

Metropolitan Transportation Commission
Policy Advisory Council

November 19, 2024

Agenda Item 6c

Next Generation Bay Area Freeways Study: Round 2 Findings and Next Steps

Subject:

Findings from the second round of analysis, including evaluation of all-lane tolling, regional mileage-based fee, and express lane pathways, as well as next steps.

Background:

As identified during Plan Bay Area 2050, Bay Area freeways will continue to experience significant congestion in the future and the region will be unable to meet state-mandated greenhouse gas emissions reduction targets in the absence of bold roadway pricing strategies. The Next Generation Bay Area Freeways Study, in partnership with Caltrans, is reimagining an alternative future for our freeways by exploring pricing strategies in greater depth. Staff has shared four updates with the Council so far. The first update kicked off the study in April 2022. At the second update in October 2022, staff shared learnings from the first round of community engagement. In March 2023, staff shared five goals for Next Generation Freeways informed by learnings from the first round of community engagement, and an initial portfolio of “pathways” – packages of pricing and complementary strategies – to advance those goals. In September 2023, staff shared findings from the first round of analysis, which highlighted opportunities and challenges with highway all-lane tolling, among other strategies. Since the last update to the Council, staff conducted a second round of engagement in fall 2023 to refine pricing and complementary strategies and co-created a second portfolio of pathways with the study’s advisory groups (which include several Policy Advisory Council members). Staff has since completed a second round of analysis; this memo highlights key findings in advance of the final phase of the study.

Round 2 Engagement:

In fall 2023, staff conducted two public webinars with 400+ participants, seven small group focused discussions with 43 participants across varied demographics, income groups and occupations, and two local-level stakeholder workshops. The goals were to help participants visualize what travel may look like in 2035 — with and without pricing, gauge how participants

respond to the outcomes, and gather public and partner input to further refine pathways. Opposition to pricing outweighed support. Key themes of opposition were the adverse impacts on low-income drivers, local street congestion, insufficiency of reliable transit alternatives, skepticism about future toll rises and an unfair burden on road users that should instead be on corporations. Key themes of support included time savings, less road rage from lowered congestion, improved environment for highway-adjacent communities, variable time-of-day pricing and revenue reinvestment opportunities. Staff specifically sought input to refine strategies for the second round of analysis. This prompted the inclusion of monthly caps on tolls for low-income households, 2+ person carpool discounts and no tolls during mid-day hours into the Round 2 pathways for analysis. Further, revenue reinvestment priorities were shifted from express bus toward local bus and first/last mile connections in Equity Priority Communities (EPCs), and safety investments and enforcement on local streets and pavement improvements in EPCs were included among the complementary strategies.

Pathways for Round 2 Analysis

The analysis mainly focused on two major pricing strategies – highway all-lane tolling and a regional mileage-based user fee (MBUF). The definition of all-lane tolling was revised from the Round 1 analysis definition to include tolling on all Bay Area highways to support long-term VMT/GHG reduction and prioritize regional uniformity, with tolling only during peak hours to provide added flexibility. The regional MBUF – a simple per-mile fee for all miles traveled on all roads at all times – is a new strategy introduced in Round 2 analysis for two main reasons:

- The state is actively evaluating the potential of a Road User Charge, a per-mile fee for all travel in the state that is intended to eventually replace the gas tax in a revenue-neutral manner. A regional surcharge on top of this statewide fee could potentially lean on this implementation without any significant capital investment.
- This strategy is also unlikely to have any significant diversion effect, which was a key challenge with all-lane tolling.

Both pricing strategies – in combination with cost burden mitigation strategies and transit, road and reparative investment complementary strategies funded by pricing revenues – were analyzed as Pathway 1 Highway All-Lane Tolling and Pathway 2 Regional MBUF.

Further, the analysis also included an evaluation of three different versions of regional express lane networks to understand their performance relative to Pathway 1 and 2. These versions were differed in their approach to implementing express lanes – one with a mix of lane expansions and conversions, one only with lane conversions, and one with dual express lanes.

Round 2 Analysis Findings

While both Pathway 1 and 2 were found to be able to advance GHG reduction while maintaining monthly caps on tolls for low-income households, each pathway furthers some, but not all, goals that were established at the beginning of this study. The table below summarizes the relative strengths and weaknesses of the two pathways as well as the express lane pathways. Further details of analysis, including key performance indicators, can be found in **Attachment B**.

	Relative Strengths	Relative Weaknesses
Pathway 1: Highway All-Lane Tolling	<ul style="list-style-type: none"> • Advances VMT/GHG reduction goals • Improved highway reliability with 14% average reduction in peak-period travel times, for people and goods • More affordable for most residents; those who use highways heavily pay more • Maintains free alternatives during non-peak hours • Less regressive approach, with higher-income households paying greater share of tolls than Pathway 2 • Generates ~\$0.8B annual net revenues that can be reinvested into the transportation system 	<ul style="list-style-type: none"> • Diversion to local streets parallel to highways is an unintended consequence that adversely impacts travel times and safety <ul style="list-style-type: none"> • Lowering local road speed limits can help mitigate diversion but this has a counter-effect of increasing GHG emissions
Pathway 2: Regional Mileage-Based User Fee	<ul style="list-style-type: none"> • Advances VMT/GHG reduction goals • Generates significantly higher revenues (~4x net revenues) that can be reinvested toward more equitable outcomes, including robust transit improvements that could drive 2x the transit ridership growth seen in Pathway 1 	<ul style="list-style-type: none"> • Higher incremental costs for the average household, and a higher share of overall revenues from low-income households • Does not meaningfully reduce congestion or improve travel

	Relative Strengths	Relative Weaknesses
	<ul style="list-style-type: none"> • No major capital infrastructure needed; operations, while potentially complex, will likely cost less as a share of revenue 	<p>times as prices are not sufficiently high on any given facility to incentivize a significant behavior shift</p>
<p>Pathway 4/5/6: Regional Express Lane Networks</p>	<ul style="list-style-type: none"> • Provides a reliable travel lane that carpoolers, transit users and those willing to pay can take advantage of 	<ul style="list-style-type: none"> • Unable to advance goals of VMT/GHG reduction or impact mode shift meaningfully • Costs may exceed the revenue potential at the regional scale

Next Steps:

With Round 2 analysis complete, staff is working with the advisory groups of the study to determine framing of the study’s findings. Along with finalizing the findings, the study is seeking to develop a high-level 10-year implementation roadmap to determine actions that would be needed to make further progress. The final report of the study is slated to be developed by mid-2025.

With a more robust understanding of opportunities and challenges of pricing strategies since Plan Bay Area 2050, staff is seeking to connect this study to Plan Bay Area 2050+ and recommend an update to Strategy T5 in the plan. Road pricing continues to be an essential component in meeting the state-mandated GHG reduction target of Plan Bay Area 2050+. Staff leans toward maintaining highway all-lane tolling as a strategy this cycle, updated with latest specifics of strategy as studied in Round 2 Analysis to better balance tradeoffs between mobility, environmental, and equity outcomes. While the study has not reached a conclusion that highway all-lane tolling is a more equitable and politically acceptable pathway than a regional mileage-based user fee, staff recommends maintaining highway all-lane tolling for the following reasons:

- It yields a **greater VMT reduction** while **managing congestion** on highways, as well as a comparable GHG reduction as the regional mileage-based fee.

- Plan Bay Area 2050+ includes **local street Vision Zero strategies** that have shown potential in **mitigating diversion** from highway all-lane tolling.
- **Affordability is among the top concerns** in recent public polling, and the cost to the public of highway all-lane tolling is half of that with the regional mileage-based user fee.

Staff feels that it will be essential to reconfirm that this strategy meets the moment in future plan cycles (i.e. Plan Bay Area 2060 and beyond) given potential changes in the policy, funding, and mobility landscape (e.g., SB 375 framework, transportation revenue measure, work-from-home dynamics, traffic congestion), and shift direction if warranted.

Recommendations:

Information and Discussion.

Attachments:

- Attachment A: Presentation
- Attachment B: Round 2 Analysis Findings Handout