March 1, 2023

Hon. Dick Mazza, Chairman
Senate Committee on Transportation
Vermont State Capitol
115 State Street
Montpelier, VT 05633

**RE: Road Funding and Electric Vehicles**

Dear Chairman Mazza and Members of the Committee:

On behalf of the Alliance for Automotive Innovation[1] (Auto Innovators), thank you for the opportunity to provide testimony to the Committee on some factors that bear consideration when assessing the impact electric vehicles will have on current road funding revenue streams.

Auto Innovators' members are committed to the decarbonization of the transportation sector and are working diligently to expand motor vehicle offerings of battery electric vehicles, plug-in hybrid electric vehicles, and fuel cell electric vehicles with ranges, price points, and vehicle types to satisfy all customers' needs. IHS Markit predicts there will be 130 models of electric vehicles for sale in the U.S. market by 2026, up from roughly 50 models today[2]. Our members recognize the pressure this transition – along with the continued rise in MPG ratings of traditionally powered vehicles and the increased costs of highway construction generally – places upon state road infrastructure budgets that have historically been funded by state and federal gas taxes.

To address this concern, policymakers across the country have been forced to consider other avenues to recoup revenues that otherwise would have been collected via the gas tax. The three potential revenue streams most commonly identified are: higher registration fees on EVs; a tax based on the number of miles traveled by an EV; and a tax based on the number of kilowatt hours used to charge an EV.

As with any change in tax policy, there are both upsides and downsides to each option considered. While we do not have a formal position on road user charges generally, I will highlight a few points on each below.

**EV Fees**

Upside – Lowest administrative costs for state
Fastest revenue stream to establish and begin collecting.

Downside – Regressive tax;
Collected all at one time, as opposed to periodically throughout year like the gas tax;
Does not capture non-resident usage of roadways.

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*[1] From the manufacturers producing most vehicles sold in the U.S. to autonomous vehicle innovators to equipment suppliers, battery producers, and semiconductor makers – the Alliance for Automotive Innovation (Auto Innovators) represents the full auto industry, a sector supporting 10 million American jobs and five percent of the economy. Active in Washington, D.C., and all 50 states, the association is committed to a cleaner, safer, and smarter personal transportation future.*

*[2] Stephanie Brinkley, IHS Markit Forecasts EV Sales to Reach US Market Share of 7.6% in 2026, IHS Markit, https://ihsmarkit.com/research-analysis/--ihs-markit-forecasts-ev-sales-us.html (May 28, 2019).*

**Vehicle Miles Traveled Tax**

Upside – Proportional tax, ties road user contributions to amount of public good used.

Downside – Higher administrative costs for state to accurately collect odometer data and set tax;
Necessitates GPS monitoring of drivers to offset out-of-state driving;
Does not capture non-resident usage of roadways;
Principle of VMT taxes not generally liked by vehicle owners/voters.

**Kilowatt Hour Tax**

Upside – Tax on fuel used most similar to rationale of current gas tax – tax on volume used;
Proportional tax, ties road user contributions to amount of fuel used.
If tied to physical charger location, captures non-resident drivers.

Downside – Higher administrative costs to state to collect kWh usage and validate tax obligations;
Long delay to implementation, as neither current infrastructure or vehicle technology capable of accurately capturing and reporting charging data;
Necessitates GPS monitoring of drivers to offset out-of-state charging;
Range of charging options (home, workplace, owned-by-utility, owned-by-private company) may present remittance challenges/complications.

A few additional points for your consideration. It must be emphasized that, while an increasing number of automobiles are equipped with telematic systems to provide connected vehicle features to consumers, no vehicle system today has been designed with the capabilities to monitor and report either mileage or charging data to a state taxing entity. Given the five- to seven-year development cycle of the modern automobile, such capabilities cannot be anticipated to be a near-term solution. Additionally, when one considers that both a Vehicle Miles Traveled tax and a Kilowatt Hour tax would necessitate accurately tracking a vehicle's location in real time to properly assess whether the miles/charging was done within one state or another, consumer support for and acceptance of either proposal is not expected to be high. Finally, at a time of heightened awareness of consumer privacy, any rules around a state tracking and monitoring the movements of the general population will receive considerable scrutiny and will necessitate a very strong framework to govern access and acceptable uses.

While Auto Innovators does not have an official position on road use charges at this time, we recognize the importance of this issue. As such, our members are actively meeting with the goal of coalescing around a unified position on roadway funding. If (and hopefully when) we achieve that consensus around a policy recommendation to state policymakers, I will be sure to update the Committee on our views.

Thank you again for the opportunity to present this information to the Committee. Please do not hesitate to contact me at wweikel@autosinnovate.org with any questions or if I can provide further information.

Sincerely,

*Wayne Weikel*
*Vice President, State Affairs*

cc: Members, Senate Committee on Transportation