

Metropolitan Transportation Commission Operations Committee

June 12, 2020

Agenda Item 6b

Bay Area Express Lanes Network Recommendation for Plan Bay Area 2050

- Subject:** Presentation of the Regional Express Lane Network recommended for consideration for Plan Bay Area 2050 (Plan). The recommended Network maximizes multiple outcomes, addresses deficiencies identified in the Plan Bay Area 2050 Project Performance Assessment, and has a cost of \$3.7 billion.
- Background:** At the May 2020 Operations Committee meeting, staff presented an informational item on the Regional Express Lane Network for Plan Bay Area 2050. The presentation included:
- Review of deficiencies identified in the Plan's Project Performance Assessment, including equity, greenhouse gas (GHG) emission increases, and relatively low benefit to cost ratios. The key takeaways included: (1) express lanes must address equity through policy measures rather than network definition; (2) widening projects add more GHG emissions than lane conversion projects in the Plan Bay Area analysis; and (3) coupling express lanes with cost-effective express bus service in transit-supportive corridors can likely offset GHG increases to some degree.
 - Network scenarios that highlighted trade-offs among express lane goals including minimizing GHG emissions, service express bus, completing the pipeline, and connecting to the mega-region;
 - Regional Express Bus concept combined with the Express Lane Network submitted for the Plan; and
 - Regional Express Lane Network goals and future work for the Express Lane Strategic Implementation Plan.
- Commissioner comments on the Network included:
- Support for projects which help minimize greenhouse gas emission increases by not constructing new lanes;
 - Support for a regional express bus network, with emphasis on increasing equity outcomes, filling in transit gaps, and lowering GHG emissions;
 - Support for greater connectivity by closing high-occupancy vehicle (HOV) lane gaps to prevent degradation of HOV lanes; and
 - The importance of increasing public exposure to priced corridors to both introduce and encourage acceptance of the concept of priced corridors in preparation for future changes.
- Based on the analysis presented in May and the ensuing discussion with regional partners and the Policy Advisory Council, staff recommends the Regional Express Lane Network presented in Attachment A. The Network is highly connected, well matched with proposed Regional Express Bus services and weighted toward conversion of existing freeway capacity. It is based on segments that meet multiple express lane outcomes presented in May and adds several HOV conversion projects. Such projects are relatively low-cost ways to increase network connectivity while minimizing GHG increases.

The recommended Network costs approximately \$3.7 billion and includes 530 lane-miles of which 290 miles are lane conversions of existing HOV lanes or general purpose lanes, 80 miles are new lanes, and 160 miles are dual-lane projects where one express lane is an HOV conversion (80 miles) and one is new capacity (80 miles). The recommended Network, which is 70 percent lane conversions projects, better supports GHG goals than the original network submitted for Plan project assessment by focusing more on lane conversion and supporting future Express Bus operations.

As a reminder, staff will be undertaking research on the following topics throughout 2020 to form a Bay Area Express Lane Strategic Implementation Plan: equity, bond financing, express bus, consistent policies, GHG reduction policies, cost saving measures, and strategic funding principles. Staff will present the Strategic Plan for adoption at the end of the year.

Equity is particularly important in this research. Staff will continue to work with express lane partners and the Equity and Access Subcommittee of MTC's Policy Advisory Council to explore a means-based tolling pilot as well as other possible equity approaches, including targeted incentives, complementary bus service, toll revenue for equity projects, origin-destination connections to jobs, environmental equity, and workforce development programs. The group will work closely with San Mateo and San Francisco partners to learn from and collaborate on their ongoing express lane equity studies, scheduled to finish in fall 2021.

Issues:

While the recommended Network better supports GHG goals than the original \$6.1B network, it still includes widening projects and will contribute to increased GHG emissions. Though coupling the Network with express bus routes should mitigate GHG emission increases, it is likely that offsets in other parts of the Plan will be needed to meet the state-mandated GHG goals. A number of complementary strategies are included in Draft Blueprint (e.g., optimizing the transit system through fare integration and seamless payments, expanding bicycle and pedestrian infrastructure and first and last mile options). In addition, one of the most effective strategies to reduce GHG emissions is likely to be tolling all freeway lanes in corridors with robust transit and reinvesting net toll revenue to provide more seamless transit; this is an expansion of the congestion pricing concept introduced by express lanes. Ultimately, however, if the Plan's Draft Blueprint does not meet the state-mandated 19 percent per-capita GHG target, some freeway widening projects from both the Express Lane Network and other county priorities may need to be removed from the Plan.


In addition, it will be important that commitments to complementary strategies and policies to both reduce GHG emissions and ensure equity are carried through project design and implementation. This will require policy approaches, which could include GHG mitigation requirements or prioritizing lane conversion projects that staff will explore over the coming months.

To pay for the \$3.7B Network, staff assumes financing with toll revenue will be necessary. Staff also anticipates toll revenue will be needed to help fund capital and/or operating costs of the proposed express bus system. The amount of the Plan's discretionary funds will dictate how much financing will be needed and whether toll revenue can support both the remaining cost of network build out and express bus service.

While the current COVID-19 emergency will certainly affect carpooling, express bus and express lanes capital funding and operations in the near-term, the mid- and long-term impacts are not yet clear. As a result, it is currently premature to alter their planning assumptions. However, staff will continue to monitor over the coming months and adjust as needed.

Attachments:

Attachment A: Bay Area Express Lanes Network Recommendation for Plan Bay Area 2050 By Construction Type
Attachment B: Presentation


Therese W. McMillan

Express Lane Network Legend

- HOV/GP Lane Conversion
- New Single Lane
- New Dual Lanes
- Direct Connector
- Open/Under Construction

0 3.75 7.5 15 Miles

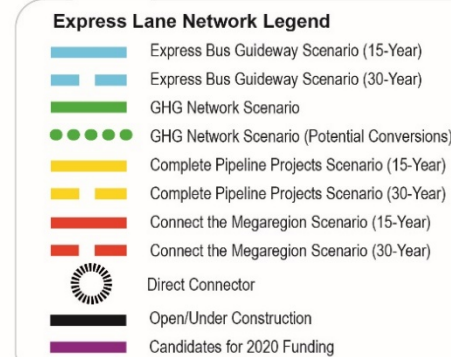
Bay Area Express Lanes Network Recommendation for Plan Bay Area 2050

MTC Operations Committee
June 12, 2020



METROPOLITAN TRANSPORTATION COMMISSION

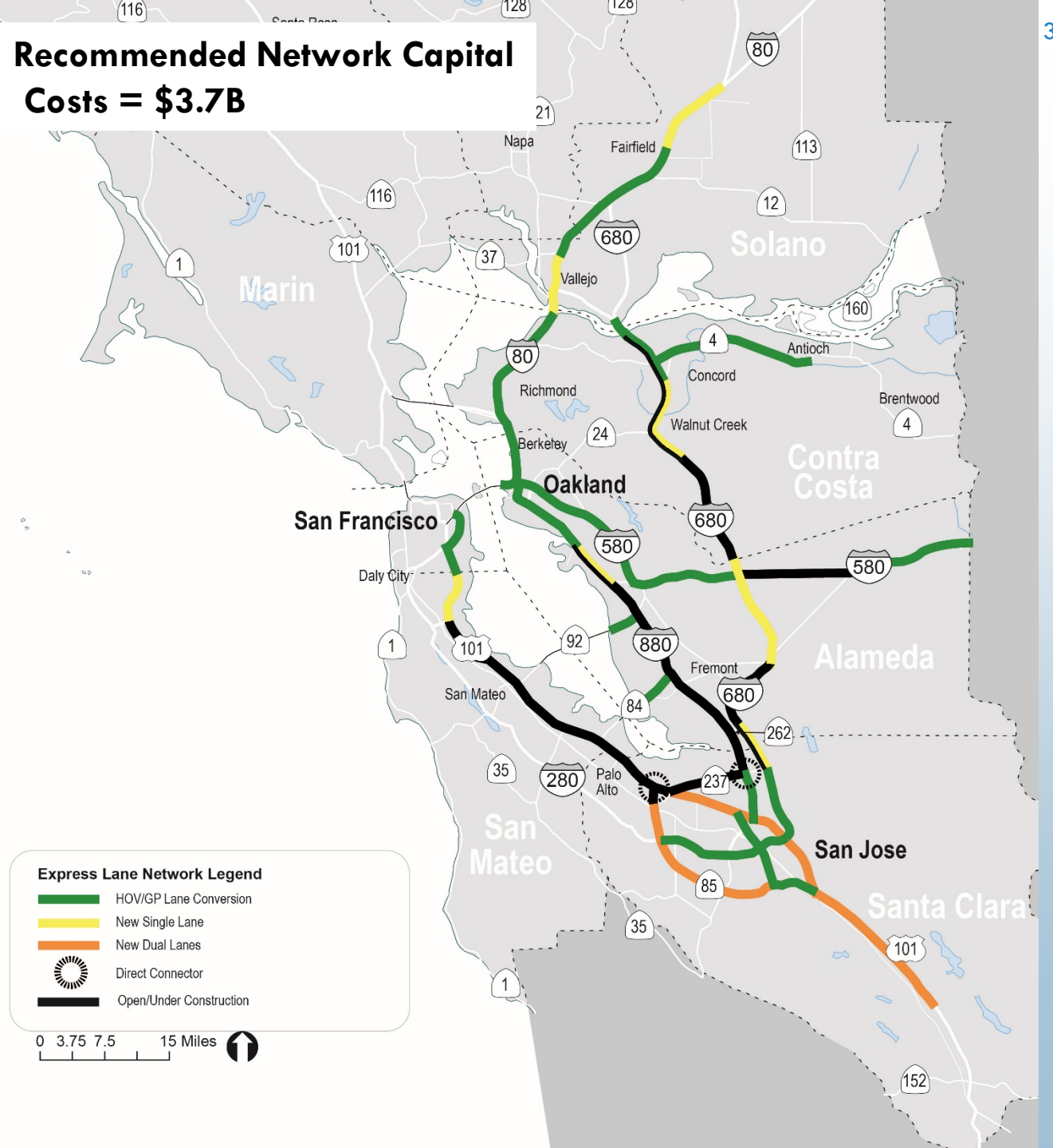
- Many express lane segments meet multiple objectives
- Widening projects increase GHG emissions
- Coupling express lanes with cost-effective express bus can likely offset some GHG emission increases
- Express lanes must address equity through policy



Express Lanes Network Recommendation for Plan Bay Area 2050




**Recommended Network Capital
Costs = \$3.7B**



Express Lane Network Considerations

- Plan Bay Area 2050 must meet an aggressive GHG emissions reduction target by 2035: 19% per capita
- Some prior widening segments now proposed as conversions; however, Network still includes some widening
- Not a large increase in freeway capacity overall

Project Type	Lane Miles
Convert existing HOV lanes	150
Convert existing GP lanes	140
Dual lanes - convert HOV	80
- widen for new lane	80
Add new single lane - widen	80
TOTAL	530



160 new lane miles
less than a 4% increase in
freeway miles

Express Lanes Network Considerations Continued

- Coupled strategies to offset GHG emissions
 - Transit: Express bus, fare integration & seamless payment
 - First and last mile
 - Bicycle and pedestrian infrastructure
 - All-lane freeway tolling in corridors with robust transit
- Require commitments through design and implementation
- May still need to revisit widening for Express Lanes and other highway capacity projects



Equity Commitments

- Continued collaboration with:
 - Express Lane Partners
 - Equity and Access Subcommittee of Policy Advisory Council
- Next Steps
 - Stronger commitment to Equity for Plan Bay Area 2050
 - Begin work to develop means-based toll discount pilot



Next Steps

July 2020

August
2020

Sept
2020

Dec 2020

- **Planning Cmte:**
Plan Bay Area 2050
Draft Blueprint Results
(July)

- **Express Lanes**
Network for Plan Bay
Area 2050:
Possible Reduction of
Widening Projects

- **Planning Cmte:**
Plan Bay Area 2050
Define Final Blueprint
- action item

- **Planning Cmte:**
Plan Bay Area 2050
Advance Blueprint to
EIR

- **Operation Cmte:**
Express Lanes
Strategic Plan
Adoption

Express Lanes Strategic Plan Policy Development