I-580 Express Lane Policy Committee

Monday, October 9, 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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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.

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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, October 9, 2017, 10:00 a.m. (Or immediately following the I-680 Sunol SMART Carpool Lane Joint Powers Authority meeting)

1. Roll Call

2. Public Comment

3. Consent Calendar
   3.1. Approve the September 11, 2017 I-580 Express Lane PC meeting minutes.

4. Regular Matters

5. Committee Member Reports

6. Staff Reports

7. Adjournment

Next Meeting: November 13, 2017

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, September 11, 2017, 10:00 a.m.

1. Roll Call
A roll call was conducted. All members were present.

Commissioner Narum was present as an alternate for Commissioner Throne.

2. Public Comment
There were no public comments.

3. Consent Calendar
3.1. Approve the July 12, 2017 I-580 Express Lane PC meeting minutes.
Commissioner Haubert moved to approve the Consent Calendar. Commissioner Narum seconded the motion. The motion passed with the following votes:

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

4. Regular Matters
Ashley Tam provided an update on the operation of I-580 Express Lanes for June and July 2017. She shared information on the corridor performance specifically average daily trips and speed/density data locations. Ms. Tam 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 wanted to know when net revenue amounts will be available asked when the Commission could discuss usage for the net revenue. Art Dao stated that there will be a draft expenditure plan brought to the Commission in January or February 2018.

Commissioner Haggerty stated that he recalls that revenue in the lane will go to transit. Mr. Dao stated that AB 2032 defines the use for toll revenue in the corridor.

This item was for information only.

5. Committee Member Reports
There were no committee reports.

6. Staff Reports
7. **Adjournment/ Next Meeting**

The next meeting is:

- **Date/Time:** Monday, October 9, 2017 at 10:00a.m.
- **Location:** Alameda CTC Offices, 1111 Broadway, Suite 800, Oakland, CA  94607

Attested by:

Vanessa Lee, Clerk of the Commission
DATE: October 2, 2017

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 August 2017 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 27 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 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.
August 2017 Operations Update: Over 758,000 express lane trips were recorded during operational hours in August, an average of approximately 33,000 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 seven 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.

Table 1. Express Lane Trips by Type and Direction for August 2017

<table>
<thead>
<tr>
<th>Trip Classification</th>
<th>Percent of Trips</th>
</tr>
</thead>
<tbody>
<tr>
<td>HOV-eligible with FasTrak flex tag</td>
<td>40%</td>
</tr>
<tr>
<td>SOV with FasTrak standard or flex tag</td>
<td>39%</td>
</tr>
<tr>
<td>No valid toll tag in vehicle</td>
<td>21%</td>
</tr>
<tr>
<td><strong>By Direction</strong></td>
<td></td>
</tr>
<tr>
<td>Westbound</td>
<td>45%</td>
</tr>
<tr>
<td>Eastbound</td>
<td>55%</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 August. This table provides an overall snapshot of the express lane benefits for the month during commute hours.

Attachment B presents the speed and density heat maps for the I-580 corridor during revenue hours for the six-month period from January 2017 – June 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, and are used to evaluate whether the express lane is meeting both federal and state performance standards. During these six months, 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 Hacienda Road. 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 Hacienda Road) during the morning commute hours. By comparison, the general purpose lanes experienced speeds as low as 42 mph and LOS D throughout...
several sections of the corridor. During the evening commute, the westbound lanes reflect a small period of reverse-commute congestion between Hacienda Road and San Ramon Road from 5 pm to 6 pm, though the express lane continued to operate at LOS A or better during this time. Outside of the commute hours, express lane users experience average speeds of 70 mph or higher and average LOS A.

Table 2. Speed Differentials and Level of Service for August 2017

<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>6 - 8</td>
<td>7</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td></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>3 - 11</td>
<td>7</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td>Santa Rita Road</td>
<td>9 - 15</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 Drive</td>
<td>20 - 27</td>
<td>23</td>
<td>C</td>
<td>E</td>
</tr>
<tr>
<td></td>
<td>Airway Blvd</td>
<td>8 – 11</td>
<td>10</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td>North Livermore Ave</td>
<td>9 – 15</td>
<td>12</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td>North First Street</td>
<td>11 - 25</td>
<td>17</td>
<td>B</td>
<td>D</td>
</tr>
</tbody>
</table>

In the eastbound direction, average express lane speeds from January 2017 through June 2017 ranged from 25 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. Most of the express lane corridor operates at LOS C 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 pm and at the eastern terminus between 4 pm and 6 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 lane 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 August 2017.
### Table 3. Toll Rate Data for August 2017

<table>
<thead>
<tr>
<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>Westbound</td>
<td>$12.25 (1 of 23 days)</td>
<td>$2.13</td>
</tr>
<tr>
<td>Eastbound</td>
<td>$9.00 (20 of 23 days)</td>
<td>$3.06</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 1.4 million total trips. Total gross revenues received include $1.97 million in toll revenues and $772,000 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 accessible information about the I-580, I-680 Sunol, and the I-680 Contra Costa County express lanes, which are scheduled to open this fall.

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

**Attachments**

A. I-580 Corridor Express Lane Location Map
B. I-580 Corridor Heat Maps January 2017 – June 2017

**Staff Contacts**

[Liz Rutman](mailto:liz.rutman@caltrans.ca.gov), Director of Express Lanes Implementation and Operations

[Ashley Tam](mailto:ashley.tam@caltrans.ca.gov), Assistant Transportation Engineer
Westbound I-580 Corridor Speed Heat Maps
Monday-Friday, January 2017 - June 2017

Express Lane

General Purpose

<table>
<thead>
<tr>
<th>Mile</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>
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<tbody>
<tr>
<td>0</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>
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<td>1 PM</td>
<td>2 PM</td>
<td>3 PM</td>
<td>4 PM</td>
<td>5 PM</td>
</tr>
</tbody>
</table>

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

Heat Map Legend:
- 75 mph
- 55 mph
- 35 mph
- 15 mph
Westbound I-580 Corridor Density Heat Maps
Monday-Friday, January 2017 – June 2017

Express Lane

General Purpose

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

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

0 | 3 | 6 | 9 | 12 | Mile
Eastbound I-580 Corridor Density Heat Maps
Monday-Friday, January 2017 – June 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

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

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