


## MTC EXPRESS LANE NETWORK

### Alameda County Transportation Commission

Alameda County  
Technical Advisory Committee  
March 5, 2013

Presented by Lisa Klein  
Metropolitan Transportation Commission

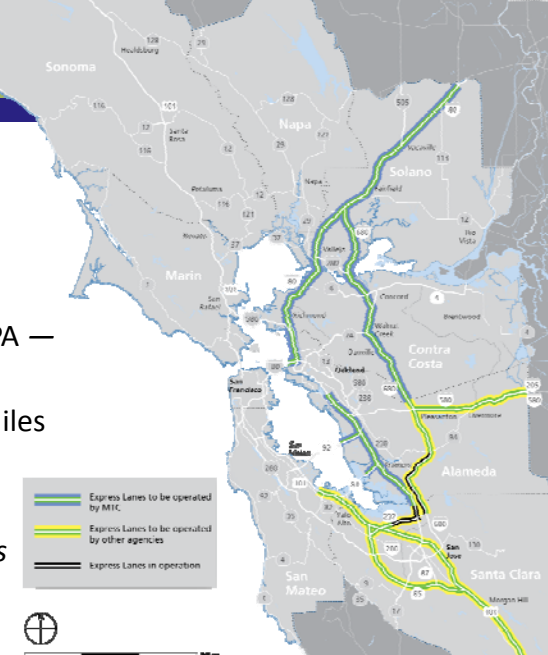


## Bay Area Express Lane System

550 miles total

- MTC — 270 miles  
(Oct. 2011 CTC action)
- Alameda CMA & Sunol JPA — 90 miles
- Santa Clara — VTA 190 miles

*All parties are committed to making the system seamless for drivers*



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2001 road system configuration and map  
current data as of 10/1/2011. All rights reserved.

## Why Express Lanes?

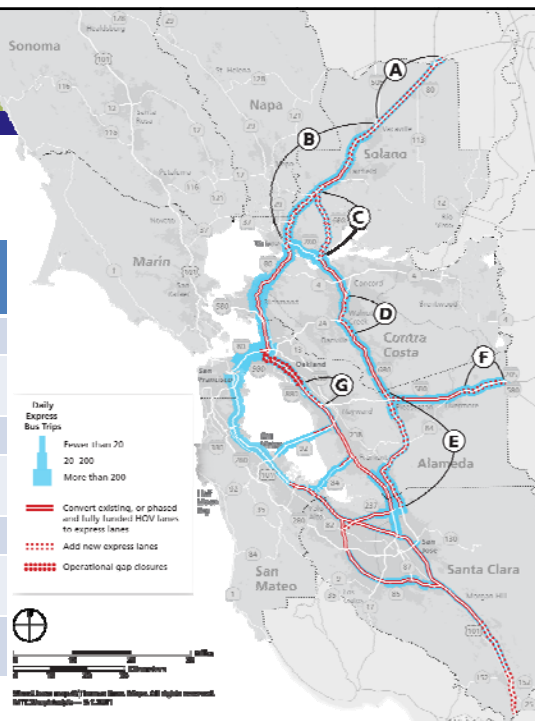
- **Connectivity:** Close gaps within existing HOV lane system to serve carpools and buses
- **Efficiency:** Optimize capacity in Bay Area freeway corridors
- **Reliability:** Provide a reliable, congestion-free transportation option

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## Improvements Serve Transit

| Route                                     | Peak Hour Bus Trips (current service) |
|---|---------------------------------------|
| A. I-80 Yolo County to I-505              | 4                                     |
| B. I-80 I-505 to Carquinez Bridge         | 40                                    |
| C. I-680 Gold Hill Rd. to I-780           | 4                                     |
| D. I-680 Route 242 to North Main St.      | 40                                    |
| E. I-680 Alcosta Blvd. to SR 237          | 4                                     |
| F. I-580 Greenville to San Joaquin County | 40                                    |
| G. I-880 Hegenberger to Lewelling         | 30                                    |



## Complementary Strategies

**Freeway Performance Initiative**

Implementation by:

- 2015: Capital funded via Cycle 2; \$134 (shortfall)
- 2020: Design funded; Unfunded Capital Needs: \$186M
- 2025: Plan Bay Area Build Out; Unfunded Needs: \$818M

NOTE: Map shows ramp metering, signal plans, and other delivery needs amounts include RMT and TDS.

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## Coordination is Key

**Toll System  
Operations  
& Policies**

**Project  
Design**

**Public  
Information  
& Messaging**

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## Current Project Plan (MTC Network)

1. Conversions first  
(benefit cost ratio = 5)
  - Low cost & low risk
  - Toll-system comprises most of the investment
  - 150 miles
2. Close gaps, segments with better revenue/cost ratios  
(benefit cost ratio = 3)
  - 65 miles

### Current Project Plan

- Currently open
- Tier 1
- Tier 2
- Previously Authorized Lanes in Santa Clara and Alameda Counties



Current Project Plan  
 Source: MTC Map of the MTC Network, Map 1. All rights reserved.  
 8/12/2012

## Tier 1 Conversions

### MTC Network Projects Underway 90 miles open in 2015

In progress

- Toll system concept
- Environmental clearance

Next steps in 2013

- Toll system requirements & procurement
- Roadway design

### Remaining Conversions 60 miles

Secure funding and initiate studies/environmental clearance in 2013

### Tier 1 Projects

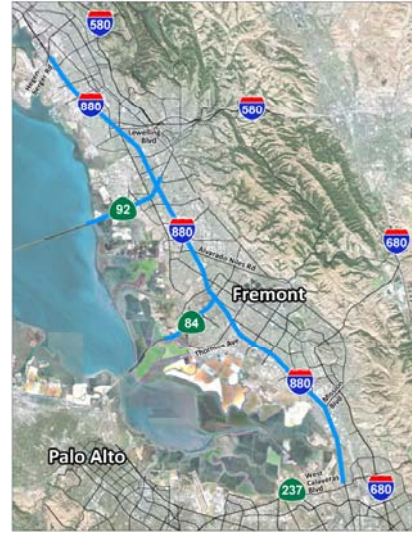
- Currently open
- Tier 1 projects underway
- Remaining conversions
- Previously authorized lanes: Santa Clara County and Alameda County



Tier 1 projects to  
 Source: MTC Map of the MTC Network, Map 1. All rights reserved.  
 8/12/2012

## I-880 Corridor

- Congested corridor
- Some slowdowns in HOV lanes already, primarily due to weaving
- Interface with 237 Express Lanes—coordination with VTA has begun
- Timing with Hegenberger to Marina HOV extension
- Lack of communications infrastructure



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## Bay Area Infrastructure Financing Authority (BAIFA)

- Created by MTC and BATA in 2006 to finance the state contribution to the toll bridge seismic program and “to plan, develop and fund transportation and related projects”
- Amended in September 2011 to include development, operation and financing of express lane facilities

**Recommendation: Revise board membership for express lane responsibilities.  
Both MTC and BATA must approve this change.**

| Current Membership                      |         | Proposed Membership  |          |
|---|---------|--|----------|
| 1. MTC Chair                            | Tissier | 1. MTC Chair   | Worth    |
| 2. MTC Vice Chair                       | Worth   | 2. BATA Oversight Chair                                      | Dodd     |
| 3. BATA Oversight Chair                 | Dodd    | 3. Alameda County  | Haggerty |
| 4. BATA Oversight Vice Chair            | Bates   | 4. Contra Costa County                                       | Glover   |
| 5. Programming & Allocations Chair      | Glover  | 5. Solano County   | Spering  |
| 6. Programming & Allocations Vice Chair | Kinsey  | 6. Business, Transportation & Housing Appointee (non-voting) | Sartipi  |

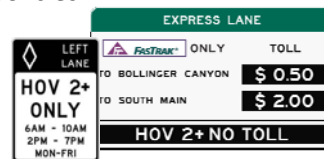
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## Policy Decisions and Responsibilities for BAIFA

### Developing, Operating and Funding the Network

1. Approve phasing and financing plans
  - Which projects get built first;
  - How the network will be financed.
2. Design, procure, install and construct the express lanes and toll system
3. Adopt business rules, tolling and operating policies
  - Recommend hours of operation (peak only, all day, weekends)
  - Toll rates and requirement for toll free travel (HOV2 or HOV3+)
  - Toll collection methods, violation procedures and penalties
4. Operate and maintain the express lanes and toll system
5. Take steps necessary to fund the project



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### Example BAIFA Policy Decision: Toll Violation System

- FasTrak® toll tags will be used for toll collection.
- Employ toll violation system, which is in use on toll bridges:
  1. Toll violations will be automatically captured through license plate cameras.
  2. All vehicles, including carpools, will be required to carry a toll tag.
- Managing violations is critical for managing traffic, recovering the cost of operations, and for bond financing.

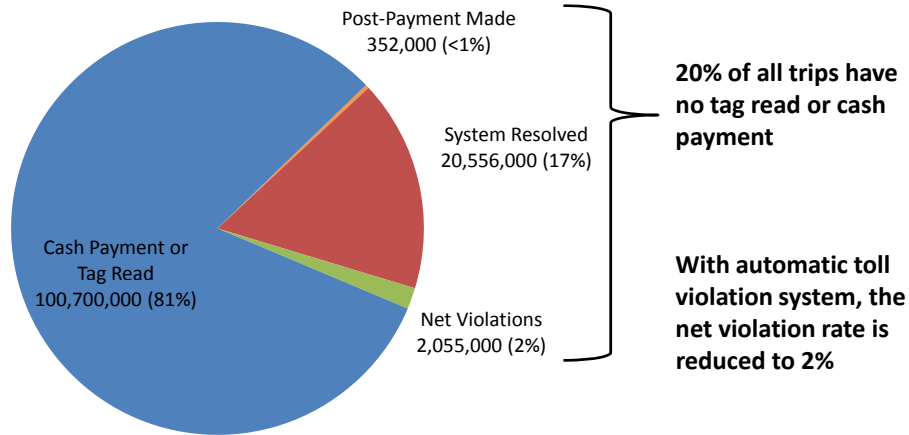
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## Toll Violations on BATA Bridges in FY 11-12

Total Bridge Trips: 123,667,000 (100%)



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## Example BAIFA Policy Decision: Determining Toll Tag Technology

- Switchable toll tag
  - Drivers identify number of occupants using a switch on the toll tag
  - Toll readers detect the switch setting and apply the toll for non-HOVs; HOVs travel toll-free
  - Used in LA (I-10 and I-110) and Virginia (I-495 E-Zpass® Flex™)
  - Non-HOVs can use existing FasTrak® tags
- Large number of Bay Area carpoolers have FasTrak® already
  - 22,000 daily HOV trips on the BATA bridges (2012)



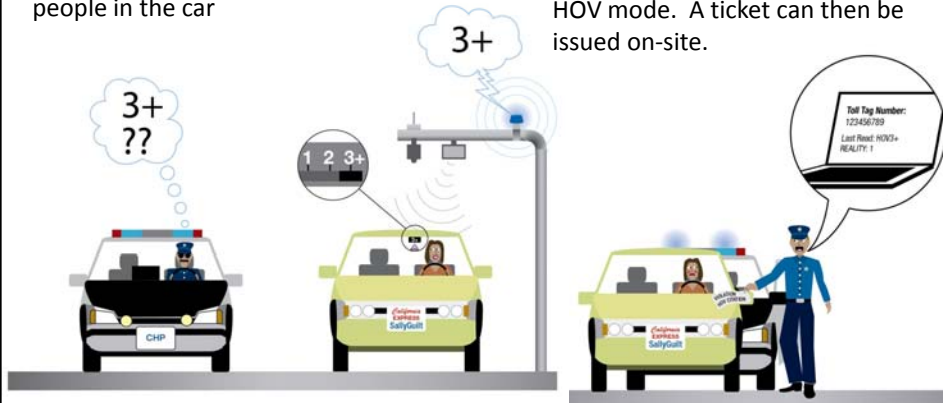
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## HOV Violations Enforced by CHP

1: CHP observes beacon and visually verifies fewer than the required number of people in the car

2: CHP pulls vehicle over and verifies whether toll tag was set to HOV mode. A ticket can then be issued on-site.



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 Concept of Operations

## BAIFA Timeline

|                               |  |
|-------------------------------|--|
| <b>Feb</b>                    | <input checked="" type="checkbox"/> <b>Information item on BAIFA</b><br>2/13 BATA Oversight & MTC Admin.   |
| <b>Mar</b>                    | <input type="checkbox"/> <b>Revise BAIFA Board</b><br>3/6 BATA Oversight & MTC Admin.<br>3/27 BATA & MTC<br><br><input type="checkbox"/> <b>Approve MTC-BAIFA coop</b><br>3/6 MTC Admin.<br>3/27 MTC |
| <b>Apr</b>                    | <input type="checkbox"/> <b>First BAIFA express lanes meeting</b><br><input type="checkbox"/> <b>Approve MTC-BAIFA coop</b><br>4/24 BAIFA  |
| <b>Spring 2013 and beyond</b> | <input type="checkbox"/> <b>Monthly BAIFA meetings</b>   |

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