



Meeting Notice

1111 Broadway, Suite 800, Oakland, CA 94607

• 510.208.7400

• www.AlamedaCTC.org

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City of Oakland

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Mayor Jerry Thorne

City of San Leandro

Mayor Pauline Cutter

City of Union City

Mayor Carol Dutra-Vernaci

Executive Director

Arthur L. Dao

I-580 Express Lane Policy Committee

Monday, October 12, 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.

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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.

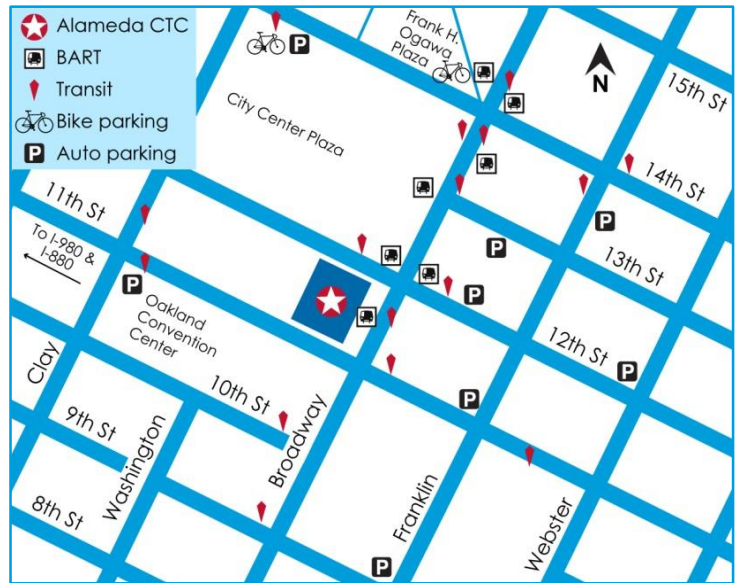
Glossary of Acronyms

A glossary that includes frequently used acronyms is available on the Alameda CTC website at www.AlamedaCTC.org/app_pages/view/8081.

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).



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.

Accessibility

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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.

Paperless Policy

On March 28, 2013, the Alameda CTC Commission approved the implementation of paperless meeting packet distribution. Hard copies are available by request only. Agendas and all accompanying staff reports are available electronically on the Alameda CTC website at www.AlamedaCTC.org/events/month/now.

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I-580 Express Lane Policy Committee Meeting Agenda Monday, October 12, 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

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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 September 14, 2015 Meeting Minutes](#)

1 A

4. Regular Matters

- 4.1. [I-580 Corridor High Occupancy Vehicle/Express Lane Projects \(PN 1368.004, 1372.004/.005, 1373.003\): Monthly Progress Report](#)

5 I

5. Committee Member Reports (Verbal)

6. Staff Reports (Verbal)

7. Adjournment

Next Meeting: November 9, 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, September 14, 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 during Item 4.1.

2. Public Comment

There were no public comments.

3. Consent Calendar

3.1 Approval of the I-580 Express Lane PC July 13, 2015 Meeting Minutes

Commissioner Thorne motioned to approve the consent calendar. Commissioner Harrison seconded the motion. The motion passed unanimously (Miley absent).

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 Garcia stated that all of the HOV lane 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 some civil infrastructure components have experienced delays. Kanda Raj stated that the last component of the express lane implementation which is system integration has been experiencing delays due to the delay in completing the civil infrastructure improvements. Kanda stated that the lanes are expected to open in early 2016, weather dependent. He concluded by providing a budget update in regards to the system integration construction contract change order budget and information on the education and outreach efforts.

Commissioner Haubert wanted to know if the outreach materials have been updated to reflect the delayed opening of the express lanes. Heather Barber stated that the agency is ready to make adjustments to the outreach schedule due to the delayed opening of the lane.

Commissioner Marchand asked if there had been an increase in the number orders for the new FasTrak flex transponder. Heather stated that 14,000 FasTrak flex transponders have been issued, which is more than the number of anticipated HOV lane users.

Commissioner Haggerty requested that staff avoid similar delays on future projects. Art Dao stated that staff intends to make every effort to ensure projects are completed as planned.

Commissioner Haubert asked if there are time specific requirements to pave and restripe an uneven portion of a lane. Stefan stated that there are no time requirements; however there are limits on the allowed differences in pavement levels prior to opening the lanes for public use and temporary striping is maintained based on state standards.

Commissioner Guillen wanted to make sure that the public was made aware of the new express lane opening date. Art stated that staff will ensure that the public is well informed of the new opening dates.

This item was for information only.

4.2. I-580 Express Lane Projects (PN 720.4/724.5): Update on Hours of Operation

Kanda Raj provided an update on the I-580 Express Lane hours of operation. He stated that staff had been working with the HOV Lane Committee, comprised of Caltrans, California Highway Patrol and Metropolitan Transportation Commission to extend the current HOV hours and to determine the hours of operation for the Project to effectively manage the traffic congestion in the corridor. The committee met on July 7, 2015 and approved the hours of operation from 5:00 a.m. to 8:00 p.m., Monday through Friday, which is similar to the current I-680 Southbound Express Lane hours of operation.

Commissioner Haggerty asked what the current hours of operation are for the I-680 Southbound Express Lane. Kanda stated the current hours of operation are from 5:00 a.m. through 8:00 a.m. Art stated that the state statute requires that the hours of operation mirror or are within the carpool lane hours. He also stated that based on law, recreation and weekend hours are not considered for inclusion in the operational hours.

This item was for information only.

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

Kanda Raj recommended that the commission approve the toll policy necessary for express lane implementation. He stated that the toll rates will change dynamically based on real-time traffic congestion in the general purposes and express lanes in order to optimize the use of existing roadway capacity. He reviewed the parameters of the policy, including minimum and maximum toll rates, HOV only toll rate and a mechanism to implement the necessary toll waivers or reductions. Since dynamic

pricing will be implemented, Kanda stated that an initial cap on maximum toll rate will be implemented to avoid wide daily fluctuations in toll rates.

Commissioner Haggerty asked why the initial cap (maximum) for dynamic pricing was so high. Kanda stated that the initial cap that is included in the recommendation is necessary for studying the effect of toll rates on driver behavior. Staff intends to come back to the Commission and ask for approval on the final cap on the toll rate prior to opening the I-580 Express Lanes. In the future, if any toll increases or decreases are required, staff will come back to the Commission to discuss the required changes.

Commissioner Haggerty moved to approve this item. Commissioner Thorne seconded the motion. Commissioner Haubert opposed the motion. The motion passed with one opposed vote by Commissioner Haubert.

5. Committee Member Reports

There were no committee member reports.

6. Staff Reports

There were no staff reports.

7. Adjournment/ Next Meeting

The next meeting is:

Date/Time: Monday, October 12, 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: October 5, 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.

As reported in September 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 and public outreach 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, 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 been progressing. 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. Significant paving progress was made on the westbound corridor between Greenville Road and Isabel Avenue in September, and only the final lift of open graded asphalt and final striping activities remain to be completed. 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 has 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. Progress was made in September on PG&E service point connections, and there is now a plan to have all service points energized by November 2015. Interface with the regional customer service center will have to be completed and tested prior to opening the toll lanes to the public. Staff will provide additional update to the Commissioners at the meeting.

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

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

PROJECT DESCRIPTION

The I-580 Eastbound 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 9 pm and 4 am. 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 – 92% of the contract work was completed as of 09/20/15

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 October 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 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
Total	20.40	5.21	1.62	0.23	4.69	7.58	39.73
Total Project Cost: \$39.7M							

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.

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
September 2015

PROJECT DESCRIPTION

The I-580 Westbound (WB) 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 I-580 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 9 pm and 4 am. 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) – 87% of the contract work was completed as of 09/20/15

- 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
- Pavement widening necessary for conversion of existing HOV lane to an express lane (high occupancy toll lane facility)
- All base layers of new pavement have been placed (HMA and RAC)

SEGMENT 2 (Western Segment) – 93% of the contract work was completed as of 09/20/15

- 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 October 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 October 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					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
Total	41.86	8.68	7.66	6.34	13.54	4.41	0.42	82.91
Total Project Cost: \$82.9M								

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					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
Total	40.48	5.79	2.58	0.10	9.61	1.83	0.58	60.97
Total Project Cost: \$61.0M								

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.

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.

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
Monthly Progress Report
September 2015

PROJECT DESCRIPTION

The I-580 Eastbound 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
- Toll system installation and outreach activities are progressing (see Attachment E for details)

UPCOMING ACTIVITIES

- Civil construction activities, including infrastructure required for the installation of toll system (see Attachment A for details)
- Toll system installation 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, testing and opening of the express lane facility. 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. Due to the delays, the express lanes will now be opened to traffic in early 2016. Staff continues to assess 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
Monthly Progress Report
September 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
- Toll system installation and outreach activities are progressing (see Attachment E for details)

UPCOMING ACTIVITIES

- Coordinate civil construction activities, including infrastructure required for the installation of 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, testing and opening of the express lane facility. 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.

Due to the delays, the express lanes will now be opened to traffic in early 2016. Staff continues to assess schedule delays to minimize the delays in lane opening.

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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
Monthly Progress Report
September 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 have to 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 that 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 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

Electronic Transaction Consultants Corporation (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

Due to the above referenced schedule delays, staff now anticipates the express lanes facilities to be opened in early 2016 (weather dependent). Staff is working closely with all parties involved to minimize the lane opening delays.

The comprehensive education and outreach effort continues 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 about the benefits of the lanes and that a FasTrak® toll tag is required for all users. Collateral materials and online information has been updated to reflect the new anticipated opening schedule and staff has worked to inform partners including the cities and CHP. Outreach continues to employers and major corridor destinations including Stoneridge Shopping Center and the Premium Outlets in Livermore as well as presentations to civic groups. A significant media campaign will be launched in early 2016, placing particular emphasis on commuter-oriented media including radio traffic sponsorships and outdoor transit posters as well as targeted online and local print.

The public is obtaining FasTrak Flex toll tags at a good rate both online at www.bayareafastrak.org and at Costco, Safeway and Walgreens retail stores, and the Bay Area Toll Authority has registered more than 16,000 tags through September 2015.

Key Recent Activities

- August 24 presentation to the Brentwood Rotary Club
- Articles for Dublin Chamber Newsletter and Dublin Business E-Newsletter
- Update materials and webpages to reflect opening timeframe
- Development of "how-to" video
- Outreach and responses to media
- Collaborate with 511 Rideshare to develop carpooling outreach on I-580 corridor and develop carpool/express lane door hanger
- Attendance at public outreach events

- September 2: First Wednesdays in Pleasanton (with FasTrak representative)
- September 11: Solano Avenue Stroll
- September 25 meeting with Dublin CHP

Key Upcoming Activities

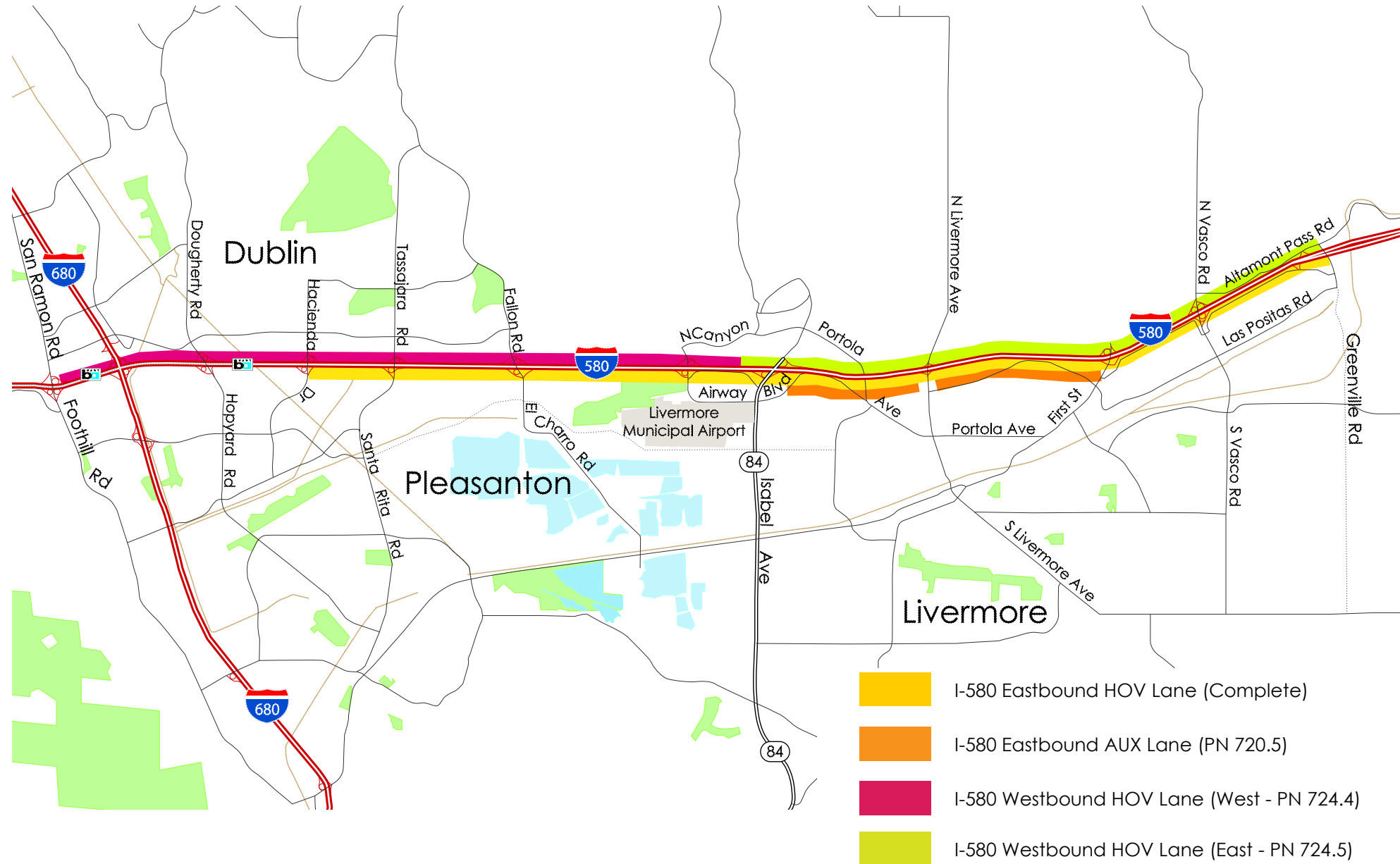
- October 14 presentation to Pleasanton Chamber of Commerce Board
- October 27 presentation to Tracy Rotary Club
- January 13 presentation to Tracy Sunrise Rotary Club
- Banner over 4th Street in Livermore scheduled January 18-31
- January 21 presentation to Tri-Valley Rotary Club
- Continued outreach to commuters and employers throughout commute shed in coordination with WHEELS, 511 Rideshare, San Joaquin County's Commute Connection and CCTA/Contra Costa 511
- Placement of informational posters on WHEELS and San Joaquin Regional Transit buses, in Livermore kiosks and in Pleasanton
- E-blasts to media, commuters and employers
- Media campaign to launch in early 2016, including radio (English and Spanish), print, online and outdoor - estimated to generate 21 million impressions

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

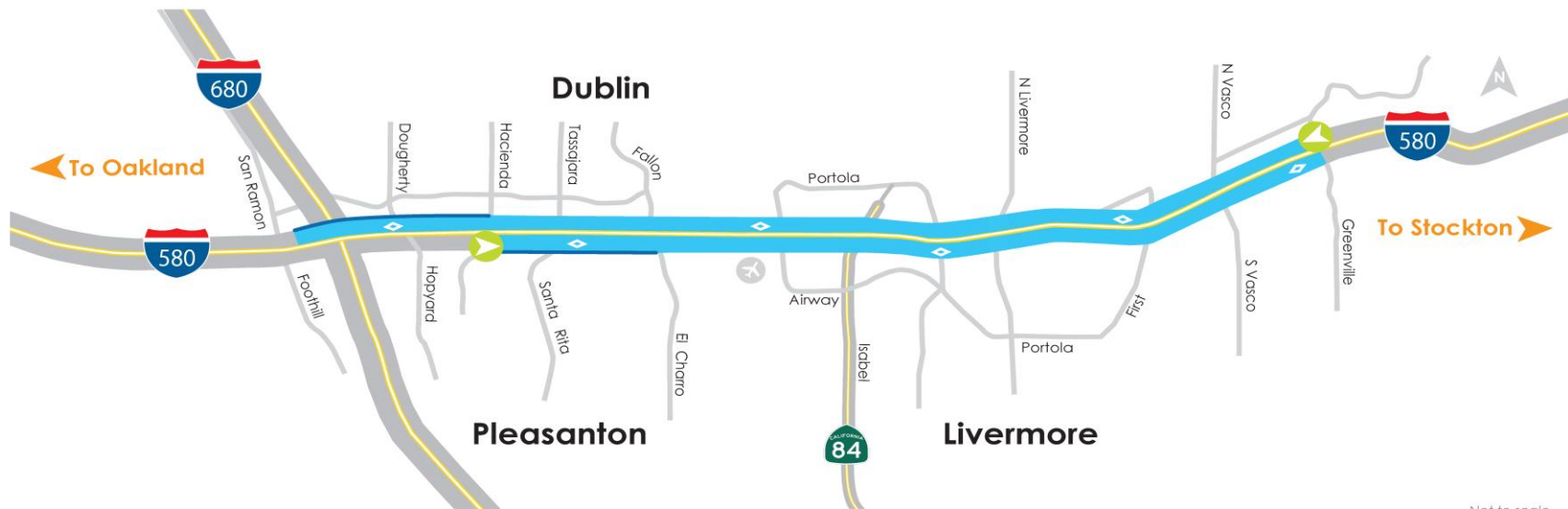


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I-580 Express Lanes Project Location Map

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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