

Capital Projects UPDATE

ACTC PROGRAMS AND PROJECTS COMMITTEE

November 8, 2010

Capital Program Summary

- ❑ 14 active projects located throughout the four planning areas of the County
- ❑ Current Program Estimated Cost is \$1,060, 116. The majority of the Program Costs are funded from Proposition 1B, STIP, SHOPP, Regional Measure 2, and Measure B
- ❑ Two sound wall projects along I-580 in San Leandro and Oakland.
- ❑ Two SMART Corridor-type projects
- ❑ One environmental mitigation project and one corridor right-of-way preservation project along I-580 in the Livermore Valley.
- ❑ Two High Occupancy Toll (HOT) Lane Projects: Eastbound and Westbound I-580 in the Livermore Valley

Capital Program Summary

- ❑ Six projects, with an estimated cost of \$779.5 million are funded with a significant amount (\$519.5 million) from the Statewide Proposition 1B Bond Funds and have the highest project delivery risks
 - ❖ Eastbound and Westbound I-580 HOV Lanes Project
 - ❖ Southbound I-680 Sunol Express Lane Project
 - ❖ Southbound I-880 HOV Extension Project
 - ❖ I-880/23rd and 29th Avenue Interchange Modifications
 - ❖ I-80 Integrated Corridor Mobility Project

- ❑ In general, the ACCMA, now ACTC, is responsible for pre-construction project development activities, and Caltrans is responsible for advertise, award, and administer construction contracts of the Prop 1B projects

Capital Program Assessment

- ❑ Smaller projects (sound walls, SMART corridors, and ITS-type projects) are either been completed or waiting to go to construction
- ❑ Larger corridor improvements HOV projects on southbound I-680 and eastbound I-580 are being completed
- ❑ Delivery of the eastbound and westbound HOT lanes projects on I-580 will largely depend on reaching agreement on the scope of the projects
- ❑ The scopes of the other major State Proposition 1B bond-funded projects are being assessed during the final design process. No additional contingency funds have been identified to address scope changes or risks management

Capital Program Assessment

- ❑ Many projects have been split into smaller segments necessitating more resources requirement for managing and tracking
- ❑ Much of the direct costs and indirect costs of the Alameda CTC are funded from project funds allocated from the Regional Measure 2 Program and State Proposition 1B bond revenues, which are one-time grants
- ❑ RM-2 and Proposition 1B project costs are paid on a reimbursed basis requiring the ACTC to have sufficient cash flow to front project costs over longer periods of time, which is becoming a financial burden
- ❑ A sustainable funding source to continue the operations and maintenance of the SMART Corridors Program has not been identified. O&M resources are currently a drain on the finance of the agency

PROJECT LOCATION MAP



Project Status – Northern County Area

Project Name	Current Phase	Begin Construction	End Construction
SMART Corridors O&M	Operations	--	--
I-580 Sound Walls -- Oakland	Design Completed	TBD	TBD
I-880/23rd and 29th Avenue Interchange Modifications	Final Design	8/2012	10/2015
I-80 Integrated Corridor Mobility	Environmental Clearance & Design	01/2011	01/2015*
Webster Street SMART Corridor	Design	2011	2011

Project Status – Central County

Project Name	Current Phase	Begin Construction	End Construction
I-880 Southbound HOV Lane Extension – (North Segment) Hegenberger to Davis	Final Design	01/2012	01/2014
I-880 Southbound HOV Lane Extension – (South Segment) Davis to Marina	Final Design	06/2011	01/2014
I-580 Sound Walls in San Leandro	Completed/Closeout	11/2008	10/2010

Project Status – South County

Project Name	Current Phase	Begin Construction	End Construction
I-680 Express Lane	Construction & Operations	11/2008	11/2010

Project Status – East County

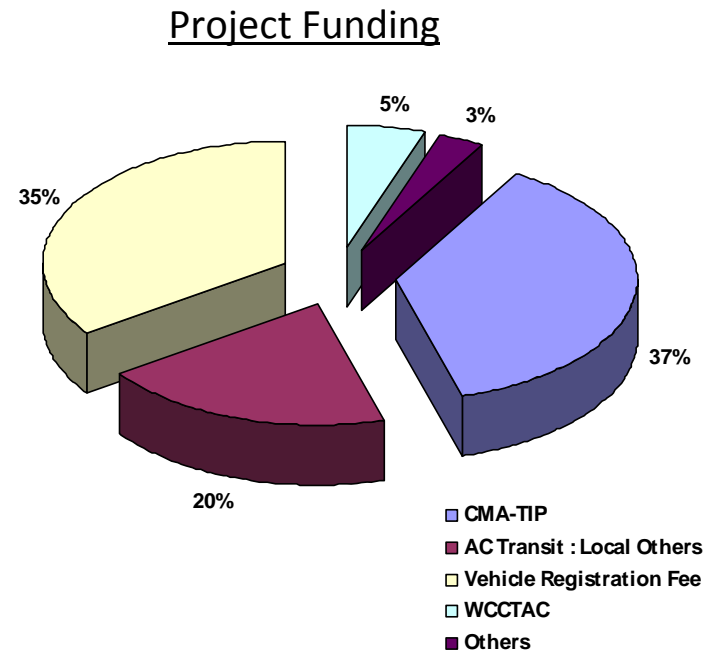
Project Name	Current Phase	Begin Construction	End Construction
I-580 Eastbound HOV Lane	Construction Completed	8/2009	11/2010
I-580 Eastbound HOT Lane & Auxiliary Lanes	Final Design	2011	2012
I-580 Westbound HOV Lane	Final Design	12/2011	12/2013
I-580 Westbound HOT Lane	Scoping	-	12/2013

Smart Corridors Program Operations & Maintenance

- ❑ Over the past seven years, significant investments have been made in intelligent transportation system (ITS) infrastructure to provide video and traffic data to the public and to transportation managers as well as emergency service providers in real-time
- ❑ A sustainable funding stream to fund the costs to maintain the ITS equipment and component and to provide services was not identified at the time of implementation

Smart Corridors Program – Project Issues

- ❑ **Project Funding: Original Funding resources have been depleted. Additional funding needs to be identified or the program needs to be transitioned to the participating cities per the Operation and Management Plan terms.**
- ❑ **Current annual O&M costs are in the range of \$850,000 and \$1.5 million**
- ❑ **Options:**
 - **VRF – will not cover costs**
 - **Supplemental funding from cities**
 - **Turnover program to the Cities**



I-80 Integrated Corridor Mobility (ICM) Project

- The project will install new Active Traffic Management features to Interstate 80 in Alameda and Contra Costa Counties. It will also upgrade existing traffic management elements along the San Pablo Avenue Corridor.
- The major project components will be Incident Management, Adaptive Ramp Metering, Traffic and Transit Information and improvements to San Pablo Avenue and Arterials connecting with I-80
- The project has been split into five CMIA projects and two Traffic Light Synchronization Program (TLSP) projects.
- Current estimate project cost is \$92.9 million



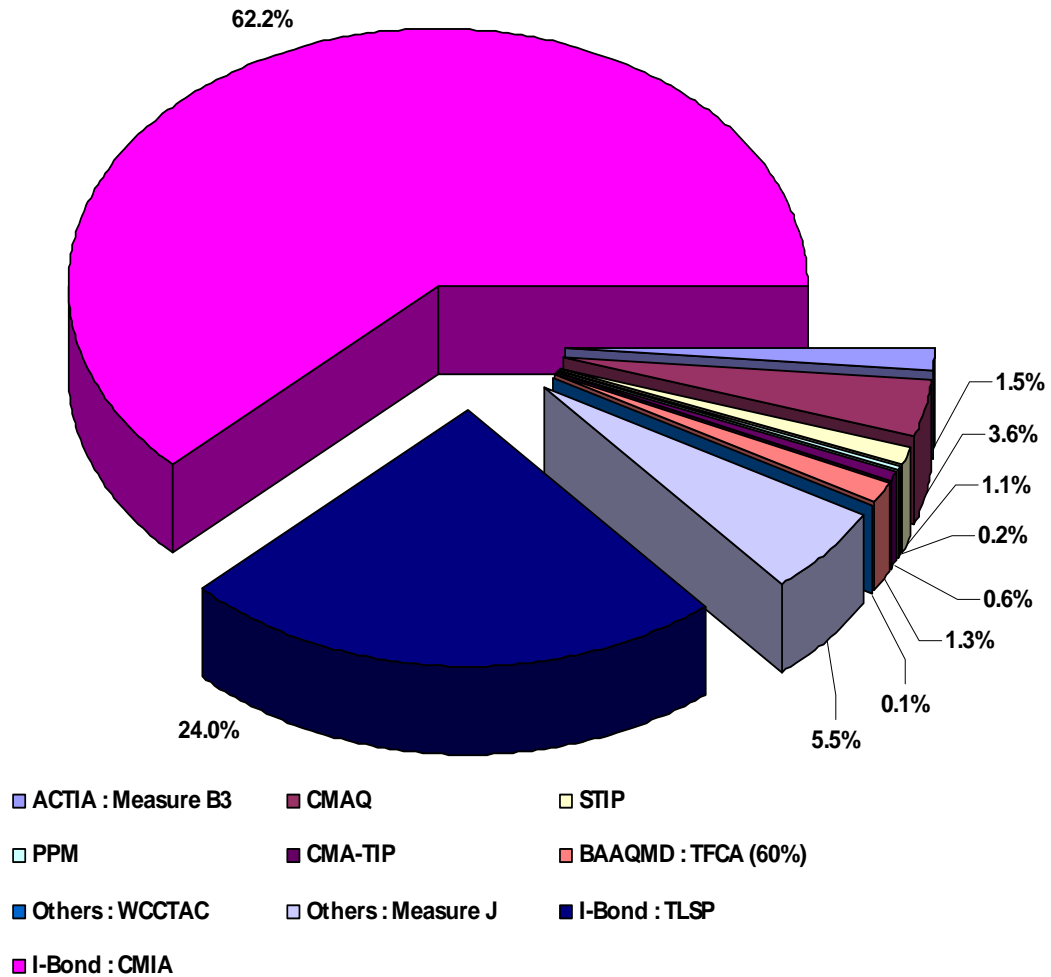
I-80 Integrated Corridor Mobility (ICM) Project – Project Status

- ❑ The construction contracts to implement the Traffic Operations System (TOS) Project and the Traffic Lights Synchronization Project are ready for advertisement pending project and funding approval from the California Transportation Commission in January 2011**
- ❑ The Mainline I-80 Adaptive Ramp Metering and Incident Management Project is still under environmental review.**
- ❑ The consensus on the overall project scope is still being obtained from the California Transportation Commission and the Cities along I-80 and San Pablo Corridor within the project limits**

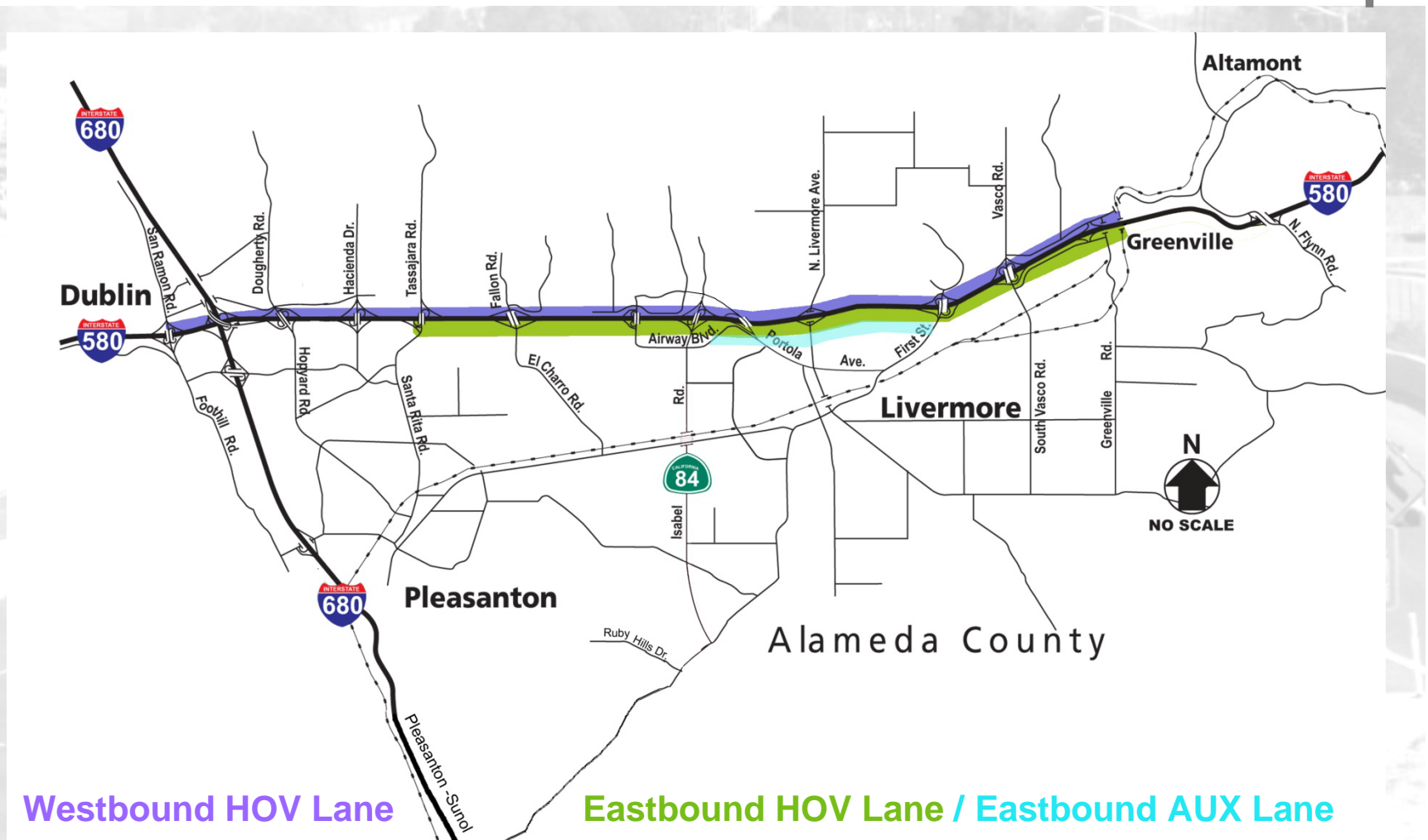
I-80 ICM Project – Project Issues

- ❑ **Additional funding, estimated at \$1.0 million, is needed to complete the project development phase, cost overruns due to unforeseen environmental conditions and project delays**
- ❑ **The CTC has several concerns regarding the project scope, project benefits, project management structure, risks management, future resources for maintenance and operations, and project delivery approach**
- ❑ **Consensus has not been obtained from the cities along I-80 and San Pablo Corridor on project implementation, maintenance, and operations**
- ❑ **Unresolved/Unidentified funding for the operations and maintenance of the improvements on San Pablo Corridor and local arterials**
- ❑ **The project is approximately 14 months behind the baseline schedule due to resolution of the project scope among the project partners and stakeholders**

I-80 ICM Project – Project Funding



I-580 Eastbound / Westbound HOV Lane Project Location Map



I-580 Eastbound HOV Lane

The project will provide an HOV lane in the eastbound direction from Hacienda Drive in Pleasanton to the Greenville overcrossing in Livermore.

The project will also provide eastbound auxiliary lanes between Isabel Avenue and North Livermore Avenue and North Livermore Avenue and First Street.

The current estimated project cost is \$153.9 million



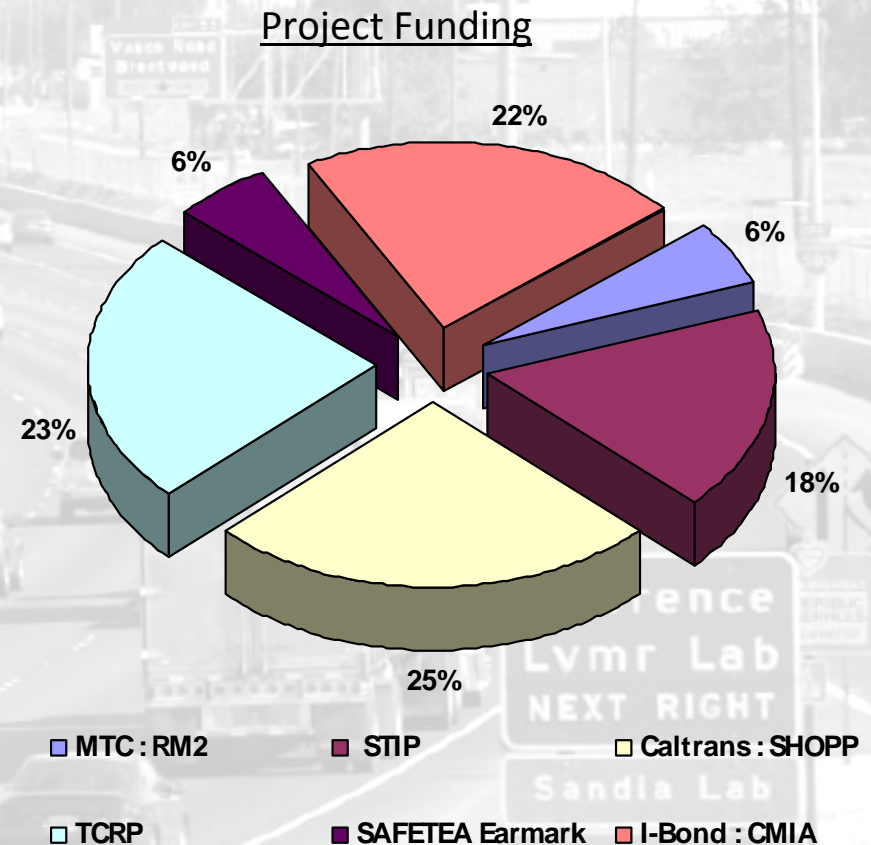
I-580 Eastbound HOV Lane – Project Status

- ❑ The construction of the eastern segment of the Project was completed and opened to traffic in February 2010
- ❑ The construction of the western segment between Hacienda Drive and Airway Boulevard is being completed and the facility was opened to traffic in November 2010
- ❑ The design of the auxiliary lanes project is underway. The auxiliary lanes will be constructed with the construction of the EB HOT lane project



I-580 Eastbound Auxiliary Lane – Project Issues

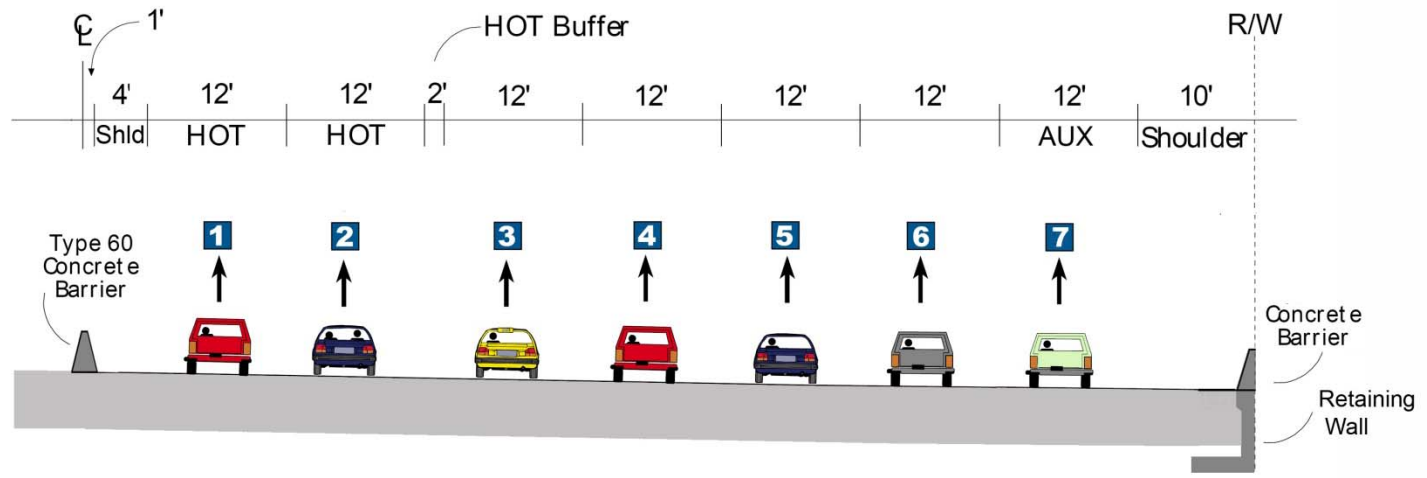
- ❑ **Project Schedule:** The schedule for the eastbound auxiliary lanes project will be impacted by the decision on HOT Lane implementation options.
- ❑ **Right of Way:** Eminent domain proceedings could delay the project schedule by about one year



I-580 Eastbound HOT Lane

❑ Project Components

- ❖ The approved project will convert the I-580 eastbound HOV Lane to a HOT Lane from Hacienda Drive in Pleasanton to the Greenville overcrossing in Livermore.
- ❖ The project is also investigating the feasibility of a double HOT Lane

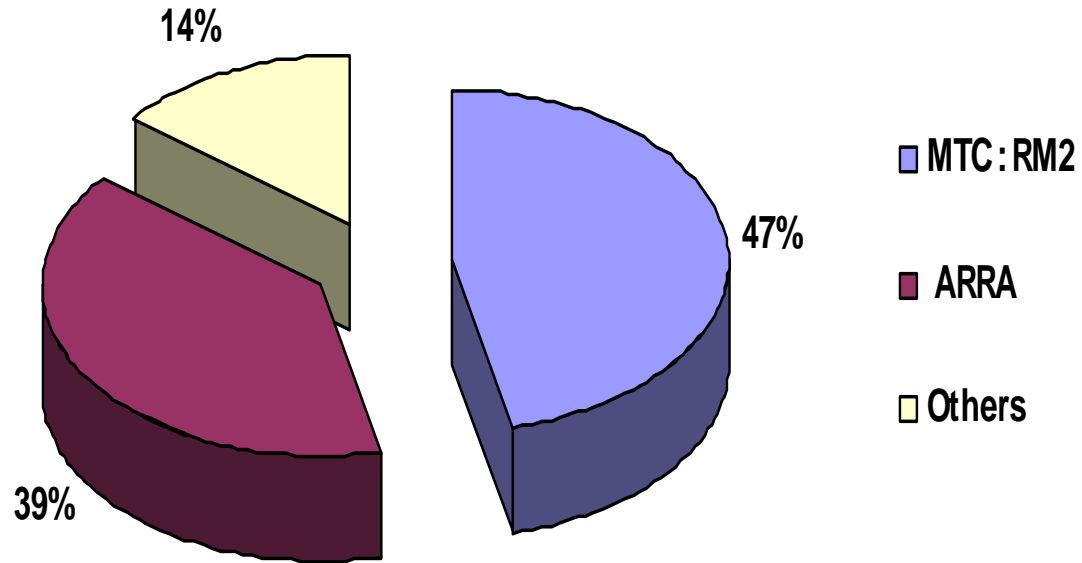


Currently proposed lane configuration

I-580 Eastbound HOT Lane – Project Status

- ❑ The Environmental Document (ED) for a single HOT Lane was approved in October 2009
- ❑ The Alameda CTC has requested that ED be prepared for construction of Double HOT lane
- ❑ Caltrans is reviewing environmental technical reports but disagreed with the proposed 4-foot wide inside shoulder
- ❑ Two design workshops were held to:
 - ❖ Define the parameters of Dynamic Pricing Algorithm
 - ❖ Coordinate the civil elements of the System Integrator work with those done by HOV and Auxiliary Lane Projects.
- ❑ The EB HOT Lane project is expected to be added to EB Auxiliary Lane project

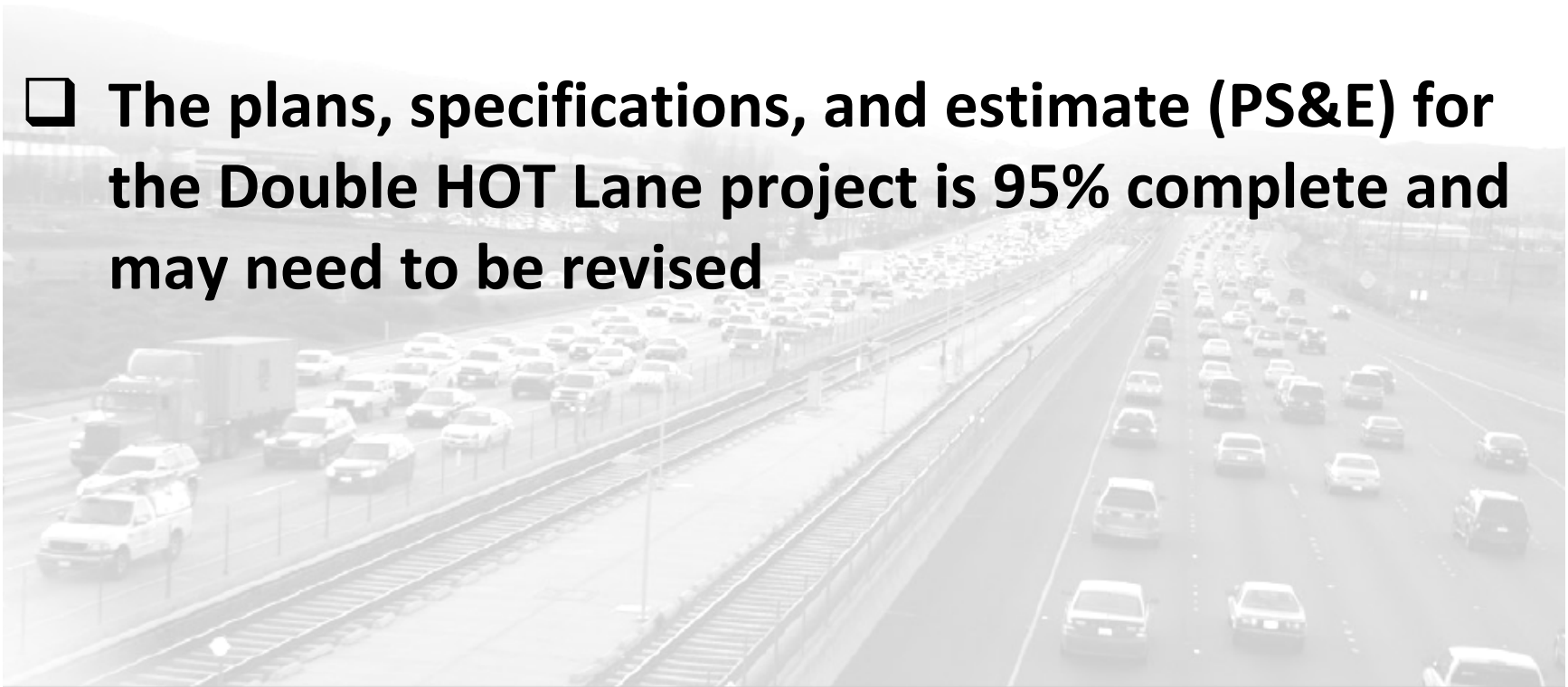
I-580 Eastbound HOT Lane -- Funding



The current estimated project cost is \$19 million

I-580 Eastbound HOT Lane – Project Issues

- Agreement with Caltrans and MTC has not been obtained on the project scope of the Double HOT Lanes project
- The plans, specifications, and estimate (PS&E) for the Double HOT Lane project is 95% complete and may need to be revised



I-580 Eastbound HOT Lane – Options Being Discussed with Caltrans

- ❑ **Option 1: Implement a Double HOT lane as currently proposed:**
 - ❖ **Non standard left shoulder width between Hacienda and First Street.**
- ❑ **Option 2: Implement a single HOT lane as originally approved**
 - ❖ **Upgrade Single 2+ HOT Lane to Single 3+ HOT Lane at a future date, or to a Double HOT Lane as traffic demand dictates.**
- ❑ **Option 3: Implement double HOT lane with:**
 - ❖ **Non standard left shoulder width from Hacienda to Isabel, standard with from Isabel to Greenville.**
 - ❖ **Incorporate changes to the Auxiliary Lane Project to include the additional widening**
 - ❖ **Require further Environmental Review and a new Biological Opinion (BO) prior to Project Approval which would result in a project delay of about one year and new possible mitigation requirements**
 - ❖ **Additional funding would also be require**

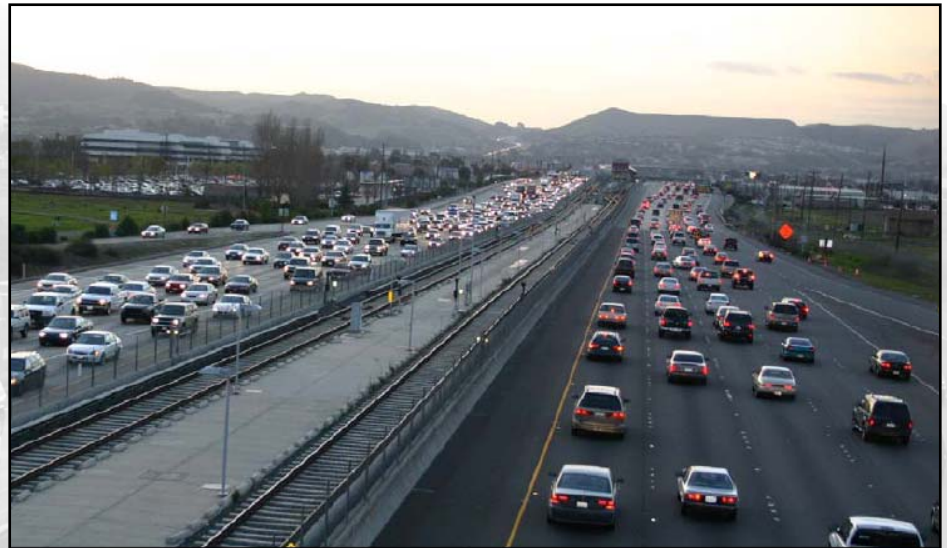
I-580 Westbound HOV Lane

❑ Project Components

- ❖ The project will provide a westbound HOV lane from the Greenville overcrossing in Livermore to the Foothill Boulevard overcrossing in Pleasanton.
- ❖ Rehabilitation of the existing pavement was added to the project in January 2010 and the plans have been revised to add the rehabilitation.

❑ Project Issues

- ❖ Right of Way: Eminent domain proceedings could delay the project schedule by about one year

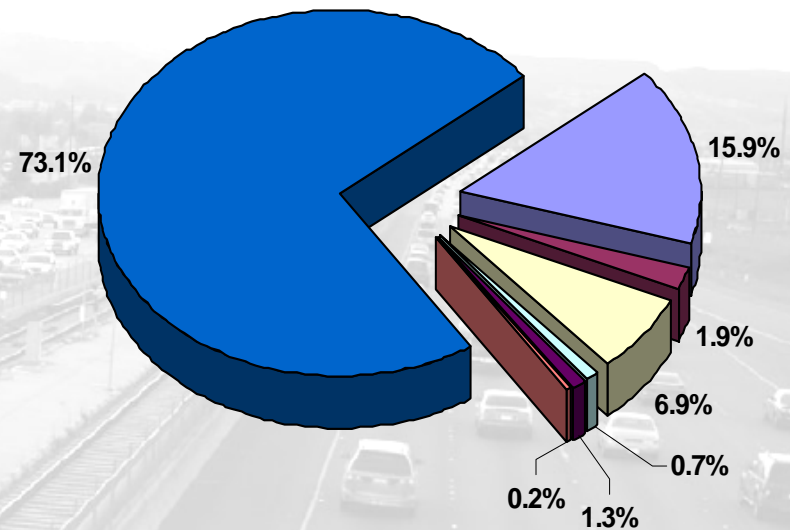
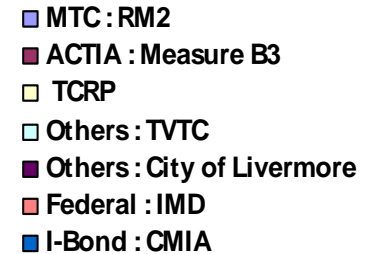


I-580 Westbound HOV Lane

Project Status:

- ❖ The project design package was split into three smaller construction contracts; East Segment, West Segment, and Eastbound Bridge Widening.
- ❖ Rehabilitation of existing pavement was added to the project in January 2010; design plans have been revised to include this change.
- ❖ West Segment 100% PS&E Package was submitted to Caltrans on October 1, 2010.
- ❖ The Eastbound Bridge Widening will be combined with Eastbound Auxiliary Lane Project.

Project Funding



I-580 Westbound HOT Lane

❑ Project Components

- ❖ The project is studying the feasibility of converting the I-580 westbound HOV Lane to a HOT Lane from the Greenville overcrossing in Livermore to the Foothill Boulevard overcrossing in the cities of Dublin and Pleasanton.

❑ Project Status

- ❖ Caltrans has approved the modeling and traffic operations methodology recommendations
- ❖ A draft travel demand forecast was submitted to Caltrans for review
- ❖ The Cost/Revenue and Operations Analysis is underway and scheduled for completion in December 2010.
 - ❖ *An RFP to initiate the Project Study Report will be released in November 2010.*

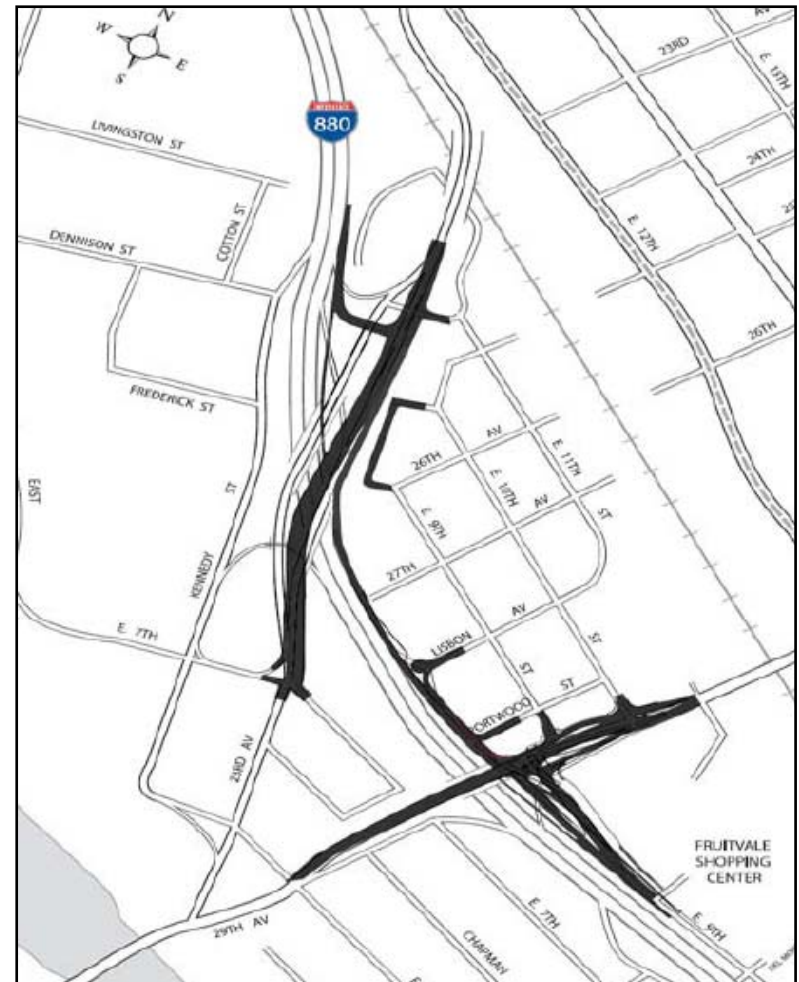
I-580 Westbound HOT Lane – Project Issues

- The project is not fully funded.
- There is only adequate funding for scoping, environmental clearance and project approval and for design engineering
- Funding in the amount of \$8.5 to \$10 million for construction capital and construction management has not been identified
- The current design and construction cost estimate assumes use of the existing pavement with limited widening and no additional right of way.



I-880 North Safety Operational -- Improvements at 23rd/29th

- ❑ The project proposes to construct operational and safety improvements on Interstate 880 (I-880) at the existing overcrossings of 29th Avenue and 23rd Avenue in the City of Oakland.
- ❑ The project will remove and reconstruct the 29th Avenue overcrossing and the two 23rd Avenue overcrossings of I-880, increasing the flow of vehicles along the mainline and helping to reduce the rate of congestion related accidents in the area.
- ❑ The current project estimated cost is about \$100 million



I-880 North Safety Operational Improvements at 23rd/29th

❑ Key Project Components:

- ❖ Relocating the northbound Lisbon Avenue on ramp to begin at 29th Avenue.
- ❖ Lengthening the northbound auxiliary lane between 29th Avenue and 23rd Avenue and removing and reconstruction of both the eastbound and westbound 23rd Avenue overcrossings.
- ❖ Reconstruct the 23rd Avenue / I-880 northbound ramps / 11th Street Intersection.
- ❖ Lengthen and improve the northbound off ramp at 29th Avenue to terminate directly into the 29th Avenue crossing.
- ❖ Construct a soundwall along the northbound auxiliary lane between 29th and 23rd Avenues.

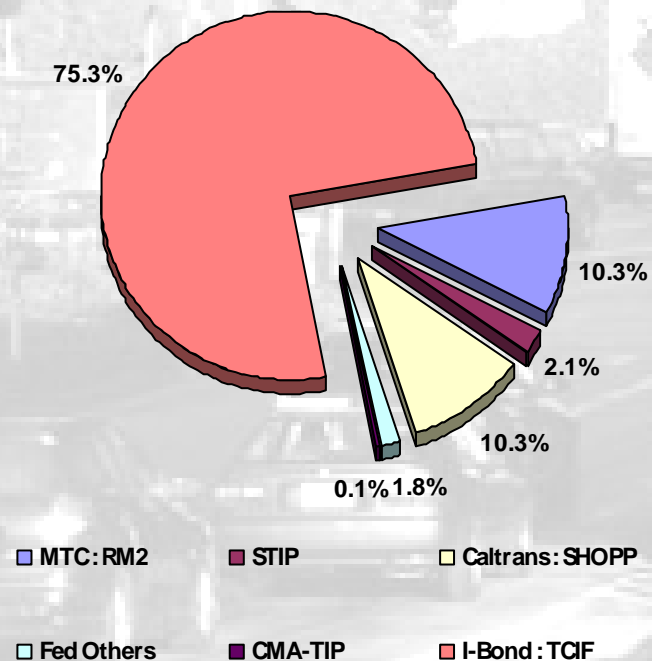


I-880 North Safety Operational Improvements at 23rd/29th

- ❑ The Final Project Report and Environmental Document were approved by Caltrans on April 14, 2010. A consultant team is preparing civil and structural design packages

- ❑ Additional funding of approximately \$3.1 million is needed to complete the Project Development and the Design phases of the project and for right of way support
- ❑ Additional future funding may be needed to accommodate additional project scope and address project risks

Project Funding



I-880 Southbound HOV Lane Extension— Hegenberger Rd. to Davis St. / Davis St. to Marina Blvd

- ❑ The project will widen I-880 southbound on the outside from Hegenberger Road in Oakland to Marina Boulevard in San Leandro
- ❑ Construct SB HOV lane and re-delineate the mainline
- ❑ Provide on & off-ramp conformity at Hegenberger Road, 98th Avenue, Davis Street, and Marina Boulevard interchanges
- ❑ Replace overcrossings at Davis Street and Marina Boulevard
- ❑ The current project estimated cost is \$108,000 million

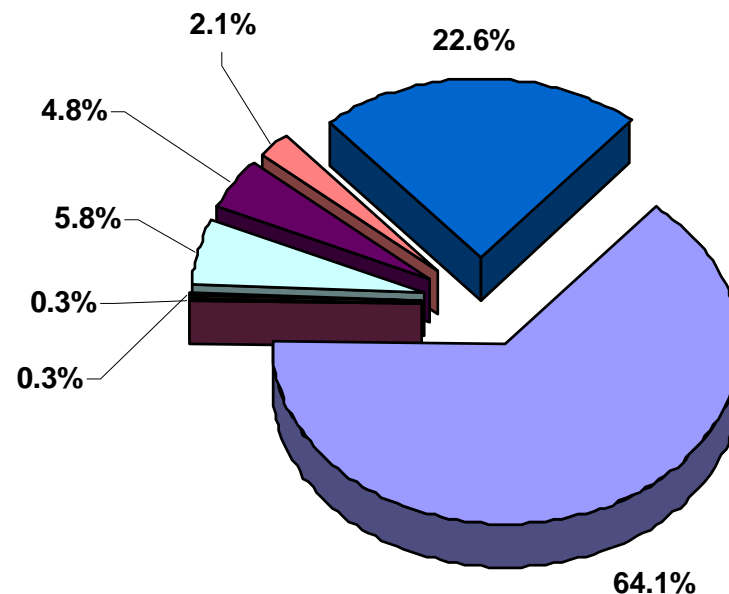


I-880 Southbound HOV Lane Extension— Hegenberger Rd. to Davis St. / Davis St. to Marina Blvd

❑ Project Status:

- ❖ The Environmental Document was Approved by FHWA in February 2010
- ❖ Caltrans approved the Project Report in March 2010.
- ❖ At the request of the City of San Leandro the Alameda CTC is overseeing the Marina Boulevard Interchange Project Study Report

Project Funding



■ ACTIA : Measure B3

■ STIP

■ Fed Others

■ Fed Demo-Ala

■ Fed Demo: SCL

■ CMA-TIP

■ Others : Local Others

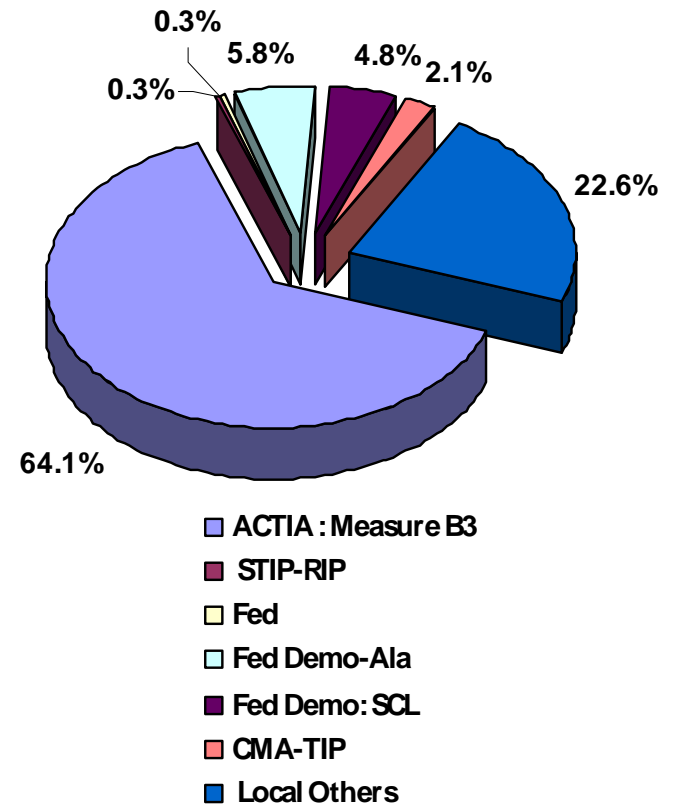
I-880 Southbound HOV Lane Extension— Hegenberger Rd. to Davis St. / Davis St. to Marina Blvd

- Project Issues:**
- ❖ **Initial project funding shortfall -- Approximately \$2.0 million of additional funding is needed to complete the right of way acquisition and utility relocations.**
- ❖ **Unanticipated additional project scope -- Caltrans required the seismic retrofit the three adjoining bridges over the Union Pacific Railroad. Only the southbound outside bridge is being widened by Marina Boulevard and Davis Street Interchange Project.**
- ❖ **Additional project scope and coordination -- The City of San Leandro has asked the ACTC to oversee the ultimate interchange improvements projects and include them with the HOV project.**
- ❖ **Potential need for additional funding to address the additional project scope and project risks**
- ❖ **Potential for schedule delays**

I-680 Express Lane



Project Funding



I-680 Express Lane

Project Status:

- *Highway construction was substantially completed and the Express lane opened on September 20, 2010, as scheduled. Final Testing, System Integration and final punch list items are underway.*
- *Contract #1 is complete and was accepted on September 27, 2010*
- *Contract #2 has a revised completion date of December 2010.*
- *Contract #3 is expected to be completed October 2010*



I-580 Soundwall Design – San Leandro

ACTC PROJECT NO. PN 374.0

Key Project Components:

Construction of soundwalls between Estudillo and 141st Avenue along both sides of I-580 in San Leandro.

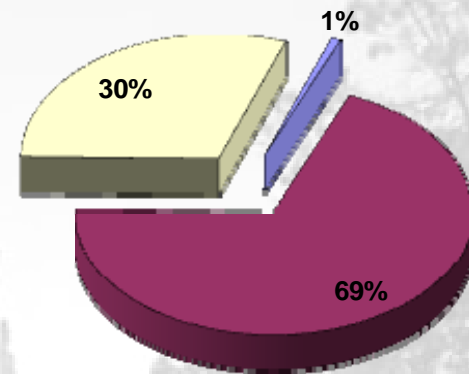
Project Status:

- **Scheduled to be finished in early November 2010.**
- **Construction Closeout through December 2010.**
- **Schedule extended 18 weeks due to weather and utility delays.**

Project Funding:

- **Additional \$500,000 is needed to complete construction due to time extension.**

Project Funding



■ MTC : Local Others

■ STP

□ CMA-TIP



I-680 / I-880 Cross Connector

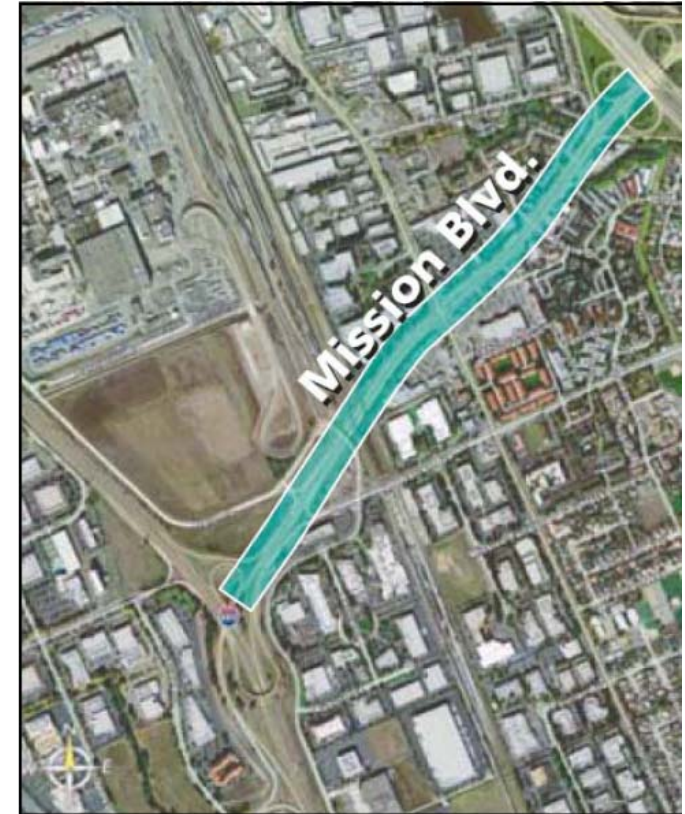
Key Project Components:

The project will identify improvements to SR 262 (Mission Boulevard) between I-680 and Warm Springs Boulevard in Fremont.

Funding: ACTIA Measure B, \$938,100

Project Status:

- *Staff met with partnering agencies and intends to reinitiate work in November 2010*



Webster Street SMART Corridor

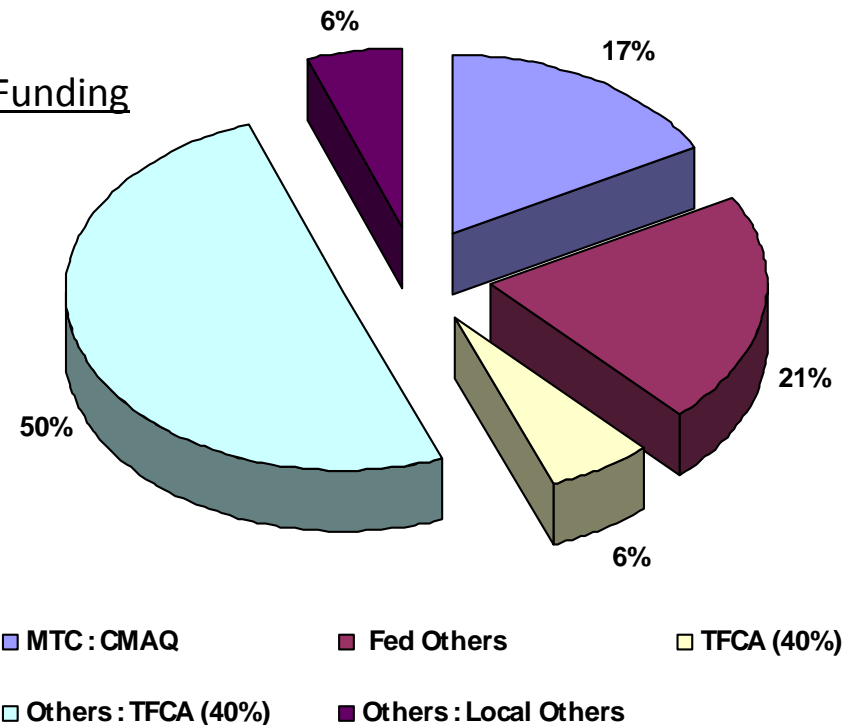
Key Project Components

- Includes operations and safety improvements related to traffic and transit
- Implementation of a Traffic Incident Management (TIM) system through the Webster / Posey Tube connecting the City of Alameda and the City of Oakland where the area trauma center is located.

Project Funding:

- Funding has been provided through a variety of local and federal sources totaling \$1.6 million, including a \$340,000 federal Earmark.

Project Funding



Webster Street SMART Corridor

Harris and Associates was selected to provide the Construction Management Services for this project.

Project Issues:

- *The schedule has been pushed out pending authorization to proceed from Caltrans, new bid opening date for construction contract expected in March 2011.*
- *Working with Caltrans to clear Environmental, ROW, Encroachment Permit and E-76*
- *Additional funding is being sought for the implementation of a local Transportation Management Center in the City of Alameda.*

