Bay Bridge Forward and I-80 Design Alternatives Assessment (DAA)

Multi-Modal Committee
July 12, 2021

Agenda

• Overview of Bay Bridge Corridor
• Bay Bridge Forward
• I-80 Design Alternatives Assessment
• Discussion
I-80

- I-80 is one of the most congested freeway corridors in the Bay Area
- Buses slowed by congestion
- HOV lane degrades during peak commute hours
  - High rate of carpool lane violators in the HOV3+ lane

Bay Bridge

- Congestion on the East Bay side approaching the bridge is significant, and worse than congestion on the bridge itself
- Buses and HOVs are stuck in congestion on approaches to HOV by-pass lanes
Bay Bridge Forward – Alameda CTC/ MTC Partnership Efforts

- Alameda Co. I-580 WB HOV Lane Extension
- Alameda Co. I-80 WB Bus Lane Extension
- Alameda Co. I-80 Powell Interchange Transit Access Improvement
- Park & Ride Lots along I-580/I-80
- Alameda Co./Contra Costa Co. I-80 Design Alternative Assessment

Bay Bridge Forward

Delivering Near-Term and Low-Cost Transit Priority Improvements
Bay Bridge AM Traffic Close to Normal
HOV Traffic is Slower to Recover

SFOBB WB Hourly Volumes (Tu-Fri)

SFOBB 5-10 AM Volumes by Lane Type (Tu-Fri)

Bay Bridge Forward 2020: Suite of Strategies

Operational Improvements | Cost (2019$, M)
--- | ---
1 ALA 580 WB Bus/HOV Lane Extension | 40
2 ALA I-80 WB Bus Lane Extension | —
3 I-80 Powell Interchange Transit Access Improv. ALA/CC I-80 Design Alternative | —
4 Assessment/Operational Improvements Bridge Approach Bus/HOV Lane Hours of Operations | —
5 I-80 HOV Lane Access Mod/Restrictions Dynamic Bridge Operations: Dynamic transit routing, advanced traveler's information on alternate modes, and others | —
6 Pilot Transbay Express Bus Routes (AC Transit, WestCAT) | 19
7 SFBB Bike Shuttle | —
8 Commuter Parking on I-580/I-80 | —
9 MTC SHIFT Employer Focused | 6
10 Total | 65
Roadmap to Prioritizing Transit + Shared Mobility in the Bay Bridge Corridor

- Relieve congestion at the West Grand approach
- Commuter Parking
- Grow fleet, Add more Transbay transit services
- Manage travel demand

- Fix bridge approaches (580, 80, etc.)
- Commuter Parking
- Grow fleet, Add more Transbay transit services
- Manage travel demand

- All Electronic Tolling, Open Road Tolling (AET/ORT)
- Congestion Pricing, Two-Way Tolling
- Managed Lanes on I-80 and I-580
- HOV Lane Policy: Occupancy, Hours of Operations, Access Restrictions
- Bay Skyway

Bay Bridge Forward Delivers Results

**West Grand Ave On-Ramp Bus/HOV Lane**
- 21 Minutes Saved
- 109% HOV Volume Increase

**Vehicle Occupancy Detection – Pilot Phase 1**
- 78% – 88% Overall System Accuracy Rate

**Commute Management Platform with Kaiser**
- 4900 registered employees

**AC Transit Double Deckers + Increased Service**
- 50% reduction in overcrowded trips (2017)
- 40% reduction in overcrowded trips (2018)
- 7% increase in ridership (2018)

**WestCat Double Decker Transbay Express**
- 24% increase in daily passengers in June 2019
- 19% increase in average weekday passengers over 2018

**WETA Ferry Service Enhancement**
- 28% increase in Alameda/Oakland weekday ridership

**Flexible On-Demand Transit Pilot with UCSF**
- 10,000+ trips served during pilot
- 780+ unique users
West Grand Ave On-Ramp Bus/HOV Lane

Phase 1 Opened in 2019

Phase 2 in Design

Source: MTC

I-80 Westbound Bus Lane and Powell St Interchange Transit Access Improvement

Convert Freeway Shoulder to Bus Lane

I-80 Westbound Bus Lane and Powell St Interchange Transit Access Improvement

Convert I-80 WB Shoulder to Bus Lane

Benefits AC Transit Lines C, F, J
I-580 Westbound HOV Lane Extension

**Convert General Purpose Lane to HOV Lane**

Benefits AC
Transit Lines
B, CB, E, NX, NX1, NX2, NX3, NX4, NXC, P, V

Existing HOV3+

Proposed HOV3+: Limits TBD

Breaking the Project Delivery Paradigm

- Delivery of the I-80 Powell, I-80 Bus Lane, and I-580 WB HOV Lane Projects by 2023
  - Senate Bill 288 Eligibility for Statutory Exemption
  - Design Engineering Evaluation Report (DEER) Eligibility for Caltrans Approval
  - Funding Status
- Continue to Seek Funding to Advance Other Bay Bridge Forward Projects
I-80 Design Alternatives Assessment (DAA)

I-80 DAA Corridor

- SF-Oakland Bay Bridge to Carquinez Bridge
- About 21 miles
- 2 Counties - Alameda & Contra Costa
- 11 Cities
  - Oakland, Emeryville, Berkeley, Albany, El Cerrito, Richmond, San Pablo, Pinole, Hercules, Rodeo, Crockett
I-80 Corridor Bus Service

- **Six** bus operators
- **19** routes
- **34 buses** AM peak hour crossing the Bay Bridge (Pre-Covid)

I-80 DAA Goals

*Identify operational efficiency projects that:*

- Reduce Delays
- Improve Person Throughput
- Encourage Mode Shift
- Improve Travel Time Reliability
Potential Concepts/Strategies

• HOV Lane Access Restrictions
• HOV/Bus Queue Jump Lanes
• HOV Operating Policies
  ➢ Hours of operation
  ➢ Occupancy
• HOV Conversion to Express Lanes
• GP Conversion to Managed Lane
• Dual Managed Lanes
  ➢ Very-high Occupancy
• Express Bus Access to and from Freeway
• Part-time Bus/Transit Lane
• ICM Corridor Enhancements for Transit
• Transit/TDM Strategies
  ➢ New/Modified Transit Service
  ➢ Park and Ride

Evaluation Plan
I-80 DAA Schedule

Discussion