

FEDERAL GUIDANCE AND ELECTRIC VEHICLES

Introduction

Almost all states and the federal government rely on the gas tax to help pay for transportation projects and to keep roads and highways in good condition. With the advent of electric vehicles (EV), gas tax revenues are declining. Several states have compensated for lost revenue by increasing EV registration fees, adding a tax to EV charging stations, or charging drivers by the miles they drive (vehicle miles traveled). The federal government has not proposed any legislation that would replace the lost revenue provided by the federal gas tax. The Federal government is studying vehicle miles traveled (VMT) or a road user charge. While the federal government has not made a definitive decision relating to EVs, they are showing interest in the vehicle miles traveled option by implementing pilot programs to study the effectiveness of the tax. VMT also seems like the best option because the federal government does not have the option to increase EV registration fees and has acknowledged that most EV owners charge at home and would not pay a tax at a public charging station.

Infrastructure Investment and Jobs Act Studies Road User Fees

The Infrastructure Investment and Jobs Act (IIJA) directs the U.S. Department of Transportation to establish a national per-mile road usage fee pilot program while continuing to support state-level pilots programs. Mileage-based user fees, also known as Vehicle Miles Traveled (VMT) fees, charge drivers a fee based on the number of miles driven as opposed to taxing motor fuel, the primary revenue source for federal and most states' transportation infrastructure spending. IIJA-authorized pilot programs will replace the existing [Surface Transportation System Funding Alternatives Program](#), established in 2015, to provide grants to states to explore alternatives to motor fuel taxes.

The Biden administration has set the ambitious goal of a 50% electric vehicle sales share by 2030. Several major U.S. auto manufacturers have signaled their intention to help meet that target. EVs sold in the U.S. is expected to double between 2021 and 2024, with EVs representing a growing share of cars on the road.

Many states rely on state-level gas taxes to fund transportation infrastructure, in addition to federal support. However, as EV ownership rises, transportation infrastructure will require an alternative source of dedicated revenue at both the state and federal levels.

State Pilot Program Background

Federal surface transportation legislation from 2015 established the Surface Transportation System Funding Alternatives (STSFA) program, which has provided \$95 million in grants to individual states and coalitions of states, with a minimum 50% matching requirement for grantees. The STSFA program intended to inform Congress about whether mileage-based user fees could be a viable replacement for the gas tax. In addition to designing and implementing the pilot programs, the program required grantees to conduct outreach to raise public awareness about the need for alternative highway funding sources and to provide recommendations for a future user-based road fee program.

STSFA funded pilots in 13 individual states and two coalitions of states: the [Western Road Usage Charge Consortium \(RUC West\)](#) and the [Eastern Transportation Coalition](#), which aim to test the feasibility of regional mileage-based user fee systems.

Six states have ongoing pilot programs funded by STSFA. [Oregon](#) and [Utah](#) have the most advanced pilot projects, where drivers can avoid paying registration fees by paying mileage-based user fees, with revenue directed to transportation infrastructure projects.

Some of the primary challenges for mileage fees that arose during STSFA pilots programs and any broader mileage-based user fee programs in the future:

- **Privacy:** State pilot administrators found that drivers are concerned about the government tracking their location. Technology to track miles driven does not have to include GPS data, and technology that does track location can be subject to various privacy policies.
- **Equity:** Some state transportation officials noted that the public believed rural drivers would pay more than their fair share under a mileage-based user fee system. Several states reported disparities in fees paid by rural drivers compared to other drivers are greater under gas taxes than mileage-based user fees.
- **Administrative costs:** Pilot administrators noted potentially expensive aspects of mileage-based user fees, including start-up costs of a new system, operating costs and data processing, and enforcement costs with certain mileage tracking technology.

While funding for STSFA pilots through the FAST Act in 2015 has come to a close, these programs are eligible for continued funding through the IIJA.

Details of the IIJA Pilot Programs

The IIJA includes funding for two mileage-based user fee pilot programs: additional grants for state-level pilot programs, and the establishment of a new national pilot program.

Strategic Innovation for Revenue Collection (IIJA Section 13001)—\$75 million over 5 years

This updated version of the STSFA will provide grants for state-level user fee pilot programs, but will also expand eligibility to local governments and metropolitan planning organizations. The new version of the grant also increases the federal share for new pilot projects to 80%, with a 70% share for recipients who have already received STSFA

grant money. IIJA Section 1301 also explicitly requires USDOT to submit a report to Congress in 2024 with recommendations on a national alternative revenue mechanism based on results from the state pilots.

National Motor Vehicle Per-Mile User Fee Pilot (IIJA Section 13002)—\$50 million over 5 years

This new program directs USDOT to carry out a nationwide pilot, soliciting volunteer participants from all 50 states, including commercial and passenger vehicles. The legislation requires the pilot program to offer different methods for participants to track their mileage and directs USDOT to set annual per-mile fees for different types of vehicles. Within 90 days of the bill's passage, USDOT must establish a Federal System Funding Alternative Advisory Board to provide recommendations for developing and implementing the pilot program and carrying out a public awareness campaign. One year after participants begin the federal pilot program, USDOT and Treasury will submit their first annual report to Congress with a comprehensive analysis of the pilot program.

The IIJA laid out suggested technology to track mileage for the national pilot, including:

- **Smartphone applications:** Apps can use GPS tracking but do not have to.
- **Telemetric data collected by automakers:** Telematics transmits data about vehicles to manufacturers through the internet. They require cooperation from manufacturers, and not all cars have telemetric data capability.
- **Motor vehicle data obtained by car insurance companies or fueling stations.**
- **Other methods used in STSFA pilots:** Under STSFA, some states allowed participants to manually report odometer readings periodically.

USDOT [has stated](#) that the next milestones for the state and national pilot are still to be determined. In the coming months, the agency will likely release comprehensive guidance for grant applicants.

Electric Vehicle Tax Credits

On August 16, 2022, President Biden signed the Inflation Reduction Act into law, which including tax credit for electric vehicles. EVs placed into service after December 31, 2022, will receive up to \$7,500 EV tax credit for 10 years or until December 2032. The amount of the credit is based on a calculation considering factors like the vehicle's sourcing and assembly. Additionally, used EVs (previously owned vehicles that are at least two years old) will now have a separate tax credit of up to \$4,000 or 30% of the price of the vehicle, whichever is less. However, a previously owned EV cannot qualify if it's purchased for resale.

The Inflation Reduction Act also imposes income limits on who can claim the credit. To qualify for the tax credit, a single person's modified gross income must be below \$150,000. Married couples must make less than \$300,00 jointly, and a head of household must make less than \$225,000. Vehicle price and type also matter. Vans, pickups, and SUVs with an MSRP of more than \$80,000 won't qualify for the credit. Clean cars only qualify if the MSRP is less than \$55,000. If you buy a used clean vehicle (two years or older), it will only qualify for the tax credit if it costs \$25,000 or less. Manufacturers that produce more than 200,000 EVs couldn't qualify for the EV tax credit. However, vehicle final assembly must take place in North America to qualify for the tax credit.