



# Meeting Notice

1111 Broadway, Suite 800, Oakland, CA 94607

• 510.208.7400

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

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## I-580 Express Lane Policy Committee

Monday, April 14, 2014, 9:30 a.m.

1111 Broadway, Suite 800  
Oakland, CA 94607

### **Mission Statement**

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

### **Public Comments**

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

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### **Reminder**

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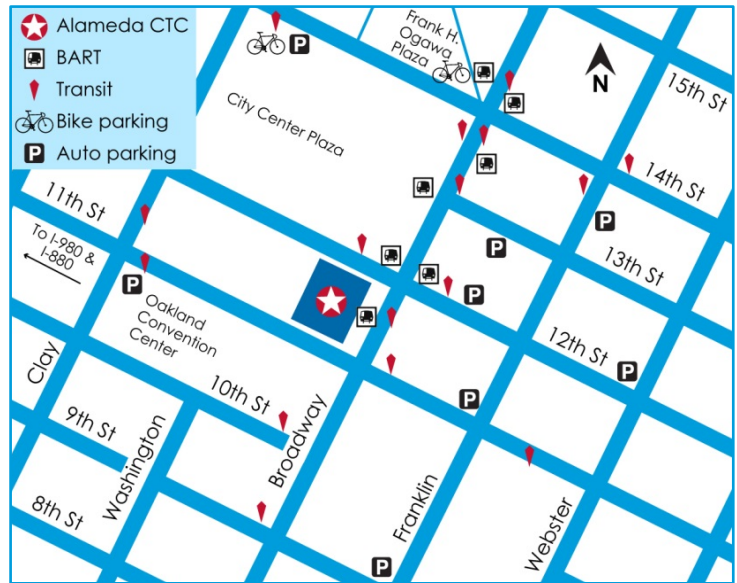
### **Glossary of Acronyms**

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).



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

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## Meeting Schedule

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

## Paperless Policy

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](http://www.AlamedaCTC.org/events/month/now).

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# I-580 Express Lane Policy Committee Meeting Agenda

Monday, April 14, 2014, 10:00 a.m.\*

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

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**Chair:** Mayor John Marchand, City of Livermore  
**Vice Chair:** Supervisor Nate Miley, Alameda County District 4  
**Commissioners:** Scott Haggerty, Tim Sbranti, Jerry Thorne  
**Staff Liaison:** Stewart D. Ng  
**Executive Director:** Arthur L. Dao  
**Clerk:** Vanessa Lee

- 1. Roll Call
- 2. Public Comment

3. Consent Calendar

Page A/I

- 3.1. [March 10, 2014 I-580 Express Lane PC Meeting Minutes](#) 1 A

Recommendation: Approve the March 10, 2014 meeting minutes.

4. Regular Matters

- 4.1. [I-580 Corridor High Occupancy Vehicle Lane Projects \(PN 720.5 /724.4/724.5\): Monthly Progress Report](#) 3 I

- 4.2. [I-580 Express \(HOT\) Lane Projects \(PN 720.4/724.1\): Monthly Progress Report](#) 13 I

5. Committee Member Reports (Verbal)

6. Staff Reports (Verbal)

7. Adjournment

**Next Meeting:** May 12, 2014

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, March 10, 2014, 10:00 a.m.

3.1

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**1. Roll Call**

The Clerk conducted a roll call. All committee members were present.

**2. Public Comment**

There were no public comments.

**3. Consent Calendar**

**3.1 January 13, 2014 I-580 Express Lane PC Meeting Minutes**

*Commissioner Haggerty motioned to approve the consent calendar. Commissioner Sbranti seconded the motion. The motion passed unanimously.*

**4. Regular Matters**

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

Stefan Garcia presented the I-580 Corridor High Occupancy vehicle lane projects monthly progress report. He stated that the projects provide increased capacity, safety and efficiency along the corridor. He covered construction status, financial highlights and provided an update on the schedule for completion.

*This Item was for information only.*

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

Gary Sidhu presented the I-580 Express Lane projects monthly progress report. Gary stated that on January 22, 2014 an open house meeting was held for the eastbound express lane improvements. He covered ongoing and upcoming activities, continuous access implementation, express lane and other corridor projects schedules, and concluded by providing an overview of the funding plan.

Commissioner Haggerty asked for a definition of the term "buffer separation". Stewart Ng stated that it is a striped buffer that will separate the express lane and general purposes lane, proposed at areas where traffic conflicts/weaves are anticipated..

*This item was for information only.*

**5. Committee Member Reports (Verbal)**

There were no committee member reports.

**7. Staff Reports (Verbal)**

There were no staff reports.

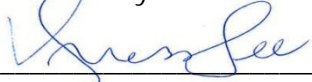
**8. Adjournment/ Next Meeting**

The meeting adjourned at 10:50 a.m. The next meeting is:

Date/Time: Monday, April 14, 2014 @ 10:00 a.m.

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

Attested by:



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Vanessa Lee,  
Clerk of the Commission



**DATE:** April 7, 2014

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

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

## Summary

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

## Background

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

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

Attached for the Committee's review are the March 2014 progress reports for the I-580 Eastbound HOV Lane Project (Segment 3 Aux Lanes) and the I-580 Westbound HOV Lane Project (Segments 1 and 2).

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

## Attachments

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

## Staff Contact

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

[Stefan Garcia](#), Project Controls Team



**ATTACHMENT A**  
**I-580 Eastbound HOV Lane Project (PN 720.5)**  
**Monthly Progress Report**  
**March 2014**

**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 (HOT) lane facility;
- Final lift of asphalt concrete (AC) pavement and striping for entire eastbound project limits from Hacienda Drive to Portola Avenue;
- The soundwall that was deleted from the I-580/Isabel Avenue Interchange Project; and
- The widening of two bridges at Arroyo Las Positas in the eastbound direction.

**CONSTRUCTION STATUS****Traffic Handling & Night Work**

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

**Construction Challenges**

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

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

**Completed Activities – 49% of the contract work was completed as of 2/20/14**

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

- Las Positas Creek (EB and WB) bridge widening
- Widening of major box culvert at Arroyo Seco and modification of drainage facilities. Creek diversion is removed and area restored
- Several retaining walls on the outside edges of the freeway corridor

### **Ongoing & Upcoming Activities**

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

- Construct and backfill remaining retaining walls
- Install Lighting and Traffic Operation Systems
- Install infrastructure to support express lane operations
- Complete Subgrade preparation and cement treated soil
- Paving activities will begin this spring

### **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	<b>0.02</b>
PS&E		1.72	1.30	0.23			<b>3.25</b>
ROW		0.17	0.08			0.28	<b>0.53</b>
Construct Cap	17.87	2.20	0.14		4.69	6.57	<b>31.47</b>
Construct Sup	2.53	1.12	0.10			0.71	<b>4.46</b>
<b>Total</b>	<b>20.40</b>	<b>5.21</b>	<b>1.62</b>	<b>0.23</b>	<b>4.69</b>	<b>7.58</b>	<b>39.73</b>
<b>Total Project Cost: \$39.7M</b>							

### **SCHEDULE STATUS**

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

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

**ATTACHMENT B**  
**I-580 Westbound HOV Lane Projects (PN 724.4/724.5)**  
**Monthly Progress Report**  
**March 2014**

**PROJECT DESCRIPTION**

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

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

**CONSTRUCTION STATUS – SEGMENTS 1 & 2**

**Traffic Handling & Night Work**

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

**Construction Challenges**

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

**SEGMENT 1 (Eastern Segment)**

- Installation of future HOT Lane components to facilitate HOT Lane completion. Project staff is working to combine HOV and HOT construction work in a manner that will allow the HOT/HOV express lane facility to be opened concurrently
- Additional widening of the North Livermore Avenue structure to accommodate HOT Lane width requirements
- New retaining wall to account for recent, accelerated erosion within the Arroyo Seco Creek adjacent to the widening necessary for westbound lanes
- Coordination 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 HOT Lane components to facilitate HOT Lane completion. Project staff is working to combine HOV and HOT construction work in a manner that will allow the HOT/HOV express lane facility to be opened concurrently
- 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) – 42% of the contract work was completed as of 2/20/14**

- North Livermore Ave 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
- Temporary striping, shift traffic lanes and placement of k-rail on outside shoulder from Greenville to Airway

#### **SEGMENT 2 (Western Segment – 41% of the contract work was completed as of 2/20/14**

- Stage 1 median widening from Airway to Hacienda
- BART Barrier modifications
- Temporary striping, shift traffic lanes and placement of safety barrier (k-rail) to allow for Stage 2 outside widening
- Bridge widening at Dougherty Undercrossing near Dublin BART station
- Bridge widening at Tassajara Creek
- Precast slab pavement replacements
- K-rail placed for Stage 2 from Airway to just east of Tassajara Creek

### **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)**

- Excavate and construct retaining walls and soil nail walls
- Soundwall construction at Vasco Road
- Install Lighting and Traffic Operation Systems
- Install infrastructure to support express lane operations
- Median widening for HOV lane

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

- Completion of Stage 2 outside widening
- Installation of drainage systems
- Median barrier reconfiguration
- Install Lighting and Traffic Operation Systems
- Install infrastructure to support express lane operations
- Final paving and striping of westbound I-580

## 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. Construction is planned to complete in 2015.

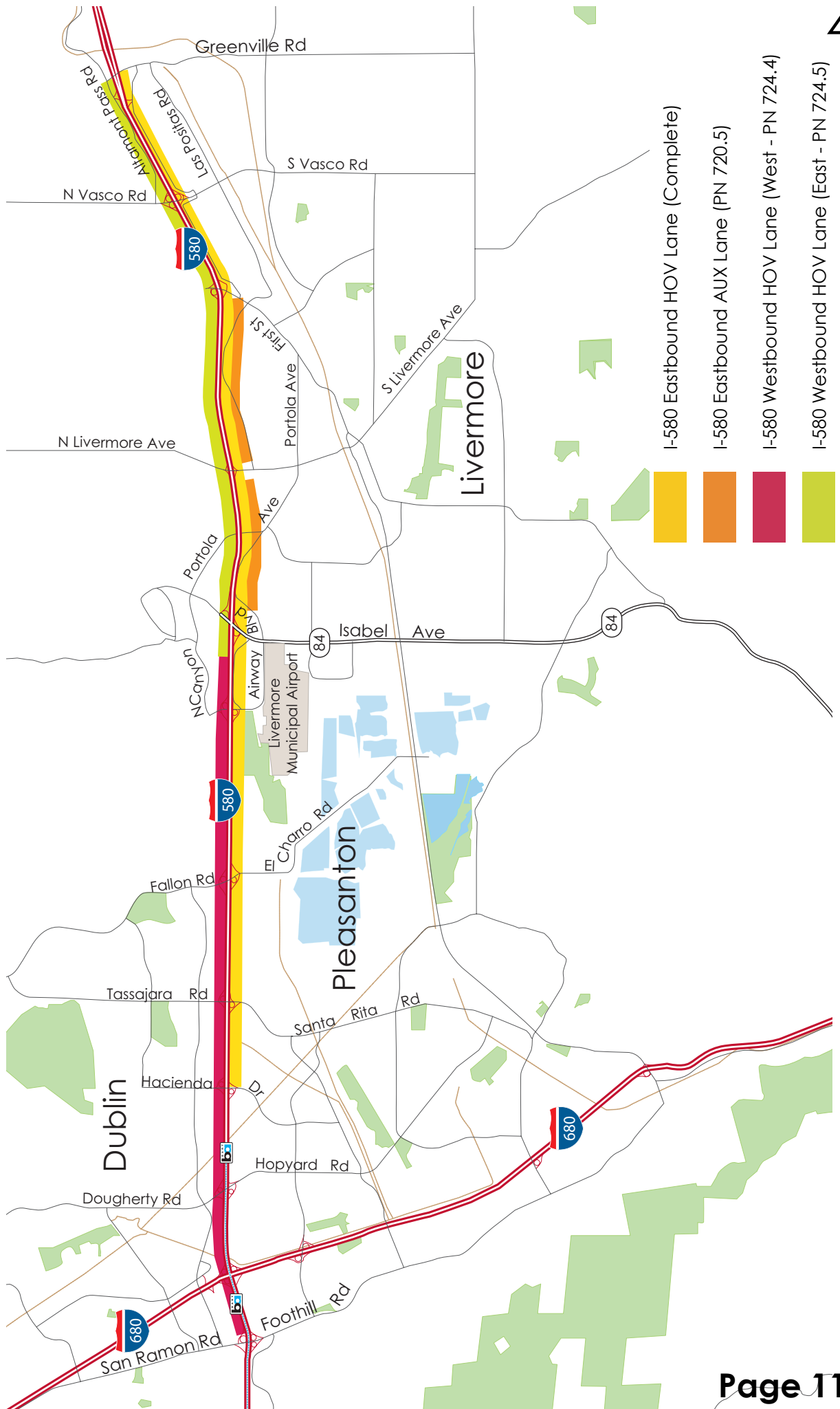
Project Approval	January 2010 (A)
RTL	May 2012 (A)
CTC Vote	May 2012 (A)
Begin Construction (Award)	November 2012 (A)
End Construction	May 2015 (T)

**SEGMENT 2 (Western Segment):**

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

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

# I-580 Corridor HOV Lane Projects - Location map



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# Memorandum

4.2

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**DATE:** April 7, 2014

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

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

## Summary

The Alameda CTC is sponsoring the 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 High Occupancy Vehicle Lane (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 west of Greenville Road to west of the San Ramon Road/Foothill Road Overcrossing in Dublin/Pleasanton.

A Categorical Exemption/Exclusion (CE) for the westbound direction was approved on August 2, 2013. An Initial Study/Environmental Assessment (IS/EA) for the eastbound direction was approved on March 18, 2014. Staff is working with Caltrans to evaluate the option to implement civil construction through multiple contract change orders (CCO's) to the on-going construction contracts. The I-580 Eastbound and Westbound Express Lane civil construction work will construct the necessary infrastructure, such as signing, sign gantries for dynamic messaging and toll reading, electrical conduit for connecting power and communication sources, and striping to accommodate the express lanes. The System Integrator contractor will install the required communication equipment and software. The express lane facility is scheduled to open for use in 2015.

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

## Background

### *Delivery Strategy*

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

In October 2013, Staff issued four CCO's to the on-going construction contracts (I-580 Westbound HOV, I-580 Eastbound Auxiliary Lane and Freeway Performance Project) along I-580 to incorporate some scope elements (Tier 1 CCOs) for the express lane project. These CCOs are currently under construction. Staff has also recently issued additional CCO's (Tier 2 CCOs) to the above mentioned contracts to construct additional civil scope elements of the express lanes. Staff is also evaluating the option to implement the remaining civil construction work via CCO's (Tier 3 CCOs). The benefit of implementing CCO's is to avoid working in the environmentally sensitive area, minimize additional traffic disruptions to the traveling public, reduce or eliminate re-work and potentially finish construction sooner. Items included in already issued CCOs and under consideration to be included in the potential future CCOs include:

- 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.

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

Staff is currently moving forward with the concept of a “near continuous” (aka “more open”) access configuration in lieu of “limited” access for the express lanes on the I-580 corridor. The “near continuous” access configuration would eliminate the two foot buffer between the express lane and the general purpose lanes except at “hot spots” or “safety zones” such as between Hacienda and Fallon Road (eastbound) and Hacienda and I-680 (westbound). To support the implementation of near continuous access, zone tolling and automated toll violation enforcement strategies have been incorporated in project design.

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

## Attachments

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

## Staff Contact

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

[Gary Sidhu](#), Project Controls Team

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**ATTACHMENT A**  
**I-580 Eastbound Express (HOT) Lane Project**  
**Monthly Progress Report**  
**April 2014**

**PROJECT DESCRIPTION**

The Eastbound I-580 Express (HOT) Lane Project will convert the newly constructed eastbound HOV lane, from Hacienda Drive in Dublin/Pleasanton to Greenville Road in Livermore, to a double express lane facility, a distance of approximately 11 miles.

**PROJECT DELIVERY STATUS**

- The Initial Study and Environmental Assessment (IS/EA) was approved on March 18, 2014 and the Project Study Report/Project Report (PSR/PR) was approved on March 21, 2014.
- Staff is coordinating with the three I-580 HOV lane projects currently in construction (I-580 Westbound HOV Lane - West Segment, I-580 Westbound HOV Lane - East Segment and I-580 Eastbound HOV Lane - Segment 3 with Auxiliary Lanes) to implement the entire civil scope through Contract Change Orders (Tier 3 CCOs) in addition to already issued CCO's (Tier 1 & 2 CCO's) to on-going construction contracts.

**RECENT ACTIVITIES**

- Submitted Tier 2 and 3 CCO packages to Caltrans for their review and negotiation with the contractors
- Caltrans approved IS/EA and Project Study Report/Project Report (PSR/PR) marking completion of the Environmental Document and Project Report Approval Phase.

**UPCOMING ACTIVITIES**

- Finalize Tier 2 and 3 CCO's and complete cost negotiations with the contractors
- Amend construction cooperative agreements for three on-going construction contracts (I-580 Westbound HOV - West Segment, I-580 Westbound HOV - East Segment, I-580 Eastbound HOV Segment 3 - Auxiliary Lanes) to implement additional CCO's (Tier 2 and 3 CCO's)
- Execute Operations & Maintenance Agreement with Caltrans to delineate roles and responsibilities for operations and maintenance of the high facilities within the express lanes limits

**POTENTIAL ISSUES/RISKS**

Construction implementation – due to potential delays in completion of construction contracts, it may not be possible to issue a stand-alone contract for civil construction in time to complete the project on schedule. Staff is working with Caltrans to evaluate the

option to complete the entire civil construction work via CCO's to the on-going contracts.

### **FUNDING AND FINANCIAL STATUS**

See Attachment C for combined project funding and financial status.

### **SCHEDULE STATUS**

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

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

**ATTACHMENT B**  
**I-580 Westbound Express (HOT) Lane Project**  
**Monthly Progress Report**  
**April 2014**

**PROJECT DESCRIPTION**

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

**PROJECT DELIVERY STATUS**

- The environmental document, a Categorical Exemption (CE), has been approved
- Staff is coordinating with the three I-580 HOV lane projects currently in construction (I-580 Westbound HOV - West Segment, I-580 Westbound HOV - East Segment, I-580 Eastbound HOV Segment 3 - Auxiliary Lanes) to implement the entire civil scope through Contract Change Orders (Tier 3 CCOs) in addition to already issued CCO's (Tier 1 & 2 CCO's)

**RECENT ACTIVITIES**

- Submitted Tier 2 and 3 CCO's to Caltrans for their review and negotiation with the contractors

**UPCOMING ACTIVITIES**

- Finalize Tier 2 and 3 CCO's and complete cost negotiations with the contractors
- Amend construction cooperative agreements for three on-going construction contracts (I-580 Westbound HOV - West Segment, I-580 Westbound HOV - East Segment, I-580 Eastbound HOV Segment 3 - Auxiliary Lanes) to implement additional CCO's (Tier 2 and 3 CCO's)

**POTENTIAL ISSUES/RISKS**

Construction implementation – due to potential delays in completion of construction contracts, it may not be possible to issue a stand-alone contract for civil construction in time to complete the project on schedule. Staff is working with Caltrans to evaluate the option to complete the entire civil construction work via CCO's to the on-going contracts.

**FUNDING AND FINANCIAL STATUS**

See Attachment C for combined project funding and financial status.

## SCHEDULE STATUS

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

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



**ATTACHMENT C**  
**I-580 Express (HOT) Lanes Systems Integration**  
**Monthly Progress Report**  
**April 2014**

**SYSTEM INTEGRATION SCOPE DESCRIPTION**

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

**Detailed Discussion**

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

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

**Project Geometry and Electronic Toll System Design**

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

In the eastbound I-580 direction:

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

In the westbound I-580 direction:

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

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

## PROJECT STATUS

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

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

### **Software and hardware design**

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

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

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

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

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

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

Agency staff are also working to deploy a comprehensive public education/outreach program in spring 2014 to support the implementation of a “near continuous” access configuration and the use of switchable transponders, which will be new to Bay Area toll customers.

The Golden Gate Bridge Authority implemented another payment option, payment through pay-by-plate. The user is required to open up an account to pay via their license plate. Our initial assessment indicates that this payment option is likely to encounter challenges since it will be difficult to distinguish the HOV and SOV users in an open/shared express lane facility, unless every vehicle is required to register as either an HOV or SOV vehicle. Staff will continue to evaluate and collaborate with other toll operators and report back to the committee on whether or not the I-580 Express Lanes will employ such payment option.

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

**RECENT ACTIVITIES**

- Continued to work on accommodating “zone tolling” and automated violation enforcement in project design documents

**UPCOMING ACTIVITIES**

- Continue to work on accommodating “zone tolling” and automated violation enforcement in project design documents
- ETC to continue with Electronic Toll System design
- Execute a contract with the consultant group to initiate the public outreach and marketing campaign in spring 2014
- Complete a draft customer services agreement for collecting tolls and processing toll violation enforcement services by spring 2014

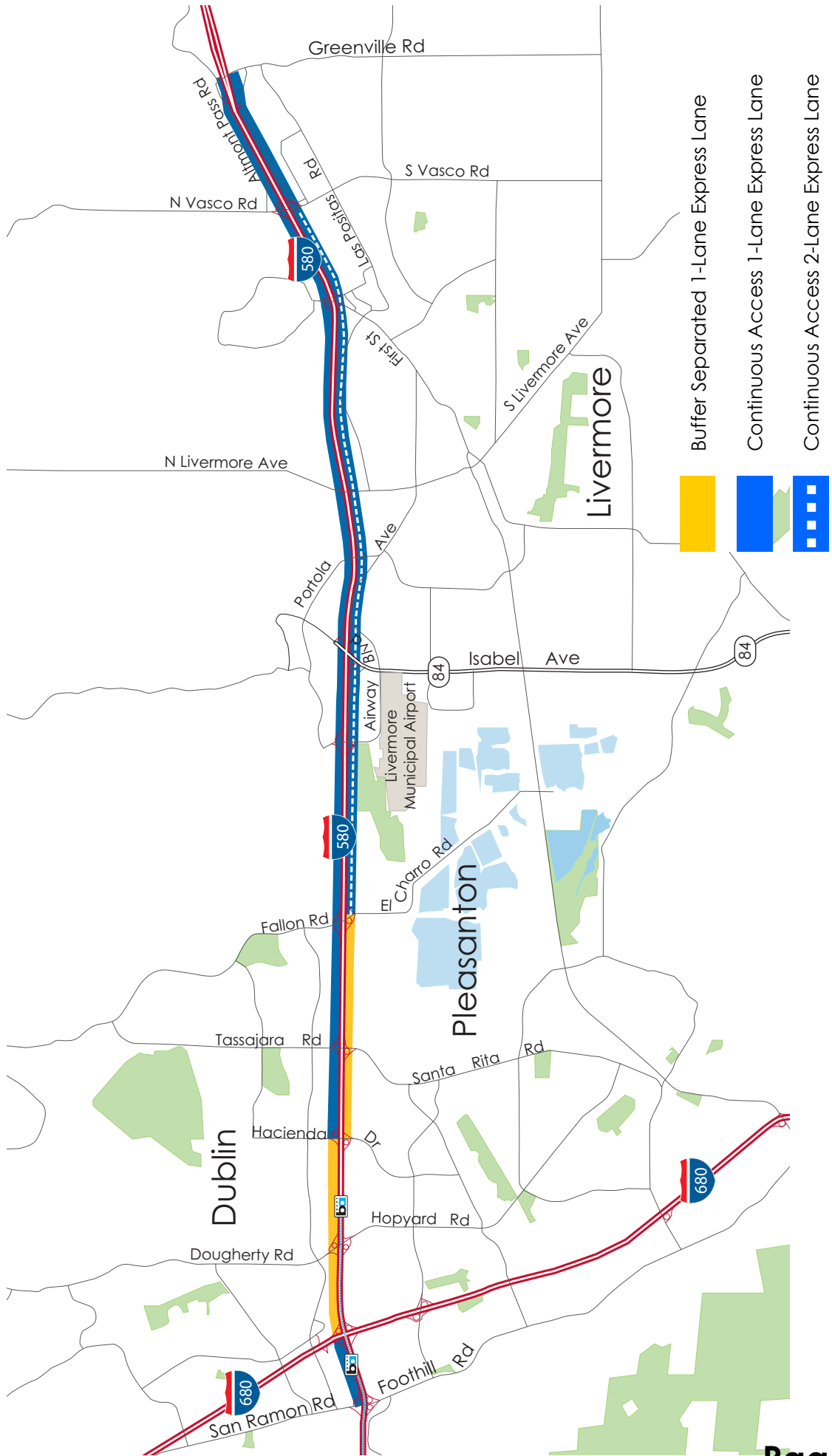
**FUNDING AND FINANCIAL STATUS**

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

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

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I-580 Express Lane Projects Location map



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