

SAN FRANCISCO BAY AREA RAPID TRANSIT DISTRICT

2150 Webster Street, Oakland, CA 94612 • P.O. Box 12688, Oakland, CA 94604-2688
510-464-6000

**NOTICE OF MEETING AND AGENDA
BART Bicycle Advisory Task Force (BBATF)**

June 3, 2024
6:00 p.m. – 8:00 p.m.

BBATF Members: Jon Spangler (Chairperson), Jeremiah Maller (Vice Chair), Tyler Morris (Secretary), Maya Chaffee, Rick Goldman, Marc Hedlund, Phoenix Mangrum, Francisco Muñoz, Natalie Makhijani, Estrella Sainburg, and Sebastian Harper.

Chairperson Jon Spangler has called a meeting of the BART Bicycle Advisory Task Force on June 3, 2024, at 6:00 p.m. Public participation for this meeting will be via teleconference only. Presentation materials will be available via Legistar at <https://bart.legistar.com>

You may join the Task Force meeting via Zoom by calling (833) 548-0282 and entering access code 891 9794 0581; logging into Zoom.com and entering access code 891 9794 0581 or typing the following Zoom link into your web browser: <https://us06web.zoom.us/j/89197940581>

If you wish to make a public comment:

- 1) Submit written comments via email to hmaddox@bart.gov using “public comment” as the subject line. Your comment will be provided to the Task Force and will become a permanent part of the file. Please submit your comments as far in advance as possible. Emailed comments must be received before noon May 31, 2024 in order to be included in the record.
- 2) Call (833) 548-0282, enter access code 891 9794 0581, dial *9 to raise your hand when you wish to speak, and dial *6 to unmute when you are requested to speak; log into Zoom.com, enter access code 891 9794 0581 and use the raise hand feature; or join the Task Force meeting via the Zoom link (<https://us06web.zoom.us/j/89197940581>) and use the raise hand feature.

Public comment is limited to two (2) minutes per person.

BART provides services/accommodations upon request to persons with disabilities and individuals who are limited English proficient who wish to address Committee matters. A request must be made between one and five days in advance of Board/Committee meetings, depending on the service requested. Please contact the Office of the District Secretary at (510) 464-6083 for information.

SAN FRANCISCO BAY AREA RAPID TRANSIT DISTRICT

2150 Webster Street, Oakland, CA 94612 • P.O. Box 12688, Oakland, CA 94604-2688
510-464-6000

AGENDA

1. Self-Introductions of Members, Staff, and Guests: All. *(For Information)* 5 min.
2. General Discussion and Public Comment: Jon Spangler. *(For Information)* 5 min.
3. Approval of April 2024 BBATF Minutes: Jon Spangler. *(For Action)* 5 min.
4. Election of At-Large (Non-Officer) Member to the BBATF Standing Committee: Jon Spangler. *(For Action)* 10 min.
5. Richmond San Rafael Bridge Bicycle Access: Dani Lanis, Bike East Bay. *(For Action: potential letter)* 30 min.
6. Summer 2024 BBATF Tabling Opportunities - San Francisco Sunday Streets, Town Life Ecofutures: Maya Chaffee/Jon Spangler. *(For Discussion)* 10 min.
7. BART Next Generation Fare Gates: Jon Spangler. *(For Discussion)* 10 min.
8. Online BART Bike Materials Updates: Jon Spangler. *(For Discussion)* 5 min.
9. BBATF Social Media: Jon Spangler. *(For Discussion)* 5 min.
10. BART to Silicon Valley Update: Director Robert Raburn, All. *(For Discussion)* 10 min.
11. Remembering Bill Pinkham: Director Robert Raburn, All. *(For Discussion)* 10 min.
12. BART Bike Program Updates: Heath Maddox, BART Customer Access. *(For Information)* 5 min.
13. BBATF Membership and Vacancies: Jon Spangler. *(For Discussion)* 5 min.
14. Future Agenda Items: All. *(For Discussion)* 5 min.

DRAFT MINUTES
BART Bicycle Advisory Task Force (BBATF)
April 1, 2024 6:00 p.m. – 8:00 p.m.

BBATF Members: Jon Spangler (Chairperson), Jeremiah Maller (Vice Chair), Tyler Morris (Secretary), Rick Goldman, Marc Hedlund, Phoenix Mangrum, Francisco Muñoz, Bill Pinkham, Natalie Makhijani, Estrella Sainburg, and Sebastian Harper.

Meeting called to order via Zoom by Chair Jon Spangler at 6:04pm

Members in attendance:

Jon Spangler, Jeremiah Maller, Tyler Morris, Marc Hedlund, Phoenix Mangrum, Francisco Muñoz, Bill Pinkham, Cedar Makhijani, Estrella Sainburg, and

BART Director: Robert Raburn
BART Liaison: Heath Maddox

Guests: Maya Chaffee, Bruce Ohlson, Joshua Davis, Susie Hufstader, Sean Funcheon, Alexandra Mckeever

Absent: Rick Goldman, Natalie Makhijani, and Sebastian Harper

Agenda with minutes follows as is:

1. 6:05pm Self-Introductions of Members, Staff, and Guests: All. (For Information) 5min.
 1. Members introduced themselves
2. 6:18pm General Discussion and Public Comment: Jon Spangler. (For Information) 5min.
 1. Joshua Davis comments on his experience with the new fare gates
 1. Trying to get a bike through is awkward without using the accessible gate
 2. Some inconsistency with the clipper card working with the fare gate
 2. Marc mentioned the need for multiple larger gates at stations if one malfunctions
 3. Estrella thanks Joshua for his comments and feedback
 4. Robert thanks Heath for his support of Jon at the Crucible
 5. Jeremiah mentions Silicon Valley Bike Coalition and collaboration possibilities for Bike To Where-ever Day
 1. Heath mentions the permit and application process for events at BART
 6. Tyler mentioned to Heath that the BBATF Member names on the agenda needs to be updated
3. 6:28pm Approval of February 2024 BBATF Minutes: Jon Spangler. (For Action) 5min.
 1. Marc motions to approve minutes, Francisco seconds
 2. Passed unanimously
4. 6:29pm BBATF Member Applications: Jon Spangler. (For Action) 15min.
 1. Michael Sacks—San Francisco County
 1. Michael withdrew his application in support of Maya
 2. Maya Chaffee—San Francisco County
 3. Jon moves to accept her application for membership
 1. Marc seconds the motion by Jon

2. Passes unanimously
5. 6:32pm BART Bicycle Preferred Path of Travel Capital Plan Preliminary Recommendations: Heath Maddox, Susie Hufstader, Fehr & Peers. (For Action) 60min.
 1. Heath introduces Susie and the 'Path of Travel Plan'
 2. Tyler commented on Susie's monstera plant in her background
 1. Tyler suggested installing a trellis to help support it
 3. Jon commented favorably on the bikes hanging up on Susie's wall
 4. Susie begins the presentation
 1. The plan includes grant-ready concept plans
 2. Cost estimates
 3. Recommendation lists
 5. Current phase is Preliminary Recommendations
 6. Phase 1 consists of 10 stations
 1. Balboa Park, Bay Fair, Castro Valley, Coliseum, Concord, Daly City, Hayward, MacArthur, San Leandro, Walnut Creek
 2. 12 more to come in Phase 2
 7. Daly City and MacArthur didn't have stakeholder meetings to keep the project within budget (8 stations were budgeted initially and two more were added)
 8. Proposals for Castro Valley include modifications to the fencing and stairway channels
 9. Proposed for Walnut Creek is a bike path leading to bike lockers
 10. Proposals for San Leandro include a short bike path and updated wayfinding
 11. Open to questions
 1. Bill asks how the signage will look once updated
 1. Susie comments about the extensive updates to way-finding at stations
 2. Director Raburn mentions the East Bay Greenway and right-of-way relating to the railroad
 3. Director Raburn, relating to San Leandro station, asks if the bikeway will be paved
 1. Susie responds that the crossing will be made ADA accessible under a separate project
 4. Marc, relating to Walnut Creek station, asks if there are any improvements to be recommended to improve the crossing safety of the southern slip lanes
 5. Sean, relating to Bay Fair, compliments the proposed bike ramp additions
 6. Phoenix, relating to Bay Fair, asks if the planned commercial redevelopment will impact proposed BART upgrade plans
 1. Susie comments that a study is underway for the impact of those redevelopments
 7. Director Raburn mentions that Sean makes a great point about access
 8. Director Raburn comments that the Walnut Creek station access would benefit from a partnership with the City of Walnut Creek to address slip lane safety concerns
 9. Jon, pertaining to Bay Fair, asks Susie to clarify the proposed upgrades for the stairway channels
 1. Heath comments that an egress study is still needed for all stairway channels
 10. Alexandra comments that the proposed improvements are greatly welcomed to the San Leandro station
 11. Bill comments that the Rock 'N Roll group is working getting Richmond to update their Safe Routes signage to the Bay Trail
 12. Estrella comments that there is a benefit on expanded way-finding signage
 1. Estrella also asks if recommendations for signage how to exit the stations and upgraded lighting are in the pipeline
 13. Jon asks Susie if Grant-Ready equals shovel-ready
 1. Susie says they are different

6. 7:34pm BBATF Bylaw Amendment: Standing Committee Rules: Tyler Morris. (For Action) 15min.

1. Jon introduces the new articles and new bylaws article numbering
2. Estrella asks if there is a max number of times the Standing Committee would be able to meet
 1. Jon comments that there isn't
3. Jeremiah motions to approve and Jon seconds
4. Motion to approve passes unanimously

7. 7:48pm BART Bike Program Updates: Heath Maddox, BART Customer Access. (For Information) 10min.

1. Heath mentions SR2B cycle 3 awards are being handed out
2. Heath discuss the 7th Generation bike locker upgrades coming
 1. Lockers will be double decker with a lift assist
 2. Bottom lockers can be adjusted to conform to larger cargo bikes
3. Daly City station has a new Bay Wheels bike share station
4. Bill asks if North Berkeley BART upgrades will be impacted by future residential redevelopment
 1. Heath mentions that these bike lockers were chosen specifically with those TOD developments in mind
5. Estrella comments that she saw the new bike lockers and is excited about their install
6. Estrella commented that bike signage in the first/last BART car could be updated
7. Francisco commented that maybe digital signage could be updated to help cyclists board trains

8. 8:11pm Future Agenda Items: All. (For Discussion) 5min.

1. Standing Committee 'At Large' Member election
2. Social media updates
3. Bike East Bay Richmond Bridge bike path
4. Next generation fare gate update

Meeting adjourned at 8:14 p.m. by Chairperson Jon Spangler
Next meeting is called for by Chairperson Jon Spangler on June 3rd, 2024 at 6:00p.m.

BART Bicycle Advisory Task Force

May 1, 2024

TO: Bay Conservation and Development Commission (BCDC)
Metro Center
375 Beale Street, Board Room
San Francisco, CA 94105

FROM: BART Bicycle Advisory Task Force

RE: Proposed Closure of Richmond-San Rafael Bridge Bicycle Path Is Unjustified
(BCDC Board Meeting - May 2, Item 8)

The Metropolitan Transportation Committee (MTC) is proposing to replace the multi-use path on the Richmond-San Rafael Bridge (RSR Bridge) with a westbound breakdown lane/shoulder every week from Monday through Thursday. This will leave people who walk or ride bicycles without a safe and direct path of travel between Marin County and the East Bay for four work days every week. **The BART Bicycle Advisory Task Force (BBATF) strongly opposes this proposal. Instead, the BBATF urges the BCDC Board to support a permanent RSR Bridge multi-use path that is open all day, every day (24/7/365) to walkers, bicyclists, and others.**

The draft MTC proposal is inappropriate and seems premature, considering that:

- 1) The final evaluation of the four-year pilot project will not be completed until this summer;
- 2) The two-way bike-pedestrian path and associated bridge changes have not significantly affected traffic congestion, collision rates, or incident-related delays, per the After Study for the Richmond-San Rafael Bridge, Phase I, Section 10.5 (2022) in Appendix B;
- 3) Bicyclists and pedestrians combined made 368,206 trips (326,902 were by bike) across the RSR Bridge since the path was opened in 2019. Over the last 45 days, more than 63% of all bicycle trips — and 64% of bicycle and pedestrian trips combined — occurred on weekdays, per My Sidewalk: <https://reports.mysidewalk.com/3374a0ca74>;
- 4) Restricting sustainable commute options such as walking and bicycling will drastically reduce carbon-free weekday transit options across the bridge, increasing both automotive pollution and greenhouse gas production;
- 5) Closing the bike-ped path appears to violate BCDC Transportation Policies 1 and 4;
- 6) Closing the bike-ped path appears to violate BCDC Public Access Policies 2, 5, and 8.

Closing or restricting the path — especially before the final evaluation report is complete — also runs counter to MTC's and BCDC's goals and policies to foster clean, green, and equitable transportation.

Furthermore, MTC's apparent rush to close the multi-use path during the work week seems to be driven by vocal claims from motorists and business groups — claims that are, overall, not supported by the available traffic data on the Pilot Project.

Bicyclists, pedestrians, and users of e-bikes, scooters, wheelchairs, and other mobility devices need and deserve the access to San Francisco Bay and the connectivity offered by the RSR Bridge multi-use path. The path should be permanently open to everyone who relies on sustainable transportation and remain accessible 24 hours a day, 365 days a year.

Please support sustainable Bay access and the RSR Bridge's direct connection between Marin County, the East Bay, and BART for everyone.

Thank you for your time and consideration.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Jon Spangler', with a long horizontal line extending to the right.

Jon Spangler, Chair

BART Bicycle Advisory Task Force

<https://www.bart.gov/about/bod/advisory/bicycle>

510-846-5356 mobile

goldcoastjon@gmail.com

May 12, 2024

TO: Lisa Klein
Director, Field Operations and Asset Management
Metropolitan Transportation Commission
Association of Bay Area Governments
O: 415-778-5232 | M: 510-316-5353
lklein@bayareametro.gov

RE: RSR Bridge Path, 3:00 pm Tuesday Phone Call

I have appreciated your thorough staff reports, presentations, and responses to questions before the BCDC and MTC BATA Oversight Committee recently. I want to follow up with you on a few points regarding the proposal approved by the BATA Oversight Committee on Wednesday, May 8.

Unfortunately, critical background information, data analysis, and attention to significant MTC, ABAG, BCDC, and state goals and policies are missing or underemphasized in the proposal to modify the current RSR Bridge Pilot Project. These omitted or under-emphasized factors all cause and/or affect congestion on and around the RSR Bridge.

MISSING BACKGROUND: MARIN'S DECISIONS (BART, AFFORDABLE HOUSING)

Had Marin County voted to join BART in the 1960s, there might not be as much congestion on the RSR Bridge today. Unfortunately, the board of the Golden Gate Bridge District feared losing bridge toll revenue and prevented Marin voters from choosing BART. How would BART in Marin County have affected congestion on the RSR Bridge today?

For decades, Marin County has failed to build enough affordable multifamily and workforce housing for its teachers, firefighters, hospital workers, and restaurant employees — leaving these workers to face arduous daily commutes from the nearest affordable housing in the East Bay and North Bay. Housing policies affect transportation reality.

Neither of these conscious decisions made by Marin County officials are mentioned in the MTC staff discussions of congestion on the RSR Bridge or the Multi-use Path but these past — and current — choices helped create significant traffic congestion plus serious social and economic inequities. Why are they absent from discussions of congestion?

IS MTC ACTUALLY SERIOUS ABOUT REDUCING VMT, CARBON EMISSIONS, CLIMATE CHANGE, SEA LEVEL RISE, AND TRAFFIC CONGESTION?

If the MTC and CalTrans were taking climate change, sea level rise, congestion management, and/or sustainable transportation seriously, would it seriously propose to decrease sustainable commute options, reduce access to the Bay Trail, and favor single-occupancy vehicle drivers over people who take transit, walk, bicycle, ride scooters and e-bikes, or use wheelchairs?

CONGESTION: A MISSING VARIABLE, MISSING DATA, AND ABSENT ANALYSIS

Studies and anecdotal reports abound about changes in driver behaviors (increased aggression, impatience, distraction, depression, and other negative factors that increase collisions) following the recent “end” of the COVID epidemic. The epidemic — and its effects on driver behaviors — overlapped the RSR Bridge Multi-use Path Pilot Project and its data collection, but the pilot’s data analysis does not mention or address changes in driver behavior — a known independent variable — as a potential cause of the increased collision rates, especially within the approaches to the bridge.

How can the increased collision rates be ascribed solely to the physical changes made to the bridge in 2019 without also factoring in the known changes in driver behaviors that have increased collisions worldwide? Would different strategies be used to reduce the collision increases if they were attributable to broader COVID-related behavioral changes in drivers since 2020 rather than to the changes made to the RSR Bridge in 2019? How will we know the real cause(s) unless we examine them?

Here are three examples — not an exhaustive list — of international studies that address post-epidemic changes in driver behavior that increased conflict and collision rates:

1. “How did COVID-19 impact driving behaviors and crash severity? A multigroup structural equation modeling” by Xiaomeng Dong, Kun Xie, and Hong Yang. (2022) *Accident Analysis and Prevention* 172 (2022) 106687. www.elsevier.com/locate/aap
2. “Psychological impacts on the travel behaviour post COVID-19” by Vikram Singh, Kamini Gupta, Amit Agarwal, and Neelima Chakrabarty. (2022). *Asian Transport Studies* 8 (2022) 100087. <https://www.sciencedirect.com/journal/asian-transport-studies>
3. “Driver behaviour, cyclists, and COVID-19” by Marton Kocsis. (2022). [“This preprint research paper has not been peer reviewed. Electronic copy available at: <https://ssrn.com/abstract=4537083> ”]

TRANSPORTATION JUSTICE AND CONGESTION MANAGEMENT

Transportation justice (AKA equitable access to transit, economic justice, social justice, etc.) is given short shrift in the various reports on the RSR Bridge, Bay Trail access, and related topics. Here are a few points to consider:

- 1) When was the last time that a section of the Bay Trail was removed to accommodate traffic congestion that is allegedly caused by physical changes to a bridge? This is a serious equity concern: many low-income people cannot afford autos and depend on bicycles, walking, or public transit such as BART and buses) to get to work, school, run errands, and pursue recreation. Marin County politicians have exacerbated the RSR Bridge congestion by maintaining its shortage of affordable workforce housing and by torpedoing BART behind the scenes in 1961.

- 2) The current hourly transbay bus service between Richmond and San Rafael cannot compete with driving in convenience and does not offer a viable alternative to car use. In contrast, AC Transit operates 16 transbay lines across the Bay Bridge. Just one of these 16 lines, the “O” bus, serving Oakland and my home city of Alameda, runs from 5:00 am to 9:00 pm Monday-Friday with 30-minute headways.) Reducing RSR Bridge bus headways to as short as 12 minutes — the point at which commuters begin to consider bus service as an alternative to driving — is never mentioned as a congestion mitigation option for the RSR Bridge corridor. Why not?
- 3) The planned RSR Forward improvements to westbound bridge access should be implemented and measured before the end of the current pilot project ends or access to the RSR Multi-use Path is curtailed. In other words, the Pilot Project should have been extended “as is” through at least 2026 to see if the “Forward” toll plaza improvements could reduce or eliminate the collisions that seem so worrisome to MTC and CalTrans — especially since post-COVID driver behavioral changes were not considered as a potential cause of increased collision rates.
- 4) Establishing a westbound HOV lane will not significantly reduce traffic or congestion on the bridge or its approaches — especially without frequent and convenient express buses with headways as frequent as 12-30 minutes to serve the communities in which commuters live and work. Why were specific transbay bus frequency improvements missing from the presentations, reports, and recommendations?
- 5) Demand pricing changes in westbound tolls is not mentioned in the staff report as a way to reduce the morning backups and, therefore, reduce collisions. Were economic incentives or disincentives even considered as a means of reducing the collision rates on the bridge approaches? These could have transportation justice implications for lower-income drivers but should at least be investigated.

CONCLUSION

Transbay bridge traffic congestion is a longstanding — and seemingly intractable — Bay Area issue. The Richmond-San Rafael Bridge Multi-use Path Pilot Project offered a fleeting glimpse of new and sustainable commute and recreation options.

The discussion above critiques the RSR path pilot’s methodology and offers alternatives to the proposed Bay Trail restrictions as well as new options to mitigate both congestion and collisions during the next stages of the pilot and beyond.

I look forward to discussing these points with you on Tuesday, May 14, at 3:00 pm.

Thanks very much,

Jon Spangler
Chair, BART Bicycle Advisory Task Force (BBATF)
League Cycling Instructor #3175
CEL 510-846-5356 | goldcoastjon@gmail.com

BART Bicycle Advisory Task Force

May 19, 2024

TO: Bay Area Toll Authority (BATA)
Metro Center
375 Beale Street, Board Room
San Francisco, CA 94105

FROM: BART Bicycle Advisory Task Force

RE: Proposed Closure of Richmond-San Rafael Bridge Bicycle Path Is Unjustified
(MTC-Bay Area Toll Authority, May 22, Item 4a)

The Bay Area Toll Authority (BATA) and Metropolitan Transportation Commission (MTC) are proposing to replace the multi-use path on the Richmond-San Rafael Bridge (RSR Bridge) with a westbound breakdown lane (shoulder) every week from Monday through Thursday. This will leave people who walk or ride bicycles without a safe and direct path of travel between Marin County and the East Bay for four work days every week.

The BART Bicycle Advisory Task Force (BBATF) strongly opposes this proposal. Instead, the BBATF urges the Bay Area Toll Authority to support a permanent RSR Bridge multi-use path that is open all day, every day (24/7/365) to walkers, bicyclists, and others. There are better solutions to traffic congestion: some of them are already planned and ready for implementation in 2025.

Critical background information, data analysis, and attention to significant MTC, ABAG, BCDC, and state goals and policies are either missing or under-represented in the proposal to modify the current RSR Bridge Pilot Project. These omitted or underemphasized factors all affect congestion on and around the RSR Bridge. Here are some of those missing factors.

MISSING BACKGROUND: MARIN'S DECISIONS (BART, AFFORDABLE HOUSING)

Had Marin County voted to join BART in the 1960s, there might not be as much congestion on the RSR Bridge today. Unfortunately, the board of the Golden Gate Bridge District feared losing bridge toll revenue and prevented Marin voters from choosing BART. How would BART service to Marin County have affected congestion on the RSR Bridge today?

For decades, Marin County has failed to build enough affordable multifamily and workforce housing for its teachers, firefighters, hospital workers, and restaurant employees — leaving these workers to face arduous daily commutes from the nearest affordable housing in the East Bay and North Bay. Housing policies affect transportation reality.

Neither of these conscious decisions made by Marin County officials are mentioned in the MTC staff discussions of congestion on the RSR Bridge or the Multi-use Path but these past — and current — choices helped create significant traffic congestion plus serious social and economic inequities. Why are these causes absent from discussions of bridge congestion?

IS MTC ACTUALLY SERIOUS ABOUT REDUCING VMT, CARBON EMISSIONS, CLIMATE CHANGE, SEA LEVEL RISE, AND TRAFFIC CONGESTION?

If the MTC and CalTrans were taking climate change, sea level rise, congestion management, and/or sustainable transportation seriously, would it seriously propose to decrease sustainable commute options, reduce access to the Bay Trail, and favor single-occupancy vehicle drivers over people who take transit, walk, bicycle, ride scooters and e-bikes, or use wheelchairs?

CONGESTION: A MISSING VARIABLE, MISSING DATA, AND ABSENT ANALYSIS

Studies and anecdotal reports abound about changes in driver behaviors (increased aggression, impatience, distraction, depression, and other negative factors that increase collisions) following the recent “end” of the COVID epidemic. The epidemic — and its effects on driver behaviors — overlapped the RSR Bridge Multi-use Path Pilot Project and its data collection, but the pilot’s data analysis does not mention or address changes in driver behavior — a known independent variable — as a potential cause of the increased collision rates, especially within the approaches to the bridge.

How can the increased collision rates be ascribed solely to the physical changes made to the bridge in 2019 without also examining the known changes in driver behaviors that have increased collisions worldwide? Would different strategies be used to reduce the collision increases if they were attributable to broader COVID-related behavioral changes in drivers since 2020 rather than to the changes made to the RSR Bridge in 2019? How will we know the real cause(s) unless we examine them?

Here are three examples — not an exhaustive list — of international studies that address post-epidemic changes in driver behavior that increased conflict and collision rates:

1. “How did COVID-19 impact driving behaviors and crash severity? A multigroup structural equation modeling” by Xiaomeng Dong, Kun Xie, and Hong Yang. (2022) *Accident Analysis and Prevention* 172 (2022) 106687. www.elsevier.com/locate/aap

2. “Psychological impacts on the travel behaviour post COVID-19” by Vikram Singh, Kamini Gupta, Amit Agarwal, and Neelima Chakrabarty. (2022). *Asian Transport Studies* 8 (2022) 100087. <https://www.sciencedirect.com/journal/asian-transport-studies>

3. "Driver behaviour, cyclists, and COVID-19" by Marton Kocsis. (2022).
["This preprint research paper has not been peer reviewed. Electronic copy available at: <https://ssrn.com/abstract=4537083>"]

TRANSPORTATION JUSTICE AND CONGESTION MANAGEMENT

Transportation justice (AKA equitable access to transit, economic justice, social justice) is given short shrift in the various reports on the RSR Bridge, Bay Trail access, and related topics. Here are a few points to consider:

- 1) When was the last time that a section of the Bay Trail was removed to accommodate traffic congestion that is allegedly caused by physical changes to a bridge? This is a serious equity concern: many low-income people cannot afford autos and depend on bicycles, walking, or public transit such as BART and buses) to get to work, school, run errands, and pursue recreation. Marin County politicians have exacerbated the RSR Bridge congestion by maintaining its shortage of affordable workforce housing and by torpedoing BART behind the scenes in 1961.
- 2) The current hourly to half-hourly transbay bus service between Richmond and San Rafael cannot compete with driving in convenience and does not offer a viable alternative to car use. In contrast, AC Transit operates 16 transbay lines across the Bay Bridge. Just one of these 16 lines, the "O" bus, serving Oakland and my home city of Alameda, runs from 5:00 am to 9:00 pm Monday-Friday with 30-minute headways. Reducing RSR Bridge bus headways to as short as 12 minutes — the point at which commuters begin to consider bus service as an alternative to driving — is never mentioned as a congestion mitigation option for the RSR Bridge corridor. Why not?
- 3) The planned RSR Forward improvements to westbound bridge access should be implemented and measured before the end of the current pilot project ends or access to the RSR Multi-use Path is curtailed. In other words, **the Pilot Project should be extended "as is" through at least 2026 to see if the "Forward" toll plaza improvements could reduce or eliminate the collisions that seem so worrisome to MTC and CalTrans** — especially since post-COVID driver behavioral changes were not considered as a potential cause of increased collision rates.
- 4) Establishing a westbound HOV lane will not significantly reduce traffic or congestion on the bridge or its approaches — especially without frequent and convenient express buses with headways as frequent as 12-20 minutes to serve the communities in which commuters live and work. Why were specific transbay bus frequency improvement options missing from the alternatives, presentations, and recommendations?

- 5) Demand pricing changes in westbound tolls is not mentioned in the staff report as a way to reduce the morning backups and, therefore, reduce collisions. Were economic incentives or disincentives even considered as a means of reducing the collision rates on the bridge approaches? These could have negative transportation justice impacts on lower-income drivers but should at least be investigated.

CONCLUSION

The Richmond-San Rafael Bridge Multi-use Path Pilot Project offered a fleeting glimpse of new and sustainable commute and recreation options on a new section of the Bay Trail. Because of the gaps and omissions in the evaluation of the RSR Bridge Path Pilot Project, **the current pilot project should — at the very least — be extended “as is” through at least 2026, until the pending toll plaza and access improvements can be implemented. The Multi-use Path should remain open and accessible every day of the week through at least 2026.**

Thank you for your consideration.

Respectfully submitted,



Jon Spangler, Chair

BART Bicycle Advisory Task Force

<https://www.bart.gov/about/bod/advisory/bicycle>

510-846-5356 mobile

goldcoastjon@gmail.com

Richmond-San Rafael (RSR) Bridge Pilot Project Recommendation

BATA Oversight Committee Meeting

May 08, 2024



Agenda



PHOTO COUTESEY CALTRANS

**Recap:
Pilot Timeline &
Purpose**

**Findings to Date &
Proposal**

**Recommended
Action**

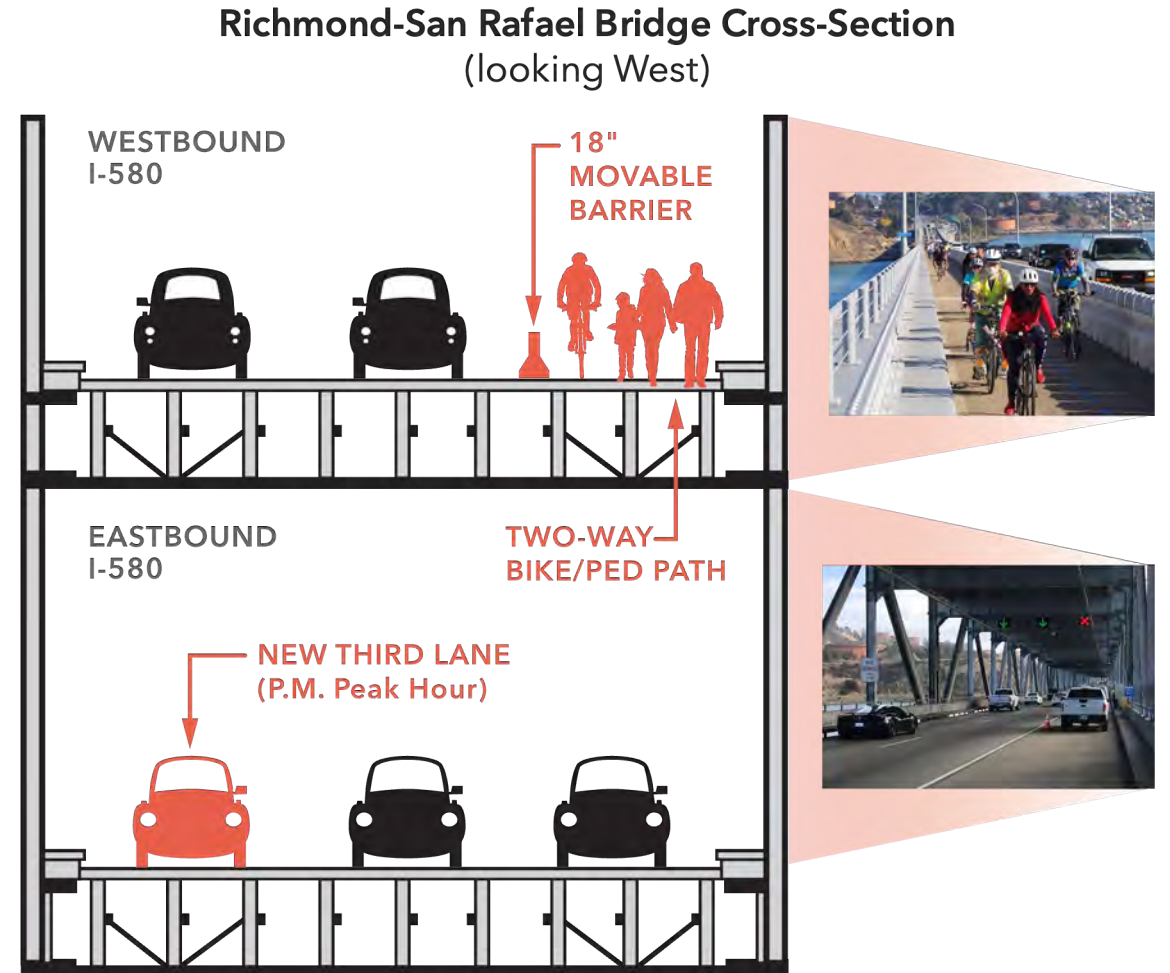
Pilot Designed for Two Purposes

Bicycle & Pedestrian Access:

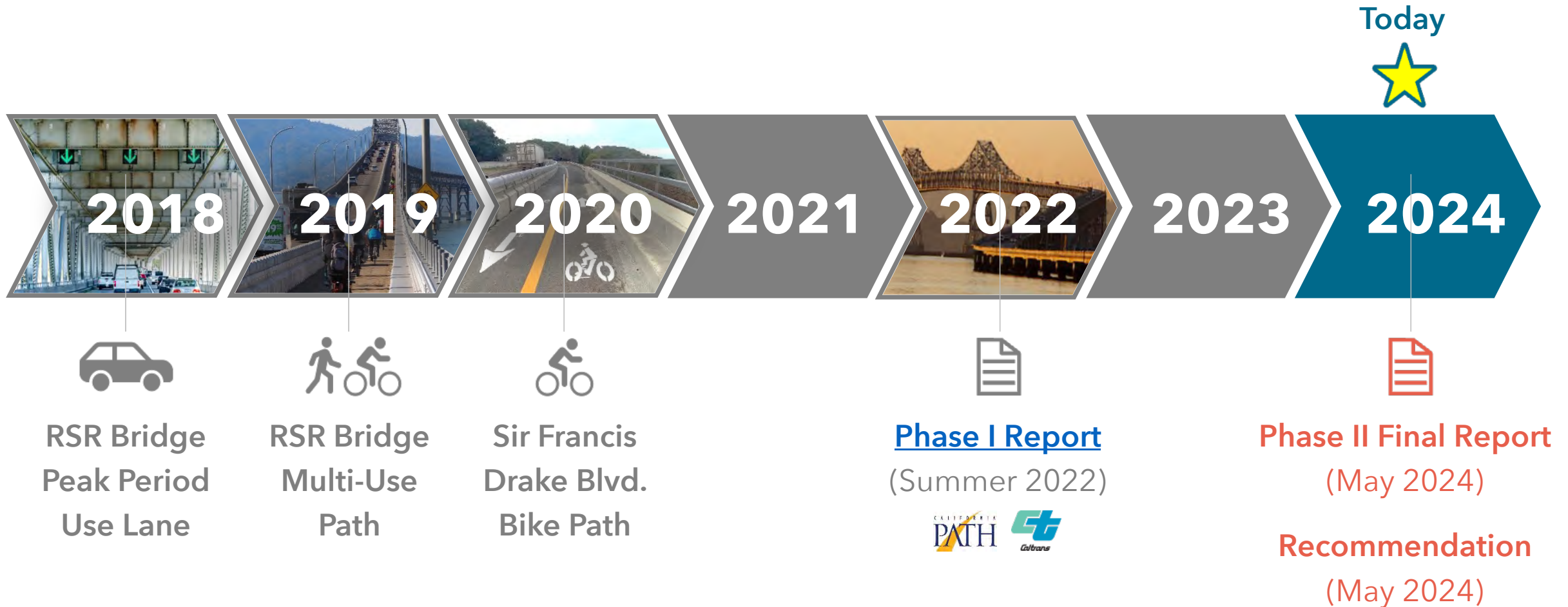
- Bay Trail connection between East Bay and Marin
- Permanent Connections for Richmond and San Rafael

Traffic Congestion and Delay:

- Eastbound Peak-Period Use Lane



Timeline



Lower Deck Results are Clear

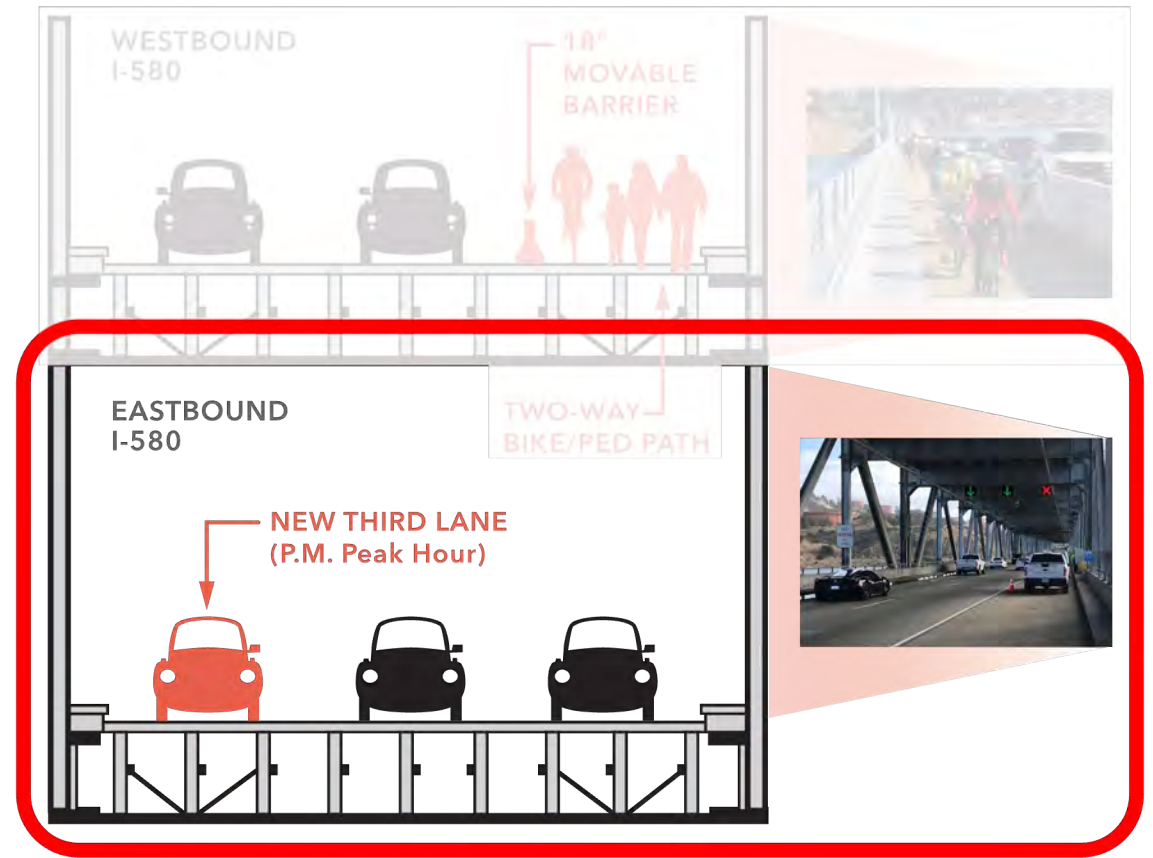
Findings:

- Peak-Period use lane eliminated afternoon eastbound congestion (freeway and local streets).
Up to 14 to 17 mins. travel time savings.
- High compliance.
- No major impacts to bridge maintenance, vehicular incidents or response.

Proposal:

- Make improvements permanent, as-is.

Richmond-San Rafael Bridge Cross-Section
(looking West)

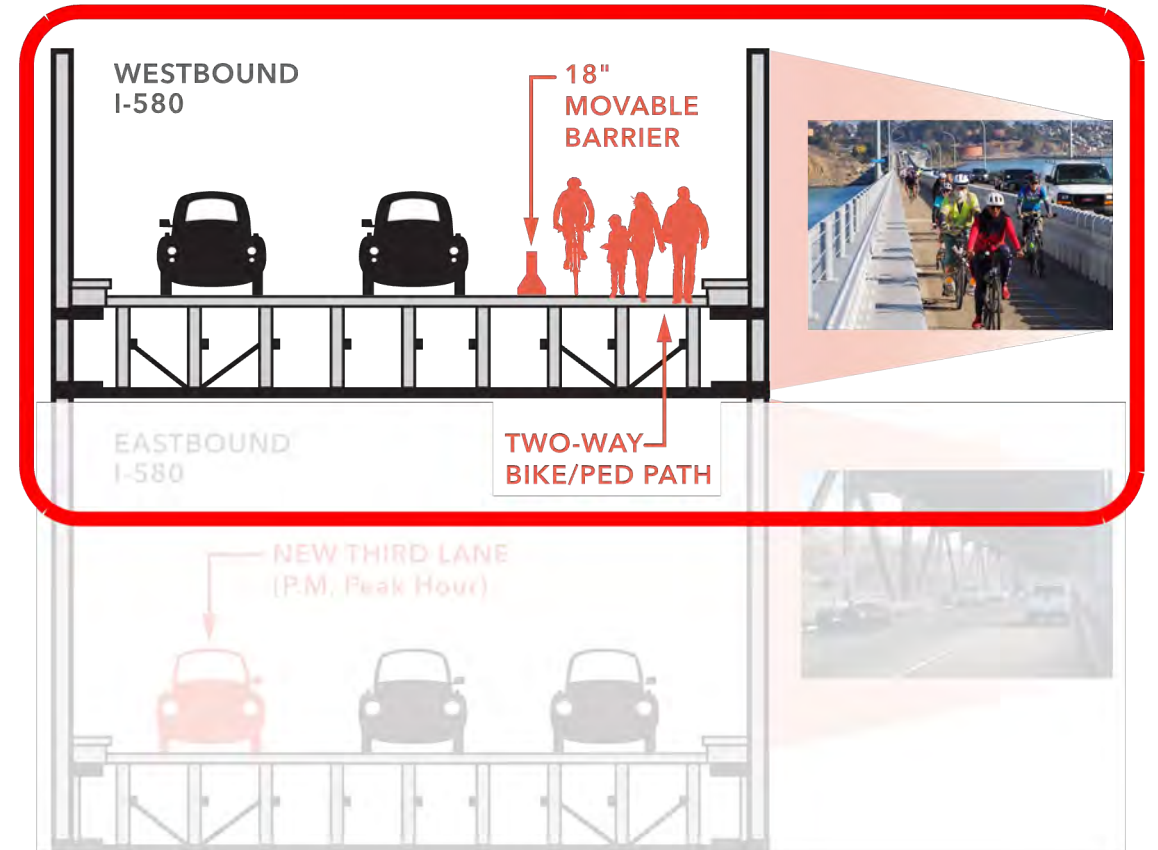


Upper Deck Multi-Use Path Results are Less Clear

Findings:

- **Access:** Demonstrated importance of bike/ped access but usage higher on weekends
- **Traffic:** No increase in typical AM congestion with traffic at 90% of pre-COVID levels *but* impacts on incident rates, incident response times and incident-related congestion are not clear

Richmond-San Rafael Bridge Cross-Section
(looking West)

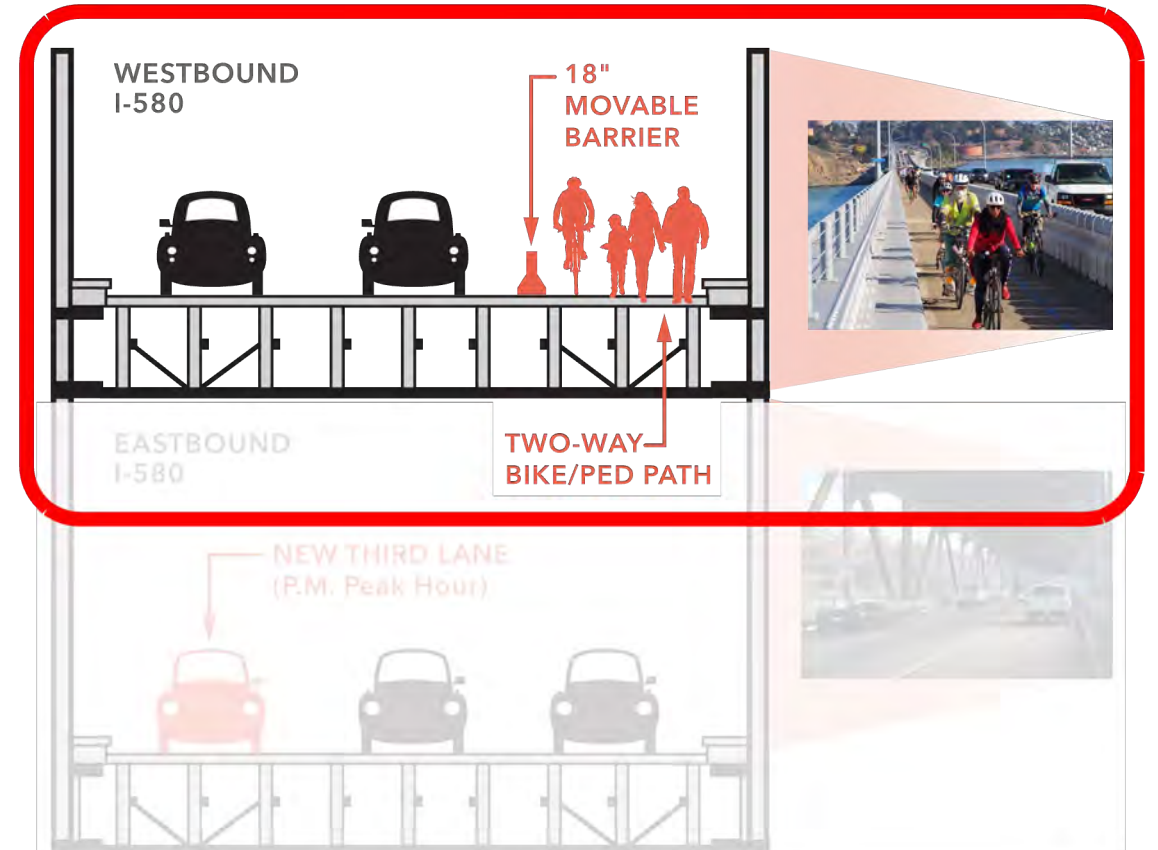


Upper Deck Multi-Use Path Results are Less Clear (Cont.)

Considerations:

- Concerns raised about impact of incident-related congestion on equity communities
- Related work needs more time:
 - Bridge strengthening assessment
 - Multi-modal milestones in 2025:
Open Forward projects and complete shoulder study

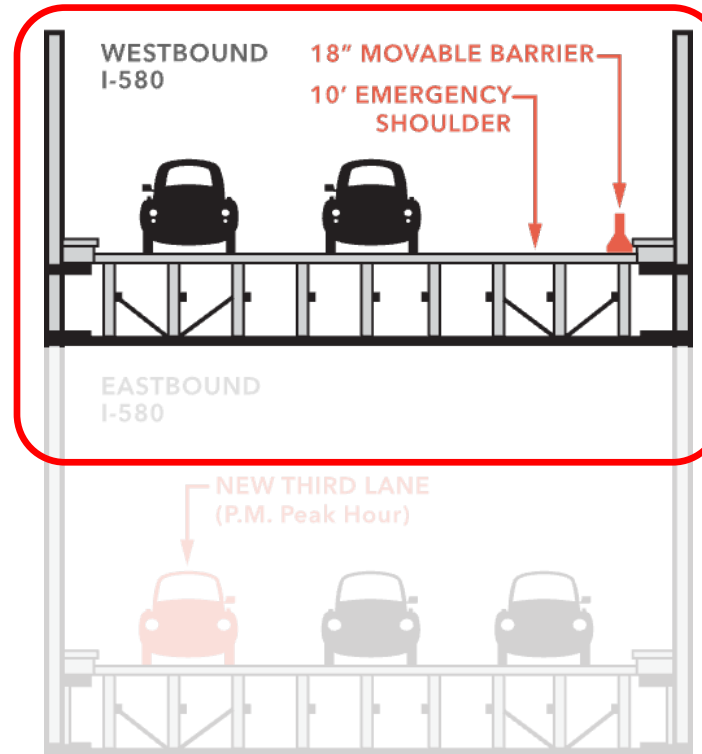
Richmond-San Rafael Bridge Cross-Section
(looking West)



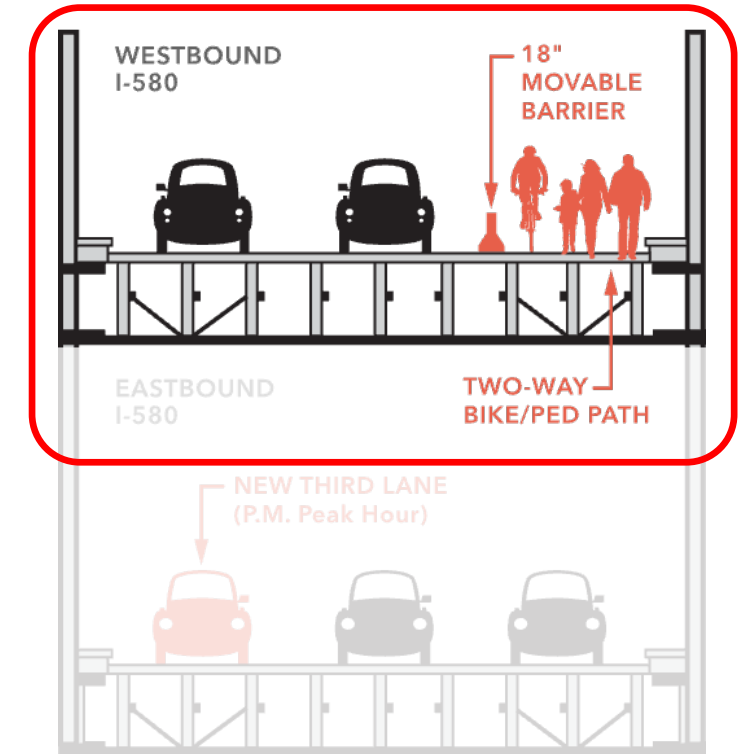
Upper Deck Multi-Use Path Proposal

Extend Pilot with Modifications to end of 2025 (at minimum)

Heavier commute days
(e.g., Mon-Thurs):
Emergency Shoulder + Bike Shuttle



Lighter commute days
(e.g., Fri/Weekends/Holidays):
Multi-Use Path



What Does Extension Achieve?

- Maintains access on Bay Trail segment when it is most used
- Provides emergency shoulder when commute traffic is heaviest
- Allows better understanding of:
 - Access and Non-Motorized Trips
 - Incident Response & Role of Emergency Shoulder
 - Equity Considerations
 - Bridge Strengthening Needs for the Barrier
- Shoulder study and RSR Forward can advance in parallel



Path Usage is Higher on Weekends

Multi-Use Path Used More Heavily on Weekends

- Average Daily Trips: 140 cyclists on weekdays and 360 on weekends, with seasonal variability
- Compared to other BATA bridges with multi-use paths, usage is second to the Bay Bridge
- 85% use it for recreation/exercise
- 15% use it for commute/other

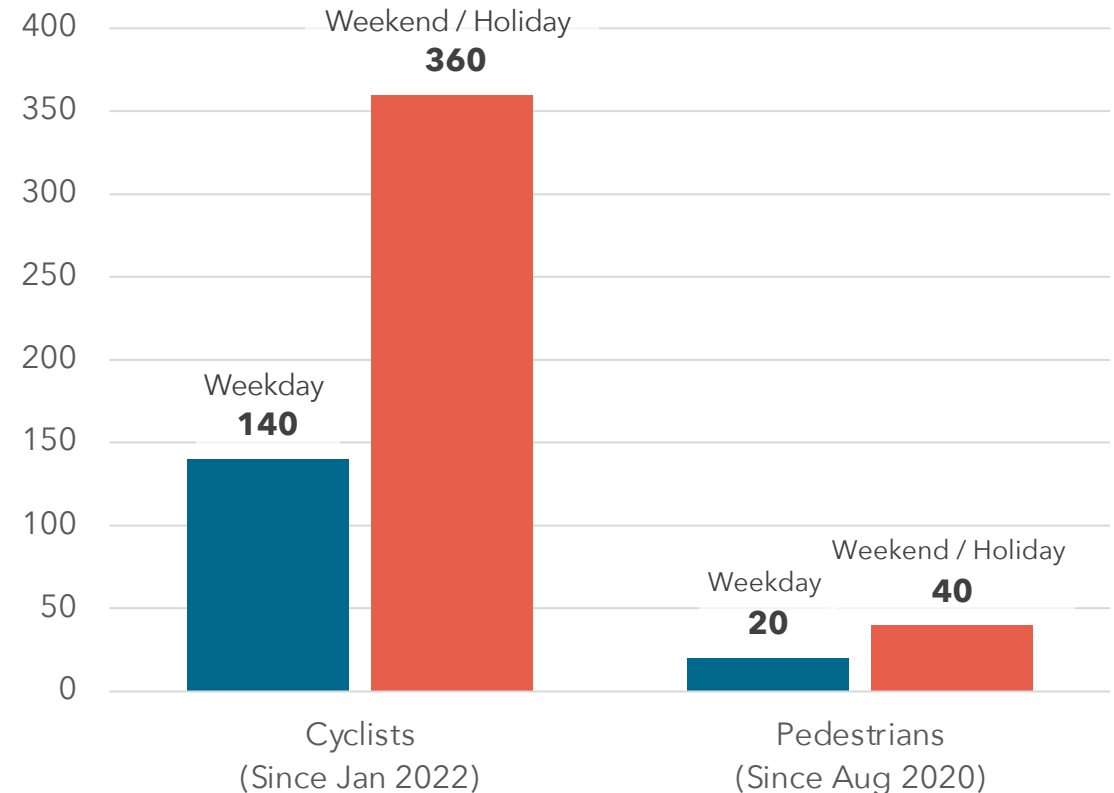
High Ranking on Multi-Use Path Safety



Source: Pilot Study User Survey 2021

8.2 (Avg. Perceived Safety)

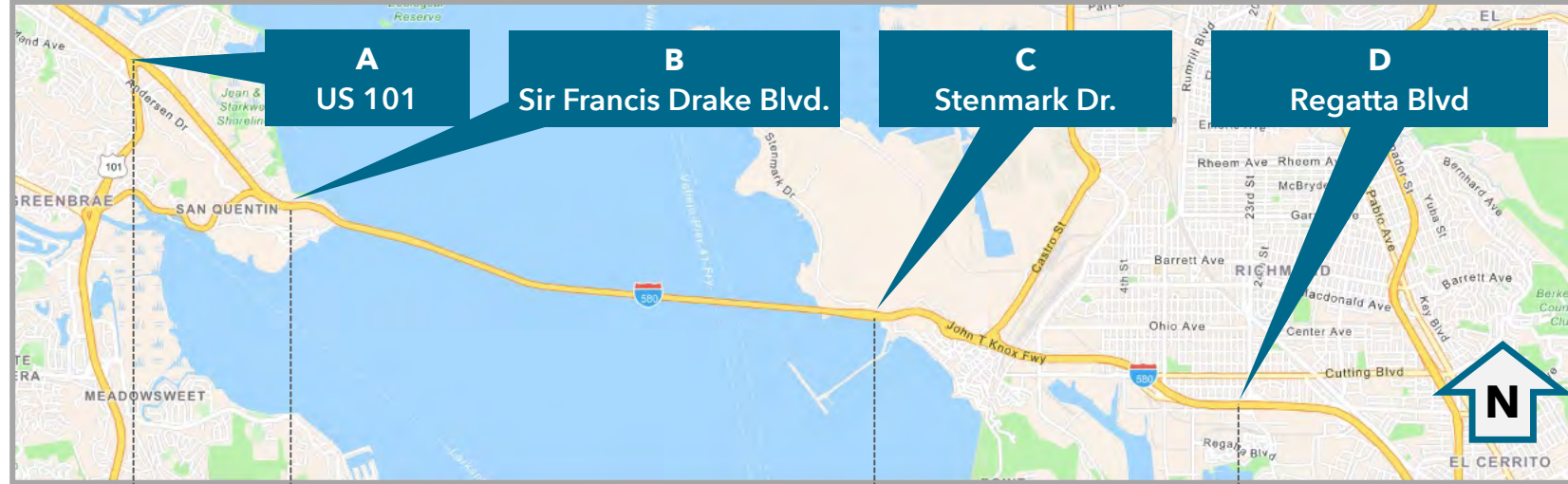
Average Daily Trips



Note: Summer Saturdays up to 480 average daily trips
Source: Eco-Counter

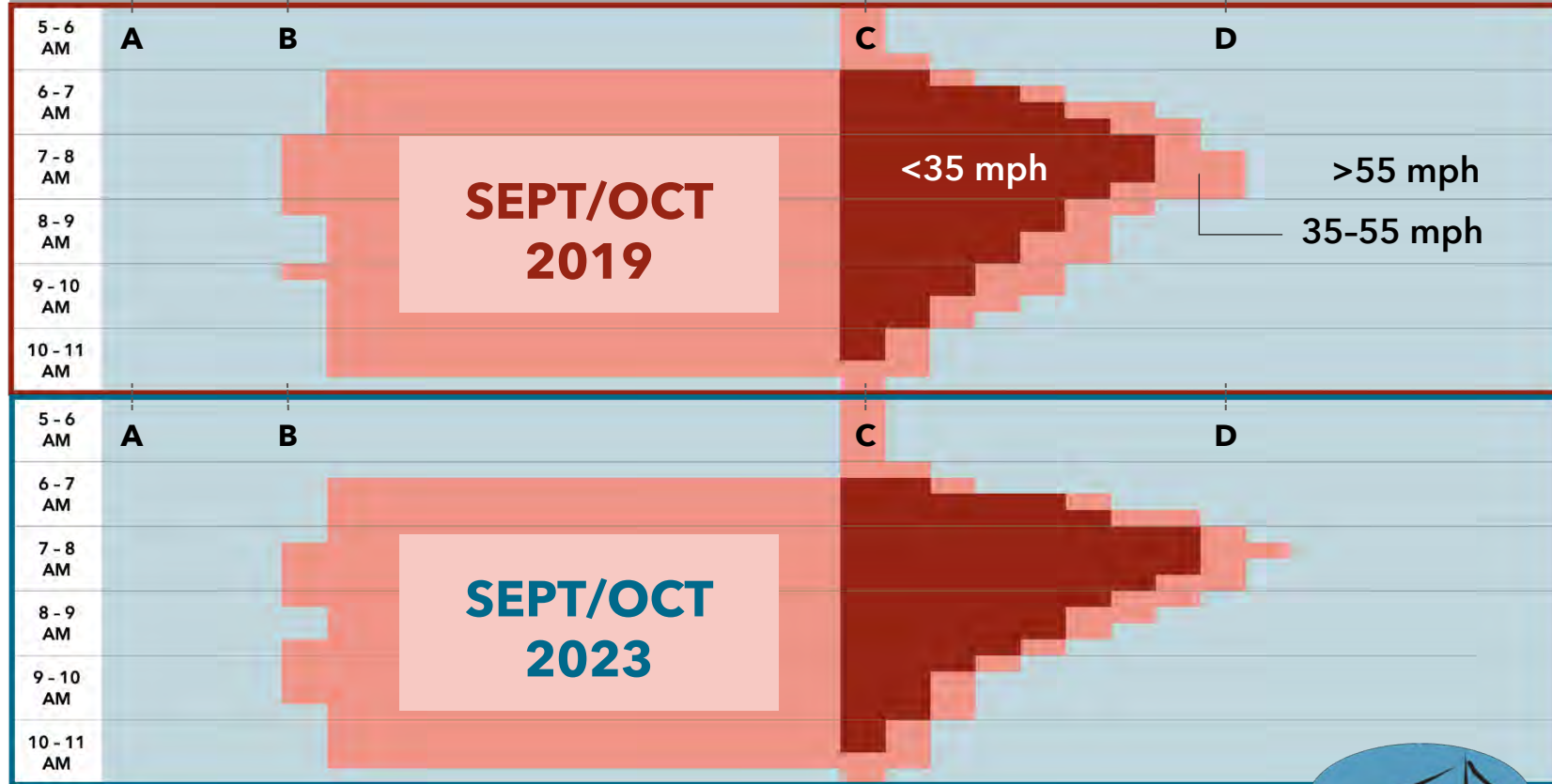


Typical Mid-Week Congestion Largely Unchanged



Compared to Fall 2019:

- Morning congestion dissipates 15 minutes earlier
- Back up is 0.2 miles longer
- Does not fully capture incident-related congestion



Note: Fall 2023 traffic volume was 90% of fall 2019 levels.
 Source: BATA analysis of INRIX data (Tues-Thurs)

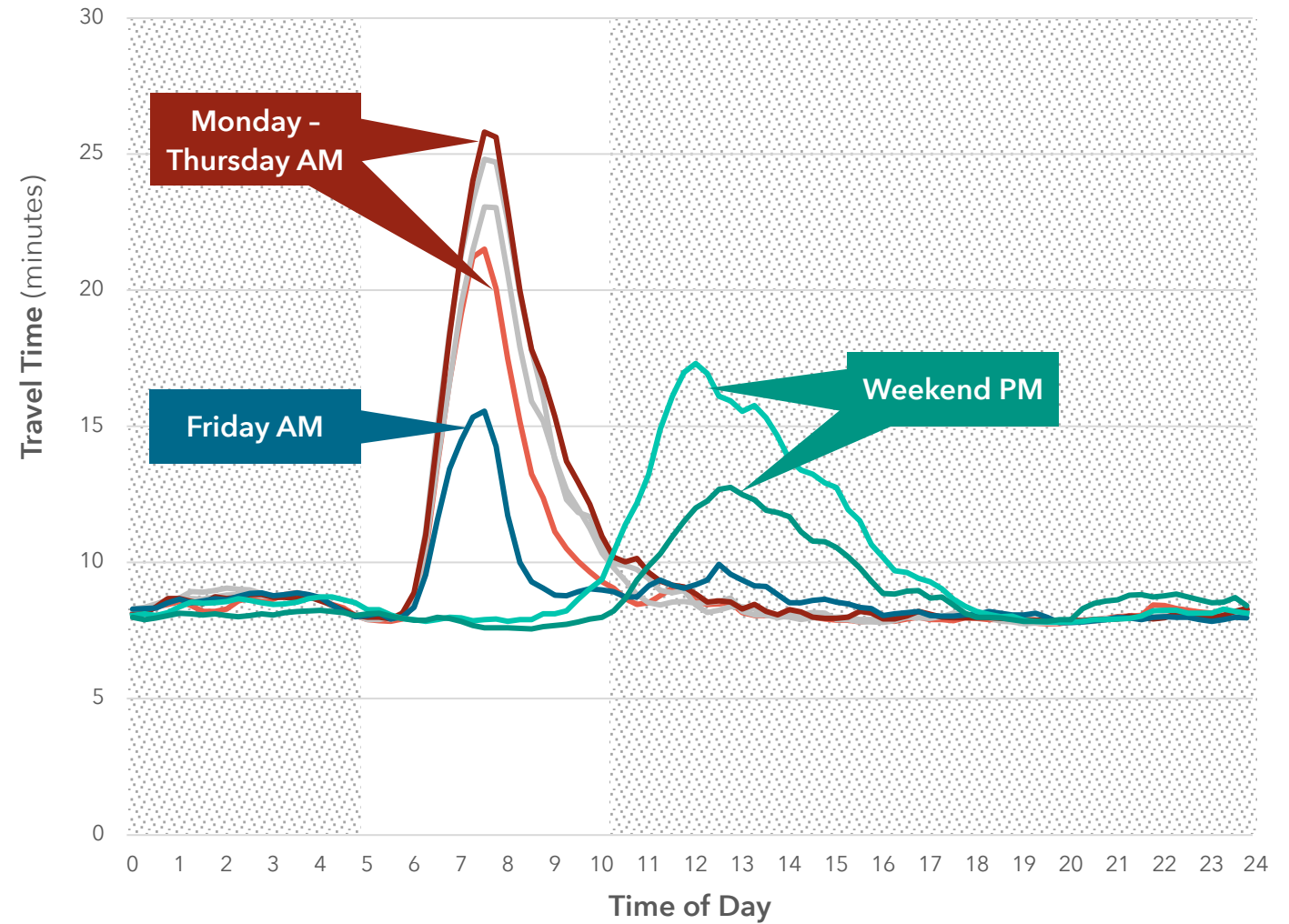


Less Traffic Congestion on Fridays & Weekends than Weekdays

Review traffic patterns, operational factors and other data to recommend days for Multi-Use Path operation

Source: INRIX

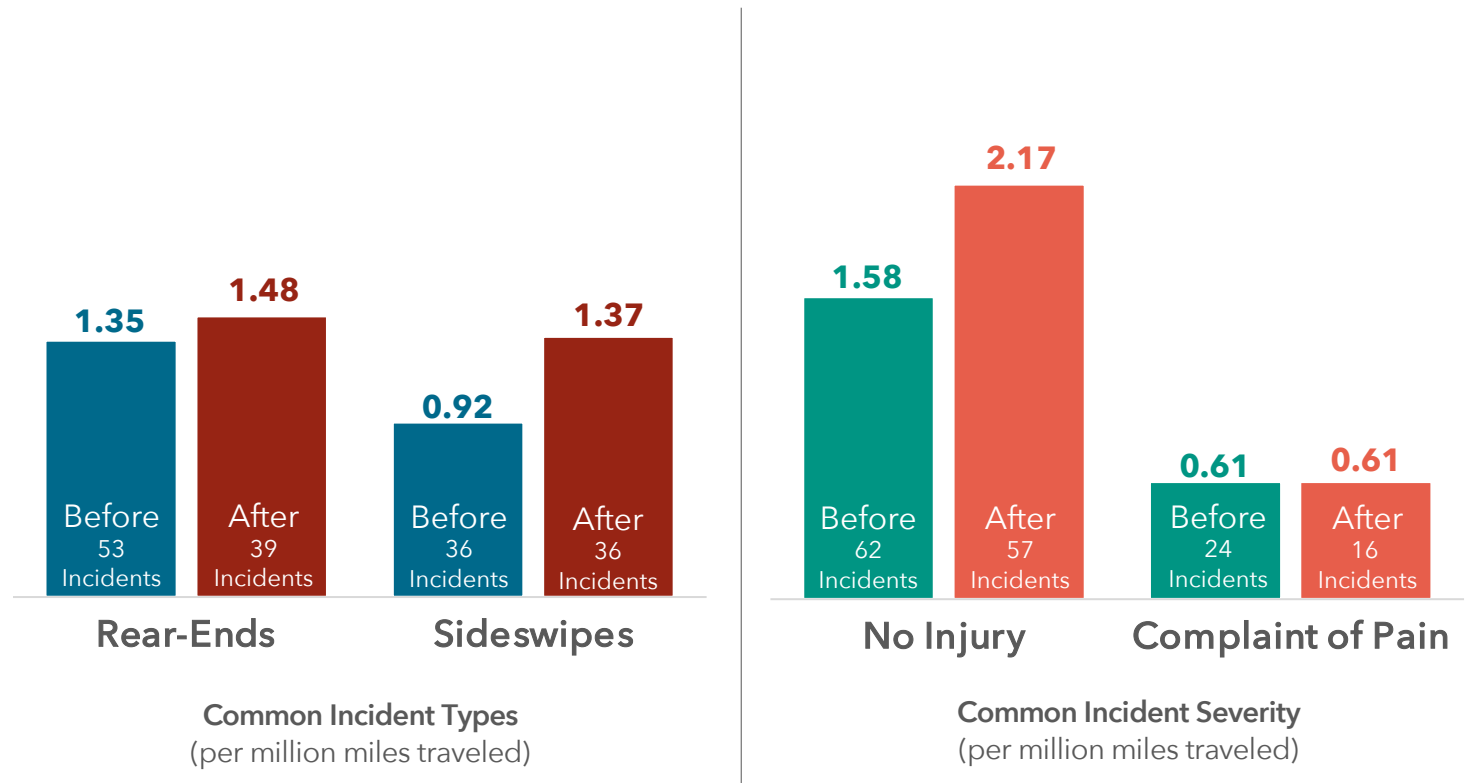
2023 Travel Time on RSR/580
from Marina Bay Pkwy to Bridge West End



Increases in Incident Rates During AM Peak

- **Rear-Ends and Sideswipes** have increased. Together these are 90% of total incidents by type.
- **“No injury” and “Complaint of Pain”** incidents have increased. Together these are 90% of total incidents by severity.

Before vs. After Rates of Most Common Incident Types & Severity
Weekdays Only (6am - 9am)



Note:

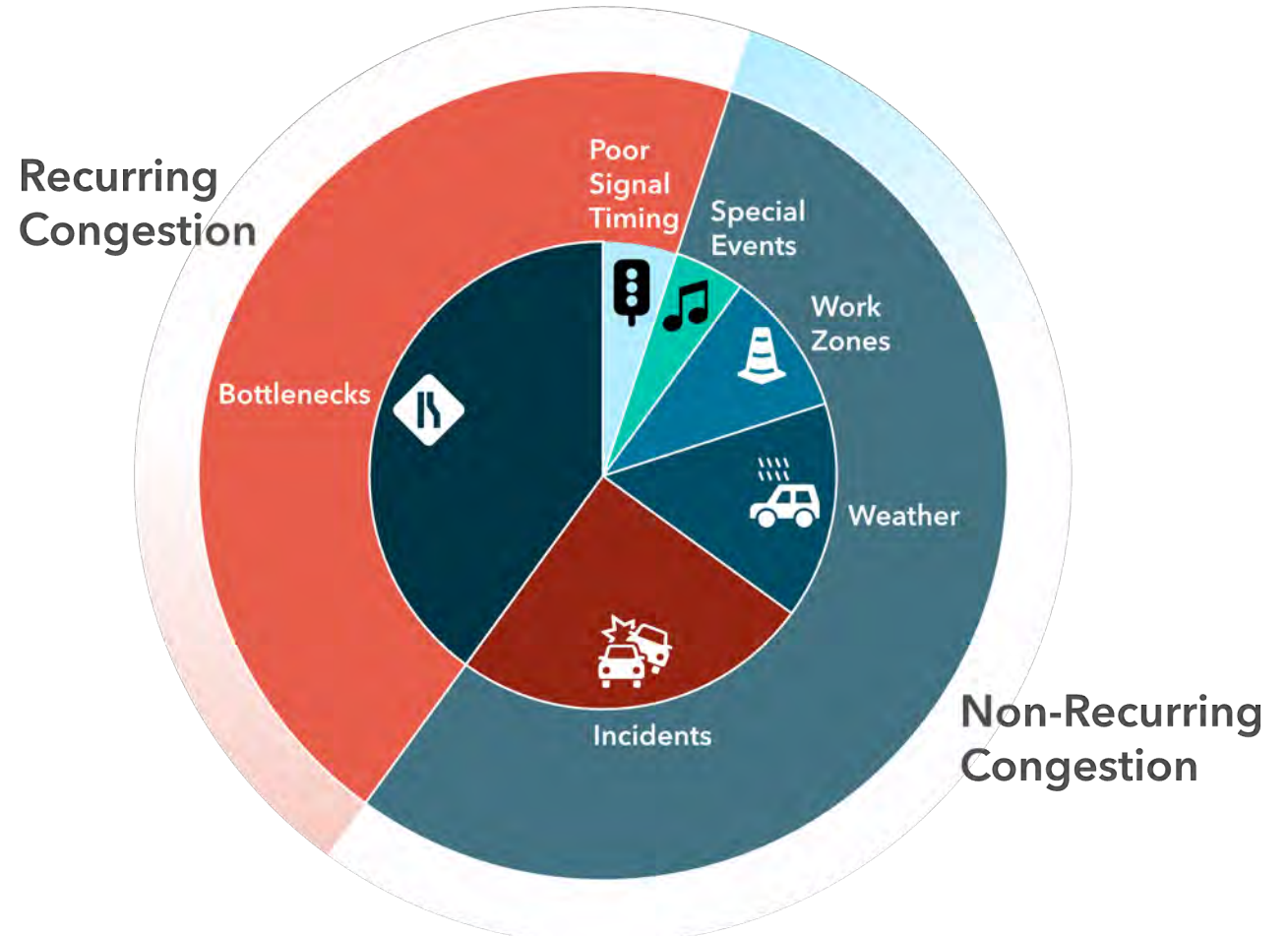
- Before = 01/2016 - 09/2019 (15 quarters)
- After = 07/2021 - 03/2020 and 07/2020 - 12/2023 (11 quarters, No-COVID)

Source: TASAS



Uncertain Impacts on Travel Time Variability

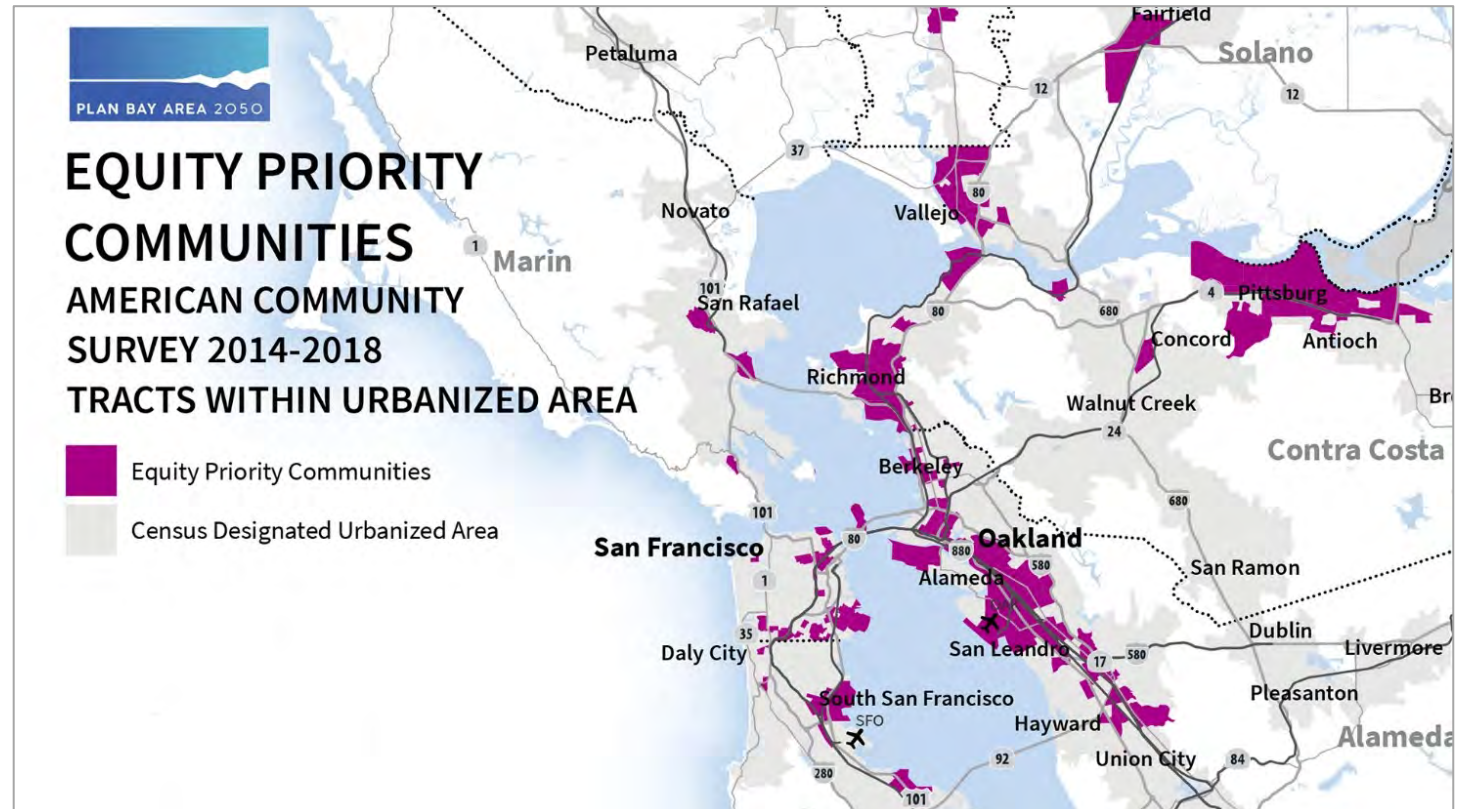
- Peak weekday travel times on the bridge's approach are now more variable than before, mainly due to the barrier preventing disabled vehicles from pulling out of a traffic lane.



Source: *Travel Time Reliability: Making It There On Time, All The Time*; Federal Highway Administration. FHWA-HOP-06-070

Seek Better Understanding of Equity Considerations

- What are demographics of travelers?
- If incident-related congestion is worse, who is impacted?
- Pilot Study did not include equity data.
- 2024 MTC Travel Survey will provide detailed profile of corridor travelers.



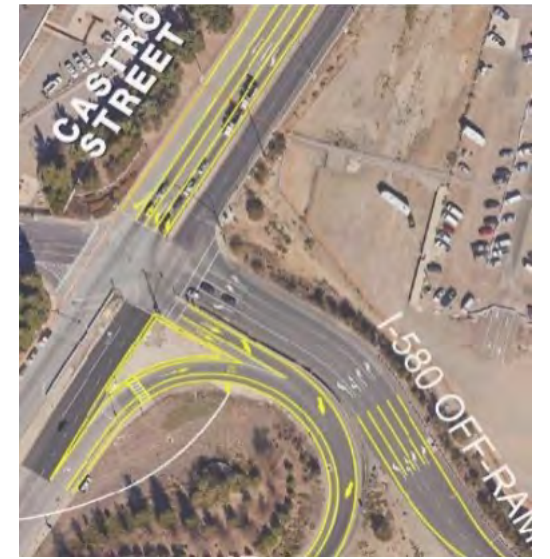
RSR Forward



**Open Road Tolling
+
HOV Lane Extension**
(End of 2025)



**Cutting Blvd. Transit
Improvement**
(Winter 2025)



**Richmond Parkway
Improvements**
(Spring 2026)

Recommendation

Authorize staff to pursue:

1. Making the lower deck part-time use lane permanent.
2. Extending the upper deck pilot with modifications to better understand the role of the emergency shoulder.
 - Modify to restore emergency shoulder and provide bicycle shuttle service on weekdays.
 - Retain path on weekends.
 - Evaluation by UC Berkeley PATH.

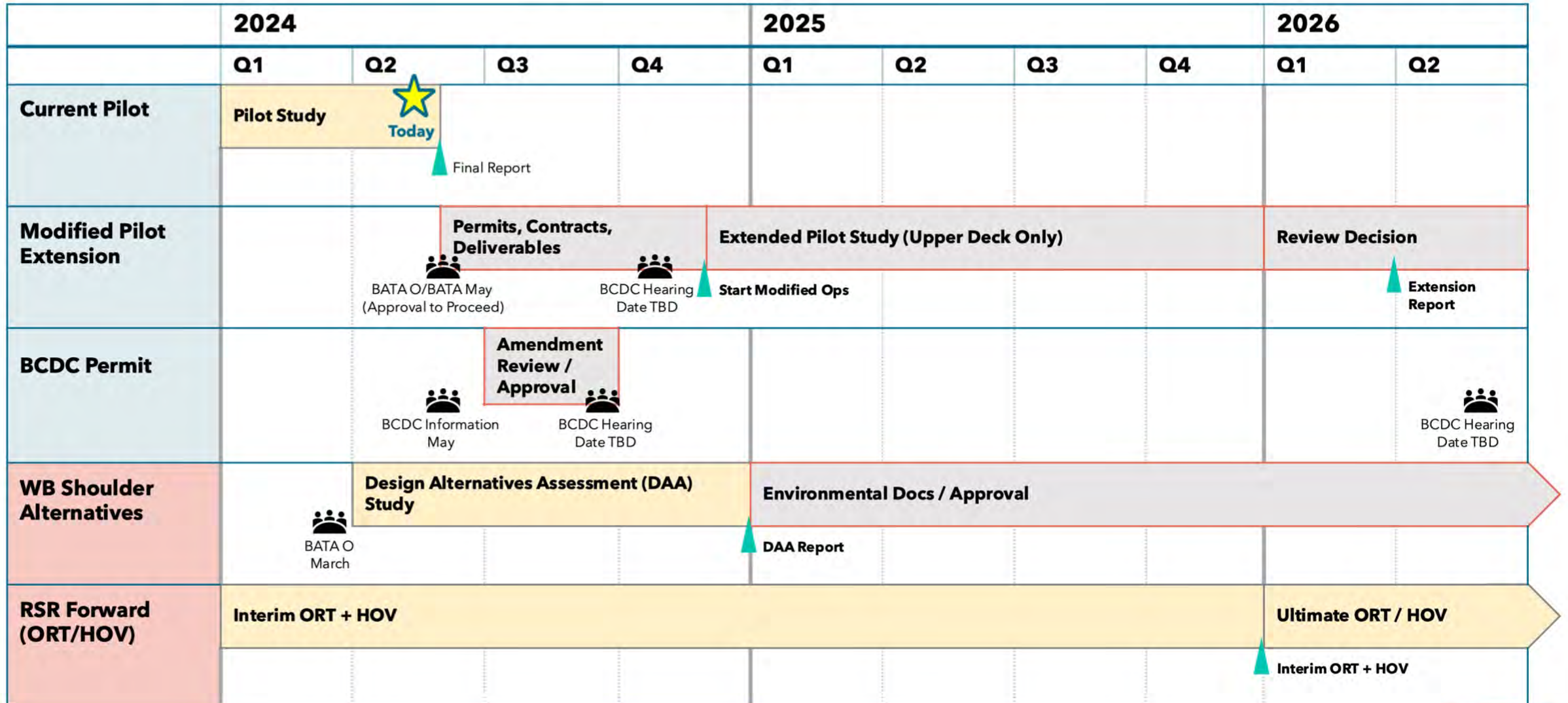
This allows staff to:

- Work with partners and stakeholders to define days of path operation and scope shuttle operations.
- Complete documentation (environmental revalidation, Caltrans project approval, decision document).
- Seek BCDC permit amendment.

Timeline by Quarter

Legend

- In Progress
- Subject to Approval



Thank You

PHOTO: TOM PAIVA

BAY AREA TOLL AUTHORITY



**Bay Area Toll Authority
Oversight Committee**

May 8, 2024

Agenda Item 3a-24-0354

(i) Richmond-San Rafael (RSR) Bridge Pilot Project Recommendations

(ii) Contract Amendment – RSR Bridge Access Improvement Project – On-Call Design Services: HNTB Corporation (\$100,000)

Subject:

A status report and recommended next steps for BATA’s Interstate 580 (I-580) Richmond-San Rafael (RSR) Bridge Access Improvement Pilot Project (Pilot). Staff seeks:

- (i) Committee referral to the Authority for approval to pursue steps to extend the Pilot on the upper deck with modifications and make the Pilot on the lower deck permanent; and
- (ii) Committee approval for a contract amendment with HNTB Corporation (HNTB) in an amount not to exceed \$100,000 to provide on-call design services to complete the project documentation for the required approvals .

Background:

The 5.5-mile long RSR Bridge has served the needs of North Bay and East Bay travelers for over 65 years. BATA has been collaborating with partner agencies including Caltrans, Transportation Authority of Marin (TAM), and Contra Costa Transportation Authority (CCTA) on a series of projects and programs that work collectively to manage the bridge and improve multi-modal mobility in the corridor. Efforts include the RSR Forward Program, the RSR Bridge Access Improvement Pilot Project (Pilot) and the recently authorized Westbound Upper Deck Design Alternative Assessment (DAA).

In 2014, BATA took responsibility for funding and implementing the Pilot, a pilot undertaken in partnership with Caltrans with the goals to address traffic congestion and provide bicycle and pedestrian access to and across the bridge, consistent with core strategies in Plan Bay Area 2050 including Bay Trail build-out.

The partners committed to a four-year pilot that converted the bridge lower deck shoulder to a peak period use lane, converted the upper deck shoulder to a multi-use path and added permanent multi-use path improvements in Richmond and San Rafael. The Pilot required a permit approval by the San Francisco Bay Conservation and Development Commission (BCDC). For evaluation purposes, the four-year clock started November 2019 with the opening of the multi-use path on the upper deck of the bridge. Staff have previously presented to the BATA Oversight Committee, as well as TAM and CCTA, in October 2021, November 2022 and November 2023. See Attachment A for additional background information on the Pilot.

Findings and Proposal:

Caltrans employed UC Berkeley PATH to conduct a study of the pilot projects and to prepare the following Pilot After Study reports:

- **Phase I Pilot Study Report** – published in October 2022 on the Caltrans website (https://dot.ca.gov/-/media/dot-media/programs/research-innovation-system-information/documents/final-reports/ca22-3141_final_reportv3-a11y.pdf). Key findings from this report were included in prior staff reports to the Committee.
- **Phase II Pilot Study Final Report** – to be published in May 2024. The Phase II Final Report will include updated evaluation of the RSR Bridge Pilot and will include the evaluation of the Sir Francis Drake Blvd. Overpass Bike Path in Marin County that opened in August 2020. In response to public feedback associated with the November 2023 BATA Oversight Committee meeting, the Final Report will include additional data focused on westbound AM peak period such as incident response, and it will further distinguish the “After” data that separates COVID and post-COVID results.

Findings from the PATH reports, including preliminary data for the Phase II report, have been reviewed by staff from BATA, Caltrans, TAM, and CCTA and inform the proposals described below. Additional factors such as public opinions and experiences shared with the Committee also inform the proposals.

Peak Period Use Lane (Bridge Lower Deck)

Findings: The pilot study data shows I-580 eastbound traffic congestion has been eliminated; travel time during the peak hour has been reduced by up to 14 minutes (between US-101 and I-80). Compliance with the part-time shoulder hours of operations is high. There is no evidence of impacts on incident types and incident response. There’s also been no signs of impacts to Caltrans bridge maintenance and inspections.

Proposal: Staff propose to make improvements permanent, keep operations as-is.

Multi-Use Bicycle and Pedestrian Path (Bridge Upper Deck)

Findings:

- The Pilot has demonstrated the importance of having safe Transbay bicycle/pedestrian access on both the bridge and on the permanent paths constructed on both approaches. The pilot study conducted a survey that resulted in an 8/10 rating when asked about user safety comfort along the multi-use path while adjacent to vehicular traffic and separated by a moveable concrete barrier. However, the bridge path is used more heavily on

weekends than weekdays and, while it serves some commute trips, the majority of trips are for recreation or exercise as shown in the attached presentation.

- The COVID-19 pandemic started just a few months after the path opened and traffic has recovered to 90% pre-pandemic volume. While data shows average morning congestion has not increased (as shared in staff's November 2023 report), preliminary data from the Phase II report suggests the impacts of the path compared to the pre-existing shoulder are not clear cut when it comes to the rate of incidents and incident response times during the weekday morning commute. Vehicular incident types, rates, and incident response times averaged over a full day have not statistically shown any impacts when comparing the before and after periods of the Pilot. However, when data is filtered to show only the weekday morning period, average incident response times have increased by just over three minutes and overall rates of incidents on the bridge have increased by 33%. The PATH study also suggests travel times may be more variable due to incidents. It is difficult to assess the significance of this finding without more data.

Other Considerations:

Several additional considerations make it challenging to propose either keeping the upper deck in its current format or reverting to a shoulder in the absence of more information.

- Members of the public have asserted corridor commuters are lower income and more diverse racially and ethnically compared to the Bay Area average. This raises good questions about who is impacted by incident-related delays. While the UC Berkeley PATH evaluation did not consider traveler demographics, detailed travel behavior and demographic data from MTC's Travel Survey will be available in a few months and may provide more insight.
- In addition, several related efforts are underway but need more time to generate results that help us understand how this multi-modal corridor can best operate. BATA Oversight Committee actions in March 2023 will: (1) accelerate Richmond Forward Open Road Tolling (ORT) and HOV Lane Project to open by the end of 2025; and (2) launch Westbound Upper Deck DAA examining a 3rd HOV lane, multi-use path and shoulder alternatives to be completed early 2024. Caltrans has performed a preliminary analysis that confirms bridge structural strengthening is required to satisfy latest load rating standards if the moveable concrete barrier were to remain a permanent fixture on the bridge. Therefore, BATA would like to continue working with Caltrans to seek better understanding of the structural strengthening scope, costs and impacts.
- Finally, there are strong and highly varied opinions and experiences in relation to the upper deck multi-use path. Bicycle communities and multi-use path advocates are strong

supporters of making the improvements permanent as demonstrated in their consistent usage over the last four years and letters of support for the Pilot. At the same time, a number of westbound commuters that rely on the congested corridor to get to work have publicly expressed their concerns about persistent delays, the lack of emergency lane during the morning commute hours and incident-related congestion. In addition, Point Richmond residents have observed overflows into city of Richmond neighborhoods from cut-through traffic, particularly during incidents.

Proposal:

Based on these findings and considerations, staff propose to pursue extension of the pilot with modified operations until the end of 2025 (at minimum). Modified operations would move the barrier weekly to allow a multi-use path on days with less commute traffic and higher path usage (e.g., weekends, Fridays and Holidays) and revert to an emergency shoulder on days with more commute traffic and less path usage (e.g., weekdays). The specific days for path operations would be developed through additional review of data and discussion with stakeholders. Caltrans would engage UC Berkeley PATH for evaluation.

Extending the pilot would continue to provide bike and pedestrian access across the bridge when there is the largest demand and facilitate an ultimate decision on use of the shoulder in this multi-modal corridor. The extension would allow better understanding of access and non-motorized travel, the role of the emergency shoulder on incident rates, incident response and travel time reliability and how equity communities are affected. It also allows operations of Richmond Forward's ORT and HOV Lane to start, and it allows BATA and Caltrans to further develop the Westbound Upper Deck DAA and bridge structural strengthening needs associated with a moveable barrier.

The proposed modifications would require the San Francisco Bay Conservation and Development Commission (BCDC) to amend the current RSR bridge permit associated with the Pilot. BATA and Caltrans are scheduled to provide an update on the current Pilot to the BCDC Commission on May 2 to share findings from the Pilot and understand questions about the proposed extension and modifications. Attachment B includes the written report provided to BCDC. Staff will summarize this discussion at the May 8 BATA Oversight Committee meeting.

Next Steps:

If approved by BATA, several key steps are anticipated to happen concurrently in order to implement the RSR Bridge Pilot proposal as outlined above:

- **BCDC:** Staff will work with Caltrans to submit a request for permit amendment this summer.

- **Stakeholder Engagement:** Ongoing meetings will be held with stakeholders for input on upper deck modifications, such as bridge maintenance/construction activities, hours of the multi-use path, and potential bike shuttle operations.
- **Project Deliverables:** BATA and Caltrans will collaborate on the required project documentation and approvals, such as an amendment to the decision document and environmental revalidation.
- **BATA Oversight Committee/BATA:** Seek approval on contract items for approval, such as the Lindsay Movable Barrier contract amendment and a potential contract award for a bicycle shuttle.

Contract Amendment:

In January 2014, after a competitive procurement, the BATA Oversight Committee approved a pool of eight firms, including HNTB, to provide on-call design services for a two-year period with an option to extend. Following the approval of the bench, staff issued a Request for Qualifications to seek design services for the RSR Bridge Access Improvement Project. On March 5, 2014, this Committee authorized a contract with HNTB based on the recommendation by a review panel comprised of staff members from BATA, Caltrans and the TAM. Currently HNTB is providing design services during construction for the Package B2 of the RSR Bridge Access Improvement Project, which will construct a bicycle and pedestrian path on the west side of the RSR bridge on East Francisco Boulevard, in San Rafael. Staff seeks an amendment to the existing HNTB contract to complete the project documentation required for approvals to implement the Pilot as described above.

HNTB and its project team's small business and disadvantaged business enterprise status is included in Attachment C.

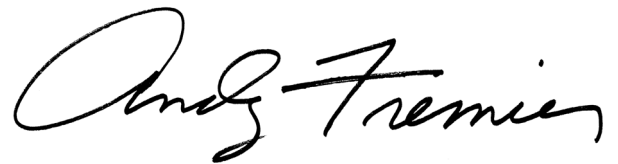
Recommendations:

Staff recommends:

- (i) The Committee referral to the Authority for approval to pursue steps to extend the Pilot on the upper deck with modifications and make the Pilot on the lower deck permanent. This would allow staff to work with Caltrans to pursue a BCDC bridge permit amendment and complete supporting documents and project approvals.
- (ii) The Committee authorize the Executive Director or designee to negotiate and enter into a contract amendment with HNTB in an amount not to exceed \$100,000 to complete the deliverables required for approval of the Pilot Extension of the Project.

Attachments:

- Attachment A – Additional Pilot Project Information
- Attachment B – Report on the Richmond-San Rafael Bridge Access Improvement Pilot Project, provided to BCDC on May 2, 2024
- Attachment C – Disadvantaged Business Enterprise and Small Business Enterprise Status
- Request for Committee Approval – Summary of Proposed Contract Amendment
- Presentation – Richmond San Rafael Bridge Pilot Recommendations

A handwritten signature in black ink that reads "Andrew B. Fremier". The signature is written in a cursive, flowing style.

Andrew B. Fremier

Attachment A - Additional Pilot Project Information

The Pilot consists of the following pilots:

- **Peak Period Use Lane (Bridge Lower Deck)** – Approximately \$6M of capital costs to convert shoulder lane to a peak-period use lane in April 2018, which eliminated eastbound traffic congestion.
- **Multi-Use Bicycle and Pedestrian Path (Bridge Upper Deck)** – Approximately \$10M of capital costs to convert shoulder lane to a two-way multi-use bicycle/pedestrian path in November 2019, creating a new route across the Bay and a vital link in the 500-mile San Francisco Bay Trail and connected with MTC’s continuous 3,244 mile All Ages and Abilities Active Transportation Network. The path is separated from vehicular traffic by a moveable concrete barrier system that accommodates bridge maintenance.

In conjunction with the pilot projects, BATA implemented permanent improvements on both bridge approaches in Marin and Contra Costa counties:

- **Eastbound Improvements** – approximately \$30M of capital costs to widen and modify the on/off ramps along eastbound I-580 to accommodate the bridge lower deck improvements.
- **Bicycle and Pedestrian Access** – approximately \$17M of capital costs to improve the connections from the bridge to the existing pedestrian and bicycle networks in the cities of Richmond and San Rafael, including a sidewalk widening project that’s currently under construction along East Francisco Blvd. in the City of San Rafael.

BATA Oversight Committee
May 08, 2024

Attachment B
Agenda Item 3a-24-0354

**Attachment B: Report on the Richmond-San Rafael Bridge Access Improvement Pilot
Project, provided to BCDC on May 2, 2024**



May 02, 2024

Report on the Richmond-San Rafael Bridge Access Improvement Pilot Project

Introduction

The 5.5-mile-long Richmond-San Rafael (RSR) Bridge has served the needs of North Bay and East Bay travelers for over 65 years. The Bay Area Toll Authority (BATA) and Caltrans have been collaborating with partner agencies including Transportation Authority of Marin (TAM) and Contra Costa Transportation Authority (CCTA) on a series of projects and programs that work collectively to manage the bridge and improve multi-modal mobility in the corridor, including bicycle and pedestrian access. Efforts include the RSR Bridge Access Improvement Pilot Project (Pilot) the RSR Forward Program, and the Westbound Upper Deck Design Alternative Assessment.

In 2014, BATA took responsibility for funding and implementing the Pilot, a project undertaken in partnership with Caltrans, TAM, CCTA and local agencies (City of Richmond, City of San Rafael, Marin County, Contra Costa County) with the goals to address traffic congestion and provide bicycle and pedestrian access to and across the bridge, consistent with core strategies in Plan Bay Area 2050 including the San Francisco Bay Trail build-out.

The partners committed to a four-year pilot that converted the bridge lower deck emergency shoulder to a Part-time Third Travel Lane in April 2018, converted the upper deck emergency shoulder to a Multi-use Path in November 2019, and added permanent Multi-use Path improvements in the cities of Richmond and San Rafael. The purpose of the pilot is to provide bicycle and pedestrian access to improve multimodal circulation and connections to the RSR Bridge while also reducing traffic congestion and delay for



motorists. Because improvements on both decks are innovative uses of emergency shoulders, the partners committed to undertake the Pilot with an evaluation.

In 2016, BCDC approved Material Amendment No. 4 to the RSR Bridge Permit; this report satisfies the approved permit's requirement under Special Condition II.H.4, which requires a written and verbal report to the Commission at the end of the Pilot's third year on the status, including, but not limited to, an analysis of public usage and benefits, an assessment of any operational and safety issues, and the need for any future changes to the facilities, including removal or making them permanent.

The following Attachments provide supplemental information for the contents of this memo:

- Attachment A – Project Maps and Exhibits
- Attachment B – Caltrans / UC Berkeley PATH Phase I Pilot Study Report (2022)

Background

The Pilot consists of the following projects:

- **Multi-Use Bicycle and Pedestrian Path (Bridge Upper Deck)** – Convert the emergency shoulder to a two-way multi-use bicycle/pedestrian path in November 2019, creating a new route across the Bay and a link in the 500-mile San Francisco Bay Trail and connection in the region's continuous 3,244 mile All Ages and Abilities Active Transportation Network. The path is separated from vehicular traffic by a moveable concrete barrier system that accommodates bridge maintenance. (Approximately \$10M capital cost)
- **Part-Time Third Travel Lane (Bridge Lower Deck)** – Convert the emergency shoulder to a Part-time Third Travel Lane (between 2 PM and 7 PM every day) in April 2018, to reduce traffic congestion and delays. (Approximately \$6M capital cost)

In conjunction with the Pilot, the partners implemented permanent improvements on both bridge approaches in Marin and Contra Costa counties:

- **Bicycle and Pedestrian Access** – Improve the connections from the bridge to the existing pedestrian and bicycle networks in the cities of Richmond and San Rafael, including a sidewalk widening project that's currently under construction along East Francisco Blvd. in the City of San Rafael. (Approximately \$17M capital cost)



- **Eastbound Improvements** – Widen and modify the on/off ramps along eastbound I-580 to accommodate the bridge lower deck improvements. (Approximately \$30M capital cost)

Refer to Attachment A for Project Maps and Exhibits.

BATA implemented a variety of infrastructure improvements and programs during the pilot period to support biking across the bridge corridor through e-bike purchase incentives and bike trips across the bridge, guided group rides, and local quick-build bike access improvement projects. Implemented programs and projects include: RSR Rides, which launched February 2020 and relaunched in Fall 2021 after being paused due to COVID; the Francisco Blvd East / Grange Ave. Quick Build bike path improvements, which opened in December 2020; Richmond Bike Share, which launched in June 2021; and the RSR Bridge E-Bike Commute Program, which launched in February 2023 and offered subsidies for e-bike purchases.

Caltrans employed UC Berkeley PATH (PATH) to conduct a study of the Pilot and to prepare the following Pilot After Study reports:

- **Phase I Pilot Study Report (Attachment B)** – published in Summer 2022 on the Caltrans website ([Phase I Pilot Study Report](#)).
- **Phase II Pilot Study Final Report** – to be published in May 2024. The Phase II Report will include updated evaluation of the Pilot reflecting an extended evaluation period incorporating data up to April 2024. It will also include the evaluation of the Sir Francis Drake Blvd. Overpass Bike Path in Marin County that opened in August 2020.

While the original plan anticipated the Part-Time Third Travel Lane and Multi-Use Path projects opening at approximately the same time, construction phasing and upper deck bridge repairs allowed the Part-Time Third Travel Lane to be completed earlier. The Phase I Pilot Study Report reflects almost three years following the opening of the Multi-use Path on the bridge, but much of the data was impacted by the COVID-19 lockdown and its slow emergence. In addition, the Project partners added TAM's connecting bicycle path project along Sir Francis Drake Overcrossing in the City of San Rafael (opened August 2020) to the Pilot After Study, and its results will be captured in the Phase II Pilot Study Report along with updated data for the RSR Bridge Pilot that better reflect post-COVID conditions.

In compliance with the BCDC permit, the pilot studies include an analysis of public usage and benefits (e.g., bicycle and pedestrian counts, impacts on local businesses and communities and quality of life) and an assessment of operational and safety issues



(e.g., user surveys on perceived safety of the Multi-use Path, comparing before and after traffic congestion, incident rates and response times).

The following sections summarize findings from the Phase I Pilot Study Report and include additional preliminary findings from the extended evaluation period and additional analysis in the Phase II Pilot Study Report as noted.

Findings: Multi-Use Path (Bridge Upper Deck)

Summary:

The Multi-use Path has demonstrated the importance of providing access across the San Francisco Bay and is particularly well-used weekends. Path usage is considerably lower on weekdays. The impact of the path on vehicular traffic safety and operations is not entirely clear; nor is there a clear public consensus about the path. Data on vehicular incident response and incident related congestion suggests there is value in further understanding bridge access needs and the role of the emergency shoulder.

Multi-Use Path Usage and Safety (Phase I Report Sections 6, 7, 9, and 13):

- Cyclist and pedestrian counts were collected from automated counters installed on the Multi-use Path:
 - Cyclist:
 - Weekend Averages: 190 cyclists per day in each direction. Seasonal highs and lows range between around 300 and 100, respectively. Peak daily use is on weekends, with Saturdays generally seeing the highest traffic. Findings in the preliminary Phase II Report shows slightly lower average usage of 180 cyclists per day in each direction with similar seasonal trends since January 2022. Summer (June-September) Saturdays show highest averages of 240 cyclists per day in each direction.
 - Weekday Averages: 68 cyclists per day in each direction. This is consistent with the findings in the preliminary Phase II Report.
 - Pedestrian:
 - Pedestrian use is lower than cyclists, likely due to the length of the bridge.
 - Weekend Averages: 20 pedestrians per day in each direction.
 - Weekday Averages: 10 pedestrians per day in each direction.



- These are consistent with the findings in the preliminary Phase II Report.
- A user survey was conducted from June 16, 2021, to August 13, 2021 to assess how users of the Multi-use Path view its usefulness and safety. It was an online survey, with QR codes and URL posted along the Multi-use Path and various social media platforms, which generated approximately 2,200 respondents. 29% of the respondents indicated that they do not use the path.
 - Perceived Safety rating by overall users is 8.2 out of 10 (with 10 being the safest).
 - Perceived Benefits rating by cyclists is 8.4 out of 10 (with 10 being most beneficial). Pedestrians responded 6 out of 10 and non-users responded 2.8 out of 10.
 - 85% of path users used it for recreation or exercise.
 - 14% of path users used it for commuting to work or locations other than work.
 - 1% used it for other, non-specified reasons.
- No incidents (such as crashes and near-miss collisions) involving bicyclists or pedestrians were recorded by the CHP or reported on the Street Story platform during the evaluation period. However, anecdotal evidence suggests that some incidents have occurred. This is consistent with the findings in the preliminary Phase II Report.

Vehicular Traffic Impacts (Phase I Report Section 8):

- Peak-hour travel time across the bridge has increased by less than a minute, due to slightly slower speeds on the bridge. Installing the Multi-use Path and barrier required shortening the merge downstream of the toll plaza and narrowing the bridge roadway, which reduced the maximum traffic flow across the bridge by 7%, on weekdays and 4% on weekends. This is consistent with the findings in the preliminary Phase II Report.
- Travel time has also been more variable due to the inability of disabled vehicles to move out of a traffic lane.
- However, these impacts have not translated into significantly increased congestion upstream of the bridge compared to the 2015 to 2018 average conditions. This appears to be due to traffic levels on the approach remaining 90% of 2018 levels. This is consistent with the findings in the preliminary Phase II Report.



Vehicular Safety / Incident Impacts (Phase I Report Sections 10 and 11):

The Phase I Report examined safety and traffic incidents in total, over the course of the full day. The Phase II Report examined trends during the congested AM peak period in more detail and further distinguished the COVID period from the post-COVID period, to provide context for the large volume of comments and concerns expressed during presentation of the Phase I report findings to BATA, Caltrans and the other partners by motorists, residents, and employers about their experiences in the corridor. This analysis conveys a complex picture and suggests there is more to learn about the impact on bridge operations of not having an emergency shoulder during the congested peak period. The following data considers incident data since 2016 and excludes incidents during the COVID-impacted period of April 2020 to June 2021 (unless otherwise noted). Therefore, excluding the COVID-impacted period, the Phase I Report data on incidents represents less than a full year and the preliminary Phase II report represents up to 3 years of data.

- All Incidents, Full Day:
 - On the bridge approach, the frequency (per million vehicle miles traveled) of traffic incidents (commonly rear-end collisions, sideswipes, and vehicles hitting objects) has reduced by 20% as reported in the Phase I report. Findings in the preliminary Phase II report show a reduction of 13%.
 - On the bridge itself, the frequency of traffic incidents has increased by 5%. Findings in the preliminary Phase II report show a reduction of 19%.
 - On the bridge, rear-ends (~50%) and sideswipes (~40%) represent about 90% of all reported incidents. The frequency of rear-ends decreased by 5% and sideswipes increased by 36%. Findings in the preliminary Phase II report show rear-ends decreased by 19% and sideswipes decreased by 12%.
 - On the bridge, incident severity such as “no injury” (~70%) and “complaint of pain” (~20%) represent about 90% of the reported incidents. The frequency of “no injury” increased by 9% and “complaint of pain” decreased by 23%. Findings in the preliminary Phase II report show “no injury” decreased by 17% and “complaint of pain” decreased by 23%.
 - Average incident response time (data includes COVID-impacted period) on the bridge decreased from 11.6 mins to 10.3 mins and the median response time decreased from 11.5 mins to 9.5 mins. In the preliminary Phase II Report (data excludes COVID-impacted period), average response time increased from 11.6 mins to 14.8 mins and the median response time increased from 11.5 mins to 12.0 mins.



- Weekdays 6am – 9am Only (from the preliminary Phase II Report)
 - On the bridge approach, the frequency of traffic incidents has increased by 18%.
 - On the bridge itself, the frequency of traffic incidents has increased by 33%.
 - Although the full day shows a decrease in frequency of various types of incidents on the bridge, the weekday AM data indicates increases. Frequency of rear-ends increased by 10% and sideswipes increased by 49%.
 - Similarly with incident severity on the bridge, frequency of “no injury” increased by 37% and “complaint of pain” increased by 1%.
 - Average incident response time (data excludes COVID-impacted period) on the bridge increased from 12.9 mins to 16.3 mins and the median response time decreased from 13.0 mins to 12.0 mins. Considering all the potential influencing factors, the relatively small number of incidents that have occurred on the upper deck of the bridge since 2016, makes it difficult to provide any clear conclusion on whether the modifications have significantly affected incident response times. Current data suggests only a small potential impact.

Other Considerations:

In response to the Pilot studies, Caltrans, BATA, TAM, and CCTA boards have received considerable public feedback, particularly about the upper deck Multi-use Path. There are strong and highly varied opinions and experiences. Many bicycle and Multi-use Path users are strong supporters of making the improvements permanent as demonstrated in their consistent usage over the last four years and letters of support for the Pilot. At the same time, a number of westbound motorist commuters and employers whose workers rely on the congested corridor have expressed concerns about persistent delays, the lack of an emergency shoulder during the morning commute hours and incident-related congestion. Furthermore, Point Richmond residents have observed overflows into city of Richmond neighborhoods from cut-through traffic, particularly during incidents.

In addition, Caltrans performed a preliminary analysis of the bridge structure and identified that if the moveable barrier were to be made permanent, then the bridge stringers on the upper deck would require strengthening to meet the latest codes. This analysis will need to be further developed to identify scope, cost, and budget needs.



Findings: Part-Time Third Travel Lane (Bridge Lower Deck)

Summary:

The Part-time Third Travel Lane has significantly reduced round trip commute time by effectively eliminating weekday afternoon congestion in the eastbound direction and has improved local street traffic in the City of San Rafael. The project has not evinced any safety or operational concerns and is widely embraced by the public and community.

Traffic Impacts (Phase I Report Section 8):

- Afternoon congestion on I-580 Eastbound in Marin County has disappeared, leading to a reduction of up to 14 minutes in peak-hour travel time from the US-101 interchange to the end of the RSR bridge. In the preliminary Phase II Report, findings show a reduction of up to 14 to 17 minutes in peak-hour travel time during the midweek days (Tuesday through Thursday).
- This has resulted in improved travel times and traffic flow along Sir Francis Drake Boulevard and has resulted in significantly fewer vehicles using local arterials (such as East Francisco Blvd. and Main St.) as a bypass to I-580 Eastbound traffic in the afternoon.
- On average, over 99% of traffic observed on the bridge before 2 PM and after 7 PM is compliant with the shoulder hours of operations. This is consistent with the findings in the preliminary Phase II Report.

Safety and Incident Impacts (Phase I Report Sections 10 and 11):

- On the bridge approach, the frequency of traffic incidents (commonly rear-end collisions, sideswipes, and vehicle hitting objects) has reduced by 70%. No significant impacts were further observed on the type, severity, duration, and location of incidents. This is consistent with the findings in the preliminary Phase II Report.
- On the bridge itself, the overall frequency of traffic incidents has reduced by 10%. Findings further show a reduction in rear-end collisions associated with lower traffic densities during the peak, despite a smaller increase in sideswipes associated with lane changes. This is consistent with the findings in the preliminary Phase II Report.
- There is no evidence that the modifications are producing longer incidents or changing the location where crashes tend to occur on the bridge, and there is no evidence that the bridge modifications are increasing the time needed to clear crash events. This is consistent with the findings in the preliminary Phase II Report.



Next Steps

As a result of the Pilot study findings and other considerations, Caltrans, BATA, TAM and CCTA staffs have developed the following proposal:

- **Multi-Use Bicycle and Pedestrian Path (Bridge Upper Deck)** – Extend the Pilot with modified operations until at least the end of 2025, with allowance for further extension as needed for proper evaluation. Modified operations would move the barrier weekly to allow a Multi-use Path on days with less commute traffic and higher path usage (e.g., weekends, Fridays, and Holidays) and revert to an emergency shoulder on days with more commute traffic and less path usage (e.g., remaining weekdays). On days when the Multi-use Path is not available, BATA and Caltrans would provide a bicycle shuttle operation that will pick-up and drop-off at designated stops at each end of the bridge to accommodate users impacted by the closure. The specific days for path operations and specific shuttle operations would be developed through additional review of data and discussion with stakeholders. Caltrans would continue to engage UC Berkeley PATH for evaluation of the Pilot extension.

Extending the pilot would continue to provide bike and pedestrian access across the bridge when there is the largest demand and would facilitate an ultimate decision on use of the shoulder in this multi-modal corridor. The extension would allow better understanding of access needs and non-motorized travel, the role of the emergency shoulder on incident rates, incident response and travel time reliability and how equity communities are affected. It also allows related work to progress. This includes completing the assessment of bridge structural strengthening required to retain the moveable barrier as well as constructing Richmond – San Rafael Forward Open Road Tolling and HOV Lane improvements, which are expected to greatly improve transit and carpooling options as well as improve, though not eliminate, general traffic congestion when they open around the end of 2025. In parallel, BATA and Caltrans will continue to examine opportunities to use the shoulder to balance bike and pedestrian access with transit and carpool priority such as through the Westbound Upper Deck Design Alternative Assessment now underway.

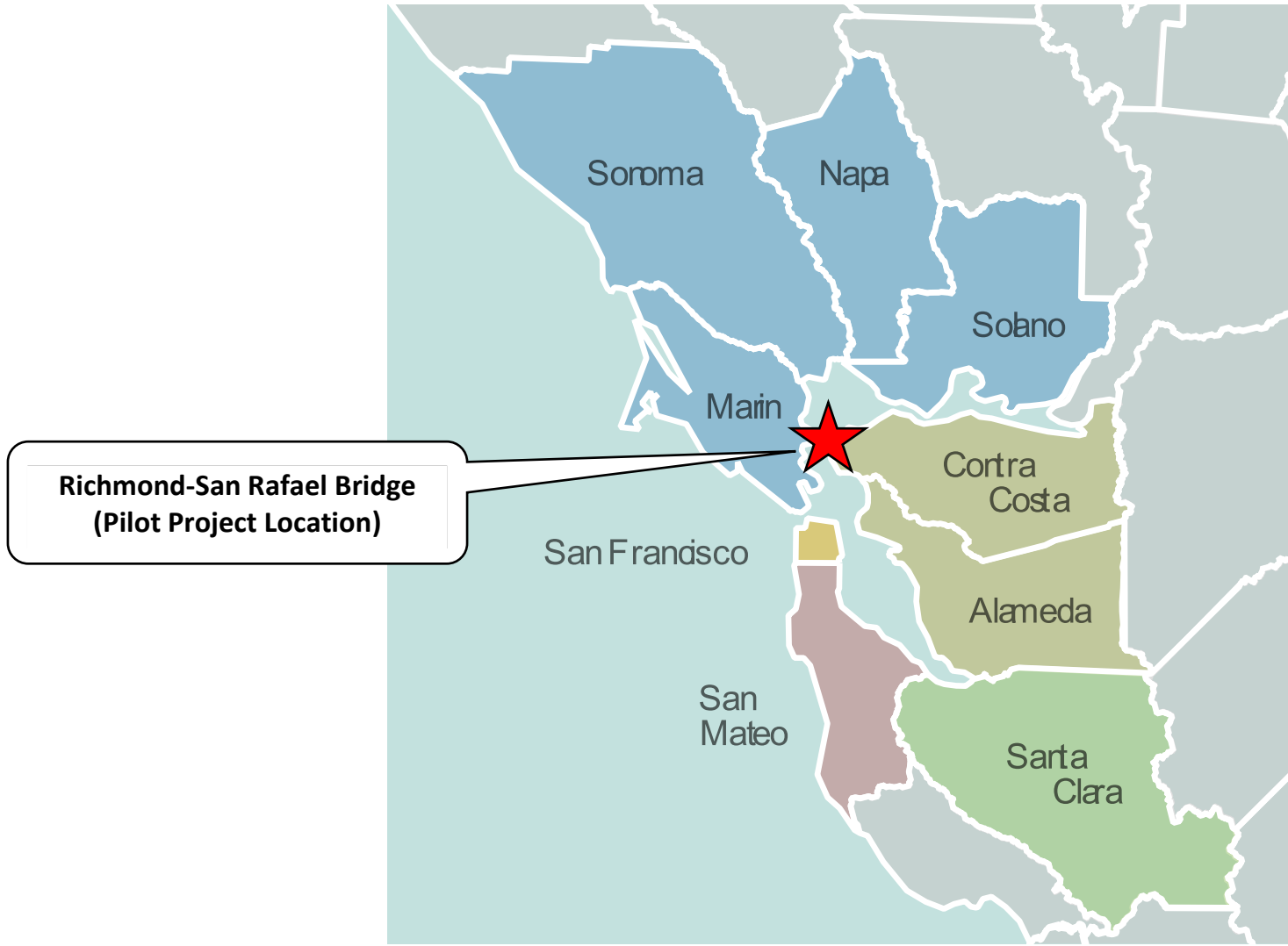
- **Part-Time Third Travel Lane (Bridge Lower Deck)** – Make permanent, keep operations as-is.

The proposal above would require a material amendment to the BCDC RSR bridge permit associated with the Pilot. BATA will present the Pilot recommendations at the BATA Oversight Committee Meeting on May 08, 2024, and seek the BATA's approval on

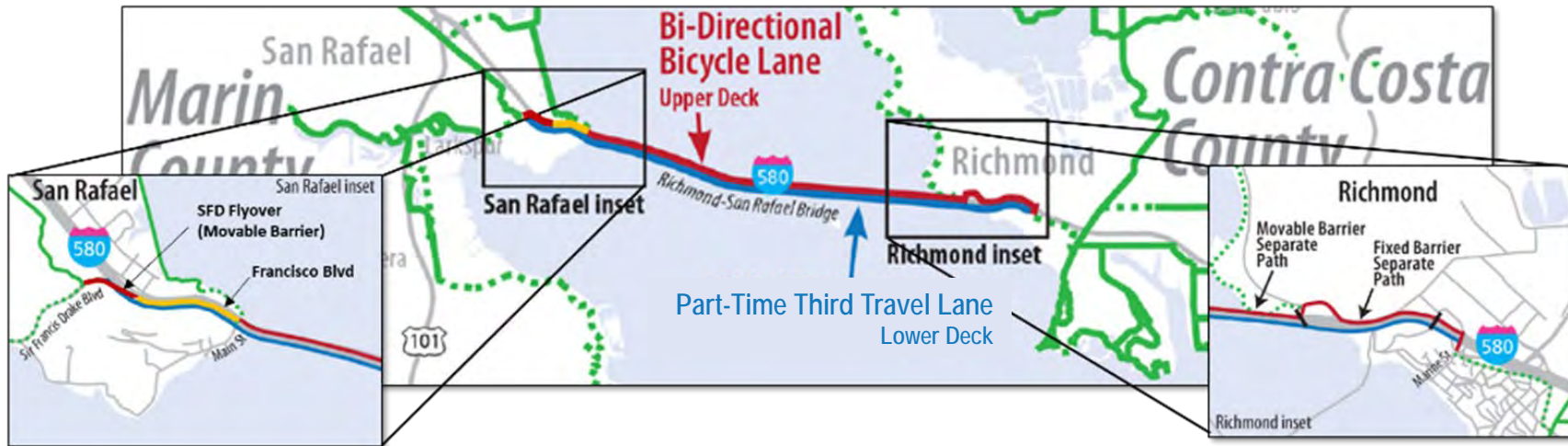


May 22, 2024 to pursue the proposal. If approved in May, this would allow BATA staff to work with Caltrans to request a BCDC bridge permit amendment this summer.

Pilot Project Vicinity Map

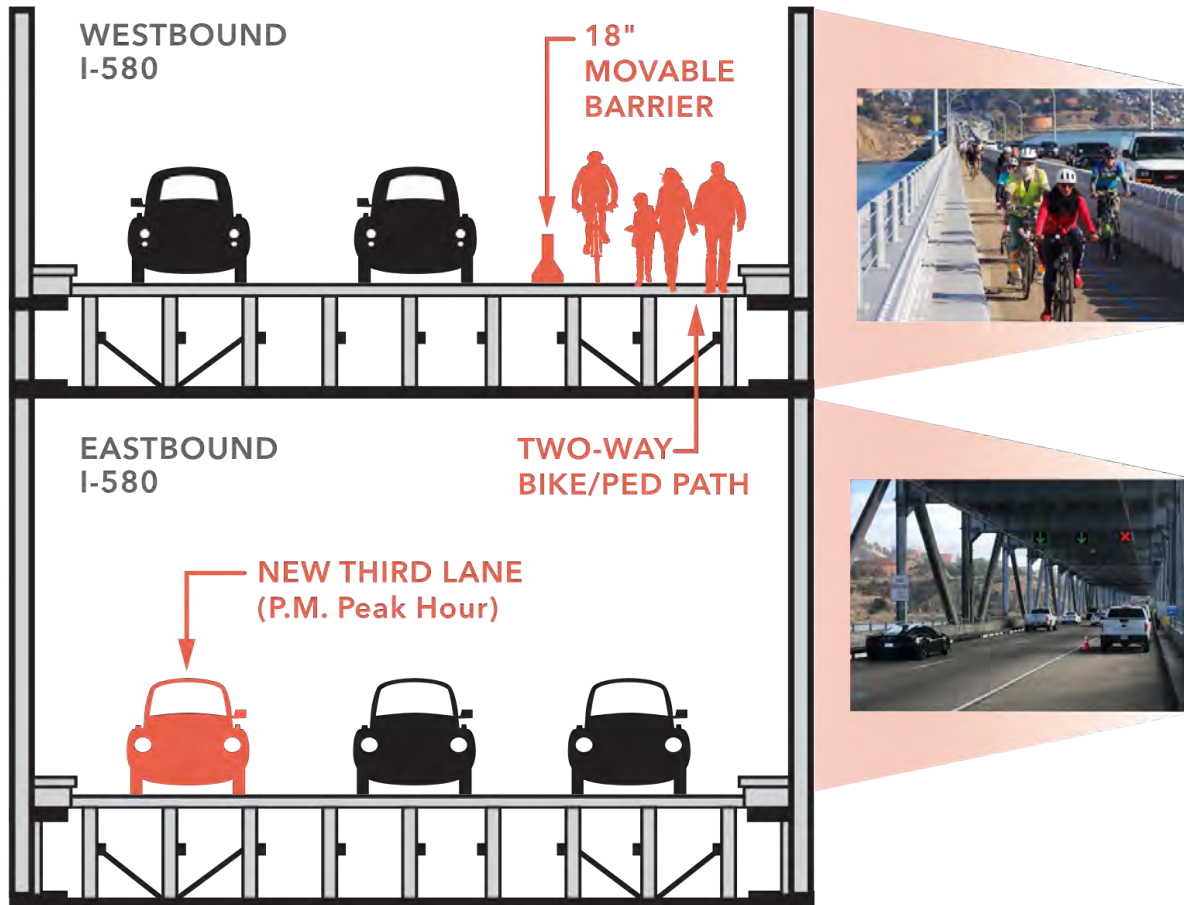


Pilot Project Location (Aerial)



- Key:**
- Multi-Use Path
 - Part-Time Third Travel Lane
 - Sidewalk Widening (Under Construction)
 - Bay Trail (Existing)
 - Bay Trail (Proposed)

Richmond-San Rafael Bridge Pilot Project Cross-Section (looking West)



Contra Costa County Trail Connections



Marin County Trail Connections

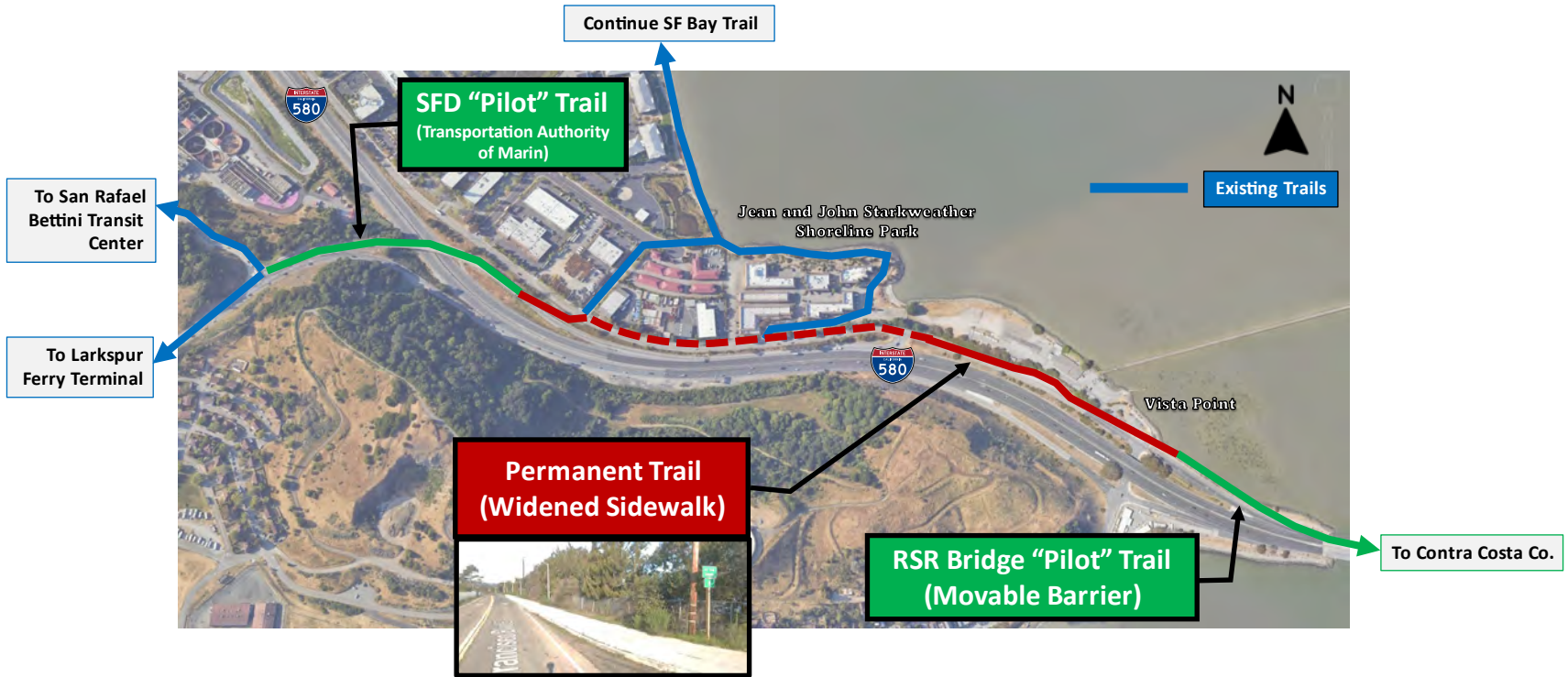




Image of Bill Pinkham taken in 2005 enjoying life.

I was saddened to learn that Bill Pinkham died on May 7, 2024.

During the past 25 years there have been neither environmental nor public access issues in Richmond, CA that Bill Pinkham did not volunteer to help advance. He opposed coal transport through Richmond and Chevron refinery emissions. His advocacy with the East Bay Bicycle Coalition (EBBC) began in 2002 and continued with Bike East Bay. He monitored Environmental Impact Reports for projects in Richmond. Following several years of being the liaison listed in the EBBC newsletter for the *ad hoc* West Contra Costa advocacy contact, Bill contributed to the formation of the Richmond Bicycle Advisory Committee. He also served on the Contra Costa County Bicycle Advisory Committee. Through these dedicated collaborations with others, Bill contributed to the first Richmond Bicycle Master Plan, adopted in 2011. Next he worked to ensure that the Richmond Greenway was delivered.

My last ride with Bill was on November 11, 2023, when 800 bicyclists celebrated the 4th anniversary of opening the Richmond-San Rafael Bridge Path. Among our first rides together was in 2005 to Point Pinole Regional Park where we met up with renowned environmental activist Sylvia McLaughlin to protect a large adjacent parcel on the Richmond shoreline known as Breuner Marsh. We also visited Whitney Dodson, another luminary who was elected to the East Bay Regional Park District Board, at his home in nearby Parchester Village. The Breuner Marsh is now named Dotson Family Marsh, part of the beautiful regional park that protects the wildlife habitat formed by Bill's beloved Rheem Creek where it reaches the San Francisco Bay.

In 2005, when Bill was nominated to serve on the EBBC's Board of Directors, he sent me the following short biography:

"Although I have been active in the EBBC for a relatively short time, for many years I have worked to promote alternative modes of transportation, renewable energy development, and to protect of our natural environment. I have enjoyed representing bicyclists' interests in West CoCo County and am happy to have made new friends in the EBBC.

"I managed to parlay my degree in philosophy/English lit into a job as a carpenter. Although my work compels me to use my van to transport heavy boxes of tools and construction materials, I ride as much as possible for errands, visits, and meetings, and often pedal for recreation on the weekends. Bicycling was a big factor in my losing 60 lbs. five years ago, which averted major back surgery.

"I am an avid sea kayaker and cross-country skier, activities like bicycling where one moves slow enough to take in and connect with the environment and fast enough to avoid boredom. My wife and I have hiked in mountains throughout the U.S. and in some foreign countries. I am an active member of the Richmond Greens, and belong to the Nature Conservancy, the Sierra Club, and the Audubon Society. Recently I have been involved with projects to save Breuner Marsh from development (next to Pt. Pinole Regional Park), restore Rheem Creek, and oversee if not prevent the proposed development of 1300 units on the former site of Stauffer Chemical and Zeneca Pharmaceuticals, land which is laced with herbicides, pesticides and other nasty waste. I was active in the recent successful campaign to elect the first Green to the Richmond City Council.

"I believe that the EBBC's work is crucial given this country's profligate and archaic energy policies and would find work on the Board important and rewarding."

Indeed, his work was rewarding to all. Bill's exemplary service to the community and the environment never wavered—it even grew following his retirement as a carpenter. In 2022 the BART Bicycle Advisory Task Force recommended his appointment to represent Contra Costa County. I intend to adjourn the March 23, 2024, BART Board Meeting in Memory of Bill Pinkham.

Good-bye Bill, I thank you for your service and for representing a solid role model for others to follow. I also extend my deepest sympathy over his loss to Wanda Mar, his loving wife.

-Robert Raburn, PhD

Director - District 4

San Francisco Bay Area Rapid Transit District (BART)

510-530-3444 hm/msg

Heath Maddox

From: BART Customer Service <webcustomerservices@bart.gov>
Sent: Friday, April 26, 2024 9:58 AM
To: BART Webmaster; Heath Maddox
Subject: RE: Case 00333546: Feedback [ref:!00Dd00hrYV.!5006T02RBBok:ref]

Hello Webmaster, Heath:

Feedback about the Trip Planning app from a bicyclist point of view. Thank you.

Regards,

Samson Wong
BART Customer Services

M-F 8am to 5pm

510-464-7134

=====

Contact Name Stephen von Kugelgen

Contact Email [REDACTED]

Contact Phone

Opened Date/Time 4/23/2024 9:14 AM

Description Please tell us about your experience planning your trips linked below. Did you get what you needed? If no, explain what you were expecting and how we can improve?

<https://planner.bart.gov/?SID=A%3D2%40O%3D6401%20Hollis%20St%2C%20Emeryville%2C%2094608%40H%3D6401%40X%3D-122290844%40Y%3D37844820%40U%3D100%40L%3D980008495%40B%3D1%40p%3D1712660254%40&ZID=A%3D2%40O%3D1423%20Polk%20St%2C%20San%20Francisco%2C%2094109%40H%3D1423%40X%3D-122420522%40Y%3D37789797%40U%3D100%40L%3D980436264%40B%3D1%40p%3D1712660254%40&date=23.04.2024&time=18:00:00&timeSel=0&journeyProducts=492&start=1>

It's frustrating that BART's trip planner never seems to be willing to provide a route that has TWO bike segments. If I'm bringing my bike on BART, why not give me directions that are BIKE-BART-BIKE? It's usually much faster than BIKE-BART-BUS or BUS-BART-BIKE due to skipping the connection!

Stephen von Kugelgen, Ph.D.

[REDACTED]
[REDACTED]ref

Heath Maddox

From: BART Customer Service <webcustomerservices@bart.gov>
Sent: Thursday, April 25, 2024 12:44 PM
To: Michael Forte; Heath Maddox; Eric White
Subject: FW: RE: Case 00333712: Bicycle safety inside stations and on train platforms [ref:!00Dd00hrYV.!5 [ref:!00Dd00hrYV.!5006T02RBS8A:ref]

Hi Mike, Lt. White, Heath:

FYI. No response required. Anonymous/invalid email comment about bikes at M16. Thanks.

Samson Wong
BART Customer Services

=====

Contact Name not given decline

Contact Email decline@no.com

Contact Phone

Opened Date/Time 4/25/2024 5:54 AM

Description Please do something to enforce pedestrian safety at Embarcadero station. Bicyclists ride directly at people while blinding them with LED headlamps.
ref:!00Dd00hrYV.!5006T02RBS8A:ref

Heath Maddox

From: BART Customer Service <webcustomerservices@bart.gov>
Sent: Thursday, April 25, 2024 12:37 PM
To: Eric White; Heath Maddox; Phaethon Brown; Michael Forte; William Spears
Subject: RE: Case 00333705: Safety issues entering/exiting BART controls [ref:!00Dd00hrYV!
5006T02RBQWK:ref]

Hello Lt. White, Lt. Spears, Cmdr. Power, Mike, Phaethon (c/o Fred), Heath:

FYI. No required response. Customer/bicyclist feedback below about 16th Street and Ashby fare evasion. Patron was given info about pilot fare gates (16th Street is alternative for installation), contacting BPD about policing issues and informed that station agents can contact BPD but do not enforce.

Thanks for listening!

Regards,

Samson Wong
BART Customer Services

M-F 8am to 5pm

510-464-7134

=====
Contact Name Catherine Covey

Contact Email [REDACTED]

Contact Phone

Opened Date/Time 4/24/2024 6:50 PM

Description Dear BART,

Each week, I commute with my bike on BART between the East Bay and SF, usually through the Ashby and 16th/Mission stations. Almost every time I enter or exit the accessible (wide) controls with my bike, someone tries to push through on my fare. Many times, I have been forcefully shoved out of the way and verbally harassed. It seems like there are often individuals who are waiting around for opportunities to push through, especially as cyclists are entering/exiting. I usually have this happen at least once, but experienced this twice today -- receiving verbal abuse for several minutes from one person who tried to exit as I was entering and being pushed by another person who exited on my fare. This issue seems to have increased exponentially since the early part of 2024.

I'm sure that you are well aware of this issue, but I don't feel safe at all and wanted to let you know that this is getting worse. People who are working at the BART controls station say that they can't and aren't supposed to do anything about this -- which I understand.

Thanks for anything that promotes a more secure experience.
ref:!00Dd00hrYV.!5006T02RBQWK:ref

Heath Maddox

From: Peoples, Jesse <JPeoples@berkeleyca.gov>
Sent: Tuesday, May 7, 2024 4:42 PM
To: Heath Maddox
Cc: Rachel Factor
Subject: RE: MLK/Prince Pushbutton

The detection type is something we are still looking into. Many community members have advocated for passive detection so we will thoroughly look into it as we do have passive detection at some other PHB locations. However, at this stage in the project I can't guarantee anything (we are currently in the early design stage).

Thanks,
Jesse

From: Heath Maddox <hmaddox@bart.gov>
Sent: Tuesday, May 7, 2024 4:26 PM
To: Peoples, Jesse <JPeoples@berkeleyca.gov>
Cc: Rachel Factor <RFactor@bart.gov>
Subject: RE: MLK/Prince Pushbutton

Hi Jesse, thanks for the follow-up, much appreciated.

This all makes sense me, and I just have one question before I get back to Marc: what type of detection will the PHB have?

-Heath

From: Peoples, Jesse <JPeoples@berkeleyca.gov>
Sent: Tuesday, May 7, 2024 4:14 PM
To: Heath Maddox <hmaddox@bart.gov>
Cc: Rachel Factor <RFactor@bart.gov>
Subject: RE: MLK/Prince Pushbutton

Adding Rachel Factor (from original email) to this thread.

Thanks again,
Jesse

From: Peoples, Jesse
Sent: Tuesday, May 7, 2024 4:12 PM
To: hmaddox@bart.gov
Subject: RE: MLK/Prince Pushbutton

Hi Heath,

Sorry for the delay in getting back to you on this item. We've been doing quite a bit of research to confirm the right-of-way in this area. I'm attaching two items to this email (that you may already have as I believe we received them from

BART). The "STREETS" document is a deed that grants ownership of the R9-1 parcel (in gray from the b68p125 RRW9 file) to the City of Berkeley to accommodate widening of MLK.

With that said, my understanding is that the eastern sidewalk is within the City's right-of-way and we will take care of the installation, ownership, and maintenance of the equipment installed as part of the Woolsey-Fulton Bicycle Boulevard project. An additional update that we haven't posted yet, is that this location (MLK & Prince) is now slated for a Pedestrian Hybrid Beacon. There is a myriad of reasons for this, including existing traffic and pedestrian volumes, tradeoffs with beacon installations at other project intersections, and requests/support from the public.

Thank you, please let me know if you have any questions.

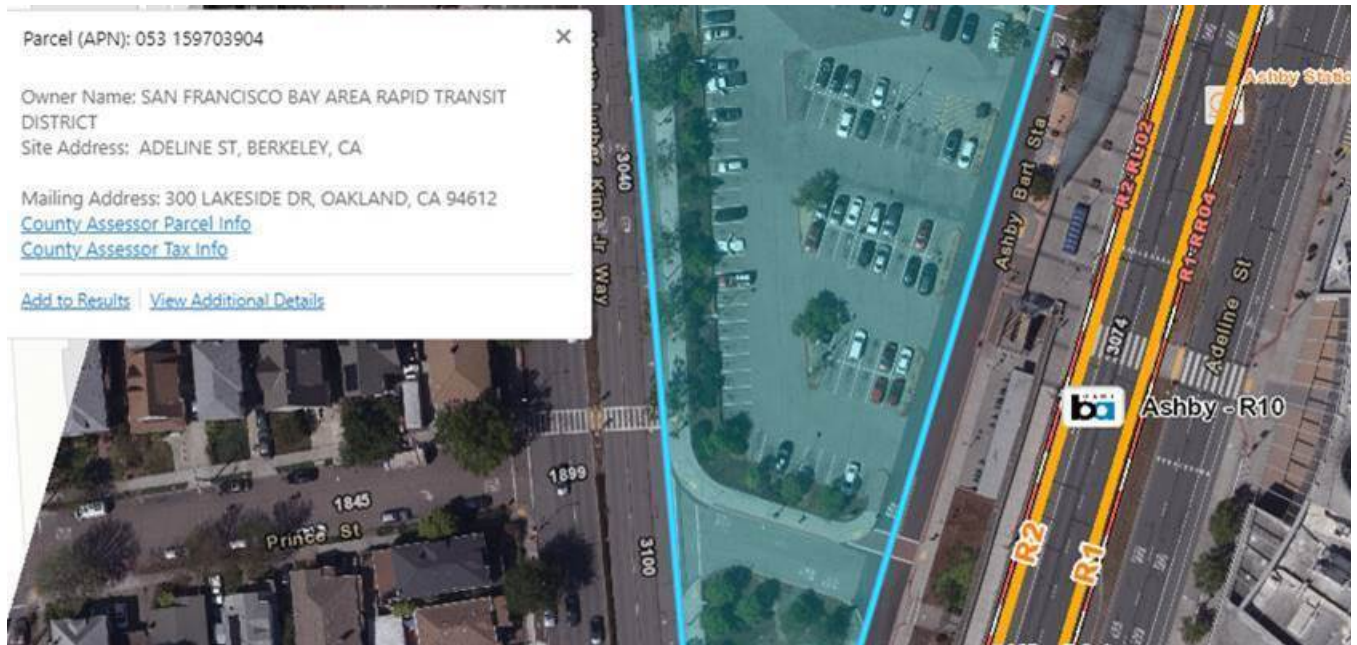
Jesse

From: Heath Maddox <hmaddox@bart.gov>
Sent: Tuesday, February 06, 2024 10:26 AM
To: Jung, Kenneth <KJung@berkeleyca.gov>
Cc: Rachel Factor <RFactor@bart.gov>
Subject: MLK/Prince Pushbutton

WARNING: This is not a City of Berkeley email. Do not click links or attachments unless you trust the sender and know the content is safe.

Hi Ken,

At last night's BART Bicycle Advisory Task Force (BBATF) meeting, I gave a short update on the Ashby BART Woolsey-Prince Bicycle Boulevard connector and the City's Fulton-Woolsey Bicycle Boulevard project. Marc Hedlund, a BBATF member and Berkeley resident who attended the 1/31 public meeting, raised an issue about detection for the RRFB on MLK at Prince that I must have missed during the public meeting: namely that one of the pushbuttons (and one of the RRFBs) on the east side of MLK may in fact be on BART property, as the screenshot below from our parcel viewer appears to show.



I believe Marc is advocating for video detection here instead of a pushbutton, and as I understood his comment last night, he heard from the City at the public meeting that they could only control the detection on the west side of MLK since the eastern side was on BART property.

This raises a few questions for me that it might be easier to sort out on a quick call, but here they are:

1. Did the City or BART install the pushbutton and RRFB on the east side of MLK?
2. Who currently maintains the RRFB and pushbutton on the east side of MLK?
3. Presumably the City's project would take care of any necessary modifications to the RRFB and its detection as part of the crossing construction—am I right?
4. Are you open to video detection for this RRFB? I don't have firm opinion or preference myself, but I feel like with video there may be a chance of false positives which could be confusing and ultimately reduce motorist yielding behavior and safety over time. I just don't know enough about the technology to be able to tell if my hunch might be founded.

Thanks,

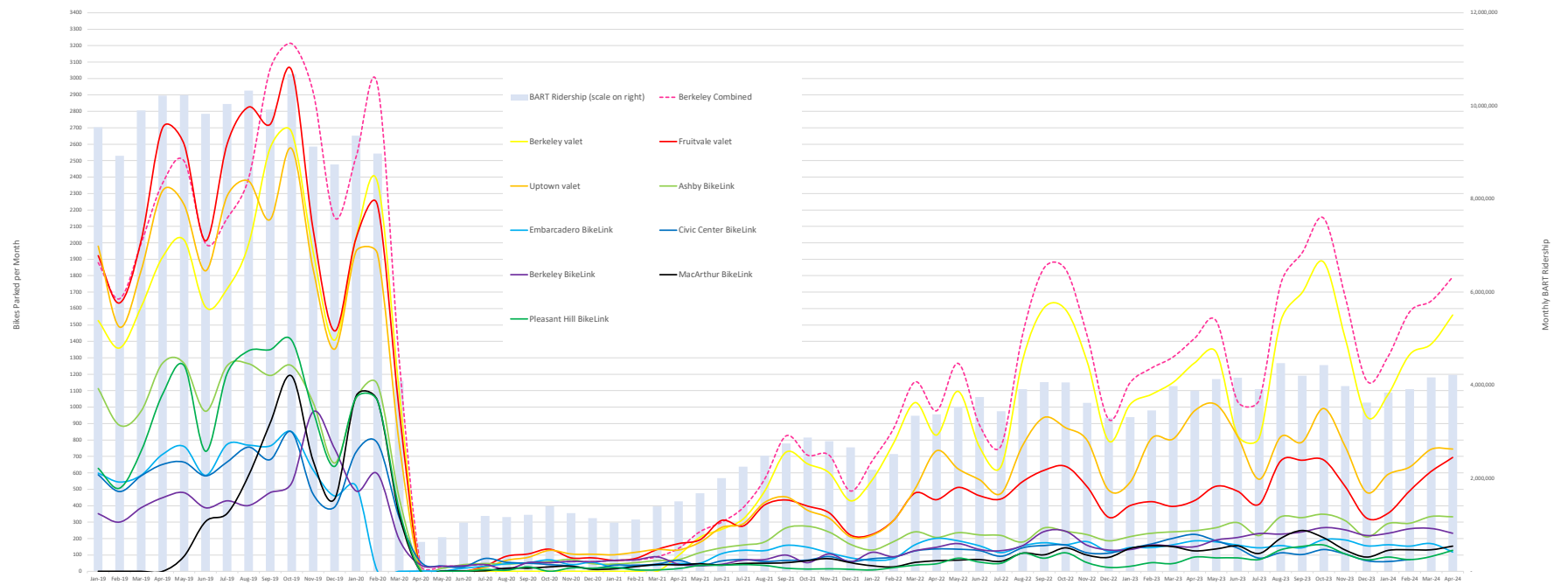
Heath Maddox
Manager of Bicycle Access Programs
Bay Area Rapid Transit District
2150 Webster Street, 8th Floor
Oakland, CA 94612
415.728.1352



**CUSTOMER ACCESS & ACCESSIBILITY
DEPARTMENT**

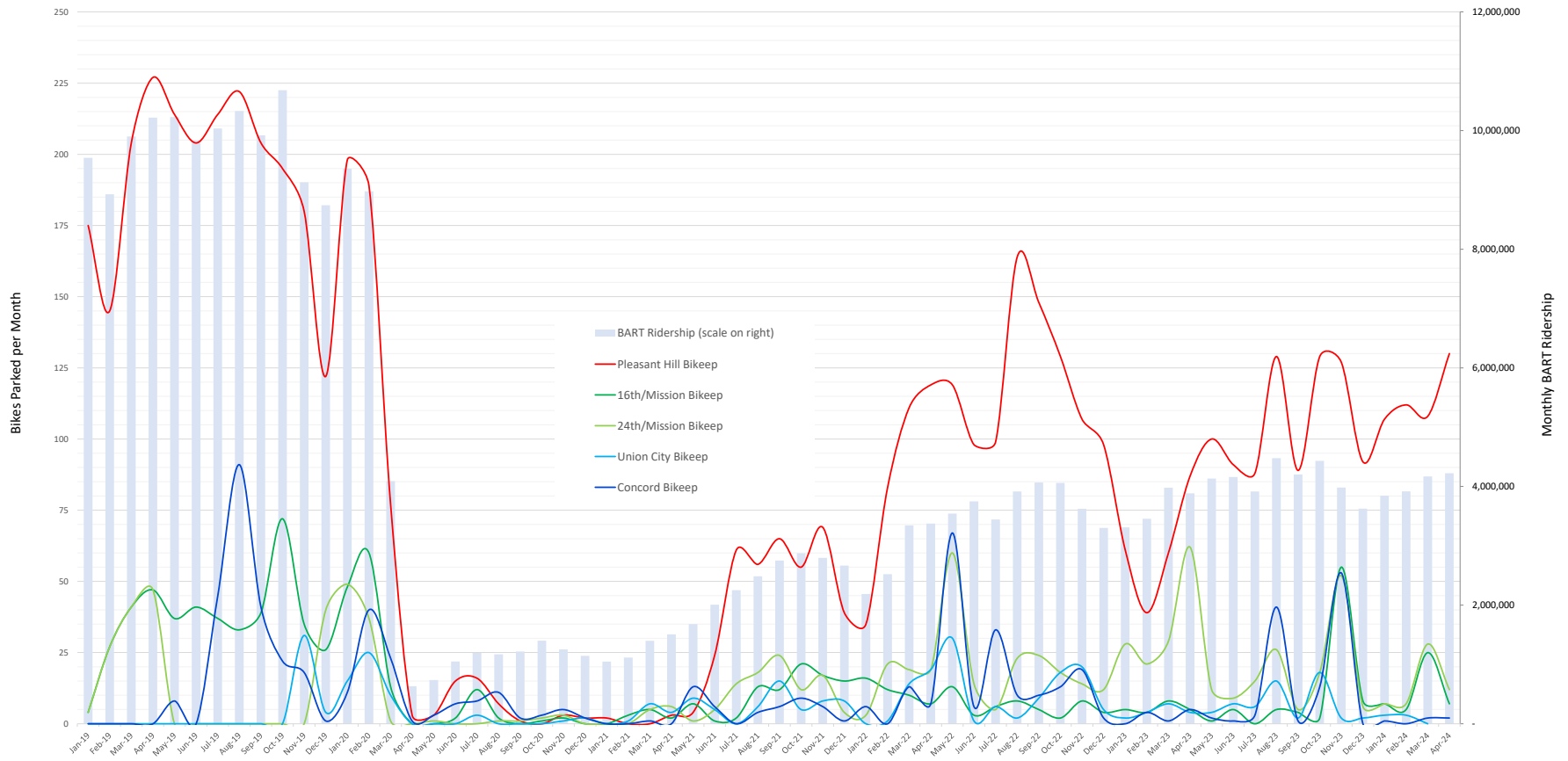


Monthly Volumes at BART Bike Stations & BART Ridership Jan 2019-Mar. 2024





Monthly Volumes at BART Bikeep Smart Racks & BART Ridership Jan 2019-Mar. 2024





Monthly Rentals at all BikeLink Bike Lockers and BART Bike Stations vs. BART Ridership Jan 2019-Mar. 2024

