



CALIFORNIA ROAD CHARGE PILOT PROGRAM

2017 | Highlights
Senate Bill 1077

With the passage of Senate Bill 1077 (DeSaulnier, 2014), California demonstrated the commitment and foresight to investigate a long-term, sustainable transportation funding mechanism as a potential replacement to the gas tax, known as a “road charge.” Taking direction from the Legislature, California completed the largest road charge research effort in the nation to date, piloting more than 5,000 vehicles that reported in excess of 37 million miles over a nine-month duration. These statistics only serve to reinforce Californians’ desire for mobility, a safe and reliable transportation system, and an improved overall quality of life.



FOUR PHASES, THREE YEARS, ONE PURPOSE

The purpose of the California Road Charge Pilot Program was to provide objective information for policymakers in response to Senate Bill 1077. As the sponsoring agency, the California State Transportation Agency (CalSTA) managed the pilot program through the California Department of Transportation (Caltrans) working closely with the California Transportation Commission, the Road Charge Technical Advisory Committee (TAC), and external stakeholders.

Phase 1: Conducted 12 statewide public meetings, formulated design principles for what methods and technologies to test, and selected evaluation criteria to assess the results.

Phase 3: Participants representing all regions and demographics of the state drove, reported miles using a method and account manager of their choice, made simulated payments and provided feedback on the pilot.

Phase 1: Design
Jan-Dec 2015

Phase 2: Setup
Jan-Jun 2016

Phase 3: Operate
Jul 2016-Mar 2017

Phase 4: Report
Apr-Dec 2017

Phase 2: Built and tested the systems and technologies envisioned by the TAC, recruited thousands of statewide volunteers, and enrolled over 5,000 vehicles to participate in the pilot.

Phase 4: An independent evaluator analyzed pilot data and participant input gathered throughout the pilot. CalSTA worked with Caltrans to develop a findings report.

Historically, transportation funding has been impacted by two main factors: inflation and vehicle fuel efficiency. Until this year, with the passage of the Road Repair and Accountability Act of 2017 (Senate Bill 1), the state gas tax had not been adjusted for inflation since 1994, which significantly reduced its purchasing power. Senate Bill 1 adjusted fuel rates for past inflation and includes future inflation adjustments: hence, solving the inflation issue and delaying the expected transportation funding shortage by a decade or more. However, the impact of improving vehicle fuel efficiency remains an issue, especially as new vehicles sold in the coming decades are expected to be much more fuel efficient.

PILOT FINDINGS

Mileage Recording and Reporting Options

- Manual options provide the highest degree of privacy and data security, but will in all likelihood be the most difficult to enforce, and could be costly to administer
- Plug-in devices are the most reliable options, however as new technology emerges this methodology could be obsolete by the time a road charge program is adopted
- More technologically advanced methods, such as the smartphone application with location services and the in-vehicle telematics show great promise, but need further refinement



Third-Party Vendor Observations

- The pilot was successful in studying the viability of using third-party vendors
- Demonstrated the ability to offer value-added features as an enhancement to the user experience

Privacy and Data Security

- Privacy and data security provisions were implemented, ensuring pilot participant information was secure
- No breaches or complications
- Privacy and data security were not of significant concern for the majority of focus group participants

Manual Reporting Methods:

- Time Permit – pre-payment for an unlimited amount of driving for a fixed period of time
- Mileage Permit – pre-payment for a fixed number of miles
- Odometer Charge – reports miles driven periodically and post-pays for the number of miles traveled since the last odometer reporting

Automated Reporting Methods:

- Plug-in Device – reports miles electronically with a device that plugs into a vehicles data (OBD-II) port
- Smartphone (with and without location awareness) – reports miles using a smartphone app
- In-Vehicle Telematics – reports miles using technology integrated into vehicles

86% satisfied with mileage reporting method

74% satisfied with account manager chosen for the pilot

62% using technology chose a location-based mileage reporting method

PILOT FINDINGS

Participant Feedback

Of those participants that responded to the surveys:

73% felt a road charge was a more equitable transportation funding solution than the gas tax

87% found participating in the pilot easy

85% overall pilot satisfaction, which is further supported by the low rate of 4% attrition

61% are more aware of the amount they pay for road maintenance

Communications and Acceptance

Communications were developed primarily to recruit and retain pilot participants. More than 5,000 vehicles participated for the duration of the pilot, however certain demographic targets and sub-targets goals set by the TAC were unattainable. Specifically, the most difficult targets to convert from volunteer to participant were rural, low-income, and certain ethnicities/races.

- Low attrition rate for the duration of the nine month pilot
- Program website and newsletters were vital to pilot participant retention and communications
- Over 60% participant response rate for all surveys
- 81% stated a road charge model should continue to be researched
- 91% willing to participate in another road charge pilot

I think (a road charge) is a good idea, there are a lot of unknowns and it still has to be fleshed out, but in general I think it is a fair opportunity for a majority of people to pay equitable shares."

- San Luis Obispo, Plug-in device with location user

BY THE NUMBERS

The California Road Charge Pilot Program achieved many firsts:

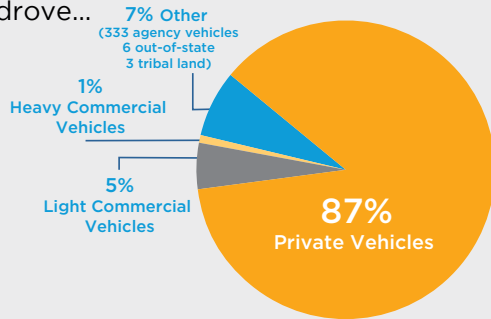
- Maintained more than 5,000 participating vehicles over a nine-month pilot
- Demonstrated six reporting and recording methods
- Offered manual, low tech, and high tech reporting methods
- For the first time included light and heavy commercial vehicles

Over the course of 9 months

JULY 2016 ●●●●●●●●●● MARCH 2017

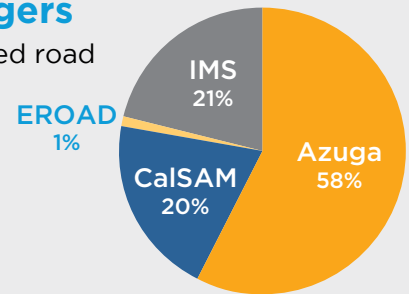
5000+ vehicles statewide

that drove...



4 account managers

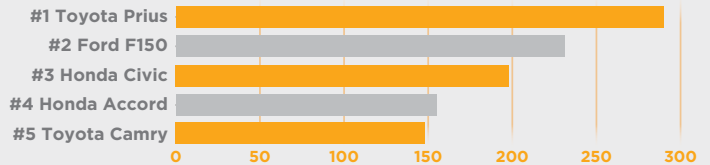
managed and maintained road charge accounts for...



37+ million miles

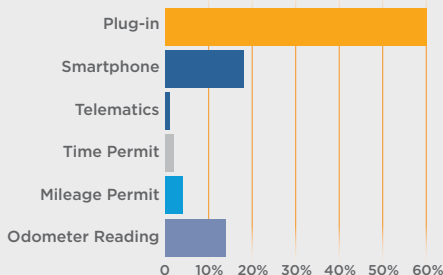
on California roads using...

Top 5 participating vehicles:



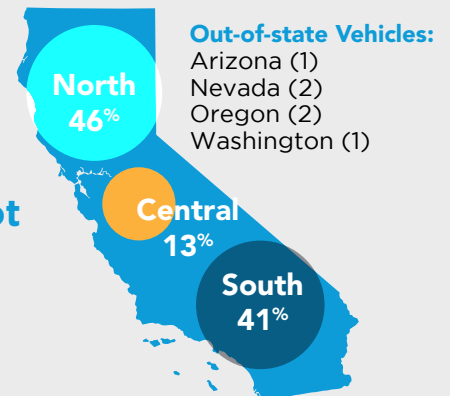
6 mileage recording

and reporting methods...



The heavy vehicle mileage meter used by our heavy trucks represented in the pilot makes up 1%

Making it the largest road charge pilot in the nation to date.



Out-of-state Vehicles:

- Arizona (1)
- Nevada (2)
- Oregon (2)
- Washington (1)

WHAT HAPPENS NEXT?

The Road Charge Pilot Program successfully tested the functionality, complexity, and feasibility of the critical elements of this new potential revenue system - road charge - for transportation funding. However, some questions remain unanswered, necessitating additional investigation into the mechanics and policy issues of implementing a road charge in California.

The Road Charge Pilot Program confirmed the viability of many aspects of a user-based transportation revenue mechanism. Yet, many obstacles must still be evaluated before transitioning from a gas tax to a road charge is considered. Purposeful research, deliberative planning, and careful application, in a fully transparent process, will help to minimize the risks associated with adopting any new transportation funding mechanism.

The Road Charge Pilot Program was an initial step in the journey towards exploration of sustainable funding solutions, however there are still many miles to go to reach the destination before an implementation decision can be considered. **Learn more at www.californiaroadchargepilot.com/final-report**

Proposed Research:

- *Pay-at-the-Pump*
- *In-Vehicle Telematics*
- *Technology Forum*

"I believe this pilot program accomplished the objectives prescribed in Senete Bill 1077 and provides valuable information that will prove helpful in assessing whether to seek adoption of a road charge mandate in the future as an important long-term funding mechanism for California's highway system."

- Brian Kelly, Secretary of Transportation