I-580 EXPRESS LANE POLICY ADVISORY COMMITTEE

MEETING NOTICE

Monday, January 14, 2013, 9:45 am

(Or immediately following I-680 SSCLJPA meeting)
1333 Broadway, Suite 300, Oakland, California 94612
(See map on last page of agenda)

Chair: Scott Haggerty
Vice Chair: TBD

Members: Jerry Thorne
John Marchand
Tim Sbranti

Staff Liaison: Stewart D. Ng
Executive Director: Arthur L. Dao
Clerk of the Commission: Vanessa Lee

AGENDA
Copies of Individual Agenda Items are Available on the:
Alameda CTC Website -- www.AlamedaCTC.org

1 ROLL CALL

2 PUBLIC COMMENT

Members of the public may address the Board during "Public Comment" on any item not on the agenda. Public comment on an agenda item will be heard when that item is before the Board. Only matters within the Board's jurisdictions may be addressed. Anyone wishing to comment should make their desire known by filling out a speaker card and handling it to the Secretary. Please wait until the Chair calls your name. Walk to the microphone when called; give your name, and your comments. Please be brief and limit comments to the specific subject under discussion. Please limit your comment to three minutes.

3 CONSENT CALENDAR

3A. Approval of the Minutes of November 19, 2012 – **Page 1** **A**

4 REGULAR MATTERS

4A. I-580 Corridor High Occupancy Vehicle (HOV) Lane Projects Status Update **– Page 3** **I**

4B. I-580 Express (HOT) Lane Projects Status Update**– Page 15** **I**

4C. I-580 Express (HOT) Lanes System Integration Status Update**– Page 29** **I**

Commission Chair
TBD

Commission Vice Chair
Scott Haggerty, Supervisor – District 1

AC Transit
Greg Harper, Director

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Supervisors
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Wilma Chan – District 3
Nate Miley – District 4
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Suzanne Chan, Councilmember

City of Hayward
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City of Pleasanton
Jerry Thorne, Mayor

City of San Leandro
Michael Gregory, Vice Mayor

City of Union City
Carol Dutra-Vernaci, Mayor

Executive Director
Arthur L. Dao

5 COMMITTEE MEMBER REPORTS (Verbal)

6 STAFF REPORTS (Verbal)

7 ADJOURNMENT/NEXT MEETING: February 11, 2013

Key: A- Action Item; I – Information Item

(*) Materials will be distributed at the meeting.
(#) All items on the agenda are subject to action and/or change by the Board.

PLEASE DO NOT WEAR SCENTED PRODUCTS SO INDIVIDUALS WITH ENVIRONMENTAL SENSITIVITIES MAY ATTEND

Alameda County Transportation Commission
1333 Broadway, Suites 220 & 300, Oakland, CA 94612
(510) 208-7400 (New Phone Number)
(510) 836-2185 Fax (Suite 220)
(510) 893-6489 Fax (Suite 300)
www.alamedactc.org

Glossary of Acronyms

ABAG Association of Bay Area Governments

ACCMA Alameda County Congestion Management Agency

ACE Altamont Commuter Express

ACTA Alameda County Transportation Authority (1986 Measure B authority)

ACTAC Alameda County Technical Advisory Committee

ACTC Alameda County Transportation Commission

ACTIA Alameda County Transportation Improvement Authority (2000 Measure B authority)

ADA Americans with Disabilities Act

BAAQMD Bay Area Air Quality Management District

BART Bay Area Rapid Transit District

BRT Bus Rapid Transit

Caltrans California Department of Transportation

CEQA California Environmental Quality Act

CIP Capital Investment Program

CMAQ Federal Congestion Mitigation and Air Quality

CMP Congestion Management Program

CTC California Transportation Commission

CWTP Countywide Transportation Plan

EIR Environmental Impact Report

FHWA Federal Highway Administration

FTA Federal Transit Administration

GHG Greenhouse Gas

HOT High occupancy toll

HOV High occupancy vehicle

ITIP State Interregional Transportation Improvement Program

LATIP Local Area Transportation Improvement Program

LAVTA Livermore-Amador Valley Transportation Authority

LOS Level of service

MTC Metropolitan Transportation Commission

MTS Metropolitan Transportation System

NEPA National Environmental Policy Act

NOP Notice of Preparation

PCI Pavement Condition Index

PSR Project Study Report

RM 2 Regional Measure 2 (Bridge toll)

RTIP Regional Transportation Improvement Program

RTP Regional Transportation Plan (MTC's Transportation 2035*)*

SAFETEA-LU Safe, Accountable, Flexible, Efficient Transportation Equity Act

SCS Sustainable Community Strategy

SR State Route

SRS Safe Routes to Schools

STA State Transit Assistance

STIP State Transportation Improvement Program

STP Federal Surface Transportation Program

TCM Transportation Control Measures

TCRP Transportation Congestion Relief Program

TDA Transportation Development Act

TDM Travel-Demand Management

TEP Transportation Expenditure Plan

TFCA Transportation Fund for Clean Air

TIP Federal Transportation Improvement Program

TLC Transportation for Livable Communities

TMP Traffic Management Plan

TMS Transportation Management System

TOD Transit-Oriented Development

TOS Transportation Operations Systems

TVTC Tri Valley Transportation Committee

VHD Vehicle Hours of Delay

VMT Vehicle miles traveled

ALAMEDA
County Transportation Commission

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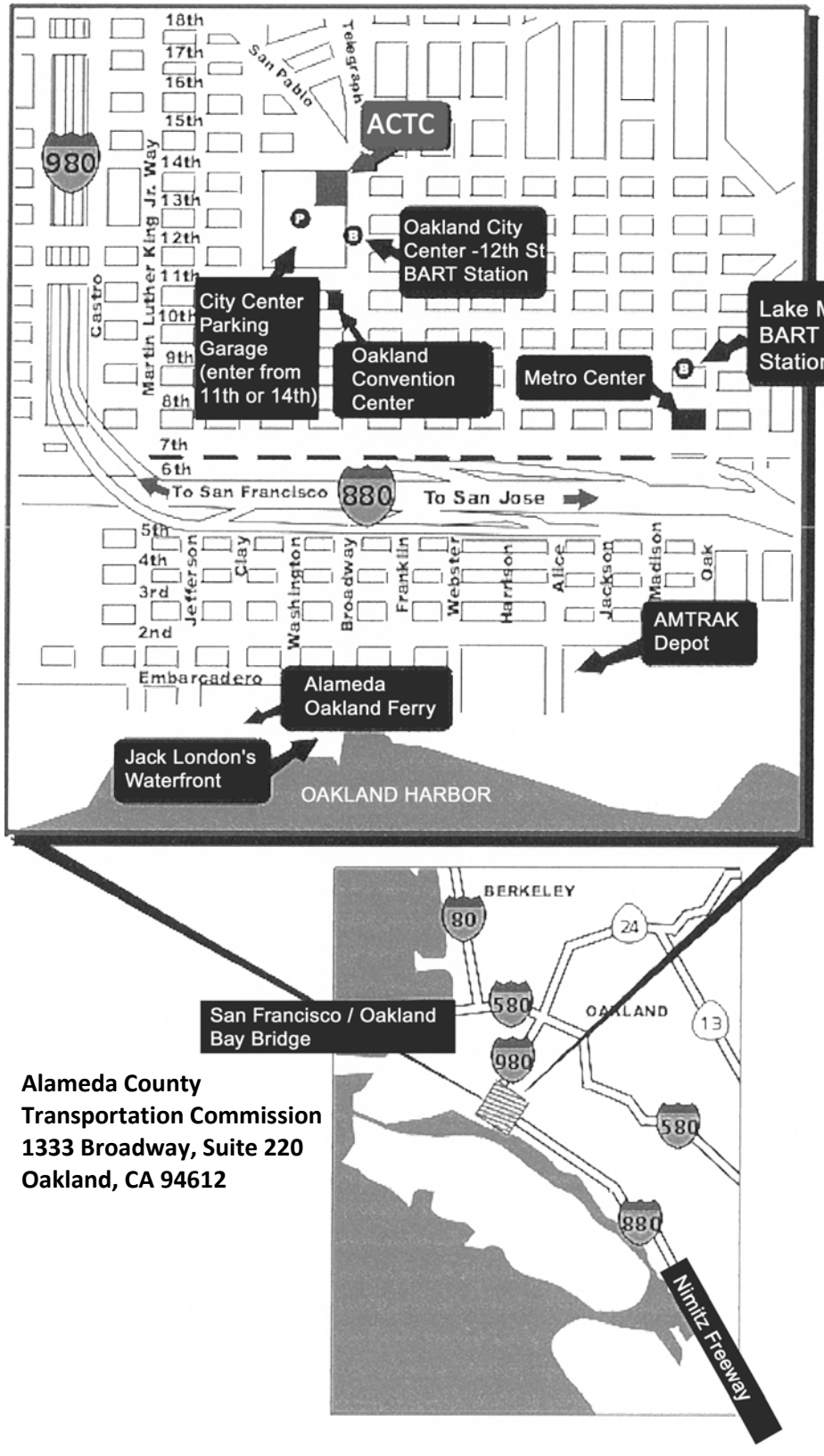


Alameda County Transportation Commission
1333 Broadway, Suite 220
Oakland, CA 94612

Directions to the Offices of the Alameda County Transportation Commission:

1333 Broadway, Suite 220
Oakland, CA 94612

Public Transportation Access:

BART: City Center / 12th Street Station

AC Transit:
Lines 1,1R, 11, 12, 13, 14, 15, 18, 40, 51, 63, 72, 72M, 72R, 314, 800, 801, 802, 805, 840

Auto Access:

- Traveling South: Take 11th Street exit from I-980 to 11th Street
- Traveling North: Take 11th Street/Convention Center Exit from I-980 to 11th Street
- Parking:
  City Center Garage – Underground Parking,
  (Parking entrances located on 11th or 14th Street)

I-580 Express Lane Policy Advisory Committee Meeting
MINUTES OF NOVEMBER 19, 2012
OAKLAND, CALIFORNIA

The meeting was convened by the Chair, Supervisor Haggerty, at 10:20am

1 ROLL CALL

A quorum was confirmed; Haggerty, Hosterman, Green, Marchand and Sbranti were all present.

2 PUBLIC COMMENT

There were no public comments.

3 CONSENT CALENDAR

3A. Approval of Minutes of October 08, 2012

Mayor Green motioned to approve this Item. Mayor Hosterman seconded the motion. The motion passed 5-0.

4 REGULAR MATTERS

4A. I-580 Corridor High Occupancy Vehicle (HOV) Lane Projects Status Update

Stewart Ng provided an update on the I-580 Corridor High Occupancy Vehicle (HOV) Lane Projects. Mr. Ng gave a brief overview of the Eastbound and Westbound segments and included an update on the construction bids for both contracts. He stated that the western segment was awarded on October 29, 2012 and the eastern segment is expected to be awarded by end of November 2012. Mr. Ng concluded by giving an update on the construction budgets.

Supervisor Haggerty questioned if we have been looking into night construction. Mr. Ng. stated that that has been discussed with Ghilotti Construction and Caltrans construction staff.

This item was for information only.

4B. I-580 Express (HOT) Lane Projects Status Update

4C. I-580 Express (HOT) Lane System Integration Status Update

Connie Fremier and Kanda Raj presented a combined update on Item 4B and Item 4C. The update covered delivery strategies including combining the Eastbound & Westbound Express Lane Projects design and construction phases for efficiency purposes. The westbound civil infrastructure design and system integration contract work will be sole sourced to consultants currently retained by the agency for either the environmental clearance for the westbound or electronic toll system implementation for the eastbound projects. Single construction contracts will be implemented each for the civil infrastructure and system integration components of the express lane implementation. The update also included a review of

continuous access (aka open access) versus limited access, corridor scheduling, requirements of zone tolling and frequency of toll reader locations, enforcement strategies, benefits & risks of continuous access and the individual and combined project costs. Ms. Fremier highlighted the additional support, construction capital and operations cost associated with the continuous access and the project funding shortfall.

Supervisor Haggerty questioned the implementation of zone tolling for limited travel within a zone. Art Dao stated that the zone tolling concept is to address the recently approved open access and to limit toll violation. He stated that specific toll policy will be brought back to the authority at a future meeting for consideration.

Mayor Hosterman wanted to know if there were any other projects similar to this one nation-wide. Connie Fremier stated that Seattle is in the process of converting an existing limited access express lane to a continuous access express lane; however the project has not been completed.

Mayor Sbranti wanted to know the potential positives of the open access concept. Stewart Ng stated that continuous access will look and feel very similar to any of the existing HOV Lane; therefore will provide driver familiarity, and this type of access also helps meet design standards, consistent revue and safety.

These items were presented for information only.

5 COMMITTEE MEMBER REPORTS

There were no committee member reports.

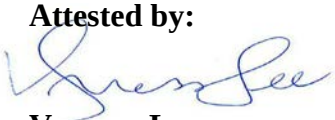
6 STAFF REPORTS

There were no Staff Reports.

7 ADJOURNMENT/NEXT MEETING: January 14, 2013

The meeting adjourned at 11:20am. The next meeting will be January 14, 2013.

Attested by:



Vanessa Lee
Clerk of the Commission

Memorandum

DATE: January 7, 2013

TO: I-580 Express Lane Policy Advisory Committee

FROM: Stewart D. Ng, Deputy Director of Programming and Projects
Gary Sidhu, Project Controls Team

SUBJECT: I-580 Corridor High Occupancy Vehicle (HOV) Lane Projects Status Update

Recommendation
This is an informational item only. No action is required.

Summary
The Alameda CTC is the sponsor for the I-580 Corridor High Occupancy Vehicle (HOV) Lane Projects, which will construct an HOV lane in both the Eastbound and Westbound directions along I-580 from Pleasanton to Livermore. The projects are designed to provide increased capacity, safety and efficiency for commuters and freight along the primary trade corridor connecting the Bay Area with the Central Valley.

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 construction contracts are being administered by Caltrans; the current status of each is as follows:

- I-580 Eastbound HOV Lane Project (Segments 1 and 2) is complete and the HOV lane was opened to traffic in 2010. Segment 3 was awarded on November 16, 2012.

- The Westbound HOV Lane Project will be constructed in two separate construction contracts: an eastern segment from Greenville Road to Isabel Avenue and a western segment from Isabel Avenue to Foothill/San Ramon Road. Construction bids for both the contracts have been opened. The western segment was awarded on October 29, 2012 and the eastern segment was awarded on November 20, 2012.

Attached for the Committee's review, are the monthly status reports for both the I-580 Eastbound HOV Lane Project and the I-580 Westbound HOV Lane Project; each report covers activities through December 31, 2012.

Discussion

I-580 Eastbound HOV Lane

The I-580 Eastbound HOV Lane Project is comprised of three segments:

- Segment 1 and 2 provided one HOV lane in the eastbound direction from Greenville Road to Hacienda Drive. Construction was completed in 2010.
- Segment 3 limits span from Hacienda Drive to Greenville Road and will construct eastbound auxiliary (AUX) lanes from Isabel Avenue to First Street in Livermore. In addition, the project will widen the eastbound bridges at Arroyo-Las Positas, pave and stripe all lanes in the eastbound direction from Hacienda Drive to Greenville Road and make other improvements to accommodate conversion of the HOV lane to a double express / high occupancy toll (HOT) lane facility.

Design and right-of-way acquisition work for Segment 3 was completed in May 2012. The bids for this segment were opened on October 5, 2012. The apparent lowest bidder is OC Jones & Sons with a bid 6.22% below the Engineer's Estimate. The contract was awarded on November 16, 2012.

The total cost of I-580 Eastbound HOV Lane Project is $137.1M. The project is funded from a combination of local, state and federal funds. The California Transportation Commission allocated $21.56M CMIA ad $5M SHOPP funds for Segment 3 at their May 2012 meeting. Both CMIA and SHOPP allocations were adjusted to reflect the bid savings at the contract award. See Attachment A for detailed project funding and financial status.

I-580 Westbound HOV Lane

The I-580 Westbound HOV Lane Project will provide a westbound HOV lane from the Greenville Overcrossing in Livermore to the San Ramon / Foothill Road overcrossing in Dublin / Pleasanton. The project will also provide an auxiliary lane from Vasco Road to First Street; First Street to North Livermore; North Livermore to Isabel Avenue; and from Airway Blvd to Fallon Road and will rehabilitate the existing pavement. The widening of the Arroyo Las Positas Creek Bridges has been included in Segment 3 of Eastbound HOV Lane Project in order to avoid conflict during construction between contractors. The westbound project will be constructed in two separate construction contracts:

- An East Segment from Greenville Road to Isabel Avenue, and
- A West Segment from Isabel Avenue to San Ramon/Foothill Road.

The total cost of the I-580 Westbound HOV Project is $145.2M. The project is funded from local, state and federal funds. California Transportation Commission allocated $101.7M CMIA, $29.4M SHOPP and $10M TCRP funds at their April, May and September 2012 meetings. Both CMIA and SHOPP allocations were adjusted to reflect bid savings at the contract award. See Attachment B for detailed project funding and financial status.

Design and right-of-way acquisition work for both segments was completed in May 2012. The bids for the western segment were opened on August 29, 2012; the apparent lowest bidder is DeSilva Gates Construction with a bid at 23.32% below Engineer's Estimate. The bids for the eastern segment were opened on September 19, 2012; the apparent lowest bidder is Ghilotti Construction Company with a bid at 16.33% below Engineer's Estimate. The west segment contract was awarded October 29, 2012 and the east segment contract was awarded on November 20, 2012.

Benefits

The I-580 Eastbound HOV Project has reduced peak period congestion and delay by providing a new HOV lane for carpooling motorists and transit riders. The I-580 Westbound HOV Project will complement the newly completed eastbound HOV lane and provide similar benefits. The new lane aims to encourage ridesharing and transit use and to reduce the number of single occupant vehicles on the mainline. AUX lanes are designed to improve highway operations by separating vehicle on and off movements on the mainline from the faster moving through traffic lanes. This project will support regional air quality attainment goals by reducing the numbers of automobiles in use and idling in traffic. It will also improve safety for motorists and maintenance workers by providing adequate inside and outside shoulders where possible, allowing a refuge area for disabled vehicles and improving accessibility for the California Highway Patrol (CHP) and emergency and maintenance vehicles.

Fiscal Impact

This is an informational item and there is no fiscal impact.

Attachment(s)

Attachment A: ALA580 Eastbound HOV Lane Project Monthly Status Report
Attachment B: ALA580 Westbound HOV Lane Project Monthly Status Report
Attachment C: I-580 Corridor HOV Lane Projects – Location Map

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ATTACHMENT A
I-580 Eastbound HOV Lane
Monthly Progress Report
Through December 31, 2012

PROJECT DESCRIPTION

The Eastbound I-580 HOV Lane Project includes three segments: Segment 1, Segment 2 and Segment 3:

- **Segment 1 -** HOV lane construction from Greenville Road to Portola Avenue.
- **Segment 2 -** HOV lane construction from Portola Avenue to Hacienda Drive.
- **Segment 3 -** Auxiliary (AUX) Lane from Hacienda Drive to Greenville Road. Project scope includes:
  - Construction of AUX lanes from Isabel Avenue to First Street;
  - Includes the pavement width necessary for a double high occupancy toll (HOT) lane facility;
  - Includes final lift of asphalt concrete (AC) pavement and striping for entire eastbound project limits from Hacienda Drive to Portola Avenue;
  - Includes the sound wall that was deleted from the I-580/Isabel Avenue Interchange Project; and,
  - Includes the widening of two bridges at Arroyo Las Positas in the eastbound direction.

CONSTRUCTION STATUS

Segment 1 - The HOV lane from Greenville Road to Portola Avenue was opened to traffic in October 2009. The construction contract of this segment was accepted on February 2, 2010.

Segment 2 - The HOV lane from Hacienda Drive to Portola Avenue was opened to traffic in November 2010. The construction contract was accepted on September 30, 2011.

PROJECT DELIVERY STATUS

Segment 3 – Project was advertised on July 9, 2012 and bids opened on October 05, 2012. The apparent low bidder is O C Jones & Sons with a low bid at 6.33% below Engineer's Estimate. The contract was awarded on November 16, 2012.

SEGMENT 3 ANTICIPATED CONSTRUCTION STAGING & TRAFFIC HANDLING

Construction activities are expected to include both day and night work; final construction staging sequence may change based on contractor's proposed plans. Significant work is involved in rehabilitating the existing pavement which requires closing traffic lanes. Due to heavy day time traffic volumes, closing traffic lanes will create considerable traffic delays. For this reason, pavement rehabilitation work can only be done during night time hours. Night work will include setting lane closures and shifting traffic lanes (placement of k-rail and striping

work), existing pavement rehabilitation work (crack and seat, slab replacement and overlay) and electrical work. According to the approved lane closure charts by Caltrans, night work will occur between 9:00 PM and 4:00 AM. Lane closures are expected, but complete freeway closure is not anticipated. Work within the median behind k-rail is expected as the first order of work and will occur during day time hours. In addition, all bridge work is expected to occur during day time hours. In cooperation with Alameda CTC, Caltrans will lead the public outreach effort; which is expected to occur following award of the construction contract.

PROJECT FUNDING & FINANCIAL STATUS

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

I-580 Eastbound AUX Lane Project Funding Plan - Segment 3

	CMIA	RM2	TVTC	FED	SHOPP	Meas. B	Total
PA&ED		1.54	0.64				**2.18**
PS&E		1.38	0.92	0.23		0.07	**2.60**
ROW		0.20	0.06			0.33	**0.59**
Construct Cap	17.87	2.20			4.69	6.08	**30.84**
Construct Sup	2.53	1.12				1.09	**4.74**
TOTAL	**20.40**	**6.44**	**1.62**	**0.23**	**4.69**	**7.57**	**40.95**
Total Project Cost: $40.95 M							

SCHEDULE STATUS

I-580 Eastbound AUX Lane Project Schedule - Segment 3

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)

RECENT ACTIVITIES

Project was awarded on November 16, 2012.

UPCOMING ACTIVITIES

Construction activities are expected to begin April 2013.

ATTACHMENT B
I-580 Westbound HOV Lane
Monthly Progress Report
Through December 31, 2012

PROJECT DESCRIPTION

The Westbound I-580 HOV Lane Project includes three segments: Segment 1, Segment 2 and Segment 3:

- **Segment 1** - East HOV Segment; project limits are Greenville Road to Isabel Avenue.
- **Segment 2** - West HOV Segment; project limits are from Isabel Avenue to San Ramon Road in Dublin.
- **Segment 3** - Eastbound bridge widenings at Arroyo Las Positas Creek. The project scope of this segment has been combined with the Segment 3 of the Eastbound HOV Lane Project.

PROJECT DELIVERY STATUS

Segment 1(East Segment) – This project was advertised on July 16, 2012 and bids were opened on September 19, 2012. The apparent lowest bidder is Ghilotti Construction Company, Inc. with bid about 16.33% below Engineer's Estimate. The contract was awarded on November 20, 2012

Segment 2 (West Segment) – This project was advertised on June 25, 2012 and bids were opened on August 29, 2012. The apparent lowest bidder is DeSilva Gates Construction with bid about 23.32% below Engineer's Estimate. The contract was awarded by Caltrans on October 29, 2012.

ANTICIPATED CONSTRUCTION STAGING & TRAFFIC HANDLING

Even though final construction staging sequence could change based on contractor's proposed plans, construction activities are expected to include both day and night work. Significant work is involved in rehabilitating the existing pavement which requires closing traffic lanes. Due to heavy day time traffic, closing traffic lanes will create significant traffic delays. As such pavement rehabilitation work can only be done during night time. Night work will include setting lane closures and shifting traffic lanes (placement of k-rail and striping work), existing pavement rehabilitation work (crack and seat, slab replacement and paving) and electrical work. According to the approved lane closure charts by Caltrans, night work will occur between 9:00 PM and 4:00 AM. Lane closures are expected but complete freeway closure is not anticipated. Work within the median behind k-rail is expected as first order of work and will occur during day time. All bridge work is expected during day time. In cooperation with Alameda CTC, Caltrans will lead the public outreach effort; which is expected to occur following award of the construction contracts.

PROJECT FUNDING & 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 $145.2M. The total programmed (committed) funding from federal, state and local sources is $45.2M.

I-580 Westbound HOV Lane Project Funding Plan
Segment 1 (East Segment)

	CMIA	RM2	TCRP	FED	SHOPP	Meas. B	TVTC	TCRP LONP	Total
PA&ED		4.44							**4.44**
PS&E		3.23		0.12		0.89	0.54		**4.78**
ROW		1.37							**1.37**
Const Cap	35.34		5.92	6.19	13.54	0.96			**61.95**
Const. Sup	6.52		1.59			2.06		0.24	**10.41**
Total	41.86	9.04	7.51	6.31	13.54	3.91	0.54	0.24	**82.95**
Total Project Cost: $82.95									

Segment 2 (West Segment)

	CMIA	RM2	TCRP	FED	SHOPP	Meas. B	TVTC	Total
PA&ED		3.71						**3.71**
PS&E		2.71		0.10		0.73	0.46	**4.00**
ROW		1.12						**1.12**
Const Cap	33.73		2.49		9.61			**45.83**
Const. Sup	6.75					0.88		**7.63**
Total	40.48	7.54	2.49	0.10	9.61	1.61	0.46	**62.29**
Total Project Cost: $62.29								

SCHEDULE STATUS

I-580 Westbound HOV Lane Project Schedule:

Segment 1 (East Segment):

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

Segment 2 (West Segment):

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)

RECENT ACTIVITIES

- East Segment: Bids opened on September 19, 2012; construction contract awarded November 20, 2012.
- West Segment: Bids opened on August 29, 2012; construction contract awarded October 29, 2012.

UPCOMING ACTIVITIES

- East Segment: Construction expected to start April 2013.
- West Segment: Construction expected to start March 2013.

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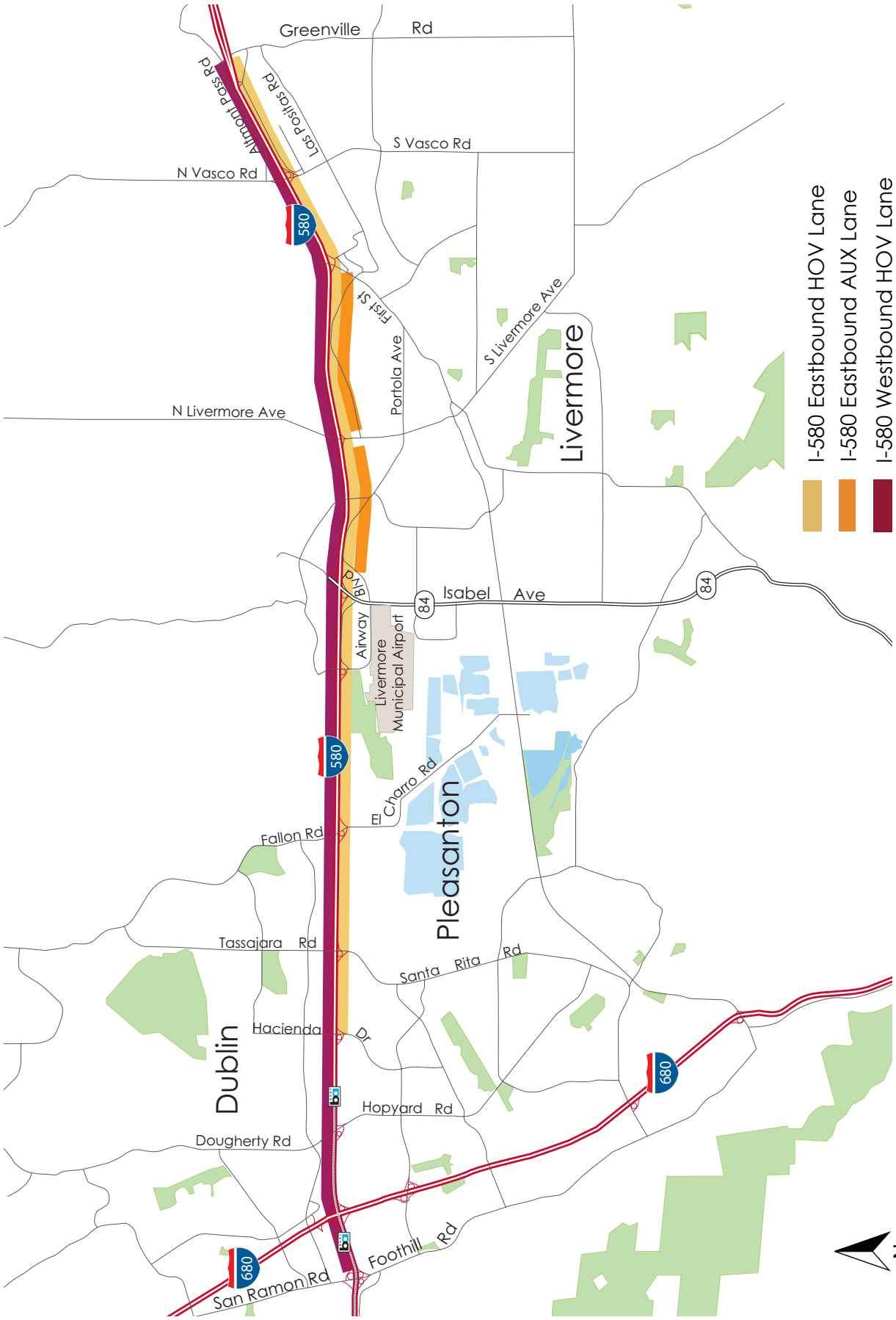
I-580 Corridor HOV Lane Projects - Location Map



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ALAMEDA
County Transportation Commission

Memorandum

DATE: January 7, 2013

TO: I-580 Express Lane Policy Advisory Committee

FROM: Stewart D. Ng, Deputy Director of Programming and Projects
Connie Fremier, Project Controls Team

SUBJECT: I-580 Express (HOT) Lane Projects Status Update

Recommendation
This is an informational item only. No action is required.

Summary
The Eastbound I-580 Express High Occupancy Toll (HOT) 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 High Occupancy Toll (HOT) Lane 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.

Both I-580 express lane projects are currently in the environmental phase which is estimated for completion June of 2013 and are scheduled to start construction immediately after the east and west segments of the I-580 Westbound HOV and I-580 Eastbound Auxiliary lane projects are completed in 2014. These HOV lane projects will widen the freeway to provide the width needed for the express lane projects. The I-580 Eastbound and Westbound Express Lane Projects will construct the necessary infrastructure such as signing, sign gantries for dynamic messaging and toll reading, electrical conduit for connecting power and communication sources, and striping to accommodate the express lanes. The System Integrator contractor will install the required communication equipment and software. The express lane facility will be open for use in 2015.

Progress reports for both the Eastbound I-580 Express (HOT) Lane Project and the Westbound I-580 Express (HOT) Lane Project; which include more information on funding, schedule and project status are attached.

Discussion

Delivery Strategy

At the November 9, 2012 meeting, a delivery concept for the two proposed I-580 express lane projects was presented in order to expedite the delivery of the Eastbound and Westbound Express Lane projects in the most cost effective manner.

Staff is currently moving forward with an amendment to the I-580 Westbound Express (HOT) Lane Project contract (Contract No. A11-0024) with URS Corporation to add design services, perform additional traffic engineering for continuous access configuration, and for design services during construction which will be presented at the January 2013 PPC and Commission meetings for approval.

In addition, staff proposes to combine the I-580 Eastbound Express (HOT) and I-580 Westbound Express (HOT) Projects into one construction project. This will save money in 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.

Finally, staff continues to work with Caltrans to add strategic express lane project elements to the existing I-580 Westbound HOV and I-580 Eastbound Auxiliary Lane construction contracts via contract change order, where feasible. The benefit of this approach is to avoid additional traffic disruptions to the traveling public and eliminate and reduce re-work. Work under consideration to include via contract change order includes:

- Sign foundations in median
- Electrical Conduit – across and along I-580
- Striping – stripe to final HOT configuration
- Install K-rail along median at sign locations

Continuous Access Configuration - Status

At the November 9, 2012 meeting, the concept of a "continuous" access configuration in lieu of "limited" access for the express lanes on the I-580 corridor was presented. The continuous access configuration would eliminate the 2' 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 Fallon Road and I-680 (westbound). Staff is currently moving forward with this concept and the project team is working on refining the traffic operations analysis for a continuous access configuration. This process has required more work and time than originally anticipated; which will result in a delay in completion of the environmental phase of the two projects until approximately June 2013. The construction start date will not be delayed and is scheduled to start in 2014.

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

Fiscal Impact
This is an informational item only. There is no additional fiscal impact, in addition to the fiscal issues already discussed in the November 19, 2012 meeting.

Attachment(s)
Attachment A: ALA580 Eastbound Express (HOT) Lane Project Monthly Status Report
Attachment B: ALA580 Westbound Express (HOT) Lane Project Monthly Status Report
Attachment C: I-580 Corridor Express Lane Projects – Location Map

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ATTACHMENT A
I-580 Eastbound Express (HOT) Lane Project
Monthly Status Report
Through December 31, 2012

PROJECT DESCRIPTION

The Eastbound I-580 Express or High Occupancy Toll (HOT) Lane Project will convert the newly constructed eastbound HOV lane, from Hacienda Drive to Greenville Road, to a double express lane facility which will include standard shoulder and lane widths where feasible.

PROJECT FUNDING

The I-580 Eastbound Express (HOT) Lane Project is funded through a combination of federal, state, and local funds. Staff has recently reconciled RM2 funding on the I-580 corridor and funding that was previously programmed for this project has been used to fund needs on other projects in the corridor resulting in a funding shortfall of approximately $4.8M for the construction capital phase of the project. Alameda CTC staff are working with the Metropolitan Transportation Commission (MTC) to identify funding for this shortfall.

PROJECT DELIVERY STATUS

An Initial Study and Environmental Assessment (IS/EA) for this project is underway as follows:

- Environmental studies are complete and the IS/EA is drafted and ready to circulate pending minor changes to address continuous access alternative and Caltrans approval of the Traffic Operations in March 2013 and Draft Project Report in April 2013. The estimated date of circulation of the draft IS/EA is May/June 2013 (pending approval of Design Exceptions in January 2013). A 30 day public circulation period is required in addition to a public meeting.
- The Draft Project Report is drafted and is pending approval upon Caltrans approval of Design Exceptions for reduced shoulder width and lane widths and refinement of traffic studies for a continuous access configuration. It is anticipated that the Project Report will be finalized in July 2013.
- Staff continues to work with Caltrans staff to obtain approval of Design Exceptions for reduced inside shoulder width (4'-8') and reduced lane widths (11') at locations where right of way is insufficient. Focus meetings with Caltrans have been taking place on a regular basis to address their issues and concerns. The project team has been able to significantly reduce the magnitude of the Design Exceptions by maximizing use of existing right of way including an continuous access approach, however, Caltrans still has not granted approval at all locations. In general, Caltrans appears to be agreeable to the reduced lane widths (11'), however, the reduced inside shoulder width continues to be problematic. The project team continues to work with Caltrans and is meeting on a regular basis to resolve their concerns; however additional project costs may result in order to resolve Caltrans concerns.

- Staff is working to coordinate with the HOV projects (I-580 Westbound HOV - West Segment, I-580 Westbound HOV - East Segment, I-580 Eastbound HOV Segment 3 - Auxiliary Lanes) to add some project express lane elements to the HOV projects via contract change order (CCO). Work under consideration to include via CCO includes:
    - Sign foundations in median
    - Electrical Conduit – across and along I-580
    - Striping – stripe to final HOT configuration
    - Install K-rail along median at sign locations

POTENTIAL ISSUES/RISKS

- Funding – Current shortfall (for limited access design) of $5.5M
- Funding - Additional funding shortfall of approximately $7M to convert limited access approach to continuous access
- Approval of design exceptions by Caltrans – if Caltrans does not approve the requested Design Exceptions, it could require additional work to increase inside shoulder width to meet standard (10') such as constructing retaining walls, reconfiguring interchange ramps, relocating environmental mitigation areas to an offsite location, and/or purchasing additional right of way which would increase the project cost. Depending on the solution, additional cost could range from $5M-$50M. Additional right of way would also require additional environmental evaluation which would delay completion of the environmental phase of the project.
- Schedule impacts –additional project delays to the environmental phase due to refinement of traffic analysis for continuous access configuration and final agreement of the Design Exceptions. Staff anticipates working on design details for continuous access (location and number of toll gantries, zone tolling requirements) concurrently with completing the overall civil design to avoid delays to the start of construction which is scheduled to start in 2014.

FINANCIAL STATUS

I-580 Eastbound Express (HOT) Lane Project Funding Plan (For Limited Access Design)
See Table at end of report for Combined Project – Continuous Access Funding Plan

				TCRP Deferred	Local (Meas. B)		
PA&ED		**1.32**	**0.30**	**0.12**			**1.74**
PS&E		**0.18**	**0.70**	**1.15**			**2.03**
Sys. Int.	**7.50**						**7.50**
ROW			**0.20**				**0.20**
Const. Support		**0.60**	**0.18**	**0.50**			**1.28**
Construct Cap		**1.95**		**2.23**		**4.82**	**9.00**
O&M					**0.18**		**0.18**
TOTAL	**7.50**	**4.05**	**1.38**	**4.0**	**0.18**	**4.82**	**21.93**
Total Project Cost: $21.93M							

SCHEDULE STATUS

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

Project Approval	June/July 2013
RTL	December 2013
Begin Construction	2014
End Construction	2015

RECENT ACTIVITIES

- Refining traffic studies for "continuous" access alternative
- Continuing to work with Caltrans for approval of Design Exceptions for reduced shoulder width and lane widths

UPCOMING ACTIVITIES

- Finalize Design Exceptions – Target date January 2013
- Finalize Traffic study refinements – Target date March 2013
- Finalize Draft Project Report – Target date April 2013
- Circulate the Draft IS/EA for 30 day public comment – working toward May/June 2013 circulation of document; dependent on approval of design exceptions and additional work for conversion to continuous access - A public meeting will be held during the 30 day comment period
- Working toward environmental clearance and project approval by Caltrans and the Federal Highway Administration by June/July 2013
- Determine items to be added to HOV lane projects via CCO – Target date April 2013

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ATTACHMENT B
I-580 Westbound Express (HOT) Lane
Monthly Status Report
Through December 31, 2012

PROJECT DESCRIPTION
The I-580 Westbound Express or High Occupancy Toll (HOT) Lane Project will convert the planned westbound HOV lane to a single express lane facility on I-580 in Alameda County from west of the Greenville Road Undercrossing in Livermore (PM R8.3) to west of the San Ramon Road/ Foothill Road Overcrossing in Dublin/Pleasanton (PM 21.4), a distance of approximately 13.1 miles.

PROJECT FUNDING
The I-580 Westbound Express (HOT) Lane Project is partially funded through federal and local funds. A shortfall of $11.1 million remains; Alameda CTC staff are working with the Metropolitan Transportation Commission (MTC) to identify funding for this shortfall.

PROJECT DELIVERY STATUS
The environmental phase for this project is underway as follows:

- Traffic studies are being updated to include an evaluation of continuous access alternative.
- The environmental document, a Categorical Exemption (CE), is being prepared and environmental studies are underway.
- A Draft Project Report is being prepared.
- This project will require design exceptions, reduced inside shoulder widths and potential lane width reductions (11'). The design exceptions, however, are the same design exceptions previously approved by Caltrans for the I-580 westbound HOV projects. The intent is to request the same design exceptions that Caltrans previously approved. Staff met with Caltrans in December 2012 to present the potential design exceptions and received favorable feed-back.

POTENTIAL ISSUES/RISKS

- Funding – there is a current funding shortfall (for limited access design) of $11.1M.
- Funding – additional funding shortfall of approximately $7 to implement continuous access alternative.
- Approval of design exceptions by Caltrans – although it appears that Caltrans has provided favorable feedback to the proposed design exceptions, if Caltrans does not approve the requested Design Exceptions, it could require additional work to increase inside shoulder width to meet standard (10').
- Schedule impacts – there could be additional project delays should Caltrans and Alameda CTC not come to agreement on the Design Exceptions by January 2012. In addition, there are some additional delays associated with completing the traffic studies for the continuous access approach. The target date for completion of the environmental phase

is currently July 2013. At this time, staff anticipates to work on design details for continuous access (location and number of toll gantries) concurrently with completing the overall civil design to avoid delays to the start of construction which is scheduled for 2014.

FINANCIAL STATUS

I-580 Westbound Express (HOT) Lane Project Funding Plan (For Limited Access)

See Table at end for Combined Project – Continuous Access Funding Plan

	Fed	TVTC	TCRP LONP Deferred	TBD*	Total
PA&ED	**0.78**	**0.78**			**1.56**
PS&E	**0.19**	**0.25**	**1.00**		**1.44**
Sys. Int.			**1.00**	**4.50**	**5.50**
ROW		**0.17**			**0.17**
Const. Support		**0.90**			**0.90**
Construct Cap		**1.30**		**6.60**	**7.90**
TOTAL	**0.97**	**3.40**	**2.00**	**11.10**	**17.47**
Total Project Cost: $17.47M					

**TBD = funding shortfall*

SCHEDULE STATUS

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

Project Approval	July 2013
RTL	December 2013
Begin Construction	October 2014
End Construction	November 2015

RECENT ACTIVITIES

- Environmental technical studies and completion of traffic studies (including continuous access configuration) are underway
- Draft geometrics and Draft Project Report (including Design Exceptions) are underway

UPCOMING ACTIVITIES

- Complete traffic studies – Target date February 2013

- Draft Design Exceptions – Target date March 2013
- Draft Project Report – Target date March 2013
- Draft Environmental Document (CE) – Target date May 2013
- Final environmental clearance – Target date July 2013

Funding Plan
Combined EB & WB Project – Continuous Access

	EB HOT - Limited Access	WB HOT - Limited Access	Sub Total - Limited Access (Combined EB & WB)	Addt'l Cost - Open Access (Combined EB & WB)	*Revised* Total
PA&ED	1.74	1.56	3.30	0.00	3.30
PS&E	2.03	1.44	3.47	0.30	3.77
System Integrator[1]	7.50	5.50	13.00	4.30	17.30
ROW	0.20	0.17	0.37	0.00	0.37
Con Support	1.28	0.90	2.18	1.10	3.28
Con Capital[1]	9.00	7.90	16.90	5.00	21.90
O & M	0.18		0.18	0.30	0.48
Total	21.93	17.47	39.40	11.00	50.40

All costs shown are in million dollars

Current Shortfall	5.00	11.1	**16.10**		
Addl. Cost - Open Access				11.00	
Total *Revised* Shortfall					**27.10**

Note:
1) System integration work will transfer nearly $5 million in roadway work to Civil-HOT

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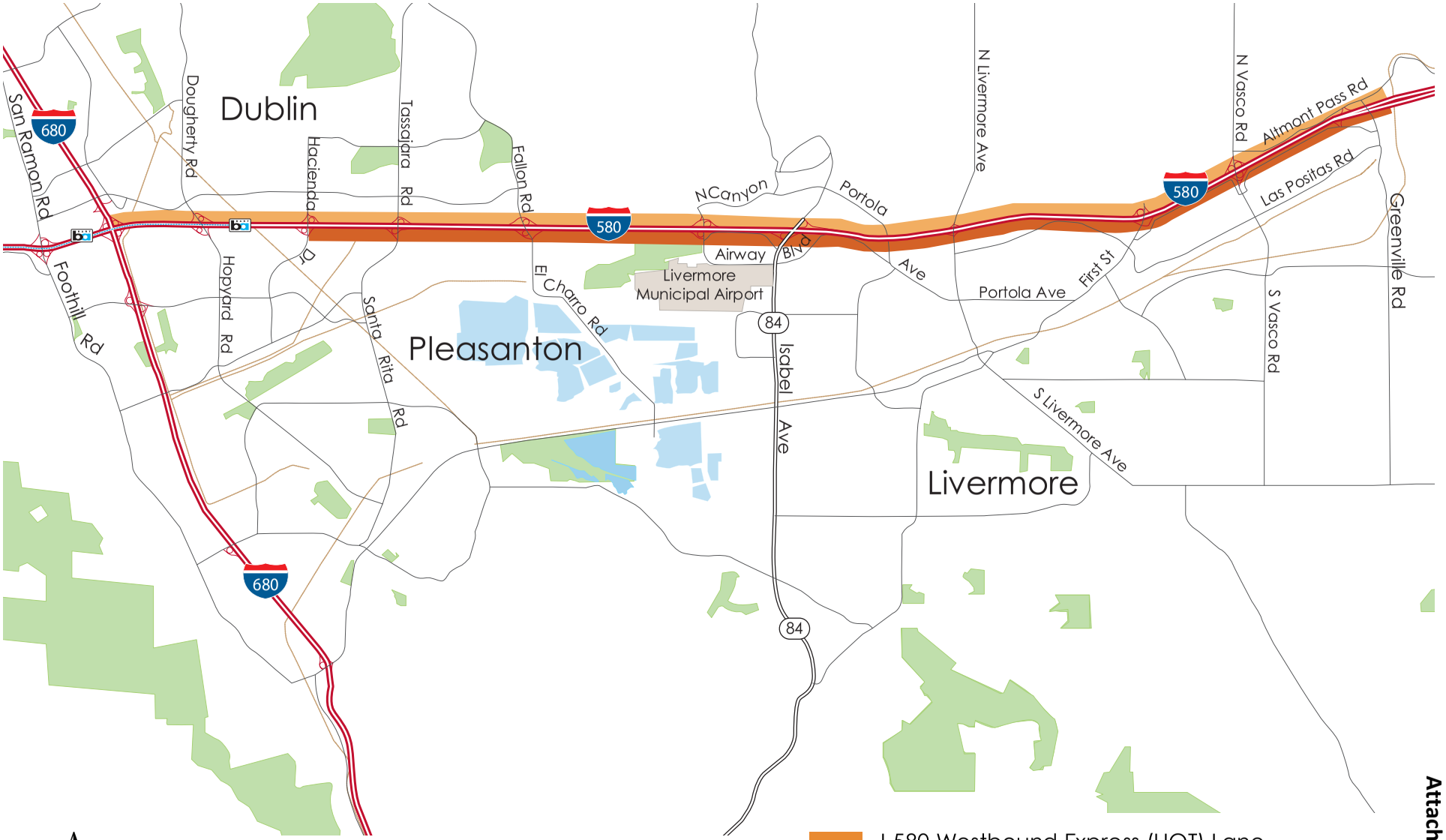
I-580 Corridor Express Lane Projects - Location Map



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Memorandum

DATE: January 7, 2013

TO: I-580 Express Lane Policy Advisory Committee

FROM: Stewart D. Ng, Deputy Director of Programming and Projects
Kanda Raj, Project Controls Team

SUBJECT: I-580 Express (HOT) Lanes System Integration Status Update

Recommendation
This is an informational item only. No action is required.

Summary
This staff report provides a status update of current and planned project development activities associated with the I-580 System Integration; including the implementation of the new "continuous" (previously referred to as "open") access configuration.

As discussed at the November 19, 2012 I-580 Policy Advisory Committee (PAC) meeting, the two High Occupancy Vehicle (HOV) Lanes to HOV/Express Lane conversion projects will be combined into one single design and construction project to implement the HOV/Express Lane concept along the I-580 corridor in both the eastbound and westbound directions. The project limits spans from Hacienda Drive to Greenville Road in the eastbound direction and from Greenville Road to San Ramon Road/ Foothill Road in the westbound direction. System integration is the last component of express lane implementation; which typically follows the express lane civil-roadway infrastructure improvements. For efficiency purposes, the civil-roadway portion of the express lane construction will likely install some elements of the system integration work such as: installing sign gantries for dynamic messaging and overhead toll readers (toll collection via transponder reads), barriers for protecting the toll equipment, and electrical conduit for providing connections to power and communication sources. The System Integration project will ultimately provide the design of the software and hardware and install and test the equipment to implement the express lanes. This System Integration work is being coordinated with, and will immediately follow, the construction of the I-580 Express Lane (civil-roadway) improvements.

Discussion
System integration is a specialized field, focusing on newer technologies including software and hardware equipment deployment for optimizing existing corridor/system capacity to manage

current and forecasted traffic congestion. The system integrators however, will continue to own the software while the implementing agency pays for the licensing fee associated with use of the integrator's software and for the design, development and deployment of the electronic toll system. The system integrator is responsible for the design, development, integration, and testing of the software and hardware and field installation of toll hardware equipment. In addition, they provide integration of the road geometry and toll equipment with the toll collection software for seamless electronic toll collection, utilizing FasTrak® transponders.

In March 2010, the Alameda CTC retained Electronic Transaction Consultants (ETC) Corporation as its System Integrator for implementation of the new electronic toll system for the I-580 Eastbound Express Lanes facility. The electronic toll system design progressed based on a limited access configuration, which comprised of a total of five access locations: three exclusive ingress/egress and two combined ingress/egress locations. As a follow up to discussions at the November 19, 2012 I-580 PAC meeting, the agency and ETC staff have been working towards revising ETC's contract requirements to modify the express lane access configuration from "limited" to "near continuous" type and include additional tasks for implementing the electronic toll system for the Westbound I-580 Express Lane Project. With the contract revisions, ETC will be responsible for the implementation of electronic toll systems for both the westbound and eastbound express lanes along the I-580 corridor.

The following is a detailed discussion of major project development activities; that will require careful attention in 2013:

Concept of Operations

CDM Smith (formerly Wilbur Smith and Associates) staff, as an extension of agency staff, completed a concept of operations (Con Ops) plan for eastbound I-580 that defined the toll pricing strategies, software and hardware needs and enforcement concepts. CDM Smith also developed a system engineering management plan (SEMP) for the I-580 Eastbound Express (HOT) Lane Project that outlined the engineering process, the testing process, QA/QC guidelines, toll maintenance and operations requirements, and communication network requirements, etc. CDM Smith staff will revise both documents to reflect the change in access type and inclusion of the westbound I-580 improvements. The revised documents will then be re-submitted to FHWA and Caltrans for their review and approval.

Traffic and Revenue Study

The continuous access concept provides additional access opportunities while reducing the foot-print required for implementing a shared express/general purpose lane facility. On one hand, the additional access opportunities could generate additional revenue; however on the other hand, it could increase revenue leakage due to the challenges associated with toll violation enforcement. In addition, the previously completed traffic and revenue (T&R) study was based on robust pre-recession traffic forecasts. The agency and the industry experts now realize the need to revise the T&R Study based on more realistic post-recession traffic conditions. Based on the above discussion, the design team will revise the T&R Study to accommodate revised access type and traffic forecasts. Caltrans and the agency staff are currently reviewing the revised traffic forecasts, prepared by the express lane design consultant, which will become the basis of this revised T&R Study.

Toll Pricing and Rate Publishing
As discussed in the last meeting, for practical purposes and to curtail toll violation, a zone-based toll pricing scheme likely will be implemented to effectively support the continuous access configuration and publish the toll rates to patrons via the dynamic message signs (DMS). Staff is seeking additional technical/technology knowhow for limiting toll rate imparities, which may result when toll paying patrons chose to travel shorter distances within a toll zone; as requested by the I-580 PAC members at the last meeting.

The DMS signs will likely display two rates, one that applies to that specific toll zone and the other for the zone immediately downstream. It will be cumbersome for potential express lane users to process a lot of toll rate information as they approach the express lane entry points, which is why it is important to limit the number of toll rates to be displayed on the DMS signs. Given that the continuous access approach is a new concept and first of its kind to be implemented in California, additional details for pricing and messaging will have to be analyzed and determined during the system design process, prior to finalizing electronic toll system implementation.

Toll Readers and Violation Enforcement
Closely spaced toll readers will facilitate a continuous access express lanes configuration since it will lead to an effective FasTrak® transponder read process and will also support more effective violation enforcement. Various local and regional agencies are currently studying the potential effects of placing toll reader gantries at various intervals through the corridor, i.e.) from ½ mile or 1 mile intervals, which is expected to effectively support a continuous access facility. Staff will evaluate this further, discuss with Caltrans, FHWA and other toll facility operators and report back with an approach for implementation on the I-580 Express Lanes.

Deploying CHP Enforcement Observation Areas at several of these toll reader sites (toll zones) and/or utilizing a manual violation enforcement approach might be cost prohibited. Therefore, an automated toll violation enforcement strategy will have to be designed and deployed to effectively provide the required system enforcement. The issues related to customer privacy, toll dispute resolution, customer service and issuance of automated violation tickets will have to be vetted to ensure that it can be implemented within the current California vehicle code, likely through some type of regional implementation plan and through future legislation. MTC is currently reviewing these options, as documented in its draft Con Ops, prepared for its Tier 1 Express Lane projects. To enhance system violation detection, additional CCTV cameras and violation enforcement system (VES) cameras (for automated violation detection) will need to be designed, procured and installed. The effects of these changes on toll system design and construction costs will be evaluated by the design team.

Software and hardware design
ETC will revise the Detailed Design Document (DDD) for the software and hardware development, based on deploying continuous access express lane system and associated increases in toll system elements. The project designers will also revise the electrical design plans and coordinate additional communication network and electrical power source.

Even though the continuous access approach provides additional opportunities, it is a new concept and will require additional research, education and evaluation for effective

implementation on all Alameda County Express Lanes, including the I-580 Express Lanes. Staff is committed to working closely with other likeminded agencies/industry experts to move forward and implement an effective electronic toll system strategy for the continuous access configuration.

Fiscal Impact

This is an informational item only. There is no additional fiscal impact, in addition to the fiscal issues already discussed in the November 19, 2012 meeting.