Meeting Notice

1-580 Express Lane Policy Committee

Monday, November 14, 2016, 10:00 a.m.
1111 Broadway, Suite 800
Oakland, CA 94607

Mission Statement

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

Public Comments

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

Recording of Public Meetings

The executive director or designee may designate one or more locations from which members of the public may broadcast, photograph, video record, or tape record open and public meetings without causing a distraction. If the Commission or any committee reasonably finds that noise, illumination, or obstruction of view related to these activities would persistently disrupt the proceedings, these activities must be discontinued or restricted as determined by the Commission or such committee (CA Government Code Sections 54953.5-54953.6).

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.

Connect with Alameda CTC

www.AlamedaCTC.org    facebook.com/AlamedaCTC
@AlamedaCTC    youtube.com/user/AlamedaCTC
I-580 Express Lane Policy Committee
Meeting Agenda
Monday, November 14, 2016, 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: Mayor David Haubert, City of Dublin
Commissioners: Scott Haggerty, Rebecca Kaplan, Bill Harrison, Jerry Thorne, Nate Miley
Staff Liaison: Elizabeth Rutman
Executive Director: Arthur L. Dao
Clerk: Vanessa Lee

1. Roll Call
2. Public Comment
3. Consent Calendar
   3.1. Approval of the I-580 Express Lane PC October 10, 2016 Meeting Minutes

4. Regular Matters
   4.1. Receive a status update on the operation of I-580 Express Lane

5. Committee Member Reports (Verbal)
6. Staff Reports (Verbal)
7. Adjournment

Next Meeting: January 9, 2017

All items on the agenda are subject to action and/or change by the Committee.
This page intentionally left blank
1. Roll Call
   A roll call was conducted. All members were present with the exception of Commissioner Haubert and Commissioner Kaplan.

   **Subsequent to the roll call:**
   Commissioner Kaplan 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 September 12, 2016 Meeting Minutes
   Commissioner Thorne moved to approve the Consent Calendar. Commissioner Haggerty seconded the motion. The motion passed with the following vote:

   Yes: Marchand, Haggerty, Harrison, Thorne, Miley
   No: None
   Abstain: None
   Absent: Haubert, Kaplan

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 month of August 2016. She shared the corridor performance information such as the express lane trip totals broken down by toll tag type and by westbound and eastbound direction, month-over-month average daily express lane trips, average travel speed and density “heat” maps, and average daily toll rates and revenue.

   Commissioner Haggerty asked for a comparison between the number of toll trips on I-580 and I-680 during August. Liz stated that I-680 had 88,000 toll trips compared to I-580 which had approximately 350,000 toll trips. Commissioner Haggerty requested a slide comparison between I-580 and I-680 for future meetings. Liz said that she can show the data but since I-680 does not include license plate capture technology, they are not equivalent express lane facilities.

   Commissioner Haggerty asked if there are drivers who use the HOV setting on their toll tag to HOV to avoid violations. Liz stated that this is possible but it is not a large percentage of the violations.

   Commissioner Haggerty asked about the status of enforcement. Liz said she would bring the statistics to the Committee next month.
Commissioner Miley asked if the demand coming from San Joaquin County has been measured. Art answered that the congestion on the Altamont Pass is probably a combination of the grade and trips generated from San Joaquin County; however, staff has not collected that data. Liz stated that motorists encounter slower speeds in the Altamont Pass due to poor pavement conditions and fewer lanes, but speeds increase and congestion decreases due to the additional lanes westbound lanes coming into Alameda County after the Altamont Pass.

Commissioner Kaplan asked if trucks can use the express lanes. Liz said they are prohibited from doing so by state law.

Commissioner Kaplan asked if we have a net revenue chart. Liz stated that there is currently no chart provided as financials are expected to be finalized next month and will be analyzed on an annual basis.

This item was for information only.

5. Committee Member Reports
   There were no committee member reports.

6. Staff Reports
   Art Dao stated that the Commission retreat was scheduled for November 18, 2016.

7. Adjournment/ Next Meeting
   The next meeting is:

   Date/Time:  Monday, November 14, 2016 @ 10:00 a.m.
   Location:  Alameda CTC Offices, 1111 Broadway, Suite 800, Oakland, CA  94607

   Attested by:

   Vanessa Lee, Clerk of the Commission
DATE: November 7, 2016

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

RECOMMENDATION: Receive a status update on the operation of I-580 Express Lane

Summary
The Alameda CTC is the project sponsor of the I-580 Corridor Express Lane Projects along the I-580 corridor in the Tri-Valley that are now in operation, opened to traffic on February 19th and 22nd of 2016. See Attachment A for express lane operation limits.

The September 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 up to 26 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 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.
**September 2016 Operation Update:** During the 22 days of September express lane operations, there were over 675,000 total express lane trips recorded. Table 1 presents the breakdown of trips based on toll classification and direction of travel. The percent of users without FasTrak® flex tags continued to decline, dropping to 25% in September, with a corresponding increase toll tag usage by HOV users of about 1%. 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 our customer service representatives either assess tolls to the matching FasTrak account or issues 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 57% of the 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 11% this month.

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

<table>
<thead>
<tr>
<th>Trip Classification</th>
<th>Percent of Trips</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>By Type</strong></td>
<td></td>
</tr>
<tr>
<td>HOV-eligible with FasTrak flex tag</td>
<td>33%</td>
</tr>
<tr>
<td>SOV with FasTrak standard or flex tag</td>
<td>42%</td>
</tr>
<tr>
<td>No Tag or Invalid Tag</td>
<td>25%</td>
</tr>
<tr>
<td><strong>By Direction</strong></td>
<td></td>
</tr>
<tr>
<td>Westbound</td>
<td>46%</td>
</tr>
<tr>
<td>Eastbound</td>
<td>54%</td>
</tr>
</tbody>
</table>

Express lane users generally experience higher speeds and lesser lane densities that 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).

During September 2016, express lane users experienced average travel speeds up to 26 mph greater than the average speeds in the general purpose lanes, with greater speed differentials in the more congested segments of the corridor. Express lanes also operate at better LOS than adjacent general purpose lanes during commute times. Table 2 summarizes the speed differentials and LOS at four locations in each of the westbound and eastbound directions during the morning and evening commute hours, respectively.
Table 2. Speed Differentials and Level of Service for September 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>Westbound Morning Commute:</td>
<td>North First Street</td>
<td>5 - 8</td>
<td>7</td>
<td>A</td>
<td>C</td>
</tr>
<tr>
<td>5 am – 11 am</td>
<td>North Livermore Ave</td>
<td>2 - 5</td>
<td>4</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td>Fallon Road</td>
<td>4 - 13</td>
<td>9</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td>Santa Rita Road</td>
<td>9 - 19</td>
<td>13</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td>Eastbound Evening Commute:</td>
<td>Hacienda Road</td>
<td>19 - 26</td>
<td>23</td>
<td>C</td>
<td>E</td>
</tr>
<tr>
<td>2 pm – 7 pm</td>
<td>Airway Blvd</td>
<td>7 - 12</td>
<td>9</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td>North First Street</td>
<td>7 - 9</td>
<td>8</td>
<td>A</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td>Vasco Road</td>
<td>9 - 22</td>
<td>14</td>
<td>B</td>
<td>C</td>
</tr>
</tbody>
</table>

Attachment B presents the speed and density heat maps for the I-580 corridor during revenue hours for the five-month period from April – September 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 April through September, the average speeds in the westbound express lane ranged from 55 to 70 mph during the morning commute hours (5 am to 11 am) with lower speeds occurring between Isabel Avenue and Fallon Road; average speeds throughout the rest of the day exceeded 70 mph. The express lane operated at LOS C or better at all times, with LOS C occurring only for a short period of time in the middle of the corridor (Isabel Avenue to Fallon Road). By comparison, the general purpose lanes experienced speeds as low as 40 mph and LOS D for much longer periods of time, throughout a greater portion of the corridor.

In the eastbound direction, average corridor speeds from April through September ranged from 20 to 70 mph during the evening commute hours (2 pm – 7 pm) with the lowest speeds occurring only at the eastern terminus of the express lanes, between North First Street and Greenville Road; average 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 3 pm and 6:30 pm; average LOS B or better was realized throughout the rest of the day in all locations. By comparison, the general purpose lanes experienced similar low speeds but with LOS F for much longer periods of time throughout a greater portion of the corridor. The degraded service at the east end of the corridor improved for both the express and general purpose lanes when Caltrans opened a new general purpose lane on June 30, 2016 from Greenville Road to Flynn Road. Future heat
maps will reflect significant improvement for express lane performance, though congestion between Greenville Road and I-205 during the evening commute causes almost daily queues that extend into the eastbound express lanes.

Posted toll rates have yet to hit the operational maximum toll rates to travel the entire length of the corridor, which is currently set at $13.00 and $9.00 for westbound and eastbound, respectively. 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.

Table 3. Toll Rate Data for September 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>$7.50</td>
<td>$1.82</td>
</tr>
<tr>
<td>Eastbound</td>
<td>$5.75</td>
<td>$1.79</td>
</tr>
</tbody>
</table>

Through September 2016, the I-580 Express Lanes have recorded over 4.6 million total trips and generated over $5.05 million in gross toll revenues.

In 2010, the Commission adopted a minimum toll of $0.30 for I-580 Express Lanes. The currently implemented minimum toll rate is $0.30 for a single zone. Upon evaluation of the operating costs, staff has recommended to the Executive Director that the minimum toll on I-580 be raised to $0.50. Per the I-580 Express Lane Toll Policy adopted by the Commission in September 2015, the adjustment of the minimum and maximum toll rates within the constraints set by the Policy is delegated to the Executive Director. The new minimum rate of $0.50 will be implemented effective January 1, 2017.

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
B. I-580 Corridor Heat Maps April – September 2016

**Staff Contact**

Liz Rutman, Express Lanes Operation and Maintenance Manager
This page intentionally left blank
Eastbound I-580 Corridor Speed Heat Maps
Monday-Friday, April 2016 – September 2016

Mile

Express Lane

<table>
<thead>
<tr>
<th>Hacienda Rd</th>
<th>5 AM</th>
<th>6 AM</th>
<th>7 AM</th>
<th>8 AM</th>
<th>9 AM</th>
<th>10 AM</th>
<th>11 AM</th>
<th>12 PM</th>
<th>1 PM</th>
<th>2 PM</th>
<th>3 PM</th>
<th>4 PM</th>
<th>5 PM</th>
<th>6 PM</th>
<th>7 PM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Santa Rita Rd</td>
<td>5 AM</td>
<td>6 AM</td>
<td>7 AM</td>
<td>8 AM</td>
<td>9 AM</td>
<td>10 AM</td>
<td>11 AM</td>
<td>12 PM</td>
<td>1 PM</td>
<td>2 PM</td>
<td>3 PM</td>
<td>4 PM</td>
<td>5 PM</td>
<td>6 PM</td>
<td>7 PM</td>
</tr>
<tr>
<td>Fallon Rd</td>
<td>5 AM</td>
<td>6 AM</td>
<td>7 AM</td>
<td>8 AM</td>
<td>9 AM</td>
<td>10 AM</td>
<td>11 AM</td>
<td>12 PM</td>
<td>1 PM</td>
<td>2 PM</td>
<td>3 PM</td>
<td>4 PM</td>
<td>5 PM</td>
<td>6 PM</td>
<td>7 PM</td>
</tr>
<tr>
<td>Airway Blvd</td>
<td>5 AM</td>
<td>6 AM</td>
<td>7 AM</td>
<td>8 AM</td>
<td>9 AM</td>
<td>10 AM</td>
<td>11 AM</td>
<td>12 PM</td>
<td>1 PM</td>
<td>2 PM</td>
<td>3 PM</td>
<td>4 PM</td>
<td>5 PM</td>
<td>6 PM</td>
<td>7 PM</td>
</tr>
<tr>
<td>Isabel Ave</td>
<td>5 AM</td>
<td>6 AM</td>
<td>7 AM</td>
<td>8 AM</td>
<td>9 AM</td>
<td>10 AM</td>
<td>11 AM</td>
<td>12 PM</td>
<td>1 PM</td>
<td>2 PM</td>
<td>3 PM</td>
<td>4 PM</td>
<td>5 PM</td>
<td>6 PM</td>
<td>7 PM</td>
</tr>
<tr>
<td>N. Livermore Ave</td>
<td>5 AM</td>
<td>6 AM</td>
<td>7 AM</td>
<td>8 AM</td>
<td>9 AM</td>
<td>10 AM</td>
<td>11 AM</td>
<td>12 PM</td>
<td>1 PM</td>
<td>2 PM</td>
<td>3 PM</td>
<td>4 PM</td>
<td>5 PM</td>
<td>6 PM</td>
<td>7 PM</td>
</tr>
<tr>
<td>N. First St</td>
<td>5 AM</td>
<td>6 AM</td>
<td>7 AM</td>
<td>8 AM</td>
<td>9 AM</td>
<td>10 AM</td>
<td>11 AM</td>
<td>12 PM</td>
<td>1 PM</td>
<td>2 PM</td>
<td>3 PM</td>
<td>4 PM</td>
<td>5 PM</td>
<td>6 PM</td>
<td>7 PM</td>
</tr>
<tr>
<td>Vasco Rd</td>
<td>5 AM</td>
<td>6 AM</td>
<td>7 AM</td>
<td>8 AM</td>
<td>9 AM</td>
<td>10 AM</td>
<td>11 AM</td>
<td>12 PM</td>
<td>1 PM</td>
<td>2 PM</td>
<td>3 PM</td>
<td>4 PM</td>
<td>5 PM</td>
<td>6 PM</td>
<td>7 PM</td>
</tr>
<tr>
<td>Greenville Rd</td>
<td>5 AM</td>
<td>6 AM</td>
<td>7 AM</td>
<td>8 AM</td>
<td>9 AM</td>
<td>10 AM</td>
<td>11 AM</td>
<td>12 PM</td>
<td>1 PM</td>
<td>2 PM</td>
<td>3 PM</td>
<td>4 PM</td>
<td>5 PM</td>
<td>6 PM</td>
<td>7 PM</td>
</tr>
</tbody>
</table>
Eastbound I-580 Corridor Density Heat Maps

Monday-Friday, April 2016 – September 2016

Express Lane

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

LOS A  LOS B  LOS C  LOS D  LOS E  LOS F

Mile
0
2
4
6
8
10

I-580 Express Lane Policy Committee | November 2016 Status Update