

The Case for Public Access on the Richmond-San Rafael Bridge

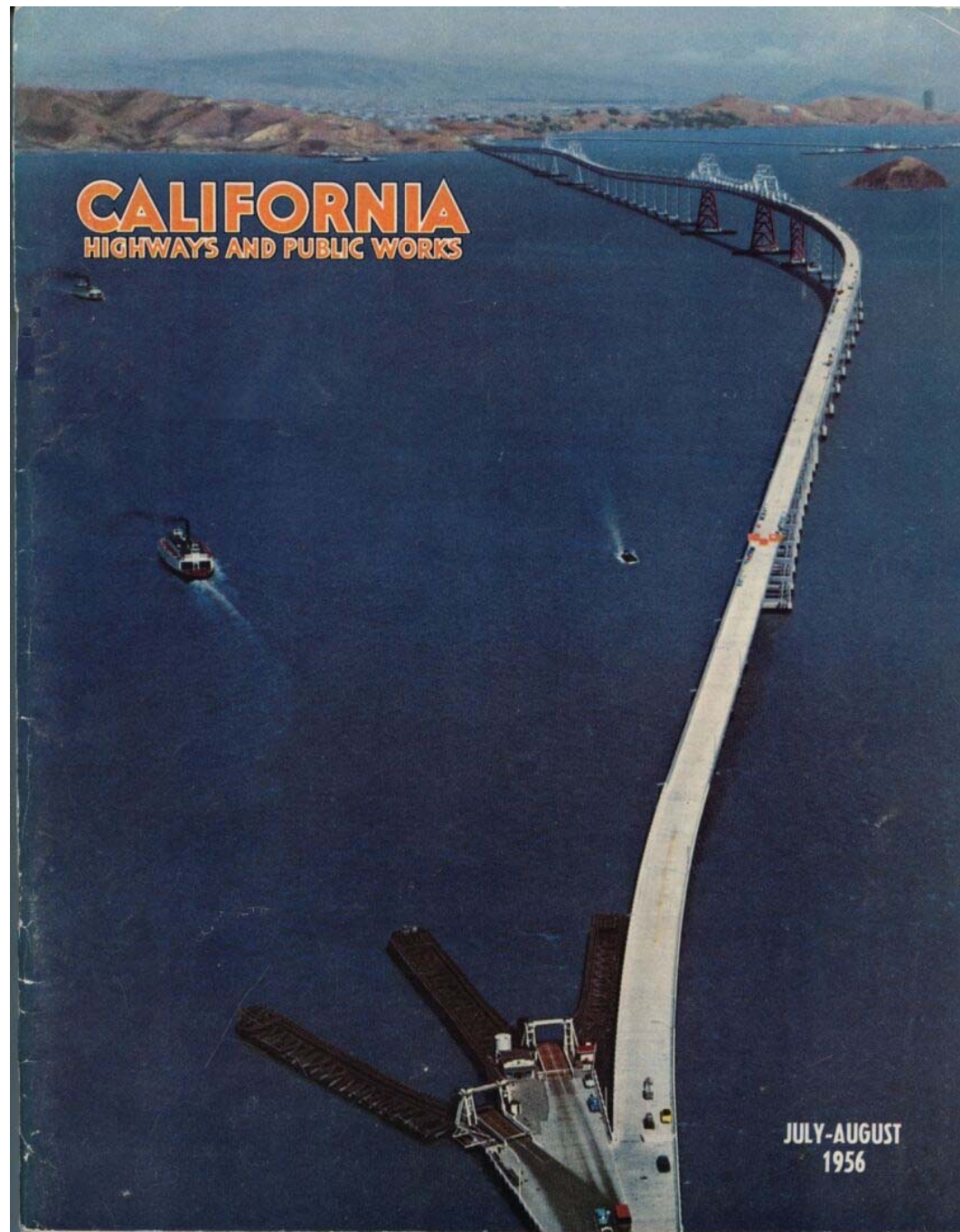
A nighttime photograph of the Richmond-San Rafael Bridge, showing light trails from traffic moving across the bridge. The bridge is illuminated with streetlights, and the surrounding area is dark, with some buildings and trees visible in the background.

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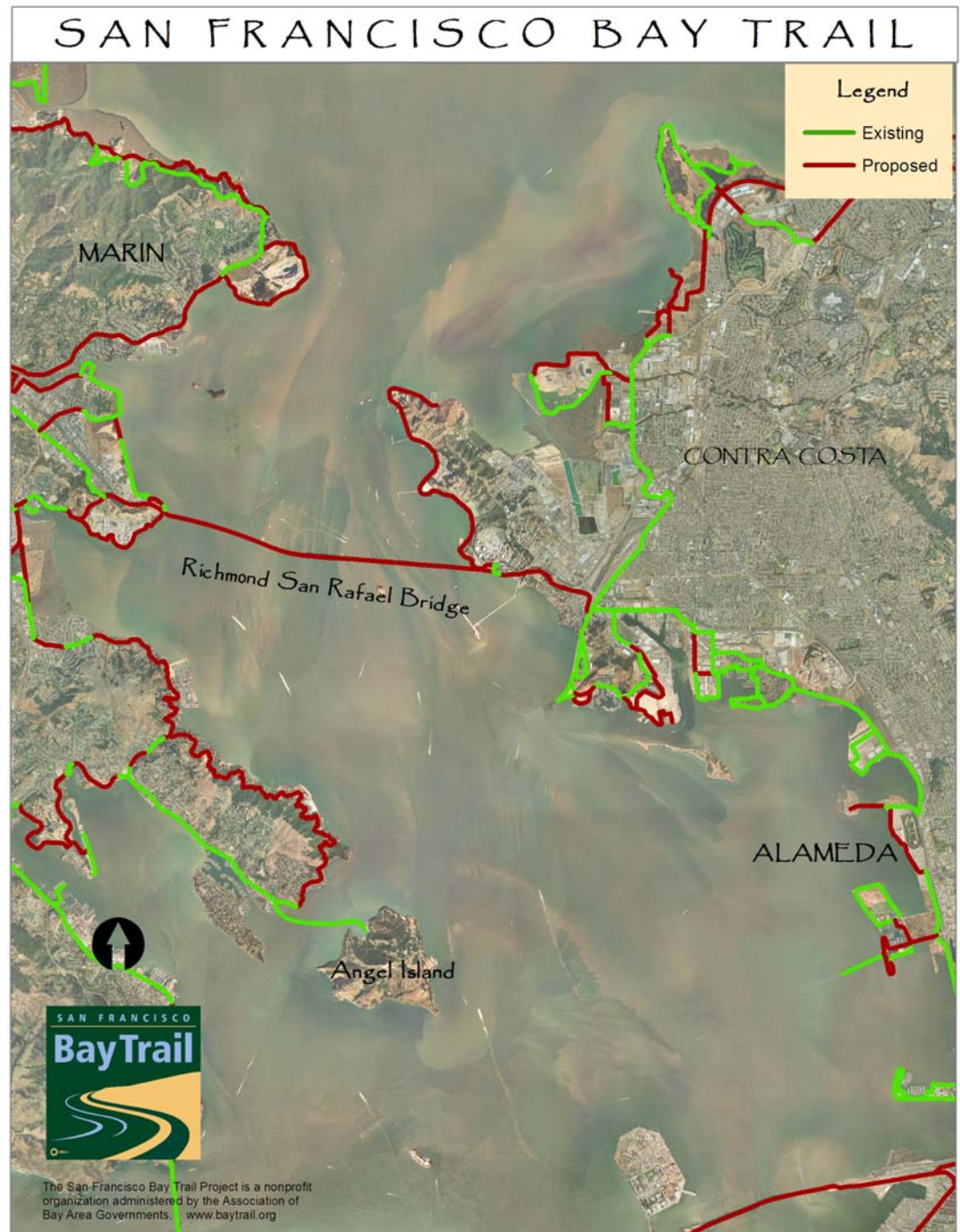
The San Francisco Bay Trail is a planned 500-mile path around the entire SF Bay. 300 miles are complete, and 4.5 of the region's 7 toll bridges currently provide bicycle and pedestrian access, or are under construction.



Public access between Marin and Contra Costa Counties on the bay ferry ended with the opening of the bridge.



Existing & Proposed Bay Trail in Marin & Contra Costa Counties



Caltrans PSR/PDR
 Tables 3 & 4 show that
**opening the third
 lane on the
 upper deck to
 vehicles will
 increase
 throughput by
 85 cars**, or by
1.7%.

3.2.1 Forecasting and Operations Analysis Report (2005)

As discussed above, MTC prepared an assessment of existing and future traffic conditions in the I-580 corridor, as a part of the Multiple-Use Access Study. The 2005 report (Forecasting and Operations Analysis Report - Task 3, 2005) used simulation and modeling techniques that showed an estimated increase of 29% in 2025 for vehicles traveling in the westbound direction and an increase of 38% for eastbound traffic, as shown in Table 3. The report's results also indicated that, as a four-lane facility, the bridge has the capacity to handle 55% of the projected 2025 traffic westbound volume and 83% of the projected 2025 traffic eastbound volume, which is also shown in Table 3.

Table 3: 2025 Projected Motor Vehicle Demand on the Richmond-San Rafael Bridge

Direction/Peak	4-Lane Bridge		6-Lane Bridge	
	Demand (2025 Forecast)	Throughput	Demand (2025 Forecast)	Throughput
Westbound/AM	9,005	4,985	9,197	5,070
Eastbound/PM	9,280	7,722	9,503	9,423

Limits: Toll Plaza (east) and end of Bridge (west)

Source: URS, Forecasting and Operations Analysis Report - Task 3, November 23, 2005

As design periods are usually based on a 20-year traffic projection and this joint PSR/PDS was being prepared in 2007, Caltrans requested that MTC prepare a straight-line analysis to extrapolate the 2025 data to 2030. The extrapolated data show that, as a four-lane facility, the bridge has the capacity to handle 52% of the projected 2030 traffic westbound volume and 77% of the projected 2030 traffic eastbound volume. This is shown in Table 4.

Table 4: 2030 Motor Vehicle Demand on the Richmond-San Rafael Bridge

Direction/Peak	4-Lane Bridge		6-Lane Bridge	
	2030 Demand (Extrapolation)	Throughput	2030 Demand (Extrapolation)	Throughput
Westbound/AM	9,509	4,985	9,749	5,070
Eastbound/PM	9,925	7,722	10,203	9,423

Limits: Toll Plaza (east) and end of Bridge (west)

The data in Tables 3 and 4 do not indicate what percentage of the westbound congestion will be a result of inadequacy of toll plaza operations and what percentage could be attributed to limited lane capacity. Nevertheless, these findings indicate that the four-lane bridge is likely to become a major bottleneck in the future during commute hours.

According to the 2005 Forecasting and Operations Analysis Report, traffic counts and visual observations on the bridge indicated that queues for westbound traffic start at the toll plaza at about 7:00 AM. The back-up at the toll plaza generally cleared by about 8:00 AM. During peak morning

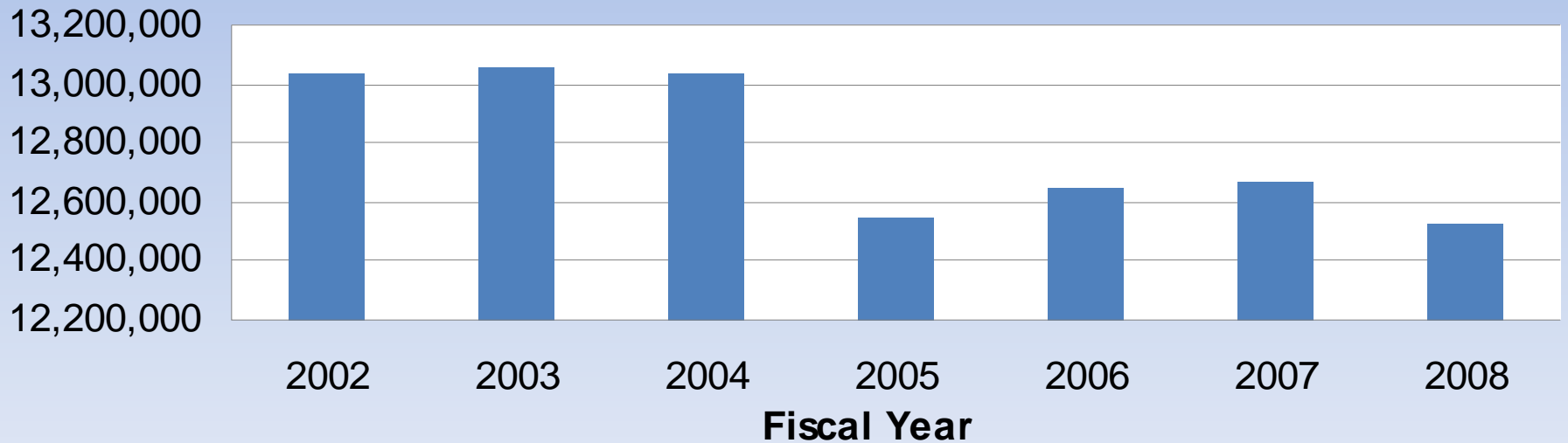
3rd Lane Won't Solve Real or Perceived Congestion

" ... the queuing problem that occurs behind the toll plaza due to this bottleneck during peak commute hours **will require additional measures, e.g., increasing the capacity of the toll plaza,** adding more...toll booths, and/or adding dedicated carpool lanes"

--Caltrans *PSR/PDR for Non-Motorized Access and Third Lane on the Richmond-San Rafael Bridge* November 2007

Bridge Crossings in Decline

Richmond-San Rafael Bridge Paid & Free Vehicles



SAFETY



Accidents *Declined* by 31% When Barrier in Place for Construction

Year	Number	% diff from Previous Yr.
2001	96	n/a
2002	94	-2%
2003	112	19%
2004	77	-31%
2005	63	-18%
2006	58	-8%

Recommendations for Safety on the Richmond-San Rafael Bridge

- Install the demonstration project pathway on the upper deck
- Reduce the speed limit
- Increase enforcement of speed limit
- Conduct driver education and awareness
- Use radar to show drivers their speed
- Monitor speed and crashes--compare data before & after demonstration project

BICYCLE FACILITY USE



The Numbers: Bike Use Soars

- San Francisco: **43.3% increase** from August 2006 – August 2008 *During Bike Plan Injunction*
- Marin: **66% increase** from 1999 to 2007
- Oakland: **40% increase** in bicycles at Fruitvale BART Station
- Contra Costa County: **27% increase** over 7 years
- Bay Area: **40% increase** in Bike to Work Day participation from 2007 to 2008.

*all numbers approximate

Bicycle/Pedestrian Access on Bay Area Bridges



Future SF/Oakland Bay Bridge Path



Carquinez "Zampa" Bridge Path



Golden Gate Bridge Path