I-580 Express Lane
Policy Committee

Monday, February 13, 2017, 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.
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
Public meetings at Alameda CTC are wheelchair accessible under the Americans with Disabilities Act. Guide and assistance dogs are welcome. Call 510-893-3347 (Voice) or 510-834-6754 (TTD) five days in advance to request a sign-language interpreter.

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, February 13, 2017, 10:00 a.m.*

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

Chair: Mayor John Marchand, City of Livermore
Vice Chair: Supervisor Nate Miley, Alameda County, District 4
Commissioners: Scott Haggerty, David Haubert, Jerry Thorne
Ex-Officio Members: Rebecca Kaplan, Richard Valle
Staff Liaison: Elizabeth Rutman
Executive Director: Arthur L. Dao
Clerk: Vanessa Lee

1. Roll Call

2. Public Comment

3. Consent Calendar
   3.1. Approve the January 9, 2017 I-580 Express Lane PC meeting minutes.

4. Regular Matters
   4.1. Status update on the operation of I-580 Express Lane

5. Committee Member Reports

6. Staff Reports

7. Adjournment

Next Meeting: March 13, 2017

All items on the agenda are subject to action and/or change by the Committee.
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1. **Roll Call**
   A roll call was conducted. All 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 November 14, 2016 Meeting Minutes**
   Commissioner Haggerty moved to approve the Consent Calendar. Commissioner Thorne seconded the motion. The motion passed with the following vote:

   - **Yes:** Marchand, Haggerty, Thorne, Kaplan
   - **No:** None
   - **Abstain:** None
   - **Absent:** Miley

4. **Regular Matters**
   **4.1. Receive a status update on the operation of I-580 HOV/Express Lane**
   Liz Rutman provided an update on the I-580 HOV/Express Lane for the months of October and November 2016, including aggregated information for the prior six months. She shared information on the corridors performance specifically average daily trips by month, Express Lane transaction breakdowns and speed/density data locations for both months. Liz also covered speed and density heat maps, average daily toll rates and cumulative gross revenue.

   Commissioner Haubert asked if the length of the I-580 express lane segment is the same as length of I-680 lanes. Liz stated that the length of the lanes are comparable.

   Commissioner Haubert asked if data was collected to see how many users are tolling through both I-580 west from San Joaquin County to I-680 south in Fremont. Liz stated that the two systems are separate which restricts the agency from being able to collect that data.

   Commissioner Haggerty wanted more information on the percentage of toll violators in the lane. Liz stated roughly 10% of user are violators, with a small amount being caught through CHP enforcement.

   Commissioner Haggerty asked how many trips have we had in the I-680 corridor since the opening. Liz stated that approximately 5 million toll trips in the corridor.
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, February 13, 2017 at 10:00 a.m.
   Location:   Alameda CTC Offices, 1111 Broadway, Suite 800, Oakland, CA 94607

Attested by:

Vanessa Lee, Clerk of the Commission
DATE: February 6, 2017

SUBJECT: I-580 Express Lanes (PN 1373.002): Monthly Operation Update

RECOMMENDATION: Status update on the operation of I-580 Express Lane

Summary

The Alameda CTC is the project sponsor of the I-580 Corridor Express Lanes, located in the Tri-Valley corridor through the cities of Dublin, Pleasanton, and Livermore, which are now in operation having opened to traffic on February 19th and 22nd of 2016. See Attachment A for express lane operation limits.

The December 2016 operations report indicates that the new express lane facility continues to provide travel time savings and travel reliability throughout the day. Express lane users experienced average speeds of 5 to 23 mph greater than the average speeds in the general purpose lanes, along with lesser average lane densities than the general purpose lanes, in the most congested segments of the corridor.

Background

The I-580 Corridor Express Lanes, extending from Hacienda Drive to Greenville Road in the eastbound direction and from Greenville Road to San Ramon Road/Foothill Road in the westbound direction, were opened to traffic on February 19 and 22, 2016 in the eastbound and westbound directions, respectively. See Attachment A for express lane operation limits. Motorists using the I-580 Express Lanes facility enjoy travel time savings and travel reliability benefits as the express lanes optimize the corridor capacity by providing a new choice to drivers. Single occupancy vehicles (SOVs) may choose to pay a toll and travel within the express lanes, while carpool, clean-air vehicles, motorcycles, and transit vehicles enjoy the benefits of toll-free travel in the express lanes.

An All Electronic Toll (AET) collection method has been employed to collect tolls. Toll rates are calculated based on real-time traffic conditions (speed and volume) in express and general purposes lanes. California Highway Patrol officers provide enforcement services and Caltrans provides roadway maintenance services through reimbursable service agreements.
December 2016 Operation Update: Nearly 640,000 express lane trips were recorded during operational hours in December. Table 1 presents the breakdown of trips based on toll classification and direction of travel. Pursuant to the Commission-adopted “Ordinance for Administration of Tolls and Enforcement of Toll Violations for the I-580 Express Lanes,” if a vehicle uses the express lanes without a FasTrak toll tag then the vehicle is either assessed a toll by means of an existing FasTrak account or issuing a notice of toll evasion violation to the registered vehicle owner based on the license plate read by the Electronic Tolling System. Of those motorists without a toll tag, approximately 12% of total trips were matched to existing FasTrak accounts by means of license plate information. The percentage of trips resulting in violation notices is thus less than 13%.

Table 1. Express Lane Trips by Type and Direction for December 2016

<table>
<thead>
<tr>
<th>Trip Classification</th>
<th>Percent of Trips</th>
</tr>
</thead>
<tbody>
<tr>
<td>By Type</td>
<td></td>
</tr>
<tr>
<td>HOV-eligible with FasTrak flex tag</td>
<td>34%</td>
</tr>
<tr>
<td>SOV with FasTrak standard or flex tag</td>
<td>41%</td>
</tr>
<tr>
<td>No Tag or Invalid Tag</td>
<td>25%</td>
</tr>
<tr>
<td>By Direction</td>
<td></td>
</tr>
<tr>
<td>Westbound</td>
<td>44%</td>
</tr>
<tr>
<td>Eastbound</td>
<td>56%</td>
</tr>
</tbody>
</table>

Express lane users generally experience higher speeds and lesser lane densities than the general purpose lanes. Lane density is measured by the number of vehicles per mile per lane and reported as Level of Service (LOS). LOS is a measure of freeway performance based on vehicle maneuverability and driver comfort levels, graded on a scale of A (best) through F (worst).

Table 2 summarizes the average speed differentials and LOS at four locations in each of the westbound and eastbound directions during respective commute hours for December.

Attachment B presents the speed and density heat maps for the I-580 corridor during revenue hours for the six-month period from July – December 2016. These heat maps are a graphical representation of the overall condition of the corridor, showing the average speeds and densities along the express lane corridor and throughout the day for both the express and general purpose lanes. From July through December, the average speeds in the westbound express lane ranged from 50 to 70 mph during the morning commute hours (5 am to 11 am) with lower speeds occurring between Isabel Avenue and Santa Rita Road; average speeds throughout the rest of the day exceeded 70 mph. The express lane operated at LOS B or better at all times, with LOS B occurring only for a short period of time in the middle of the corridor (Isabel Avenue to Santa Rita Road). By comparison, the general purpose lanes experienced speeds as low as 35 mph and LOS D for much
longer periods of time, throughout a greater portion of the corridor. During the evening commute, the westbound lanes experience a small period reverse-commute congestion between San Ramon Road and Hacienda Road from 5 pm to 6 pm, though the express lane continued to operate at LOS B or better during this time.

Table 2. Speed Differentials and Level of Service for December 2016

<table>
<thead>
<tr>
<th>Direction</th>
<th>I-580 in the Vicinity of</th>
<th>Speed Differential Range (mph)</th>
<th>Average Speed Differential (mph)</th>
<th>Average Express Lane LOS</th>
<th>Average General Purpose Lane LOS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Westbound Morning Commute:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 am – 11 am</td>
<td>North First Street</td>
<td>5 - 8</td>
<td>7</td>
<td>A</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td>North Livermore Ave</td>
<td>4 - 6</td>
<td>5</td>
<td>A</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td>Fallon Road</td>
<td>5 - 9</td>
<td>6</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td>Santa Rita Road</td>
<td>9 - 12</td>
<td>11</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td><strong>Eastbound Evening Commute:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 pm – 7 pm</td>
<td>Hacienda Road</td>
<td>18 - 28</td>
<td>23</td>
<td>C</td>
<td>E</td>
</tr>
<tr>
<td></td>
<td>Airway Blvd</td>
<td>9 – 13</td>
<td>11</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td>North First Street</td>
<td>4 – 8</td>
<td>6</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td>Vasco Road</td>
<td>8 - 20</td>
<td>13</td>
<td>B</td>
<td>C</td>
</tr>
</tbody>
</table>

In the eastbound direction, average express lane speeds from July through December ranged from 20 to 70 mph during the evening commute hours (2 pm – 7 pm) with the lowest speeds occurring at the eastern terminus of the express lanes, between Vasco Road and Greenville Road. Average express lane speeds throughout the rest of the day exceeded 70 mph. The express lane operated primarily at LOS B or C from during the evening commute hours, with small sections of degraded LOS at the eastern terminus of the express lanes between 4 pm and 6 pm; average LOS B or better was realized throughout the rest of the day in all locations. By comparison, the general purpose lanes experienced lower speeds and LOS F at the western end of the corridor, and speeds and LOS similar to the express lanes but for a longer period of time at the eastern end of the corridor, during the evening commute hours.

Table 3 presents the maximum posted toll rates to travel the entire corridor in each direction, along with the average toll assessed to non-HOV users, for December 2016.
Table 3. Toll Rate Data for December 2016

<table>
<thead>
<tr>
<th>Direction</th>
<th>Maximum Posted Toll (Travel Entire Corridor)</th>
<th>Average Assessed Toll (All Trips)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Westbound</td>
<td>$7.25</td>
<td>$1.45</td>
</tr>
<tr>
<td>Eastbound</td>
<td>$6.25</td>
<td>$1.82</td>
</tr>
</tbody>
</table>

Through December 2016, the I-580 Express Lanes have recorded over 6.8 million total trips. Total gross revenues received include over $7.4 million in gross toll revenues and nearly $913,000 in violation penalties.

Public outreach and education activities continue throughout the I-580 corridor commute shed. These efforts are planned through the end of Fiscal Year 2016/17 in order to increase awareness of the express lanes, promote the benefits of the lanes, emphasize proper use of the facility, and encourage the public to obtain FasTrak® and FasTrak® flex toll tags. Current activities include outreach via social media and advertising on Waze.

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

**Attachments**

A. I-580 Corridor Express Lane Location Map

**Staff Contact**

Liz Rutman, Express Lanes Operation and Maintenance Manager
Westbound I-580 Corridor Speed Heat Maps
Monday-Friday, July 2016 – December 2016

Express Lane

General Purpose

5 AM 6 AM 7 AM 8 AM 9 AM 10 AM 11 AM 12 PM 1 PM 2 PM 3 PM 4 PM 5 PM 6 PM 7 PM

San Ramon Rd
Hopyard Rd
Hacienda Rd
Santa Rita Rd
Fallon Rd
Airway Blvd
Isabel Ave
N. Livermore Ave
N. First St
Vasco Rd
Greenville Rd

75 55 35 15

I-580 Express Lane Policy Committee | February 2017 Status Update
Westbound I-580 Corridor Density Heat Maps
Monday-Friday, July 2016 – December 2016

Express Lane

San Ramon Rd

Hopyard Rd

Hacienda Rd

Santa Rita Rd

Fallon Rd

Airway Blvd

Isabel Ave

N. Livermore Ave

N. First St

Vasco Rd

Greenville Rd

General Purpose

LOS A

LOS B

LOS C

LOS D

LOS E

LOS F

I-580 Express Lane Policy Committee | February 2017 Status Update
Eastbound I-580 Corridor Speed Heat Maps
Monday-Friday, July 2016 – December 2016

Express Lane

General Purpose

Santa Rita Rd
Fallon Rd
Airway Blvd
Isabel Ave
N. Livermore Ave
N. First St
Vasco Rd
Greenville Rd

Salt Express Lane General Purpose

Mile
0 2 4 6 8 10

5 AM 6 AM 7 AM 8 AM 9 AM 10 AM 11 AM 12 PM 1 PM 2 PM 3 PM 4 PM 5 PM 6 PM 7 PM

75 55 35 15
Eastbound I-580 Corridor Density Heat Maps
Monday-Friday, July 2016 – December 2016