I-580 Express Lane
Policy Committee

Monday, January 8, 2018, 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.
Location Map

Alameda CTC
1111 Broadway, Suite 800
Oakland, CA 94607

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 510-208-7450 (Voice) or 1-800-855-7100 (TTY) 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, January 8, 2018, 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 November 13, 2017 I-580 Express Lane PC meeting minutes.

4. Regular Matters

5. Committee Member Reports

6. Staff Reports

7. Adjournment

Next Meeting: February 12, 2018

All items on the agenda are subject to action and/or change by the Committee.
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I-580 Express Lane Policy Committee
Meeting Minutes
Monday, November 13, 2017, 10:00 a.m.

1. Roll Call
   A roll call was conducted. All members were present with the exception of Commissioner Miley and Commissioner Kaplan.

   Subsequent to the roll call:
   Commissioner Kaplan and Commission Miley arrived during Item 4.1.

2. Public Comment
   There were no public comments.

3. Consent Calendar
   3.1. Approve the October 9, 2017 I-580 Express Lane PC meeting minutes.
       Commissioner Thorne moved to approve the Consent Calendar. Commissioner Haubert seconded the motion. The motion passed with the following votes:

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

4. Regular Matters
       Liz Rutman presented the I-580 express lane monthly operations update. She shared information on the corridor performance specifically average daily trips and speed/density data locations. Ms. Rutman also covered speed and density heat maps, and average daily toll rates. She concluded by providing information on maximum toll rates and express lane financials.

       Commissioner Kaplan noted that the traffic is slowing down in the lane and suggested changing the tolls during peak hours for the congested segments. Liz stated that the pricing algorithm takes into account downstream traffic as well and noted that you can’t change a price in one zone without changing it in the entire lane. Mr. Dao noted that the lane is working efficiently and the heat maps data is reflective of design issues that affect congestion in the lane.

       Commissioner Haggerty wanted to confirm that the data is showing that 20% of users in the lane are violators. Ms. Rutman clarified and stated that the 20% of users are traveling with no tag or invalid tag but about half of those are charged FasTrak tolls by their license plate.

       Commissioner Haggerty noted that a significant amount of funding is lost to violators and paying for enforcement and requested that staff to bring back the numbers of tickets that CHP has written for toll violations in both directions of the lane.
Commissioner Valle wanted to know the impacts of enforcing the lane with more officers and wanted input from CHP on staffing abilities and resources to enforce the lane. Mr. Dao stated that there is a contract with CHP to enforce the lane and staff will bring back more data on enforcement as well as CHP staffing resources.

Commissioner Haggerty asked for more information on decisions regarding the occupancy of the lane. Mr. Dao noted that staff is closely monitoring the regional occupancy policy as well as regional implications of changing the occupancy in the lane.

This item was for information only.

4.2. Approve and authorize the Executive Director, or a designee, to negotiate and execute Professional Services Agreement with System Metrics Group, Inc. for a not-to-exceed amount of $500,000 for the I-580 Express Lanes Evaluation Study.

Kristen Villanueva recommended that the Commission approve and authorize the Executive Director, or a designee, to negotiate and execute Professional Services Agreement with System Metrics Group, Inc. for a not-to-exceed amount of $500,000 for the I-580 Express Lanes Evaluation Study. She noted that Assembly Bill (AB) 574 requires a report on the findings, conclusions, and recommendations of the I-580 Express Lanes to be completed within three years of the first revenue day. Ms. Villanueva recommended that the Commission approve and authorize the Executive Director, or a designee to negotiate and execute Professional Services Agreement with System Metrics Group, Inc. for a not-to-exceed amount of $500,000 for the I-580 Express Lanes Evaluation Study. The resulting contract will be funded by I-580 Express Lanes operations revenues and will span 18 months.

Commissioner Haggerty moved to approve this item. Commissioner Kaplan seconded the motion. The motion passed with the following votes:

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

5. 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, January 8, 2018 at 10:00 a.m.
- **Location:** Alameda CTC Offices, 1111 Broadway, Suite 800, Oakland, CA 94607

Attested by:

Vanessa Lee, Clerk of the Commission
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DATE: January 2, 2018

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

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

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 are now in operation having opened to traffic on February 19th and 22nd of 2016. See Attachment A for express lane operation limits.

The October and November 2017 operations report indicates that the express lane facility continues to provide travel time savings and travel reliability throughout the day. Express lane users 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 San Ramon Road/Foothill Road in the westbound direction, were opened to traffic on February 19th and 22nd of 2016 in the eastbound and westbound directions, respectively. See Attachment A for express lane operation limits. 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 purposes 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.
October/November 2017 Operations Update: Over 700,000 express lane trips were recorded during operational hours in October, an average of approximately 31,800 daily trips. There were nearly 648,000 express lane trips recorded in November, or 32,400 average daily trips. Table 1 presents the breakdown of trips based on toll classification and direction of travel; these percentages have remained consistent for the last eight months. 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 either 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 half 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>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>October</td>
<td>November</td>
</tr>
<tr>
<td>By Type</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HOV-eligible with FasTrak flex tag</td>
<td>42%</td>
<td>43%</td>
</tr>
<tr>
<td>SOV with FasTrak standard or flex tag</td>
<td>38%</td>
<td>38%</td>
</tr>
<tr>
<td>No valid toll tag in vehicle</td>
<td>20%</td>
<td>19%</td>
</tr>
<tr>
<td>By Direction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Westbound</td>
<td>45%</td>
<td>45%</td>
</tr>
<tr>
<td>Eastbound</td>
<td>55%</td>
<td>55%</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 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). Speed and density measurements over a six-month period of time are used to evaluate whether the express lane is meeting required federal and state performance standards.

Attachment B presents the speed and density heat maps for the I-580 corridor during revenue hours for the six-month period from April 2017 – September 2017. 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. These heat maps are currently being updated quarterly. During the six months shown in these maps, the westbound express lane users averaged speeds greater than 50 mph at all times with LOS C or better most times and a short half-hour period of LOS D near Fallon Road during the morning commute. In the eastbound direction, the express lanes users averaged speeds 45 mph or
greater at all times and locations except at the eastern terminus of the express lanes, between Vasco Road and Greenville Road, where the express lane ends at the foot of the Altamont Pass, at which point average speeds dropped to as low as 20 mph. Density in the eastbound direction is at LOS C better throughout most of the corridor, with limited sections of degraded LOS at the western and eastern ends during peak evening commute hours. In comparison to the general purpose lanes, these heat maps show that the express lanes provide a significant benefit in both speed and LOS.

Table 2 summarizes the average speed differentials and LOS comparison between the express and general purpose lanes at four locations in each of the westbound and eastbound directions during respective commute hours for October and November. This table provides an overall snapshot of the express lane benefits for the month during commute hours.

Table 2. Speed Differentials and Level of Service

<table>
<thead>
<tr>
<th></th>
<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>October</strong></td>
<td>Westbound Morning Commute: 5 am – 11 am</td>
<td>North First Street</td>
<td>6 - 10</td>
<td>8</td>
<td>A</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td></td>
<td>North Livermore Ave</td>
<td>3 - 7</td>
<td>5</td>
<td>A</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fallon Road</td>
<td>5 - 11</td>
<td>9</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Santa Rita Road</td>
<td>12 - 16</td>
<td>15</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td>Eastbound Evening Commute: 2 pm – 7 pm</td>
<td>Hacienda Drive</td>
<td>18 - 29</td>
<td>23</td>
<td>C</td>
<td>E</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Airway Blvd</td>
<td>9 – 13</td>
<td>11</td>
<td>B</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td></td>
<td>North Livermore Ave</td>
<td>5 – 13</td>
<td>10</td>
<td>B</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td></td>
<td>North First Street</td>
<td>9 - 21</td>
<td>14</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td><strong>November</strong></td>
<td>Westbound Morning Commute: 5 am – 11 am</td>
<td>North First Street</td>
<td>5 - 8</td>
<td>7</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td></td>
<td>North Livermore Ave</td>
<td>3 - 7</td>
<td>5</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fallon Road</td>
<td>3 - 9</td>
<td>7</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Santa Rita Road</td>
<td>13 - 18</td>
<td>15</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td>Eastbound Evening Commute: 2 pm – 7 pm</td>
<td>Hacienda Road</td>
<td>18 - 27</td>
<td>23</td>
<td>C</td>
<td>E</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Airway Blvd</td>
<td>10 – 14</td>
<td>12</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td></td>
<td>North Livermore Ave</td>
<td>8 – 11</td>
<td>10</td>
<td>B</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td></td>
<td>North First Street</td>
<td>9 - 23</td>
<td>14</td>
<td>B</td>
<td>C</td>
</tr>
</tbody>
</table>
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>
<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>October</td>
<td>Westbound</td>
<td>$12.00 (1 of 22 days)</td>
<td>$2.19</td>
</tr>
<tr>
<td></td>
<td>Eastbound</td>
<td>$9.00 (22 of 22 days)</td>
<td>$2.91</td>
</tr>
<tr>
<td>November</td>
<td>Westbound</td>
<td>$12.00 (1 of 20 days)</td>
<td>$2.20</td>
</tr>
<tr>
<td></td>
<td>Eastbound</td>
<td>$9.00 (17 of 20 days)</td>
<td>$3.04</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.

During Fiscal Year 2017-18, the I-580 Express Lanes have recorded over 3.04 million total trips. Total gross revenues received include $4.95 million in toll revenues and $1.65 million in violation fees and penalties.

Staff is coordinating education and outreach with partner agencies including CCTA, MTC, 511 Contra Costa as well as local CMAs to promote consistent messaging and information about the I-580, I-680 Sunol, and the I-680 Contra Costa County express lanes, which opened on October 9, 2017.

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

**Attachments**

A. I-580 Corridor Express Lane Location Map  
B. I-580 Corridor Heat Maps April 2017 – September 2017

**Staff Contact**

Liz Rutman, Director of Express Lanes Implementation and Operations  
Ashley Tam, Assistant Transportation Engineer
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Westbound I-580 Corridor Density Heat Maps
Monday-Friday, April 2017 – September 2017

Express Lane

General Purpose

Los Angeles (LOS A) to Los Angeles (LOS F)

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

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 Angeles (LOS A) to Los Angeles (LOS F)

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

Los Angeles (LOS A) to Los Angeles (LOS F)
Eastbound I-580 Corridor Speed Heat Maps
Monday-Friday, April 2017 – September 2017

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

Mile
0
2
4
6
8
10

75
55
35
15

I-580 Express Lane Policy Committee | September 2017 Status Update
Eastbound I-580 Corridor Density Heat Maps
Monday-Friday, April 2017 – September 2017

Express Lane

General Purpose

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

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

Los Angeles

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

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