Executive Summary

Senate Bill (SB) 339 (Wiener, 2021) offers one high-level objective for California's forthcoming pilot: *"to identify and evaluate issues related to the collection of revenue for a road charge program."* SB 339 directs the Road Charge Technical Advisory Committee (TAC), to recommend design features for the implementation of a road charge pilot to the California State Transportation Agency (CalSTA). SB 339 also directs the TAC to develop a "fee per mile travelled" for the pilot. In addition, the bill allows the TAC to recommend criteria for evaluating the pilot to CalSTA, who is responsible to implement the pilot program, in consultation with the California Transportation Commission and other appropriate state agencies.

At its September 16, 2022, TAC meeting, CTC staff made preliminary road charge pilot design recommendations to the TAC and these recommendations were approved with the direction to spend additional time researching the proposed number of recommended pilot participants.[1]

This briefing book for the February 2023 TAC meeting refines those preliminary recommendations based on further analysis, responds to the TAC request for additional pilot participant research, and adds evaluation criteria for TAC consideration. The TAC recommendations are broken down into six categories:

1) **Organizational Design** determines which agencies will fulfill the functions of a road charge program – data processing, fee collection, account management, compliance, operations, and oversight – including agency collaboration and accountability.
2) **Revenue Collection** outlines an administrative framework and procedures needed for agencies to fulfill funds collection and to handle the functions of a Road Charge program.
3) **Road Usage Data Collection** covers technology feasibility, rate of adoption, cost, and research and development in technology along with potential partnership options that can be beneficial for data collection in the pilot.
4) **Pilot Participant Design** includes participant recruitment and sampling considerations to fulfill two distinct road charge rate methodologies (flat per-mile and variable per-mile rates).
5) **Privacy & Data Security** recommends privacy provisions to apply to the pilot and enhancements to the TAC's 2021 privacy recommendations.
6) **Rate Setting** discusses the two pilot rate methodologies prescribed by SB 339: one focused on revenue generation and one focused on behavior change. Participating light-duty vehicles are randomly assigned to one of two cohorts of equal size.

Draft Evaluation Criteria: To evaluate the pilot, the briefing book covers five categories of prospective evaluation criteria most relevant to the provisions of SB 339: organizational readiness, energy efficiency, revenue generation, distributional impacts, and privacy and data security. The briefing book offers specific evaluation criteria for TAC consideration. This draft evaluation criteria is included for TAC review, with the intent of possibly recommending the evaluation criteria to CalSTA.

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[1] The TAC also asked California Transportation Commission (Commission) staff to follow-up with Caltrans regarding the feasibility of offering up front incentives to pilot participants (which was a recommendation from Commission staff) and to reach out to Caltrans to ask them to consider the possibility of using a toll agency as an account manager for the pilot. Commission staff followed up on these requests and Caltrans has agreed to take these recommendations into consideration.

The table below summarizes the pilot design recommendations for TAC consideration for each of the categories outlined above.

Category	Pilot Design Recommendations
Organiza-tional Design	• Test a combined state and commercial account management model (hybrid model) to help determine how responsibilities could be shared between public and private entities to provide an optimal user experience at reasonable costs of administration.
Revenue Collection	• Set up a special deposit fund for the pilot that can be either completely managed by the state administering agency (Department of Motor Vehicles) or partly delegated to a private third-party to support fund reconciliation and reporting functions. • Implement a simplified revenue collection process that demonstrates how commercial account managers and the state administering agency could deposit funds accurately and efficiently into the special deposit fund. • Leverage lessons learned from previous road charge pilots to design pilot participant invoices.
Road Usage Data Collection	• Examine how recent technology advances with plug-in device, smartphone apps, and telematics could improve quality and reliability of data for road charge collection and thus reduce the cost of administration. • Focus the pilot experience on helping participants understand policy impacts, mileage reporting, and payment choices, rather than technology tests. • Prioritize technology partners that can provide a positive and integrated user experience.
Pilot Participant Design	• Recruit 2,000 statewide participating vehicles using an oversampling approach to ensure sufficient participation by rural and low-income vehicle owners. • Recruit a broad distribution of vehicles by fuel economy rating and engine type to ensure sufficient representation in each of the two randomly assigned cohorts (flat per-mile fee and variable energy efficiency-based per-mile fee). • Provide start-up funds so participants do not have to pay out of pocket, to avoid discouraging low-income individuals from participating in the pilot
Privacy & Data Security	• Update the privacy and security policy from the 2017 pilot with TAC recommendations to specify roles and responsibilities of the state and its private sector partners in the pilot and management of personally identifiable information.
Rate Setting	• Follow the prescription of SB 339, which calls for two groups of participants in the pilot with distinct rate setting methodologies: one based on a flat per-mile rate designed to generate revenue and one based on energy efficiency designed to encourage usage of energy-efficient vehicles. • Adopt a flat per-mile rate of 2.5 cents per mile. Based on research previously conducted by CTC staff, this reflects the average amount paid in gas taxes by vehicles in California, adjusted upward by 7% to account for administrative costs. • Adopt 3 rates for medium- and heavy-duty vehicles based on vehicle type: 6 cents per mile (vehicle classes 3 & 4), 10.2 cents per mile (vehicle classes 5 & 6), and 15.2 cents per mile (vehicle classes 7 & 8). The rate is based on diesel excise tax, diesel sales tax, and a 7% administrative fee.