CALIFORNIA

https://caroadcharge.com/

Pilot Description

Pilot 1: 5,000 vehicles reporting over 37 million miles over a nine-month duration, with seven technology providers.

Pilot 2: Caltrans conducted this study to evaluate how road charge could be assessed using existing business models to create an easy taxpayer experience. Four phases were tested to see how RUC can work with usage-based insurance, ridesharing, electric vehicle charging stations/pay-at-the-pump systems, and autonomous vehicles.

Pilot 3: This research effort and seven-month pilot aimed to engage motorists across rural and tribal communities to explore how their lives may be impacted by a road charge program. The pilot focused on testing the viability of geolocation technology to differentiate between public and private roads, including rural communities and tribal lands. This pilot also included a 50-vehicle sub-pilot with Transportation Corridor Agencies (TCA) to evaluate the potential for a tolling agency to act as a commercial account manager.

Pilot 4: This pilot will be conducted 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. Additionally, it aims 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.

PILOT DATE
Pilot 1: Jul. 2016 – Mar. 2017
Pilot 2: Jan. – Jun. 2021
Pilot 3: Apr. – Sept. 2023
Pilot 4: Aug. 2024 – Jan. 2025

PILOT SIZE
Pilot 1: 5,000+ participants
Pilot 2: 83 participants
Pilot 3: 289 participants
Pilot 4: In progress

Technology Explored or Demonstrated

Pre-paid mileage and time permits, odometer image capture via mobile app, odometer inspection, smartphone app with location, rideshare mobile app, plug-in devices with and without GPS, in-vehicle telematics, heavy vehicle OBUs, fuel pump and electric vehicle chargepoint technologies

Account Manager(s)

Private third-party account managers used for data collection and processing, invoicing, payment processing, fuel tax credits and customer service

Next Steps

Testing charging rate structure in SB 339 Road Charge Collection Pilot - 1st group charged a per-mile rate 2nd group charged based on the fuel economy rating of their individual vehicle

Additional Program Information

Commercial Vehicles: Commercial vehicles and trucks included in 2017 pilot
Electric Vehicles: EVs included among other vehicle types in several pilots
Consultant/Vendor Support: GasBuddy, ChargePoint, Via, EasyMile, AECOM, CDM Smith, WSP, Jacobs, Mercury, EMC, Highlands, UC Berkeley, Azuga, EROAD, IMS, Arvato

Lessons Learned:
- In future demonstrations or a live program additional education is needed to help drivers new to the road charge concept differentiate between mileage reporting options
- The use of verified odometer readings as the basis for periodic billings, in lieu of self-reported values, will help reduce errors and simplify the participant experience
- In-vehicle electronic logging devices are well-suited for supporting road charges in heavy trucks.
- Continual and clear coordination and communication are needed to maintain compliance
- Multiple customer support and outreach mediums are critical to participant satisfaction
- Instructional materials help promote a positive enrollment experience while reducing customer service inquiries
- California envisions their DMV running a passenger vehicle RUC system and the Department of Tax and Fee Administration, which administers IFTA, running a commercial vehicle system. See the 2024 Interim Report: https://caroadcharge.com/media/3gcpdr0y/ca-sb-339-interim-pilot-report_final_508c.pdf

Phasing and Highlights

2014 SB 1077 is introduced, directing creation of a RUC

2015 First road charge pilot designed, executed statewide and findings published.

2017 SB 1328 is introduced, which is an extension of SB 1077

2018

2019 Four-phase demonstration is introduced and aimed at evaluating emerging technologies

2021 Live operations of four-phase demonstration; SB 339 is introduced, extending all existing road charge laws until 2027; collection pilot is authorized

2022 Findings of the four-phase pilot are released

2023 Public/private road charge pilot is executed

2024 SB 339 Road Charge Collection Pilot launched; SB 339 Road Charge Collection Pilot Interim Pilot Report released

2035 In accordance with Advanced Clean Cars II regulations, only zero emission vehicles will be sold in the state