I-680 Sunol Express Lane Joint Powers Authority Meeting Agenda
Monday, September 10, 2018, 9:30 a.m.

Committee Chair: Jerry Thorne, City of Pleasanton
Vice Chair: Lily Mei, City of Fremont
Members: Scott Haggerty, David Haubert, Lan Diep (Santa Clara Valley Transportation Authority)
Executive Director: Arthur L. Dao
Staff Liaison: Elizabeth Rutman
Clerk of the Commission: Vanessa Lee

Teleconference location: San Jose City Hall, T-1854 (Tower Side)
200 East Santa Clara St., 18th Floor
San Jose, CA 95113

1. Call to Order/Pledge of Allegiance
2. Roll Call
3. Public Comment
4. Consent Calendar
   4.1. Approve the May 14, 2018 I-680 Sunol Smart Carpool Lane Joint Powers Authority (JPA) Meeting Minutes
5. Regular Matters
   5.1. I-680 Southbound Express Lane: Monthly Operations Status Update
   5.2. I-680 Sunol Express Lanes (PN 1369.000): Monthly Status Update
6. Committee Member Reports
7. Staff Reports
8. Adjournment

Next Meeting: Monday, October 8, 2018

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>Alameda County Technical Advisory Committee (ACTAC)</td>
<td>October 4, 2018</td>
<td>1:30 p.m.</td>
</tr>
<tr>
<td>Finance and Administration Committee (FAC)</td>
<td>October 8, 2018</td>
<td>8:30 a.m.</td>
</tr>
<tr>
<td>I-680 Sunol Smart Carpool Lane Joint Powers Authority (I-680 JPA)</td>
<td></td>
<td>9:30 a.m.</td>
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<tr>
<td>I-580 Express Lane Policy Committee (I-580 PC)</td>
<td>October 8, 2018</td>
<td>10:00 a.m.</td>
</tr>
<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>Independent Watchdog Committee (IWC)</td>
<td>November 19, 2018</td>
<td>5:30 p.m.</td>
</tr>
<tr>
<td>Paratransit Technical Advisory Committee (ParaTAC)</td>
<td>January 8, 2019</td>
<td>9:30 a.m.</td>
</tr>
<tr>
<td>Alameda CTC Commission Meeting</td>
<td>September 27, 2018</td>
<td>2:00 p.m.</td>
</tr>
<tr>
<td>Paratransit Advisory and Planning Committee (PAPCO)</td>
<td>September 24, 2018</td>
<td>1:30 p.m.</td>
</tr>
<tr>
<td>Bicycle and Pedestrian Community Advisory Committee (BPAC)</td>
<td>October 18, 2018</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](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 Diep and Commissioner Mei.

   Subsequent to the roll call
   Commissioner Mei arrived during Item 5.2

3. Public Comment
   There were no public comments.

4. Consent Calendar
   4.1. Approve the April 9, 2018 I-680 Sunol Smart Carpool Lane Joint Powers Authority (JPA) meeting minutes
   Commissioner Haggerty moved to approve the Meeting minutes. Commissioner Haubert seconded the motion. The motion passed with the following votes:

   Yes:          Haggerty, Haubert, Thorne
   No:           None
   Abstain:      None
   Absent:       Diep, Mei

5. Regular Matters
   5.1. Approve the I-680 Sunol Smart Carpool Lane FY2017-18 Third Quarter Financial Report
   Patricia Reavey recommended that the Authority approve the I-680 Sunol Smart Carpool Lane FY2017-18 Third Quarter Financial Report. She stated that the financial report summarizes revenues and expenses related to the I-680 Sunol Smart Carpool Lane for the fiscal year through March 31, 2018. Ms. Reavey stated that revenue was $2,127,883 or 13.5 percent more than projected revenues, and operating expenses totaled $1,038,661 or 35.4 percent less than budget. Non-operating expenses through the third quarter totaled $88,900 or 5.7 percent less than budget. This results in an increase to net position of $1,000,322, mostly due to actual toll revenue coming in higher than projections, and expenses coming in lower than projections related to the operations and maintenance contract which was rebid throughout the year so we are realizing savings. As of March 31, 2018, cash and investments totaled $4.27 million. Ms. Reavey also stated that the Sunol Smart Carpool Lane JPA is in a strong position compared to budget after the third quarter of the fiscal year and remains sustainable.
Commissioner Haggerty moved to approve this item. Commissioner Haubert seconded the motion. The motion passed with the following votes:

Yes: Haggerty, Haubert, Mei, Thorne
No: None
Abstain: None
Absent: Diep

5.2. Approve the I-680 Sunol Smart Carpool Lane Proposed Budget for FY2018-19
Patricia Reavey recommended that the Authority approve the I-680 Sunol Smart Carpool Lane proposed budget for FY2018-19. She noted that the proposed budget is aligned with the core function of the agency as defined in enabling legislation which is to operate a toll lane along interstate 680. The budget is balanced and sustainable, and the express lane is no longer dependent on grant funds for its solvency. In keeping with recommended best practices, the agency continues to work towards the goal of setting aside funding for future maintenance needs and operational risk. Ms. Reavey stated that the proposed budget contains a projected roll forward net position of $4,759.4 thousand from FY2017-18, projected toll revenues of $2.6 million, operating expenses of $2,140.0 thousand, and non-operating expense of $626.4 thousand, including depreciation expense, for a decrease in net position of $166.4 thousand representing depreciation expense only, for a total projected net position of $4,593.0 thousand. Net position is made up of reserves of $3 million, which is a carryover from the prior fiscal year and has not been increased with this budget, investments in capital assets of $1,301.1 thousand, and unrestricted net position of $291.9 thousand.

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

Yes: Haggerty, Haubert, Mei, Thorne
No: None
Abstain: None
Absent: Diep

5.3 I-680 Southbound Express Lane: Monthly Operations Status Update
Ashley Tam provided an update on the I-680 Southbound Express Lane for the month of March 2018. She covered the average toll trip data and roadway segment speeds and corridor performance information. Ms. Tam also reviewed average speeds and density, and toll rates during operational hours. She concluded the update by reviewing estimated gross toll revenues versus forecasted budget.

This item was for information only.

5.4. Express Lanes Toll Revenue Forecasting Update
Liz Rutman provided an update on the Express Lanes toll revenue forecast activities. She stated that the traffic and revenue study for the northbound I-680 Sunol Express
Lane currently under construction was last prepared in 2013 and projected a 77 percent usage by HOV2+ vehicles. Based on current I-580 data, usage of HOV2+ vehicles on the I-680 was likely overstated in the 2013 T&R study; therefore, correspondingly, it is expected that the revenue forecast was underestimated. Ms. Rutman stated that the I-580 Toll Revenue Expenditure Plan approved last month used current toll revenues escalated at 3% per year as a basis for the plan. However, given that the previous forecasts have been invalidated, staff does not feel that these projections can be relied upon and staff is seeking a 20-year forecast utilizing more recent data and information.

Commissioner Haubert asked do we really need to do this study. Ms. Rutman stated it is not necessary but should be done to better inform the expenditure plan when it is updated in two years. Mr. Dao said that the revenue analysis was previously prepared under the design contracts and that we need expertise on board to do a real analysis.

This item was for information only.

5.5. I-680 Sunol Express Lanes (PN 1369.000): Monthly Status Update
Trinity Nguyen presented the I-680 Sunol Express lane status update. She provided an update on recent construction activities, an overview of the project schedule, and highlighted the groundbreaking event which was held on April 19.

This item is for information only.

6. Committee Member Report
There were no committee member reports.

7. Staff Reports
Art Dao said the California Transportation Commission is poised to approve a set of programming actions for funding under Senate Bill 1. One project submitted for funding I-680/84 Widening Project. The second round of funding is coming in two years.

8. Adjournment/ Next Meeting
The next meeting is:

Date/Time: Monday, June 11, 2018 at 9:30a.m.
Location: Alameda CTC Offices, 1111 Broadway, Suite 800, Oakland, CA 94607
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Recommendation

This item is to provide an update on the Operation of the I-680 Southbound Express Lane. This item is for information only.

Summary

The purpose of this item is to provide the I-680 Sunol Smart Carpool Lane Joint Powers Authority (“Sunol JPA”) with a Monthly Operation Update of the existing I-680 Southbound Express Lane facility for April through July 2018. See Attachment A for express lane operation limits.

The April-July 2018 operations report indicates that the express lane facility continues to provide travel time savings and travel reliability along the corridor.

Background

The I-680 Sunol Southbound Express Lane spans approximately 14 miles from SR 84 near Pleasanton to SR 237 in the City of Milpitas. Motorists using the express lane benefit from travel reliability as the express lane optimizes the corridor capacity by providing a choice to drivers: single occupancy vehicles (SOVs) have the option to pay a toll and travel within the express lane, while carpool, clean-air vehicles, motorcycles, and transit vehicles enjoy the benefits of toll-free travel in the express lane. The Alameda CTC, acting as the managing agency for the Sunol JPA, has been operating the express lane facility since it opened to traffic in September 2010. California Highway Patrol (CHP) officers provide enforcement services, and the California Department of Transportation (Caltrans) provides roadway maintenance services through reimbursable service agreements.

An All Electronic Toll (AET) collection method has been employed to collect tolls. Through June 2017, toll rates were calculated based on real-time traffic conditions (speed and...
volume) in express and general purposes lanes evaluated every three minutes. Beginning July 1, 2017, in preparation for the construction of the new northbound express lane and conversion of the southbound lane to continuous access, a time-of-day pricing schedule has been in effect with rates changing as frequently as every 15 minutes. To manage congestion, especially near Washington Boulevard, the maximum toll was increased from $9.00 to $9.50 in July 2018, which is the first time the cap has been changed since January 2017.

April-July 2018 Operations Update:

Over 968,000 express lane toll trips were recorded during operational hours in Fiscal Year 2017-18. Table 1 summarizes the monthly and average daily toll trips during the operational hours from April through July. All 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).

Table 2 summarizes the express lane speed and LOS at four points in the corridor during the morning commute hours in April through July. Although comprehensive traffic data is not currently available, daily observation of the corridor via closed circuit television cameras suggests that the express lane continually provides higher speeds and better LOS than the general purpose lanes, particularly during peak commute hours.

Table 1. Toll Trips in Express Lane

<table>
<thead>
<tr>
<th>Month</th>
<th>Total Monthly Toll Trips</th>
<th>Average Daily Toll Trips</th>
</tr>
</thead>
<tbody>
<tr>
<td>April</td>
<td>80,000</td>
<td>3,800</td>
</tr>
<tr>
<td>May</td>
<td>88,000</td>
<td>4,000</td>
</tr>
<tr>
<td>June</td>
<td>82,000</td>
<td>3,900</td>
</tr>
<tr>
<td>July</td>
<td>80,000</td>
<td>3,800</td>
</tr>
</tbody>
</table>

Table 2. Speeds and Level of Service in Express Lane
Morning Commute (April 2018 – July 2018)

<table>
<thead>
<tr>
<th>Express Lane Location</th>
<th>5 AM – 11 AM</th>
<th>8 AM – 9 AM</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Avg Speed (mph)</td>
<td>Avg Express Lane LOS</td>
</tr>
<tr>
<td>Andrade Rd</td>
<td>67</td>
<td>C</td>
</tr>
<tr>
<td>Vargas Rd</td>
<td>72</td>
<td>B</td>
</tr>
<tr>
<td>Washington Blvd</td>
<td>64</td>
<td>C</td>
</tr>
<tr>
<td>Mission Blvd SR 262</td>
<td>73</td>
<td>B</td>
</tr>
</tbody>
</table>

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Table 3 presents the maximum posted toll rate to travel the entire southbound express lane corridor and the average toll assessed to non-HOV users. To mitigate increasing traffic volumes and congestion in the express lane during the morning peak hour, the maximum toll to travel the entire length of the corridor was increased from $9.00 to $9.50 in July 2018.

Table 3. Toll Rate Data

<table>
<thead>
<tr>
<th>Month</th>
<th>Maximum Posted Toll (Travel Entire Corridor)</th>
<th>Average Assessed Toll (All Trips)</th>
</tr>
</thead>
<tbody>
<tr>
<td>April</td>
<td>$9.00</td>
<td>$3.05</td>
</tr>
<tr>
<td>May</td>
<td>$9.00</td>
<td>$3.17</td>
</tr>
<tr>
<td>June</td>
<td>$9.00</td>
<td>$2.88</td>
</tr>
<tr>
<td>July</td>
<td>$9.50</td>
<td>$3.01</td>
</tr>
</tbody>
</table>

The estimated gross revenue generated from the I-680 Sunol express lane in Fiscal Year 2017-18 is $2.87 million, while the forecast operation budget is $2.27 million. The estimated gross revenue generated in July 2018 is $217,000, which is the same amount as the forecasted budget for one month in FY 2018-19.

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

**Attachment:**

A. I-680 Southbound Express Lane Location Map
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<table>
<thead>
<tr>
<th>DATE:</th>
<th>August 31, 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>TO:</td>
<td>I-680 Sunol Express Lane Joint Powers Authority</td>
</tr>
</tbody>
</table>
| FROM:         | Trinity Nguyen, Director of Project Delivery  
                Liz Rutman, Director of Express Lanes Implementation and Operations |
| SUBJECT:      | I-680 Sunol Express Lanes (PN 1369.000): Monthly Status Update |

**Recommendation**

This item is to provide an update on the status of I-680 Sunol Express Lanes – Phase 1 project. This item is for information only.

**Summary**

The Interstate 680 (I-680) Sunol Express Lanes (EL) Project will provide enhanced mobility for motorists in both the northbound and southbound directions as a combination of two projects, the I-680 Express Lanes (EL) project and the I-680 Southbound Conversion Project. The I-680 Sunol EL project will widen I-680 from SR 237 in Santa Clara County to SR 84 in Alameda County to construct a 14-mile long northbound High Occupancy Vehicle (HOV)/Express Lane in the corridor. The project is being implemented in a phased approach focused on providing immediate operational benefits based on funding availability. The I-680 Sunol Express Lane - Phase 1 (Phase 1) project, constructs an initial 9-mile HOV/Express Lane segment on northbound I-680 between south of Auto Mall Parkway and SR 84. The I-680 Southbound Access Conversion project will convert the existing southbound controlled access tolling configuration to an open access configuration to provide consistency with the new northbound express lane. This conversion has been incorporated into the northbound Phase 1 project.

The purpose of this item is to provide the Commission with a monthly status update on the project development and implementation activities which are either completed or planned for the Phase 1 project.

**Background**

The I-680 Sunol Express Lanes project will widen northbound I-680 from SR 237 in Santa Clara County to SR 84 in Alameda County to construct a 14-mile long northbound HOV/Express Lane in the corridor. The project will provide a number of benefits including:
1) enhanced mobility by reducing traffic congestion; 2) reduced travel time and improved travel reliability; and 3) reduced congestion related accidents, thereby enhancing safety. The Express Lane facility will maximize available HOV lane capacity by offering solo drivers the choice to pay an electronic toll to access the lane, while regular carpool/carpool eligible users continue to use the lane at no cost. The Phase 1 project will provide an initial 9-mile segment of new HOV/Express Lane from south of Auto Mall Parkway to SR 84 to eliminate the bottlenecks and alleviate much of the daily traffic congestion.

The I-680 Southbound Express Lane was opened to traffic in September 2010 as a controlled access facility. To be consistent with the new northbound express lane and provide enhanced accessibility for users, the southbound direction will be converted to an open access configuration in conjunction with the Phase 1 project.

The Project Approval and Environmental Document (PA&ED) for the overall project was completed in July 2015. In December 2015, WMH Corporation was selected to prepare the civil design and will continue to provide design support during construction (DSDC). In June 2016, Kapsch TrafficCom Transportation NA, Inc. was selected to provide Toll System Integration Services. In November 2017, Bay Cities Paving & Grading Inc. was awarded the civil construction contract.

Alameda CTC, in partnership with Caltrans, is the implementing agency for preliminary engineering, environmental studies, design, right-of-way acquisition, and utility relocation. For the construction phase, Alameda CTC is the project sponsor and Caltrans is the implementing agency to administer the construction of the Phase 1 project. Attachment A, I-680 Sunol Express Lanes Progress Update, provides the current implementation schedule and delivery milestones.

The approved Environmental Document and Project Report (PA&ED documents) included studies and analysis for construction of both the full project limits (SR 237 to SR 84) and an initial segment (south of Auto Mall Parkway to SR 84). The initial segment (Phase 1 project) is focused on providing immediate operational benefits within currently available funding. During development of the Phase 1 project, staff identified and implemented several geometric refinements to reduce costs and minimize environmental impacts.

In the interest of expediting important improvements for the public, Alameda CTC and Caltrans have agreed to incorporate a pavement rehabilitation project into the Phase 1 project.

Civil construction began on March 5, 2018 after the approval of the required initial submittals. The following is a detailed discussion of work in progress and/or upcoming major tasks.

**Recently Completed Project activities**

- Bridge approach slab replacements
- Sheridan Road Overcrossing columns constructed
• Sheridan Road Overcrossing abutments constructed
• Median Paving in Segment A is complete

Upcoming Project Activities

• Visible work activities for the three months ahead will include:
  o Construction of Overhead sign foundations in the median starting from the southern end of the project and proceeding northerly
  o Construction of PG&E Pedestals
  o Continued progress on the widening at the Calaveras Bridge
  o Construction of temporary retaining walls at the Sheridan interchange
  o Erection of falsework for the Sheridan Road Overcrossing Bridge replacement
  o Continued progress on the retaining wall on northbound I-680 between Paseo Padre Parkway and Palm Avenue
  o Continued progress on the retaining wall on northbound I-680 between Vargas Road and Sheridan Road off-ramps
  o Placement of median guardrail in the southerly portion of the project
  o Placement of concrete barrier in the southerly and northerly areas of the project
  o Pile driving for the retaining wall along northbound I-680 from the Alameda Creek Undercrossing to the I-680 loop on-ramp
  o Installation of drainage facilities
• Preliminary tolling zone configuration and associated signing locations determined. Continue to finalize configuration of tolling facility (on-going).
• Continue preliminary toll system design and coordinate with civil design for construction staging/sequencing (on-going).
• Continue to coordinate with PG&E, AT&T and Comcast regarding power and communication service connection needs (on-going).

Potential Risks during Construction

• PG&E facilities and services disrupted or damaged due to the fire up north may shift PG&E staffing resources to repair and restore service. PG&E resources are needed to install service connection for tolling facilities.
• Construction unit costs for concrete and asphalt materials continue to increase due to the high number of construction projects around the Bay Area.

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

Attachment

A. I-680 Sunol Express Lanes Progress Update
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