## REVENUE

## HOW WILL EVs IMPACT MOTOR FUEL TAX REVENUE?



# TRANSPORTATION CONNECTION 

## Annual Vehicle Registration

This chart shows the trends of vehicle registrations within North Dakota back to 2006 for passenger vehicles, pickup trucks, and commercial trucks. Overall, the state has averaged an additional 10,259 vehicle registrations per year. This number also accounts for the transfer of vehicles which would count the registration of the same vehicle twice.

## Annual Vehicle Miles Traveled (VMT)

This chart shows the growth of annual vehicles miles traveled (VMT), which shows a growth of 127 million miles per year on average since 1980.


The estimated impact on the state's motor fuel tax revenue used a number of trends to understand the growth of EVs in the state, as well as the growth of VMT and the overall growth of vehicle registrations.

ND Vehicle Sales Projection

This chart shows the estimated growth of EVs within North Dakota, assuming an aggressive, moderate, and low adoptions scenario. The national average of EV adoption was assumed to be the most aggressive North Dakota would experience, moderate growth is $75 \%$, and low growth is $50 \%$ of the national average.

## ND Vehicle Makeup Projection

This chart shows the impact on the total number of vehicles in North Dakota. While EV sales are projected to grow, so too is the growth of the overall number of vehicles. The number of EVs in North Dakota will lag behind vehicle sales, as vehicles purchased today may last 15 years. As of December 1, 2022 there are 537 EVs registered in North Dakota.

EV - Aggressive


EV - Moderate

- EV - Low

Total Sales

202220232024202520262027202820292030203120322033203420352036203720382039204020412042204320442045 Year

$1,200,000$
$1,000,000$
800,000
600,000
400,000
200,000

EV - Aggressive
EV - Moderate


202220232024202520262027202820292030203120322033203420352036203720382039204020412042204320442045 Year

## Annual Impact On Revenue Due To EV Adoption

On average, North Dakota collects more money per EV through its EV fee than it receives from the MFT generated by the average registered vehicle. Under the following assumptions, EV's net effect on road fee collections (including MFT and EV registration fees) has been calculated in the table below and the following annual registration fee assumptions have been used for the estimate:

| Aggressive EV Adoption | Moderate EV Adoption | Low EV Adoption |
| :---: | :---: | :---: |
| $+\$ 279 \mathrm{k}$ | $+\$ 210 \mathrm{k}$ | $+\$ 142 \mathrm{k}$ |
| $+\$ 4.1 \mathrm{M}$ | $+\$ 3.1 \mathrm{M}$ | $+\$ 2.0 \mathrm{M}$ |

