



# Meeting Notice

1111 Broadway, Suite 800, Oakland, CA 94607

• 510.208.7400

• [www.AlamedaCTC.org](http://www.AlamedaCTC.org)

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**Executive Director**  
Arthur L. Dao

## I-580 Express Lane Policy Committee

**Monday, September 14, 2015, 10:00 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.

### Recording of Public Meetings

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### 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.

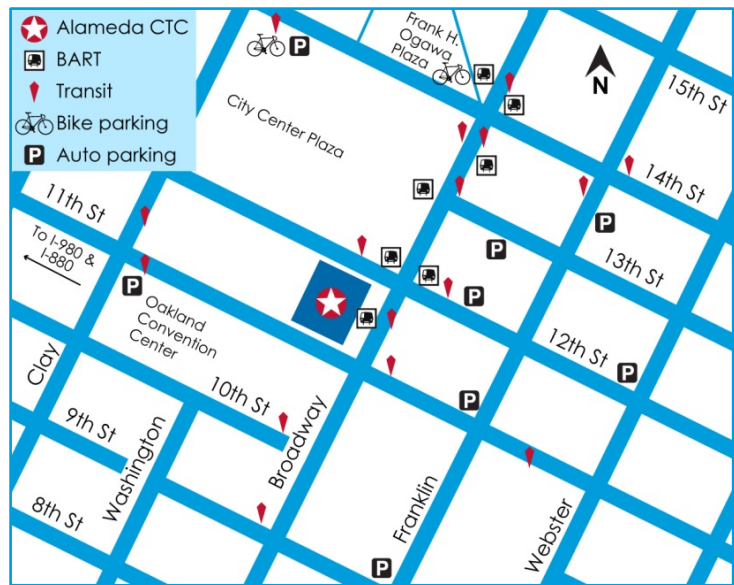
### Glossary of Acronyms

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

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# I-580 Express Lane Policy Committee Meeting Agenda

Monday, September 14, 2015, 10:00 a.m.\*

\*Or immediately following the I-680 Sunol SMART Carpool Lane Joint Powers Authority meeting

1111 Broadway, Suite 800, Oakland, CA 94607

• 510.208.7400

• www.AlamedaCTC.org

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

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

**Commissioners:** Scott Haggerty, Rebecca Kaplan, Bill Harrison, Jerry Thorne, David Haubert

**Staff Liaison:** Kanda Raj

**Executive Director:** Arthur L. Dao

**Clerk:** Vanessa Lee

## 1. Roll Call

## 2. Public Comment

## 3. Consent Calendar

**Page A/I**

3.1. [Approval of the I-580 Express Lane PC July 13, 2015 Meeting Minutes](#)

1

A

## 4. Regular Matters

4.1. [I-580 Corridor High Occupancy Vehicle/Express Lane Projects \(PN 720.4/720.5/724.1/724.4/724.5\): Monthly Progress Report](#)

5

I

4.2. [I-580 Express Lane Projects \(PN 720.4/724.5\): Update on Hours of Operations](#)

33

I

4.3. [I-580 Express Lanes \(PN 720.4/720.5\): Approval of Express Lane Toll Policy](#)

39

A

## 5. Committee Member Reports (Verbal)

## 6. Staff Reports (Verbal)

## 7. Adjournment

**Next Meeting:** October 12, 2015

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

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# I-580 Express Lane Policy Committee Meeting Minutes Monday, July 13, 2015, 10:00 a.m.

3.1

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## 1. Roll Call

A Roll Call was conducted. All committee members were present with the exception of Commissioner Miley.

### Subsequent to the roll call:

Commissioner Miley arrived prior to the vote on Item 3.1.

## 2. Public Comment

There were no public comments.

## 3. Consent Calendar

### 3.1 Approval of the I-580 Express Lane PC June 8, 2015 Meeting Minutes

*Commissioner Biddle motioned to approve the consent calendar. Commissioner Thorne seconded the motion. The motion passed unanimously.*

## 4. Regular Matters

### 4.1. I-580 Corridor High Occupancy Vehicle/Express Lane Projects (PN 720.4/720.5/724.1/724.4/724.5): Monthly Progress Report

Stefan stated that all HOV lanes construction contracts are meeting all budgetary goals and are expected to be completed by the end of this year. He informed the Commission that due to the complexity of coordinating multiple construction work activities at overlapping locations, construction completion of the some civil infrastructure components, required for express lane implementation have experienced delays. Kanda Raj then stated that system integration is being completed while working through the infrastructure delays. Kanda stated that the goal is to open the express lane in November 2015. He also stated that the agency is coordinating with the Bay Area Toll Authority (BATA) for the new Fastrak flex (switchable) toll tag distribution, customer service and provided information on media coverage and outreach for the projects.

Commissioner Haggerty wanted more information on the outreach efforts that are being done in San Joaquin County. Heather Barber stated that staff is working with transportation agencies in the San Joaquin area and has also done outreach at events throughout the county.

Commissioner Haggerty asked if there were cash type incentives for user when they buy the new transponder. Heather stated that retailers offer different incentives for users who purchase the transponders from their locations.

Commissioner Biddle asked if any work on the lanes is anticipated to occur in 2016. Stefan stated that the express lane project is planned to be completed in

November 2015, while some of the civil construction activities are expected to last until end of the year, however, the schedule is weather dependent.

Commissioner Haggerty asked when the westbound segment, east of express lane project limits will be paved and wanted to know how the project can be expedited by Caltrans. Stefan stated that the completion of a pavement rehabilitation project is expected in FY17-18. Art stated that staff could write a letter to Caltrans, requesting to prioritize the project..

*This item was for information only.*

**4.2. I-580 Express Lane Projects (PN 720.4/724.): Approval of Contract Amendments to Professional Services Agreements A09-007 and A13-0092 with Electronic Transaction Consultants Corporation and Authorize Construction Change Orders**

Kanda Raj recommended that the Commission execute Amendment No. 3 to Agreement No.A09-007 with Electronic Transaction Consultants Corporation (ETCC) to include additional scope of services for the I-580 Eastbound (EB) Express Lanes in the amount of \$324,000 for a total not-to-exceed amount of \$12,816,086; execute Amendment No. 2 to Agreement No.A13-0092 with ETCC to include additional scope of services for the I-580 Westbound (WB) Express Lane in the amount of \$40,000 for a total not-to-exceed amount of \$3,337,500; and execute construction change orders (CCOs), as needed, during the construction phase of the I-580 EB and WB Express Lanes Systems Integration. He stated that the recommended actions will authorize the executive director to execute amendments to ETCC Professional Services Agreements, in the amount of \$364,000 for subsequent expenditure. In addition, the actions will authorize the Executive Director to execute CCOs, as needed, for up to \$936,000 to keep the Project on schedule. The budget is included in the appropriate project funding plans and has been included in the Alameda CTC Adopted FY2014-15 Operating and Capital Program Budget.

Commissioner Haggerty requested that future construction change orders be reported to the Commission. Art Dao stated that staff can bring information on change orders to the Commission.

Commissioner Haggerty asked who will maintain the lighting in the lane. Art stated that Caltrans will maintain and pay for the energy costs.

Commissioner Kaplan wanted to know whether the toll rate will be free when the toll rate signs lose electricity or communication. Kanda stated that FHWA requirement is that the toll operators publish the toll rates prior to customers choosing to use the lane. Therefore, in the event of an electronic sign malfunction, the toll will be free until the sign can project a toll rate.

Commissioner Kaplan asked if there was an option to have a non-electronic sign that states the minimum toll fee. Art stated that non-electronic signs are something the agency can research.

Commissioner Miley asked why the contract value has doubled since it was originally executed. Kanda stated that the initial project concept was to implement a restricted access facility with limited number of entry and exit points. Subsequently, various amendments were brought to the Commission to accommodate continuous access requirements that required increased number of toll gantries and dynamic message signs, and automated toll evasion violation enforcement process that were not initially envisioned at the time of executing the initial agreement. Art also noted that the original contract was only for the eastbound section of the lane and the scope was augmented to include the westbound section for operational efficiencies.

*Commissioner Miley moved to approve this item. Commissioner Kaplan seconded the motion. The motion passed unanimously.*

**5. Committee Member Reports**

Commissioner Miley requested that the Commission get a status update on any future funding for the Port of Oakland in relations to goods movement or more specifically coal.

**6. Staff Reports**

There were no staff reports.

**7. Adjournment/ Next Meeting**

The next meeting is:

Date/Time: Monday, September 14, 2015 @ 10:00 a.m.

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

Attested by:



Vanessa Lee, Clerk of the Commission

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# Memorandum

4.1

1111 Broadway, Suite 800, Oakland, CA 94607

• PH: (510) 208-7400

• www.AlamedaCTC.org

**DATE:** September 8, 2015

**SUBJECT:** I-580 Corridor High Occupancy Vehicle/Express Lane Projects (PN 1373.000/1368.004/1373.001/1372.004/1372.005): Monthly Progress Report

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

## Summary

The Alameda CTC is the project sponsor of the I-580 Corridor High Occupancy Vehicle (HOV)/Express Lane Projects along the I-580 corridor in the Tri-Valley. The Eastbound I-580 Express Lane Project will convert the newly constructed eastbound HOV lane, from Hacienda Drive to Greenville Road, to a double express lane facility. The I-580 Westbound Express Lane Project will convert the westbound HOV lane (currently under construction) to a single express lane facility from Greenville Road to San Ramon Road/Foothill Road.

Construction of the express lane civil infrastructure for both eastbound and westbound I-580 express lane projects is being implemented through multiple contract change orders (CCO's) on multiple on-going construction contracts in the I-580 corridor. The express lane civil infrastructure includes both overhead and roadside signs, sign gantries for dynamic messaging and toll reading, electrical conduit for connecting power and communication sources, and pavement striping.

The originally planned opening date for the new express lane facilities was late 2015. Due to the complexity of coordinating multiple construction work activities at overlapping locations, completion of the express lane civil infrastructure has continued to experience significant delays. Delays during the construction phase of the HOV and express lane created consequent delay to the planned opening of the new express lane facilities, and staff now anticipates the facilities will be opened in early 2016 (weather dependent).

Construction of the toll system has started and will install the required communication equipment and toll hardware to integrate the toll subsystems and software. Coordination with regional agencies and California Toll Operators Committee is crucial for implementing express lanes on I-580.

Attachments A through E of this report provide detailed information on project funding, schedule and status of each corridor project, including the Eastbound HOV Lane Project - Segment 3 Auxiliary Lanes, the Westbound HOV Lane Project (Segments 1 and 2), the Eastbound I-580 Express Lane Project, Westbound I-580 Express Lane Project and Toll System Integration activities.

## **Background**

The projects in the I-580 Corridor will 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, California Highway Patrol, 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 will be completed by late 2015 (weather dependent), including the civil infrastructure required for express lane implementation.

For efficiency purposes, the I-580 Eastbound and Westbound Express Lane Projects have been combined into one express lane construction project. The civil infrastructure components of this combined project are being constructed via CCO's which have been issued to the on-going construction contracts along I-580 (I-580 Westbound HOV, I-580 Eastbound Auxiliary Lane and Freeway Performance Project). The benefit of implementing CCO's is to avoid working in the environmentally sensitive areas, minimize additional traffic disruptions to the traveling public, reduce or eliminate re-work and potentially finish construction sooner. Specific items included as CCO's are:

- Electrical Conduit – across and along I-580
- Service and controller cabinets
- Striping – stripe to final express lane configuration
- Install K-rail along median at sign locations
- Median concrete barrier
- Fiber Optics Cable
- Sign structures including tolling gantries, dynamic messaging signs, lighting standards and other sign structures.

Development of system integration is complete and toll system installation has begun. Due to the complexity of coordinating multiple construction work activities at overlapping locations, construction completion of the above referenced express lane support

infrastructure has continued to experience delays. Additionally, these civil roadway construction contracts also include rehabilitation of existing roadway that require road paving at nights when multiple lanes can be closed. Because of the stringent temperature requirements involving both rubberized and open-graded asphalt products, paving operations were delayed until summer 2015. All three roadway paving constructors secured the supply of rubberized and open-graded asphalt from the same plant, all but eliminating work windows for the express lane contractor this summer, and thus extending construction delays. Completion of commercial power sources required for express lane implementation is also behind schedule. These delays have had direct impact on toll system installation and the planned opening of express lanes. Staff have been conducting several meetings with roadway and system contractors, Caltrans and PG&E to coordinate scheduling issues and assess their impacts, in order to minimize construction and lane opening delays. Staff will provide an update to the Commissioners at the meeting.

Interface with the regional customer service center will have to be completed and tested prior to opening the toll lanes to the public.

**Fiscal Impact:** There is no significant fiscal impact to the Alameda CTC budget due to this item. This is information only.

## **Attachments**

- A. I-580 Eastbound HOV Lane Project Monthly Progress Report (PN 1368.004)
- B. I-580 Westbound HOV Lane Projects Monthly Progress Report (PN 1372.004/1372.005)
- C. I-580 Eastbound Express Lane Project Monthly Progress Report (PN 1373.000)
- D. I-580 Westbound Express Lane Project Monthly Progress Report (PN 1373.001)
- E. I-580 Express Lanes System Integration Monthly Progress Report
- F. I-580 Corridor HOV Lane Projects – Location Map
- G. I-580 Corridor Express Lane Projects – Location Map

## **Staff Contact**

[Kanda Raj](#), Express Lanes Program Manager

[Stefan Garcia](#), Construction Manager

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**ATTACHMENT A**  
**I-580 Eastbound HOV Lane Project (PN 1368.004)**  
**Monthly Progress Report**  
**July-August 2015**

**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. The Project scope includes:

- Construction of auxiliary lanes from Isabel Avenue to First Street;
- Pavement width necessary for a double express (high occupancy toll 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 the rehabilitation of 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. Due to the complexity of coordinating multiple work activities at overlapping locations, the installation of express lane support infrastructure has experienced delays. The project team is attempting to make up lost time by expediting priority locations and elevating priorities with supporting contractors and agencies such as Betancourt Brothers Construction, PG&E & Comcast. Challenges, delays and managed risks for this project include:

- Installation of future express Lane components to facilitate express lane completion. Project staff is working to combine HOV and express lane construction work in a manner that will keep the single HOV lane open until the double lane HOV/express lane facility is completed

- Paving work in the I-580 corridor is sourced to all three major HOV contractors from the same plant/quarry, due to volume and distance requirements for the required products. Additionally, the impact of early delays to the HOV project work pushed some of the production paving planned for the 2014 season into the 2015 season. The combined effect has created a major asphalt supply issue for completing corridor paving work in the summer of 2015. The corridor contractors have sequenced a plan that keeps paving activity going throughout the 2015 season, but every unplanned delay or plant closure has a domino effect on the entire delivery schedule.
- Pavement products have tight restrictions on the placement temperatures to ensure a lasting, quality pavement; when combined with lane closure restrictions on the corridor, paving work must occur at night during the summer. Lane closures for the express lane civil infrastructure are also required for the work and are often in conflict with paving operations, requiring the express lane activities to be deferred until paving is completed.
- Significant delays in the completion of 17 new PG&E power sites necessary for the operation of the new express lane tolling system
- Delays in the completion of fiber optics communication trunk throughout the corridor
- Contractor rework and design modifications to fit field conditions, including several "long distance" tolling sites on the corridor.
- Forecasts indicate high probability of an El Nino weather pattern. Weather may delay activities further over the 2015-2016 winter season.
- Bird Nesting on structures and in adjacent field areas

**Completed Activities – 84% of the contract work was completed as of 07/20/15**

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

- Construction of auxiliary lanes from Isabel Ave. to First St.
- Las Positas Creek (EB and WB) bridge widenings
- Widening of major box culvert at Arroyo Seco and modification of drainage facilities; Creek diversion is removed and area restored
- All sound walls and retaining walls on the freeway corridor
- Pavement widening necessary for a double express lane (high occupancy toll lane facility)

**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:

- Install Lighting and Traffic Operation Systems
- Complete the installation of infrastructure to support express lane operations by early September 2015.
- Complete fiber optic trunk line on south side of I-580 from Hacienda Dr. to Greenville Rd. by early September 2015.

- Open graded asphalt concrete will be placed on main line I-580 between Hacienda Dr. and Greenville Rd. until early September 2015
- Maintain HOV lane operation with temporary delineation until Express Lane "Go Live!" date
- Final striping and sign modifications to open Express Lane facility just prior to the "Go Live!" date.
- Open Express Lane facility

## 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 (\$ million)						Total
CMIA	RM2	TVTC	FED	SHOPP	Meas. B		
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	17.87	2.20	0.14		4.69	6.57	31.47
Cap							
Construct	2.53	1.12	0.10			0.71	4.46
Sup							
<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 Eastbound AUX Lane project between Hacienda Drive and Greenville Road was advertised on July 9, 2012; bids were opened on October 5, 2012. Caltrans awarded the contract to OC Jones & Sons (with a bid 6.33 percent below the Engineer's Estimate) on November 16, 2012. With the inclusion of infrastructure to support express lane operations, HOV lane construction is now planned to complete in late 2015, clearing the way for Alameda CTC's express lane contractor to complete field installation and testing activities in advance of opening the new express lanes to revenue service, now anticipated in early 2016 (weather dependent).

The originally planned opening date for the new express lane facilities was late 2015. Due to the complexity of coordinating multiple construction work activities at overlapping locations, completion of the express lane civil infrastructure has continued to experience significant delays. Delays during the construction phase of the HOV and express lane created consequent delay to the planned opening of the new express lane facilities, and staff now anticipates the facilities will be opened in early 2016 (weather dependent).

Project Approval	December 2011 (A)
RTL	May 2012 (A)
CTC Vote	May 2012 (A)
Begin Construction (Award)	November 2012 (A)
End Construction	November 2015 (T)



**ATTACHMENT B**  
**I-580 Westbound HOV Lane Projects (PN 1372.004/1372.005)**  
**Monthly Progress Report**  
**July-August 2015**

**PROJECT DESCRIPTION**

The Westbound (WB) 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 Eastbound (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. Due to the complexity of coordinating multiple work activities at overlapping locations, the installation of express lane supporting infrastructure has experienced delays. The project team is attempting to make up lost time by expediting priority locations and elevating priorities with supporting contractors and agencies such as Betancourt Brothers Construction, PG&E & Comcast. Challenges, delays and managed risks for the project include:

**SEGMENT 1 (Eastern Segment)**

- Installation of future express Lane components to facilitate express lane completion. Project staff is working to combine HOV and express lane construction work in a manner that will allow the HOV/express lane facility to be opened concurrently.
- Additional widening of the North Livermore Avenue structure to accommodate express lane width requirements
- Paving work in the I-580 corridor is sourced to all three major HOV contractors from the same plant/quarry, due to volume and distance requirements for the

required products. Additionally, the impact of early delays to the HOV project work pushed some of the production paving planned for the 2014 season into the 2015 season. The combined effect has created a major asphalt supply issue for completing corridor paving work in the summer of 2015. The corridor contractors have sequenced a plan that keeps paving activity going throughout the 2015 season, but every unplanned delay or plant closure has a domino effect on the entire delivery schedule.

- Pavement products have tight restrictions on the placement temperatures to ensure a lasting, quality pavement; when combined with lane closure restrictions on the corridor, paving work must occur at night during the summer. Lane closures for the express lane civil infrastructure are also required for the work and are often in conflict with paving operations, requiring the express lane activities to be deferred until paving is completed.
- Significant delays in the completion of 17 new PG&E power sites necessary for the operation of the new express lane tolling system
- Delays in the completion of fiber optics communication trunk throughout the corridor
- Contractor rework and design modifications to fit field conditions, including several "long distance" tolling sites on the corridor.
- Forecasts indicate high probability of an El Nino weather pattern. Weather may delay activities further over the 2015-2016 winter season.
- New retaining wall to account for recent, accelerated erosion within the Arroyo Seco Creek adjacent to the widening necessary for westbound lanes
- Coordination with concurrent Caltrans projects in the area to reduce cost
- Bird Nesting on structures and in adjacent field areas
- Revision of pavement slab replacements to prioritize in areas most in need

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

- Installation of future express lane components to facilitate express lane completion. Project staff is working to combine HOV and express lane construction work in a manner that will allow the HOV/express lane facility to be opened concurrently
- Paving work in the I-580 corridor is sourced to all three major HOV contractors from the same plant/quarry, due to volume and distance requirements for the required products. Additionally, the impact of early delays to the HOV project work pushed some of the production paving planned for the 2014 season into the 2015 season. The combined effect has created a major asphalt supply issue for completing corridor paving work in the summer of 2015. The corridor contractors have sequenced a plan that keeps paving activity going throughout the 2015 season, but every unplanned delay or plant closure has a domino effect on the entire delivery schedule.
- Pavement products have tight restrictions on the placement temperatures to ensure a lasting, quality pavement; when combined with lane closure restrictions on the corridor, paving work must occur at night during the summer. Lane closures for the express lane civil infrastructure are also required for the work and

are often in conflict with paving operations, requiring the express lane activities to be deferred until paving is completed.

- Significant delays in the completion of 17 new PG&E power sites necessary for the operation of the new express lane tolling system
- Delays in the completion of fiber optics communication trunk throughout the corridor
- Contractor rework and design modifications to fit field conditions, including several "long distance" tolling sites on the corridor.
- Forecasts indicate high probability of an El Nino weather pattern. Weather may delay activities further over the 2015-2016 winter season.
- 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 replacements to prioritize in areas most in need

### **Completed Activities**

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

#### **SEGMENT 1 (Eastern Segment) – 82% of the contract work was completed as of 07/20/15**

- North Livermore Avenue bridge widening
- Bridge widening at Arroyo Las Positas (2 locations)
- Arroyo Seco RCB culvert extension
- Construct major drainage facilities (e.g. double box culvert)
- Concrete pavement slab replacements
- Excavate and construct retaining walls and soil nail walls
- Median barrier reconfiguration
- Soundwall construction at Vasco Road
- Paving of ramp

#### **SEGMENT 2 (Western Segment) – 92% of the contract work was completed as of 07/20/15**

- Median widening from Airway Boulevard to Hacienda Drive
- Median widening and barrier reconfiguration
- Bridge widening and gore areas
- Installation of electroliers in the median
- Installation of sign structure foundations in the median for express lane tolling system signage
- Pavement widening necessary for conversion of existing HOV lane to an express lane (high occupancy toll lane facility)
- at Dougherty Undercrossing near Dublin BART station
- Bridge widening at Tassajara Creek
- Precast slab pavement replacements
- Retaining walls
- Outside widening from Airway Boulevard to Hacienda Drive

- Installation of electroliers in the median
- Installation of sign structure foundations in the median for express lane tolling system signage
- Pavement widening necessary for conversion of existing HOV lane to an express lane (high occupancy toll lane facility)

### **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)**

- Install Lighting and Traffic Operation Systems
- Install infrastructure to support express lane operations
- Complete the installation of infrastructure to support express lane operations by early September 2015.
- Final pavement layers will be placed on main line I-580 between Greenville Road and Airway Boulevard through October 2015
- Maintain HOV lane closed to traffic with temporary delineation until Express Lane "Go Live!" date
- Final striping and sign modifications to open Express Lane facility just prior to the "Go Live!" date.
- Open Express Lane facility

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

- Install Lighting and Traffic Operation Systems
- Complete the installation of infrastructure to support express lane operations by early September 2015.
- Final asphalt paving and striping between Airway Boulevard and Hacienda Drive is complete; concrete pavement placement will be completed by September.
- Maintain HOV lane closed to traffic with temporary delineation until Express Lane "Go Live!" date
- Final striping and sign modifications to open Express Lane facility just prior to the "Go Live!" date.
- Open Express Lane facility

## 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 (\$ million)							Total
	CMIA	RM2	TCRP	FED	SHOPP	Meas. B	TVTC	
Scoping		0.53	0.04					<b>0.57</b>
PA&ED		4.38						<b>4.38</b>
PS&E		2.29	0.11	0.15		1.69	0.42	<b>4.66</b>
ROW		1.16				0.04		<b>1.20</b>
Utilities		0.32						<b>0.32</b>
Const Cap	35.34		5.92	6.19	13.54	1.60		<b>62.59</b>
Const. Sup	6.52		1.59			1.08		<b>9.19</b>
<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 (\$ million)							Total
	CMIA	RM2	TCRP	FED	SHOPP	Meas. B	TVTC	
Scoping		0.36	0.02					<b>0.38</b>
PA&ED		2.92						<b>2.92</b>
PS&E		1.53	0.07	0.10		1.12	0.28	<b>3.10</b>
ROW		0.77				0.03		<b>0.80</b>
Utilities		0.21						<b>0.21</b>
Const Cap	33.73		2.49		9.61	0.10	0.30	<b>46.23</b>
Const. Sup	6.75					0.58		<b>7.33</b>
<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 and bids were opened on September 19, 2012. Caltrans awarded the contract to Ghilotti Construction Company, Inc. (with a bid 16.33 percent below Engineer's Estimate) on November 20, 2012. With the inclusion of infrastructure to support express lane operations, HOV lane construction is now planned to complete in early 2016, clearing the way for Alameda CTC's express lane contractor to complete field installation and testing activities in advance of opening the new express lanes to revenue service, now anticipated in early 2016 (weather dependent).

The originally planned opening date for the new express lane facilities was late 2015. Due to the complexity of coordinating multiple construction work activities at overlapping locations, completion of the express lane civil infrastructure has continued to experience significant delays. Delays during the construction phase of the HOV and express lane created consequent delay to the planned opening of the new express lane facilities, and staff now anticipates the facilities will be opened in early 2016 (weather dependent).

Project Approval	January 2010 (A)
RTL	May 2012 (A)
CTC Vote	May 2012 (A)
Begin Construction (Award)	November 2012 (A)
End Construction	February 2016 (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. Caltrans awarded the contract to DeSilva Gates Construction (with a bid 23.32 percent below Engineer's Estimate) on October 29, 2012. With the inclusion of infrastructure to support express lane operations, construction is now planned to complete in fall 2015, clearing the way for Alameda CTC's express lane contractor to complete field installation and testing activities in advance of opening the new express lanes to revenue service, now anticipated in early 2016 (weather dependent).

The originally planned opening date for the new express lane facilities was late 2015. Due to the complexity of coordinating multiple construction work activities at overlapping locations, completion of the express lane civil infrastructure has continued to experience significant delays. Delays during the construction phase of the HOV and express lane created consequent delay to the planned opening of the new express lane facilities, and staff now anticipates the facilities will be opened in early 2016 (weather dependent).

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

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**ATTACHMENT C**  
**I-580 Eastbound Express Lane Project**  
**Progress Report**  
**July-August 2015**

**PROJECT DESCRIPTION**

The Eastbound I-580 Express Lane Project will convert the newly constructed eastbound HOV lane, from Hacienda Drive to Greenville Road, to a double express lane facility, for, a distance of approximately 11 miles.

**PROJECT DELIVERY STATUS**

- Civil design is complete. The civil construction component is being implemented through the Contract Change Orders (CCOs) process under the three I-580 HOV lane projects currently in construction: the I-580 Westbound HOV Lane - West Segment Project; the I-580 Westbound HOV Lane - East Segment Project and the I-580 Eastbound HOV Lane - Segment 3 Auxiliary Lane Project. All CCOs have been issued and are being actively coordinated with Caltrans construction management staff and the contractors
- Electronic toll system design development is complete
- The Caltrans encroachment permit has been secured and field toll system installation activities are progressing

**RECENT ACTIVITIES**

- Construction activities are progressing (see Attachment A for details)
- Construction coordination meetings held to ease construction sequencing between the civil and systems construction projects and mitigate civil construction delays  
Public outreach activities are progressing
- Toll system and outreach activities are progressing (see Attachment E for details)

**UPCOMING ACTIVITIES**

- Civil construction activities and installation of toll system (see Attachment A for details)
- Toll system and outreach activities will continue (see Attachment E for details)

**POTENTIAL ISSUES/RISKS**

Civil construction activities were initially scheduled to be completed in summer 2015 to allow for subsequent electronic toll system installation so that the express lane facility can be opened in fall 2015. The original construction schedule was very aggressive. Delays have been experienced in completing the civil infrastructure required for the toll

system installation and lane opening. Therefore, the express lanes cannot be opened to the public in late 2015 as originally planned. Staff is assessing the schedule delays to minimize the delays in lane opening.

## **FUNDING AND FINANCIAL STATUS**

The total project cost of the combined express lane project is \$55 million and is fully funded with a combination of federal, regional and local fund sources.

## **SCHEDULE STATUS**

I-580 Eastbound Express Lane Project Schedule:

Project Approval	March 2014 (A)
Civil Design Completion	April 2014 (A)
Begin Construction	June 2014 (A)
End Construction (Civil Infrastructure for Toll Lanes)	December 2015 (T)
End System Integration and Open Express Lanes	Early 2016

**ATTACHMENT D**  
**I-580 Westbound Express Lane Project**  
**Progress Report**  
**July-August 2015**

**PROJECT DESCRIPTION**

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

**PROJECT DELIVERY STATUS**

- Civil design is complete. Civil construction is being implemented through the Contract Change Order (CCO) process under the I-580 HOV lane projects currently in construction: I-580 Westbound HOV Lane - West Segment Project; I-580 Westbound HOV Lane - East Segment Project and I-580 Eastbound HOV Lane - Segment 3 Auxiliary Lane Project. All CCOs have been issued and actively coordinated with Caltrans construction management staff and the contractors
- Electronic toll system design development complete
- Caltrans encroachment permit secured, field toll system installation activities are progressing

**RECENT ACTIVITIES**

- Construction activities are progressing (see Attachment B for details)
- Construction coordination meetings were held to ease construction sequencing between the civil and toll systems construction projects and to mitigate civil construction delays
- Public outreach activities are progressing
- Toll system and outreach activities are progressing (see Attachment E for details)

**UPCOMING ACTIVITIES**

- Coordinate civil construction activities to install toll system (see Attachment B for details)
- Toll system and outreach activities will continue (see Attachment E for details)

## POTENTIAL ISSUES/RISKS

Civil construction activities were initially scheduled to be completed in summer 2015 to allow for subsequent electronic toll system installation so that the express lane facility can be opened in fall 2015. The original construction schedule was very aggressive. Delays have been experienced in completing the civil infrastructure required for the toll system installation and lane opening. Therefore, the express lanes cannot be opened to the public in late 2015 as originally planned. Staff is assessing the schedule delays to minimize the delays in lane opening.

## FUNDING AND FINANCIAL STATUS

The total project cost of the combined express lane project is \$55 million and is fully funded with a combination of federal, regional and local fund sources.

## SCHEDULE STATUS

I-580 Westbound Express Lane Project Schedule:

Project Approval	August 2013 (A)
Civil Design Completion	April 2014 (A)
Begin Construction	June 2014 (A)
End Construction (Civil Infrastructure for Toll Lane)	December 2015 (T)
End System Integration and Open Express Lane	Early 2016

**ATTACHMENT E**  
**I-580 Express Lanes System Integration**  
**Progress Report**  
**July-August 2015**

**PROJECT DESCRIPTION**

The I-580 Express Lane civil contract will construct the necessary civil infrastructure to implement the express lanes on I-580. Civil items include signing, sign gantries for dynamic messaging and toll reading, electrical conduit for connecting power and communication sources and pavement striping. The System Integration component of the project includes communication and tolling hardware design, software development, and factory testing of toll system equipment, hardware installation and toll system integration. Field testing the toll equipment and all subsystems, including the interfaces to the Bay Area Toll Authority (BATA)- Regional Customer Service Center and Caltrans, prior to implementing the new express lanes is also included under the System Integration contract. Implementation of express lane projects involves emerging technologies and is still a relatively new concept to Bay Area commuters. For this reason, Alameda CTC embarked on a robust education and outreach campaign in February 2015, to inform the public of the new facility and how to use the lanes.

**Detailed Discussion**

System integration improvements along the I-580 corridor include the most recent congestion management hardware, software and traffic detection technologies to efficiently manage current and forecasted traffic congestion to optimize existing corridor capacity. The system integrator will continue to own the software while the implementing agency will pay for a license to allow for the use of the toll integrator's software and services.

The project will include "near continuous" type access configuration to provide additional access opportunities through the express lane facility, while reducing the foot-print required for implementing a shared express/general purpose lane facility. In addition, the near continuous access configuration looks and feels similar to a High Occupancy Vehicle (HOV) facility and, therefore, is expected to provide driver familiarity through the corridor.

Real-time traffic and travel conditions (traffic speed and volume data) will be gathered through traffic monitoring devices at various stations throughout the facility. Demand-based toll rates will be calculated utilizing a dynamic pricing model algorithm. Travelers will be informed of the calculated toll rates ahead of express lane entry locations on Dynamic Message Signs (DMSs). The DMSs are expected to display two rates, the first rate is for travel within the current or immediately downstream zone (typically the next interchange) and the second rate is for travel to a major destination within the corridor (determined as the end of the line in the I-580 Corridor).

To support this near continuous access configuration, the electronic toll system has been developed to implement zone tolling and automated toll evasion violation enforcement which involves a license plate image capture and review process. Closely spaced toll antennas and readers will be placed approximately at 3/4-mile intervals to effectively read FasTrak® / FasTrak flex® (aka switchable) transponders. A transponder will be read once within a toll zone by a toll reader; which will charge a flat fee for use of the lane within that zone. The Toll Enforcement Ordinance was adopted by the Commission in July 2015 and will enable Alameda CTC to enforce automated toll evasion violation through the use of license plate image capture and review process. The registered owners of vehicles without a valid FasTrak® account will be issued a toll evasion violation notice, following a procedure, similar to the current procedure employed throughout the San Francisco Bay Area on the toll bridges.

In addition, staff has been working closely with BATA to finalize the interface between the toll system, regional customer service center operations, and the distribution of the FasTrak flex® (aka switchable) transponders. The FasTrak flex® transponders became available to the general public in July 2015.

Since express lanes involve new and emerging technologies and are a relatively new concept to Bay Area commuters, a comprehensive education and outreach effort is underway to inform motorists about the benefits of the new lanes, how to use them, and how to obtain the required FasTrak® or FasTrak flex® toll tags. An I-580 Express Lanes education and outreach campaign is being implemented within the project area and throughout the I-580 travel sheds, which include San Joaquin, Stanislaus and Contra Costa Counties.

## **PROJECT STATUS**

ETCC has completed software and hardware development consistent with the project concepts presented during the I-580 Workshops held in 2013. Zone tolling and automated toll evasion violation enforcement are part of the design development and includes tools to support the California Highway Patrol's efforts in curtailing vehicle occupancy violation.

Toll system installation has been progressing, however, due to delays experienced during the construction of the civil infrastructure elements and the installation schedule of commercial power sources (by PG&E), sequencing ETCC's field installation has become challenging. Staff has increased their field coordination efforts, including targeted coordination with the on-going Caltrans construction projects to revise the toll system installation sequence. As discussed at the July 2015 meeting, ETCC will be provided with the required additional traffic control and remobilization to support revised installation sequencing activities. A summary of approved change orders to date are included in Table A.

**TABLE A. Toll System Construction Contract Change Orders:**

CCO	Total CCO Budget	Description of CCO	CCO Amount	Revised CCO Budget
Budget approved in July 2015	\$936,000			
No. 1		Additional scope and budget for ETCC to remobilize and provide increased traffic control to manage toll system installation	\$113,400	\$822,600

Staff is working closely with all parties involved to minimize the lane opening delays.

A comprehensive education and outreach effort is underway within the project area and throughout the I-580 travel shed to inform motorists about the benefits of the new express lanes, how to use them, and how to obtain the required FasTrak® and FasTrak® flex toll tags. The outreach effort is focusing on educating the public that a FasTrak® toll tag is required to use the I-580 Express Lanes. Carpool vehicles and other eligible motorcycles and clean air vehicles travel toll free with a FasTrak flex® toll tag. FasTrak flex® toll tags are now available online at [www.bayareafastrak.org](http://www.bayareafastrak.org) and at Costco, Safeway and Walgreens stores throughout the commute shed. The public is obtaining them at a good rate both online and at the retail stores. FasTrak® representatives are joining Alameda CTC at events throughout the commute shed this fall to assist with the distribution of FasTrak® and FasTrak flex® tags.

#### **Key Recent Activities**

- July 28 presentation to the Dublin Rotary Club
- August 5 presentation to the Livermore Valley Chamber of Commerce
- Articles in Dublin Business Newsletter, District 1 E-Newsletter and on San Joaquin County's Commute Connection and 511 Rideshare websites
- Attendance at public outreach events
  - August 2: Taste of Downtown Livermore (with FasTrak representatives)
  - August 5: First Wednesdays in Pleasanton (with FasTrak representatives)
  - August 15: Mountain House Music in the Park

#### **Key Upcoming Activities**

- Develop "how-to" video
- Presentations to Rotary Clubs and Chambers of Commerce
- Attendance at public outreach events in Tri-Valley, Contra Costa and San Joaquin Counties including

- October 3-4: Manteca Pumpkin Fair
- Continued outreach to employers within commute shed
- Placement of informational posters and over-the-road banners in Tri-Valley and on WHEELS buses.

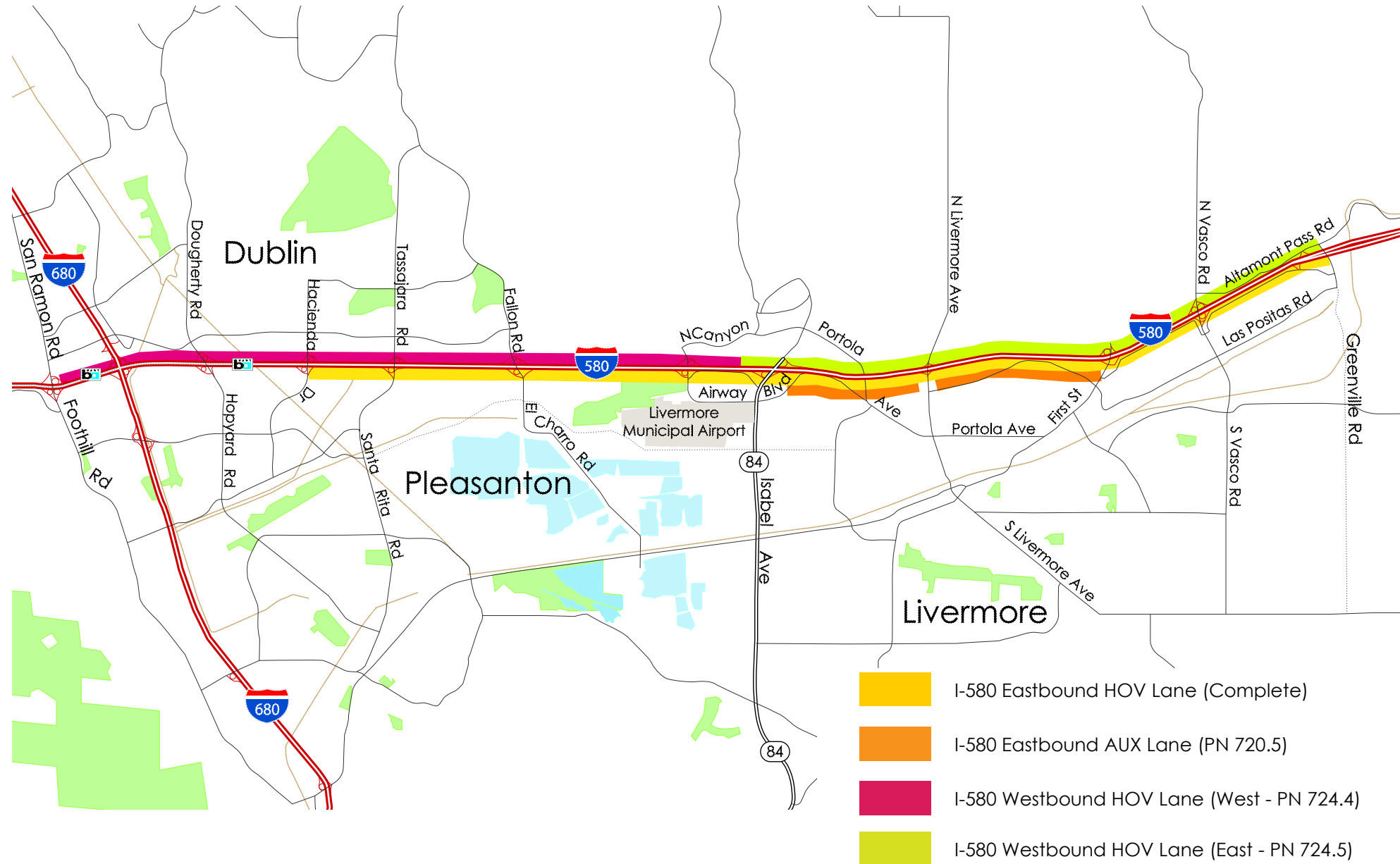
Staff will continue to bring outreach and education updates to the I-580 Express Lane Policy Committee and Commission including an update on launch activities.

## **FUNDING AND FINANCIAL STATUS**

The total project cost of the combined Eastbound and Westbound I-580 Express lane project is \$55 million, and is fully funded with a combination of federal, regional and local fund sources.



## I-580 Corridor HOV Lane Projects - Location map

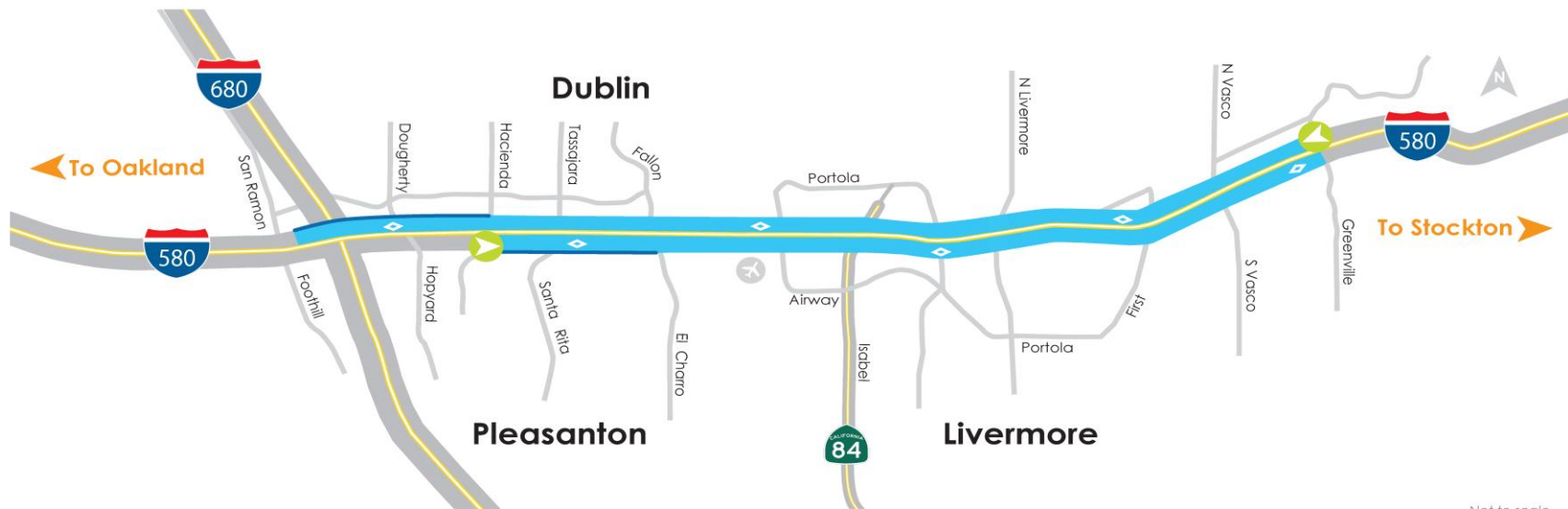


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# I-580 Express Lanes Project Location Map

4.1G



Not to scale



## Two Eastbound Express Lanes

### Lanes begin at Hacienda



No entry/exit from eastbound express lanes from Hacienda to Fallon / El Charro.

**Please note:** For access to Santa Rita Road, do not enter express lanes.



## One Westbound Express Lane

### Lane begins at Greenville



No entry/exit from westbound express lane from Hacienda to end.

**Please note:** For access to I-680 or Dougherty, exit express lane before Hacienda.

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# Memorandum

4.2

1111 Broadway, Suite 800, Oakland, CA 94607

• PH: (510) 208-7400

• www.AlamedaCTC.org

**DATE:** September 8, 2015

**SUBJECT:** I-580 Express Lanes: Update on Hours of Operation

**RECOMMENDATION:** Receive an update on Hours of Operation necessary for express lane implementation.

## Summary

The I-580 Express Lanes project ("Project") will implement high occupancy vehicle (HOV)/express lanes on Interstate 580 (I-580) from Hacienda Drive to Greenville Road in the eastbound direction, and from Greenville Road to San Ramon Road/Foothill Road in the westbound direction, as shown in Attachment A - Project Location Map. The Project is part of an overall 550-mile Bay Area express lane network that will employ emerging technologies, such as real-time congestion pricing and automated toll violation enforcement, to expand commuter choices and maximize efficiency of the highly congested I-580 corridor.

At the April 2015 I-580 Express Lane Policy Committee meeting (I-580 EL PC), staff provided an update to the committee regarding the status of the ongoing hours of operation discussions with the HOV Lane Committee. As previously reported, California Vehicle Code Sections 21655.5 (a) & (b) and 21655.6 (a) require the State Department of Transportation (Caltrans) to study and designate the hours of operation after consulting the Regional Transportation Planning Agency (RTPA) and California Highway Patrol (CHP). Staff has been working with the HOV Lane Committee, comprised of these three agencies to extend the current HOV hours and/or to determine the hours of operation for the Project to effectively manage traffic congestion in the corridor. Following an impasse on discussions among the HOV Lane Committee members, the issue was elevated to the Freeway Management Executive Committee (FMEC).

The FMEC met on July 7, 2015 and approved the hours of operations from 5:00 a.m. to 8:00 p.m., Monday through Friday, similar to current I-680 Southbound Express Lane hours of operations. Alameda CTC received a letter from FMEC, dated July 8, 2015, included as Attachment B to this staff report.

## Background

Over the last two decades, the I-580 corridor has consistently been rated as one of the most congested freeway segments within the San Francisco Bay Area region. As the next step in strategic investments to manage congestion in this corridor, Alameda CTC is implementing express lanes in both the east- and west-bound directions. The express

lanes will provide a new choice to single occupancy vehicle (SOV) users, enabling them to make use of the unused capacity in the HOV lane for a fee, if they choose to use the lanes.

As discussed at the I-580 EL PC Meeting in February 2015 (Item 4.2: Business Rules Update), Section 149.5 of California Streets and Highway Code stipulates that the express lanes operate within the HOV hours of operation without degrading the operation of the general purposes lanes. Furthermore, Sections 21655.5 (a) & (b) and 21655.6 (a) of the California Vehicle Code provide the authority to Caltrans for studying, designating occupancy and selecting the hours of operations of the lane; in cooperation with the RTPA, which in the case of the San Francisco Bay Area region, is the Metropolitan Transportation Commission (MTC).

An HOV Lane Committee comprised of Caltrans, MTC and CHP staff periodically meets to discuss the hours of operation and recommend changes to the Bay Area HOV Lane Network. Since last year, the Alameda CTC staff have been in discussions with Caltrans regarding operational requirements necessary to efficiently manage the current and forecasted traffic demand. Based on the Department's initial review of the Alameda CTC's request, Caltrans requested that Alameda CTC perform additional traffic analysis to demonstrate the benefits of extending the HOV/express lane hours of operation beyond the current HOV lane hours. On March 10, 2015, a formal request from Alameda CTC was forwarded to the full HOV Lane Committee to review the results of the traffic analysis and consider revising the hours of operation. The HOV Lane Committee met on April 21, 2015 and reviewed the operational needs of the project. Based on the request from MTC for additional review time, the Committee met again on May 6, 2015 to discuss the operational hours. The HOV Lane Committee failed to reach an agreement, and the issue was elevated by the group to the executive level, to be decided at the FMEC.

The FMEC met on July 7, 2015 and authorized Alameda CTC to operate the I-580 HOV/Express Lanes from 5:00 a.m. to 8:00 p.m., Monday through Friday with the caveat that Alameda CTC commit to work with Caltrans to set the toll rates for the mid-day (off-peak hour) operation. The hours are similar to the operational hours of the I-680 Southbound HOV/Express Lane.

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

## **Attachments**

- A. Project Location Map
- B. FMEC Letter, dated July 8, 2015

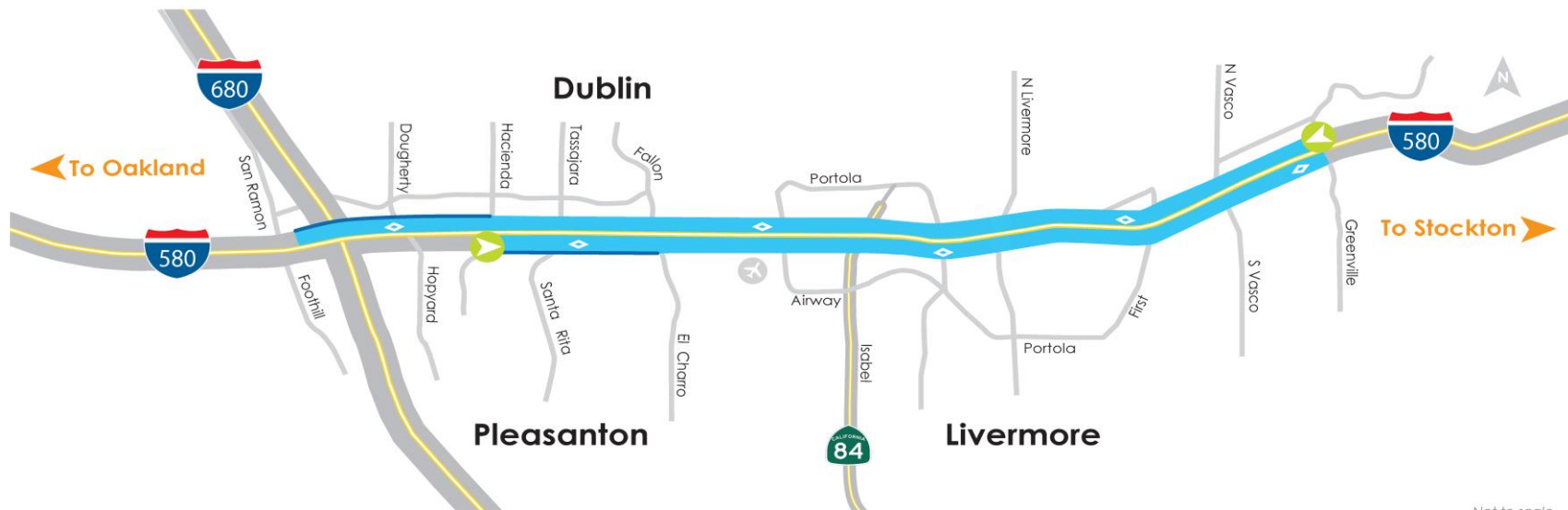
## **Staff Contact**

[Kanda Raj](#), Express Lanes Program Manager



# I-580 Express Lanes Project Location Map

4.2A



Not to scale



## Two Eastbound Express Lanes

### Lanes begin at Hacienda



No entry/exit from eastbound express lanes from Hacienda to Fallon / El Charro.

**Please note:** For access to Santa Rita Road, do not enter express lanes.



## One Westbound Express Lane

### Lane begins at Greenville



No entry/exit from westbound express lane from Hacienda to end.

**Please note:** For access to I-680 or Dougherty, exit express lane before Hacienda.

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METROPOLITAN  
TRANSPORTATION  
COMMISSION

Joseph P. Bort Metropolitan Center  
101 Eighth Street  
Oakland, CA 94607-4700  
TEL 510.817.5700  
TTY/TDD 510.817.5769  
FAX 510.817.5848  
EMAIL info@mtc.ca.gov  
WEB www.mtc.ca.gov

4.2B

July 8, 2015

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Santa Clara County

*Jake Mackenzie, Vice Chair*  
Sonoma County and Cities

*Alicia C. Aguirre*  
Cities of San Mateo County

*Tom Azumbrado*  
U.S. Department of Housing  
and Urban Development

*Jason Baker*  
Cities of Santa Clara County

*Tom Bates*  
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U.S. Department of Transportation

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*Amy Rein Worth*  
Cities of Contra Costa County

*Steve Heminger*  
Executive Director

*Alix Bockelman*  
Deputy Executive Director, Policy

*Andrew B. Fremier*  
Deputy Executive Director, Operations

Arthur L. Dao  
Executive Director  
Alameda County Transportation Commission  
1111 Broadway, Suite 800  
Oakland, CA 94607

RE: I-580 Express Lanes Hours of Operation

Dear Mr. Dao:

The Freeway Management Executive Committee discussed the topic of I-580 Express Lanes hours of operations at the July 7, 2015 meeting. The Committee, comprised of representatives from Caltrans, California Highway Patrol, and Metropolitan Transportation Commission, collaborates and addresses issues related to the freeway infrastructure, operation and management.

At the meeting, the Committee approved hours of operation from 5AM to 8PM during weekdays for the Alameda I-580 Express Lanes, with a commitment to work with the Alameda California Transportation Commission as it sets tolls for the mid-day period.

If you have any questions about the project, please contact me at 510.817.5840.

Sincerely,

Andrew B. Fremier  
Deputy Executive Director, Operations

ABF: kc

CC: Dan McElhinney, Paul Fontana, Daryl Halls, Randy Iwasaki, John Ristow

J:\SECTION\EXEC\O\Andrew Fremier\Correspondence\_2015\Dao\_Fremier\_I580 Express Lanes\_July 2015.docx

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# Memorandum

4.3

1111 Broadway, Suite 800, Oakland, CA 94607

• PH: (510) 208-7400

• www.AlamedaCTC.org

**DATE:** September 8, 2015

**SUBJECT:** I-580 Express Lanes: Approval of Express Lane Toll Policy

**RECOMMENDATION:** Approve toll policy necessary for the express lane implementation.

## Summary

The I-580 Express Lanes project ("Project") will implement high occupancy vehicle (HOV)/express lanes on Interstate 580 (I-580) from Hacienda Drive to Greenville Road in the eastbound direction, and from Greenville Road to San Ramon Road/Foothill Road in the westbound direction, as shown in Attachment A - Project Location Map. The Project is part of an overall 550-mile Bay Area express lane network that will employ emerging technologies, such as real-time congestion pricing and automated toll violation enforcement, to expand commuter choices and maximize efficiency of the highly congested I-580 corridor.

The Project will utilize real-time value pricing strategies (toll rates will change dynamically, based on real-time traffic congestion in general purposes and express lanes) to optimize the use of existing roadway capacity. Section 149.5 of California Streets and Highway Code authorized Alameda CTC, the administrative agency of I-580 Express Lanes to adopt a fee structure to manage traffic congestion. Toll policy, presented in this staff memorandum for adoption will help optimize the use of existing facility, thereby optimize the traffic throughput without impeding the benefits of HOV lanes, including the reduction of greenhouse gas emission.

## Background

Over the last two decades, the I-580 corridor has consistently been rated as one of the most congested freeway segments within the San Francisco Bay Area region. As the next step in strategic investments to manage congestion in this corridor, Alameda CTC is implementing express lanes in both the east- and west-bound directions. The express lanes will provide a new choice to single occupancy vehicle (SOV) users, enabling them to make use of the unused capacity in the HOV lane for a fee, if they choose to use the lanes.

The Project will implement real-time value pricing strategies, utilizing technology-software development to assess real-time traffic congestion in the corridor (analyze traffic volume and speed in general purposes and express lanes), price value of time, display the price to the

patrons, enable these SOV drivers to access the lanes when time saving is a value to them without compromising acceptable levels of service and/or the benefits of the HOV lane. HOV and HOV eligible users will continue to access the lane for free, provided they carry FasTrak flex (switchable) transponders and self-declare vehicle occupancy. As provided in Agenda Item 4.2, the Project's hours of operation will be from 5:00 a.m. to 8:00 p.m., Monday through Friday.

Section 149.5 (a) (2) of California Streets and Highway Code authorized the Alameda CTC, the administrative agency of I-580 Express Lanes to adopt a fee structure to manage traffic congestion. Toll policy requested for adoption below will help optimize the use of existing facility, thereby optimize the traffic throughput and reduce traffic congestion without compromising the benefits of HOV lanes.

#### Parameters of Toll Policy:

Pricing	Dynamic	1. To provide real-time value pricing
Minimum toll rate*	\$0.30	1. Implement within the hours of operation
Maximum toll rate	No maximum	<ol style="list-style-type: none"> <li>1. Implement within hours of operation to optimize corridor capacity, without degrading the operation of HOV and GP Lanes</li> <li>2. Cap the maximum initial dynamic pricing at \$15</li> <li>3. Authorize the Executive Director to adjust the toll rate, within approved toll parameters to optimize corridor throughput, based on changing traffic conditions</li> <li>4. Maintain incremental toll rate increases within a \$2 - \$5 range</li> <li>5. Report back to Commission when toll rates are revised, within the approved Min/Max parameters</li> </ol>
Toll rate during "HOV ONLY" Operation	\$30	1. Authorize the Executive Director to adjust the rate to deter illegal use of HOV lane
Toll Waiver/Reduction		1. Authorize the Executive Director to plan and execute a toll waiver/reduction plan

\*-Alameda CTC is committed to work with Caltrans to alley its concerns regarding general purposes lanes operation, during the off-peak hours. Any required change to toll rate, resulting from these discussions will be brought back to the Commission for its consideration.

The toll policy listed above for implementation on I-580 is consistent with the toll policy implemented on the other AB2032 authorized express lane, the I-680 Southbound Express Lane.

Staff recommends that the Commission approves the toll policy, enabling the implementation of value pricing on the I-580 Express Lane to provide 1) traffic congestion relief, 2) travel reliability and 3) transit benefits.

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

### **Attachments**

- A. Project Location Map

### **Staff Contact**

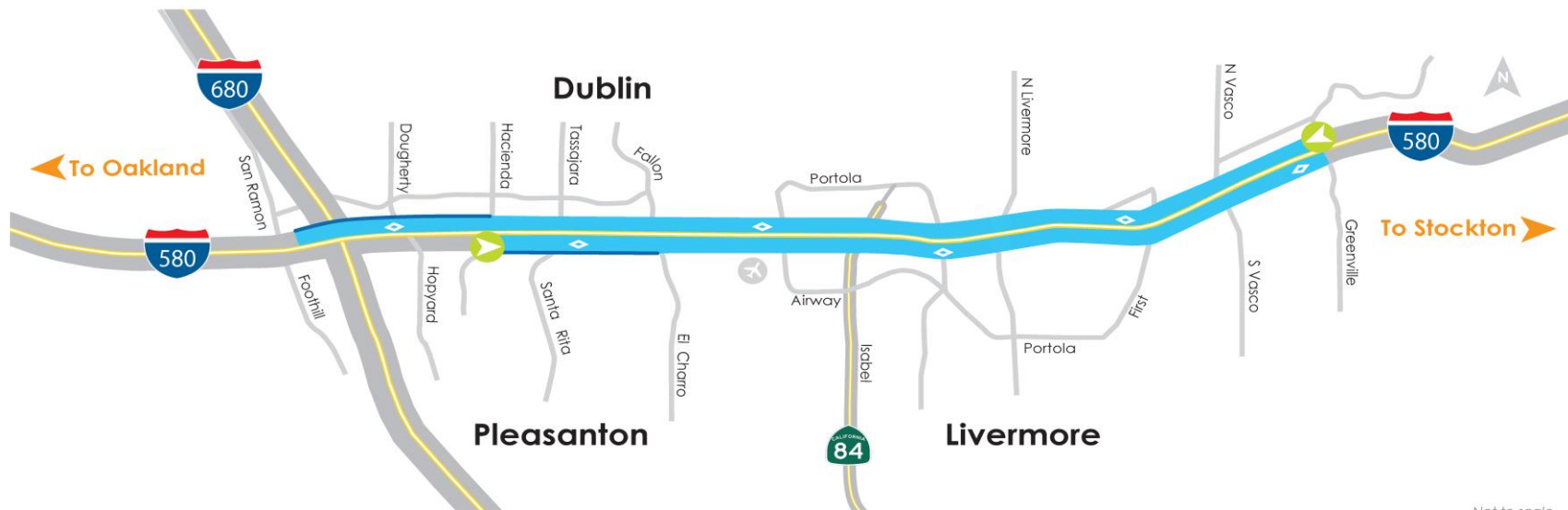
[Kanda Raj](#), Express Lanes Program Manager

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# I-580 Express Lanes Project Location Map

4.3A



Not to scale



## Two Eastbound Express Lanes

### Lanes begin at Hacienda



No entry/exit from eastbound express lanes from Hacienda to Fallon / El Charro.

**Please note:** For access to Santa Rita Road, do not enter express lanes.



## One Westbound Express Lane

### Lane begins at Greenville



No entry/exit from westbound express lane from Hacienda to end.

**Please note:** For access to I-680 or Dougherty, exit express lane before Hacienda.

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