

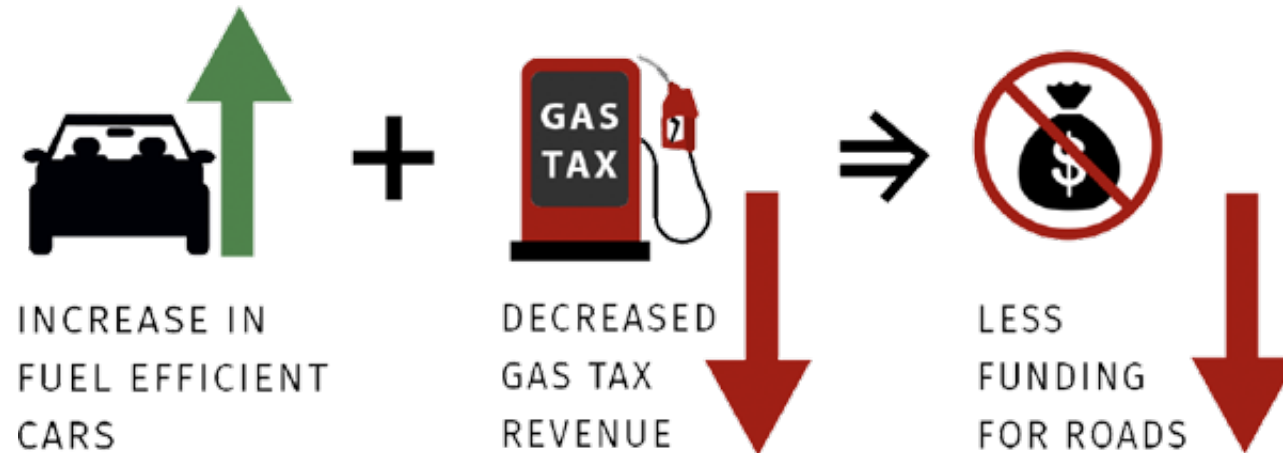
Vermont Mileage-based User Fee

SENATE FINANCE COMMITTEE, (CONTINUED) APRIL 24, 2026

PATRICK Ó. MURPHY, STATE POLICY DIRECTOR, VERMONT AGENCY OF TRANSPORTATION

Defining the Problem with Fuel Taxes

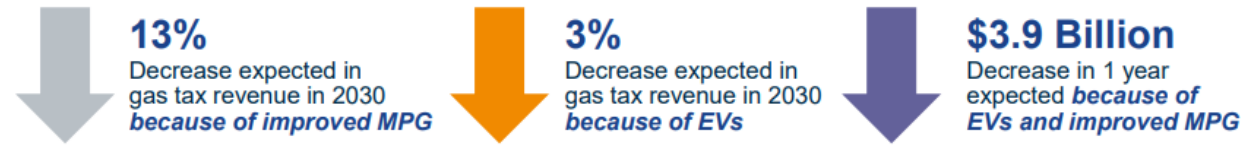
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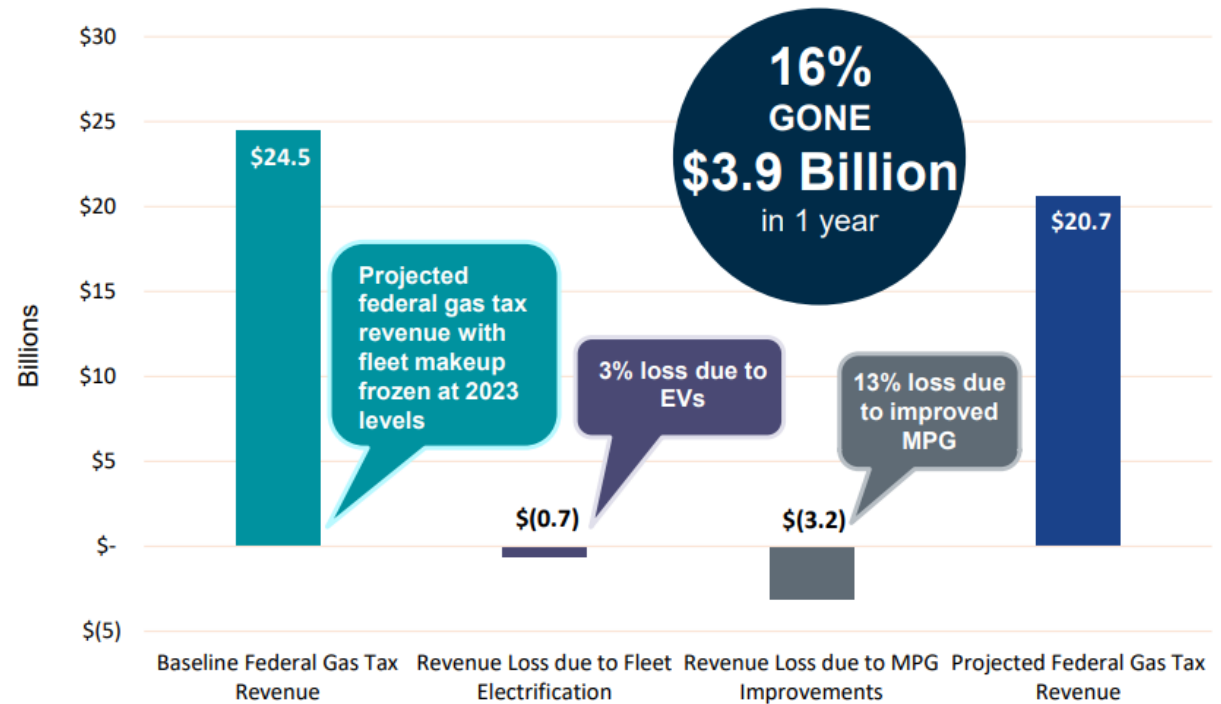
- **Electrification**: EVs don't consume gas, and will grow to a substantial percentage of the fleet
- **Fuel Efficiency**: Plug-in hybrid EVs have increased range without gas, hybrid and even gas-powered vehicles have increased fuel economy, consuming and paying substantially less
- **Inflation**: Absent automatic or proactive adjustments, purchasing power represents biggest losses

National Revenue Trends: Federal Fuel Tax

- Vermont has roughly 13,000 battery-electric vehicles, with net revenue losses at about \$1 million/ year
- With fleet makeup frozen at 2013 levels, Vermont may be losing up to \$16-17 million/ year due to fuel economy

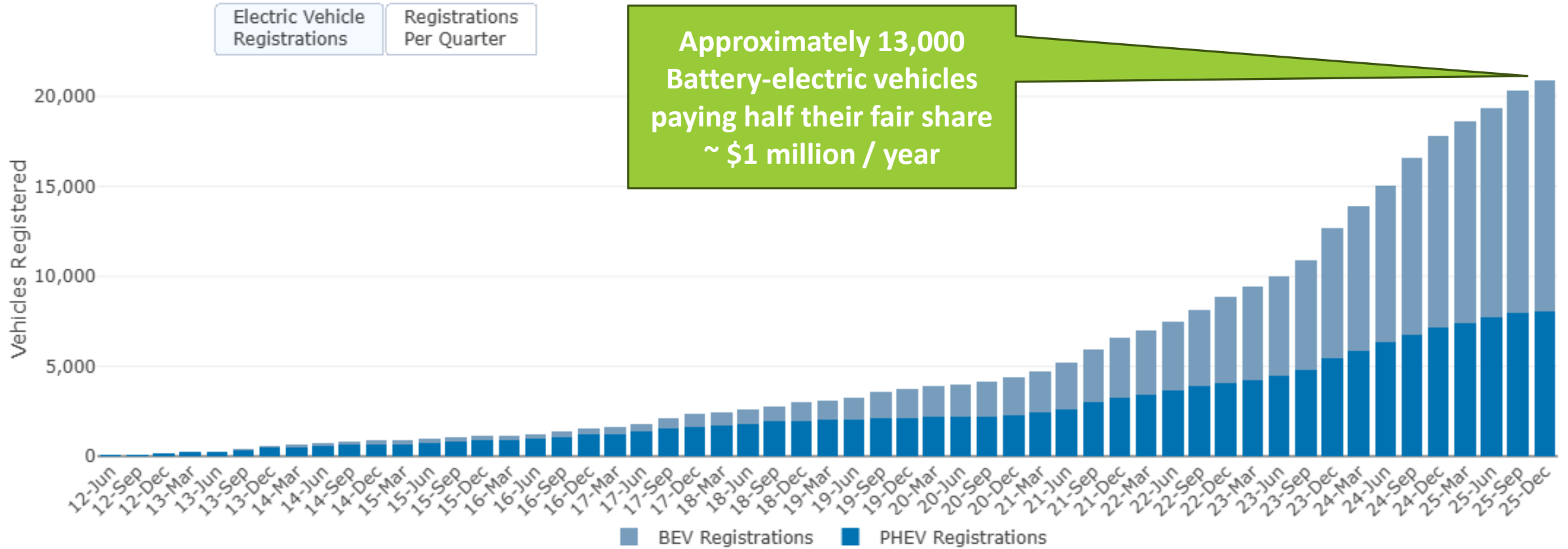


Projected Federal Fuel Tax Revenue in 2030
Slow EV Adoption (EIA)



















Note: Nominal dollars. Totals may not add up exactly because of rounding.

Electric Vehicle Adoption in Vermont

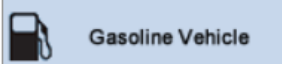

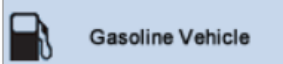











Tale of 4 Ford 150s: 2013 - Present

2013 Ford F150 Pickup 4WD	2025 Ford F150 Pickup 4WD	2025 Ford F150 Pickup 4WD HEV	2025 Ford F-150 Lightning 4WD ER1
 Gasoline Vehicle  <p>6.2 L, 8 cyl, Automatic (S6) MSRP: \$28,710 - \$53,300</p>	 Gasoline Vehicle  <p>5.0 L, 8 cyl, Automatic (S10) MSRP: \$42,465 - \$75,210</p>	 Hybrid Vehicle Gasoline  <p>3.5 L, 6 cyl, Automatic (S10), Turbo MSRP: \$42,465 - \$75,210</p>	 Electric Vehicle  <p>Automatic (A1)</p>
Regular Gasoline  13 MPG combined city highway 7.7 gal/100mi	Regular Gasoline  19 MPG combined city highway 5.3 gal/100mi	Regular Gasoline  23 MPG combined city highway 4.3 gal/100mi	Electricity  70 MPGe combined city highway 48 kWh/100 mi
Gasoline  338 - 468 miles Total Range	Gasoline  437 - 684 miles Total Range	Gasoline  529 - 828 miles Total Range	Electricity  320 miles Total Range
\$271 annually On 11,000 miles	\$185 annually On 11,000 miles	\$153 annually On 11,000 miles	\$89 annually On 11,000 miles
\$0.025 / mile	\$0.017 / mile	\$0.014 / mile	\$0.008 / mile

Tale of 4 Ford 150s: 2013 – Present

*Adjusted for inflation,
in 2013 dollars*

2013 Ford F150 Pickup 4WD	2025 Ford F150 Pickup 4WD	2025 Ford F150 Pickup 4WD HEV	2025 Ford F-150 Lightning 4WD ER1
 <p>Gasoline Vehicle</p> <p>© Ford Motor Company</p>  <p>6.2 L, 8 cyl, Automatic (S6)</p> <p>MSRP: \$28,710 - \$53,300</p>	 <p>Gasoline Vehicle</p>  <p>5.0 L, 8 cyl, Automatic (S10)</p> <p>MSRP: \$42,465 - \$75,210</p>	 <p>Hybrid Vehicle Gasoline</p>  <p>3.5 L, 6 cyl, Automatic (S10), Turbo</p>	 <p>Electric Vehicle</p>  <p>Automatic (A1)</p>
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<p>\$271 annually On 11,000 miles</p> <p>\$0.025 / mile</p>	<p>\$134 annually On 11,000 miles</p> <p>\$0.012 / mile</p>	<p>\$111 annually On 11,000 miles</p> <p>\$0.010 / mile</p>	<p>\$64 annually On 11,000 miles</p> <p>\$0.006 / mile</p>

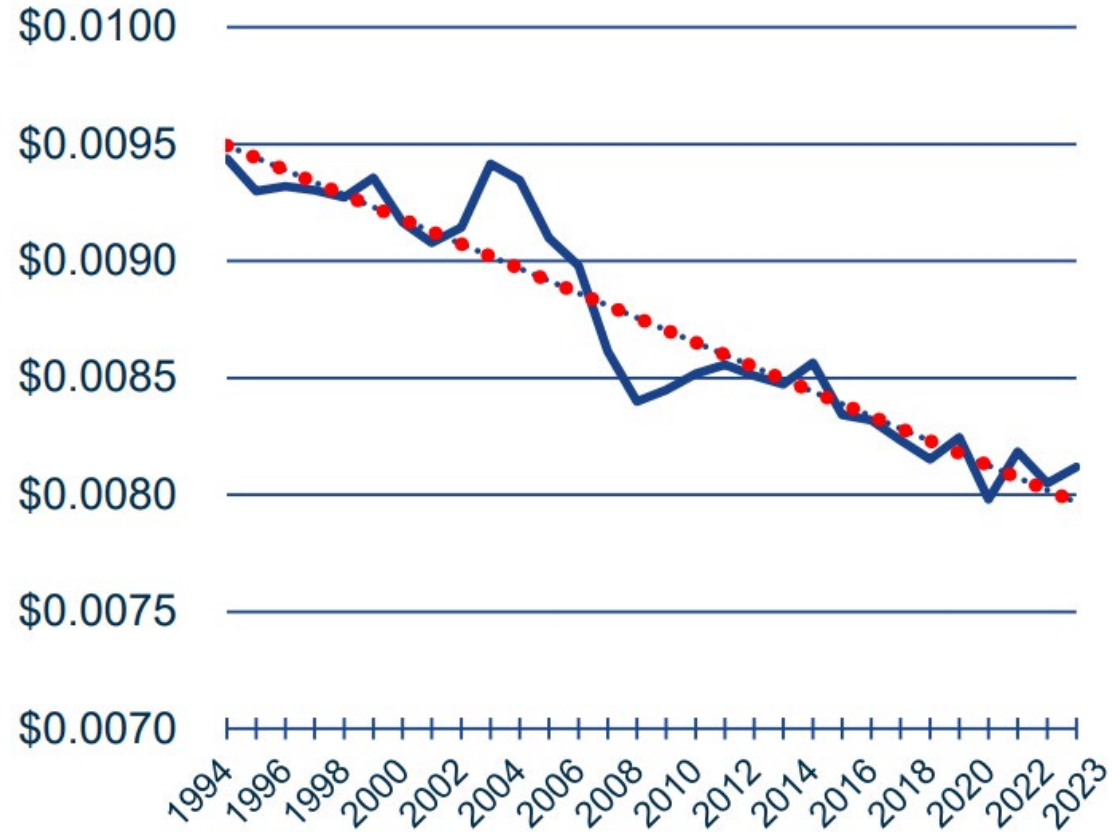
Decline in Fuel Taxes as a per mile fee due to increased fuel-efficiency

In Vermont, average state fuel tax revenue per mile in 2013 was **\$0.017 / mile**;

Average state fuel tax revenue now has dropped to **\$0.014 / mile**

Roughly **\$0.010 / mile** in 2013 dollars

Federal Fuel Tax Revenues per Mile Driven



Source: USDOT, Bureau of Transportation Statistics



University of Vermont
Transportation Research Center

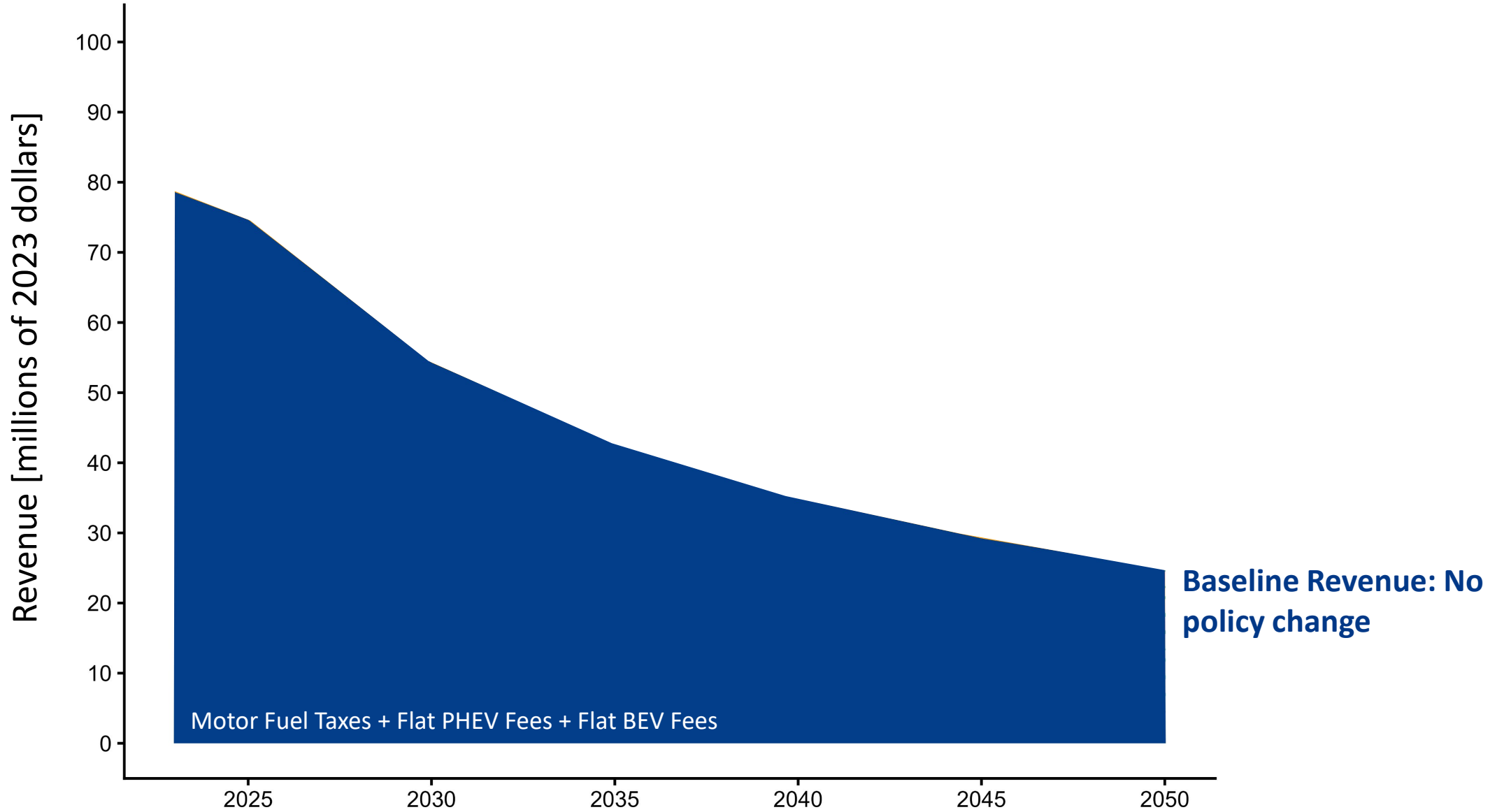
Vermont Mileage Fee Rate Setting: Additional Analysis

CLARE NELSON
RESEARCH AND POLICY ANALYST
UVM TRANSPORTATION RESEARCH CENTER
(TRC)

Gregory Rowangould
TRC Director and Associate Professor
UVM Transportation Research Center (TRC)

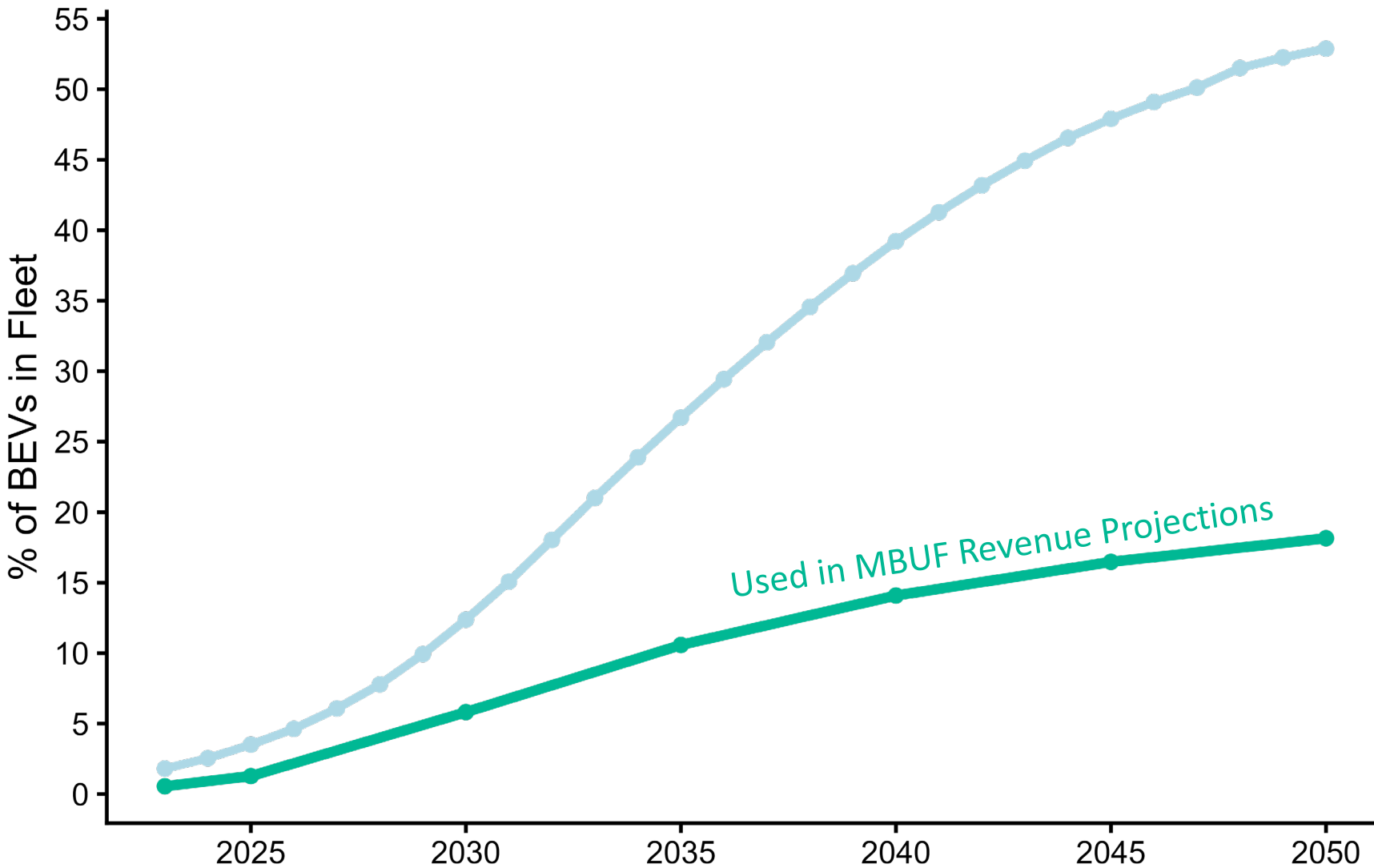
Presentation to the Vermont Senate Committee on Transportation
March 13, 2026

Vermont State Gas Tax and Mileage Fee Revenue Projections



Source: Revenue projections use EPA's MOVES4.0's county data for Vermont to project vehicle counts, fuel economy, and EV adoption.

EV Assumptions in Revenue Projections: modest compared to the prior VT reports



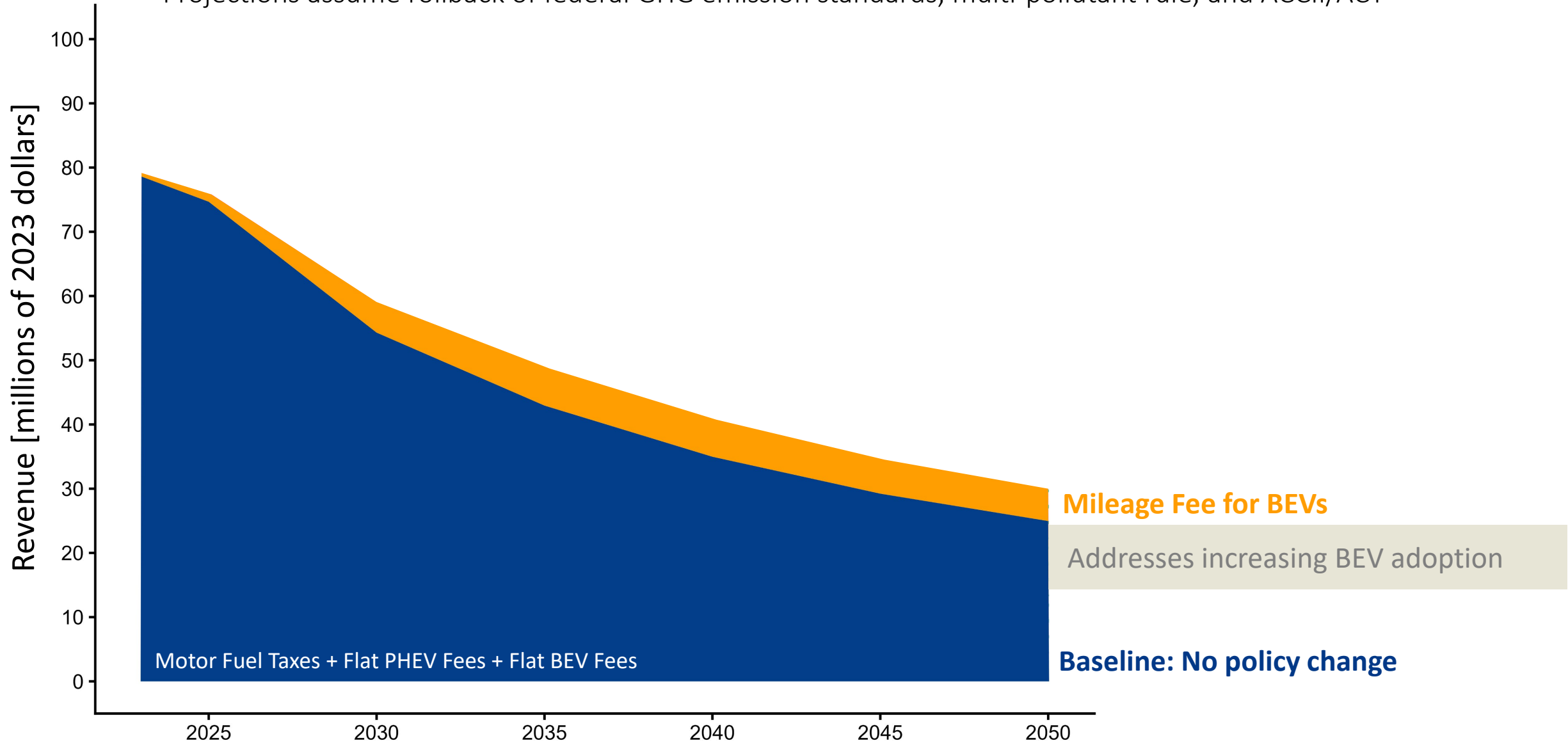
Vermont Climate Action Plan
Based on ANR baseline LEAP modeling scenario (no additional climate action strategies)

UVM TRC Projection
Based on US EPA MOVES4 modeling (accounts for rollback of federal policies including multi-pollutant rule, Advanced Clean Cars II, or Advanced Clean Trucks)

Source: Baseline LEAP model provided by Brian Wood at ANR to the UVM TRC on November 20th, 2026. This model (Vermont Pathways 4.82) was used to inform the Vermont Climate Action Plan.

Vermont State Gas Tax and Mileage Fee Revenue Projections

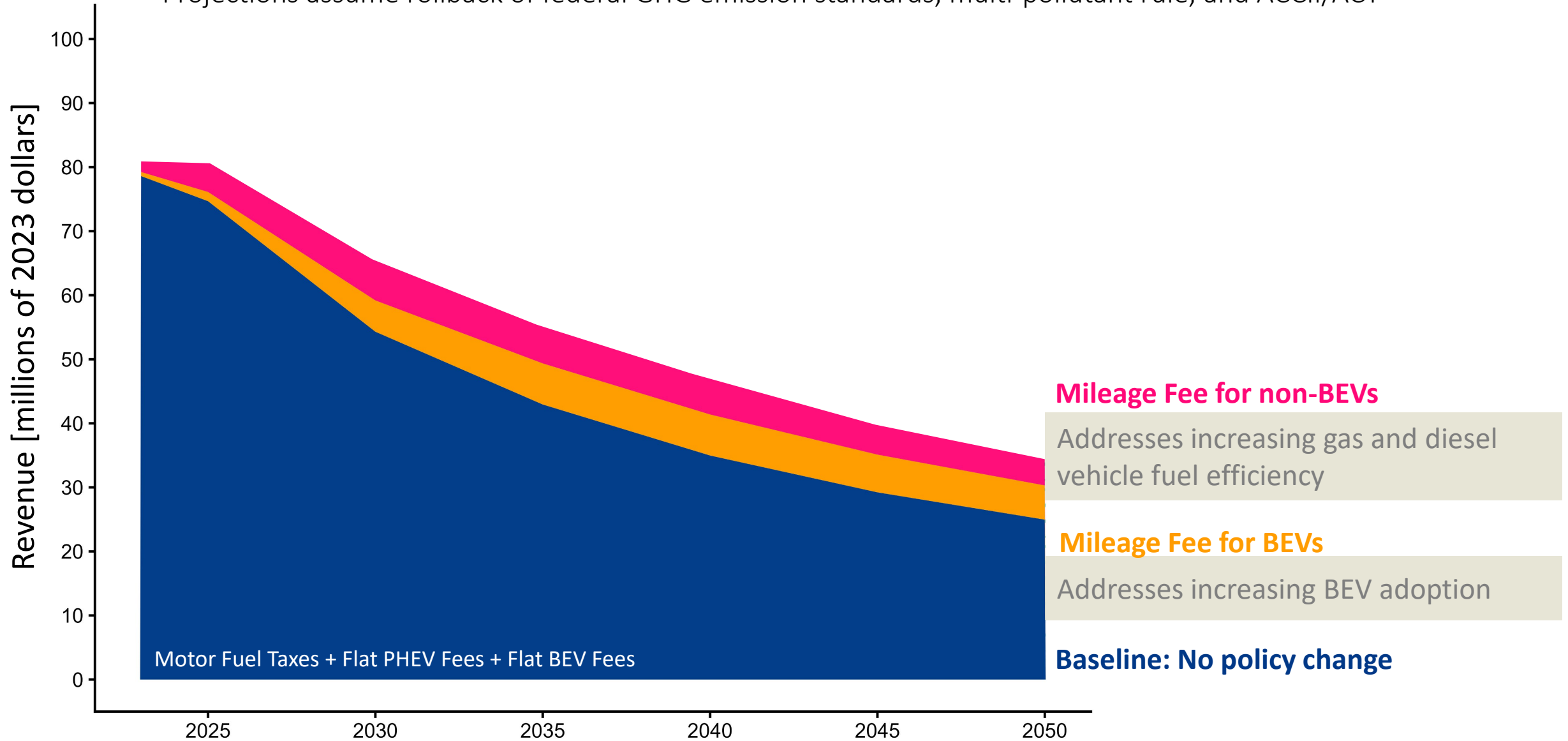
Projections assume rollback of federal GHG emission standards, multi-pollutant rule, and ACCII/ACT



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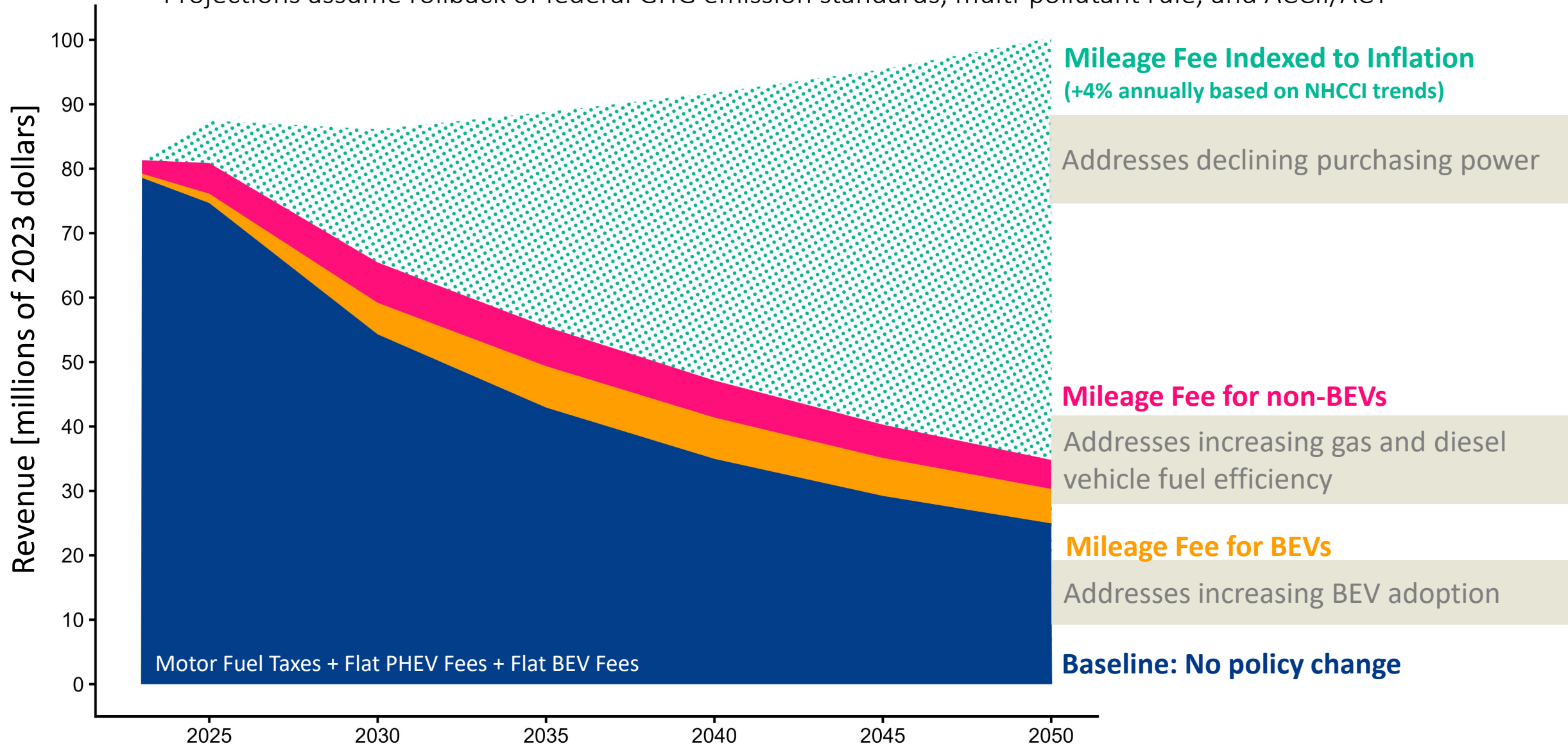
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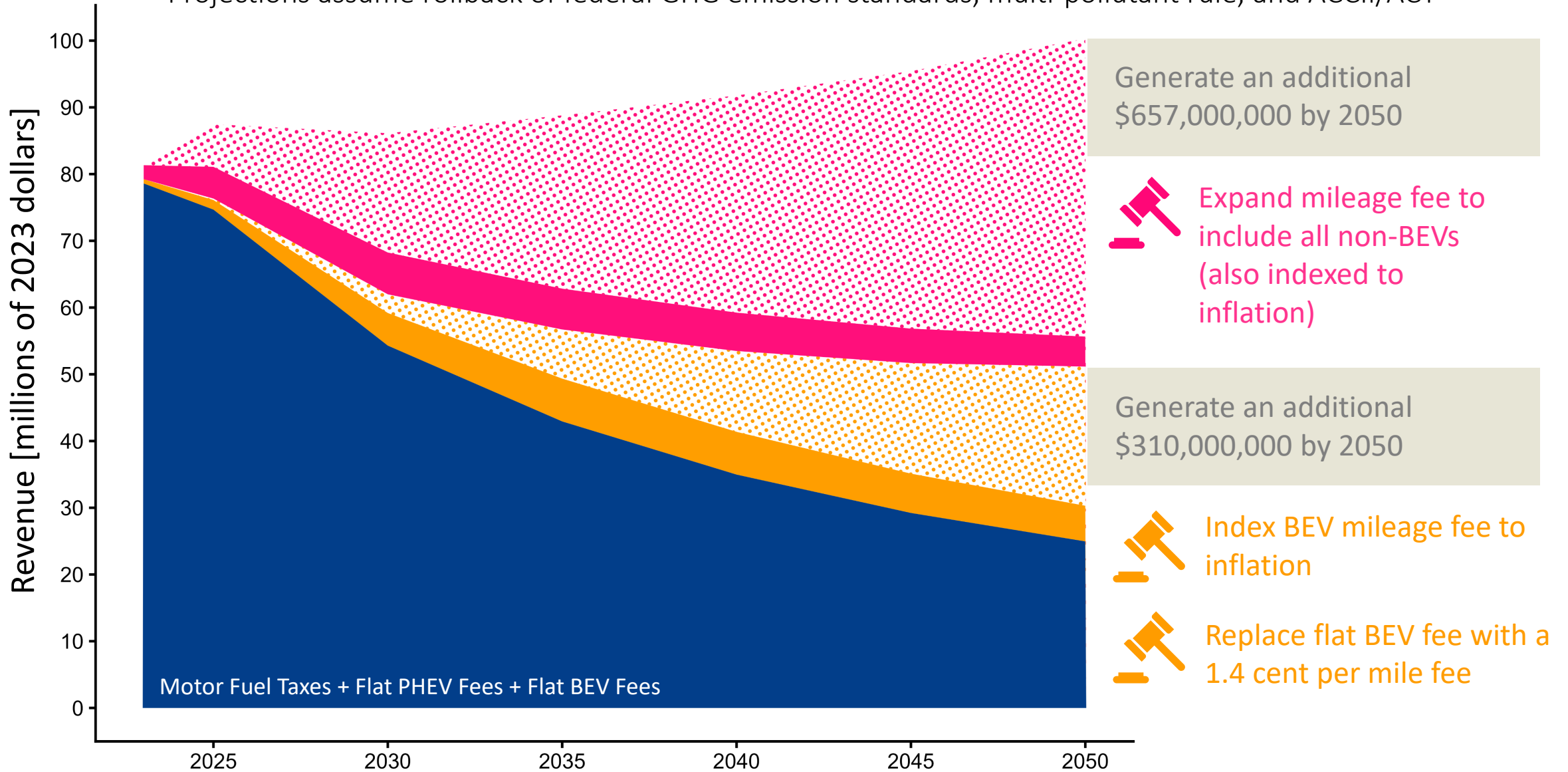
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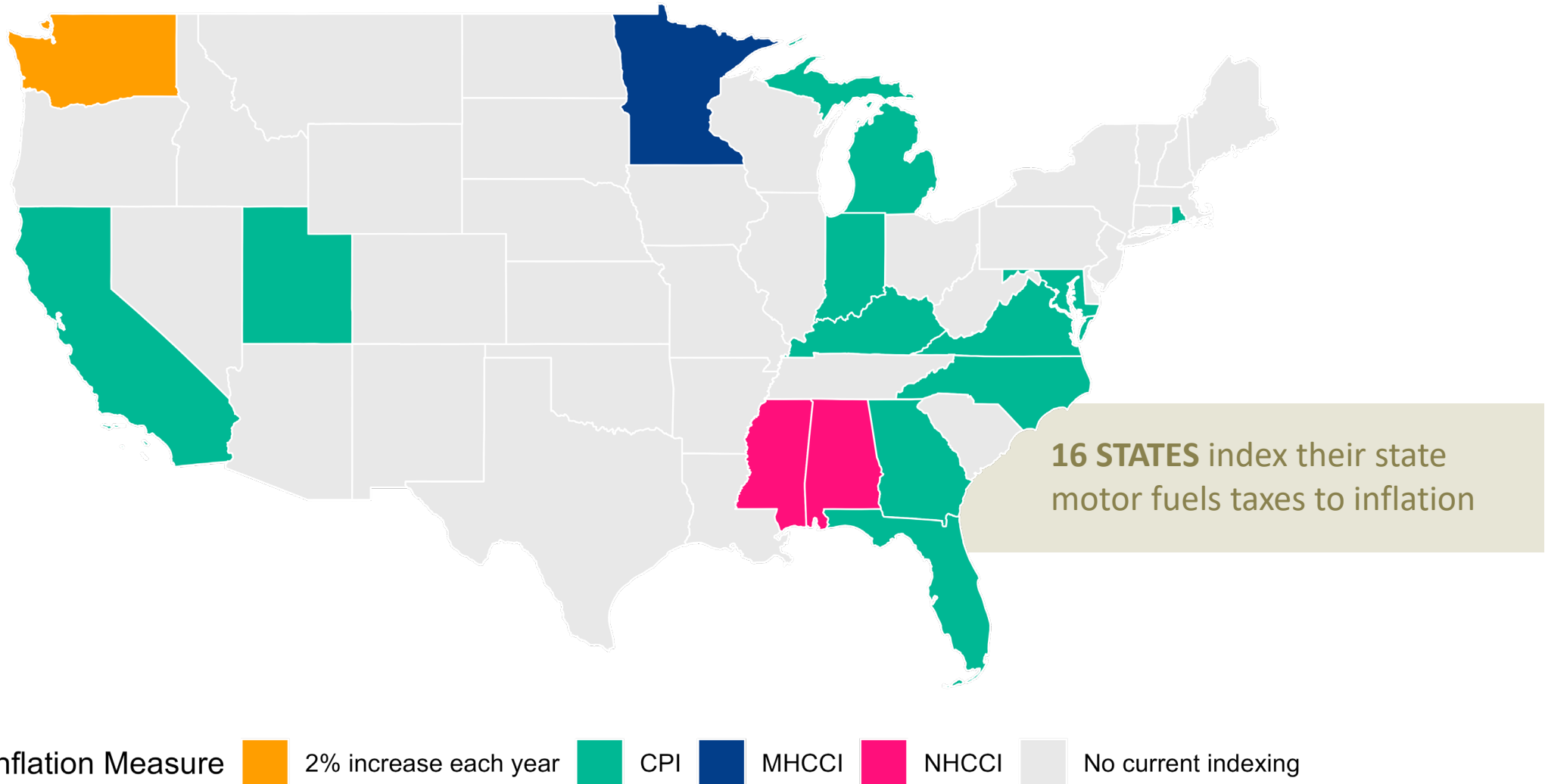
Source: Revenue projections use EPA's MOVES4.0's county data for Vermont to project vehicle counts, fuel economy, and EV adoption.

The most appropriate inflation measure for a mileage fee is one that tracks the actual costs the T-Fund is designed to cover

PRICE TRACKING	INDEX	DETAILS
Transportation construction costs	National Highway Construction Cost Index (NHCCI)	Measures changes in highway construction costs (asphalt, concrete, steel, equipment, and construction labor)
	Producer Price Index (PPI) for Streets and Highways	Measures changes in highway construction costs, but excludes contractor markups, profit margins, and bid-related costs
Consumer costs	Consumer Price Index (CPI-U)	Measures average changes over time in prices paid by urban consumers for a broad basket of goods and services
Public-sector labor costs	Employment Cost Index (ECI) – State and Local Government	Measures changes in wages and benefits for public-sector employees

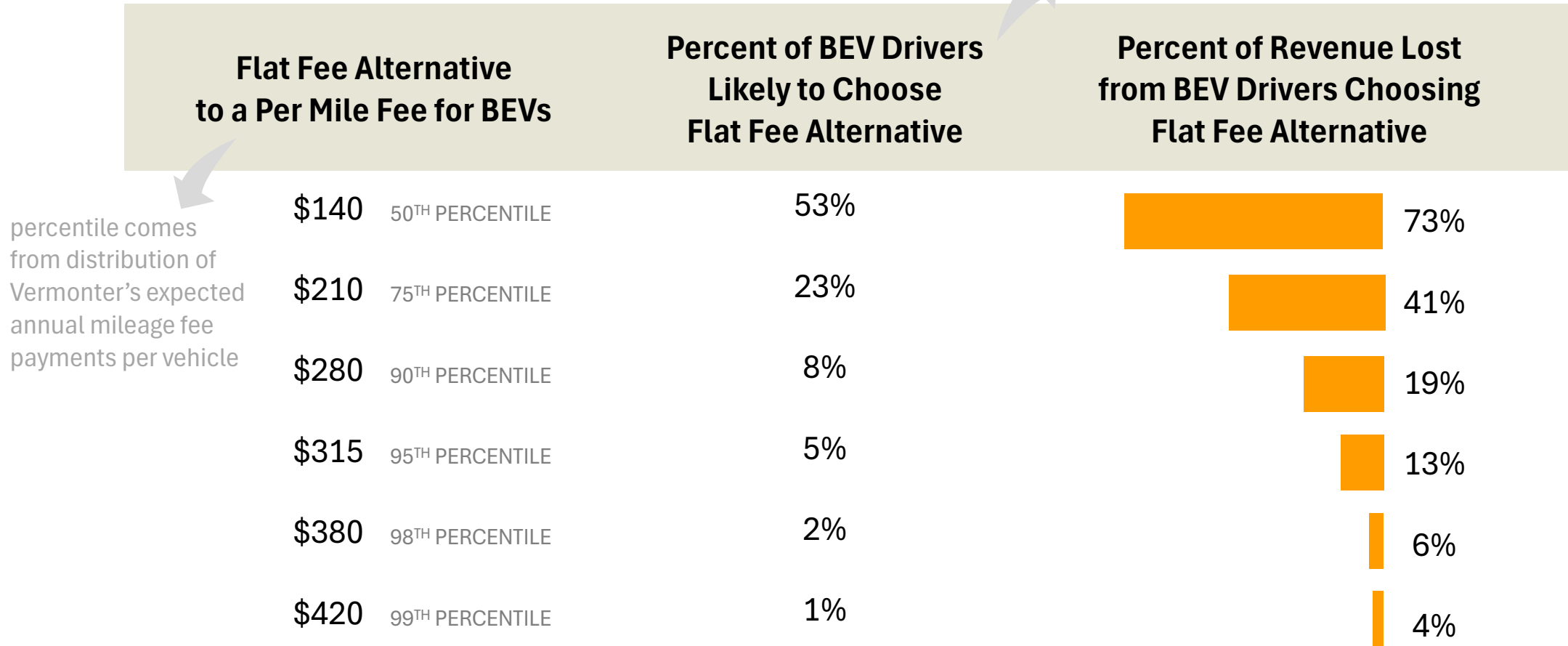
States use various measures of inflation for indexing transportation fees

Mileage fee programs are also considering indexing to inflation, though none currently have



Flat fee alternative: likely to diminish mileage fee revenue, undermines the main principle of road usage charging: that fees should reflect actual use of the transportation system

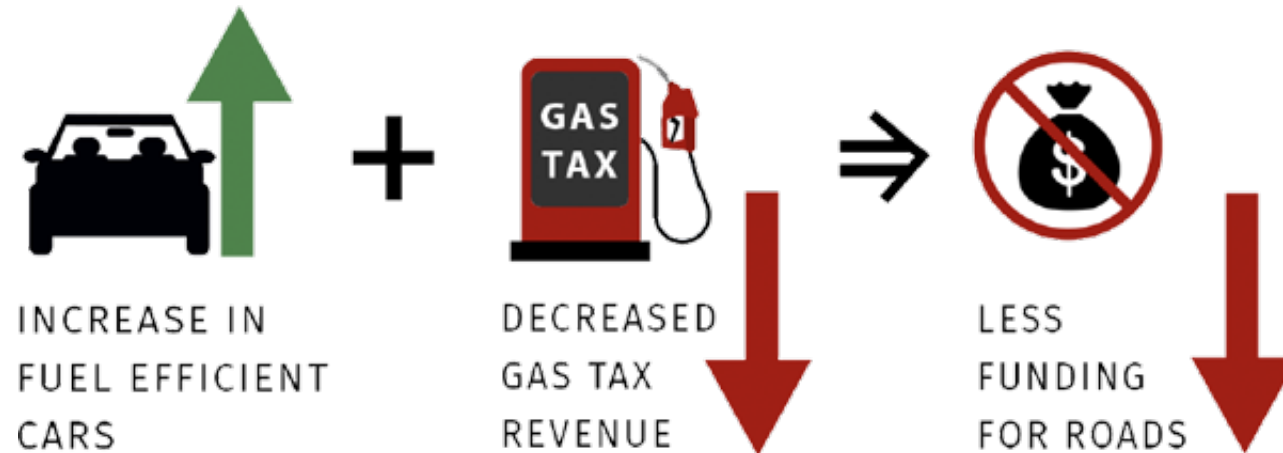
assuming drivers choose the flat fee only if they will save money



Source: 2023 Vermont DMV BEV mileage data maintained by UVM TRC. Note: True revenue differences may be higher or lower depending on who chooses to pay the flat fee alternative. Literature consistently finds drivers are poor at accurately guessing their vehicle mileage. Drivers who would save money by paying a per mile rate may choose to pay the flat fee alternative, and vice versa. Other factors, like perceived privacy and convenience, may also factor into decision making.

Addressing Problems with Fuel Taxes

The gas tax was originally intended as a *road usage charge* when all vehicles consumed gas at roughly the same rate, but over time has become a less apt proxy for use of the roads.



1. **Electrification:** 1st Phase of Mileage-based User Fee by January 1, 2027 with federal support
2. **Fuel Efficiency:** 2nd Phase to explore inclusion of fuel-efficient vehicles (25 mpg or above) by 2029
3. **Inflation:** Last phase, once an even fairer system is in place, would apply an inflation adjustment to prevent significant revenue losses over time

Addressing Electrification

Basic Points of Vermont's Program:

- Aligns push for sustainable transportation revenue with state climate goals/requirements
- Cost-effectively utilizes existing annual vehicle safety inspection process with manual odometer reading (avoiding privacy concerns)
- Builds off significant state investment in DMV core system upgrades
- Allows flexible payment options/frequencies and only asks drivers to pay for what they use
- Leverages federal funds for implementation
- Starts small, with time and flexibility to evolve and expand and deal with other revenue losses



Addressing Electrification

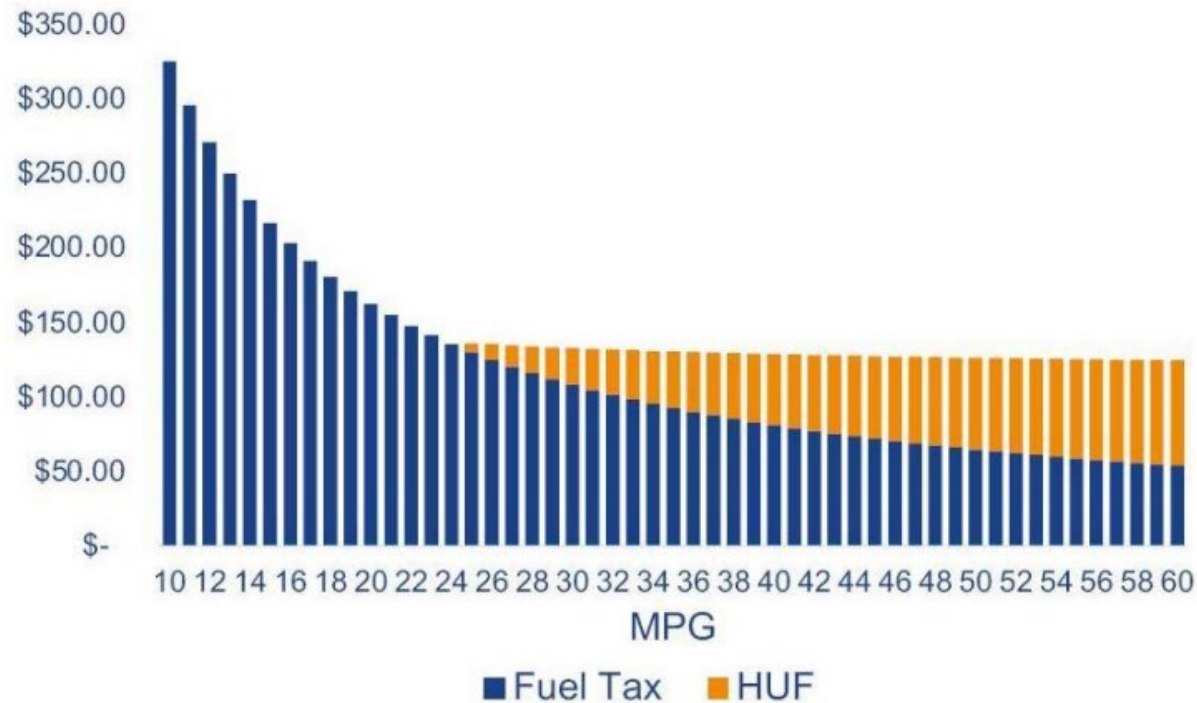
Basic Points of Vermont's Program for Users:

- BEV Drivers pay \$89 road usage charge until sufficient mileage data is available
- Last EV infrastructure fee(s) or road usage charge(s) credited to first mileage fee
- Balances reconciled at registration renewal
- Mileage fee effectively capped at \$178 or (12,700 miles)
- Users can pay upfront, at registration renewal, or elect a payment frequency that works for them



Addressing Rising Fuel Economy

Figure 2-5 compares funding contributions for car mileages (10-60) MPG: Fuel Tax vs HUF.



Virginia's Highway Use and Mileage Fees

Applies a surcharge at registration to fill 85% of the estimated gap in road usage fees, with option to pay fee on a per mile basis

Similar program in Vermont might raise \$6 million or more

[Vermont Transportation Funding Study, 2025.](#)

Strategic Innovation for Revenue Collection (SIRC)

Authorized by 2021 Investment Infrastructure and Jobs Act (IIJA):

To test the design, acceptance, equity, and implementation of user-based alternative revenue mechanisms, including among—

- (i) differing income groups; and
- (ii) rural and urban drivers, as applicable.

FEDERAL SHARE.—The Federal share of the cost of a pilot project carried out under this section may not exceed **80 percent** of the total cost of a project carried out by an eligible entity that has not otherwise received a grant



Strategic Innovation for Revenue Collection (SIRC)

<u>Task 1</u> : Project Management	\$375,000
<u>Task 2</u> : System Implementation	\$2,250,000
<u>Task 3</u> : Public Outreach and Education	\$862,500
<u>Task 4</u> : Policy Analysis and Transition Strategy	\$262,500

Total **\$3,750,000** (80% federally-funded)

Major Grant Deliverables:

- Implementation of MBUF for electric vehicles – January 2027
- Final Report with transition strategy by Fall 2028

H.944: Reporting Back on Outstanding Issues

- Requires submission and discussion of Public Outreach, Education and Communications Strategy by September 15, 2026 (Section 19, H.944)
- Requires an initial MBUF transition plan by January 15, 2027 (Section 20, H.944), including
 - Additional mileage reporting options to distinguish between in- and out-of-state miles
 - System of fuel tax credits according to relative MPG ratings to ensure that no vehicles registered in Vermont and enrolled in program are paying more than the effective per mile rate (1.4 cents proposed), while still capturing out-of-state revenue
 - Proposed schedule for vehicles classes and fuel-types (i.e. 2029, 2031)
 - Evaluation of medium- and heavy-duty electric vehicles and weight-based factor
 - Recommendations for setting a flat fee cap and default flat fee in the absence of data
- Recommendations for a capped inflation adjustment factor once all vehicles are enrolled Ongoing reporting on program results
- Requires submission of draft FHWA Final Report by July 15, 2028

Contact

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