

# Vermont Electric Vehicle Road Usage Charge Study

## Recommendations and Next Steps

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PRESENTATION FOR SENATE TRANSPORTATION COMMITTEE, JANUARY 11, 2022  
(REVISED)

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AGENCY OF TRANSPORTATION

# Impact of Electric Vehicle Adoption on Gas Tax Revenue

Year	Light Duty Electric Vehicles assumed in 2021 Climate Action Plan	Gas Tax Revenue Loss	Remaining Gas Tax (Total Gas Tax – EV Impact)
Jan 2021 Actual	4,360	\$0.47 Million	\$77.8 (actual)
2025	47,500	\$5.3 Million	\$72.1 (est)
2030	159,200	\$19.1 Million	\$57.1 (est)
2050	593,000	\$80.1 Million	No estimate available

Estimates for 2025 and 2030 gas tax revenue based on the *General Fund Revenue Forecast Update, Consensus JFO and Administration Forecast – July 2021* which shows an annual decrease of 0.17% between 2017 and 2026

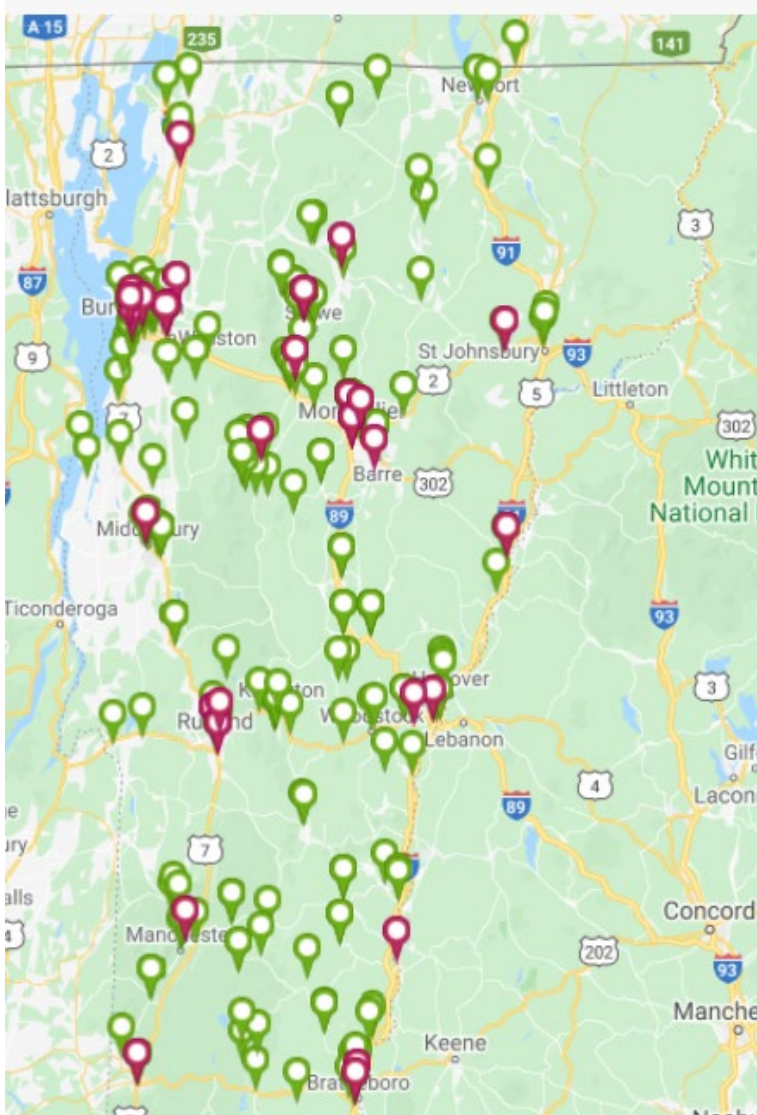
# VT Road Usage Charge Concept Evaluated in Study

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Applicability	Fee Mechanisms	Possible Eligible Vehicle Types
VT Registered Vehicles	<ul style="list-style-type: none"><li>• Flat Fee alone or with</li><li>• Mileage Based User Fee<ul style="list-style-type: none"><li>• Odometer Based</li><li>• Wireless Automated Reporting</li></ul></li></ul>	<ul style="list-style-type: none"><li>• All Electric</li><li>• Plug-in Electric Hybrid</li></ul>
Out of State Vehicles	<ul style="list-style-type: none"><li>• Per Kilowatt Hour Fee at Public Charging Stations</li></ul>	<ul style="list-style-type: none"><li>• All Electric</li><li>• Plug-in Electric Hybrid</li></ul>

Name	Organization	Position
Michele Boomhower, Chair	VT Agency of Transportation	Policy, Planning and Intermodal Development Division Director
Wanda Minoli	VT Department of Motor Vehicles	Commissioner
Rebecca Sameroff	VT Department of Taxes	Deputy Commissioner
Philip Picotte	VT Public Service Department	Utilities Economic Analyst
Peter Walke	VT Agency of Natural Resources	Commissioner, Department of Environmental Conservation
Dave Roberts	VT Energy Investment Corp (VEIC)	Senior Consultant
Chris Jolly	Federal Highway Administration	Planning & Programming Engineer
Jim Sullivan	Regional Planning Commissions	Executive Director, Bennington County RPC
Gwyn Zakov	VT League of Cities and Towns	Director Public Policy & Advocacy
Samantha Hurt	Capstone Community Action	Mileage Smart Program Manager
Monica McDonald	Head Start Policy Council	
Trish Hendren	The Eastern Transportation Coalition	Executive Director

# Study Advisory Committee



# Per kilowatt Hour (kWh) Fee for Out-of-State EVs

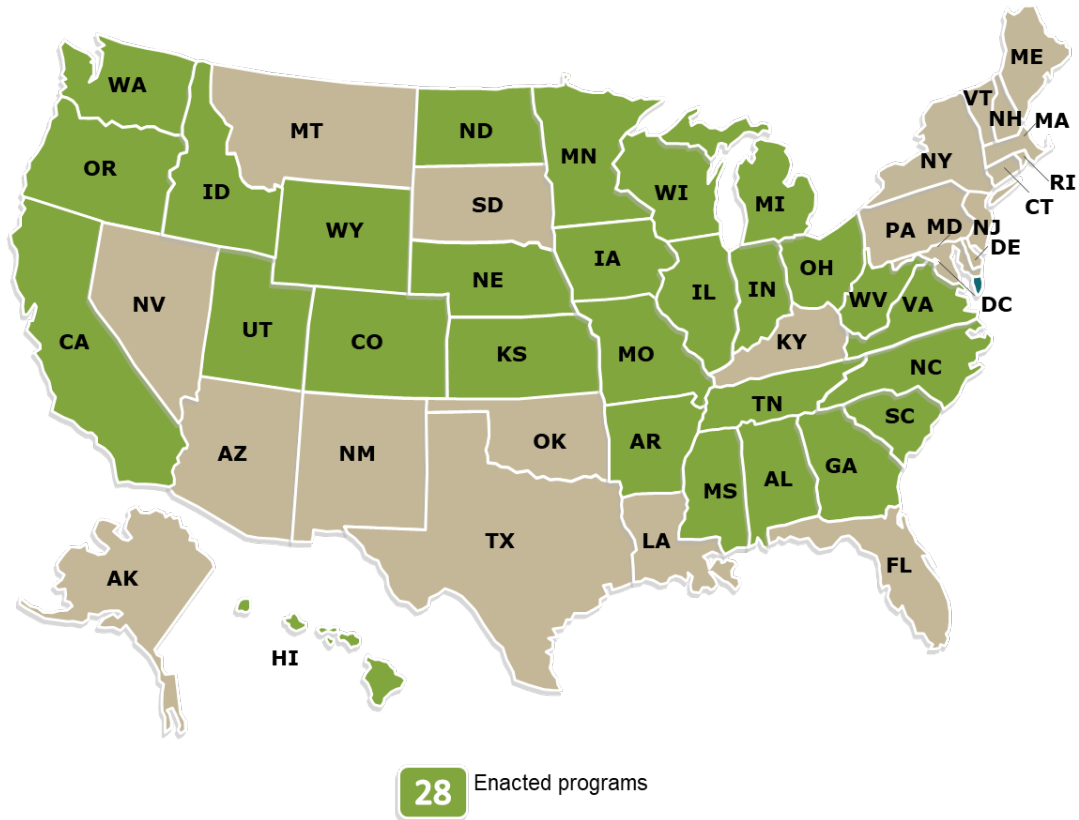
Approx. 15-20% of charging at public charging stations is by Non-VT Residents

Would generate less than \$5,000 per year under current conditions.

Technically feasible but many details to be resolved

Need more information to determine if/when revenue generation would be worth the effort

# VT Registered EVs - Flat Fee Option



Vehicle Type	U.S. Range <sup>1</sup>	U.S. Average <sup>1</sup>	VT Estimates <sup>2</sup>
All Electric	\$50-\$225	\$127	\$139
Plug-in Electric Hybrid	\$30-\$200	\$85	\$55
Gas Hybrid	\$20-\$100	\$58	Not estimated

1. Courtesy of Utah Department of Transportation
2. Preliminary from VT Road Usage Charge Study

\*Per National Conference of State Legislatures 12/1/2020



# VT Registered EVs – Mileage-Based User Fee Options

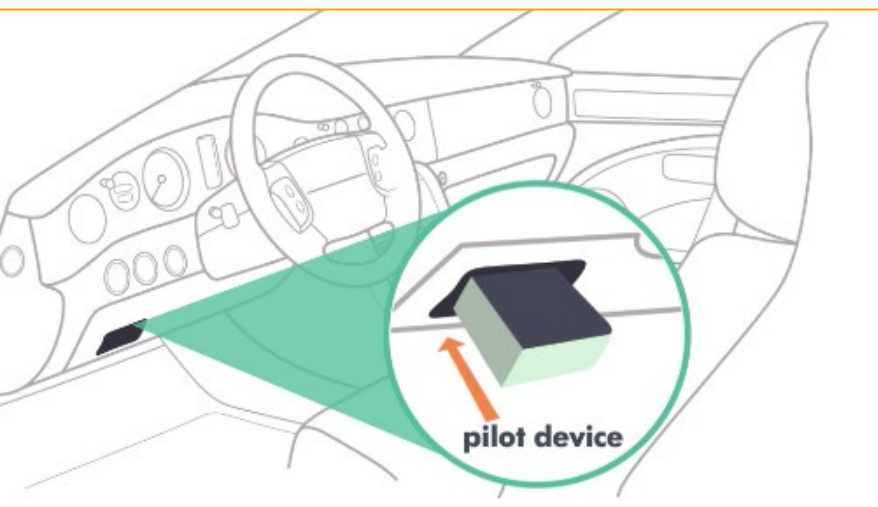


## Odometer reporting

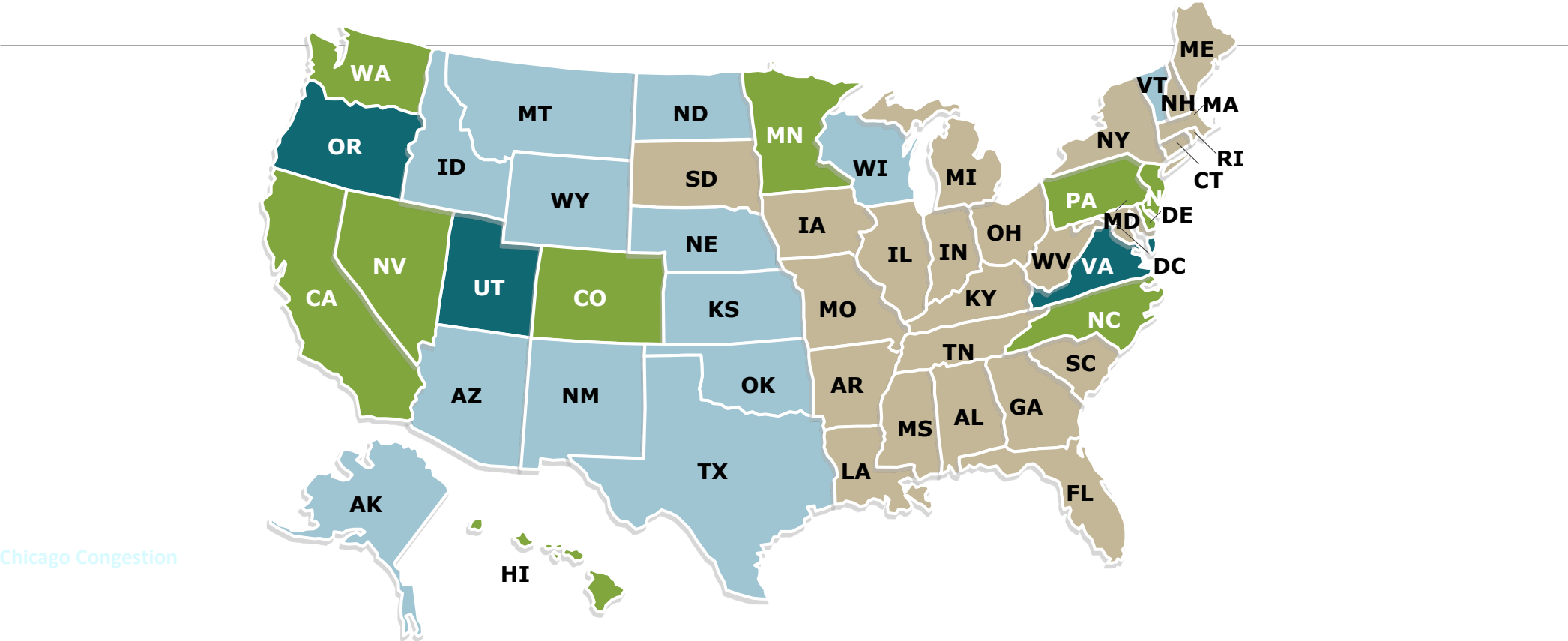
- Self-reporting by vehicle owner; or
- Use of data reported at annual vehicle inspection

## Real Time Wireless reporting (With or without location)

- On-Board Plug-in Devices (OBD-II)
- Smartphone app
- Native automaker telematics



# Where are mileage-based user fees happening in US?



**3** Enacted programs **13** Pilots/demonstrations **13** Active research



Recommendation  
– Assess Fee  
Based on  
Odometer  
Readings  
Collected at  
Annual Vehicle  
Inspections

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Builds off existing system

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More equitable than a flat fee

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Less expensive than using wireless on-board mileage reporting devices

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Protects privacy

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Apply to All Electric and Plug-In Hybrid Vehicles

# Inspection- Based Odometer MBUF System Assessment and Design

## DMV Business Process Integration

- Organizational capabilities
- Integration with existing systems
- Alignment with current IT initiatives

## Technology Assessment

- Odometer collection and validation
- Identifying applicable vehicles
- Invoicing and payment collection
- Data exchange specifications

## Consumer Engagement

- How to collect mileage when vehicles change hands or are damaged
- Frequency of payments

## Next Steps

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**2022** Conduct System Assessment

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**2023** Seek legislative approval for  
Electric Vehicle Mileage  
Based User Fee

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**2024** Earliest possible  
Implementation

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# Contact

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