Richmond – San Rafael Bridge Bicycle and Pedestrian Access Study Update

BATA Oversight Committee

February 13, 2008

Corridor Study History

- 1998 RSRB Public Feasibility Study
  - On-deck, buffer separated recommendation from Study Committee not supported by Caltrans & CHP
  - Lack of safety data on shared use facilities
- 2001 Mineta Institute Statewide Study
  - Caltrans did not support study methodology and found results inconclusive
  - Ongoing concerns about safety issues related to non-barrier separated, on-deck access

Corridor Study History (cont.)

- Current BATA/Caltrans Access Study
  - BCDC requests studies in 1997 and 2002
  - MTC/BATA study begins in 2003 - Partners include: Caltrans, CHP, Marin County Bicycle Coalition, East Bay Bicycle Coalition, CCTA, BCDC, TAM, Bay Trail, and East Bay Regional Parks

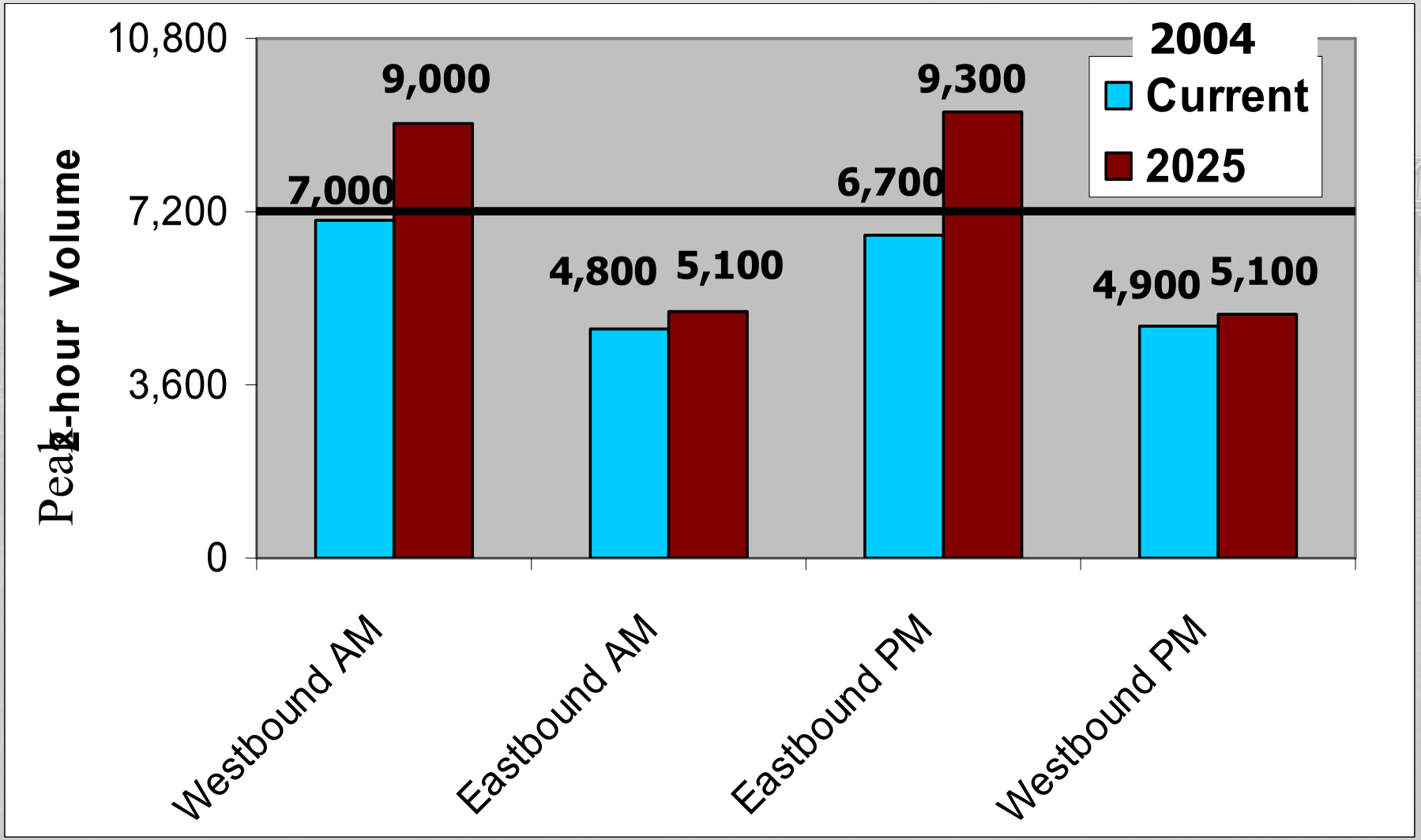
Project Goals

- Reduce traffic congestion and bottlenecks resulting from bridge capacity constraints
- Improve overall operation along I-580 corridor
- Comply with Caltrans' Deputy Directive 64 and MTC's Routine Accommodation Policy to provide non-motorized access where feasible

Current and Future Bridge Demand

7,200 Vehicles Capacity

(from RSRB Assess Study – Task 3 Report, 2005)



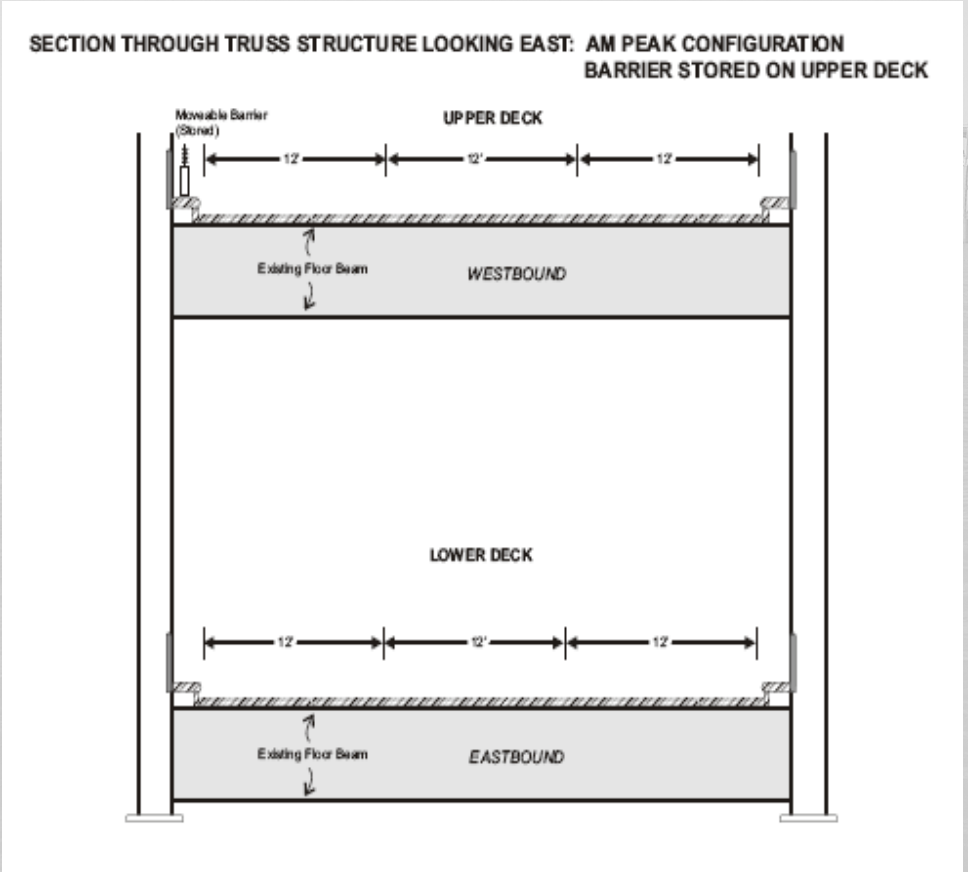
Bikeway Physical Requirements

Traffic volumes necessitate 3 traffic lanes in the peak direction (westbound AM/eastbound PM)

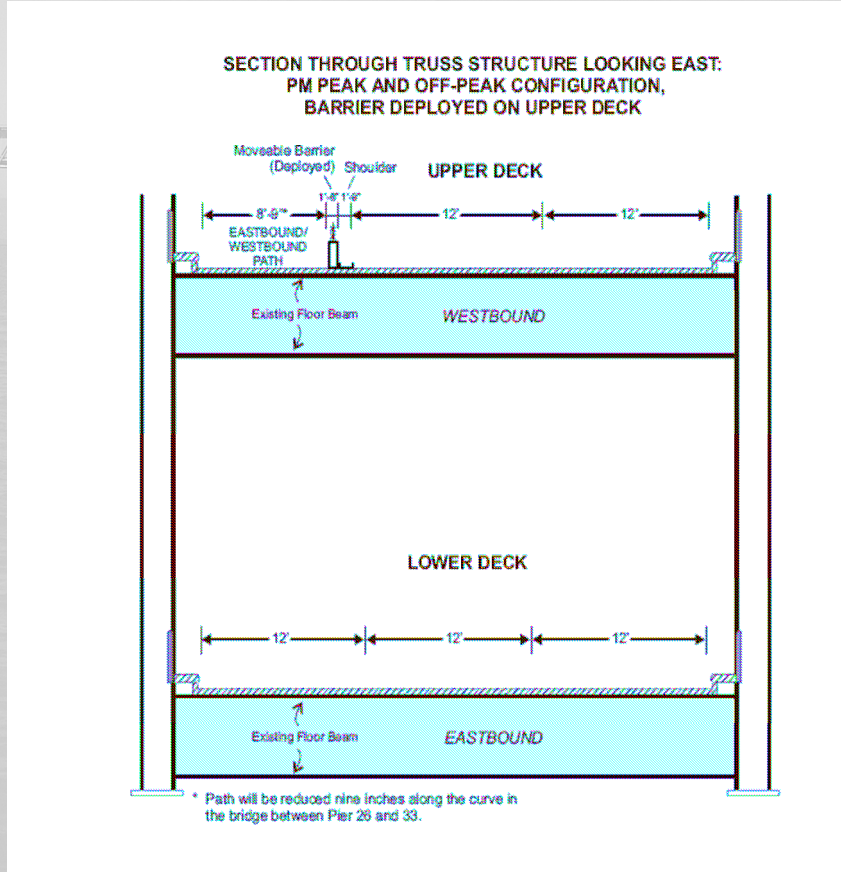
Bikeway must be separated by a solid barrier

Recommended Alternative

On-Deck, Bi-Directional Pathway on Upper Deck, with Moveable Barrier and Restriping on Both Decks for 3 Lanes of Motorized Traffic



AM Peak Weekdays



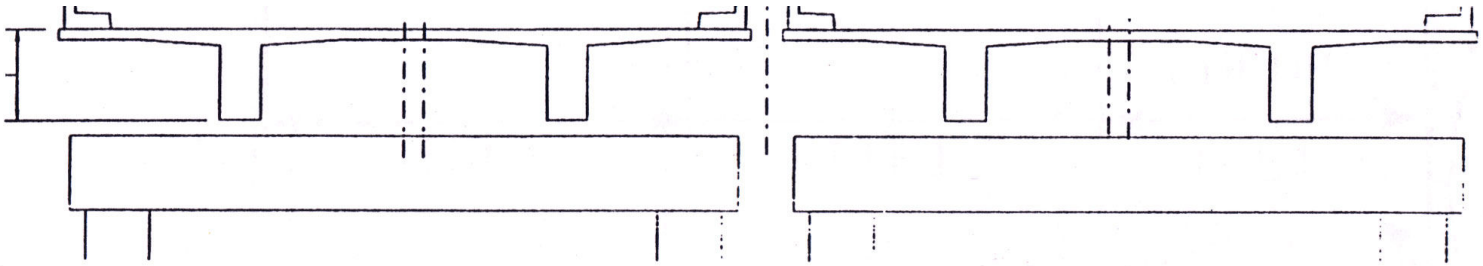
All Other Periods

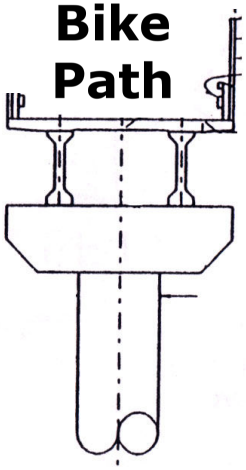
Moveable Barrier

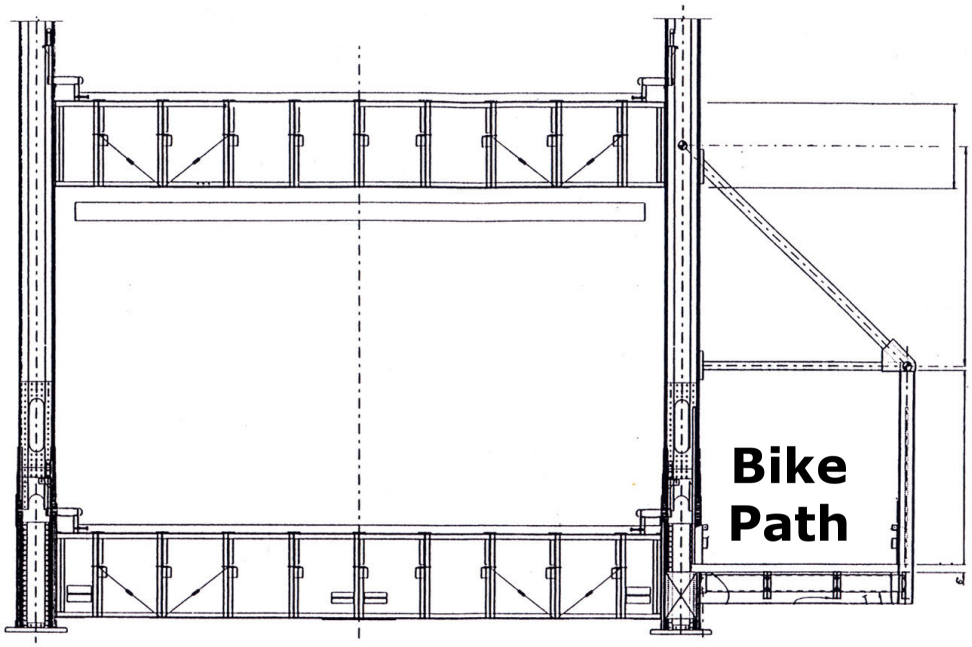
K rail for indicative purposes

Off-Deck Path

Causeway Section







Cantilever Section

Capital and Operating Costs

(2007$)

Moveable Barrier (ped/bike access & 3rd lane)	$55+ million
Off-deck Path	$400+ million
New Bridge	$7+ billion

REQUESTED DESIGN EXCEPTIONS

3rd Traffic Lane and On-Deck Pathway

HIGHWAY DESIGN MANUAL 6TH EDITION

- Insufficient shoulder width - No shoulder on bridge as proposed. Standard shoulder widths are 10 feet.
- Insufficient median width off the bridge - Minimum median width is 22 feet.
- Insufficient horizontal sight clearance

Other Cost Risk Factors

- Proposed moveable barrier requires crash testing
- Bridge structural analysis assessment for accommodating barrier part of further design process
- Accommodation of new eastbound 3rd traffic lane and existing shoulder bike lane may require lane width reductions between toll plaza and Richmond Parkway

Next Steps

- Final Caltrans decision on requested design exceptions
- Seek FHWA approval
- Presentations to TAM, WCCTAC, BCDC
- Return to BATA OS with final plan