



# Memorandum

**Date:** July 25, 2018  
**To:** Transportation Authority Citizens Advisory Committee  
**From:** Anna LaForte– Deputy Director for Policy and Programming  
**Subject:** Update on CalSTA's Road Charge Pilot Program

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| <p><b>RECOMMENDATION</b>    <input checked="" type="checkbox"/> <b>Information</b>    <input type="checkbox"/> <b>Action</b></p> <p><b>SUMMARY</b></p> <p>As requested by the Citizens Advisory Committee (CAC), we are providing an update on the California State Transportation Agency's (CalSTA's) Road Charge Pilot Program. The intent of the pilot, operated by the California Department of Transportation (Caltrans) at CalSTA's request, was to explore the viability of replacing the state gas tax with a road usage charge (RUC) or per mile fee that is assessed to drivers. This is a critical issue for the State as the state gas tax, California's main source of transportation revenues, has long been losing value due to inflation and increasing vehicle fuel efficiency. In December 2017, CalSTA released the final report on the nine-month RUC pilot, including data that Caltrans received from the 5,000 vehicles that participated. Participants tended to be satisfied with the program (85%) and support a RUC over a gas tax (73%). Using the lessons learned from the pilot program, Caltrans will continue to identify RUC best practices. Further, Caltrans will continue addressing key issues that must be resolved before a RUC could be implemented, such as determining which verification and payment methods should be used and how to charge interstate drivers. Caltrans believes that the earliest possible implementation year for a gas tax-replacing RUC is 2025.</p> | <p><input type="checkbox"/> Fund Allocation<br/> <input type="checkbox"/> Fund Programming<br/> <input type="checkbox"/> Policy/Legislation<br/> <input checked="" type="checkbox"/> Plan/Study<br/> <input type="checkbox"/> Capital Project Oversight/Delivery<br/> <input type="checkbox"/> Budget/Finance<br/> <input type="checkbox"/> Contract/Agreement<br/> <input type="checkbox"/> Other: _____</p> |
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## DISCUSSION

### Background.

In 2014, the California State Legislature passed SB 1077, authorizing a road usage charge (RUC) pilot program. A road usage charge is a per mile fee that is assessed to drivers. The revenue from a RUC is invested back into roads and transportation.

The intent of SB 1077 was to explore the viability of replacing the state gas tax with a RUC. Due to inflation and increasing fuel efficiency, the gas tax has yielded inadequate revenue on the 350 billion miles driven on California roads each year. SB1 partially addressed concerns by adjusting the gas tax for inflation for the first time since 1994, but this still leaves the gas tax vulnerable to inflation in future

decades and does not account for the increasing fuel economy of vehicles or increasing share of electric vehicles.

California is not alone in exploring a transition to a RUC. Fourteen states, including California, are members of the Western Road Usage Charge Consortium, known as RUC West, which serves as a forum for sharing RUC best practices and research. Four other member states- Colorado, Hawaii, Oregon and Washington- either are running or have run RUC pilots.

Oregon has the most advanced RUC work in the nation. In 2013, the state moved beyond the pilot phase, creating the nation's first official RUC program with SB 810. The Oregon RUC is limited to 5,000 volunteers, each of whom pay road fees per mile driven and are reimbursed for the gas taxes that they pay at the pump. CalSTA staff is closely monitoring and learning from Oregon's RUC work.

### **Pilot Study.**

Under direction from the California State Transportation Agency (CalSTA), the California Department of Transportation (Caltrans) oversaw the pilot RUC program. Over 5,000 vehicles were part of the nine-month study. Caltrans recruited participants from a broad range of demographic categories, with an emphasis on geographic diversity. Participants drove passenger vehicles, agency and business fleets, and commercial trucks. Caltrans established a revenue neutral per mile charge of 1.8 cents but ultimately did not collect the fee assessed, as the pilot was informational.

Participants chose from multiple mileage reporting methods and reporting technologies. By offering different options, Caltrans was later able to compare effectiveness while also encouraging innovation from suppliers. Both manual and automated reporting methods were available. Manual methods included time and mileage permits and odometer verifications. Automated methods used devices, either with or without GPS, to track miles driven.

Reporting technologies included plug-in devices (i.e. Progressive Snapshot), smartphones, in-vehicle telematics (i.e. OnStar) and specialized commercial meters.

Caltrans focused on miles driven by Californians in state for the pilot. It also ran a three-month simulation of interoperability with Oregon's OReGO RUC system. Only six drivers from out of state participated in the pilot. Only participants who used a reporting method with GPS were able to discount out-state and other nontaxable miles from their total.

Commercial Account Managers (CAMs) managed the automated reporting. CAMs administered participant accounts, collected mileage data, generated simulated invoices and managed receipt of mock payments. In addition to private CAMs, the State operated as an account manager for the participants who chose manual reporting methods. Participants could choose their own CAM and view data via a secure web portal.

During the pilot, Caltrans assembled an Interagency Work Group to discuss the organizational logistics of a RUC. The Group consisted of the Department of Motor Vehicles (DMV), California Department of Tax and Fee Administration (Board of Equalization), Bureau of Automotive Repair (BAR), California Air Resources Board (ARB), California Highway Patrol (CHP), State Controller's Office (SCO), California Department of Insurance (CDI) and California Transportation Commission (CTC).

## Pilot Results.

During the pilot, participants drove over 37 million miles. CalSTA succeeded in recruiting a diverse group of participants but fell short of its targets on rural, low-income and some racial demographics. Since Caltrans intended to oversample these populations, however, the overall pilot demographics closely match those of California as a whole

Participants expressed favorable views of the pilot and RUC in post-pilot surveys.

- 85% overall pilot satisfaction
  - At least 86% satisfaction for each mileage reporting method used
  - 74% satisfied with their CAM
- 73% said a road usage charge is more equitable than the gas tax
  - Increase from 66% before the pilot
  - 61% said they are more aware of the amount they pay for road maintenance
- 80% used automated reporting methods
  - 62% used location-based technology

All the reporting options offered functioned well; even so, the pilot evaluation identified some tradeoffs. Manual options provided the most privacy but had the highest potential for fraud and could not distinguish between in-state and out-of-state miles. Most participants opted to use plug-in devices. Drawbacks of the in-vehicle telematics include a high cost of registration, unstandardized methods between providers and inability to exclude out-of-state driving. Some participants commented that choosing between the many options was difficult.

There were no privacy or data breaches during the pilot.

Since the RUC was simulated and not actually collected, Caltrans did not produce an estimate of the administration costs of the program.

Pilot participants on average drove more fuel-efficient vehicles than the typical Californian, so the 1.8 cent per mile fee, intended as revenue-neutral, ended up ~~being revenue deficient~~generating a revenue surplus.

## Next Steps.

Before a RUC could be implemented, significant technological, political and administrative concerns must be resolved.

For technology, the pay-at-the-pump model has been identified as a simple and familiar method of collection for a RUC. Caltrans is currently working with the Federal Highway Administration to assess the feasibility of this technology.

The development of better in-vehicle telematics will also be key for a successful RUC, as the pay-at-the-pump model does not suit California's growing alternative fuel fleet. Much of this work will be done by the private sector, but Caltrans will likely want to be involved in the development of standards.

## Agenda Item 10

Politically, interstate travel adds jurisdictional challenges to a RUC. During the pilot, Caltrans successfully tested the interoperability of its system with Oregon's OReGO RUC. Tests like these during future pilots could help smooth jurisdictional questions. Caltrans may also explore how out-of-state drivers from jurisdictions without a RUC could be effectively charged.

To yield adequate revenue, the administrative cost of a RUC should be similar to that of a gas tax. By running future pilots in which, the RUC is actually collected, rather than simulated, Caltrans can gain a better understanding of the administrative costs. The Interagency Work Group identified new roles that the State must take on to operate a RUC and incorporating these into a new pilot could yield a better sense the RUC's administrative scope.

Other lingering issues include data privacy, public awareness, enforcement and geographic equity.

Further pilots can test solutions for these issues. At its June 26<sup>th</sup> meeting, the Transportation Authority adopted a support position on SB 1328 (Beall), which would extend the State's ability to run pilot programs and conduct RUC research, which is scheduled to sunset at the end of 2018, until the end of 2022.

Caltrans believes that the earliest possible implementation year for a RUC is 2025.

For more information and updates, please visit The California Road Charge website: <https://www.californiaroadchargepilot.com/>.

For more information on RUC West, please visit <https://www.rucwest.org/>

### **FINANCIAL IMPACT**

None. This is an information item.

### **CAC POSITION**

None. This an information item

### **SUPPLEMENTAL MATERIALS**

Attachment 1 – Presentation

# California Road Charge Pilot Program

## Citizen Advisory Committee Agenda Item 10



**SAN FRANCISCO COUNTY TRANSPORTATION AUTHORITY**

**July 25, 2018**



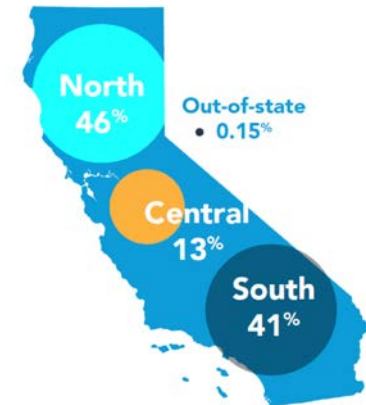
# Road Usage Charge (RUC)

- ▶ ***What?*** Road maintenance fee based on miles driven rather than gas consumed
- ▶ ***Why?*** The gas tax is an unsustainable and inequitable revenue source due to inflation and fuel efficiency
- ▶ ***Where?*** 14 states in the RUC West consortium
  - ▶ Federal funding for RUC studies
  - ▶ Oregon's RUC program

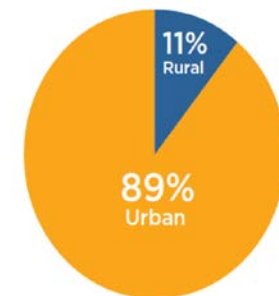
# California's Pilot

- ▶ July 1, 2016 - March 31, 2017
- ▶ 5000 vehicles
  - ▶ 33 government vehicles, 261 light, 55 heavy-duty commercial
- ▶ Diverse participants
- ▶ Revenue neutral rate: 1.8 cents/mile
- ▶ Manual or automated reporting
- ▶ Technology options with/out GPS

Pilot Participant Breakdown by Region



Urban-Rural Distribution of Private Vehicles



# Pilot Results

- ▶ 37 million miles driven
- ▶ 85% satisfied
- ▶ 73% said RUC is more equitable than gas tax
- ▶ 1.8 cents/mile yielded a revenue surplus

Figure 6-6: Participant Views on Ease of Reporting

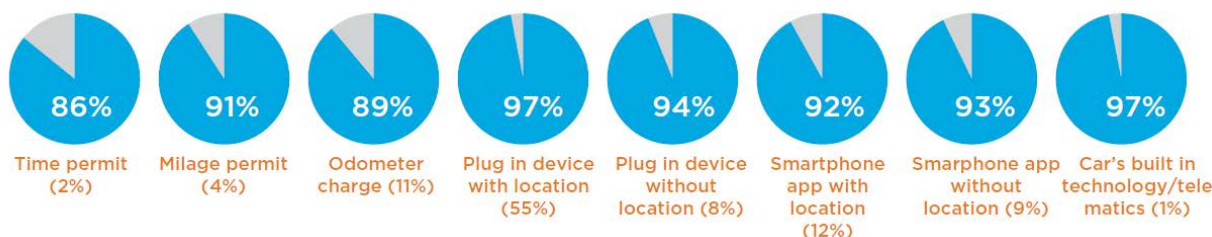
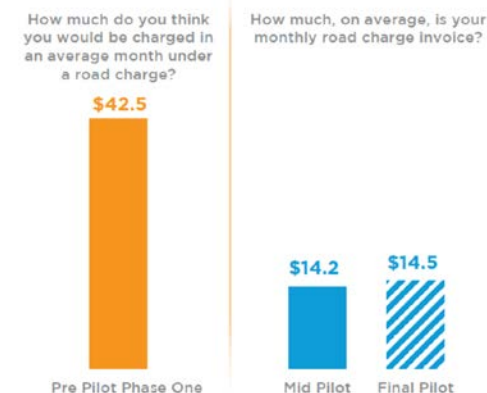


Figure 6-9: Participant Initial Estimate of a Road Charge versus Actual





# Next Steps

- ▶ Technological challenges
  - ▶ Pay-at-the-pump
  - ▶ In-vehicle telematics
- ▶ Political challenges
  - ▶ Interstate travel
- ▶ Administrative challenges
  - ▶ Charge collection, distribution, enforcement
- ▶ Earliest that a RUC could replace the gas tax: 2025



Questions?



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