I-580 Express Lane Policy Committee Meeting Agenda
Monday, March 11, 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

   4.1. Approve February 11, 2019 I-580 Express Lane PC Meeting Minutes 1 A

5. Regular Matters

   5.1. I-580 Express Lanes: Monthly Operations Status Update 3 1

6. Committee Member Reports

7. Staff Reports

8. Adjournment

Next Meeting: Monday, April 8, 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:

<table>
<thead>
<tr>
<th>Description</th>
<th>Date</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paratransit Technical Advisory Committee (ParaTAC)</td>
<td>March 12, 2019</td>
<td>9:30 a.m.</td>
</tr>
<tr>
<td>Paratransit Advisory and Planning Committee (PAPCO)</td>
<td>March 25, 2019</td>
<td>1:30 p.m.</td>
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<tr>
<td>Alameda CTC Commission Meeting</td>
<td>March 28, 2019</td>
<td>2:00 p.m.</td>
</tr>
<tr>
<td>Alameda County Technical Advisory Committee (ACTAC)</td>
<td>April 4, 2019</td>
<td>1:30 p.m.</td>
</tr>
<tr>
<td>Finance and Administration Committee (FAC)</td>
<td>April 8, 2019</td>
<td>8:30 a.m.</td>
</tr>
<tr>
<td>I-680 Sunol Smart Carpool Lane Joint Powers Authority (I-680 JPA)</td>
<td>April 8, 2019</td>
<td>9:30 a.m.</td>
</tr>
<tr>
<td>I-580 Express Lane Policy Committee (I-580 PC)</td>
<td>April 8, 2019</td>
<td>10:00 a.m.</td>
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<tr>
<td>Planning, Policy and Legislation Committee (PPLC)</td>
<td></td>
<td>10:30 a.m.</td>
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<tr>
<td>Programs and Projects Committee (PPC)</td>
<td></td>
<td>12:00 p.m.</td>
</tr>
<tr>
<td>Bicycle and Pedestrian Community Advisory Committee (BPAC)</td>
<td>May 16, 2019</td>
<td>5:30 p.m.</td>
</tr>
<tr>
<td>Joint Paratransit Advisory and Planning Committee (PAPCO) and</td>
<td>May 20, 2019</td>
<td>1:30 p.m.</td>
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<tr>
<td>Paratransit Technical Advisory Committee (ParaTAC)</td>
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<td></td>
</tr>
<tr>
<td>Independent Watchdog Committee (IWC)</td>
<td>July 8, 2019</td>
<td>5:30 p.m.</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](https://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 Miley.

3. Public Comment
   There were no public comments.

4. Consent Calendar
   4.1. Approve the January 14, 2019 I-580 Express Lane PC meeting minutes.
       Commissioner Thorne moved to approve consent calendar. Commissioner Marchand seconded the motion. The motion passed with the following votes:

       Yes:  Cutter, Haggerty, Haubert, Marchand, Thorne, Valle
       No:  None
       Abstain:  None
       Absent:  Miley

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 Haggerty noted that the congested areas in the eastbound direction appear to be worsening based on the heat maps, for both the general purpose and express lanes. Mr. Peoples stated that staff will compare the heat map to the previous year and bring the results to the next I-580 Express Lane Policy Committee meeting.

       This item was for information only.

   5.2. I-580 Tolling Overview
       This item was heard before Item 5.1.

       Liz Rutman provided an overview of the I-580 express lane tolling. Her presentation included information on express lane business rules and toll policies as well as the toll enforcement ordinance. Ms. Rutman reviewed the zone map, provided information on dynamic pricing parameters, and also reviewed the toll rate setting process. She covered state and federal requirements as it relates to performance goals for the
system and provided information on lanes performance through speed and density analysis.

Commissioner Valle asked if users are being charged every time the toll tag beeps. Ms. Rutman stated that the current tag beeps to indicate battery use, not because the user is being charged. She noted that the new transponder will not beep while traveling the lane.

Commissioner Haubert wanted to ensure that the public knows about changes in the lane. Ms. Rutman stated that changes in the toll zones will be subtle but the clean air vehicle tolling will have a regional public information push to make sure that information on the express lane will be consistent.

Commissioner Haubert asked if Alameda CTC can extend the lane farther up the corridor towards the Altamont Pass. Ms. Rutman stated that the I-580 work plan includes design alternative analyses for both the Dublin grade and the Altamont Pass that will look at several options for congestion relieve, including extending the express lanes.

6. Committee Member Reports
   There were no committee reports.

6. Staff Reports
   There were no staff reports.

7. Adjournment/ Next Meeting
   The next meeting is:
   
   Date/Time:   Monday, March 11, 2019 at 10:00a.m.
   Location:   Alameda CTC Offices, 1111 Broadway, Suite 800, Oakland, CA 94607
DATE: March 4, 2019

TO: I-580 Express Lane Policy Committee

FROM: Jesse Peoples, 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 on February 19th and 22nd of 2016. See Attachment A for express lane operation limits.

The January 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.

January 2019 Operations Update:

Over 667,000 express lane trips were recorded during operational hours in January, an average of approximately 30,300 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 Trips¹</th>
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</thead>
<tbody>
<tr>
<td>By Type</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>By Direction</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 July 2018 – December 2018. 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 lane is 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 60-minute period of LOS D
experienced near Fallon Road and a 30-minute period of LOS D experienced near Isabel Avenue in the morning commutes. By comparison, the general purpose lanes experienced average speeds as low as 40 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 July 2018 through December 2018 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 January 2019, along with the average toll assessed to toll-paying users.

<table>
<thead>
<tr>
<th>Month</th>
<th>Direction</th>
<th>Maximum Posted Toll (Travel Entire Corridor)</th>
<th>Average Assessed¹ Toll (All Toll Trips)</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>Westbound</td>
<td>$13.00 (2 of 22 days)</td>
<td>$2.28</td>
</tr>
<tr>
<td></td>
<td>Eastbound</td>
<td>$12.00 (19 of 22 days)</td>
<td>$3.70</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 January of Fiscal Year 2018-19, the I-580 Express Lanes recorded over 5 million total trips. Total gross revenues received include $8.15 million in toll revenues and $1.7 million in violation fees and penalties; the pro-rated forecast operating budget is $3.24 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 July 2018 – December 2018
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I-580 Express Lanes
Location Map

Two Eastbound Express Lanes
Lanes begin at Hacienda
No entry/exit from eastbound express lanes from Hacienda to Fallon / El Charro.
Please note: For access to Santa Rita Road, do not enter express lanes.

One Westbound Express Lane
Lane begins at Greenville
No entry/exit from westbound express lane from Hacienda to end.
Please note: For access to I-680 or Dougherty, exit express lane before Hacienda.
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Westbound I-580 Corridor Speed Heat Maps

Monday-Friday, July 2018 - December 2018
Westbound I-580 Corridor Density Heat Maps
Monday-Friday, July 2018 – December 2018

Express Lane

General Purpose

Direction of Travel

Mile

I-680

Hopyard Rd

Hacienda Rd

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
Eastbound I-580 Corridor Speed Heat Maps

Monday-Friday, July 2018 – December 2018

Express Lane General Purpose

- 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

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

Monday-Friday, July 2018 - December 2018