



ALAMEDA COUNTY TRANSPORTATION COMMISSION

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



Multi-Modal Committee

July 12, 2021

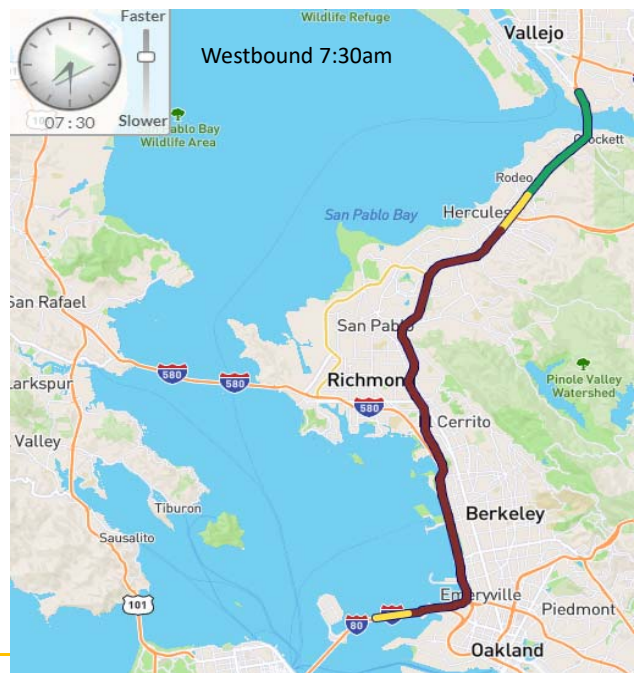
Agenda

- 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



3

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



5



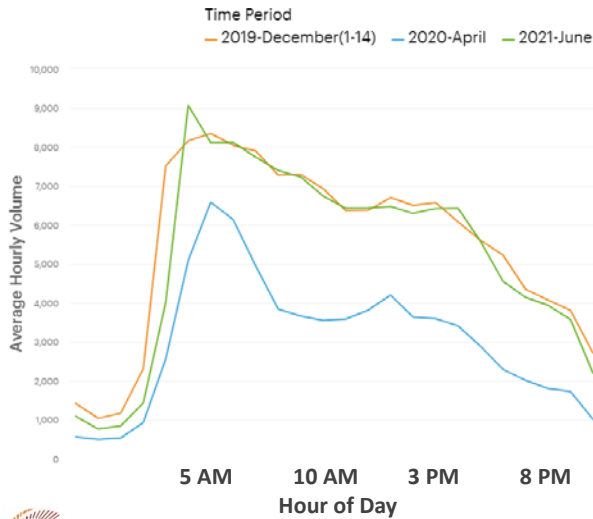
**Delivering Near-Term and Low-Cost Transit
Priority Improvements**



6

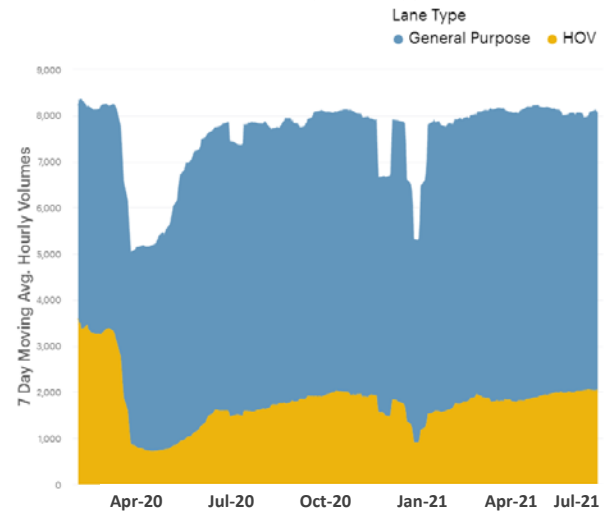
Bay Bridge AM Traffic Close to Normal HOV Traffic is Slower to Recover

SFOBB WB Hourly Volumes (Tu-Fri)



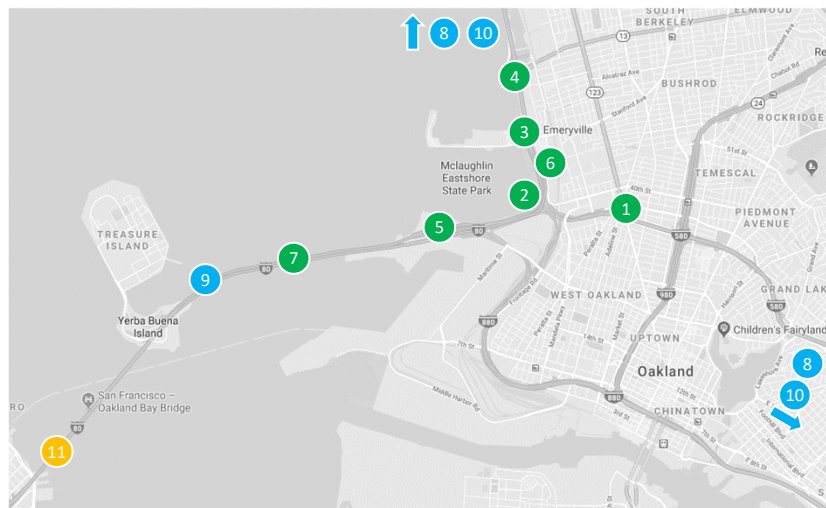
Source: MTC

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



7

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		
6	I-80 HOV Lane Access Mod/Restrictions Dynamic Bridge Operations: Dynamic transit routing, advanced traveler's information on alternate modes, and others	
7		
Express Bus Service/Transit Core		
	Pilot Transbay Express Bus Routes (AC Transit, WestCAT)	19
9	SFOBB Bike Shuttle	
10	Commuter Parking on I-580/I-80	
Shared Mobility		
11	MTC SHIFT Employer Focused	6
Total		65



Bay Bridge

I-80

West Grand Ave

I-580

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.)
- Grow fleet, Add more Transbay transit services
- Commuter Parking
- Manage travel demand

20%
Mode
Shift



- 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



2016



2020



Future

9

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



10

West Grand Ave On-Ramp Bus/HOV Lane

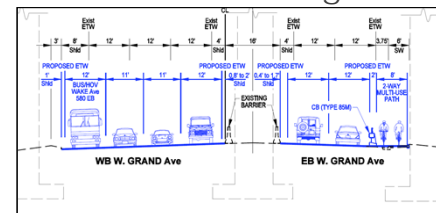


Source: MTC

Phase 1 Opened in 2019



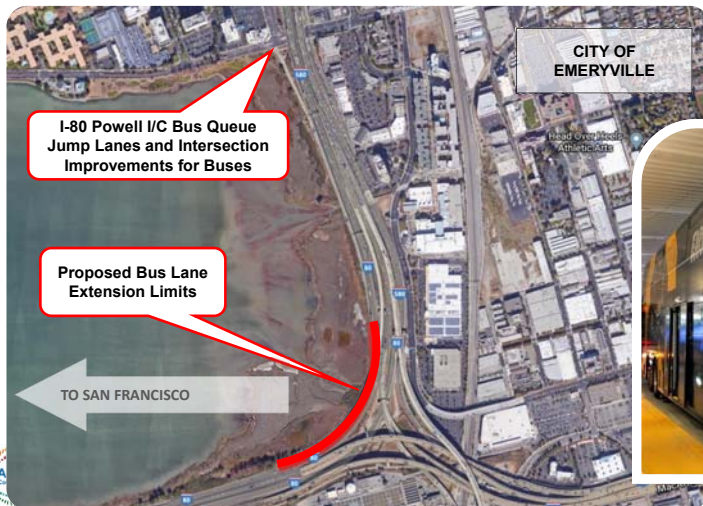
Phase 2 in Design



11

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

Convert Freeway Shoulder to Bus Lane



Convert I-80 WB Shoulder to Bus Lane



Benefits AC Transit Lines C, F, J

12

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



13

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



14



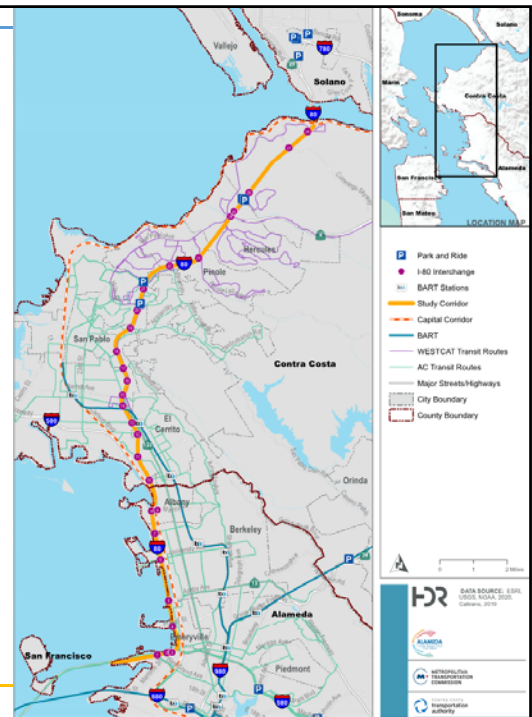
I-80 Design Alternatives Assessment (DAA)



15

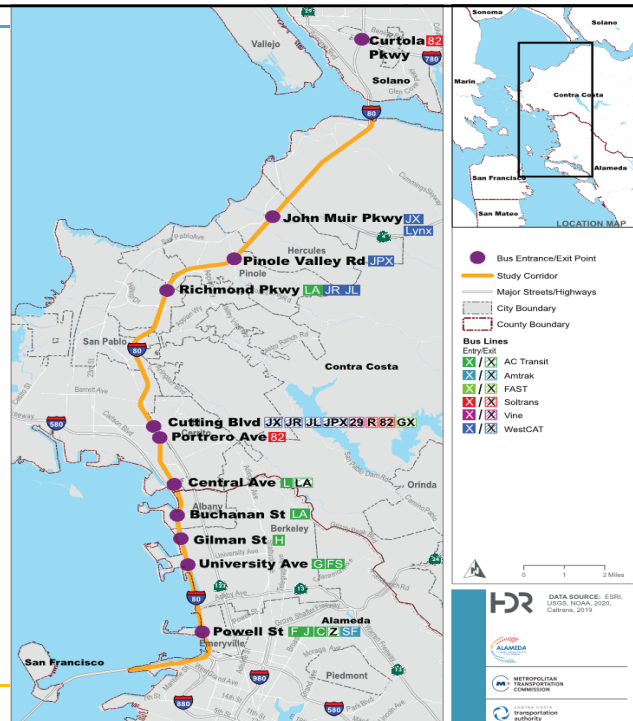
I-80 DAA Corridor

- 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



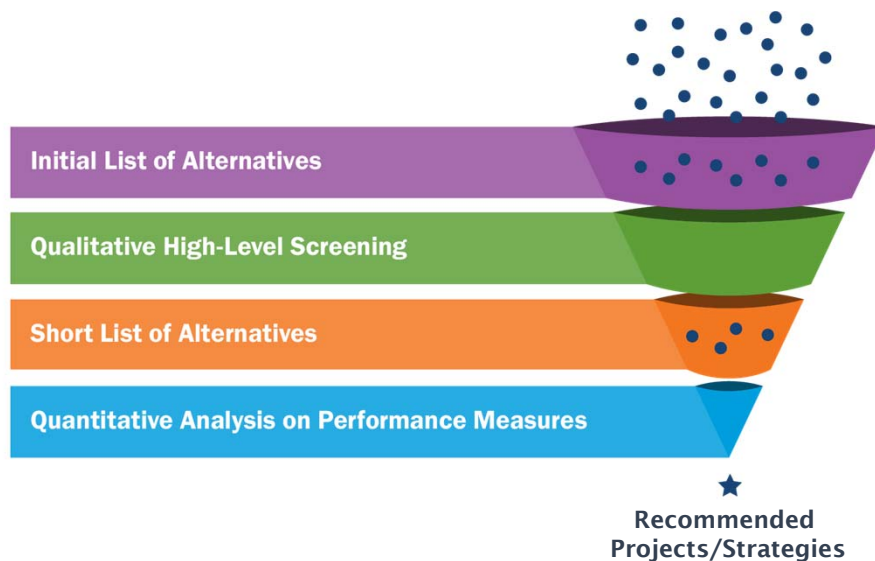
Potential Concepts/Strategies

- 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



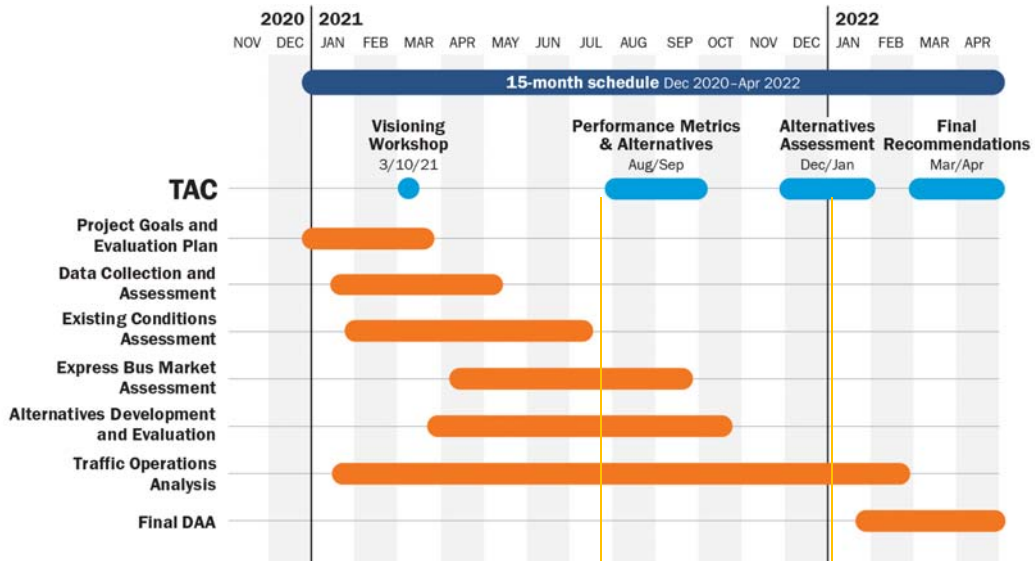
19

Evaluation Plan



20

I-80 DAA Schedule



21

Discussion

22