I-580 Express Lane Policy Committee Meeting Agenda  
Monday, May 13, 2019, 10:00 a.m.

Committee Chair:              Nate Miley, Alameda County, District 4
Vice Chair:                   David Haubert, City of Dublin
Members:                      Scott Haggerty, John Marchand, Jerry Thorne
Ex-Officio:                  Richard Valle, Pauline Cutter
Executive Director:           Arthur L. Dao
Staff Liaison:                Elizabeth Rutman
Clerk of the Commission:      Vanessa Lee

1. Call to Order/Pledge of Allegiance

2. Roll Call

3. Public Comment

4. Consent Calendar
   Page/Action
   4.1. Approve March 11, 2019 I-580 Express Lane PC Meeting Minutes  1 A

5. Regular Matters
   5.1. I-580 Express Lanes (PN 1373.002): Monthly Operations Update  3 I

6. Committee Member Reports

7. Staff Reports

8. Adjournment

Next Meeting: Monday, June 10, 2019

Notes:
- All items on the agenda are subject to action and/or change by the Commission.
- To comment on an item not on the agenda (3-minute limit), submit a speaker card to the clerk.
- Call 510.208.7450 (Voice) or 1.800.855.7100 (TTY) five days in advance to request a sign-language interpreter.
- If information is needed in another language, contact 510.208.7400. Hard copies available only by request.
- Call 510.208.7400 48 hours in advance to request accommodation or assistance at this meeting.
- Meeting agendas and staff reports are available on the website calendar.
- Alameda CTC is located near 12th St. Oakland City Center BART station and AC Transit bus lines.
  Directions and parking information are available online.
Alameda CTC Schedule of Upcoming Meetings for May 2019 through July 2019

Commission and Committee Meetings

<table>
<thead>
<tr>
<th>Time</th>
<th>Description</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>2:00 p.m.</td>
<td>Alameda CTC Commission Meeting</td>
<td>May 23, 2019</td>
</tr>
<tr>
<td></td>
<td></td>
<td>June 27, 2019</td>
</tr>
<tr>
<td></td>
<td></td>
<td>July 25, 2019</td>
</tr>
<tr>
<td>9:30 a.m.</td>
<td>Alameda CTC Commission Retreat</td>
<td>May 30, 2019</td>
</tr>
<tr>
<td>9:00 a.m.</td>
<td>Finance and Administration Committee (FAC)</td>
<td>June 10, 2019</td>
</tr>
<tr>
<td></td>
<td></td>
<td>July 8, 2019</td>
</tr>
<tr>
<td>9:30 a.m.</td>
<td>I-680 Sunol Smart Carpool Lane Joint Powers Authority (I-680 JPA)</td>
<td></td>
</tr>
<tr>
<td>10:00 a.m.</td>
<td>I-580 Express Lane Policy Committee (I-580 PC)</td>
<td></td>
</tr>
<tr>
<td>10:30 a.m.</td>
<td>Planning, Policy and Legislation Committee (PPLC)</td>
<td></td>
</tr>
<tr>
<td>12:00 p.m.</td>
<td>Programs and Projects Committee (PPC)</td>
<td></td>
</tr>
<tr>
<td>5:30 p.m.</td>
<td>Bicycle and Pedestrian Community Advisory Committee (BPAC)</td>
<td>May 16, 2019</td>
</tr>
<tr>
<td>1:30 p.m.</td>
<td>Joint Paratransit Advisory and Planning Committee (PAPCO) and Paratransit Technical Advisory Committee (ParaTAC)</td>
<td>May 20, 2019</td>
</tr>
<tr>
<td>1:30 p.m.</td>
<td>Alameda County Technical Advisory Committee (ACTAC)</td>
<td>June 6, 2019</td>
</tr>
<tr>
<td>1:30 p.m.</td>
<td>Paratransit Advisory and Planning Committee (PAPCO)</td>
<td>June 24, 2019</td>
</tr>
<tr>
<td>5:30 p.m.</td>
<td>Independent Watchdog Committee (IWC)</td>
<td>July 8, 2019</td>
</tr>
</tbody>
</table>

Advisory Committee Meetings

<table>
<thead>
<tr>
<th>Time</th>
<th>Description</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>5:30 p.m.</td>
<td>Bicycle and Pedestrian Community Advisory Committee (BPAC)</td>
<td>May 16</td>
</tr>
<tr>
<td>1:30 p.m.</td>
<td>Joint Paratransit Advisory and Planning Committee (PAPCO) and Paratransit Technical Advisory Committee (ParaTAC)</td>
<td>May 20</td>
</tr>
<tr>
<td>1:30 p.m.</td>
<td>Alameda County Technical Advisory Committee (ACTAC)</td>
<td>June 6</td>
</tr>
<tr>
<td>1:30 p.m.</td>
<td>Paratransit Advisory and Planning Committee (PAPCO)</td>
<td>June 24</td>
</tr>
<tr>
<td>5:30 p.m.</td>
<td>Independent Watchdog Committee (IWC)</td>
<td>July 8</td>
</tr>
</tbody>
</table>

All meetings are held at Alameda CTC offices located at 1111 Broadway, Suite 800, Oakland, CA 94607. Meeting materials, directions and parking information are all available on the [Alameda CTC website](http://www.AlamedaCTC.org).
1. Call to Order/Pledge of Allegiance

2. Roll Call
   A roll call was conducted. All members were present with the exception of Commissioner Thorne.

3. Public Comment
   There were no public comments.

4. Consent Calendar
   4.1. Approve the February 11, 2019 I-580 Express Lane PC meeting minutes.
   Commissioner Haubert moved to approve consent calendar. Commissioner Marchand seconded the motion. The motion passed with the following votes:
   
   Yes: Cutter, Haggerty, Haubert, Marchand, Miley, Valle
   No: None
   Abstain: None
   Absent: Thorne

5. Regular Matters
   5.1. I-580 Express Lanes: Monthly Operations Status Update
   Jesse Peoples presented the I-580 Express Lanes monthly operations update. The update covered average trips by month, user trip breakdown, corridor speed and density heat maps for both directions of travel, and historical toll rates. He concluded by reviewing estimated gross toll revenues versus forecasted operating budget.

   Commissioner Cutter wanted to know the average miles per hour of users in the other lanes and whether they were getting slower. Mr. Peoples confirmed that the trend is that freeway speeds in the general purpose lanes are getting slower when compared to last year.

   Commissioner Haggerty wanted to know how much revenue the lanes are collecting per month. Mr. Peoples stated that the lanes average around $1 million in toll revenue per month.

   Commissioner Haggerty asked for confirmation that violation rates went down to 5%. Jesse stated yes, the percent of violations has gone down when compared to December.

   This item was for information only.
6. **Committee Member Reports**
   There were no committee reports.

7. **Staff Reports**
   There were no staff reports.

8. **Adjournment/ Next Meeting**
   The next meeting is:

   Date/Time: Monday, April 8, 2019 at 10:00a.m.
   Location: Alameda CTC Offices, 1111 Broadway, Suite 800, Oakland, CA 94607
DATE: May 6, 2019

TO: I-580 Express Lane Policy Committee

FROM: Ashley Tam, Associate Transportation Engineer
       Liz Rutman, Director of Express Lanes Implementation and Operations

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

Recommendation

This item is to provide the Commission with an update on the operation of the I-580 Express Lanes. This item is for information only.

Summary

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

The February/March 2019 operations report indicates that the express lane facility continues to provide travel time savings and travel reliability throughout the day. Express lane users typically experienced higher speeds and lesser average lane densities than the general purpose lanes, resulting in a more comfortable drive and travel time savings for express lane users.

Background

The I-580 Express Lanes, extending from Hacienda Drive to Greenville Road in the eastbound direction and from Greenville Road to the I-680 Interchange in the westbound direction, were opened to traffic on February 19th and 22nd of 2016 in the eastbound and westbound directions, respectively. Motorists using the I-580 Express Lanes facility benefit from travel time savings and travel reliability 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 carpools, 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 purpose lanes and can change as frequently as every three minutes. California Highway Patrol (CHP) officers provide enforcement services and the California Department of Transportation (Caltrans) provides roadway maintenance services through reimbursable service agreements.

**February 2019 Operations Update:**

Approximately 612,000 and 666,000 express lane trips were recorded during operational hours in February and March, respectively, which is an average of approximately 31,200 daily trips. 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 valid FasTrak® toll tag then the license plate read by the Electronic Tolling System is used to assess a toll either by means of an existing FasTrak account to which the license plate is registered or by issuing a notice of toll evasion violation to the registered vehicle owner. Approximately 70 percent of all trips by users without a toll tag are assessed tolls via FasTrak account.

Table 1. Express Lane Trips by Type and Direction

<table>
<thead>
<tr>
<th>Trip Classification</th>
<th>Percent of Trips&lt;sup&gt;1&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>By Type</strong></td>
<td></td>
</tr>
<tr>
<td>HOV-eligible with FasTrak flex tag</td>
<td>49%</td>
</tr>
<tr>
<td>SOV with FasTrak standard or flex tag</td>
<td>34%</td>
</tr>
<tr>
<td>No valid toll tag in vehicle</td>
<td>17%</td>
</tr>
<tr>
<td><strong>By Direction</strong></td>
<td></td>
</tr>
<tr>
<td>Westbound</td>
<td>44%</td>
</tr>
<tr>
<td>Eastbound</td>
<td>56%</td>
</tr>
</tbody>
</table>

1. Excludes “trips” by users that had no toll tag and either no license plate or one that could not be read by the Electronic Tolling System with sufficient accuracy that a toll could be assessed.

Express lane users typically 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).

Attachment B presents the speed and density heat maps for the I-580 corridor during revenue hours for the six-month period from October 2018 – March 2019. 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, and are used to evaluate whether the express lanes are meeting both federal and state performance standards. During these six months, the average speeds at each traffic sensor location in the westbound express lane ranged from 50 to over 70 mph during the morning commute hours (5 am to 11 am) with the lower speeds occurring between Isabel Avenue and Santa Rita Road. The
express lane operated at LOS C or better at most times, with a 30-minute period of LOS D experienced near Fallon Road in the morning commutes. By comparison, the general purpose lanes experienced average speeds as low as 45 mph and LOS D throughout longer sections of the corridor. During the evening commute, a small period of westbound reverse-commute congestion between Hacienda Road and San Ramon Road is observed from 4 pm to 6 pm, though the express lane continued to operate at LOS B or better during this time. Outside of the commute hours, westbound express lane users experience average speeds of 65 mph or higher and average LOS A.

In the eastbound direction, average express lane speeds from October 2018 through March 2019 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 65 mph. Most of the express lane corridor operates at LOS C or better during the evening commute hours, with limited sections of degraded LOS at the western end of the express lanes between 3 pm and 5:30 pm and at the eastern terminus between 3 pm and 7 pm. The express lanes averaged LOS B or better throughout the rest of the day in all locations. By comparison, the general purpose lanes experienced lower speeds and degraded levels of services for longer periods of time than the express lanes during the evening commute hours.

Table 2 presents the maximum posted toll rates to travel the entire corridor in each direction in February and March 2019, along with the average toll assessed to toll-paying users.

Table 2. Toll Rate Data

<table>
<thead>
<tr>
<th>Month</th>
<th>Direction</th>
<th>Maximum Posted Toll (Travel Entire Corridor)</th>
<th>Average Assessed(^1) Toll (All Toll Trips)</th>
</tr>
</thead>
<tbody>
<tr>
<td>February/March</td>
<td>Westbound</td>
<td>$13.00 (8 of 41 days)</td>
<td>$2.50</td>
</tr>
<tr>
<td></td>
<td>Eastbound</td>
<td>$12.00 (21 of 41 days)</td>
<td>$3.54</td>
</tr>
</tbody>
</table>

\(^1\) Assessed toll is the toll rate applied to non-toll-free trips and reflects potential revenue generated by the trip. Not all potential revenue results in actual revenue received.

Through March of Fiscal Year 2018-19, the I-580 Express Lanes recorded over 6.3 million total trips. Total gross revenues received include $9.94 million in toll revenues and $2.11 million in violation fees and penalties; the pro-rated forecast operating budget is $4.45 million.

**Fiscal Impact:** There is no fiscal impact associated with the requested action.

**Attachments:**

A. I-580 Express Lanes Location Map

B. I-580 Corridor Express Lanes Heat Maps October 2018 – March 2019
This page intentionally left blank
Westbound I-580 Corridor Speed Heat Maps

Monday-Friday, October 2018 - March 2019

Express Lane

General Purpose

Direction of Travel

Mile

<30 mph 30 - 44 45 - 54 55 - 64 ≥65 mph
Westbound I-580 Corridor Density Heat Maps

Monday-Friday, October 2018 - March 2019

Express Lane

General Purpose

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

I-580  Hopyard Rd  Hacienda Rd  Santa Rita Rd  Fallon Rd

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

Direction of Travel

Mile

0  3  6  9  12

6 AM  7 AM  8 AM  9 AM  5 AM

10 AM  11 AM  12 PM  1 PM  10 AM

2 PM  3 PM  4 PM  5 PM  6 PM

7 PM  8 PM  9 PM  10 PM  11 PM
Eastbound I-580 Corridor Speed Heat Maps

Monday-Friday, October 2018 – March 2019

Express Lane

General Purpose
Eastbound I-580 Corridor Density Heat Maps

Monday-Friday, October 2018 – March 2019