



# SB 339 Road Charge Collection Pilot Interim Pilot Report

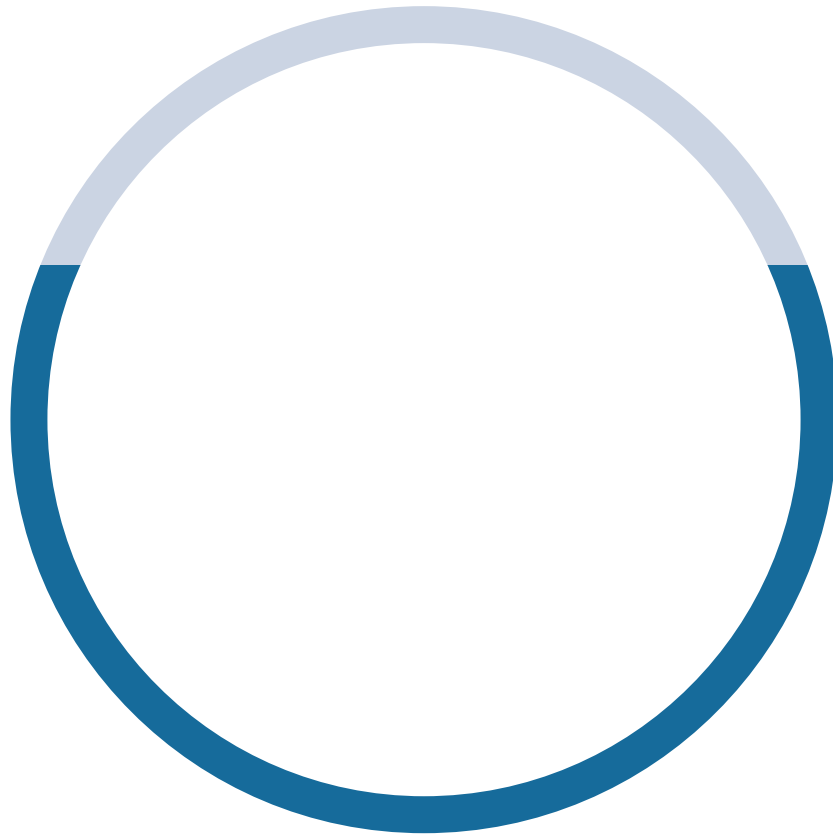
**A Potential Administrative Process  
for a Road Charge System in California**



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for a Road Charge System in California**

July 1, 2024



Prepared By:

**AECOM**





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# Executive Summary

To prepare for a future when vehicles do not use fossil fuels, California is exploring new ways to fund transportation infrastructure. Taxing gasoline and diesel is currently one of the primary ways for states and the federal government to collect funds from the traveling public to maintain public roads and transportation systems.

At the start of automotive history, most vehicles used a similar quantity of fuel to travel the same distance, and a tax on fuels was a suitable stand-in for a user fee. Today, there is a wide range in the fuel economy (miles per gallon) of vehicles, and the fuel taxes paid per vehicle are no longer similar.

California is a national leader in reducing air pollution by actively promoting electric vehicle adoption with purchase incentives and charging infrastructure investments and mandating emissions reductions. The plan to increase adoption of electric and other zero-emission vehicles (ZEVs) has many benefits, but it also creates a need for a transportation funding method that does not rely on taxing fossil fuels.

## What Are the Issues with Fuel Taxes?

Several issues are associated with the continued use of fuel taxes:

- ▶ **Better fuel efficiency:** Increases in vehicle fuel economy have reduced consumption as newer vehicles on the road need less fuel than previously used to travel the same distances. Average vehicle fuel economy has risen from 15 miles per gallon (mpg) in the 1970s to 25 mpg in 2021, and automakers are mandated to meet higher fuel economy targets in the future.
- ▶ **Increase in the number of ZEVs:** As California looks toward a future without gas-powered vehicles, the fuel tax will eventually cease to exist. The Road Improvement Fee on ZEVs that was introduced by Senate Bill (SB) 1 (Beall, 2017) only equates to approximately one-third of what an average Californian pays in state fuel taxes, so it will not be able to replace the fuel tax.
- ▶ **Reduced purchasing power of fuel tax revenue because of inflation:** Over time, inflation reduces how much a static fuel tax can purchase as shown by the federal fuel tax shortfalls in the Highway Trust Fund. In California, SB 1 does adjust fuel taxes annually per the consumer price index. However, highway construction costs in California typically increase at a higher rate than overall inflation.
- ▶ **Uneven fuel tax burden:** Fuel economy differences currently create uneven fuel tax burdens among different vehicle owners. For example, a pickup truck getting 16 mpg pays \$36.19 in state gasoline tax to travel 1,000 miles, but a passenger sedan getting 32 mpg pays only \$18.09, and a hybrid gas-electric car getting 52 mpg pays even less, \$11.13. And an electric vehicle travels 1,000 miles for \$0 in fuel tax. The inequity of the fuel tax will continue to increase as the fuel efficiency of new vehicles increases.

## New Funding Model Needed for a Clean Energy Future

Clearly, it is worth exploring options for a new funding model in a clean energy future. Since 2014, California has been investigating the use of a new transportation funding model that would be based on a per mile fee, or road usage charge. This model would be sustainable in a future when Californians drive vehicles that use little or no gasoline or diesel. A road charge could create the same per mile cost for every vehicle. Such a standard cost would eliminate the unequal fuel tax burden that exists today because of different vehicle fuel economies as well as capture a user fee from ZEVs, which currently do not pay fuel taxes. A road charge assessed on vehicle miles traveled holds great promise to remove dependence on taxing fossil fuels to fund California's transportation system and distribute the tax burden more fairly and to do so in a way that is more transparent to all users. It has the potential to create cost savings (relative to the existing gas tax system) for drivers under certain circumstances. In the SB 339 Road Charge Collection Pilot, the drivers will get detailed statements/invoices of charges that describe how many miles they drove and how much they were charged.



## California is Not Alone in Exploring a Mileage Fee Concept

States across the country are exploring road charge as a viable option (Figure ES-1).<sup>1</sup> Many states are developing road charge pilot programs. Three states, Utah, Oregon, and Virginia, have operational road charge programs (participation in all three of these programs is voluntary for EV drivers). Hawaii passed the first mandatory road charge legislation in 2023, and Oregon and Washington are looking to pass mandatory legislation in 2025. Congress has directed the U.S. Departments of Transportation and the Treasury to implement a nationwide pilot program as a potential replacement for the federal fuel tax.

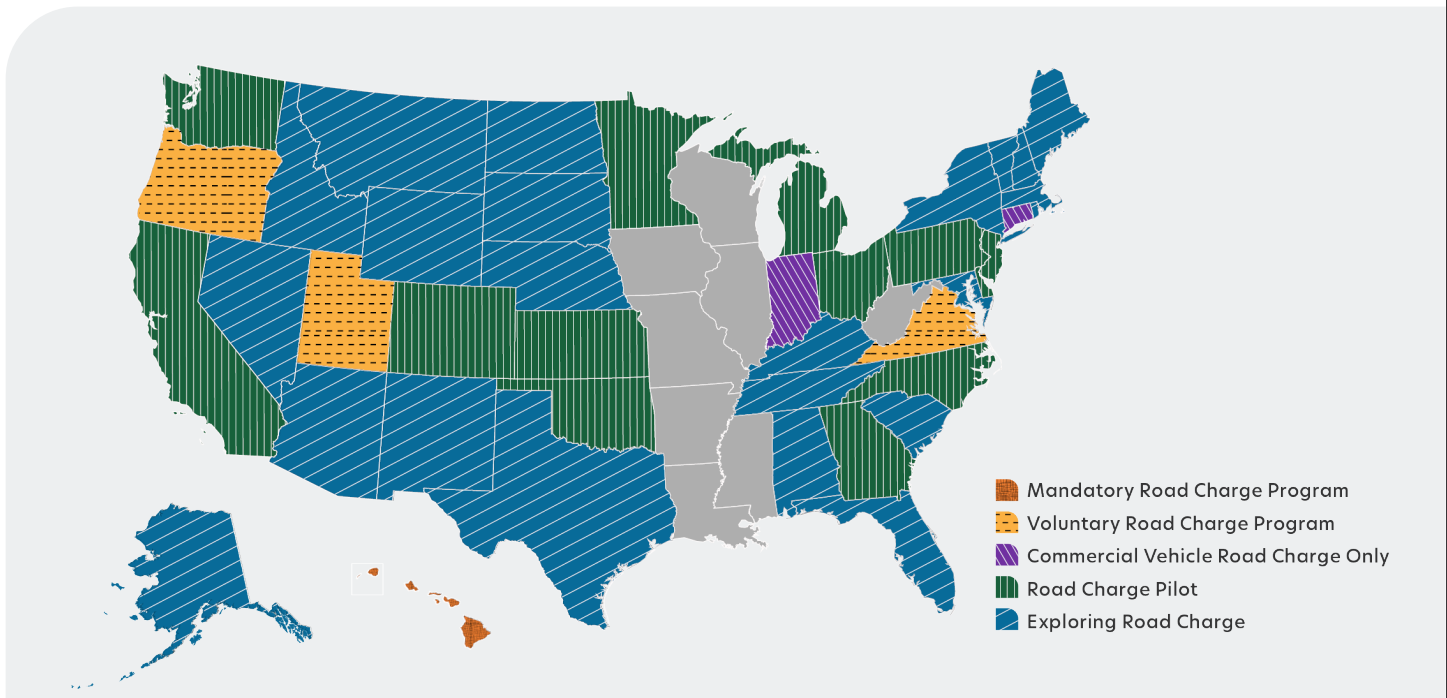


Figure ES-1. Status of road charge programs throughout the United States

### Road Charge Collection Pilot Program (SB 339)

California has been at the forefront of national research on the potential of road charge as a replacement to the fuel tax, executing several pilot programs to test the feasibility of this solution.<sup>2</sup> This body of work led the California Legislature to pass SB 339 (Wiener) in 2021. Although previous pilot programs have demonstrated that a mileage-based financing model would be a viable alternative to the fuel tax, none had the authority to actually test revenue collection and instead relied on simulated invoices without any real money changing hands. The intent of SB 339 is to establish and test a revenue collection process and identify the state agencies and departments that need to be involved to ensure a seamless flow of funds, revenue management, and the testing of different rate structures.

<sup>1</sup> Links to other states' efforts can be found at <https://caroadcharge.com/partners/road-charge-across-the-u-s/>

<sup>2</sup> California's research on road charge concepts and options can be found at [www.caroadcharge.com](http://www.caroadcharge.com)

As required by SB 339, the California Transportation Commission's (CTC) Road Usage Charge Technical Advisory Committee (TAC) provided the California State Transportation Agency with design recommendations for a road charge pilot program by July 1, 2023. Overall, the project team was able to implement most of the committee's recommendations. The live stage of the pilot program is scheduled to launch in summer of 2024.

## A Potential Administrative Structure for a Road Charge System in California

If California were to choose this path, a transition to a road charge system would require careful planning and coordination to design and implement a simple, dependable, and accurate process for collecting road charges from taxpayers. Recognizing this requirement, the Legislature in SB 339 directed the Administration (i.e., the Office of the Governor of California) to design a process for collecting road charge revenue from vehicles. Multi-department discussions were held to determine the recommended administrative structure that could collect a road charge in California. The Administration's overarching principle for its recommended approach to implementing a potential statewide road charge program is to build on existing government systems and processes. This approach would help lower administrative costs and minimize implementation burdens to affected state agencies. Also, public familiarity with these existing systems would make it easier for taxpayers to transition to paying a road charge. The recommended structure could support the transition of all 33 million passenger and commercial vehicles to a road charge, likely in a phased rollout over 10 to 12 years after passage of legislation, or it could only apply to a subset of vehicles, such as only zero-emission passenger and commercial vehicles.

### Passenger Vehicle Road Charge System

The California Department of Motor Vehicles (DMV) could be the lead agency with oversight to implement a road charge program that involves passenger vehicles. The road charge mileage tax due to the state would be tied to each vehicle's identification number (VIN) and stored as a tax record. As the oversight and taxing agency, DMV would have the responsibility to certify and audit the private third-party vendors, or Commercial Account Managers, that manage the direct interaction with the passenger vehicle owners (road charge taxpayers.) The Commercial Account Managers would play an intermediary role between taxpayers and the DMV, enrolling taxpayers into their programs, collecting the mileage, calculating the road charge and any fuel tax credits due (if any), submitting accurate and timely invoices to vehicle owners, collecting the tax amount due from taxpayers, and submitting the revenue to DMV. The general process that the Commercial Account Managers would follow is shown on Figure ES-2.

*The California Department of Motor Vehicles would be the lead agency with oversight to implement a road charge program for passenger vehicles.*

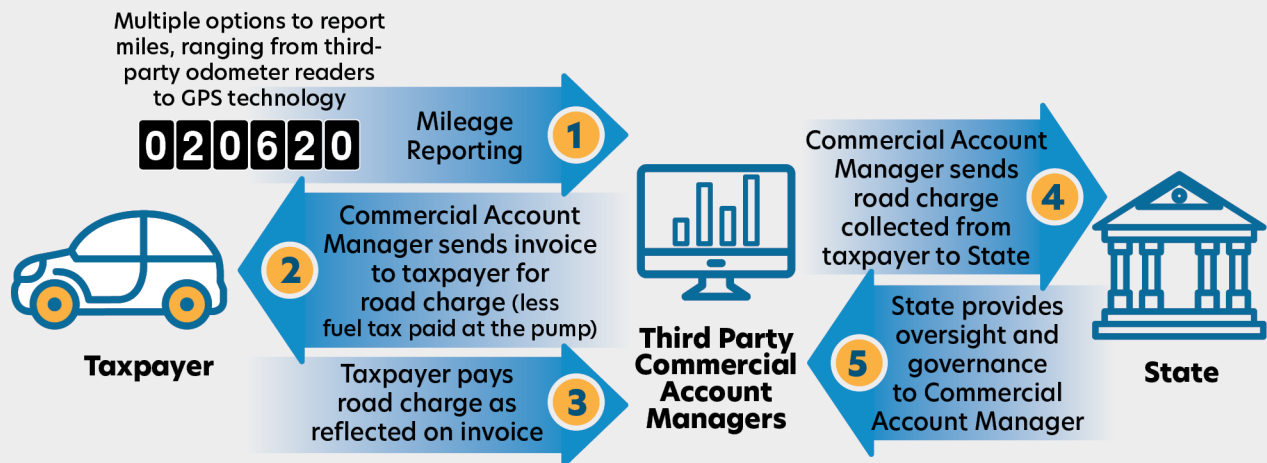


Figure ES-2. General Commercial Account Manager process for road charge program

Multiple states have tested and coalesced around this Commercial Account Manager model, as it provides multiple benefits. First, by having an open market where Commercial Account Managers compete to have taxpayers sign up with them, the options are greatest for the taxpayer and administrative costs are kept down for the state. Second, the private sector is better equipped to pursue innovation in the technologies that could be developed to report miles safely, securely, and efficiently. Third, a third-party commercial account manager would keep most data instead of the government. In general, the public is more comfortable with the private sector managing their data than the government.

California should require that there be various ways that taxpayers can report their mileage, ranging from low-tech to high-tech options. These methods could range from a certified third-party reading an odometer to the use of advanced in-vehicle telematics. This range of options allows taxpayers to choose the reporting method that best suits their own personal preferences around privacy and convenience and gives individuals control over their own data. No location tracking is required to report mileage.

*The proposed Road Charge Program would offer choices to taxpayers.*

Collection enforcement of statewide road charges can follow the existing enforcement process used by toll agencies in cooperation with the DMV. In this case, the Commercial Account Manager would attempt to collect from taxpayers and then report unpaid overdue road charge amounts to DMV to be added to vehicle registrations, with or without penalties. The DMV may turn over collection of unpaid vehicle registrations to the Franchise Tax Board. This collection system is in place and would only need minor adjustments to incorporate a road charge.



## Commercial Vehicle Road Charge System

For commercial vehicle road charge collection, California could leverage the existing International Fuel Tax Agreement (IFTA) process managed by the California Department of Tax and Fee Administration. IFTA is a cooperative agreement between the 48 contiguous states of the United States and 10 Canadian provinces to simplify and streamline the reporting of fuel tax paid by commercial motor carriers that operate in more than one state or province. This agreement enables interstate motor carriers to have one fuel tax license, instead of obtaining a fuel trip permit each time the vehicle travels through a member state or province. Mileage is reported quarterly, and auditing and enforcement processes are largely in place.







# Introduction

## Background

California relies heavily on fossil fuel tax revenues to build and maintain the state's transportation network. Currently, most of the miles driven each year on California's highways and roads are powered by gasoline- or diesel-fueled vehicles. However, the total fuel used each year is declining due to a rapid increase in the number of fuel-efficient vehicles and the critical climate initiatives the state has put in place, such as the goal of achieving 100 percent zero-emission passenger car sales by 2035.<sup>1</sup> The policies that promote fuel efficiency are beneficial for California's environment, but they also have a negative impact on the revenues collected for transportation based on the current fuel tax model.

Several factors are contributing to the growing unsustainability of the fuel tax. First, vehicle fuel efficiency in gas- and diesel-powered vehicles is increasing. Fuel taxes are excise taxes assessed per gallon of fuel. Vehicles that are more fuel-efficient need less fuel to travel a given distance, so drivers purchase less fuel and pay less fuel tax than in the past for that given distance. The average fuel economy of passenger cars in the national fleet has increased from 15 mpg in the 1970s to 25 mpg in 2021 (see Figure 1), and automakers are mandated to meet higher fuel economy targets in the future.

<sup>1</sup> Executive Order N-79-20 was signed by Governor Newsom on September 23, 2020

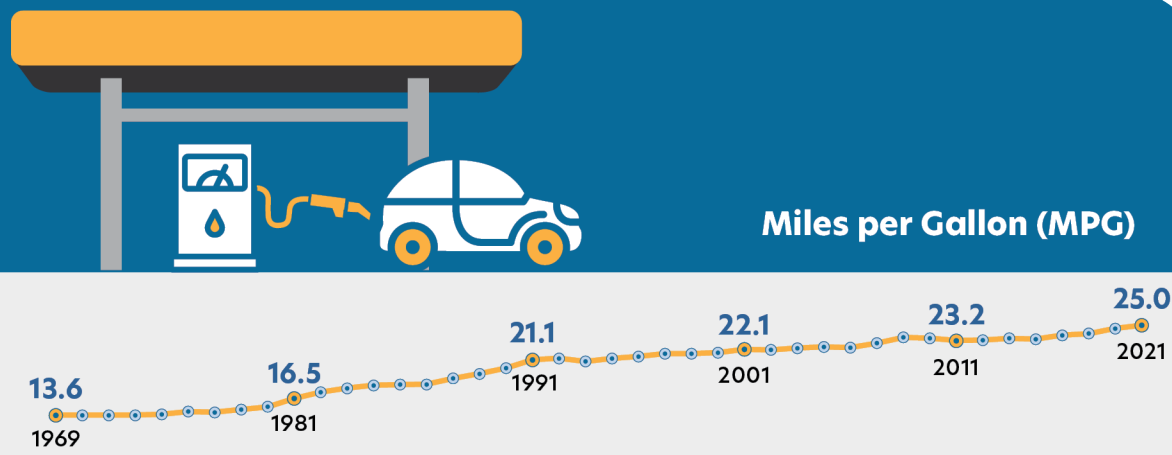


Figure 1. Average vehicular fuel economy (miles per gallon), 1969 to 2021

Second, the transition to ZEVs is proceeding as per California air quality goals. These vehicles do not use gasoline or diesel and therefore do not pay any fuel taxes. Thus, increasing the state's fuel taxes would not address the revenue shortfall caused by ZEVs. As California looks toward a future without fossil-fuel-powered vehicles, the fuel tax will eventually cease to generate revenue. The Road Improvement Fee on ZEVs introduced by SB 1 only equates to approximately one-third of what an average vehicle owner pays in state fuel taxes.<sup>2</sup>

Third, inflation causes a loss in purchase power of fuel tax revenue over time. Although the Legislature addressed this issue at the state level by indexing the state's gas and diesel taxes to inflation in SB 1, the federal fuel tax remains at the 18.4 cents per gallon that Congress set in 1993. This represents a 40% decline in purchasing power over the past 30 years.<sup>3</sup>

Fourth, as the effects of the first three issues are felt, the fuel tax burden is becoming increasingly uneven and inequitable as new vehicles become more fuel efficient, resulting in negative impacts to rural drivers and disadvantaged communities, which research shows drive less fuel-efficient vehicles on average.<sup>4</sup> Consequently, drivers with low-fuel-efficient vehicles (typically, less affluent citizens) are paying more to use the road than those with high-fuel-efficient vehicles (typically, more affluent citizens).

Significant reductions in transportation funding will result as California switches away from gas and diesel vehicles to more and more electric vehicles. Targets to reduce greenhouses gas emissions and air pollutants by increasing purchases of ZEVs are set out in several executive orders:

- ▶ In 2018, Governor Brown's Executive Order B-48-18 called for 5 million ZEVs by 2030 (see Figure 2).

<sup>2</sup> Senate Bill 1 was signed into law in April 2017

<sup>3</sup> American Public Transportation Association (APTA) Issue Brief (2020): Highway Trust Fund: Congress Must Act Now

<sup>4</sup> <https://escholarship.org/uc/item/1pn404q5>

- ▶ In 2020, Governor Newsom’s Executive Order N-79-20 required that all new passenger cars and trucks sold in California be ZEVs by 2035. The California Air Resources Board has passed recent regulations that require auto manufacturers to provide an increasing percentage of electric vehicles for sale from 2026 to 2035 to meet these goals.

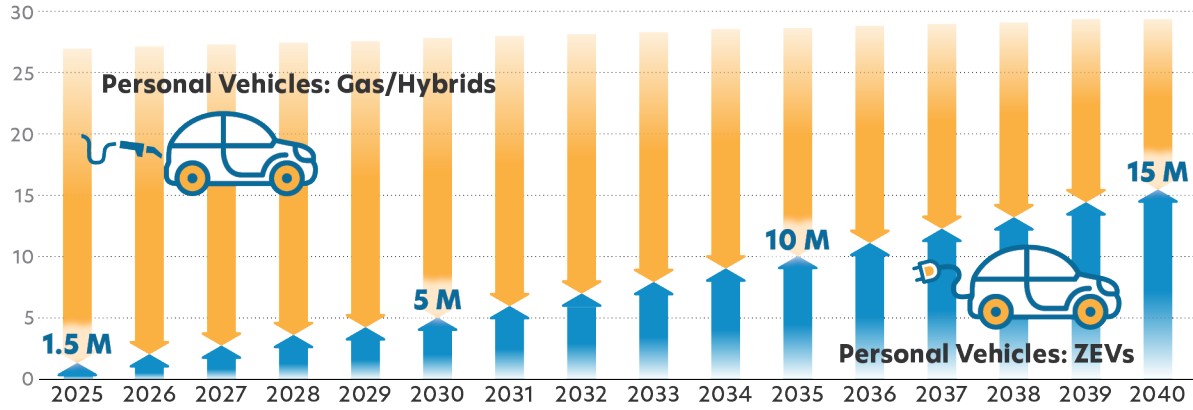


Figure 2. ZEV targets in California to 2040

If the ZEV vehicle targets illustrated on Figure 2 are met, then gasoline consumption falls dramatically and fuel tax revenues are not far behind (Figure 3). At first, revenues stay flat due to the annual inflation adjustments added by SB 1, which increase the fuel tax rates and therefore mask the reductions in gasoline gallons taxed. However, from 2030 to 2035 when 5 to 10 million electric vehicles are operating in California, gasoline consumption will be so reduced that fiscal year fuel tax revenues will begin to decline noticeably. The Road Improvement Fee, paid annually by ZEVs, only backfills approximately one-third of the revenue gap.

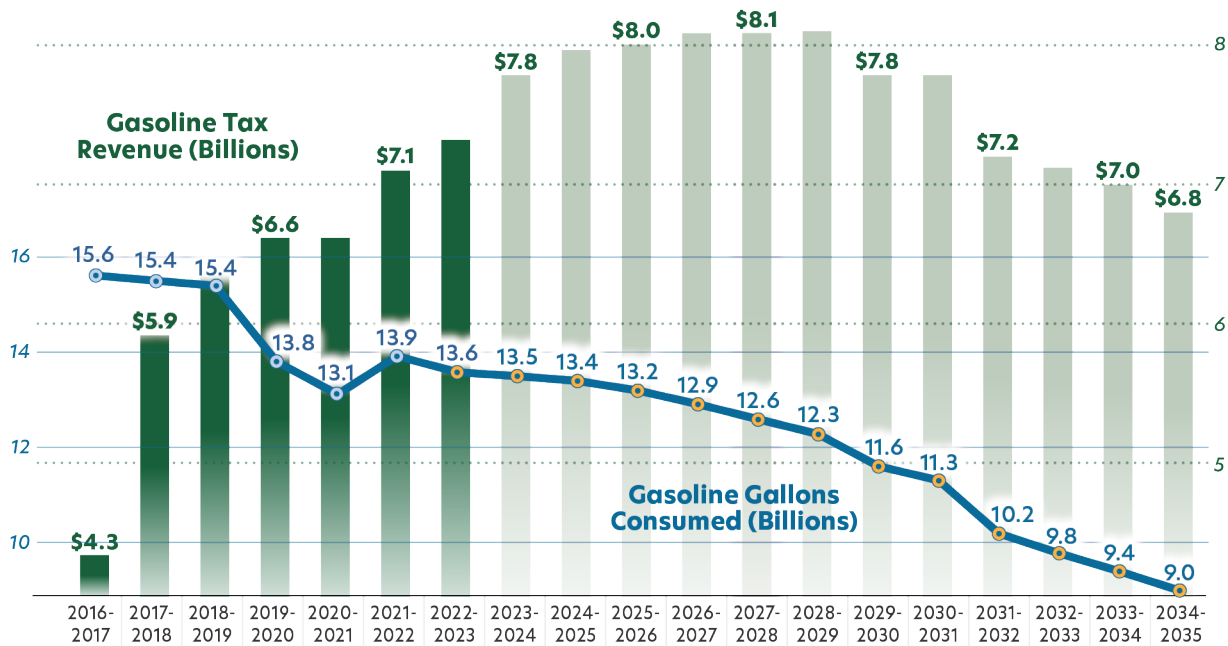


Figure 3. Estimated gasoline tax revenue to FY 2034/35

# Potential New Solution

Although the fuel tax has served California well for the past 100 years, it cannot be relied on to sustain the state's transportation network in the future. It is worth exploring options for a new funding model in a clean energy future. For the last 10 years, the state has been researching the potential of a road charge system as one possible option. Road charge would allow drivers to support the maintenance of local roads and highways based on the number of miles they travel rather than the number of gallons of fuel they use. Road charge is a sustainable transportation funding mechanism that could replace the current fuel tax and ensure that drivers pay their fair share to use the road.

California has been at the forefront of national research on the potential of road charge as a replacement to the fuel tax, executing several pilot programs to test the feasibility of that solution.<sup>5</sup> California is also one of 20 states (stretching from Hawaii to Connecticut) that form RUC America. RUC America allows state departments of transportation to pool federal research dollars to collaborate and share best practices and ideas regarding the implementation of road usage charging pilots and related programs.

In 2014, the Legislature passed SB 1077 (DeSaulnier). The legislation directed the CTC, in collaboration with the Secretary of the California State Transportation Agency (CalSTA), to create the Road Usage Charge TAC to advise the secretary in the study of a road charge as an alternative to the state fuel tax. SB 1077 provided the necessary direction and authority to implement a pilot program to investigate the potential for a road charge to replace the traditional fuel tax by distributing the road funding burden across all vehicles based on usage, without regard to fuel source.

In response to SB 1077, the California Department of Transportation (Caltrans) launched the largest road charge pilot program in the country when over 5,000 registered vehicles participated in a 9-month pilot program from July 2016 through March 2017. This pilot program was designed to increase public awareness, evaluate several technologies, capture key policy considerations, and test the general feasibility of the road charge concept as a revenue solution for California. Pilot program participants were positive about the experience, and overall the pilot program demonstrated that road charge was a feasible option for the state to consider. However, further areas of study were identified, which led to further research and pilot program work.<sup>6</sup>

The 2021 Four-Phase Demonstration<sup>7</sup> was designed to further explore questions raised by the 2017 pilot program about how to make the payment of a road charge as easy as possible for the taxpayer. Through this pilot program, Caltrans demonstrated how a Road Charge could be reported, assessed, and collected using familiar and emerging businesses, including fueling pumps/electric vehicle charging stations, usage-based insurance, ridesharing fleets, and autonomous vehicles. A key lesson learned was the advantage of building off of existing business models and processes wherever possible, as it lowers administrative costs and provides an existing and familiar process for the taxpayer.

A key implementation question is how to create an interoperable road charge reporting system across states. As a member of RUC America, California has been involved in many of the regional programs that this consortium is examining. This involvement includes the Regional Interoperability Pilot, which explored and tested the idea of a central clearinghouse that would sort mileage charges for interstate travel.

<sup>5</sup> The state's research can be found at: [www.caroadcharge.com](http://www.caroadcharge.com)

<sup>6</sup> <https://caroadcharge.com/projects/california-s-2017-road-charge-pilot/>

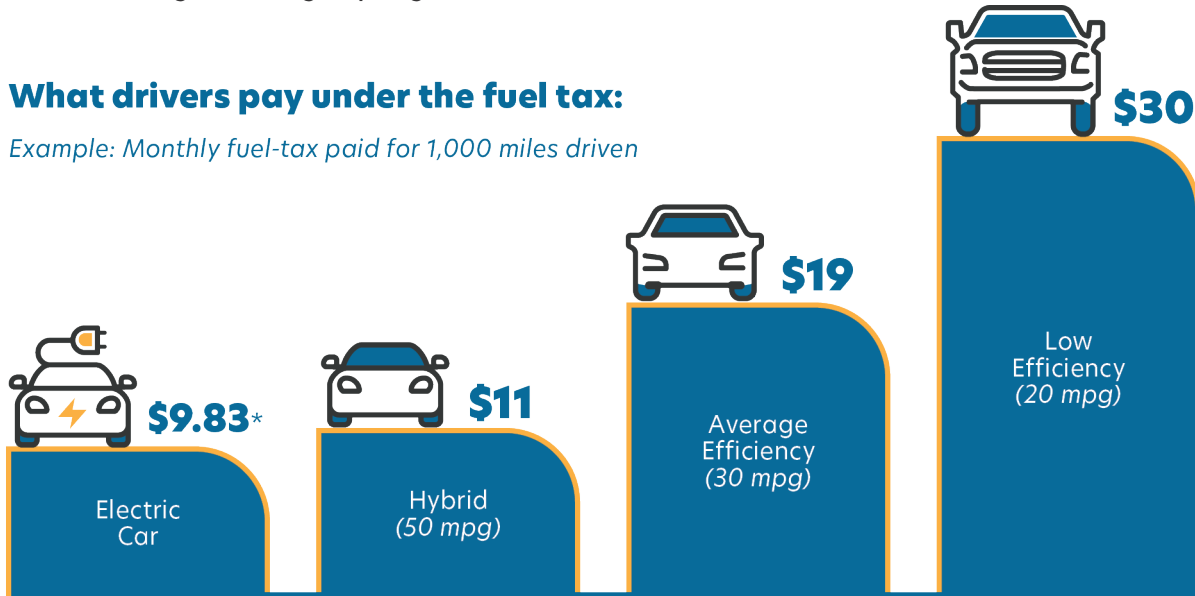
<sup>7</sup> <https://caroadcharge.com/projects/california-four-phase-demonstration/>



Further research was also recommended from the 2017 pilot program on how a road charge might affect specific communities. Caltrans collaborated with the Transportation Sustainability Research Center at the University of California, Berkeley, to study how a road charge system might impact low-income households and underserved communities.<sup>8</sup> The question of whether an individual would pay more or less under a road charge system versus the fuel tax depends entirely on what car they drive. On average, those in disadvantaged communities drive less-fuel-efficient vehicles. Under the current fuel tax system, drivers of less-fuel-efficient vehicles pay more to use the road than others (Figure 4). A switch to a road charge system would therefore mean paying less in taxes on average for this group (Figure 5).

### What drivers pay under the fuel tax:

Example: Monthly fuel-tax paid for 1,000 miles driven



\* \$118 Road Improvement Fee is assessed on all model year 2020 and later ZEVs

Figure 4. Examples of what different drivers pay under fuel tax

### What drivers pay under the road charge:

Example: Monthly fuel-tax paid for 1,000 miles driven

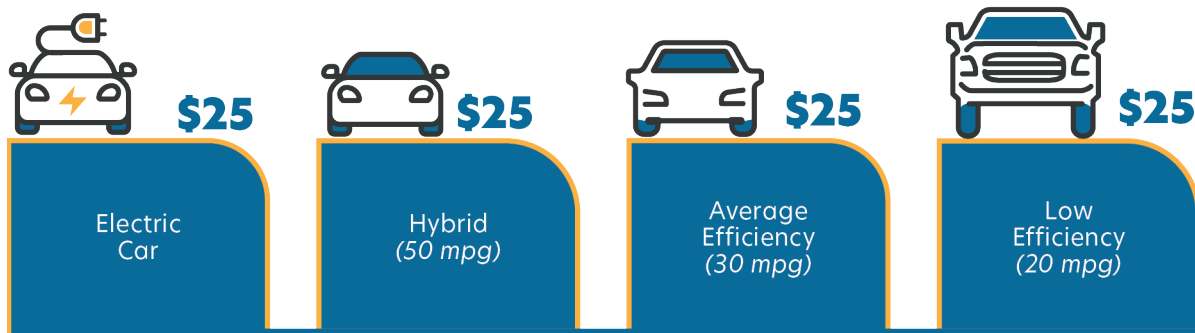


Figure 5. Examples of what different drivers would pay under road charge

<sup>8</sup> <https://escholarship.org/uc/item/1pn404q5>

Impacts to rural drivers are also a key question of concern. Through research with RUC America,<sup>9</sup> California explored the tax impacts to these areas of the state. Again, because on average rural drivers drive less fuel-efficient vehicles, under the current fuel tax system they are paying more to use the road than their urban counterparts. Thus, under a switch to a road charge, they would on average save money.

To further engage the rural community and to explore the impacts of road charge to the Native American tribes located in the state, in 2023 Caltrans began the Public/Private Roads Project,<sup>10</sup> which focused on having these communities experience a road charge system. During this pilot program, Caltrans engaged rural and Native communities to better understand their priorities and impacts under a road charge program. The live pilot program demonstration concluded in September 2023, with a report expected at the end of 2024.

<sup>9</sup> [https://caroadcharge.com/media/vktnxqg/rucamerica\\_urbrur\\_finalreport\\_2022-09-16.pdf](https://caroadcharge.com/media/vktnxqg/rucamerica_urbrur_finalreport_2022-09-16.pdf)  
<sup>10</sup> [Public/Private Roads Project | California Road Charge \(caroadcharge.com\)](#)





# SB 339 Road Charge Collection Pilot Program

The previously discussed body of work led the Legislature to pass SB 339 (Wiener) in 2021. Although previous pilot programs have demonstrated that a mileage-based financing model would be a viable alternative to the fuel tax, none of the pilot programs had the authority to actually test revenue collection and instead relied on simulated invoices, without any real money changing hands. The intent of SB 339 is to establish and test a revenue collection process and to identify the state agencies and departments that need to be involved to ensure a seamless flow of funds and revenue management.

## Overview of SB 339

SB 339 was introduced by California Senator Scott Wiener and was signed by Governor Newsom on September 24, 2021. This legislation mandates that after January 1, 2023, CalSTA, in consultation with the CTC, must implement a road charge pilot program to evaluate issues related to revenue collection. SB 339 identified two primary goals for the road charge pilot program. The first goal was to collect road charge fees from pilot program participants and to identify and evaluate issues related to the collection of revenue for a road charge program. The second goal was to implement a pilot project that offers two different mileage rate options and to assess the impacts of these rates on ensuring sustainable funding for transportation and their alignment with the state's climate, air quality, zero-emissions vehicle, and equity goals.

The legislation requires that participants must be equally and randomly divided into two groups during the pilot program. The first group will be charged a flat fee per mile traveled set by the TAC regardless of vehicle type. The other group will be subject to



*The SB 339 pilot will be the first of California's pilots to test the collection of actual payments from participants.*

an individually calculated fee per mile that is equal to the state per gallon fuel tax divided by the fuel economy rating for that vehicle obtained from the U.S. Environmental Protection Agency (EPA). In addition, participants will receive a credit or refund for the amount of fuel tax or Road Improvement Fee they pay during their participation in the road charge pilot program. Participation in the pilot program is voluntary for the public.

SB 339 also extends the Road Usage Charge TAC formed in 2014 by Senate Bill 1077 until January 1, 2027. Furthermore, the legislation requires that the TAC recommend to Caltrans best practices for the design and evaluation of the pilot program.

CalSTA may consult with California agencies to design a revenue collection system, with fees collected by any agency or entity determined by CalSTA.

Finally, SB 339 establishes deadlines for an interim report and a final report to be submitted to the Legislature containing information about the road charge pilot program and highlighting the key findings and results, as follows:

- ▶ **Interim report:** This report must provide an update on the status of the pilot program and is due to the Legislature by July 1, 2024. The content of this document is intended to satisfy the interim report requirements.
- ▶ **Final report:** This report documents the results and findings from the pilot project and must be submitted for Legislature review by December 31, 2026. The report must address cost-related issues, implementation methods, and comparison of the two fee-calculation methodologies. The comparison of these two methodologies must include an analysis of each fee structure's performance in raising revenue and their effectiveness in adhering to California's climate, ZEV, air quality, and equity goals.

## Pilot Program Status Update

CalSTA aims to launch the live stage of the pilot program in summer of 2024. At the time of the submission of this report, participant recruitment will be underway, and CalSTA has also invited members of the Legislature to participate and experience the road charge system firsthand.

## Technical Advisory Committee Recommendations

SB 339 requires the Road Usage Charge TAC to provide CalSTA with design recommendations for the road charge pilot program. The TAC developed and refined these recommendations over seven meetings beginning in October 2021 and adopted final recommendations in April 2023. The committee's final report to CalSTA was issued on June 29, 2023. The TAC proposed recommendations in six categories.<sup>1</sup> These categories are listed below. Overall, the project team was able to implement the vast majority of the TACs recommendations.

<sup>1</sup> California Transportation Commission, Road Charge Technical Advisory Committee, SB 339 Pilot Design Recommendations Report, June 29, 2023. <https://ctac.ca.gov/-/media/ctc-media/documents/ctc-committees/road-charge/sb-339-road-charge-pilot-design-recommendations-report-a11y.pdf>



- ▶ **Rate setting:** Offers guidance for the pilot program by establishing a flat per mile rate.
- ▶ **Pilot program participation design:** Includes participant recruitment and sampling recommendations.
- ▶ **Privacy and data security:** Covers privacy provisions, including an updated participant privacy policy and other considerations.
- ▶ **Organizational design:** Suggests how to use the pilot program to specify which agencies may fulfill the functions of a road charge program, including agency collaboration and accountability.
- ▶ **Revenue collection:** Outlines potential procedures to collect funds.
- ▶ **Enforcement:** Covers initial enforcement actions for the state to consider in the pilot program.

Although most of the TAC recommendations have been included in the pilot program, some recommendations have not been adopted for a variety of reasons. Table 1 lists the recommendations that were not implemented or only partially implemented, together with an explanation of the reasons for non-implementation or partial implementation.

**Table 1. TAC recommendations not implemented or partially implemented**

| CATEGORY                           | TAC RECOMMENDATION  | REASON FOR NON-IMPLEMENTATION OR PARTIAL IMPLEMENTATION   |
|------------------------------------|---|---|
| Pilot program participation design | Recruit 2,000 statewide participating vehicles using an oversampling approach to ensure sufficient participation by rural and low-income motorists.   | Not enough budget for such a large sample size. However, the sample size was increased as much as possible to respond to this recommendation. |
| Privacy and data security          | Provide choices of private and public-sector account management services.   | This is an element of the program structure in Oregon. There are no planned state account managers in California.                             |
|                                    | Consider the risk of allowing third-party vendors like account managers to offer value-added services because this creates additional information sharing. Also, consider not allowing third-party vendors to offer value-added services at the start of the pilot program. | The scope of this pilot program does not include an exploration of value-added services. This topic was explored in the 2017 pilot program.   |
|                                    | If possible, limit the ability of state government to contract work out to third-party consultants for any public-sector option offered.  | Not relevant since there are no state account managers in California.   |
|                                    | Require law enforcement to have a warrant to get access to person-specific road charge data, to keep a record of when they accessed such data, and to provide notice to the person whose data was collected.  | Will be applicable in a statewide program but is not applicable in a pilot program setting.   |

| CATEGORY              | TAC RECOMMENDATION  | REASON FOR NON-IMPLEMENTATION OR PARTIAL IMPLEMENTATION   |
|-----------------------|---|---|
| Organizational design | Have DMV run the pilot program.   | This recommendation was not possible, as DMV did not receive the resources in the state budget to run the pilot program. Caltrans is responsible for the pilot, and DMV has agreed to assist the effort. For implementation of a road charge program, it is envisioned that DMV would be the lead agency with oversight for passenger vehicles. |
| Revenue collection    | Offer various payment methods to participants, including post-payment for charges online, via phone, or via mail.   | SB 339 does not require multiple payment options. Pilot will accept credit card payments only.  |
|                       | Offer various payment methods to participants, including pre-payment for charges such as mileage permit in which vehicle owner pre-pays for a fixed number of miles.  | SB 339 does not require a pre-payment option.   |
|                       | Follow the invoice design principles laid out in the TAC report that recommend providing tips on how to minimize road charges, similar to how utility companies provide tips on how to lower energy usage.                | Given that participants will be participating in a study of whether the two rate structures will change their behaviors, the project team had concerns that such tips could lead participants to think the pilot program wanted them to cut their travel, potentially skewing results. Could be a future consideration for a program.           |
|                       | Assess the feasibility and acceptability of charging service fees for end users that vary based on the selected method of mileage reporting. This recommendation would result in a sliding scale of road charge payments. | The project team did not want to charge a service fee to avoid influencing participant's choice of mileage reporting option and potentially skewing research results.   |
|                       | Follow the invoice design principles laid out in the TAC report. Call out how to access participant surveys.  | The project team felt it was better to keep survey information separate from invoices.  |

Caltrans = California Department of Transportation  
DMV = Department of Motor Vehicle  
SB = Senate Bill  
TAC = Technical Advisory Committee



# Potential Process for a Statewide Road Charge System

With the Governor's executive order banning the sale of gas-powered vehicles beginning in 2035, policymakers often ask whether a road charge system can be implemented in sufficient time to offset revenue impacts. Based on the experience of other states and given the size and complexity of California, the Legislature would likely want to explore a phased approach to potential implementation of a road charge system for the state's approximately 35 million registered vehicles. This system could cover all passenger cars and commercial vehicles or a subset of vehicles, such as all ZEVs. A phased rollout to all vehicles could likely be accomplished in 10 to 12 years after legislation is passed. As long as ZEVs are transitioned to a road charge before 2035, there will not likely be any long-lasting impacts to revenue.

A potential transition to a road charge system would require careful planning and coordination to design and implement a simple, dependable, and accurate process for collecting road charges from taxpayers. Recognizing this requirement, the Legislature in SB 339 directed as follows:

*"The Transportation Agency shall consult with appropriate state agencies, which may include, but are not limited to, the Department of Transportation, the Department of Motor Vehicles, the California Department of Tax and Fee Administration, and the Controller to design a process for collecting road charge revenue from vehicles."*

[Section 3092.5 (c)]

Pursuant to this direction, CalSTA has held multi-department discussions to determine a recommended approach to the administrative structure required to collect a road charge in California.

As noted previously, the Administration’s overarching principle for implementing a potential statewide road charge program is to build on existing government systems and processes. This approach helps lower administrative cost and minimize implementation burdens to affected state agencies, and public familiarity with these systems makes it easier for taxpayers to transition to paying a road charge. These systems can also adapt in future to a multi-state interoperable system. The remainder of this report outlines the proposed steps, functions, and responsibilities necessary to collect road charges for both passenger cars and commercial vehicles.

## Passenger Vehicles

The DMV could be the lead agency with oversight to implement a road charge program that involves passenger vehicles. The road charge mileage tax due to the state would be tied to each vehicle’s VIN and stored as a tax record. As the oversight and taxing agency, DMV would have the responsibility to certify and audit the private, third-party vendors, or Commercial Account Managers, that would manage the direct interaction with taxpayers, similar to the DMV’s existing business partner process.

### Commercial Account Manager Model

The Commercial Account Manager would play an intermediary role between the taxpayer and the DMV. Taxpayers can choose to report their travel miles to the Commercial Account Manager monthly, quarterly, or annually, allowing taxpayers to pay their road charges at the frequency best suited to their household budget. The Commercial Account Manager would enroll participants into their programs, collect their mileages, calculate their road charges and fuel tax credits due (if any), submit accurate and timely invoices to vehicle owners, collect the tax amount due from taxpayers, and submit the revenue to DMV. The state would designate multiple certified Commercial Account Managers, allowing taxpayers to choose what works best for them in terms of account management and reporting options. Conceptually, the Commercial Account Manager performs a service similar to a tax firm that helps an individual calculate and file their income taxes. Figure 6 displays the conceptual Commercial Account Manager model, which shows the overall interactions between taxpayers and the DMV.

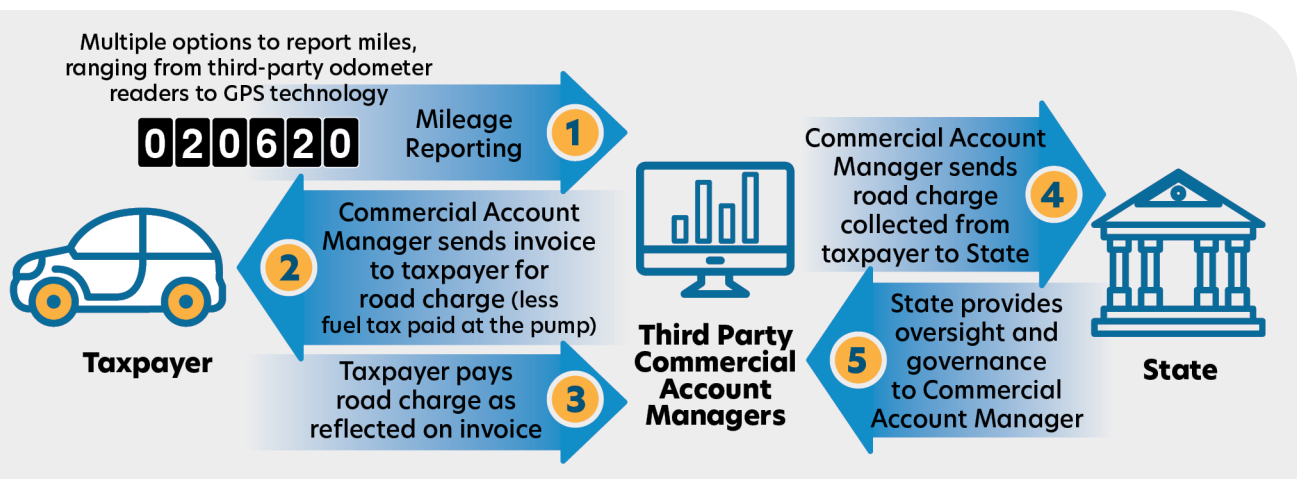


Figure 6. Commercial Account Manager concept diagram



Multiple states have tested and coalesced around this Commercial Account Manager model, as it provides multiple benefits. First, an open market where Commercial Account Managers compete to have taxpayers sign up with them provides the greatest number of options for the taxpayer and keeps administrative costs down for the state. Second, the private sector is better equipped to pursue innovation in the technologies that could be developed to report miles safely, securely, and efficiently. The system needs the flexibility to adapt to the technologies that will be in use 50 years in the future, and this requirement will not be achieved by a state agency selecting one “winning” technology. Third, a third-party commercial account manager will keep most data instead of the government. In general, the public is more comfortable with the private sector managing their data rather than the government.

### Mileage Reporting and Payment Options

California should require having a variety of options that taxpayers could use to report their mileage. These options would range from low tech to high-tech. Thus, options might range from a certified third-party odometer reader who comes to the taxpayer to the use of advanced in-vehicle telematics. This range of options allows taxpayers to choose the reporting method that best suits their personal preferences around privacy and convenience and gives the individual control over their own data. No location tracking would be required to report mileage.

*Under a statewide road charge system, taxpayers would have several options to report mileage and make payments. No location information would be required.*

Taxpayers should also have various options to choose from to pay their road charge invoices. These methods would include cash payment, credit/debit card charges, preloaded balances, personal checks, Automated Clearinghouse (ACH) transfers, and others. In addition, credit card users could be offered the opportunity to opt in or out of automatic payments. Paying in cash allows taxpayers who do not have access to a bank account or credit card the ability to pay their invoices conveniently.

Taxpayers should also be able to choose how frequently they receive their road charge invoices. Mileage reporting and invoice payment can occur monthly, quarterly, or annually. This flexibility will allow taxpayers to budget for their road charges according to their own travel habits and individual preferences.

These multiple layers of choice are expected to improve customer service and minimize process burdens on low-income and mobility-challenged population segments.



## Commercial Account Manager Certification and Auditing

The DMV would have the responsibility to ensure that the Commercial Account Managers can operate in a trustworthy manner before being authorized by the state as commercial vendors for road charge functions. Each Commercial Account Manager would need to meet certain government certification requirements that are in line with industry best practices. These requirements would likely include:



### **Data security:**

The Commercial Account Manager system must be able to protect taxpayer data, including personally identifiable information.



### **Financial transactions:**

The Commercial Account Managers will be processing payments involving cash and credit card transactions, and therefore they must meet certain standards applicable to banking institutions, including frequent reconciliations.



### **Privacy:**

The Commercial Account Managers must meet the privacy requirements of a road charge system, which could include opt-in/opt-out requirements, data correction and destruction obligations, state and federal privacy policies, and California Consumer Privacy Act constraints.



### **Customer service:**

The Commercial Account Managers are on the front line of customer service through their interaction with vehicle owners and must meet certain response times to calls and inquiries and other metrics (to be defined in a service level agreement).

The DMV would first certify that all prospective Commercial Account Managers meet the above requirements. In addition, the Commercial Account Managers would require approval by DMV to submit the necessary data points by VIN to the DMV system, similar to the process that DMV currently uses with other business partners.

Monitoring and auditing of the Commercial Account Managers would be an important DMV function to ensure that the Commercial Account Managers operate to standards, prevent fraud, and protect the information of taxpayers in a road charge system. Currently, DMV audits its existing business partners at a rate of 3 percent per year. Any criminal fraudulent activity observed at a Commercial Account Manager would be immediately reported to law enforcement.

## Enforcement

Tax systems require enforcement mechanisms to address when taxpayers either accidentally or fraudulently fail to pay their taxes. The DMV has existing processes to handle fraudulent activities related to vehicle registrations in California that could be expanded to include a road charge system. However, for situations that are not the result of criminal activity, collection enforcement of statewide road charges can follow the existing enforcement process used by toll agencies in cooperation with the DMV. In this case, the Commercial Account Manager would attempt to collect twice from taxpayers before reporting unpaid overdue road charge amounts to DMV to be added to vehicle registration with or without penalties. The DMV could enter into mediation if the vehicle owner requests an appeal on outstanding road charges, but eventually DMV could turn the collection over to the Franchise Tax Board if vehicle registration is not paid. This system is in place and only needs minor adjustments to incorporate a road charge system.

## Commercial Vehicles

Unlike passenger vehicles, commercial motor carriers are subject to regulatory requirements that include reporting of total trip miles and fuel consumption. California participates in two interoperable entities that exist for the redistribution of vehicle taxes and fees among states. First, taxes on fuel used by interstate commercial freight vehicles are subject to the International Fuel Tax Agreement (IFTA), which is processed by the California Department of Tax and Fee Administration (CDTFA) quarterly. Second, registration fees for interstate commercial freight vehicles are subject to the International Registration Plan (IRP), which DMV processes for California annually. The miles used in the calculations for IFTA returns and IRP are self-reported by the motor carrier fleets. Documentation of miles and trips per vehicle are required to be maintained by the fleet and produced at time of audit. Due to legislation passed in Indiana in 2023 (HB 1050), IFTA has updated its multi-state agreements and started allowing the reporting of road use charges on commercial electric vehicles in January 2024. Both systems were examined as potential processes on which to build a potential commercial vehicle road charge system for California, and due to its quarterly reporting and existing support of the reporting of road charges, IFTA was determined to be the better fit.



### Overview of the IFTA Process

IFTA is a cooperative agreement between the 48 contiguous states of the United States and 10 Canadian provinces to simplify and streamline the reporting of fuel used by motor carriers that operate in more than one state/province. This agreement enables interstate motor carriers to have one fuel tax license instead of obtaining a fuel trip permit each time the vehicle travels through a member state or province.

Under IFTA, each licensee must establish a base state where they will file their quarterly tax return. In California, these tax returns are submitted to CDTFA. At CDTFA, the Motor Carrier Office in the Audit and Carrier Bureau of the Business Tax and Fee Division processes IFTA returns. Through this simplified license, motor carriers are only required to report fuel usage and mileage to their base state rather than to each state/province they enter. This requirement reduces administrative costs and simplifies fuel taxation for licensees. Along with fuel usage, commercial carriers must report on their quarterly tax return their miles driven and fuel taxes paid in all the states or provinces in which they traveled.

Trucks with a gross vehicle weight of between 10,000 pounds and 26,000 pounds are not required to follow IFTA reporting. Nor are trucks over 26,000 pounds that travel only within California since in this case, no fuel is used in other states. However, the existing IFTA structure could be expanded to include these vehicles if all member states/provinces agreed to the change.

### Using IFTA for a Commercial Vehicle Road Charge System

As a result of discussions with DMV and CDTFA, it is recommended that CDTFA would be the lead agency that administers the statewide program for commercial vehicles and collects road charges from commercial taxpayers in conjunction with the IFTA quarterly tax returns. CDTFA could also provide motor carrier education and tax assistance services. In addition, CDTFA would be responsible for auditing accounts as required by IFTA and providing enforcement activities.

#### Enforcement

The current enforcement protocol under IFTA requires all IFTA licensees to carry an IFTA license and to display IFTA decals on their vehicles. Each member state employs enforcement methods to ensure compliance by the commercial vehicle fleet. Local law enforcement may issue a citation when a qualified vehicle is not in compliance with IFTA standards. Both home and member states/provinces are mandated through the cooperative administration to enforce IFTA regulations. Roadside enforcement also ensures IFTA compliance, where authorized personnel may run compliance checks of qualified vehicles.

Specific enforcement actions guarantee IFTA compliance. CDTFA performs annual audits for 3 percent of the total number of commercial vehicles to ensure continued compliance. Licenses may be revoked, suspended, canceled, or denied renewal if tax returns are not filed; if motor fuel taxes, penalties, or interest have not been paid; or if the vehicle reports no base jurisdiction distances for three or more consecutive quarters. When licenses are suspended or revoked, base jurisdictions may run an audit assessment on the licensee. Other forms of enforcement include financial penalties and accumulated interest on overdue taxes.







# Conclusions and Next Steps

The eventual decline in gasoline consumption and per gallon fuel tax revenues is widely predicted as California transitions to vehicles that use little or no gas, such as plug-in hybrid electric models or all-electric vehicles. As required by SB 339, the Administration has developed a recommended process for the Legislature to consider for the implementation of a potential road charge system for both passenger and commercial vehicles. In addition, CalSTA will be implementing the pilot program required by the bill in the second half of 2024. As 2024 closes, the Administration will have addressed the necessary research needed to implement a road charge system should the Legislature be interested in this funding mechanism as an option for a new funding model in a clean energy future.





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