



TACIR

The Tennessee Advisory Commission
on Intergovernmental Relations



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MEMORANDUM

TO: Commission Members

FROM: Cliff Lippard *Cliff*
Executive Director

DATE: 15 December 2022

SUBJECT: Electric Vehicles and Other Issues Affecting Road and Highway Funding—
Final Report for Approval

The attached Commission report is submitted for your approval. It was prepared in response to concerns raised by Commission members about the effect the growing market for electric vehicles (EVs) in Tennessee might have on state and local road funding. Members also noted that increased adoption of EVs has brought with it demands from residents to improve the state's EV-charging infrastructure. To address these concerns, the Commission directed staff to

1. study fuel taxes and the current intergovernmental funding structure for road construction and maintenance;
2. investigate road maintenance and construction costs, fuel efficiency, and electric vehicles in Tennessee and their effects on that funding; and
3. examine potential alternative means of financing transportation infrastructure to offset lost revenues without discouraging electric vehicle expansion.

Additionally, members asked staff to investigate the effect increased EV adoption will have on total electricity consumption and on the Tennessee Valley Authority's (TVA) payments in lieu of taxes (PILOTs). Vehicle charging will remain a small percentage of total electricity consumption, with only a small effect on TVA PILOTs.

While growing adoption of EVs might not become a major issue for road funding in Tennessee for decades, it along with changes in fuel economy, increases in inflation, and decisions about the distribution of new registration fees point to the need for modifications to Tennessee's road funding system. Moreover, automakers are investing

heavily in EV manufacturing facilities across Tennessee. The report's recommendations remain unchanged from the draft report.

- 1. Because the practical effect of the state's EV registration fee is to serve as a substitute for the gas tax by collecting revenue for road funding from vehicle owners who don't purchase gasoline—and therefore don't contribute to road funding through the gas tax—the Commission recommends the state**
 - a. increase the EV registration fee to better offset the revenue lost from state fuel taxes that those vehicle owners do not pay,**
 - b. share EV registration fees with local governments in the same proportion as the gas tax, and**
 - c. apply a reduced EV registration fee to plug-in-hybrid vehicles and share this revenue with local governments in the same proportion as the gas tax.**
- 2. Given the effect of inflation on the purchasing power of gas tax revenue, and to assist lawmakers in evaluating whether to adjust the state's fuel tax rates, the Commission recommends the Department of Revenue or another entity such as the State Funding Board inform the General Assembly of the effect of inflation on the purchasing power of the state's fuel taxes at least once every two years.**
- 3. As the state confronts the tradeoffs associated with any potential alternatives to its current fuel-tax-based road funding framework, the Commission recommends the state**
 - a. balance the ability to raise adequate revenue with equity for all drivers regardless of whether their vehicles are powered by gas, electricity, or some other method;**
 - b. ensure that revenue from any adopted alternatives is shared with local governments in an equivalent manner to the current sharing of fuel taxes; and**
 - c. ensure any alternatives intended to offset lost revenues are designed to do so without discouraging customers from purchasing electric vehicles.**