

March 24, 2025

1100 Minnesota Senate Bldg.
Senate Committee on Transportation
St. Paul, MN 55155

RE: Road Funding and Electric Vehicles

Chair Dibble, Vice Chair Johnson Stewart, Lead Jasinski, Senate Transportation members:

On behalf of the Alliance for Automotive Innovation¹ (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. 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 avenues outside of a gas tax to recoup revenues that otherwise would have been collected. The three potential revenue streams most identified are: a flat annual registration fee on electric vehicles (EV); a tax based on the number of vehicle miles traveled (VMT) by an EV; or a tax based on the number of kilowatts of electricity (kWh) used to charge an EV.

Auto Innovators believes that EV registration fees are the most responsible path for states to follow.

Using the following formula, we can determine an approximate EV registration fee: (Average Annual VMT /Fuel economy for new vehicles) X Gas tax per gallon = Average annual gas tax. Using 12,000 miles as the annual VMT and 26 MPG for vehicle efficiency results in an average annual gas tax of \$1146.77 as seen below.

EV fee calculation: (Average Annual VMT (12,000)/Fuel economy for new vehicles (26 MPG)) X Gas tax per gallon (\$.318) = \$146.77.

We recommend Minnesota set its EV registration fee at this approximate figure.

Increased registration fees on EVs could be accomplished with little added administrative costs. It would also represent the fastest way to begin collecting revenue and likely prove to be the most stable source of revenue year-to-year. There are policy considerations around an EV fee that deserve heed – : challenges for consumers facing a new fee that must be paid all at once, as opposed to modest payments throughout the year; and the limitations to collect road usage revenue from out-of-state drivers – but these can be mitigated through thoughtful

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.

policy development. EV fees will prove to be the most appropriate resolution to the funding problems faced by the State.

VMT Tax Has Too Many Drawbacks: While a VMT tax allows for collection of revenues in proportion to that vehicle's use of a public good, the challenges that must be navigated to properly implement such a program far outweigh this one positive attribute. VMT taxes carry a much higher administrative burden on state officials to both correctly set rates and tabulate roadway usage. To avoid legal challenges on the ability of the State to apply a tax on miles driven outside the state, monitoring of a vehicle's location in real-time may be necessary, which introduces considerable privacy concerns.

Additionally a VMT tax does not capture drivers crossing through the state from another state. And perhaps, most importantly, VMT taxes are generally disliked by the public. In a survey² conducted by San Jose State University, roughly 61% opposed the idea of taxation based on miles traveled, with the highest cohort (40%) in the "strongly oppose" category. As the auto industry pushes toward a more electrified future, a tax applied only to alternately fueled vehicles will add a substantial disincentive to consumers considering an EV purchase. 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.

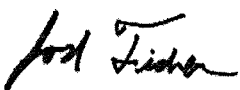
kWh Taxes Have Too Many Drawbacks: kWh taxes are most akin to the current gas tax, where consumers pay a tax on the volume of fuel used. It would also present some proportionality to the amount of road usage by that vehicle, and it would capture out-of-state drivers if they stopped to charge within the State. To effectively apply this tax in a residential setting, however, the electricity used to charge an EV must be segregated from electricity used for other household purposes, either through the installation of a sub-metered electrical panel in the home or with a network-connected charging system. Both options would add to the already considerable costs consumers face when installing a home charger.

While a networked-connected charging system may be a viable option in the future, a limited number of home chargers currently installed carry this capability, forcing early-adopters to pay to reinstall an updated system. Even if EVs were able to track charging information for tax purposes it would raise the privacy challenges around GPS monitoring to offset out-of-state use. Finally, given the lack of infrastructure, this option for taxation probably has the longest delay before the State receives considerable revenues.

Auto Innovators support reasonable annual fees on EV owners to support the maintenance of roadway infrastructure. Should the State consider the application of a kWh tax we suggest limiting that tax only to the high-speed charging infrastructure (known as Level 3 or DC Fast Chargers) being installed along highway corridors to capture out-of-state drivers who are transiting on State roadways. We do not, however, support the application of a kWh tax on all non-residential chargers, as they will primarily tax state residents already paying an EV fee.

If I can provide any further information, please feel free to contact me at jfisher@autosinnovate.org.

Sincerely,



Josh Fisher, Senior Director, State Affairs

² <https://transweb.sjsu.edu/sites/default/files/2208A-Agrawal-Nixon-Public-Opinion-Federal-Tax-Options-Transportation-Survey-Toplines.pdf>