

The Curvy Road for State Legislation

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Chair Kansas

House Transportation Committee

November 20, 2024

What's the Problem?

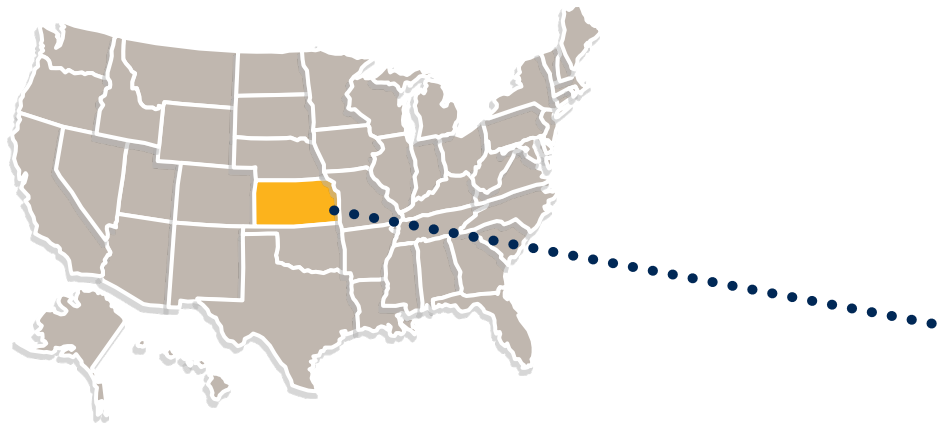
Transportation Funding is stagnant because:

1. Increasing fuel efficiency of ICE Vehicles
2. Current taxation of EV Vehicles Insufficient
3. Current taxation of ICE vehicles lags inflation and rising construction costs
4. EV's require enhanced grid and highway infrastructure investment



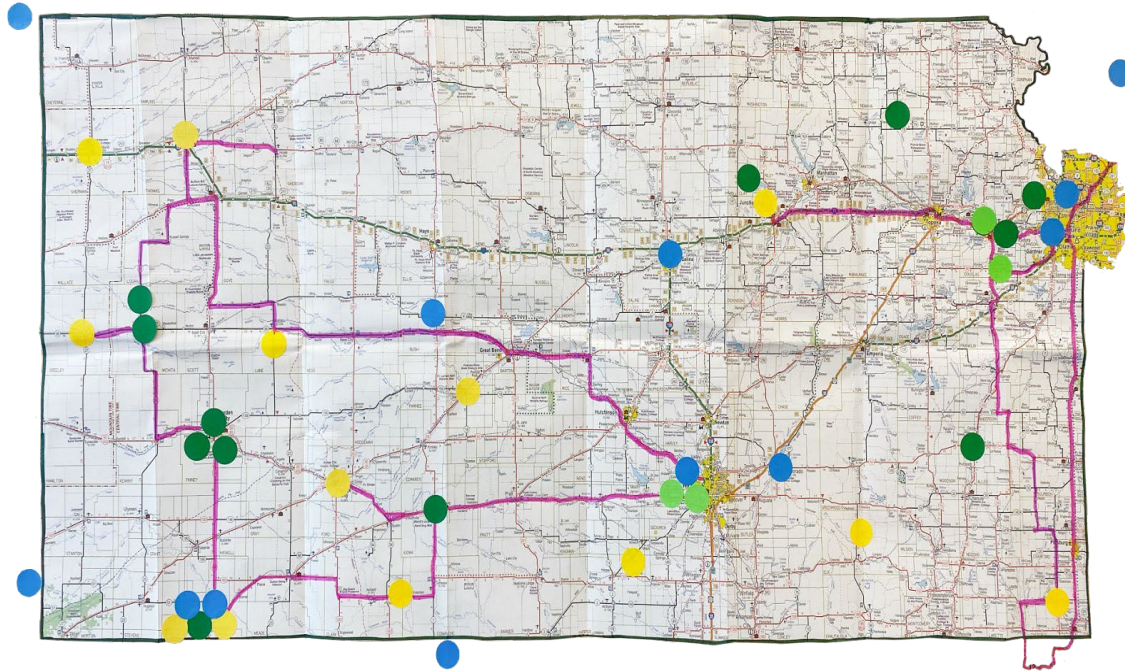
Bringing the Midwest Perspective

What are the impacts of a RUC policy on rural and agriculture communities, and the commercial trucking industry?



We are focusing on rural and agricultural communities, and trucking.

Finding common ground and understanding what's unique in Kansas to design a customized pilot.



Vehicle type

Payment options

Population density

Mileage reporting technology

Policy options

Public acceptance

Key stakeholders

Local industries

● **Rural residents**
12 participants

● **Agricultural sector**
13 participants

● **Urban residents**
4 participants

● **Commercial trucking**
12 participants

Four categories of insights

1. First Impressions

- Trucking participants understand the need for alternative revenue resources more than the general public
- Prioritize factual or neutral tone in communications as persuasive messaging makes people feel manipulated
- Include people in solution to ease fear that a unilateral solution might be imposed

3. Who runs it and how

- State agencies generally seen as trustworthy administrators of a potential RUC (e.g., KDOT)
- Some fear a new system will not correct existing inequities

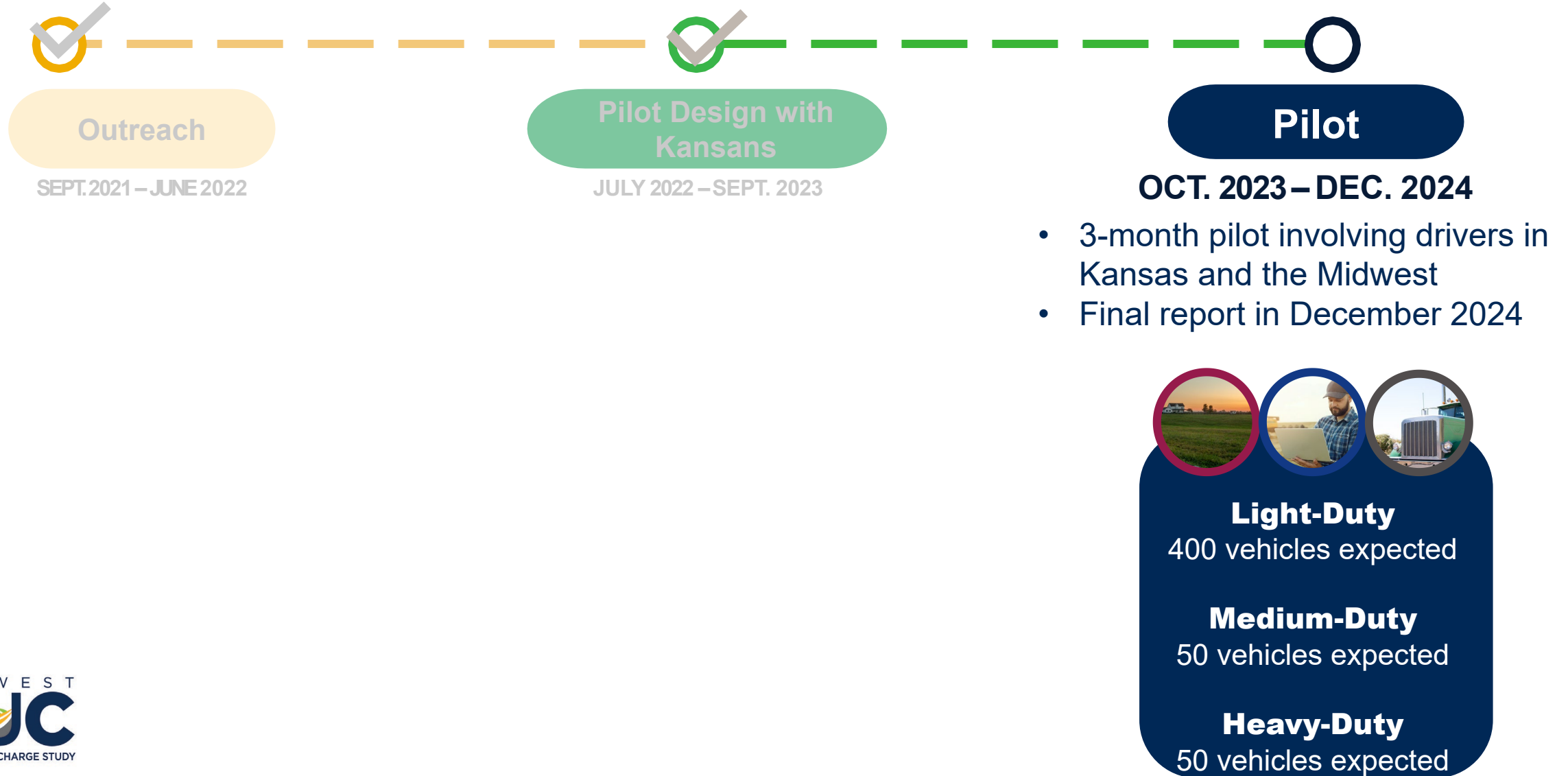
2. How much will it cost

- Uncertainty created by unknown cost and impacts of RUC impacts acceptance
- Different expectations re: cost related to use of paved versus unpaved roads

4. How will it work

- Choice desired to align with individual priorities
- Flexibility desired in payment preferences
- Convenience vs privacy tradeoffs of automated reporting

Pilot Starting in October



MBUF Barriers – My Thoughts & What I Hear

- ICE vehicle owners believe the fuel tax works well & don't want to switch to MBUF
- MBUF tax collection is inefficient
- Privacy concerns of MBUF
- EV vehicle owners believe they are improving the environment and taxation should consider that
- EV vehicle owners feel they are already taxed enough through higher registration fees and electricity taxes
- Automotive manufactures have concerns with sharing telematics data
- All vehicles don't have telematics
- Lack of national plan to address current federal highway funding issues
- ICE & EV vehicle owners are concerned MBUF will be a tax increase
- Big Brother is watching me & increasing regulation

Moving Forward – To Address the Problem

Possible Intermediate Policies

- Offer EV owners choices: Registration fees or MBUF – make sure they are equivalent to costs of avg ICE driver
- Different MBUF tax collection choices for EV's based on collection method
- Pass MBUF for alternate fueled Commercial Motor Vehicles under IFTA like Indiana
- KWH Fee for commercial chargers

- Choice lanes in metro areas for capacity expansion
- Tie ICE registration fees to fuel efficiency like Virginia
- Transportation Network Company Fees
- Delivery Fees like MN & CO

Long Term Solution

- MBUF based on Vehicle Telematics for EV's inflation indexed
- Inflation Indexing Motor Fuels Tax

Thank You!

What it takes to pass MBUF legislation

1. Coalition Building:

- Stakeholders
- Constituents
- Bipartisan
- Executive & Legislative Branch

2. Education, Education, Education

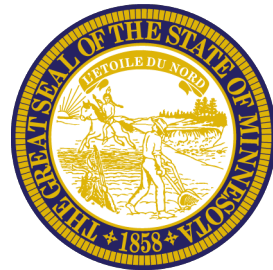
3. Return on Investment for Taxpayers

Go Cats!



House File 4889

Mileage-based Road User Charge



Minnesota
House of
Representatives

Rep Steve Elkins | House District 50B
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Guiding Principals for HF4889

- EVs should pay their fair share of road user charges, but no more.
- All drivers should be incentivized to drive less by paying in proportion to the distance they drive.
- Administrative costs should be minimized.

F 4889 Bill Summary

- Replace the current \$75 Electric Vehicle Registration Surcharge with the option of a mileage-based user fee on electric vehicles.
- There would be five rates, one for each EPA vehicle type:
 - Sedan/Wagon 0.899 ¢/mile
 - Car-based SUV 0.934 ¢/mile
 - Truck-based SUV 1.188 ¢/mile
 - Minivan/Van 1.088 ¢/mile
 - Pickup Truck 1.468 ¢/mile
- The rates would be phased in over several years
- Participation is voluntary (there would be a flat fee alternative)

These fee levels would be tied to the gas tax and average vehicle mpg, and would adjust to keep state highway trust fund revenues level during the transition

Calculation of RUC: Ford F150 Pickup Truck

Ford F150 3.5L V6



19.4 MPG (avg for pickups)

11,500 miles

Gas Tax: 28.5 ¢/gallon

Total: \$169

Ford F150 Lightning



68 MPGe

11,500 miles

MBUF Rate: 1.47 ¢/mile

Total: \$169

Cost Effective Collection of Odometer Readings

Getting Started

Introduction to Smartcar's API

Learn about how to build applications that connect to millions of vehicles around the world.



Option 1: Direct Telematics (e.g., Smartcar)

- Every EV has an accurate GPS and a cellular modem.
- Every EV Manufacturer collects odometer readings.
- Every EV manufacturer already has an API via which the odometer reading can be read.
- Vendors such as Smartcar have created “one-stop-shopping” for the collection of this data.

Multiple Solutions with One System

GeoToll offers an all-in-one solution for Tolling, Road Usage Charge (RUC), HOT/HOV lanes, Safety, and Audit.

Download our app

Available on the App Store | GET IT ON Google Play

Option 2: Cell Phone Technology (e.g., Geotoll)

- Geotoll can accurately derive odometer readings from cellular phones.
- Cheating can be policed via periodic photographs of in-vehicle odometer displays.



Minnesota House of Representatives

Thank You

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DRIVE LESS. PAY LESS.



Gerald F. Lackey, Ph.D.
DMV Commissioner

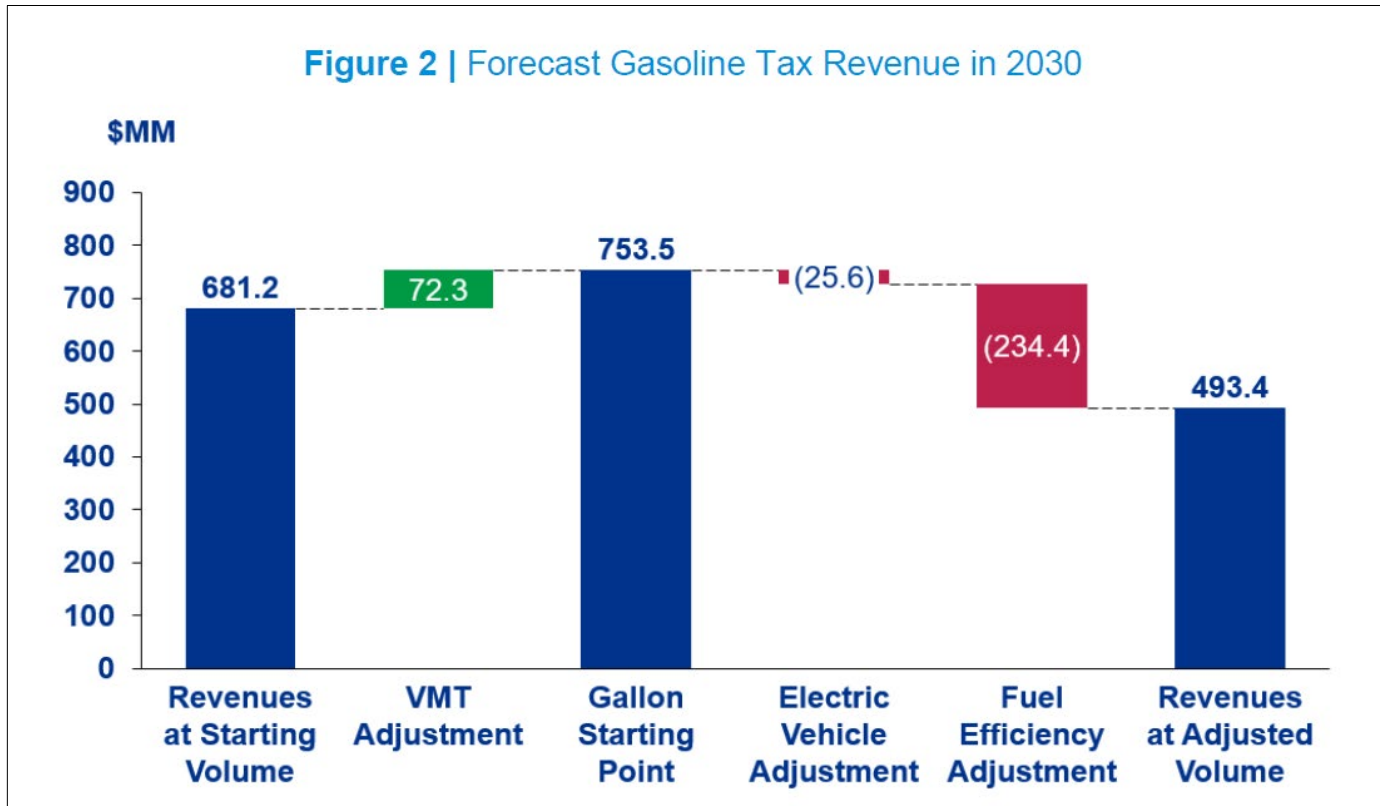


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Mileage Based User Fee Program

- **The history:** Taxing fuel to fund roadway maintenance began in VA in 1923
- **The problem:** Increasing vehicle fuel efficiency is eroding sustainability of transportation funding structure
 - Vehicle miles traveled increased and motor fuel tax revenue declined in FY 2018 over FY 2017
- **The response:** 2019 legislative directive for Virginia Secretary of Transportation to lead a working group to study impact of fuel-efficient vehicles on transportation revenue

Workgroup Findings



- Projected decline in future fuels tax revenue
- Electric vehicles and hybrids, but also impact from internal combustion engine vehicles
- 2019 EPA report: new vehicle fuel economy up 29%
 - 19.3 MPG in 2004
 - 24.9 MPG in 2017
- Rate of fuel economy improvement accelerating

Transportation Funding Sustainability

December 2019

Workgroup Recommendation

Create a bridge of near-term to long-term solutions

Near-term: Increase gas tax rate, index rate to inflation, Highway Use Fee (HUF)

Long-term: Mileage-based user fee (MBUF) program

Mid-term: Gain MBUF experience through HUF paid on a per-mile basis

Senate Bill 890 / House Bill 1414

- Passed by the 2020 General Assembly
- Raised the gas tax by 5 cents a year for 2 years; indexes the gas and diesel tax to CPI annually instead of the sales price of fuel
- Established Highway Use Fee and optional Mileage Choice Program
- HUF calculated by comparing fuel tax payments of average vehicle in VA to those for vehicles 25 MPG or greater
 - VIN decoder determines fuel economy for registered vehicles
 - Tied to gas tax rate, which is indexed to inflation
- Two options:
 - Highway Use Fee (HUF) is due in full at time of registration
 - Join the Mileage Choice Program and pay per mile, capped at HUF amount



Statewide Motor Fuel Tax Performance and Forecast

<i>(in millions)</i>	Actuals prior to legislation		Actuals since legislation				Forecast		
	2019	2020	2021	2022	2023	2024	2025	2026	2027
Motor Fuel Tax Revenue	\$844.9	\$843.3	\$971.9	\$1,215.3	\$1,382.8	\$1,415.9	\$1,504.3	\$1,554.6	\$1,599.8
<i>Year-to-Year change</i>		<i>(0.2%)</i>	<i>15.2%</i>	<i>25.0%</i>	<i>13.8%</i>	<i>2.4%</i>	<i>6.2%</i>	<i>3.3%</i>	<i>2.9%</i>

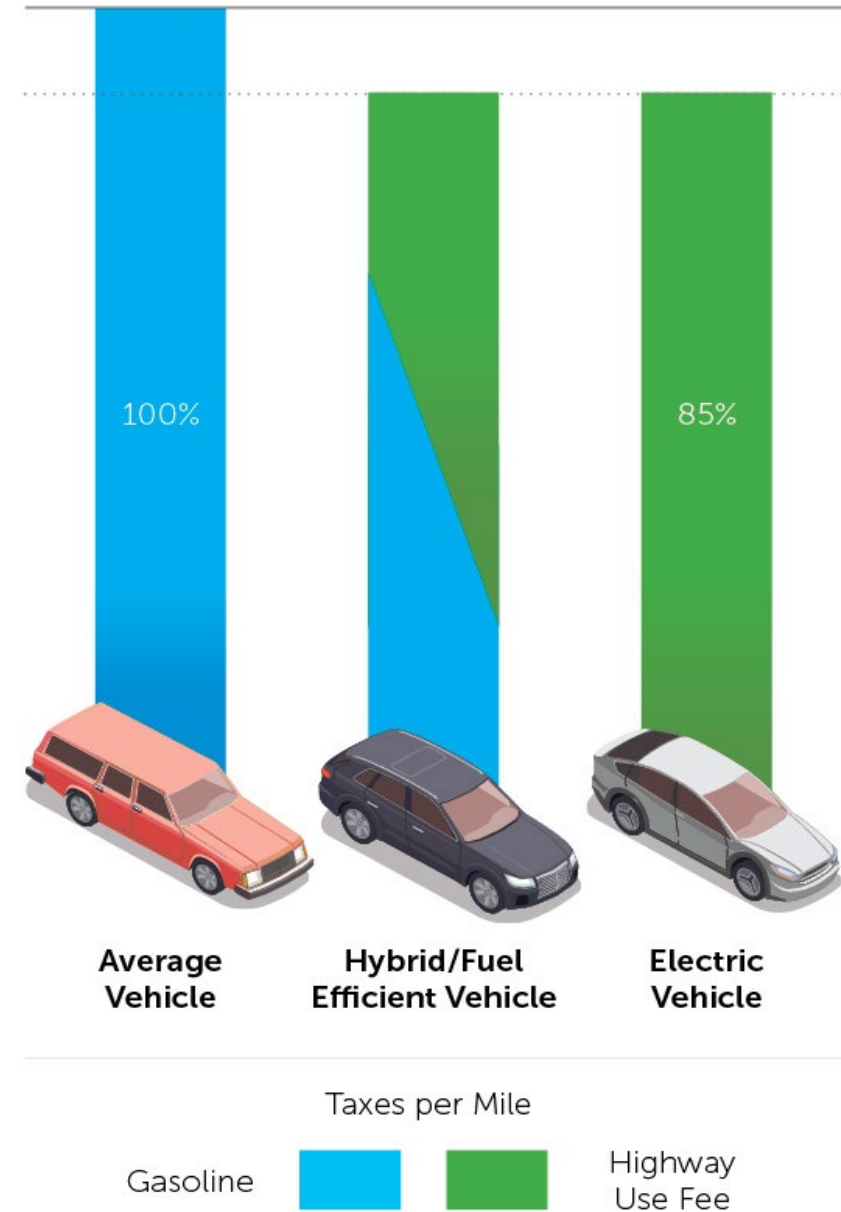
The adjustments made by the 2020 legislation has sustained the statewide fuel tax revenue as a reliable revenue source in the near-term.

The Highway Use Fee is a new revenue source bridging to the future.

Highway Use Fee

- 23.7 MPG vehicle driven 11,600 miles purchases 489 gallons of gasoline
- At \$0.308 per gallon gas tax, vehicle pays \$150.75
- Fuel efficient vehicles over 25 MPG are compared against this average and assessed 85% of difference
- For FY25, fee ranges from \$6.65 to \$128.14

FY21	FY22	FY23	FY24	FY25 est.
\$43M	\$54M	\$58M	\$71M	\$91M



Mileage Choice is a partnership



Mileage data collection is outsourced to Emovis



DMV issued RFP March 2021; awarded contract to Emovis as the Commercial Account Manager (CAM) December 2021



Customers enroll with CAM at vamileagechoice.com prior to their registration expiration



CAM interfaces with DMV to verify eligibility and receive per-mile rate, turns on participation indicator



Partnered with Eastern Transportation Coalition for a digital ad campaign using federal grant funds

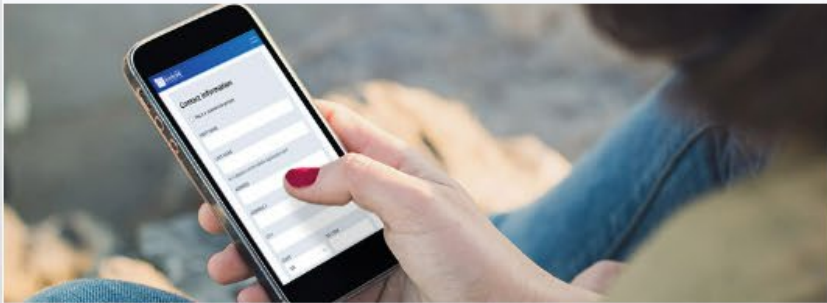
Education and Outreach



- Focused on potential participant groups and tested public response to messaging
- Targeted retirees, transit users, environmentalists, remote workers
- Ad messages about climate, innovation, saving money, equity
- All topics resonated with all users equally

Signing up for Mileage Choice is easy at vamileagechoice.com

1 Sign Up



Before renewing your vehicle registration, [create an account](#) with Emovis. You will need your vehicle information and a valid credit or debit card to set up an account. Emovis will send you a device to place in your vehicle to report mileage.

[SIGN UP](#)

2 Install



When you receive the mileage reporting device, follow the directions provided by Emovis to [install](#) the device in your vehicle and fully activate your account. You will also need to download a smartphone app to record an initial odometer reading.

3 Drive



The miles you drive will be recorded by the device, up to the amount of the highway use fee.

- Enrollments began July 1st, 2022
- Miles began to be collected August 1st, with the first invoices processed in September 2022
- Customers can choose between OBD-II devices or in-vehicle telematics
- Non-GPS option available
- Smartphone app required

Privacy Provisions

- Security and privacy paramount; enabling legislation directed DMV-led working group for PII protection
- Existing provisions covered DMV data
- Additional provisions for the *Code of Virginia* took effect on July 1, 2022
 - Data only released for program operation purposes

Next Steps – STSFA Grant Project

- ★★★ Mileage Choice Customer Motivation
- ▶ Explainer Video
- 👥 Public Awareness Campaign and Message Testing
- 🔍 Review of Customer Experience





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