

**Metropolitan Transportation Commission and Association of Bay Area Governments
Joint MTC ABAG Legislation Committee**

March 12, 2021

Agenda Item 3b

Assembly Bill 455 (Bonta): Bay Bridge Fast Forward Program

Subject: Requires the Bay Area Toll Authority (BATA) to identify, plan and deliver a set of projects and plans to speed up bus and very high occupancy vehicle (HOV) travel in the San Francisco-Oakland Bay Bridge corridor.

Overview: AB 455 would require that BATA, in consultation with the Department of Transportation (Caltrans), several local agencies and public transit operators, “identify, plan, and deliver” various projects to improve travel speeds and reliability for buses and very HOVs (defined as carpools of 5 or more passengers) that would be known as the “Bay Bridge Fast Forward Program” (BBFF). The bill lists the following agencies to be involved in the plan: Alameda County Transportation Commission, City of Oakland, San Francisco County Transportation Authority, and bus operators who provide service from the East Bay into S.F., specifically: AC Transit, WestCat, Solano Express and Amtrak.

Phase 1 Plan Components

The bill specifies two phases for the plan. Phase 1 requires:

1. A detailed set of transit, operational and infrastructure projects to speed up bus and very HOV reliability and speeds in the corridor, including a timeline and funding strategy for each investment.
2. Evaluation and implementation plan for a westbound bus/HOV lane under three scenarios for when the lane would be implemented– a) concurrent with new investments designed to improve bus and HOV travel time reliability and speeds; b) after the investments are made and assuming those investments yield ridership and service growth for buses and very HOVs; c) same as (b) *plus* assumes a toll schedule designed to incentivize bus and very HOV use is implemented.
3. Metering light strategy for morning westbound peak
4. Fare and toll pricing strategy
5. Evaluation and implementation plan for an eastbound dedicated bus/HOV lane
6. An HOV lane enforcement strategy
7. A statement of how the strategies above can maximize the number of people traveling across the Bay Bridge during congested periods.

Travel Speed Reliability Performance Target

The bill sets a “travel speed reliability performance target” for buses and very HOVs to travel at an average of 45 miles per hour during the morning and evening weekday peak commute time except for two days per month.

Phase 2 Plan Components

Phase 2 of the BBFF Program requires a conceptual design for delivering a lane on the Bay Bridge designed exclusively for buses and very HOVs.

Authorization for Bus + HOV Lane Pilot

Most importantly, the bill authorizes BATA, in consultation with Caltrans, to designate during congested periods a lane on the Bay Bridge exclusively for use by buses and very HOVs. The bill does not specify the duration of the pilot program, nor the direction of the lane, suggesting a bus-only/very HOV lane could be designated in both directions.

Annual Report

The bill requires BATA, in consultation with Caltrans and transit operators, submit an annual report to the Legislature on the travel time reliability performance target attainment and strategies deployed in furtherance of the target.

Recommendation: Support and Seek Amendments

Discussion: In June 2019, staff was directed to perform an assessment of implementing a bus-only lane on the bridge deck. Staff performed an initial design and traffic assessment, which was reported to the BATA Oversight Committee in February 2020, the memo for which is attached. Key findings of the analysis are that bus travel was primarily delayed on the approaches to the bridge, rather than the bridge itself and identified \$65 million in various operational and capital projects aimed at speeding up bus and HOV travel and generating increased transit usage in the corridor.

AB 455 is very similar to AB 2824 (Bonta), introduced last year. AB 2824 would have jointly authorized the Commission and Caltrans to implement a bus and very HOV lane on the Bay Bridge for up to one year. AB 455 is more flexible in terms of the timeframe of the pilot program and authorizes BATA to implement the project, in consultation with Caltrans.

Bill Includes Bold Directives That May Not Be Feasible Some of the language in the bill directs BATA, in consultation with partners, to not just plan and evaluate items, but to actually “deliver” them by specified dates despite there being no additional funding, nor BATA having complete control over the speed by which projects are delivered. The bill should be clarified to avoid setting unrealistic expectations but still direct BATA to prioritize and plan for projects that could feasibly be delivered in the near-term.

Implementation Planning Should Follow Evaluation The bill requires evaluation and implementation planning on the same timeline, for all three scenarios examining a westbound dedicated bus/HOV lane. This could require implementation planning for an option that an evaluation indicates would perform poorly on the core goals of improving travel time and reliability. A better approach would be to require an implementation plan only for options that the evaluation identifies as effective.

Travel Speed Reliability Target Unrealistic We support the 45 miles/hour target speed but are concerned that it is not realistic for it to be met on all but two days per month even after improvements are made given the role that incidents play in congestion. We would suggest exceptions be permitted up to six days per month, which would provide some flexibility in recognition that roadway incidents often impact all lanes of travel, especially if HOV lanes aren’t physically separated.

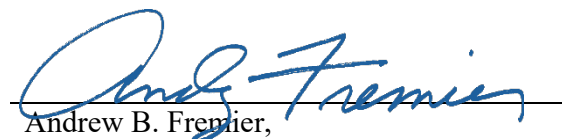
Conceptual Design Requirement is Premature The bill requires a conceptual design for delivering a lane on the Bay Bridge that is used exclusively for bus and very HOVs. Staff has concerns about mandating this work in the bill before the evaluation work or any of the transit, operational, or infrastructure investments identified in Phase 1 are completed. At a cost of approximately \$500,000, such conceptual design work should not be initiated unless clearly warranted based on further study and conditions on the ground. Instead, this provision should be made optional, similar to the option for BATA to conduct a pilot program to designate a lane for exclusive use by buses and very HOVs.

Enforcement Study Outside BATA Authority and Scope of Bill HOV lane occupancy enforcement is a critical issue that must be addressed to ensure travel time savings for bus riders and carpools. However, this is a matter that requires a statewide approach and close engagement and participation from Caltrans, CHP, transit operators and other stakeholders. Secondly, we are concerned that BATA lacks the resources to effectively develop the enforcement strategy described in the bill. Finally, while we would certainly want to participate in any effort on this subject, since Caltrans is ultimately responsible under federal law for maintaining minimum speeds in HOV lanes and CHP is the state's traffic enforcement agency, they are the appropriate lead agencies for the study. We believe the simplest approach would be to remove this component of the study from the bill and instead initiate further conversations on this matter with the California State Transportation Agency.

Summary Staff is supportive of further exploring improvements to bus and HOV speeds in the Bay Bridge corridor as proposed by AB 455 and recommends a position of "support and seek amendment" on the bill. We understand there may be substantial amendments coming that will simplify the bill to focus primarily on authorizing the pilot dedicated lane, but based on what is in print today, we recommend the following friendly amendments which have been shared with Assemblymember Bonta: (1) Authorize project streamlining for projects identified in Phase 1; (2) clarify the Phase 1 provisions so the bill doesn't require BATA to "deliver" items beyond its control; (3) limit the implementation planning to options that perform well in the evaluation; (4) remove the HOV lane enforcement strategy from the study; and (5) make the conceptual design optional rather than required, similar to the authorization to convert the lane, and for consistency with Phase 1, assign the task to BATA.

Bill Positions: See Attachment A

Attachments: Attachment A: Bill Positions
Attachment B: Agenda Item 6a from the February 12, 2020 BATA Oversight Committee Meeting


Andrew B. Fremier,

Bill Positions on AB 455 (Bonta)

Support:

SPUR (sponsor)
Eastbay for Everyone
East Bay Transit Riders Union
Greenbelt Alliance
San Francisco Transit Riders
Seamless Bay Area
The Transbay Coalition
TransForm
Urban Environmentalists
Walk Bike Berkeley

Local Elected Officials:

Oakland Mayor Libby Schaaf
Oakland Councilmember Rebecca Kaplan
Oakland Councilmember Dan Kalb
San Francisco Supervisor Myrna Melgar
Berkeley Councilmember Rigel Robinson
Berkeley Councilmember Rashi Kesarwani
Berkeley Councilmember Terry Taplin
Berkeley Councilmember Lori Droste
Berkeley Councilmember Kate Harrison
El Cerrito Councilmember Tessa Rudnick
El Cerrito Councilmember Lisa Motoyama
Albany Vice Mayor Preston Jordan
Albany Councilmember Peggy McQuaid
San Pablo Councilmember Rita Xavier
Richmond Councilmember Gayle
McLaughlin
Emeryville Mayor Dianne Martinez
Emeryville Vice Mayor Scott Donahue
Emeryville Councilmember John Bauters
AC Transit Director Elsa Ortiz
AC Transit Director Jean Walsh
AC Transit Director Jovanka Beckles
BART Director Janice Li
SF Supervisor Hillary Ronen

Oppose: None on file

Bay Area Toll Authority Oversight Committee

February 12, 2020

Agenda Item 6a

San Francisco-Oakland Bay Bridge: Bus Lane Assessment and Bay Bridge Forward

Subject: Staff to report on: 1) the initial design and traffic assessment of a bus lane on the San Francisco-Oakland Bay Bridge (SFOBB); 2) an update of results from the delivery of Bay Bridge Forward (2016); and 3) a new draft set of recommended Bay Bridge Forward near-term operational, transit, and shared mobility investments to provide additional travel time savings and smoother flows for bus transit and carpool vehicles.

Background: The SFOBB corridor is consistently ranked as one of the most congested corridors in the region. In particular, during the morning commute hours, severe traffic congestion exists at each of the major approaches from I-80, I-580, I-880, and West Grand Avenue, which, in turn, causes delays to buses and carpool vehicles accessing the high-occupancy vehicle (HOV) by-pass lanes at the toll plaza.

Per the direction of Chair Haggerty at the June 14, 2019 Metropolitan Transportation Commission (MTC) Operations Committee meeting, staff was requested to perform an assessment of implementing a bus lane on the bridge deck and report back to this Committee at a later date.

In recent headlines, State Assembly member Rob Bonta expressed interest in a legislative solution in support of a bus-only lane on this bridge. In addition, in January 2020, both AC Transit's and BART's Board of Directors have approved resolutions to support a bus-only lane.

MTC staff has led an initial design and traffic assessment on this subject, which has subsequently been vetted with partner agencies, including Caltrans, Alameda and San Francisco County Transportation Authorities, AC Transit, and Cities of Oakland and Emeryville. In short, here are our key take-aways:

- Buses and carpools/vanpools headed to the SFOBB are stuck in traffic. More must be done to move more people in fewer cars and offer travel times savings and reliability to bus riders.
- MTC's traffic analysis finds that there is more congestion during the AM peak at the westbound approaches to the SFOBB, compared to the bridge itself. Similarly, in the PM peak, there is more congestion in the East Bay corridors than on the bridge.
- Fixing these congested hotspots most affecting bus movement at the West Grand Ave, I-580 and I-80 approaches to SFOBB first is the highest priority, in order to have the most immediate impact for riders. Relieving congestion at hotspots will smooth traffic, reduce delays and result in time savings for bus riders.
- We believe implementing and analyzing the effects of these first order fixes is essential to developing an overall gameplay around bus priority opportunities in the Bay Bridge Corridor, including consideration of a bus only lane on the bridge span itself.

Bay Area Toll Authority Oversight Committee
February 12, 2020
Page 2 of 2

Agenda Item 6a

- Our roadmap to prioritize Transbay buses and shared rides calls for a \$65 million investment in Bay Bridge Forward (2020): near-term operational fixes at bridge approaches, expanded bus fleets and robust Transbay bus services, commuter parking, and demand management to encourage a shift to transit and pooling. These building blocks help us make progress towards a mode shift goal of 20% and enable transit supportive strategies within the next 5+ years such as a dedicated bus lane, higher vehicle occupancy requirements greater than 3 persons per vehicle, and managed lanes.

MTC, Caltrans and partner agencies are committed to expedite the delivery of operational fixes to support buses and carpools/vanpools. Staff asks that the Commission issue a \$20 million challenge to MTC/Bay Area Toll Authority, Caltrans, Alameda County Transportation Authority, and Contra Costa Transportation Authority to pool resources, jump-start the proposed near-term operational improvements identified in Bay Bridge Forward (2020) and advance them through the environmental review and design phase.

Issues: None identified.

Recommendation: None

Attachments: Attachment A: Presentation on SFOBB Bus Lane and Bay Bridge Forward


Therese W. McMillian



Bay Bridge Bus Lane Assessment and Bay Bridge Forward

BATA Oversight Committee

February 12, 2020

Why Consider a Bus Lane on the Bay Bridge?

Persistent congestion within the Bay Bridge corridor has renewed interest in a dedicated bus lane to:

- Move more people in fewer cars
- Offer travel time savings and reliability for bus riders
- Accommodate growing travel demand due to strong economy and long-distance commutes



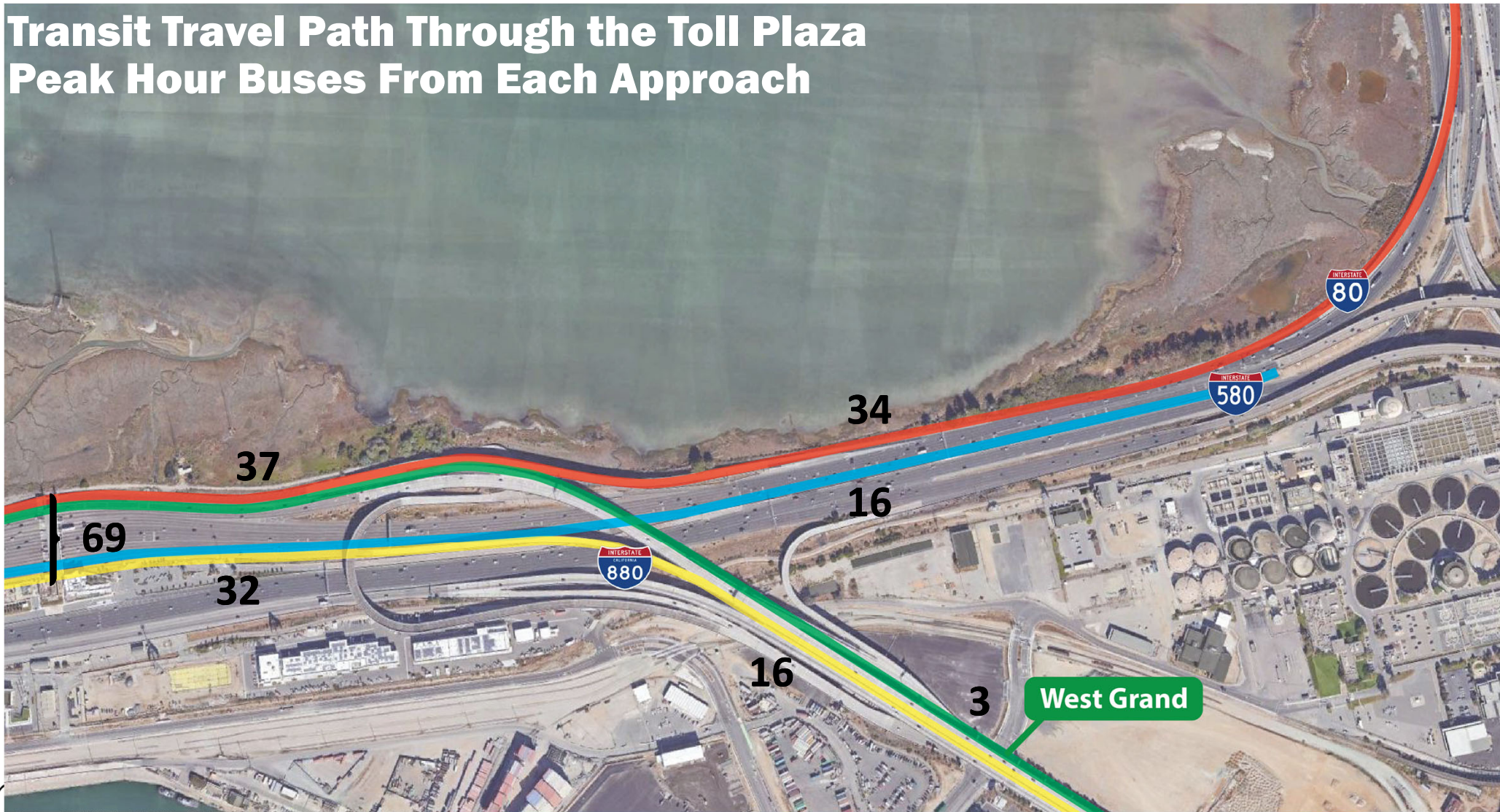
In January 1962, an order was issued restricting the eastbound shoulder for the uses of buses only.

Buses in HOV Lane Has Clear Access through the Toll Plaza and SFOBB

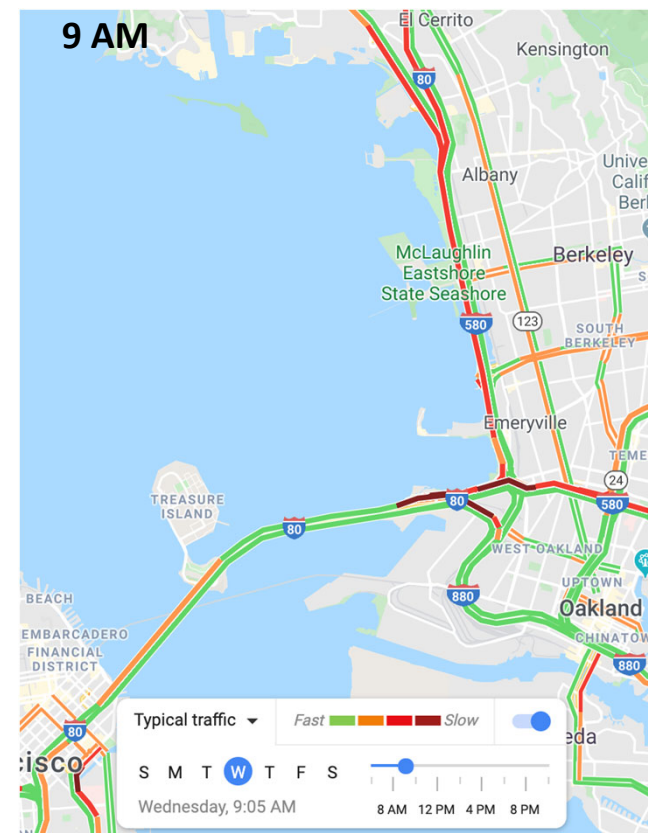
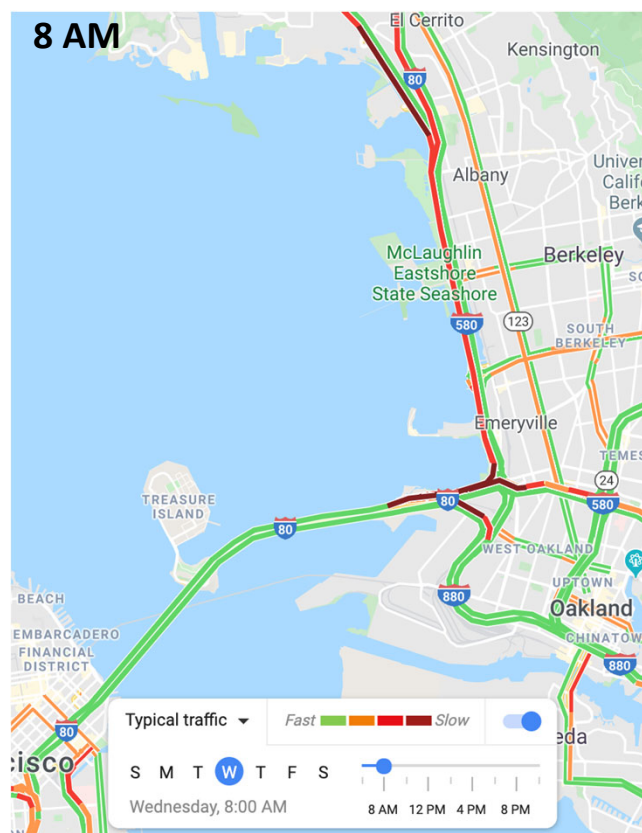
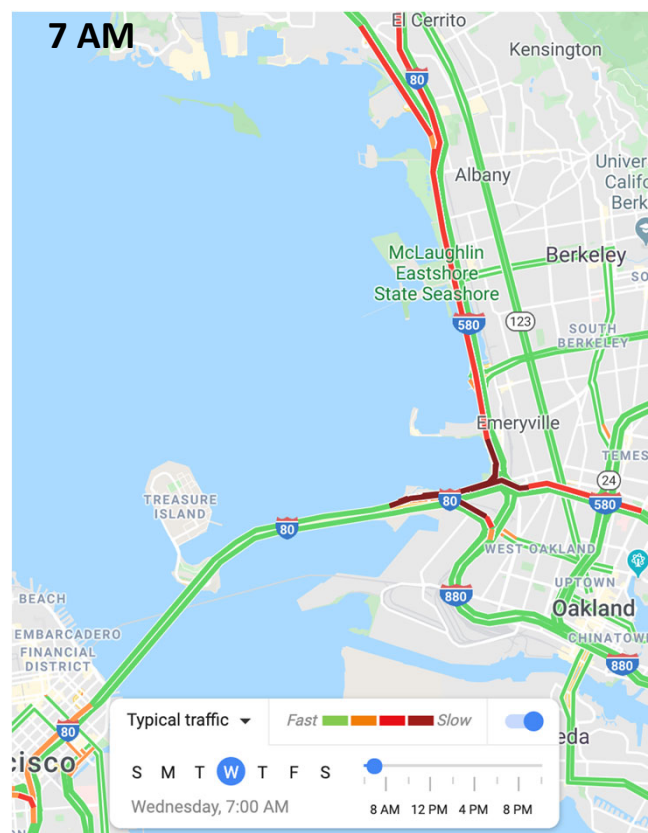
(video footage from Thursday, 1/23/2020, ~ 8 AM)



Transit Travel Path Through the Toll Plaza Peak Hour Buses From Each Approach



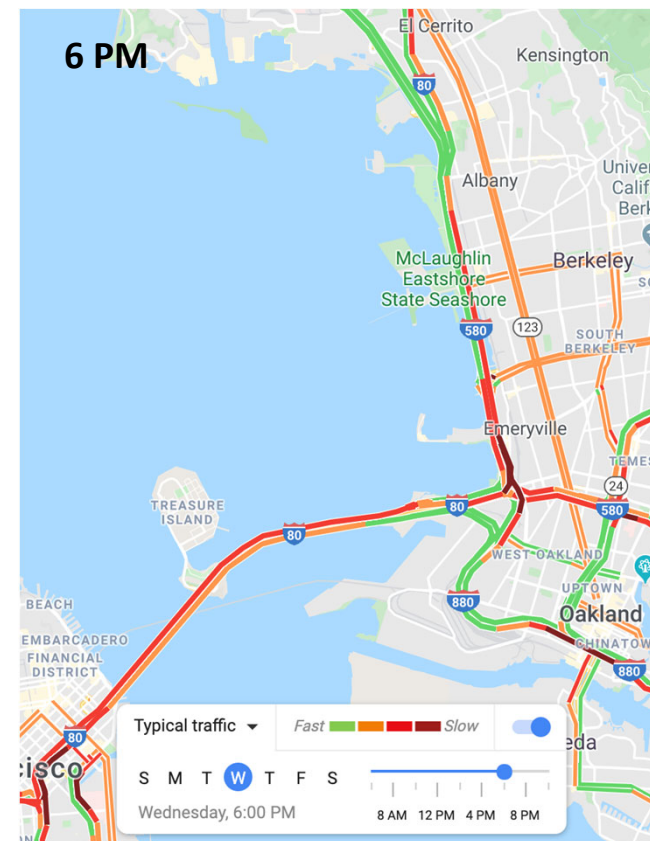
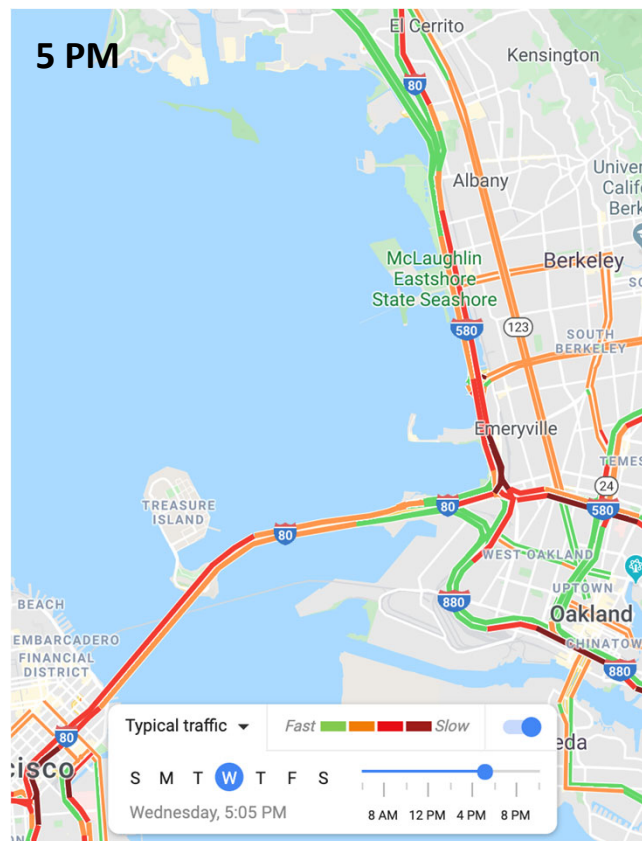
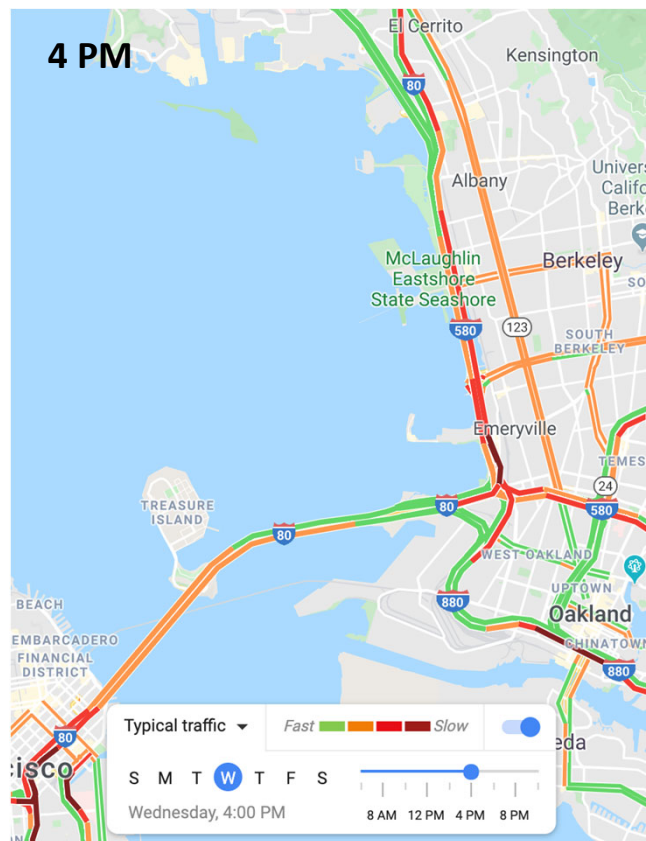
Existing AM Commute to SF: More Congestion on Approaches Than on Bridge



AM Peak Hour	Bay Bridge	I-80 Approach	I-580 Approach	I-880 Approach
Delay (minutes)	6	31	13	11
Speed (mph)	36	23	28	14

Source: Google maps 2020, INRIX average data in April, 2019

Existing PM Commute from SF: More Congestion in East Bay than Bridge



Bay Bridge (Eastbound PM)	3 PM	4 PM	5 PM	6 PM
Delay (minutes)	2	2	2	1
Speed (mph)	44	43	43	45

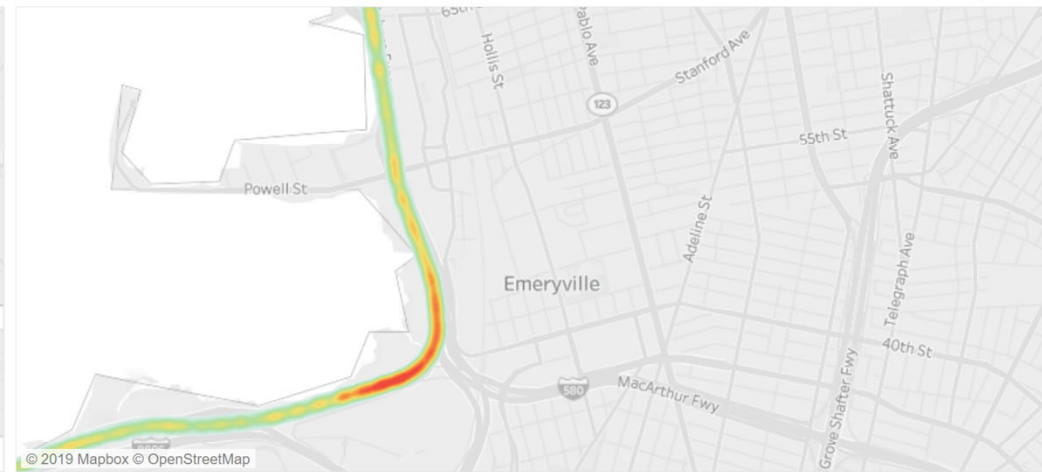
Source: Google maps 2020, INRIX average data in April, 2019

AM Peak: Buses Experience Congestion at the Approaches, not on SFOBB

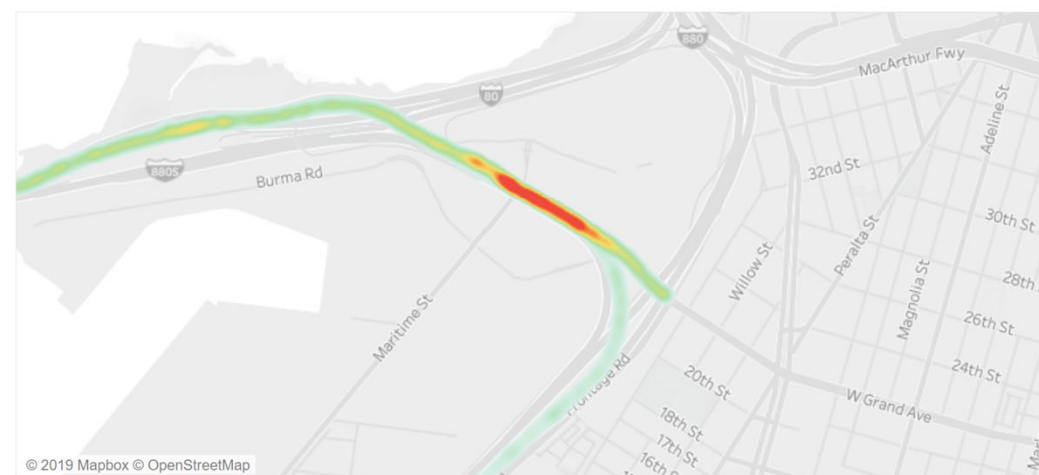
Bay Bridge, West of Toll Plaza



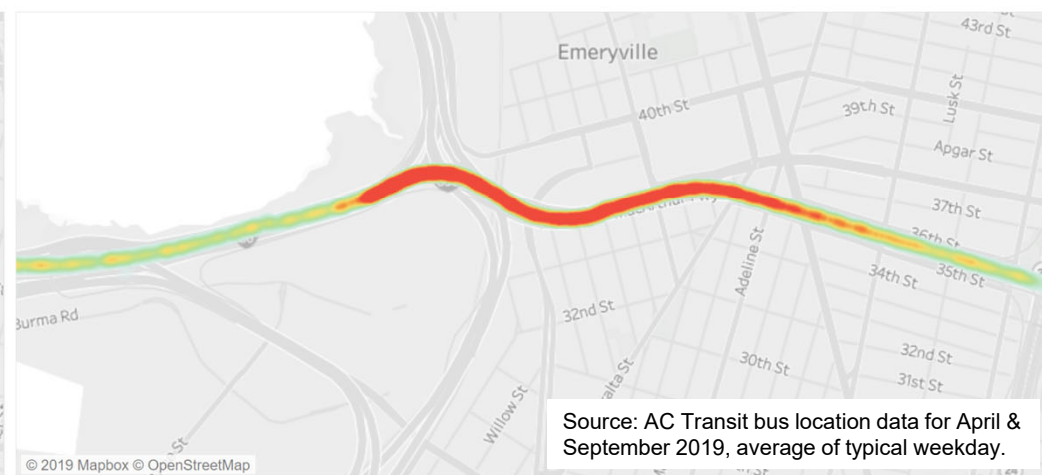
Via I-80



Via I-880 and West Grand



Via I-580



Source: AC Transit bus location data for April & September 2019, average of typical weekday.

Bay Bridge Forward Delivers Results

West Grand Ave On-Ramp HOV/Bus Only 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



Getting to a 20% Mode Shift

20%

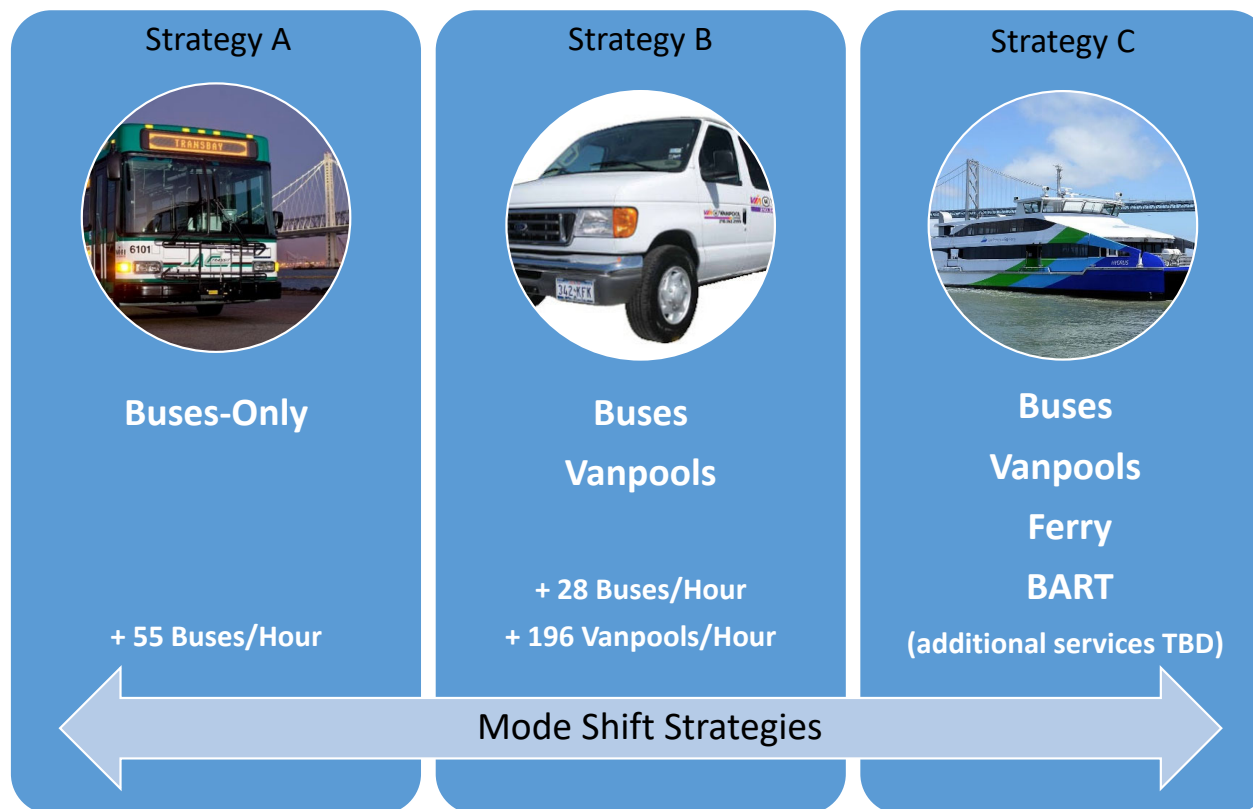
Mode Shift During AM Peak
Period (5 AM – 10 AM)

1,600

Vehicles Per Hour

2,000

Person Trips Per Hour



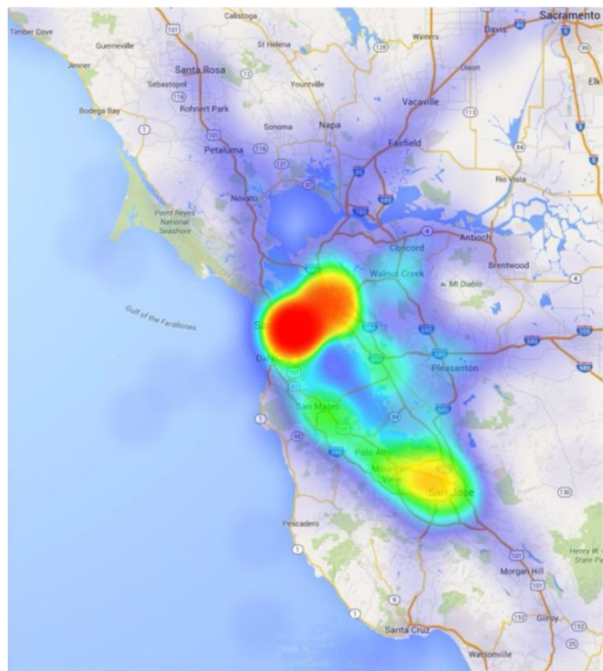
Note: these are example strategies, alternate modes of travel may also include ferry, BART, or other means. In addition, the Salesforce Transit Center has a capacity to operate up to 300 buses per hour, and would be able to accommodate these additional buses.





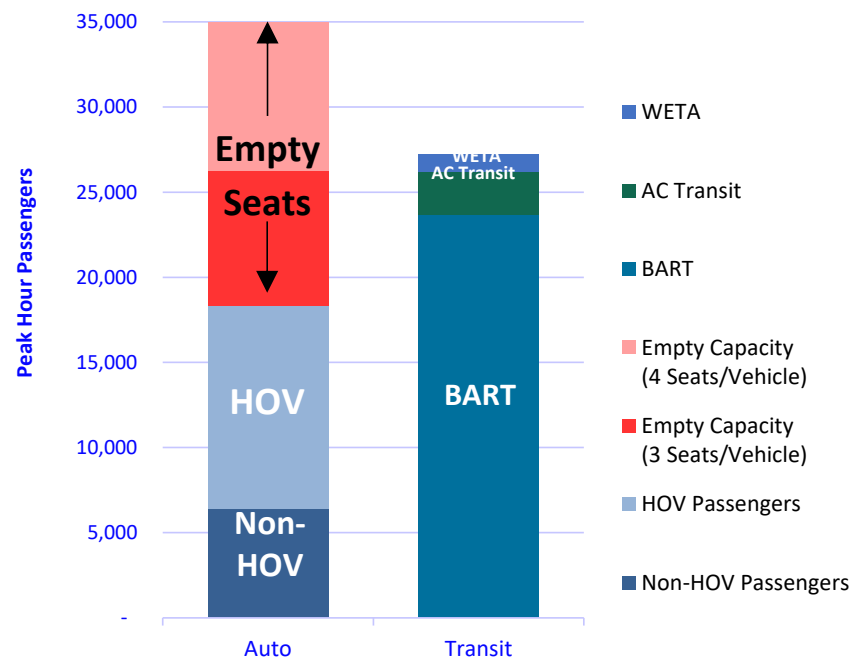
Opportunity: Utilize Empty Seats

Where do Bay Area residents experience the most traffic frustration?



Source: Bay Area Council 2016 Poll

Transbay WB Peak Hour



4 seats/vehicle → 48% seats are empty

16,000+ empty seats/hour = 70% of BART Tube Capacity

Source: BATA 2015, Caltrans 2014, MTC 2015

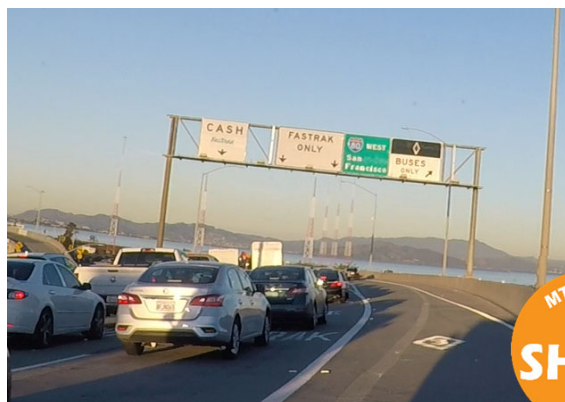


Roadmap to Prioritizing Transit + Shared Mobility in SFOBB Corridor



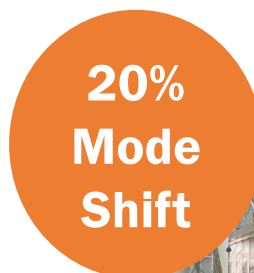
- Relieve congestion at the West Grand approach
- Commuter Parking
- Grow fleet, Add more Transbay transit services
- Manage travel demand

2016



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

2020



- Advance a bus lane, HOV occupancy policies and managed lanes

Future



Bay Bridge Forward (2020) \$65M Investment to Reduce Delay, Move More People and Buses



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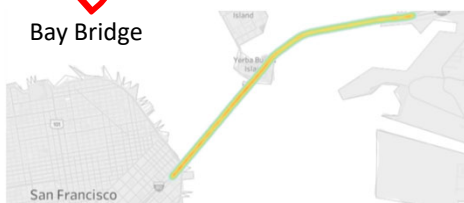
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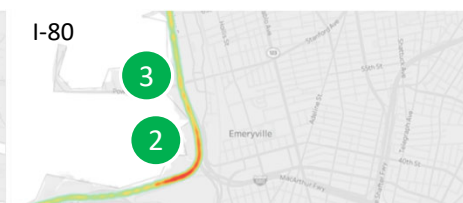
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Operational Improvements	Cost (2019\$, M)
1 ALA 580 WB HOV Extension	40
2 I-80 WB BOS/HOV/Bus Lane	
3 I-80 Powell Interchange Mod/Roundabout ALA/CC I-80 Design Alternative	
4 Assessment/Operational Improvements Bridge Approach Bus/HOV Lane Hours of Operations	
6 I-80 EB HOV Lane Buffer Separation (TBD) Dynamic Bridge Operations: Dynamic transit routing, advanced traveler's information on alternate modes, and others	
7	
Express Bus Service/Transit Core	
8 Pilot Express Bus Routes on ALA 580 from Oak. (AC Transit)	16
9 Pilot Express Bus Routes on I-80 from Hercules (WCCTAC)	
10 Commuter Parking on I-580/I-80	
Shared Mobility	
11 MTC SHIFT Employer Focused	9
Total	65

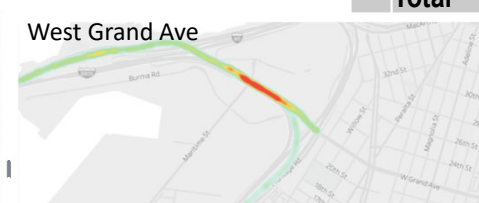
Bay Bridge



I-80



West Grand Ave



I-580

