Richmond-San Rafael Bridge Project Modified Pilot Extension

BCDC Hearing

August 07, 2025

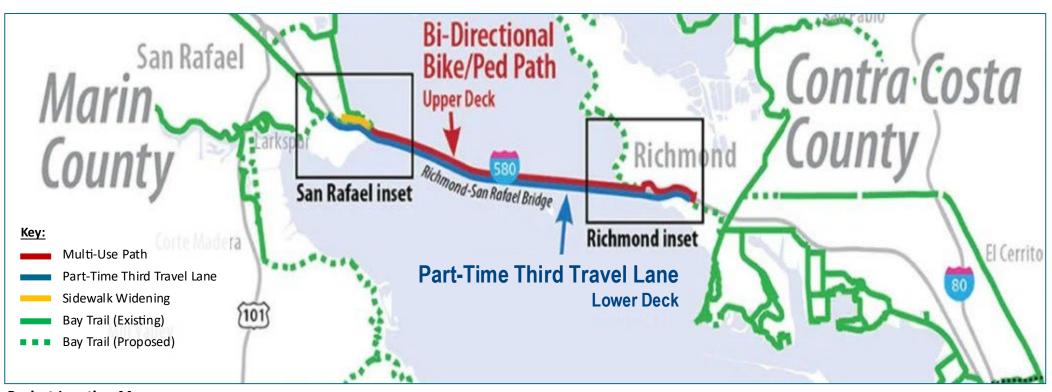






Original RSR Bridge Pilot Project

Recap & Key Findings



Project Location Map

Original 4-Year Pilot Designed for Two Purposes



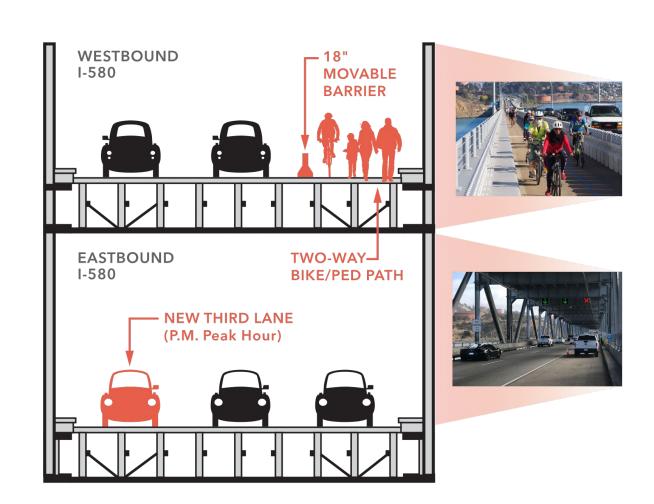


Bicycle & Pedestrian Access (Nov. 2019)

- Converted Westbound Shoulder to Multi-Use Path for Bay Trail connection between East Bay and Marin
- Permanent Path connections for Richmond and San Rafael

Traffic Congestion and Delay (Apr. 2018)

 Converted Eastbound Shoulder to Peak-Period Use Lane

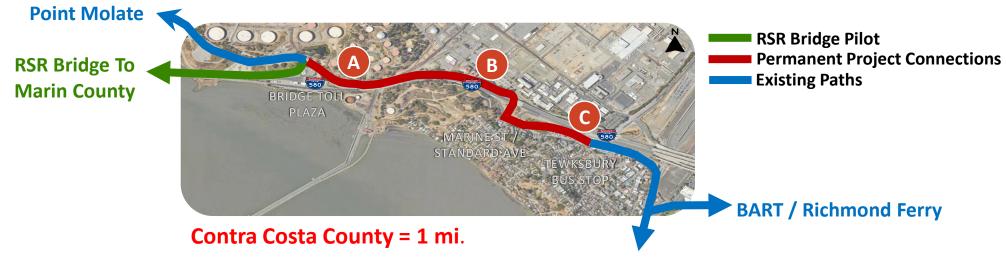


RSR Bridge Cross-Section (looking West)

Permanent Path Connections







Miller-Knox Regional Shoreline







Permanent Path Connections













Original Pilot Study Report





Study and Focus on:

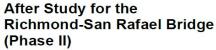
- Path Usage and Safety
- Peak-Period Lane Travel Time, Compliance
- Freeway Congestion Impacts
- Incident Rates & Response/Clearance Times
- Bridge Operations and Maintenance Impacts

PARTNERS FOR ADVANCED TRANSPORTATION TECHNOLOGY INSTITUTE OF TRANSPORTATION STUDIES

After Study for the Richmond-San Rafael Bridge (Phase I)

June 30, 2022

PARTNERS FOR ADVANCED TRANSPORTATION TECHNOLOGY INSTITUTE OF TRANSPORTATION STUDIES UNIVERSITY OF CALIFORNIA, BERKELEY



May 8, 2024





(Photo credit: Flickr / User: Don McCullough)





California Partners for Advanced Transportation Technology works with researchers, practitioners, and industry to implement transportation research and innovation, including products and services that improve the efficiency, safety, and security of the transportation system.

California Partners practitioners, and inc products and service system.

Lower Deck - Peak-Period Use Lane (Apr 2018 - Apr 2024)







Eliminated afternoon eastbound congestion on freeway and local streets



Up to 17 mins. travel time savings at peak afternoon hours



High compliance (99%)



No major impacts to bridge maintenance, vehicular incidents or response



Upper Deck - Multi-Use Path Usage (Nov 2019 - Apr 2024)







Cyclist Entries/Day/Direction:

• Weekdays: 35-80

• Weekends: 120-260

Summer up to 40% higher than Winter

Pedestrian Entries/Day/Direction:

• Weekdays: 6-20

• Weekends: 7-30





85% recreation/exercise15% commute to work/other



User perceived safety rating: 8.3 (cyclist) and 7.0 (pedestrian) out of 10



Upper Deck – Operational Impacts (Nov 2019 - Apr 2024)







Overall, no significant impact on traffic

Overall decrease in incident rates and response times



Bridge throughput of vehicles **decreased**7% (weekdays) and 5% (weekends)



Weekday AM Peak (6 – 9 AM), initial observation:



Incident rates increased:

- +4.8 incidents / year on the bridge
- +1.2 incidents / year on the approach



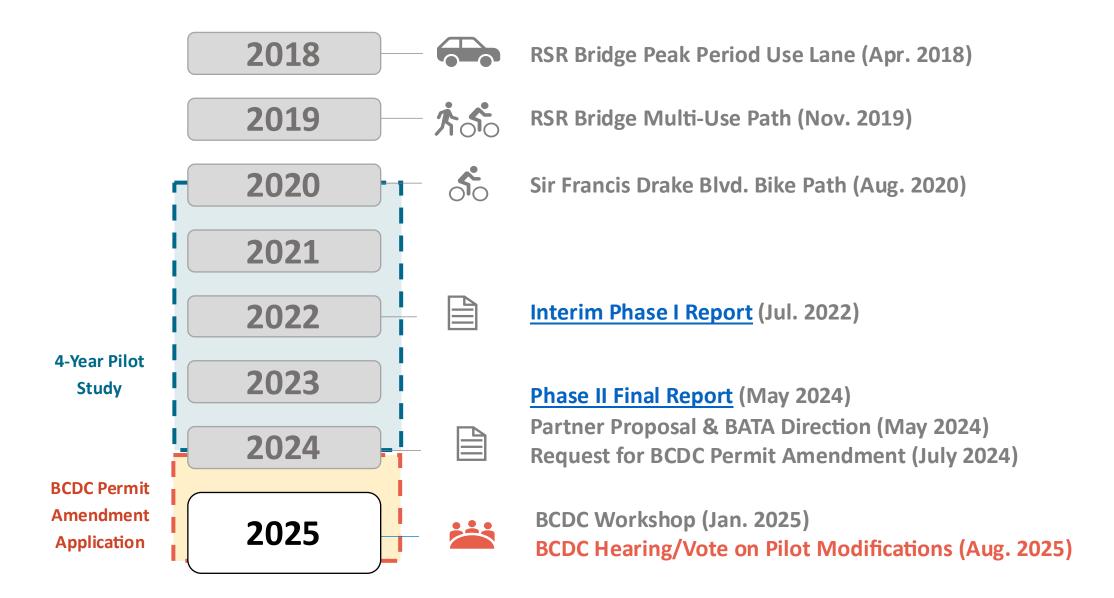
Response times increased by +3.4 mins



Original Pilot Timeline











Focused on Improving Corridor Access, Travel & Safety

(Caltrans, BATA, MTC)



Overview

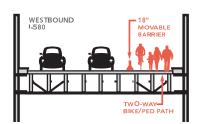




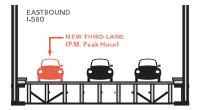
Original Pilot

Current Permit Amendment No. 4 2018-2025

Upper Deck:



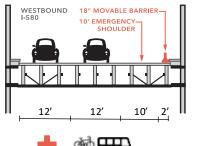
Lower Deck:



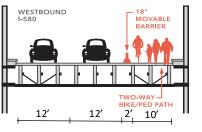
Pilot Extension

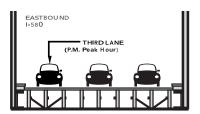
Today's Permit Vote Amendment No. 6 2025-2028







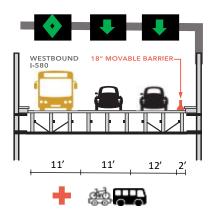




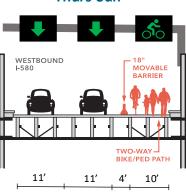
Long-Term Solution

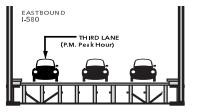
Subject to Environmental Review & Future Permit

Mon-Thurs (HOV Hours)



Thurs-Sun

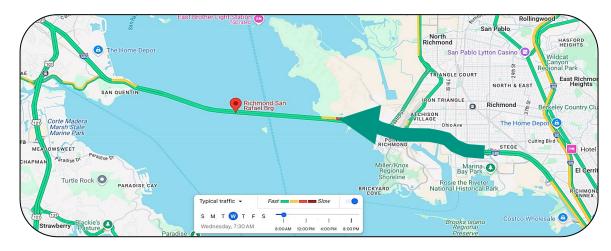




RSR Forward









Open Road Tolling & HOV Lane

Toll Plaza & Richmond Approach

Summer 2026: Expected Opening

Scope: Extends HOV 2+ lane from Toll Plaza to Regatta Blvd. and removes toll booths to reduce merging and improve safety at the toll plaza

Expected Travel Time Savings:

- General Traffic: 3-5 mins (average)
- Transit/Carpool: 10-12 mins (average)

Other RSR Forward Projects:



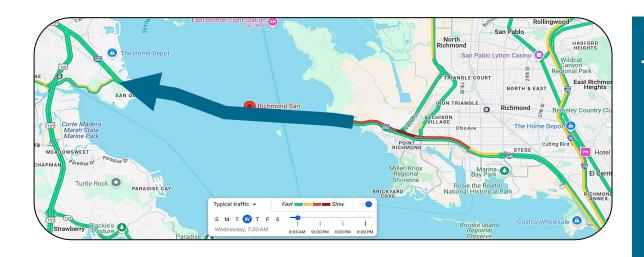


Summer 2026
Cutting Blvd Transit
Improvement Project

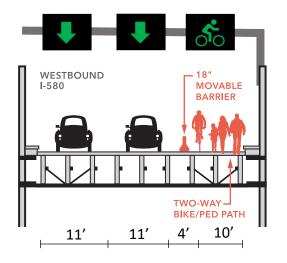
Westbound Improvement Project







WESTBOUND 18" MOVABLE BARRIER 1-580 11' 11' 12' 2'



Bridge + Marin Approach

May 2025: BATA approved start of environmental phase

Scope: Long-term bridge shoulder solution as part-time **HOV lane** and **multi-use path**

Benefits: Preliminary study shows travel time savings for general traffic (10-19 mins) and transit/carpool (4-11 mins), in addition to RSR Forward time savings

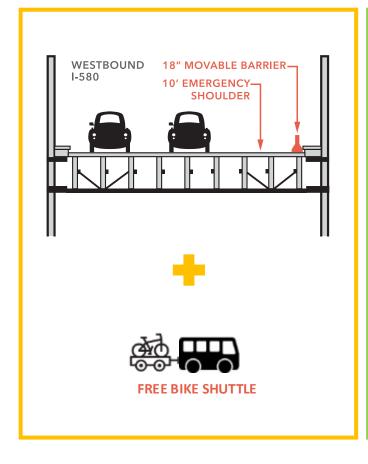
Preliminary Cost of Alternatives: \$14 - \$45M

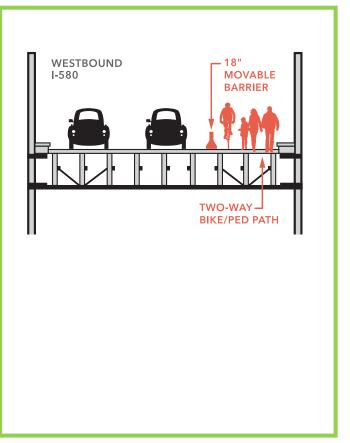
Upper Deck – Modified Hours of Operations

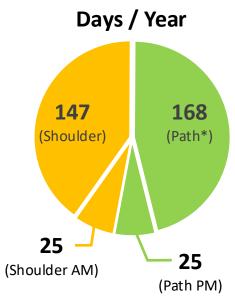




Mon	Tues	Wed	Thurs	Fri	Sat	Sun	
Emergency Shoulder				Bike / Ped Path			
(Mon 1AM – Thur 12PM)				(Thur 2PM – Sun 11PM)			







* Path open on Holidays: Memorial Day, Labor Day, week of Christmas and New Year



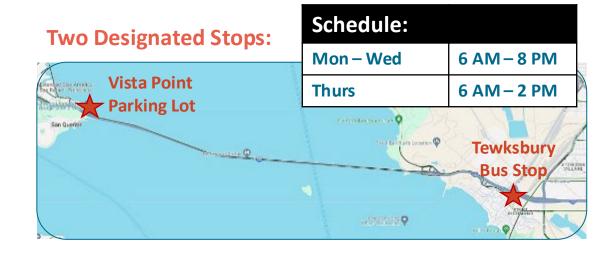
Barrier Transfer Machine Operations

Free Bike Shuttle





- Up to 10 passengers and bikes
- Approx. 20 min headway
- Real-Time GPS / website







Cohesive Approach to Corridor Access, Travel & Safety





Project	2025	2026	2027	2028	2029	
 Modified Pilot Operations Safety Equity Deck Impacts 	BCDC Permit Extension	ension (Phase II	I Study)		BCDC Update / Next Steps	
Structural Strengthening	Pla	nning / Design			ı	
RSR Forward Open Road Tolling & HOV	Cons	Interim ORT + HOV	Construction		Final ORT	
Westbound Improvement Project	Planning	Planning / Environmental				

Investments in Network Gaps







Pilot Investments ('18) \$32 M

MTC Actions ('23-'25) **\$26 M**

\$47M total including other funding

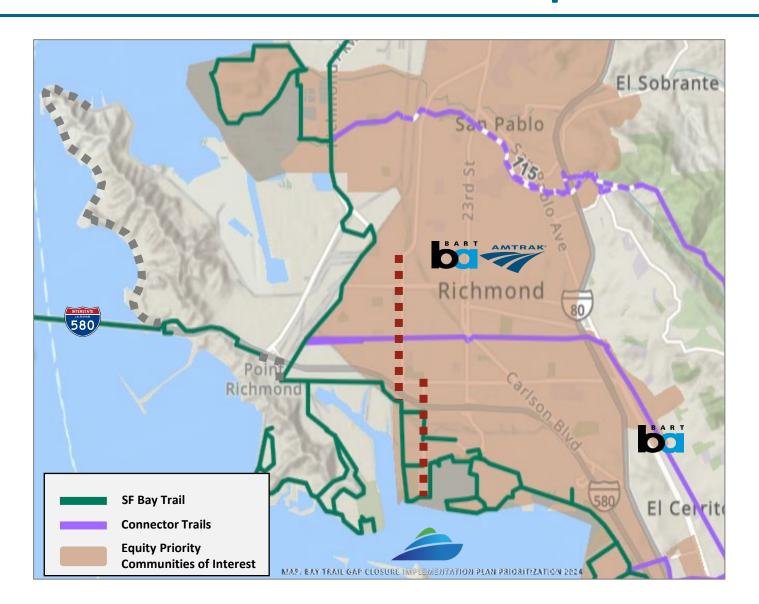


Yellow represents funding for planning study on Sir Francis Drake Blvd.

Investments in Network Gaps







Pilot Investments \$32 M

Recent MTC Awards \$26 M

(Total \$47M incl other funding)

Regional Measure 3 \$10 M

(Pending application '26)

Additional Assistance:

Convene with partners to identify future funding opportunities

Projects Identified for RM3 Funding Commitment

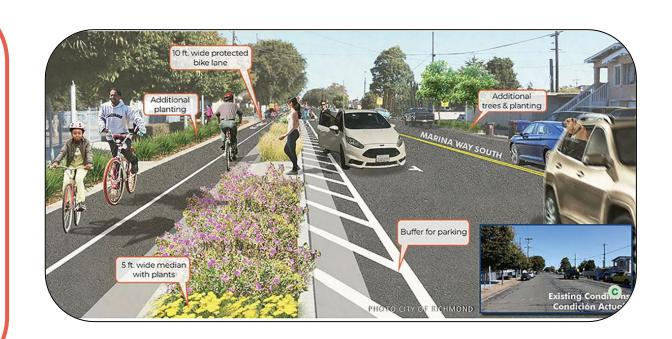




- 1. Richmond Wellness Trail (Phase II): 1.1 miles
- 2. Neighborhood Complete Streets Project: 1.7 miles

Highlights:

- Safe, Dedicated bike facilities
- Narrower vehicle lanes
- Connectivity to local schools, businesses, jobs
- **Enhanced Access** for 26K community members and to transit



Summary: Improving Access, Travel & Safety





Proposal Advances Long-Term Solution

- Informs development of Westbound Improvement Project carpool and public access elements
- Improves understanding of the barrier's impact on bridge operations and incident response

Immediate Benefits: Closes Network Gaps

- Funds path connections in Richmond for community travelers and those accessing Bridge path or shuttle, Bay Trail and shoreline
- Assists with identifying future funding opportunities for paths
- Maintains access on the bridge via free, modern bike shuttle

Future Benefits:

- Improves travel options and bus/carpool reliability
- Provides long-term access solution
- Reduces travel times for commuters through the Westbound Improvement Project





