Road Charge Pilot Design Recommendations

Executive Summary

An efficient transportation system is critical for California's economy and quality of life. The revenues currently available for highways and local roads are inadequate to preserve and maintain existing infrastructure and to provide funds for improvements that would reduce congestion and improve safety. Because of improving fuel economy, motor fuel taxes are ineffective methods of meeting California's long-term revenue needs; they will steadily generate less revenue as cars and trucks become more fuel efficient and alternative sources of power are identified. By 2030, as much as half of the revenue that could have been collected will be lost to fuel efficiency.

In an effort to address this problem, in 2014 the Legislature passed and the Governor signed into law Senate Bill (SB) 1077, establishing a Technical Advisory Committee (TAC) under the California Transportation Commission (CTC). The TAC was assigned the task to formulate recommendations for the design of a pilot project to explore the risks and benefits of road charging as an alternative to the gas tax. The CTC in consultation with the California State Transportation Agency (CalSTA) identified and appointed a 15-member TAC representing a broad-spectrum of individuals and a diverse group of stakeholders from across the state.

The TAC publically convened monthly throughout the state to discuss various policy and technical issues related to the design and implementation of a road charge pilot program. The law provided policy, design criteria and privacy protections guidance to assist in the TAC's deliberations and recommendations in the development of the pilot to test road charging in California.

This report consists of the key policy and design recommendations the TAC has concluded are critical to be implemented and studied during the pilot phase of the program. In addition to specific recommendations the TAC has also identified areas that will need further consideration at the completion of the pilot program.

The TAC recommendations are broken down into five categories: 1) Technical and Organizational Design, 2) Privacy, 3) Data Security, 4) Enforcement, and 5) Other Policy Issues and Recommendations. Each of these categories were thoroughly researched and publically examined by the TAC prior to formulation and adoption of the final recommendations. The TAC took proactive measures to ensure public engagement and input throughout the process.

The table below summarizes the recommendations of the TAC based on category with a thorough discussion of each recommendation in the body of the report.

Topic	Recommendation
Technical & Organizational Design	The pilot should offer drivers a choice in mileage recording methods.
	The pilot should offer drivers a choice in account managers.
	Out-of-state vehicles should be included in the pilot and simulate payment for driving on California roads.
	The pilot should test an open system design.
	The pilot should test the interoperability of California's system with that of other states.
	The pilot should include individuals, households, businesses, and at least one government agency.
	The pilot should include a cross-section of at least 5,000 vehicles that are reflective of the fleet currently using California's road network.
	The pilot should offer methods to exempt miles driven on private roads or out of state.

Topic	Recommendation
Privacy	The pilot should feature specific governance, accountability, and legal protection approaches for protecting privacy.
Data Security	The pilot should test ten data security features: Authentication, Authorization, Encryption, Data Modification Notification, Data Masking, Data Storage, Data Transmittal, Data Destruction, General IT Network Security, and Third Party Data Security System Verification.
Enforcement	The pilot should check for anomalies in mileage reporting; such as ensuring mileage permits and odometer readings are current, and reviewing electronic logs of the automated distance measurement operational concepts.
Other Policy Issues & Recommendations	**Income equity implications of a road charge** - Once the road charge pilot project yields data about the types of vehicles owned, mileage driven and opinions held by the participants, more in-depth analysis should be conducted on impacts on lower-income persons. The TAC recommends this issue be taken up in any future phase of road charge policy development work.
	Potential differential impacts on urban vs. rural residents - The TAC recommends that this issue be carefully monitored during the pilot, and that impacts of the road charge on rural drivers when compared with their urban counterparts should be assessed. The recommended composition of the volunteer pool reflects this concern and oversamples rural participants to ensure sufficient data is available to fully assess the impacts of the road charge on rural drivers.
	Payment Simulation Options for the Pilot - TAC recommends the simulation of payments be tested during the pilot utilizing online and mail payment options, studying the administrative costs of each.
	Rate Setting for the Pilot - The TAC recommends that in order to adequately assess the ability to invoice based on per-mile rates, a revenue neutral rate should be developed for the pilot program.

With the completion and submittal of this report the next phase of implementation and deployment of the pilot program resides with CalSTA. Moving forward the TAC will continue to meet periodically to receive updates on the progress of the pilot, to provide advice to CalSTA and to clarify any recommendations presented in this report.

Pursuant to SB 1077 the TAC will receive the final report on the findings of the pilot, providing comments and recommendations to CTC for inclusion in the Annual Report to the Legislature.