its rural network.

### *Oil and Agriculture Industries*

- **North Dakota** – rural VMT spiked sharply during the oil boom, rising from approximately 6.0 billion to 7.6 billion miles, before stabilizing near 6.3 billion miles by 2022.

## How Montana Compares

Montana's rural VMT grew about 0.86% CAGR (8.4 to 9.31 billion miles, 2010–2022), a mid-range increase among peers. This is below fast-growing Idaho/Utah but above declines seen in Vermont and Wyoming.

Montana's rural highways are major freight routes (I-90, I-15) like Idaho and Wyoming, and also serve large tourist flows (Glacier/Yellowstone parks) similar to Wyoming. This mix of heavy trucks and visitors keeps Montana's rural VMT growth positive.

## Gasoline Gallonage (Motor Fuel Usage)

The total volume of gasoline consumed for highway purposes within a state is primarily spent by vehicles licensed for highway use. This measure plays a key role in determining each state's share of revenues from the federal Highway Trust Fund.<sup>xcviii</sup>

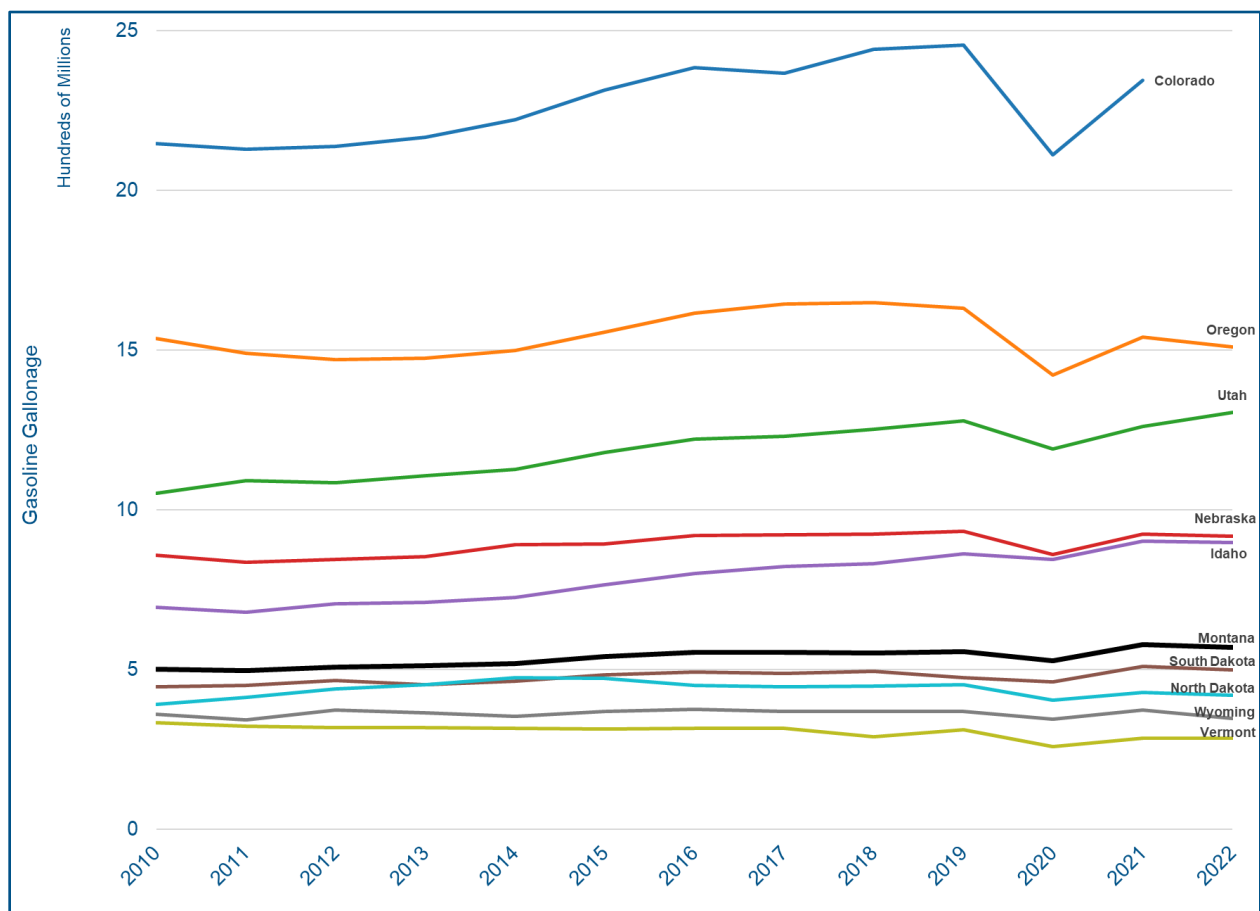


Figure 3.9 Gasoline Consumption Trends in Montana and Peer States, 2010–2022

**Figure 3.9** displays gasoline consumption trends, gasoline consumption shows clear trends driven by population growth, VMT, and infrastructure investments.<sup>xcix</sup> States with

rapid population growth, like Colorado, Utah, and Idaho, have seen a substantial increase in gasoline consumption due to higher demand for personal and freight travel. Montana, along with Wyoming and Vermont, has maintained relatively steady gasoline use, reflecting the region's larger rural areas.

Colorado, for example, experienced a significant increase in gasoline consumption, primarily due to its population growth and urban expansion. It was noted that between 2014 and 2023, Colorado's population in the Denver metro area grew by 9.5%, while the North Front Range MPO experienced a faster growth rate of 18.8%.<sup>c</sup> The state's population growth contributed heavily to this rise in gasoline use, as expanding transportation networks and increased vehicle travel demand led to higher fuel consumption. By 2022, Colorado had the highest gasoline consumption among its peer states, reaching 2.3 billion in 2021.

Similarly, Utah saw rising gasoline consumption, driven by its rapidly growing population and the expansion of metropolitan areas like Salt Lake City. As one of the fastest-growing states in the U.S., Utah experienced a noticeable increase in fuel demand, which climbed steadily alongside both population and VMT. By 2022, Utah's gasoline consumption reached significant levels, reflecting the growing demand for both personal and commercial travel.

In Idaho, gasoline consumption followed a similar trajectory, with increased fuel demand driven by population growth, particularly in the Boise metro area, and its expanding role as a freight corridor. The growing population and demand for goods movement across the state contributed to a steady increase in gasoline usage over the period. With expanding suburban areas and continued development of its infrastructure, Idaho's gasoline consumption reflected the broader trend of states with booming metros and growing vehicle travel.

On the other hand, Oregon experienced fluctuating gasoline consumption but generally saw an upward trend. Oregon's consumption increased alongside its population, but the rate of increase was slower compared to the other rapidly growing states like Colorado and Utah. The state's significant rural areas and popular tourist destinations along the coast and in the Cascades also contributed to steady fuel demand.

Vermont and Wyoming showed more modest trends. Vermont, with its aging population<sup>ci</sup> saw a slight decline in gasoline consumption, as the state's smaller population and fewer urban areas led to less overall fuel demand. Similarly, Wyoming maintained relatively steady fuel consumption, with minor increases observed during the period. Despite high truck traffic on key freight routes such as I-80, Wyoming's rural

nature and fewer population centers kept its gasoline consumption more stable compared to states with larger urban areas.

In 2020, the global pandemic caused a dip in gasoline consumption across all peer states, including Montana, as travel restrictions and lockdowns reduced overall vehicle miles traveled.<sup>cii</sup> The decline was most noticeable in densely populated areas with heavy urban traffic, but even rural states like Montana saw decreased gasoline use.

### How Montana Compares

Unlike peer states with dense urban populations, Montana's rural characteristics, such as long travel distances and few public transit options, help explain its steady fuel consumption. Despite its modest increase in population and tourism, the demand for gasoline remains relatively stable due to the prevalence of personal vehicle use in rural areas. Montana's gasoline consumption growth has been much slower compared to peers like Colorado and Utah, primarily due to its low population density and limited urbanization. The state's total gasoline consumption has remained relatively steady, as fuel usage is largely driven by long-distance travel and tourism-related trips. Despite the tourism boost, especially with attractions like Glacier and Yellowstone National Parks, Montana does not exhibit the same sharp increases in fuel demand as its more urbanized neighbors.

### Gasoline Tax Rates

Given the plateau in fuel consumption, many peer states enacted fuel tax increases in the 2010s to support highway funds. Nearly all of the states entered the decade with gas tax rates that had been static for years, prompting legislatures to adjust rates to account for inflation and growing infrastructure demands:

- **Wyoming:** An early mover, in 2013 it became the first state in over three and half years to raise its gas tax, approving a 10-cent per gallon increase from 14 cents to 24 cents.<sup>ciii</sup>
- **Idaho:** Following suit in 2015, Idaho raised its state gas tax by 7 cents (from 25 cents to 32 cents).<sup>civ</sup>
- **South Dakota:** Also implemented a 6-cent gas tax hike in 2015 (from 22 cents to 28 cents). This was enacted in April 2015 to boost funding for roads and bridges (South Dakota subsequently later indexed its tax, which reached 30 cents by 2018).<sup>cv</sup>
- **Nebraska:** Legislated a 6 cent increase as well, overriding a governor's veto in 2015. This increase was phased in at 1.5 cent year over 2016-2019, ultimately raising its rate from 26 cent up to around 32 cents per gallon.<sup>cvi</sup>

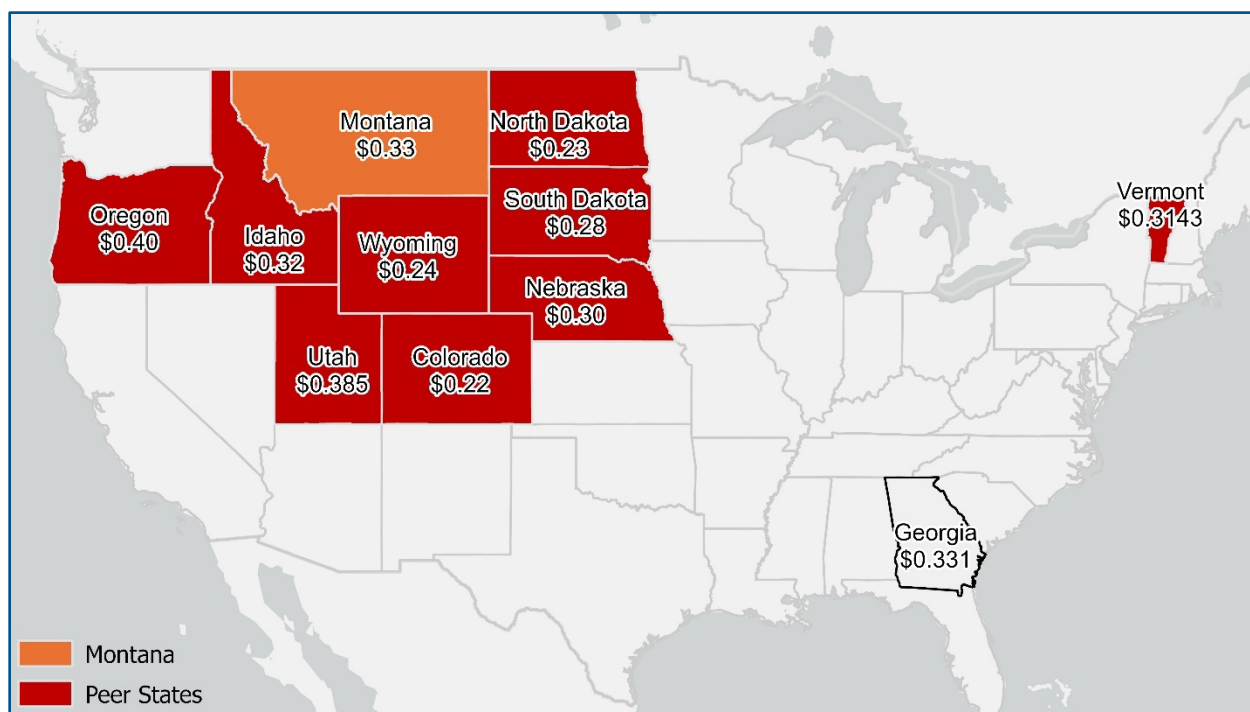
- **Oregon:** Historically it had a lower rate (24 cents) but increased its gas tax in a series with a 4-cent jump in 2018 (to 34 cents), then an additional 2 cents every two years, reaching 40 cents by 2024.<sup>cvii</sup>
- **Utah:** Reformed its fuel tax in 2015, it replaced the fixed 24.5 cent rate with a variable-rate tax (indexed to fuel prices and inflation, equivalent to an initial 4.9 increase in 2016. This moved Utah's rate to 29.4 cents in 2016 and about 30 cents by 2019. The adjustment was meant to allow "more robust revenue growth" as fuel efficiency improved.<sup>cviii</sup>
- **Vermont:** Undertook a notable gas tax restructuring in 2013. The state added a 2% fuel sales tax plus a 1 cent fee, while slightly reducing the per-gallon excise, netting an effective 5.9 cents per gallon increase initially. Due to Vermont's formula being tied to gasoline prices, the exact rate varies, but this overhaul substantially boosted revenue after years of decline. Vermont's gas tax effective rate went from around 20 cents to roughly 30 cents per gallon in the mid-2010s, despite stable population, to counteract falling fuel sales.**Error! Bookmark not defined.**
- **North Dakota:** An exception that did not raise its fuel tax in this period. The state's tax has remained at 23 cents since 2005, one of the longest stretches without an increase.<sup>cix</sup> This means North Dakota relied on the same nominal tax rate throughout the oil boom and beyond, causing its highway fund to gradually lose purchasing power with inflation.
- **Colorado:** Also did not increase its gas tax, which has been fixed at 22 cents, a rate that has remained unchanged since 1991 and does not adjust for inflation. Colorado's fuel tax is among the lowest in the nation and, unindexed, has steadily lost real value. By the 2020s, the state could only spend about \$69 per person from gas tax revenue on transportation, compared to \$125 per person in the 1990s when the rate was last set.<sup>cx</sup> Recognizing this, Colorado's legislature turned to other fees in lieu of raising the gas tax (in 2022 a road usage fee on fuel sales and fees on delivery and rideshare were enacted, per 2021 legislation).

### How Montana Compares

Montana gas tax was stagnant at 27 cents for decades until 2017, when lawmakers approved a gradual 6 cent increase. The first 4.5 cents took effect on July 1, 2017, with additional .5 cent increments each July 1 from 2019 through 2022.<sup>cxii</sup> By 2022, Montana's gas tax reached 33 cents where it remains today.



## 2025 Gasoline Tax Rates



*Figure 3.10 State Gasoline 2025 Tax Rates: Montana and Peer State Comparisons*

**Figure 3.10** displays 2025 gasoline excise tax rates.<sup>cxii, cxiii</sup> As of 2025, Montana's per-gallon fuel tax stands at \$0.33, placing it slightly above the median among its peer states. The median fuel tax rate is approximately \$0.314 (Vermont), while the average across the peer group is slightly lower at about \$0.303. Montana's rate is below the highest values observed, such as Oregon (\$0.40) and Utah (\$0.385), and notably higher than the lower-end states like Colorado (\$0.22) and North Dakota (\$0.23). Georgia's rate (\$0.331) is closely aligned with Montana.

From a regional perspective, Montana's rate is at the higher end compared to its immediate neighbors. Wyoming (\$0.24) and South Dakota (\$0.28) fall below Montana, while Idaho (\$0.32) and Nebraska (\$0.30) are slightly lower but relatively close. Vermont, while geographically distinct, sits just under Montana at \$0.314.



## Special Fuels Gallonage (Motor Fuel Usage)

Special fuel gallonage reported in FHWA Statistical Abstract Table MF-33SF<sup>cxiv</sup> represents the total volume of special fuels —such as diesel and certain alternative fuels — and under Montana law (Montana Code Annotated 15-70-401), "special fuel" includes diesel fuel and other volatile liquids (except liquefied petroleum gas) sold for use in motor vehicles on public highways and also includes biodiesel and additives when blended into special fuel.<sup>cxv</sup>

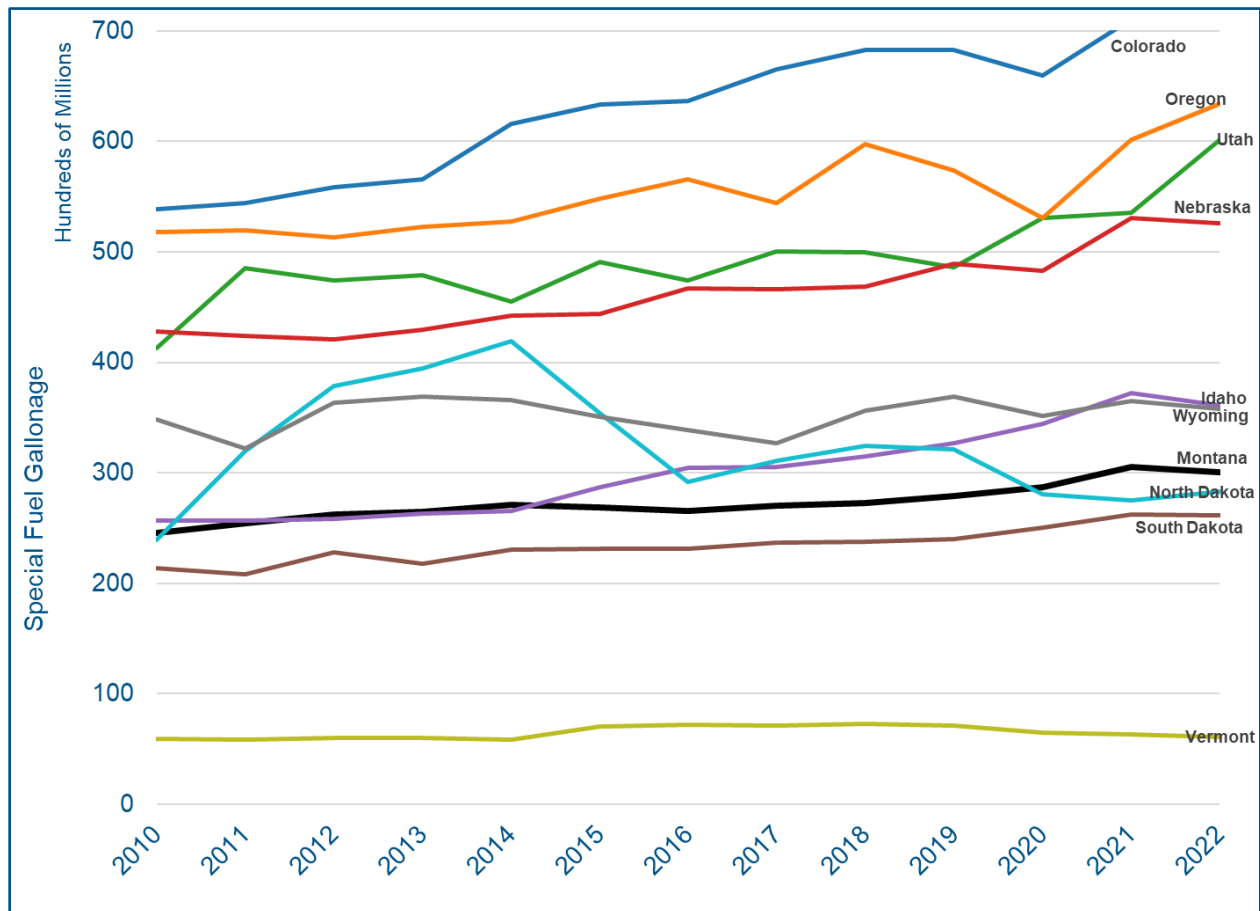


Figure 3.11 Special Fuels Consumption Trends in Montana and Peer States, 2010–2022

**Figure 3.11** displays trends in special fuel consumption.<sup>cxvi</sup> Special fuel (characterized as mostly diesel) consumption trends showed considerable variation across Montana's peer states from 2010 to 2022. States with high levels of freight activity, like Colorado, Utah, and Idaho, saw significant increases in special fuel consumption. North Dakota experienced a sharp spike in special fuel demand during the oil boom of 2011–2014, followed by a decline as production slowed.<sup>cxvii</sup>

## Peer State Comparison

### Modest Special Fuel Consumption

Montana, Vermont, Wyoming, Nebraska, and nearby South Dakota saw relatively flat or modest growth. These states have extensive rural areas and rely on long-distance trucking without massive urban or industrial surges. For example, Montana's special fuel consumption hovered in the mid-200s and only crept into the low-300s by 2022, reflecting steady long-haul traffic on I-90 and I-15 rather than new local demand. Wyoming's special fuel usage likewise rose gently (to 347 by 2022) along its I-80 corridor, where significant freight traffic dominates road use and heavily influences maintenance needs.<sup>cxviii</sup> Nebraska's special fuel gallons climbed moderately (to roughly 525) with steady farm and freight traffic on I-80, but without the sharp spikes seen in big corridors. Nebraska, with a strong agricultural base and rural freight traffic<sup>cxix</sup>, also experienced stable special fuel consumption growth, reaching around 525 million gallons by 2022.

South Dakota's usage is similarly modest (about 200 to 260 over the period). Overall, these "rural travel" states show moderate, linear trends tied to population density and established freight corridors.

Wyoming, with its significant freight activity on I-80 and I-90, saw a relatively steady rise in special fuel consumption from about 320 million gallons in 2010 to approximately 357 million gallons in 2022. Despite this steady growth, Wyoming's lower population and limited urban development have kept its special fuel consumption growth moderate compared to its more densely populated neighboring states.

### High Special Fuel Consumption

Driven by intense freight traffic along major corridors such as I-70 and I-25, Colorado experienced a sharp increase in consumption. In 2021 alone, nearly 382 million tons of goods, worth close to \$472 billion, moved across the state's infrastructure.<sup>cxx</sup> The state's population growth and continued expansion of urban and rural areas, especially along these key freight routes, led to an increase in special fuel demand. By 2022, Colorado reported the highest special fuel consumption among peer states, topping 945 million gallons (4.81% CAGR), driven by freight activity across its expansive highway network.

Utah, similar to Colorado, experienced strong special fuel consumption growth, driven by increasing freight traffic along its I-15 corridor. This highway serves as a major north-south route for goods traveling through the state, supporting both local and long-haul freight traffic. With a 1.69% CAGR population increase, Utah's special fuel use grew significantly. By 2022, special fuel consumption in Utah had reached about 600 million gallons, reflecting its expanding role as a critical freight route.

Special fuel consumption in Idaho also grew due to its expanding role as a freight corridor in the western U.S., particularly on routes like I-90 and I-15. The state's growing population, especially in urban areas like Boise, contributed to the rise in special fuel consumption. Idaho's ` Fund projects, which focus on expanding rural highway infrastructure, helped accommodate increasing special fuel demand for freight and tourism. By 2022, Idaho's special fuel consumption had reached about 361 million gallons.

### **Low Special Fuel Consumption**

Vermont's special fuel consumption remained low and largely unchanged over the period, increasing only slightly from 59 million gallons in 2010 to about 60 million gallons in 2022. With a small population and limited freight traffic, Vermont has minimal heavy truck traffic, which contributes to its consistently low special fuel consumption levels.

### **Oil Boom Effect (North Dakota)**

North Dakota stands out for its oil-boom dynamics. Its special fuel consumption jumped dramatically in the early 2010s: state reports show it roughly doubled (from about 239 million gallons in 2010 to 419 million by FY 2014) as the Bakken oil boom drove drilling rigs and freight. After peaking around 2014–2015, North Dakota's special fuel use declined sharply.<sup>cxxi</sup>

### **How Montana Compares**

Montana's special fuel consumption remains moderate compared to its peer states. Over the 12-year period from 2010 to 2022, Montana's special fuel usage grew steadily from 245 million gallons to approximately 300 million gallons (1.68% CAGR), placing it in the lower middle of the peer states in terms of total consumption. This steady growth reflects the state's reliance on long-haul freight for agriculture, energy, and tourism, rather than urban and suburban expansion that drives special fuel demand in more populous states.

Unlike states like Colorado, Utah, and Idaho, where special fuel consumption is closely linked to freight movement serving large urban markets and supported by substantial infrastructure investments, Montana's special fuel demand is primarily influenced by long-haul freight corridors and seasonal tourism activity. The state's relatively stable population and lack of significant urban commuting means that its special fuel consumption grows at a slower rate compared to fast-growing states with larger metropolitan areas.

In comparison to Wyoming and Nebraska, Montana's special fuel consumption trends are similar, reflecting the steady demand for special fuel driven by rural freight movement and low population density. While North Dakota experienced sharp spikes

and declines due to the oil boom, Montana's special fuel consumption remains more stable and tied to consistent freight and tourism activity.

## Revenues Received by State for Highways

### General Fund Appropriations

General Fund is the primary operating fund of federal, state, or local governments, supported by various taxes and fees. General Fund Appropriations refer to amounts drawn from it.<sup>cxxii</sup> Reported amounts are gross general fund allocations for highways, offset by highway-user revenue credited to the general fund.<sup>cxxiii</sup>

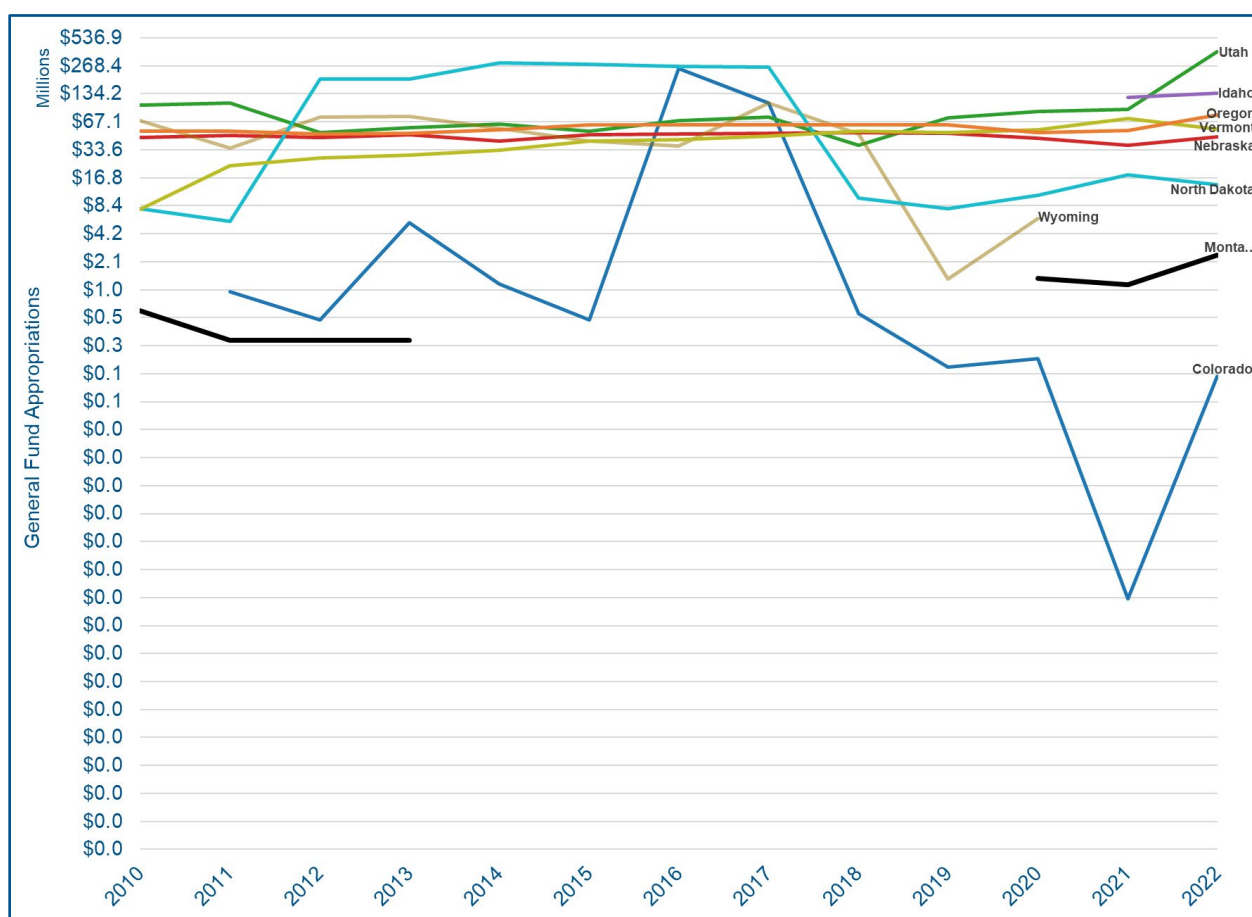


Figure 3.12 Trends in General Fund Transfers in Montana and Peer States, 2010-2022

**Figure 3.12** displays trends in general fund transfers.<sup>cxxiv</sup> General Fund Appropriations are funds allocated from a state's overall budget to support transportation projects. These funds help cover expenses when traditional transportation revenue, like fuel taxes and registration fees, are

South Dakota did not allocate any general fund appropriations for transportation from 2010 to 2022 and is therefore excluded from the chart.

insufficient. The money from the general fund is used for a variety of transportation needs, including road repairs, infrastructure improvements, and safety upgrades. Unlike funds specifically designated for one purpose, such as fuel taxes, general fund appropriations offer more flexibility, allowing states to direct money where it is most needed. These appropriations play a key role in ensuring that transportation systems are maintained and improved, especially during times when other revenue sources may not be enough to meet the growing demands of infrastructure.<sup>cxxv</sup>

### **One-Time Capital Investments**

In states like Colorado and North Dakota, capital investments funded through lease-purchase agreements and oil revenue-backed initiatives led to sharp spikes in transportation revenue. In Colorado, Senate Bill 17-267 (passed in 2017) enabled the use of lease-purchase agreements to issue bonds<sup>cxxvi</sup>, providing one-time funding for critical highway and bridge projects without raising taxes. This temporary solution allowed General Fund transfers to help sustain transportation investments during budget shortfalls. To strengthen long-term funding, Colorado later enacted Senate Bill 21-260, which introduced new fees on fuel sales and vehicle registrations<sup>cxxvii</sup>. This legislation also allocated federal American Rescue Plan Act funds and expanded General Fund transfers to support ongoing infrastructure needs. Together, these initiatives have helped stabilize and expand Colorado's transportation funding system amid fiscal challenges.<sup>cxxviii</sup>

Similarly, North Dakota capitalized on oil revenues during the boom years, using proceeds from mineral and severance taxes to fund highway improvements (among broader efforts) and ensure transportation infrastructure kept pace with the rapid economic growth driven by the oil industry. By fiscal year 2022, oil-related taxes continued to dominate the state's revenue stream, with the Extraction Tax generating \$1.3 billion and the Gross Production Tax adding nearly \$1.5 billion. Over the past five years, these oil taxes alone made up more than half of all state tax collections, far outpacing revenues from property, sales, and other sources.<sup>cxxix</sup> This surge in energy-driven funding provided critical support for both immediate infrastructure needs and longer-term transportation investment stability.

Wyoming saw spikes in transportation funding from energy-related taxes, reflecting the state's reliance on natural resources for its revenue generation. In 2023, Wyoming's oil and natural gas industry generated around \$2.42 billion in tax revenue, with \$96 million directed specifically toward public infrastructure initiatives.<sup>cxxx</sup> While both states faced challenges with the volatility of energy markets, they were able to use these revenues to fund infrastructure during periods of rapid economic expansion.

## Revenue Surplus or Federal Relief

In contrast, states like Utah and Idaho experienced revenue surges driven by a combination of temporary fiscal surpluses and federal pandemic relief funds, followed by sustained increases in transportation funding under the Infrastructure Investment and Jobs Act (IIJA), passed in November 2021. The IIJA significantly boosted Utah's share of Highway Trust Fund allocations, with a 21% increase compared to the FY 2021 baseline. In addition, federal relief funds supported long-term infrastructure initiatives, including highway resilience projects, further fueling the growth in transportation revenue from 2021 to 2022.<sup>cxxxix</sup> Similarly, Idaho utilized its "Leading Idaho" initiative to direct surplus state funds into road maintenance and construction, further enhancing its transportation network in the face of growing demand.<sup>cxxxix</sup> These late-stage revenue spikes provided necessary relief to states struggling with outdated infrastructure while also accommodating population growth.

## Low or Minimal Appropriations

States like Montana and Vermont have consistently relied on more stable and predictable revenue sources, often avoiding large infusions or one-time funding boosts. Instead, these states depend heavily on dedicated fuel taxes and vehicle registration fees to fund highway projects. Montana, for instance, has seen steady revenue growth thanks to incremental fuel tax increases (with the most recent adjustments made gradually since 2017<sup>cxxxix</sup>) and a stable reliance on fuel-based revenue streams.

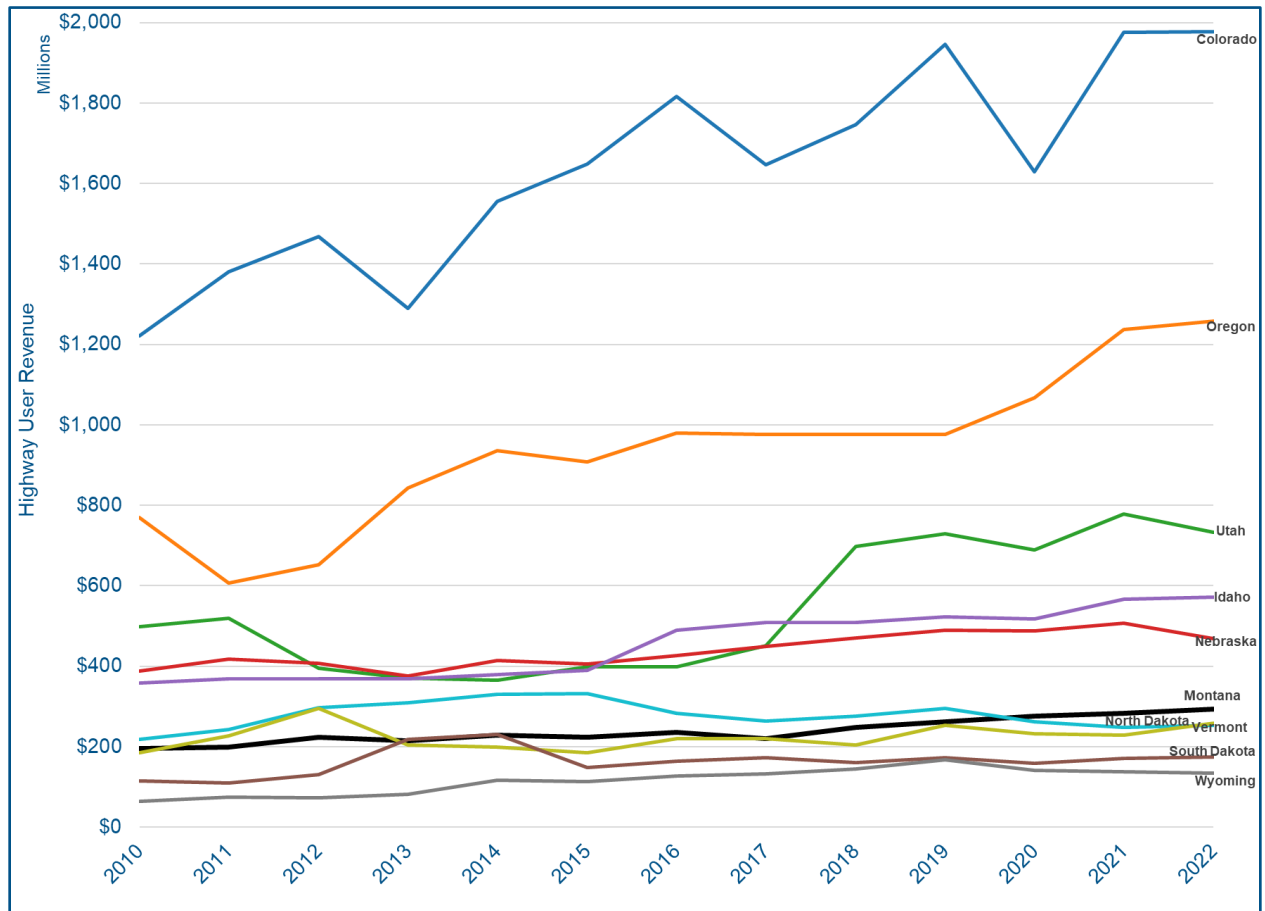
## Sales Tax

In states like Nebraska, these appropriations are bolstered by sales tax revenue. Nebraska directs 100% of its 5.5% sales/use tax on motor vehicle purchases to the Highway Trust Fund<sup>cxxxix</sup>, ensuring that revenue from vehicle sales is specifically allocated to road maintenance rather than the general fund. Additionally, through the Build Nebraska Act (2011), 0.25% of the state's 5.5% general sales tax is directed to the State Highway Capital Improvement Fund. This allocation, set to continue through 2033, generates approximately \$80–\$100 million annually, funding major highway expansion projects and providing a steady revenue stream for Nebraska's transportation needs.<sup>cxxxix</sup>

Similarly, Utah imposes a 0.25% statewide sales tax dedicated specifically to transportation. This tax helps fund both highways and transit projects through the Transportation Investment Fund (TIF).<sup>cxxxix</sup>

## Highway User Revenues

The FHWA defines highway user revenues as the sum of motor fuel taxes, motor-vehicle and motor-carrier taxes, road and crossing tolls that were expended on state or local roads, 15 months after reference.<sup>cxxxvii</sup>



*Figure 3.13 Trends in Highway User Revenue Growth in Montana and Peer States, 2010-2022*

**Figure 3.13** displays trends in highway user revenue growth.<sup>cxxxviii</sup> Across the Mountain West, highway user revenue is shaped by a combination of fuel taxes, population growth, new fees, and evolving policies. States that have raised or indexed their fuel taxes, such as Utah (38.5 cents per gallon), have seen stronger revenue growth, while those with flat or outdated rates, like North Dakota (23 cents since 2005) and Wyoming (24 cents since 2013), have fallen behind. Fast-growing states like Colorado and its regional neighbors have naturally collected more from traditional sources as their populations expanded.



Many states have also adopted new registration and EV fees to supplement highway funding. For example, Idaho now charges \$140 per year for battery-electric vehicles, Utah increased its EV fee to \$120 in 2021, and Vermont imposes a \$89 surcharge. These additional fees bolster highway funds in Utah, Idaho, and Vermont, while Montana and a few others during this period (2010-2021) had yet to implement EV-specific charges.<sup>cxix</sup>

In addition to traditional sources, some states are piloting mileage-based user fees. Utah, for example, offers EV owners the option to join a voluntary RUC program. Toll revenues, while a smaller share of overall funding, also contribute to select states, such as Colorado's express lanes and Utah's tolled corridors.

### **Peer State Comparison**

Colorado and Oregon have high highway user revenues, with Colorado reaching around \$2 billion by 2022, driven by factors such as innovative fees (e.g., EV Road Usage Equalization Fee, Retail Delivery Fees) and tolling. Oregon, on the other hand, has taken a more diversified approach, with \$1.25 billion in highway user revenue, supplemented by vehicle fees and innovative road usage charges. Idaho and Utah have moderate highway user revenues, with Utah achieving \$733 million in highway user revenue in 2022. North Dakota (\$253 million) and Wyoming (\$133 million) have comparatively lower highway user revenues, largely due to their smaller populations and lower tax rates.

### **Key factors**

- **Fuel Tax Increases & Indexing:** Utah and Idaho have adopted higher or indexed fuel taxes, boosting their user-tax revenues. By contrast, states like North Dakota and Wyoming with long-stagnant rates have seen much slower growth.
- **Population Growth & More Drivers:** States with rapid population and vehicle growth have higher revenues.
- **Registration & EV Fees:** Additional fees have pushed revenues higher in states like Utah, Idaho, and Vermont.
- **Flat/Outdated Fuel Taxes:** North Dakota, Wyoming, and Vermont have seen minimal fuel-tax growth. North Dakota's 23 cent per gallon rate (unchanged since 2005), Wyoming's 24 cent gas tax (since 2013), and Vermont's reduced rate, tied only to gas prices, have limited revenue gains. These static rates may partly explain their slower highway revenue growth compared to faster-growing peers.
- **Policy Shifts Toward Usage-Based Fees:** Oregon's OReGO program allows drivers to pay per mile instead of through traditional gas taxes.<sup>cxl</sup> Utah and Colorado are also testing road-usage charges. Utah now allows EVs to opt into a



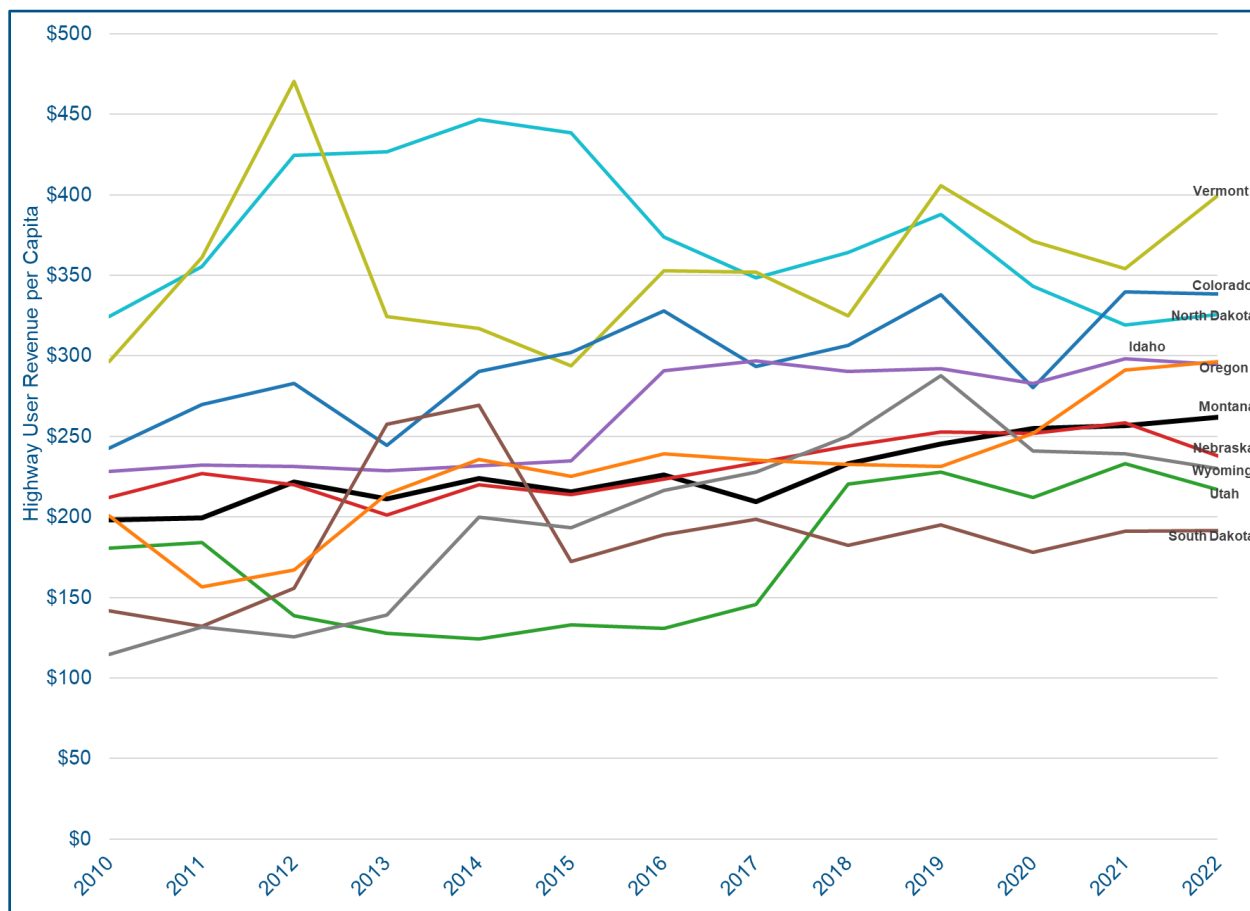
mileage fee program instead of paying the flat EV tax. Colorado passed SB 21-260 to phase in a per-gallon “road usage” fee (indexed to inflation) starting in 2023. These shifts are expected to steadily raise revenues in those states over the coming decade.

- **Toll Revenue Contributions:** Selected toll systems boost revenues in some peers. Colorado’s managed lanes and the E-470/C-470 toll generate significant revenue.<sup>cxli</sup> Utah’s I-15 express lane tolls also provide a steady revenue source for transportation infrastructure.

### *How Montana Compares*

Montana’s highway user revenue grew from \$196.2 million in 2010 to \$294.1 million in 2022, representing a compound annual growth rate (CAGR) of 3.4%. This increase primarily stems from higher fuel taxes and vehicle registration fees. Nevertheless, because Montana lacks toll roads and a formal mileage-based user fee system, its highway revenue remains lower compared to states like Colorado, which have adopted additional funding mechanisms—such as delivery fees, EV fees, and road usage charges—to supplement traditional fuel tax revenues and support infrastructure investment.

## Highway User Revenue per Capita



*Figure 3.14 Highway User Revenue Per Capita Trends in Montana and Peer States, 2010-2022*

**Figure 3.14** displays highway user revenue per capita.<sup>cxlii</sup> Examining highway revenue on a per capita basis provides insight into how much each state collects relative to its population and how that has changed.

Among peer states, Vermont stands out with one of the highest per capita highway user revenues, reaching about \$470 per person in 2012 and around \$400 in 2022. Vermont's small population means that even moderate total revenues translate into large per-resident figures. North Dakota also ranks high, peaking at roughly \$450 per capita in 2014 during the oil boom and maintaining around \$330 per capita in 2022. Wyoming and South Dakota follow closely, with peak per capita revenues close to \$300. These trends reflect the reality that sparsely populated, rural states with large road networks, often tied to agriculture or energy industries, require higher spending per resident to maintain infrastructure.<sup>cxliii</sup>

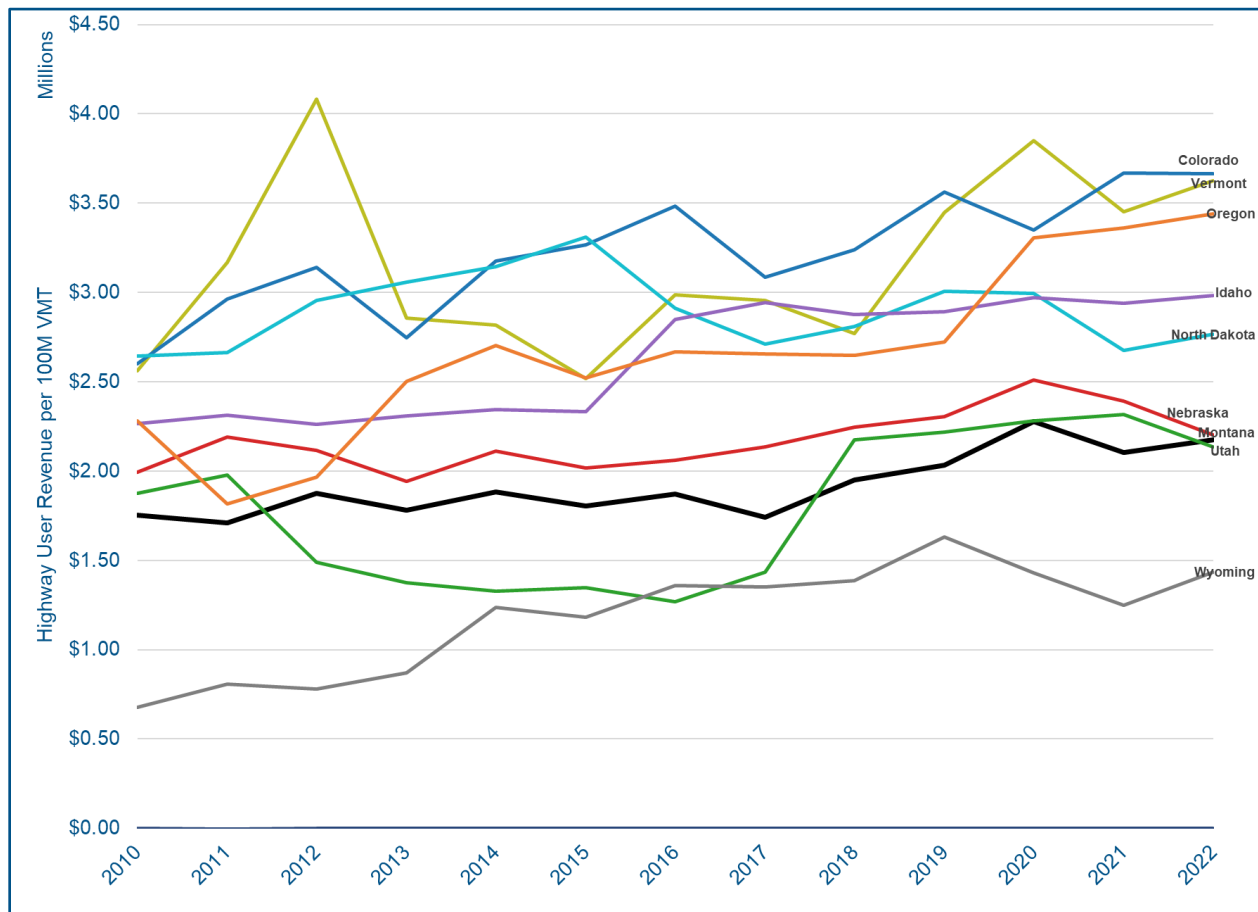
On a per-person basis, Oregon ranks among the higher-funded states within the peer group. Oregon's per capita highway user revenue rose from about \$201 in 2010 to approximately \$297 in 2022, reflecting a CAGR of about 3.3%. By 2022, Oregon's per capita was exceeded only by Colorado (\$339), North Dakota (\$326), and Vermont (\$400), and was well above that of South Dakota (\$192), and Utah (\$217). Oregon's per capita growth slightly outpaced its overall highway user revenue growth rate because population growth remained modest, at about 0.85% CAGR, suggesting that revenue increases have kept pace with both population and inflation.

States with lower per capita highway user revenue often have larger populations that dilute total collections or have implemented recent tax cuts. For example, Colorado's total highway user revenues are substantial, but its per capita revenue remains relatively low due to its large population. By contrast, Vermont's high per capita figure reflects strong revenue collections spread across a small resident base.

### **How Montana Compares**

For Montana, per capita state highway revenues climbed from roughly \$200 per person in 2010 to about \$262 per person in 2022. This increase reflects both the higher fuel taxes instituted in 2017<sup>cxliv</sup> and growth in other fees.

## Highway User Revenue per 100M VMT



*Figure 3.15 Highway User Revenue per 100M VMT Trends in Montana and Peer States, 2010–2022*

**Figure 3.15** displays highway user revenue per 100 million VMT (total), the implication of revenue per VMT is how effectively the user pays their usage.<sup>cxlv</sup> If the revenue per VMT is rising, it could mean users are being charged more per mile (via higher taxes and fees) or that additional non-user money is being infused per mile of travel (as with general funds). If it's falling, it could indicate that either taxes are stagnant (each mile yields less revenue as vehicles become more efficient) or that travel is outpacing revenue growth, a warning sign for funding inadequacy. The data shows most states in this group had flat or rising revenue per VMT, most likely due to rising tax rates.

### Overall Revenue Growth

States with strong population growth, such as Colorado, Utah, Oregon, and Idaho, saw notable increases in highway user revenue per VMT. In Colorado, highway user revenue per 100M VMT rose sharply starting around 2017, supported by a combination of general revenue growth, new fee-based funding mechanisms introduced through SB

21-260 (2021), and temporary fiscal surpluses. While capital investments under SB 17-267 expanded the state's infrastructure capacity, it was these revenue policies—rather than borrowing alone—that contributed directly to higher user revenue per VMT. Utah's highway user revenue per 100M VMT grew steadily throughout the period, with an uptick in 2021–2022 driven by rapid population growth, increased urban commuting, and sustained investment through dedicated transportation funding programs. Oregon saw a consistent increase in highway revenue per 100M VMT from 2016 to 2022. This reflects a steady rise in population and the implementation of alternative revenue sources like tolling and usage-based charges. This growth was primarily driven by increased travel demand, higher fuel consumption, and the introduction of new fees. Idaho saw steady growth, particularly after 2017, driven by its increasing role as a freight corridor and population growth in areas like Boise. In these states, rising population figures and expanding metropolitan areas contributed to more vehicles on the road and higher fuel tax collections.

### **Flat or Minimal Growth**

States like Wyoming, Vermont, and South Dakota exhibited slower or flat growth in highway user revenue. These states are characterized by smaller populations, more rural landscapes, and less significant urban sprawl, which resulted in more stable and less volatile revenue trends. The reliance on traditional revenue sources, such as fuel taxes, with limited increases, meant that these states saw fewer significant revenue spikes. In particular, Wyoming's flat trend is mostly likely due to stagnant fuel tax rates, which have remained unchanged since 2013, while Vermont and South Dakota showed slower growth due to their more stable, less urbanized demographics. These states rely on modest, consistent revenue from fuel taxes and vehicle fees, which kept their revenue growth relatively stable but not as dynamic as in faster-growing states.

### **One-Time Spikes**

Some states experienced spikes in highway user revenue driven by temporary economic booms, such as energy sector surges, or by policy changes that increased user taxes and fees. In contrast, spikes in highway expenditures during certain years were often linked to one-time capital investments or lease-purchase programs. This pattern was particularly evident in states with volatile industries or large, one-off infrastructure funding initiatives. For example, North Dakota saw a sharp rise in highway user revenue during the oil boom years, driven by increased fuel tax collections and related economic activity. Similarly, Colorado's SB17-267 lease-purchase program resulted in a surge in capital outlays, while the later SB21-260 program introduced new user fees and revenue sources that boosted ongoing highway user revenue. These combined funding efforts allowed states to accelerate infrastructure investments, though

revenue trends often stabilized once temporary economic conditions or one-time funding mechanisms were exhausted.

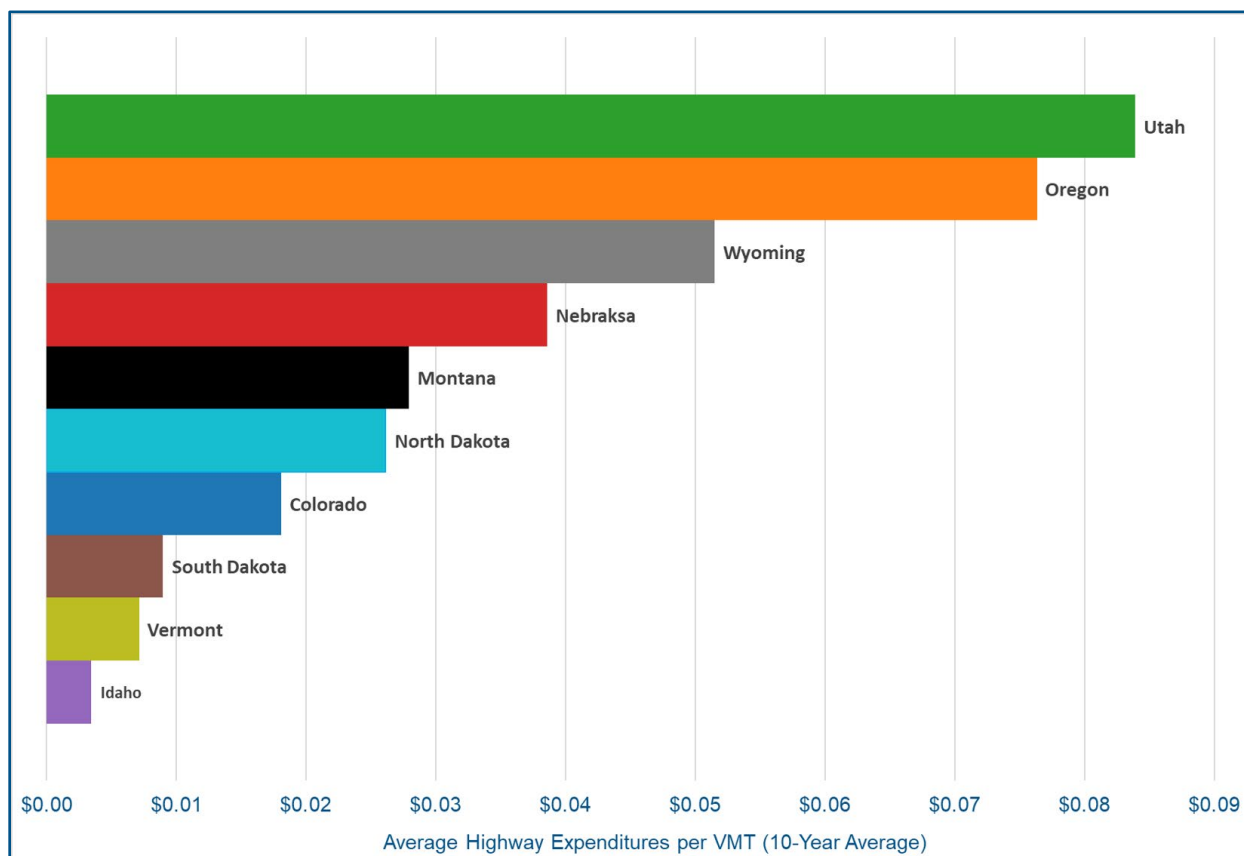
### **How Montana Compares**

Montana's highway user revenue per 100M VMT has shown steady but modest growth from 2010 to 2022. The state's revenue model primarily relies on fuel taxes and vehicle fees, which have seen gradual increases over time. Montana's revenue growth has been more restrained compared to higher-growth states like Colorado and Utah, as it has not implemented large-scale capital investments, new fee structures, or toll systems. Instead, Montana has focused on gradual tax increases, such as the fuel tax hikes that began in 2017, and maintaining stable revenue through dedicated fuel and vehicle fees.

While states like Colorado and Utah experienced significant spikes due to one-time investments or federal relief, Montana's growth remains more stable and predictable. The freight traffic on major highways like I-90 and I-15, along with tourism from national parks like Yellowstone and Glacier, contributes to steady demand for highway use and consistent funding. However, Montana's reliance on traditional funding sources means its revenue per 100M VMT remains lower than in faster-growing states with larger urban populations or tolling systems.

### ***Disbursements by States for Highways***

Receipts and disbursements by States for highways, including expenditures for local roads and streets under State control. In some states — such as Delaware, North Carolina, Virginia, and West Virginia — the majority of local roads are managed by the State.<sup>cxlvi</sup>



**Figure 3.16** 10-Year Average Highway Expenditures per VMT, 2010-2019

**Figure 3.16<sup>cxlvii</sup>** presents the 10-year average highway expenditures per VMT for Montana and peer states, based on data from 2010 to 2019. The values, expressed in dollars per VMT, provide insight into how much each state spends to support its roadway system relative to the amount of travel occurring on its network.

Across the period, Utah reported the highest 10-year average expenditure at \$0.084 per VMT, driven by significant investments in recent years. Utah's spending ranged from a high of \$0.141 in 2010 to a lower level of \$0.0459 in 2014, then rebounded to \$0.0946 in 2019 — reflecting major project cycles and growth-related investments.

Oregon followed closely, with an average of \$0.076 per VMT. Its spending fluctuated between \$0.0968 in 2010, dipping to \$0.0517 in 2013, and climbing back to \$0.0941 in 2019 — consistent with Oregon's efforts to maintain and upgrade key corridors.

Wyoming exhibited the third highest average, at \$0.051 per VMT. Wyoming's expenditures ranged from \$0.0579 in 2012 and \$0.0557 in 2015 to a lower \$0.0424 in 2016, reflecting the challenges of maintaining a large rural network with variable traffic volumes.

Nebraska recorded an average of \$0.039 per VMT, with relatively stable spending in the \$0.034–\$0.045 range across the decade. Similarly, Montana averaged \$0.028 per VMT, with values declining from \$0.0325 in 2010 to \$0.0259 in 2016, before modest increases in the later years.

North Dakota averaged \$0.026 per VMT, showing a peak of \$0.0409 in 2013 — likely reflecting the state’s oil boom-related road demands — before declining to \$0.0177.

In the mid-to-lower range, Colorado averaged \$0.018 per VMT, showing modest increases over time from \$0.0133 in 2010 to \$0.0192 in 2019. South Dakota averaged \$0.009 per VMT, ranging from \$0.0102 in 2010 to as low as \$0.00059 in 2018, likely reflecting fluctuations in rural investment needs.

Finally, Vermont (\$0.007 per VMT) and Idaho (\$0.003 per VMT) reported the lowest average expenditures in this group. Vermont’s spending ranged from \$0.0100 in 2011 to \$0.0058 in 2016, while Idaho’s expenditures gradually decreased from \$0.0046 in 2010 to \$0.0024 in 2016, before increasing slightly in recent years.

### **Total Highway Expenditures**

In addition to per-VMT values, the underlying total highway expenditures also vary widely across states and years. For example, Colorado’s expenditures increased from \$626 million in 2010 to over \$1.28 billion in 2020, reflecting major investment growth. Utah, which showed the highest per-VMT spending in the chart, consistently posted large total expenditures — peaking at \$1.25 billion in 2011, dipping during the mid-decade, and rising again to \$1.17 billion in 2022.

Oregon also maintained significant highway investment, with total expenditures ranging from \$799 million in 2010 to over \$1.22 billion in 2020. Similarly, Wyoming, though smaller in population, steadily invested between \$372 million (2013) and \$443 million (2022) — helping explain its higher per-VMT spending in the earlier chart.

Other states, such as Nebraska and Montana, showed more stable expenditure levels over the decade. Nebraska ranged from \$408 million in 2010 to \$668 million in 2022, while Montana ranged from \$401 million (2017) to \$585 million (2020). Smaller states like Vermont consistently reported lower total spending, averaging between \$152 million and \$262 million across most of the period, consistent with their smaller roadway networks and traffic volumes.

Idaho and North Dakota demonstrated more variable spending. Idaho’s expenditures rose from \$515 million in 2010 to \$726 million in 2022, while North Dakota — which experienced oil boom-driven road needs early in the decade — saw spending spike to



\$791 million in 2013, followed by declines to \$263 million in 2018, then stabilizing at \$428 million in 2022.

These results reinforce several of the key themes discussed earlier in this chapter. States pursuing aggressive infrastructure investment strategies — such as Utah and Oregon — translate these efforts into some of the highest observed highway expenditures per VMT. Conversely, states with more traditional or conservative funding models, such as Montana, Vermont, and South Dakota, exhibit lower per-mile spending patterns that reflect their policy choices, rural characteristics, and revenue strategies. The per VMT spending data thus provides a clear, measurable outcome of how funding strategies perform in practice — a critical consideration for future transportation planning.

### **National Receipts Analysis Summary**

Population and travel trends across peer states reveal distinct patterns that shape transportation infrastructure needs, funding strategies, and expenditures. Fast-growing states like Utah, Idaho, and Colorado experienced strong VMT and gasoline consumption growth, driven by robust economies, suburban expansion, and sustained infrastructure investment—resulting in higher highway expenditures both in total and per VMT. In contrast, states such as Wyoming, Vermont, and South Dakota exhibited slower or flat growth, influenced by demographic shifts and rural characteristics, with more stable or lower spending patterns. Montana’s steady, moderate growth positioned it in the middle of the peer group, with freight, tourism, and rural travel—rather than large-scale urban commuting—driving transportation demand and shaping a balanced expenditure profile. Gasoline and special fuel consumption trends mirrored these patterns, with states reliant on freight corridors or affected by energy booms seeing larger increases. In response to evolving demands, most states raised fuel taxes and introduced new fees to bolster highway user revenues; Montana’s gradual tax increases helped maintain infrastructure funding amid stable consumption trends. Overall, the analysis underscores how population change, VMT dynamics, fuel consumption, and funding policies collectively shaped transportation system performance and expenditure patterns across these states from 2010 to 2022.

## **4. Summary of Findings**

The baseline forecasts project MDT revenue to increase through 2050 at a rate of 0.61% per year. The gas tax revenue, making up 46% of total revenues in 2024, is the largest contributor to growth. The second largest revenue source, the special fuels tax, projects little to no growth due to forecasted commercial vehicle efficiency. Montana’s

population is increasing at a rate of 0.91% per year, and construction costs at a rate of 5.8% per year. Population growth and increases in construction costs are significantly outstripping revenue growth.

Comparing Montana's transportation policies and related metrics to peer States reveals important policies and trends. States like Colorado, Utah, Oregon, Nebraska, and Georgia are contemplating and implementing new and innovative funding alternatives that can be reviewed further as options for Montana.

### **Key Takeaways (National Receipt Comparison):**

- **Steady, Moderate Population Growth:** Montana's population grew at a 1.06% CAGR (2010–2022), consistently increasing but slower than high-growth peers like Utah (1.9%) and Idaho (2.4%), while outperforming rural peer states like Vermont (-0.53%), Wyoming (-0.22%), and South Dakota (0.95%).
- **Rural Dominance:** Urban VMT remains low (4.2 billion miles in 2022), with most travel occurring on rural roads. Montana's rural VMT reached 9.31 billion miles in 2022, growing from 8.4 billion in 2010 (0.86% CAGR).
- **Special Fuel:** Fuel consumption grew steadily. Special fuel usage rose from 245 million to 300 million gallons (1.68% CAGR).
- **No Tolls or Mileage Fees:** Unlike some peers (i.e., Utah and Colorado), Montana has not adopted tolling or road usage charges, limiting revenue diversification.
- **Highway Revenue Growth:** Highway user revenue increased from \$196.2M in 2010 to \$294.1M in 2022 (3.4% CAGR), fueled by gradual gas tax hikes but lacking broader funding mechanisms.
- **Per Capita Revenue – Slightly Above Median:** Montana collected \$261.94 per person in 2022, ranking 6th out of 10 peers, behind Vermont (\$399.53), Colorado, North Dakota, Oregon, and Idaho, but ahead of South Dakota (\$191.50), Utah, Wyoming, and Nebraska. This places Montana just above the median in per capita revenue performance.
- **Moderate Highway Expenditures per VMT:** Montana averaged \$0.028 per VMT over 2010–2019 — lower than high-investment peers like Utah (\$0.084), Oregon (\$0.076), and Wyoming (\$0.051), but higher than low-spending states such as Idaho (\$0.003) and Vermont (\$0.007). This reflects Montana's steady investment approach aligned with its rural network and moderate travel growth.

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- <sup>vi</sup> Alternative fuel taxes are omitted from the table due to the minimal revenue contribution.
- <sup>vii</sup> *Id.*
- <sup>viii</sup> *Id.*
- <sup>ix</sup> *Id.*
- <sup>x</sup> *Id.*
- <sup>xi</sup> *Id.*
- <sup>xii</sup> *Ibid.*
- <sup>xiii</sup> *Ibid.*
- <sup>xiv</sup> Since miles per gallon is the reciprocal of gasoline use, the model was performed on the reciprocal of miles per gallon to get gallons per mile. Otherwise, the fuel efficiency increase from 20 to 22 would be treated equally to 22 to 24, when really 20 to 22 results in more fuel saved.
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- <sup>xxiv</sup> *Id.*
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