



# Meeting Notice

1111 Broadway, Suite 800, Oakland, CA 94607

• PH: (510) 208-7400

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## I-580 Express Lane Policy Committee

**Monday, October 14, 2013, 9:30 a.m.**

**1111 Broadway, Suite 800  
Oakland, CA 94607**

### Mission Statement

The mission of the Alameda County Transportation Commission (Alameda CTC) is to plan, fund and deliver transportation programs and projects that expand access and improve mobility to foster a vibrant and livable Alameda County.

### Public Comments

Public comments are limited to 3 minutes. Items not on the agenda are covered during the Public Comment section of the meeting, and items specific to an agenda item are covered during that agenda item discussion. If you wish to make a comment, fill out a speaker card, hand it to the clerk of the Commission, and wait until the chair calls your name. When you are summoned, come to the microphone and give your name and comment.

### Reminder

Please turn off your cell phones during the meeting. Please do not wear scented products so individuals with environmental sensitivities may attend the meeting.

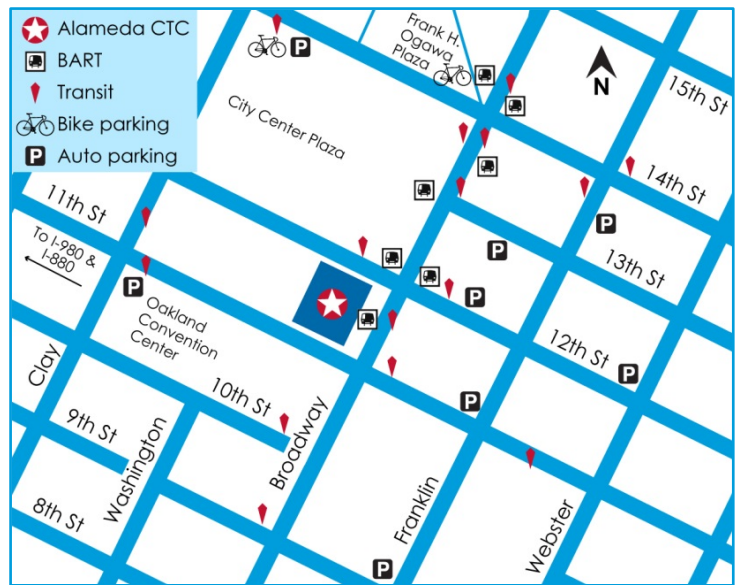
### Glossary of Acronyms

A glossary that includes frequently used acronyms is available on the Alameda CTC website at [www.AlamedaCTC.org/app\\_pages/view/8081](http://www.AlamedaCTC.org/app_pages/view/8081).

## Location Map

★ Alameda CTC  
1111 Broadway, Suite 800  
Oakland, CA 94607

Alameda CTC is accessible by multiple transportation modes. The office is conveniently located near the 12th Street/City Center BART station and many AC Transit bus lines. Bicycle parking is available on the street and in the BART station as well as in electronic lockers at 14th Street and Broadway near Frank Ogawa Plaza (requires purchase of key card from [bikelink.org](http://bikelink.org)).



Garage parking is located beneath City Center, accessible via entrances on 14th Street between 1300 Clay Street and 505 14th Street buildings, or via 11th Street just past Clay Street. To plan your trip to Alameda CTC visit [www.511.org](http://www.511.org).

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## Meeting Schedule

The Alameda CTC meeting calendar lists all public meetings and is available at [www.AlamedaCTC.org/events/upcoming/now](http://www.AlamedaCTC.org/events/upcoming/now).

## Paperless Policy

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# I-580 Express Lane Policy Committee Meeting Agenda Monday, October 14, 2013, 9:30 a.m.

1111 Broadway, Suite 800, Oakland, CA 94607

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## A. Joint Meeting with I-680 Sunol Smart Carpool Lane Joint Powers Authority (JPA)

### A.1. Convene Meeting with I-680 Sunol Smart Carpool Lane JPA

### A.2. Roll Call to Confirm Quorum

### A.3. [I-580 Express Lane Projects Workshop: Concept of Operations Review](#)

### A.4. Recess Joint Meeting

## 1. Public Comment

## 2. Consent Calendar

### 2.1. [September 9, 2013 I-580 PC Meeting Minutes](#)

Recommendation: Approve the September 9, 2013 meeting minutes.

### 2.2. [I-580 Corridor High Occupancy Vehicle Lane Projects \(PN 720.5/724.4/724.5\): Monthly Progress Report](#)

### 2.3. [I-580 Express Lane Projects \(PN 720.4/724.1\): Monthly Progress Report](#)

## 3. Committee Member Reports (Verbal)

## 4. Staff Reports (Verbal)

## 5. Adjournment

**Chair:** Mayor John Marchand, City of Livermore

**Vice Chair:** Supervisor Nate Miley, Alameda County District 4

**Commissioners:** Scott Haggerty, Tim Sbranti, Jerry Thome

**Staff Liaison:** Stewart D. Ng

**Executive Director:** Arthur L. Dao

**Clerk:** Vanessa Lee

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**Next Meeting:** November 4, 2013

All items on the agenda are subject to action and/or change by the Commission.

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# Memorandum

A.3

1111 Broadway, Suite 800, Oakland, CA 94607

• PH: (510) 208-7400

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**DATE:** October 7, 2013

**SUBJECT:** I-580 Express Lane Projects Workshop: Concept of Operations Review

**RECOMMENDATION:** Provide input on key concepts that define the development of the I-580 Express Lanes.

## Summary

Development and implementation of the I-580 Express Lanes ("Project") is underway from Hacienda Drive to Greenville Road in the eastbound direction, and from Greenville Road to San Ramon Road/Foothill Road in the westbound direction. The Project will expand commuter choices and maximize efficiency of this highly congested corridor by employing emerging technologies, such as congestion value pricing and automated violation enforcement. The Project is ahead of most other regional express lanes under development in the Bay Area (in the I-80, I-680, I-880, SR 237 and US 101/SR 85 corridors), as part of an overall 550-mile express lane network.

Several design, operations, enforcement and educational decisions must be made to ensure consistency with other Bay Area express lanes. This would facilitate the Public's understanding, acceptance, and utilization of express lanes within the regional network. Staff is implementing a series of workshops with the Commissioners to provide updates on design and operational decisions and seek input on key policy issues. In the July 8<sup>th</sup> and September 9<sup>th</sup> workshops, staff provided an overview of overarching design and policy issues, and detailed information about automated violation enforcement and associated policy (toll ordinance) and legislation needs. The October workshop will focus on the following:

- A brief overview of prior meeting discussion topics, and
- An outline of implementing toll policies and business rules and an implementation timeline.

This memo is an informational item.

## Background

The I-580 corridor has consistently been rated as one of the top three congested freeway segments within the San Francisco Bay Area region. As the next step in strategic investments in this corridor, the Alameda CTC is implementing express lanes in both the east and westbound directions. The express lanes will include the implementation of an

Electronic Toll System (ETS) to collect revenue generated by single-occupant users of the express lanes.

The express lane concept is an innovative transportation solution that utilizes technology to optimize the existing corridor capacity to provide traffic congestion relief, and is expected to provide the following benefits:

- Expand travel choices by allowing solo drivers to use the underutilized capacity in the High Occupancy Vehicle (HOV) lane for a fee when time saving is of value,
- Optimize the existing corridor capacity and improves efficiency of the corridor,
- Provide travel reliability, and
- Create a revenue source to pay for future corridor improvements, including closing gaps in the HOV network, transit investments and other improvements to increase connectivity.

The draft Concept of Operations plan developed for the Project is consistent with industry protocols and describes implementation of new and improved technologies to address congestion relief. Because the express lane implementation is still a relatively new concept, staff began providing periodic updates to the I-580 Policy Committee about the key concepts beginning in November 2012.

At the July 2013 Workshop, staff discussed the overarching concepts of Project implementation including:

- Express lane access design (near continuous access)
- Toll pricing strategies (zone tolling)
- System design, including automated toll violation enforcement
- Associated toll ordinance and legislation needs (for requiring HOV users to carry switchable transponders)
- Operating organizational structure
- Agency coordination
- Planned public education and outreach strategies

At the September 2013 Workshop, staff discussed the following:

- System design associated with toll and occupancy violation enforcement, and system-operations monitoring through cameras and dashboard
- Policy decisions and customer service center operations associated with employing automated toll violation enforcement
- Switchable transponders that define vehicle occupancy (i.e. a driver can select 1,2 or 3 on the transponder to self-declare number of occupants)
- Legislation needs, requiring HOV users to carry transponders

- Other policy issues such as HOV Degradation (requirement to maintain minimum speed in HOV lanes), National Interoperability (system capabilities to read any transponder issued by other national toll operator), and Caltrans Deputy Directive No. 43 (a draft policy directive, issued for the design and operations of managed lanes)
- Continued collaboration on planning outreach strategies for region-wide implementation

Through the end of this calendar year, staff will continue to provide detailed information on a series of topics and will request feedback from the Commissioners on policy issues to keep project development moving forward. Attachment A includes the list of recently completed and planned focused topics for discussion at upcoming meetings.

At the October 2013 meeting, staff will provide a brief overview of past meeting discussion topics, and include focused discussions on toll policies and business rules that require approval prior to Project implementation. This staff memorandum includes the following topics:

- Design and Infrastructure
- Operations and Enforcement
- Policy and Legislation
- Public Education and Outreach
- Agency Coordination

## ***1. Design and Infrastructure***

**Design of express lanes:** In the July Workshop staff described why a near continuous (aka more open) access configuration is suitable for implementation on I-580, highlighting that within the Project limits, the interchange densities are high, entrance ramps are closely spaced and the majority of those ramps are carrying large volumes of express lane eligible vehicles. Project design is moving forward with this new access type in order to stay on schedule and deliver the first construction project in fall 2014. See Attachment B for the Project limits and access configuration.

**Design of tolling equipment:** Project design included several travel zones within the corridor, where a flat fee will be charged for travel within a zone (zone tolling), based on real-time value pricing. Within each zone, overhead toll gantries will be placed at approximately  $\frac{3}{4}$  mile intervals, which will be essential to effectively read FasTrak® transponders.

## ***2. Operations and Enforcement***

Based upon industry research and discussions with express lane experts/operators, an automated toll violation enforcement system was selected to minimize revenue leakage.

This system includes a violation enforcement system (VES) that employs license plate recognition (LPR) capabilities, (i.e. cameras which are capable of capturing the license plate images when vehicles fail to carry valid transponders). HOV users also will have to carry a switchable transponder as discussed in previous workshops.

### **3. Policy and Legislation**

At the September 2013 Workshop, staff discussed the following policy issues:

- HOV degradation
- FHWA MAP-21 interoperability
- Toll ordinance (for enacting toll violation enforcement/collecting penalties)
- Legislation needs (for requiring HOV users to carry switchable transponders)
- Caltrans deputy directive 43

As discussed during the September workshop, current law allows the Commission to adopt a toll ordinance to enact the toll violation penalties. Staff continues to explore options for addressing how the Alameda CTC will issue violation notices. Staff is also discussing this item with other toll operators to collectively seek legislation for requiring all users to carry transponders while travelling in express lanes.

Several toll policies, business rules and best practices will have to be developed by the project team and adopted by the Commission, or approved by other entities that have jurisdiction over the express lanes, and incorporated by the design team for completing the toll system design, toll implementation and customer service operations.

Toll policies include, but are not limited to:

- Minimum/maximum toll rates
- Hours of operation
- HOV occupancy requirements (2 or 3+)
- Reinvestment of net revenue
- Toll rate adjustments
- Toll violation penalty/delinquent fees
- Dispute resolution and hearing processes, etc.

Business rules include but are not limited to:

- Zone toll implementation
- Toll waivers/ reductions
- Customer service center operations
- Toll violation noticing and processing, etc.

Staff has begun to discuss these items with the project system integrator and other toll operators, and is planning on bringing them to Commission's attention as are developed.



A list of identified toll policies/business rules and the timeline for implementation are included as Attachment C. A detailed presentation will be provided at the October 14, 2013 Workshop.

#### **4. *Public Education and Outreach***

As described in the past workshops, staff is working toward completing a public education and marketing plan by the end of this calendar year.

Goals of the plan are:

- Advance education about the Project benefits
- Provide information on how to use or access the new facility
- On-going public education to support the use and understanding of this new commute choice

Targeted audiences will include:

- HOV users, current FasTrak® users and other potential express lane users
- Communities and businesses along the corridor
- Elected officials and stakeholders in both Alameda and San Joaquin Counties

In the September 2013 Workshop, staff gathered input from the Commissioners regarding the targeted audience and strategies for reaching out to them. Staff is working with the Project team and will provide additional updates in the November 2013 Workshop.

Staff continues to collaborate with other regional partners to jointly brand the facility and effectively market this new transportation solution to the customer as a congestion management tool. Implementation of the public education and marketing strategies are expected to commence in July 2014, well in advance of the planned opening of the facility in the fall of 2015, and extend at minimum six months beyond the opening date.

#### **5. *Agency Coordination***

Staff has been coordinating the project development efforts with other congestion management agencies such as the Santa Clara Valley Transportation Authority (VTA), Contra Costa Transportation Authority (CCTA) and the Solano Transportation Authority (STA), MTC/BATA, California Toll Operators Committee (CTOC), California Department of Transportation (Caltrans), and FHWA. In addition, staff routinely communicates with other toll operators such as the LA Metro, Orange County Transportation Authority (OCTA) and the Minnesota Department of Transportation to share information and validate concepts developed for the project.

**Fiscal Impact:** There is no fiscal impact.

## Attachments

- A: Express Lane Workshop Discussion Items
- B: I-580 Project limits and access configuration
- C: List of Toll Policies and Business Rules

## Staff Contact

[Stewart Ng](#), Deputy Director of Programming and Projects

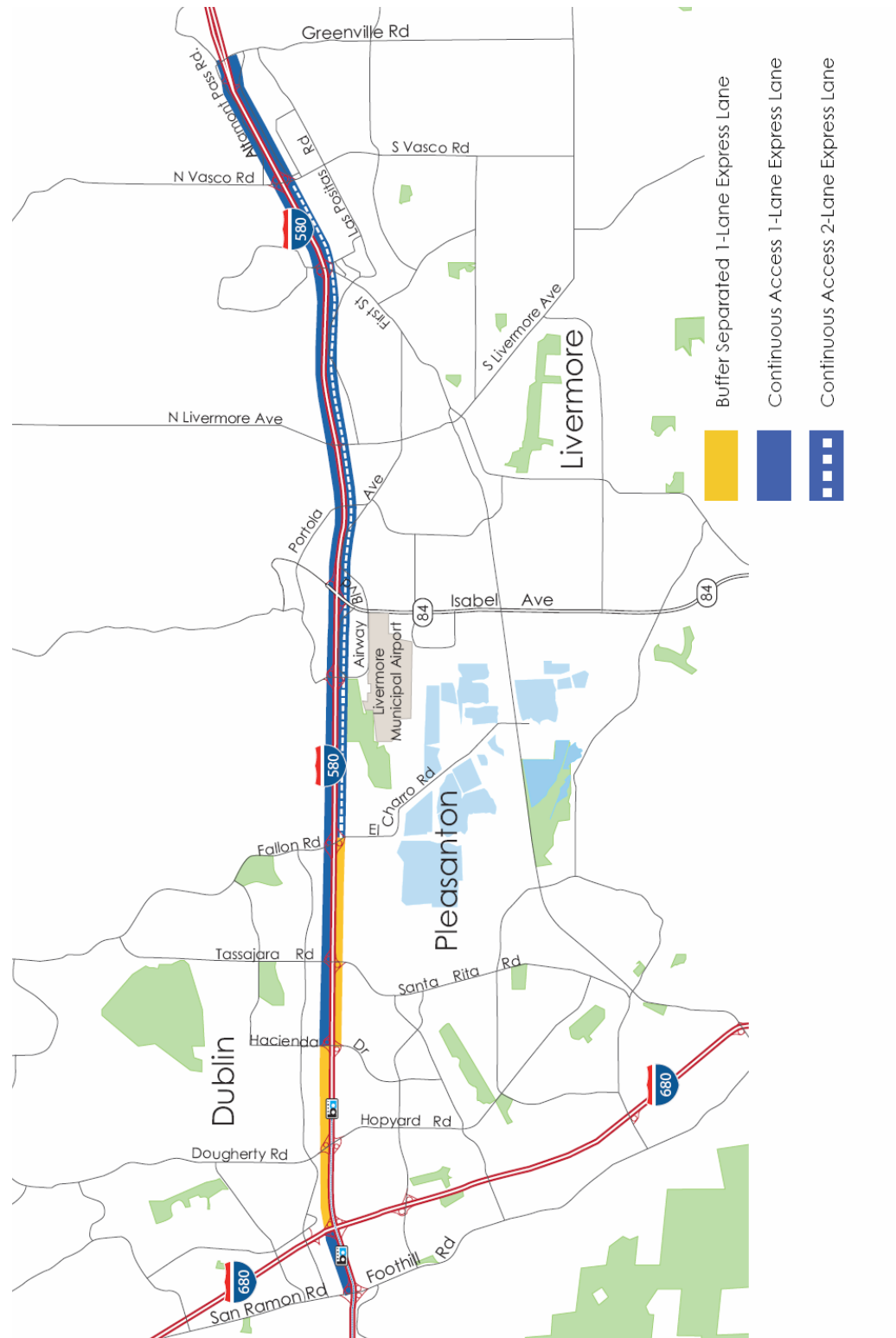
[Kanda Raj](#), Project Controls Team

## A: Express Lane Workshop Discussion Items

I580 PC/I680 Sunol JPA Meeting Date	List of Items
July 8, 2013 (Completed)	<ol style="list-style-type: none"> <li>1. Design and Infrastructure               <ol style="list-style-type: none"> <li>a. Lane Design for Access</li> <li>b. Equipment and lane design to support pricing strategies and messaging</li> </ol> </li> <li>2. Operations and Enforcement: Concept of Operations, including Enforcement</li> <li>3. Policy Overview: Legislation and Ordinance</li> <li>4. Public Education and Marketing Strategies</li> <li>5. Agency Coordination</li> </ol>
September 9, 2013 (Completed)	<ol style="list-style-type: none"> <li>1. Design and Infrastructure (Responses to inquiries)</li> <li>2. Operations and Enforcement (Focused discussion on enforcement)</li> <li>3. Policy and Legislation               <ol style="list-style-type: none"> <li>a. HOV Degradation</li> <li>b. FHWA MAP-21 Interoperability</li> <li>c. Toll Ordinance</li> <li>d. Legislation {clean up Vehicle Code 149.5(b)}</li> <li>e. Caltrans Deputy Directive-43</li> </ol> </li> <li>4. Public Education and Marketing Strategies</li> <li>5. Agency Coordination</li> </ol>
October 14, 2013	<ol style="list-style-type: none"> <li>1. Brief Overview of Past Discussions on               <ol style="list-style-type: none"> <li>a. Design and Infrastructure</li> <li>b. Operations and Enforcement</li> <li>c. Policy and Legislation</li> <li>d. Public Education and Marketing Strategies</li> </ol> </li> </ol>

	<ul style="list-style-type: none"> <li>e. Agency Coordination</li> </ul> <p>2. Focused Discussion on</p> <ul style="list-style-type: none"> <li>a. Toll Policies</li> <li>b. Business Rules</li> </ul>
November 4, 2013	<p>Updates on</p> <ul style="list-style-type: none"> <li>a. Toll Ordinance and Legislation</li> <li>b. Public Education and Marketing Strategies</li> </ul>
2014	<ul style="list-style-type: none"> <li>1. Operations <ul style="list-style-type: none"> <li>a. Revenue Study Results</li> <li>b. Hours of Operations</li> <li>c. HOV Occupancy Requirements</li> <li>d. Financial Breakeven Analysis</li> </ul> </li> <li>2. Policies <ul style="list-style-type: none"> <li>a. Toll ordinance</li> <li>b. Legislation</li> <li>c. Toll Policies and Business Rules</li> <li>d. Caltrans Deputy Directive No. 43</li> </ul> </li> <li>3. Public Education and marketing Strategies</li> <li>4. Agency Coordination</li> </ul>

B: I-580 Project Limits and Access Configuration



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## C: List of Toll Policies and Business Rules

No.	Description	Approved By			Schedule	Remarks
		Board	Others	Design Decision Only		
Toll Policies						
1	Types of vehicles allowed in HOV/Express Lane		X		N/A	Types of vehicles allowed in HOV/Express Lane, per California Vehicle Code (CVC) requirements
2	Transponder requirements		X		Summer 2014	Commission's input has been sought. Pending legislative action to revise CVC, requiring all users, including HOV users to carry transponders when utilizing the lane.  (Legacy transponder for SOV, switchable transponder for HOV/motorbikes/commercial bus users.)
3	Toll rates	X			Summer/fall 2014	Set Min/Max rates. (Requires iterative runs on a revenue/toll platform, to be completed by the system integrator as part of systems design.)
4	Toll rate adjustment	X			Summer/fall 2014	Schedule a timeline for periodically revisiting toll rates
5	Revenue reinvestment	X			Summer 2015	Policy decision/process for revenue reinvestment, per AB 2032 guidelines
6	Toll Ordinance	X			Summer 2014	Commission's input has been sought. Establish administrative procedures and penalties to enact toll violation enforcement process.
7	Toll rate plans			X	Fall 2014	Optimize facility operations within approved min/max rate parameters
8	Hours of Operation		X		Spring 2014	Commission's input will be sought. Hours of operations shall be as same as HOV hours.  Procedure: Caltrans-led HOV Lane Committee will review request from the tolling agency and decide whether to change the hours. Discuss a potential for afterhours/weekend operations.
9	HOV occupancy requirement (2 or 3+)		X		Spring 2014	Commission's input will be sought.  Procedure: Caltrans-led HOV Lane Committee will review request from the tolling agency and decide whether to change the HOV occupancy requirements.
Business Rules/Agreements						

No.	Description	Approved By			Schedule	Remarks
		Board	Others	Design Decision Only		
1	Toll collection method			X	Included in system design scope	All electronic toll (AET) collection through Title 21 compliant transponders. (No toll plaza and/or need to slow down at toll zones.)
2	Access type			X	Included in system design scope	Near continuous access (open for most part to enhance access opportunities)
3	Pricing strategy			X	Included in system design scope	Dynamic pricing. Frequency of rate recalculation and allowed rate changes (up or down) in each cycle will be incorporated.  Employ zone-based tolling that will employ a flat rate for travel within a zone. Will publish rates via dynamic message signs (DMS).  Lock-in the rate, as published while customer entered the lane.  Publish historic rate, when communication with the DMSs is interrupted.
4	Charging practices			X	Included in system design scope	Charge a rate only within the hours of operation, based on vehicle occupancy (identify and charge only the SOV users and toll violators.)
5	Toll waivers/reductions			X	Summer/fall 2014	After consultations with the Commission, develop circumstances or scenarios where toll charges will be waived/reduced
6	Loss of revenue during incidents/events			X	Summer/fall 2014	After consultations with the Commission, develop circumstances or incident scenarios where revenue loss will be permitted
7	Trip building			X	Included in system design scope	Specify information to be included in a trip record (transponder ID, time of travel, first/last reads, etc) to be transferred to customer service center for processing tolls.  Single-trip to be formed, unless the users got off and got back in between zones and gaps exist between toll read points.



No.	Description	Approved By			Schedule	Remarks
		Board	Others	Design Decision Only		
						Specify how license plate images will be utilized to form trips, when a transponder is not detected. If a transponder account is found for the license plate read, a trip will be formed and processed. If no account information is found, a trip will be formed and processed as toll violation, utilizing information from DMV records (only made available to MTC/BATA).
8	Modes of operation			X	Included in system design scope	AB 2032 requires that LOS C or higher is maintained in express lane, if not the lane operational mode shall be switched to "HOV Only." Modes of operation may have to be manually changed to respond to incident management.
9	Roles and responsibilities			X	Winter 2014	Define roles and responsibilities of local/regional/state partners and project consultants
10	Routine maintenance and operations	X			Summer 2014	Commission's approval will be sought to memorialize Caltrans role in providing routine roadway maintenance and/or facilitating incident responses in an agreement
11	Enforcement (occupancy violation)	X			Spring 2015	Commission's approval will be sought to memorialize CHP's role in employing manual occupancy violation enforcement in an agreement
12	Enforcement (toll violation)			X	Included in system design scope	Manual toll violation will be curtailed by employing automated violation enforcement. Commission will adopt a toll ordinance and likely enter into an agreement that could delegate processing responsibilities to BATA. (See Toll Policy Item No. 6 and Business Rule Item No. 13 for additional information.)
13	Toll collection and customer services	X			Spring 2014	Commission's approval will be sought on a potential agreement with BATA in providing 1) toll collection services, and 2) M-F customer service center operations. The agreement would stipulate BATA as the processing agency for 3) issuing toll violation/delinquent notices and collecting fees 4) providing dispute resolution and hearing processes.

No.	Description	Approved By			Schedule	Remarks
		Board	Others	Design Decision Only		
14	Method of payment			X	Spring 2014	The customer services agreement stipulated above will also define 1) forms of customer payment, 2) account balance and method of replenishment, 3)refund policy, 4)non-revenue accounts, and 5)other account information, etc.



# I-580 Express Lane Policy Committee

## Meeting Minutes

Monday, September 09, 2013, 9:45 a.m.

2.1

1111 Broadway, Suite 800, Oakland, CA 94607

PH: (510) 208-7400

www.AlamedaCTC.org

### A. Joint Meeting with I-580 Express Lane Policy Committee

#### A.1 Convene meeting with I-580 Express Lane Policy Committee

#### A.2 Roll Call to Confirm Quorum

#### A.3 I-580 Express Lane Projects Workshop: Concept of Operations Review

Kanda Raj introduced the I-580 Express Lane Projects Workshop. Chris Wuestefeld, the System Manager from CDM Smith covered the automated toll violation and manual occupancy violation enforcement, and system operation monitoring via CCTV cameras and dashboard. Kris explained the components of the system and how the automated toll system enforcement would work, and elaborated on a requirement for the HOV users to carry switchable transponders.

Tess Lengyel covered policy and legislation specifically toll ordinances to enact toll violation enforcement, legislation needs, for requiring the HOV users to carry switchable transponders, upcoming public education/outreach efforts and marketing strategies.

Kanda provided an overview of agency coordination and collaboration to effectively implement near continuous access, zone-based tolling, automated toll violation enforcement, etc. He also covered the overall schedule of I-580 corridor projects. Ramsey Hissen provided traffic forecast information and explained the operational requirements to the Commissioners when responding to their previous inquiry about the effect of converting the second express lane in to a general purposes lane in the vicinity of Vasco Road.

Commissioner Miley questioned how out of state drivers will access the express lane and if the outreach will strictly focus on local jurisdictions? Tess stated that this lane will have new technology that should assist out of state drivers with using the lane and staff plans to do extensive education throughout the Bay region as well as using the 511 system. Adequate signage will also be provided throughout the corridor to inform the drivers how the lane would work. Commissioner Miley requested that staff also reach out to potential customers through DMV registration process.

Commissioner Haggerty questioned how the truck climbing lanes interact with the express lane. Ramsey stated there will be a new 5<sup>th</sup> lane going up the hill, east of Grenville Road, which will provide better access for the trucks to climb up the hill without impeding the traffic operations in other lanes.

Commissioner Sbranti wanted to know what policy decisions the commission has to make regarding the lane. Art stated that several policy issues will be brought to Commission's attention in the upcoming months, and at that time staff will seek Commission input and/or adoption. Just to mention a few, Art indicated that the Commission will weigh in on HOV occupancy requirement, hours of operation, toll rates (minimum/maximum), toll ordinance and net toll revenue reinvestment.

Commissioner Thorne wanted to know what involvement the local city councils will have in the express lanes coordination. Tess stated that staff plans to present each City Council in the tri-valley with in depth information about the project to begin the educational process for the express lane.

*This Item was for information only.*

#### **A.5 Recess Joint Meeting**

##### **1. Public Comment**

There were no public comments.

##### **2. Consent Calendar**

2.1. July 8, 2013 I-580 PC Meeting Minutes

2.2. I-580 Corridor High Occupancy Vehicle Lane Projects (PN 720.5/724.4/724.5): Monthly Progress Report

2.3. I-580 Express (HOT) Lane Projects (PN 720.4/724.1): Monthly Progress Report

*Commissioner Thorne motioned to approve the Consent Calendar. Commission Miley seconded the motion. The motion passed unanimously.*

##### **3. Committee Member Reports (Verbal)**

There were no committee member reports.

##### **4. Staff Reports (Verbal)**

Art stated that US Department of Transportation announced the Tiger 5 grant awardees. He informed the committee that Alameda County unfortunately did not receive funding under this grant.

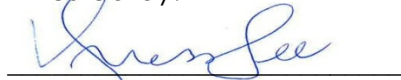
##### **5. Adjournment/ Next Meeting**

The meeting adjourned at 10:35 a.m. The next meeting is:

Date/Time: Monday, October 14, 2013 @9:30 a.m.

Location: Alameda CTC Offices, 1111 Broadway, Suite 800, Oakland, CA 94607

Attested by:



Vanessa Lee,  
Clerk of the Commission



# Memorandum

2.2

1111 Broadway, Suite 800, Oakland, CA 94607

• PH: (510) 208-7400

• www.AlamedaCTC.org

**DATE:** October 7, 2013

**SUBJECT:** I-580 Corridor High Occupancy Vehicle Lane Projects (PN 720.5 / 724.4 / 724.5): Monthly Progress Report

**RECOMMENDATION:** Receive a monthly status update on the I-580 Corridor High Occupancy Vehicle Lane Projects.

## Summary

The Alameda CTC is sponsoring the I-580 Corridor High Occupancy Vehicle (HOV) Lane Projects along the I-580 corridor in the Tri-Valley. This monthly progress report is intended to provide a status update of the various projects currently underway in the corridor. This item is for information only.

## Background

The Alameda CTC is the sponsor for the I-580 Corridor High Occupancy Vehicle (HOV) Lane Projects which include HOV lanes in the Eastbound and Westbound directions between Pleasanton and Livermore. The projects provide increased capacity, safety and efficiency for commuters and freight along the primary corridor connecting the Bay Area with the Central Valley. In its role as project sponsor, the Alameda CTC has been working in partnership with Caltrans, the Metropolitan Transportation Commission (MTC), Alameda County, and the cities of Livermore, Dublin, and Pleasanton to deliver the projects.

The I-580 Corridor HOV Lane Projects will be completed with the construction of three final projects in the Livermore Valley (two westbound HOV segments and one eastbound auxiliary (AUX) lanes project). All of these projects are currently in construction and are being administered by Caltrans. Construction activity began in March 2013 and the project partners held a groundbreaking ceremony on June 13, 2013.

Attached for the Committee's review are the August 2013 progress reports for the I-580 Eastbound HOV Lane Project (Segment 3 Aux Lanes) and the I-580 Westbound HOV Lane Project (Segments 1 and 2).

**Fiscal Impact:** There is no fiscal impact.

## Attachments

- A: I-580 Eastbound HOV Lane Project Monthly Progress Report (PN 720.5)
- B: I-580 Westbound HOV Lane Projects Monthly Progress Report (PN 724.4/724.5)
- C: I-580 Corridor HOV Lane Projects – Location Map

## Staff Contact

[Stewart Ng](#), Deputy Director of Programming and Projects

[Stefan Garcia](#), Project Controls Team

**ATTACHMENT A**  
**I-580 Eastbound HOV Lane Project (PN 720.5)**  
**Monthly Progress Report**  
**Through September 1, 2013**

**PROJECT DESCRIPTION**

The Eastbound I-580 HOV Lane Project is completing one final construction segment:

- **SEGMENT 3** – Auxiliary (AUX) Lanes between Hacienda Drive and Greenville Road. Project scope includes:
  - Construction of auxiliary lanes from Isabel Avenue to First Street;
  - Pavement width necessary for a double express / high occupancy toll (HOT) lane facility;
  - Final lift of asphalt concrete (AC) pavement and striping for entire eastbound project limits from Hacienda Drive to Portola Avenue;
  - The soundwall that was deleted from the I-580/Isabel Avenue Interchange Project; and,
  - The widening of two bridges at Arroyo Las Positas in the eastbound direction.

**CONSTRUCTION STATUS**

**Traffic Handling & Night Work**

Construction activities include both day and night work. Significant work is involved in rehabilitating the existing pavement which requires closing traffic lanes; however, no complete freeway closures are anticipated. Due to heavy daytime traffic volumes, closing traffic lanes in the daytime is not feasible. For this reason, pavement rehabilitation work can only be done during nighttime hours. Night work will include setting lane closures and shifting traffic lanes (placement of safety barrier (k-rail) and striping work), existing pavement rehabilitation work (crack and seat, slab replacement and overlay) and electrical work. Caltrans lane closure charts permit the contractor to perform this work at night between 9pm and 4am. Work behind k-rail and all bridge work is expected to occur during day time hours.

**Construction Challenges**

Alameda CTC staff is working in close coordination with Caltrans to implement the project within limited funding. Challenges and managed risks for this project include:

- Bird Nesting on structures and in adjacent field areas
- Completion of work in the Arroyo Las Positas in the 2013 season
- Installation of future HOT Lane components to facilitate HOT Lane completion

**Completed Activities – 24% of the contract work was completed as of 8/20/13**

Construction activities began in April 2013. Work completed to date includes:

- Las Positas Creek (EB and WB) completed abutments and columns
- Temporary striping and placement of k-rail for Stage 1
- Install temporary creek diversion system for box culvert and bridge work
- Installation of bird exclusion measures at bridge locations
- Widening of major box culvert at Arroyo Seco and modify drainage facilities
- Completion of several retaining walls

### Ongoing & Upcoming Activities

Caltrans maintains a project website

(<http://www.dot.ca.gov/dist4/projects/i580wbhov/>) and conducts public information and outreach efforts in cooperation with Alameda CTC. Ongoing and upcoming work activities include:

- Construct and backfill remaining retaining walls
- Las Positas Creek (EB and WB) bridge deck construction and falsework removal
- Winterization measures project-wide

### **FUNDING AND FINANCIAL STATUS**

The I-580 Eastbound HOV Project is funded through federal, state and local funds.

#### ***Funding Plan – SEGMENT 3***

Project Phase	Funding Source (\$ x million)						
	CMIA	RM2	TVTC	FED	SHOPP	Meas. B	Total
PA&ED						0.02	0.02
PS&E		1.72	1.30	0.23			3.25
ROW		0.17	0.08			0.28	0.53
Construct Cap	17.87	2.20	0.14		4.69	6.57	31.47
Construct Sup	2.53	1.12	0.10			0.71	4.46
<b>Total</b>	<b>20.40</b>	<b>5.21</b>	<b>1.62</b>	<b>0.23</b>	<b>4.69</b>	<b>7.58</b>	<b>39.73</b>
<b>Total Project Cost: \$39.7M</b>							

### **SCHEDULE STATUS**

The EB Auxiliary Lane project between Hacienda Drive and Greenville Road was advertised on July 9, 2012; bids were opened on October 5, 2012. The contract was awarded to OC Jones & Sons (with a bid 6.33% below the Engineer's Estimate) by Caltrans on November 16, 2012. Construction is planned to complete in late 2014.

Project Approval	December 2011 (A)
RTL	May 2012 (A)
CTC Vote	May 2012 (A)
Begin Construction (Award)	November 2012 (A)
End Construction	November 2014 (T)



**ATTACHMENT B**  
**I-580 Westbound HOV Lane Projects (PN 724.4/724.5)**  
**Monthly Progress Report**  
**Through September 1, 2013**

**PROJECT DESCRIPTION**

The Westbound I-580 HOV Lane Project includes three segments:

- **SEGMENT 1** – WB HOV Eastern Segment from Greenville Road to Isabel Avenue.
- **SEGMENT 2** – WB HOV Western Segment from Isabel Avenue to San Ramon Road.
- **SEGMENT 3** – Bridge widening at Arroyo Las Positas Creek. This work is included in the construction contract for the EB HOV Lane Project (see Attachment A).

**CONSTRUCTION STATUS – SEGMENTS 1 & 2**

**Traffic Handling & Night Work**

Construction activities include both day and night work. Significant work is involved in rehabilitating the existing pavement which requires closing traffic lanes; however, no complete freeway closures are anticipated. Due to heavy daytime traffic volumes, closing traffic lanes in the daytime is not feasible. For this reason, pavement rehabilitation work can only be done during nighttime hours. Night work will include setting lane closures and shifting traffic lanes (placement of safety barrier (k-rail) and striping work), existing pavement rehabilitation work (crack and seat, slab replacement and overlay) and electrical work. Caltrans lane closure charts permit the contractor to perform this work at night between 9pm and 4am. Work behind k-rail and all bridge work is expected to occur during daytime hours.

**Construction Challenges**

Alameda CTC staff is working in close coordination with Caltrans to implement the project within limited funding. Challenges and managed risks for the project include:

**SEGMENT 1 (Eastern Segment)**

- Installation of future HOT Lane components to facilitate HOT Lane completion
- Additional widening of the North Livermore Avenue structure to accommodate HOT Lane width requirements
- New retaining wall to account for recent, accelerated erosion within the Arroyo Seco Creek adjacent to the widening necessary for westbound lanes
- Coordination of concurrent work with ongoing Caltrans projects in the area to reduce cost
- Bird Nesting on structures and in adjacent field areas
- Revision of pavement slab replacement locations to best correct existing conditions

**SEGMENT 2 (Western Segment)**

- Installation of future HOT Lane components to facilitate HOT Lane completion
- Elimination of a retaining wall to reduce project cost
- Changes to the pavement cross section to reduce project cost
- Bird Nesting on structures and in adjacent field areas

- Revision of pavement slab replacement locations to best correct existing conditions

### **Completed Activities**

Construction activities began in March 2013. Work completed to date includes:

#### **SEGMENT 1 (Eastern Segment) – 17% of the contract work was completed as of 8/20/13**

- Foundation work and erection of falsework for bridge widenings is complete
- Concrete pavement slab replacements are complete
- Temporary striping, shift traffic lanes and placement of k-rail on outside shoulder from Greenville to Airway
- Installation of temporary creek diversion systems for bridge and box culvert (RCB) widenings

#### **SEGMENT 2 (Western Segment – 29% of the contract work was completed as of 8/20/13**

- Stage 1 median widening from Airway to Hacienda is complete
- Temporary striping, shift traffic lanes and placement of safety barrier (k-rail) to allow for Stage 2 outside widening
- Installation of temporary creek diversion system and erection of falsework at Tassajara Creek
- BART Barrier modifications are complete

### **Ongoing & Upcoming Activities**

Caltrans maintains a project website

(<http://www.dot.ca.gov/dist4/projects/i580wbhov/>) and conducts public information and outreach efforts in cooperation with Alameda CTC. Ongoing and upcoming work activities include:

#### **SEGMENT 1 (Eastern Segment)**

- Bridge deck construction and falsework removal for bridge widenings
- Excavate and construct retaining walls and soil nail walls
- Construct major drainage facilities (e.g. double box culvert)
- Winterization measures project-wide

#### **SEGMENT 2 (Western Segment)**

- Bridge widening at Dougherty near Dublin BART station
- Precast concrete pavement slab replacements are in progress
- Stage 2 outside widening
- Bridge deck construction and falsework removal for Tassajara Creek
- Winterization measures project-wide

## FUNDING AND FINANCIAL STATUS

The I-580 Westbound HOV Lane Project is funded through federal, state and local funds available for the I-580 Corridor. The total project cost is \$143.9M, comprised of programmed (committed) funding from federal, state and local sources.

### *Funding Plan – SEGMENT 1 (Eastern Segment)*

Project Phase	Funding Source (\$ x million)							
	CMIA	RM2	TCRP	FED	SHOPP	Meas. B	TVTC	Total
Scoping		0.53	0.04					0.57
PA&ED		4.38						4.38
PS&E		2.29	0.11	0.15		1.69	0.42	4.66
ROW		1.16				0.04		1.20
Utilities		0.32						0.32
Const Cap	35.34		5.92	6.19	13.54	1.60		62.59
Const. Sup	6.52		1.59			1.08		9.19
<b>Total</b>	<b>41.86</b>	<b>8.68</b>	<b>7.66</b>	<b>6.34</b>	<b>13.54</b>	<b>4.41</b>	<b>0.42</b>	<b>82.91</b>
<b>Total Project Cost: \$82.9M</b>								

### *Funding Plan – SEGMENT 2 (Western Segment)*

Project Phase	Funding Source (\$ x million)							
	CMIA	RM2	TCRP	FED	SHOPP	Meas. B	TVTC	Total
Scoping		0.36	0.02					0.38
PA&ED		2.92						2.92
PS&E		1.53	0.07	0.10		1.12	0.28	3.10
ROW		0.77				0.03		0.80
Utilities		0.21						0.21
Const Cap	33.73		2.49		9.61	0.10	0.30	46.23
Const. Sup	6.75					0.58		7.33
<b>Total</b>	<b>40.48</b>	<b>5.79</b>	<b>2.58</b>	<b>0.10</b>	<b>9.61</b>	<b>1.83</b>	<b>0.58</b>	<b>60.97</b>
<b>Total Project Cost: \$61.0M</b>								

## SCHEDULE STATUS

### **SEGMENT 1 (Eastern Segment):**

The Westbound HOV Eastern Segment from Greenville Road to Isabel Avenue was advertised on July 16, 2012; bids were opened on September 19, 2012. The contract was awarded to Ghilotti Construction Company, Inc. (with a bid 16.33% below

Engineer's Estimate) by Caltrans on November 20, 2012. Construction of the HOV lane is planned to complete in late 2014, and the entire contract will complete in 2015.

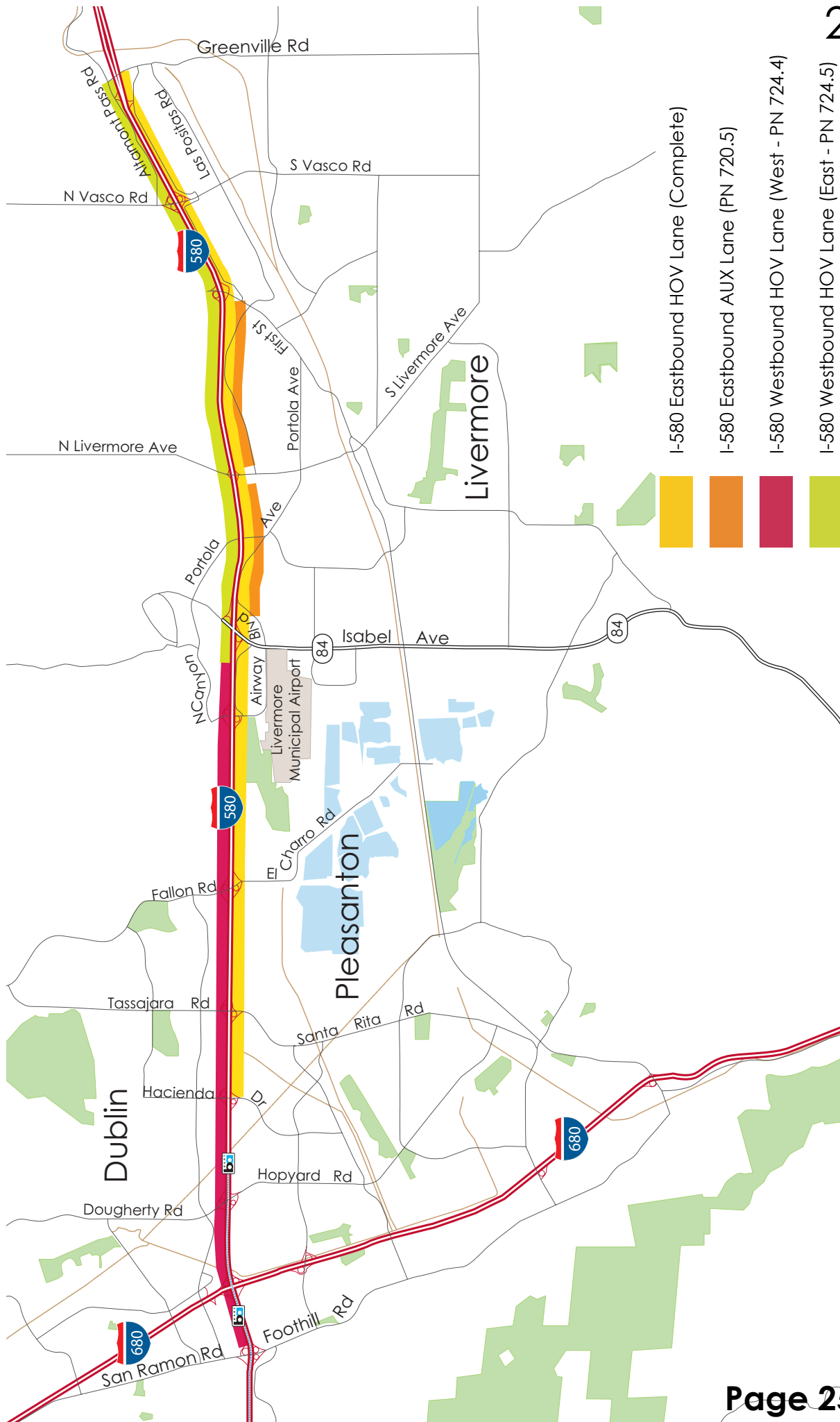
Project Approval	January 2010 (A)
RTL	May 2012 (A)
CTC Vote	May 2012 (A)
Begin Construction (Award)	November 2012 (A)
End Construction	May 2015 (T)

**SEGMENT 2 (Western Segment):**

The Westbound HOV Western Segment from Isabel Avenue to San Ramon Road was advertised on June 25, 2012 and bids were opened on August 29, 2012. The contract was awarded to DeSilva Gates Construction (with a bid 23.32% below Engineer's Estimate) by Caltrans on October 29, 2012. Construction is planned to complete in late 2014.

Project Approval	January 2010 (A)
RTL	April 2012 (A)
CTC Vote	April 2012 (A)
Begin Construction (Award)	October 2012 (A)
End Construction	November 2014 (T)

# I-580 Corridor HOV Lane Projects - Location map



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# Memorandum

2.3

1111 Broadway, Suite 800, Oakland, CA 94607

• PH: (510) 208-7400

• www.AlamedaCTC.org

**DATE:** October 7, 2013

**SUBJECT:** I-580 Express Lane Projects (PN 720.4 / 724.1): Monthly Progress Report

**RECOMMENDATION:** Receive a monthly status update on the I-580 Express Lane Projects.

## Summary

The Eastbound I-580 Express High Occupancy Toll (HOT) Lane Project will convert the newly constructed eastbound High Occupancy Vehicle Lane (HOV) lane, from Hacienda Drive to Greenville Road, to a double express lane facility. The I-580 Westbound Express (HOT) Lane Project will convert the westbound HOV lane (currently under construction) to a single express lane facility from west of Greenville Road to west of the San Ramon Road/Foothill Road Overcrossing in Dublin/Pleasanton.

A Categorical Exemption/Exclusion (CE) for the westbound direction was approved on August 2, 2013. An Initial Study/Environmental Assessment (IS/EA) for the eastbound direction is forecast for completion in February 2014. These projects are scheduled to start construction immediately after the east and west segments of the I-580 Westbound HOV Lane and I-580 Eastbound Auxiliary Lane Projects are completed in 2014. These HOV lane projects will widen the freeway to provide the width needed for the express lane projects. The I-580 Eastbound and Westbound Express Lane civil construction contract will construct the necessary infrastructure, such as signing, sign gantries for dynamic messaging and toll reading, electrical conduit for connecting power and communication sources, and striping to accommodate the express lanes. The System Integrator contractor will install the required communication equipment and software. The express lane facility will be open for use in 2015.

For detailed information on project funding, schedule and status of the Eastbound I-580 Express (HOT) Lane Project, Westbound I-580 Express (HOT) Lane Project and System Integration activities, see Attachments A, B and C of this report.

## **Background**

### ***Delivery Strategy***

I-580 Eastbound Express (HOT) and I-580 Westbound Express (HOT) Projects will be combined into one construction project. This will reduce bid advertising and construction support costs and minimize potential conflicts with two contractors performing work within the same project limits and median of the highway.

Staff has issued four Contract Change Orders (CCO's) to the on-going construction contracts (I-580 Westbound HOV, I-580 Eastbound Auxiliary Lane and Freeway Performance Project) along I-580 to incorporate some scope elements for the express lane project. Staff is working with Caltrans to identify additional scope elements that can be incorporated via CCO's to the above mentioned contracts. The benefit of this approach is to avoid working in the environmentally sensitive area, minimize additional traffic disruptions to the traveling public and reduce or eliminate re-work. Items under consideration to be included as contract change order work include:

- Electrical Conduit – across and along I-580
- Service and controller cabinets
- Striping – stripe to final HOT configuration
- Install K-rail along median at sign locations

### ***“Near Continuous” Access Configuration Status***

Staff is currently moving forward with the concept of a “near continuous” (aka “more open”) access configuration in lieu of “limited” access for the express lanes on the I-580 corridor. The “near continuous” access configuration would eliminate the two foot buffer between the express lane and the general purpose lanes except at “hot spots” or “safety zones” such as between Hacienda and Fallon Road (eastbound) and Hacienda and I-680 (westbound). The project team is working on refining the traffic operations analysis for a “near continuous” access configuration. This process has required more work and time than originally anticipated; which will result in a delay in completion of the environmental phase of the eastbound project until approximately February 2014. The construction start date will not be delayed and is scheduled to start in fall 2014.

In addition, other project revisions are underway to implement the “near continuous” access concept including revisions to the toll systems software, changes to the location of the Dynamic Message Signs (DMS) and toll gantries, updating the Concept and Operations Plan and System Engineering and Management Plan, and analyzing zone tolling requirements.

**Fiscal Impact:** There is no fiscal impact.



## Attachments

- A: I-580 Eastbound Express (HOT) Lane Project Monthly Progress Report
- B: I-580 Westbound Express (HOT) Lane Project Monthly Progress Report
- C: I-580 Express (HOT) Lanes System Integration Monthly Progress Report
- D: I-580 Corridor Express Lane Projects – Location Map

## Staff Contact

[Stewart Ng](#), Deputy Director of Programming and Projects

[Gary Sidhu](#), Project Controls Team

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**ATTACHMENT A**  
**I-580 Eastbound Express (HOT) Lane Project**  
**Monthly Progress Report**  
**Through September 30, 2013**

**PROJECT DESCRIPTION**

The Eastbound I-580 Express (HOT) Lane Project will convert the newly constructed eastbound HOV lane, from Hacienda Drive in Dublin/Pleasanton to Greenville Road in Livermore, to a double express lane facility.

**PROJECT DELIVERY STATUS**

The Environmental Phase for this project is underway as follows:

- Environmental studies are complete and the Initial Study and Environmental Assessment (IS/EA) is drafted and ready to circulate pending updating for changes to address "near continuous" access alternative and Caltrans approval of the Traffic Operational Analysis Report and Draft Project Report in December 2013. The estimated date of circulation of the draft IS/EA is December 2013. A 30 day public circulation period is required in addition to a public meeting expected in January 2014.
- Staff is working to coordinate with the three I-580 HOV lane projects currently in construction (I-580 Westbound HOV - West Segment, I-580 Westbound HOV - East Segment, I-580 Eastbound HOV Segment 3 - Auxiliary Lanes) to add some express lane elements to the civil projects via contract change order (CCO).

**RECENT ACTIVITIES**

- Refining traffic studies for "near continuous" access configuration
- Submitted Contract Change Order (CCO) packages to Caltrans for construction implementation
- Submitted 65% Plans, Specifications & Estimate (PS&E) for Caltrans review
- Executed construction cooperative agreements for CCO implementation
- Preparing ETC Contract Amendment
- Submitted revised Concept of Operations & System Engineering Management Plan documents to Caltrans and FHWA for final approval

**UPCOMING ACTIVITIES**

- Finalize Traffic Study refinements – target December 2013
- Finalize Draft Project Report – target December 2013
- Circulate the Draft IS/EA for 30 day public comment – working toward December 2013 circulation of document; dependent on completion of additional work for conversion to "near continuous" access. A public meeting will be held during the 30 day comment period
- Working toward environmental clearance and project approval by Caltrans and the Federal Highway Administration by February 2014

- Address Caltrans comments on 65% PS&E review and prepare 95% PS&E – target November 2013
- Final Concept of Operations document approved by FHWA – target October

#### **POTENTIAL ISSUES/RISKS**

- Schedule impacts –additional project delays to the environmental phase due to refinement of traffic analysis for “near continuous” access configuration and final agreement on the Design Exceptions. The delay in environmental phase is not expected to have any effect on construction start which is scheduled to start in 2014.

#### **FUNDING AND FINANCIAL STATUS**

See Attachment C for combined project funding and financial status.

#### **SCHEDULE STATUS**

##### **I-580 Eastbound Express (HOT) Lane Project Schedule:**

Project Approval	February 2014
RTL	June 2014
Begin Construction	September 2014
End Construction (Civil and System Integrator)	November 2015

**ATTACHMENT B**  
**I-580 Westbound Express (HOT) Lane Project**  
**Monthly Progress Report**  
**Through September 30, 2013**

**PROJECT DESCRIPTION**

The I-580 Westbound (HOT) Lane Project will convert the planned westbound HOV lane to a single express lane facility from west of the Greenville Road Undercrossing in Livermore to west of the San Ramon Road / Foothill Road Overcrossing in Dublin / Pleasanton, a distance of approximately 14 miles.

**PROJECT DELIVERY STATUS**

- Traffic studies are complete and the Traffic Operational Analysis Report (TOAR) has been approved by Caltrans
- The environmental document, a Categorical Exemption (CE), has been approved
- Staff is working to coordinate with the three I-580 HOV lane projects currently in construction (I-580 Westbound HOV - West Segment, I-580 Westbound HOV - East Segment, I-580 Eastbound HOV Segment 3 - Auxiliary Lanes) to add some express lane elements to the civil projects via contract change order (CCO).

**RECENT ACTIVITIES**

- The environmental document, a Categorical Exemption (CE), was signed on August 2, 2013
- Traffic Operational Analysis Report (TOAR) approved by Caltrans
- CCO packages submitted to Caltrans for construction implementation
- Construction Cooperative Agreement amendments and new cooperative agreements executed to implement CCO work
- Submitted 65% PS&E for Caltrans review
- Initiated development of a new contract with ETC

**UPCOMING ACTIVITIES**

- Address Caltrans comments on 65% PS&E review and prepare 95% PS&E – target December 2013
- Finalize High Profile Project Agreement with FHWA and Caltrans – target October 2013
- Final Concept of Operations document approved by FHWA – target October

**FUNDING AND FINANCIAL STATUS**

See Attachment C for combined project funding and financial status.

## SCHEDULE STATUS

### I-580 Westbound Express (HOT) Lane Project Schedule:

Project Approval	August 2013
RTL	June 2014
Begin Construction	September 2014
End Construction (Civil and System Integrator)	November 2015

**ATTACHMENT C**  
**I-580 Express (HOT) Lanes Systems Integration**  
**Monthly Progress Report**  
**Through September 30, 2013**

**SYSTEM INTEGRATION SCOPE DESCRIPTION**

The I-580 Express Lane civil contract will construct the necessary infrastructure, such as signing, sign gantries for dynamic messaging and toll reading, electrical conduit for connecting power and communication sources, and pavement striping to accommodate express lanes. The System Integrator will include tolling hardware design and software development, factory testing of design, equipment and system installation, and road geometry and toll system integration. It will also consist of field testing of the toll equipment and all subsystems including the interfaces to the BATA Regional Customer Service Center and Caltrans prior to implementing the new express lanes.

**Detailed Discussion**

The systems integration focuses on the most recent technologies including software, hardware and traffic detection that will be deployed to optimize the existing corridor capacity in order to effectively manage the current and forecasted traffic in the corridor. The system integrator, however, will continue to own the software while the implementing agency will pay for the use of license to allow for the usage of the toll integrator's software.

Project toll system integrator, the ETC Corporation has been revising the system design to support the "near continuous" access configuration in both directions of I-580. The "near continuous" concept provides additional access opportunities while reducing the foot-print required for implementing a shared express/general purpose lane facility. In addition, it looks and feels similar to an HOV facility and, therefore, would expect to provide driver familiarity.

**Project Geometry and Electronic Toll System Design**

The latest version of the express lanes concept proposes the following:

In the eastbound I-580 direction:

- Buffer separated single-lane HOV/Express Lane will be installed from Hacienda Drive to Fallon Road
- Continuous access dual-lane HOV/Express Lane will be installed from Fallon Road to west of Vasco Road
- Continuous access single-lane HOV/Express Lane will be installed from west of Vasco Road to Greenville Road

In the westbound I-580 direction:

- Continuous access single-lane HOV/Express Lane will be installed from Greenville Road to Hacienda Drive

- A buffer separated single-lane HOV/Express Lane will be installed from Hacienda Drive to the I-580/I-680 Interchange

## PROJECT STATUS

### **Concept of Operations/System Engineering Management & Enforcement Plans**

CDM Smith staff updated the Concept of Operations (Con Ops) Plan and the System Engineering Management Plan (SEMP) to reflect the changes described above. These plans outline the engineering process, the testing process, QA/QC guidelines, toll maintenance and operations requirements, and communication network requirements. Both these documents have been submitted to Caltrans and FHWA after addressing their comments.

### **Software and hardware design**

ETC staff has been revising the Detailed Design Document (DDD) for the software and hardware development based on deploying a “near continuous” access express lane system. The system designers are in the process of assessing the communication network and electrical power needs. ETC staff will then complete the system design, perform a series of factory and field tests and work with the agency staff to validate its hardware and software design, prior to opening the new express lanes facility.

### **Toll Pricing and Rate Publishing**

As discussed in previous meetings, for practical purposes and to curtail toll violation, a zone-based tolling has been included in design to effectively support the “near continuous” access configuration. The zone-based toll rates will be displayed to patrons via the Dynamic Message Signs.

### **Toll Antennas, Readers and Violation Enforcement Subsystem**

The toll gantries will be placed at approximately  $\frac{3}{4}$  mile intervals. Closely spaced toll antennas and readers will help facilitate a “near continuous” access express lane configuration since it will lead to an effective FasTrak® transponder read. It should also support more effective toll violation enforcement.

As discussed previously, the system design includes an automated toll violation enforcement to effectively manage toll violations in this “near continuous” access express lane facility.

The agency staff is also working to deploy a comprehensive public education/outreach program to support the implementation of a “near continuous” access configuration and the use of switchable transponders, which will be new to Bay Area toll customers.

The Golden Gate Bridge Authority implemented another payment option, payment through pay-by-plate. The user is required to open up an account to pay via their license plate. Our initial assessment indicates that this payment option is likely to encounter challenges since it will be difficult to distinguish the HOV and SOV users in an open/shared express lane facility, unless every vehicle is required to register as either an HOV or SOV vehicle. Staff will continue to evaluate and collaborate with other toll operators and report back to the committee on whether the I-580 Express Lanes will employ such payment option.



In summary, even though the “near continuous” access concept provides additional opportunities it is a relatively new concept for implementation in the region. Staff is committed to working closely with other like-minded agencies/industry experts to move forward and implement an effective electronic toll collection system strategy to effectively support a “near continuous” access express lane configuration.

## RECENT ACTIVITIES

- Working with ETC on the contract amendment for eastbound to reflect “near continuous” access configuration scope. Developing a new contract with ETC for the westbound direction.
- Continue to work on accommodating “zone tolling” and automated violation enforcement in project design documents.

## UPCOMING ACTIVITIES

- Finalize ETC contract amendment for eastbound and new contract for westbound – target October 2013
- Get Concept of Operations and System Engineering Management Plans approved by FHWA – target October 2013

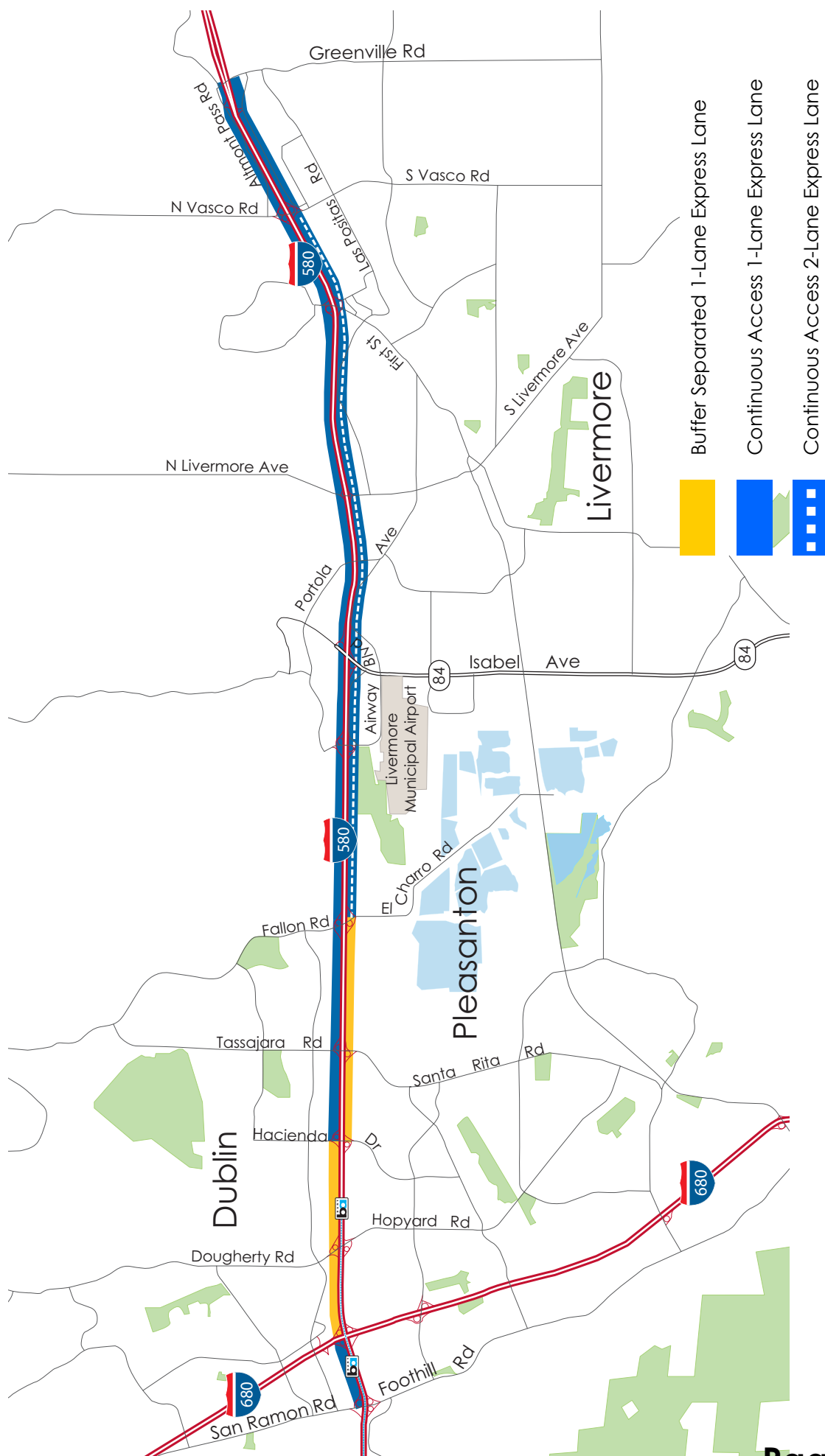
## FUNDING AND FINANCIAL STATUS

### *Combined Eastbound & Westbound Funding Plan for “near continuous” access*

Project Phase	Funding Source (\$ x million)							
	ARRA	Federal Earmark	RM2	TVTC	TCRP Deferred	Local (Meas. B)	Other Local	Total
PA&ED			1.39	2.17	0.10			3.66
PS&E	0.70		0.11	0.93	3.10			4.84
Sys. Int.	6.80			0.68	1.47		8.05	17.00
ROW				0.37				0.37
Const. Support			2.55		0.05	1.47		4.07
Construct Cap		1.00		0.63	1.28		21.65	24.56
O&M						0.18	0.30	0.48
<b>TOTAL</b>	<b>7.50</b>	<b>1.00</b>	<b>4.05</b>	<b>4.78</b>	<b>6.0</b>	<b>1.65</b>	<b>30.00</b>	<b>54.98</b>
<b>Total Project Cost: \$54.98 M</b>								

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# I-580 Express Lane Projects Location map



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