Meeting Notice

1111 Broadway, Suite 800, Oakland, CA 94607 • 510.208.7400 • www.AlamedaCTC.org

I-680 Sunol Smart Carpool Lane Joint Powers Authority

Monday, January 8, 2018, 9:30 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.

Recording of Public Meetings
The executive director or designee may designate one or more locations from which members of the public may broadcast, photograph, video record, or tape record open and public meetings without causing a distraction. If the Commission or any committee reasonably finds that noise, illumination, or obstruction of view related to these activities would persistently disrupt the proceedings, these activities must be discontinued or restricted as determined by the Commission or such committee (CA Government Code Sections 54953.5-54953.6).

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.
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.

Connect with Alameda CTC
www.AlamedaCTC.org  facebook.com/AlamedaCTC  @AlamedaCTC  youtube.com/user/AlamedaCTC
I-680 Sunol Smart Carpool Lane
Joint Powers Authority Meeting Agenda
Monday, January 8, 2018, 9:30 a.m.

1. Pledge of Allegiance

2. Roll Call

3. Public Comment

4. Consent Calendar

4.1. Approve the November 13, 2017 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 Project Delivery Status Update.

6. Committee Member Reports

7. Staff Reports

8. Adjournment

Next Meeting: February 12, 2018

All items on the agenda are subject to action and/or change by the Committee.
This page intentionally left blank
1. **Pledge of Allegiance**

2. **Roll Call**
   A roll call was conducted. All members were present with the exception of 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 October 9, 2017 I-680 Sunol Smart Carpool Lane Joint Powers Authority (JPA) meeting minutes.**
   Commissioner Haggerty moved to approve the Consent Calendar. Commissioner Haubert seconded the motion. The motion passed with the following roll call votes:

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

5. **Regular Matters**
   5.1. **Approve the I-680 Sunol Smart Carpool Lane Statement of Revenues and Expenses as of September 30, 2017.**
   Patricia Reavey recommended that the Authority approve the I-680 Sunol Smart Carpool Lane Statement of Revenues and Expenses as of September 30, 2017. She stated that net toll and other revenue was $729,798 or 32.69 percent more than projected revenues through the first quarter of FY2017-18. Expenses through the first quarter totaled $463,913, or 15.7 percent less than budget, which results in an increase to net position of $265,885. This positive variance is due to actual revenue coming in higher and expenses coming in lower than projections. As of September 30, 2017, the I-680 Sunol Smart Carpool Lane had cash and investments totaling $3.66 million.
Commissioner Haggerty moved to approve this item. Commissioner Haubert seconded the motion. The motion passed with the following roll call votes:

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


Patricia Reavey recommended that the Authority approve the I-680 Sunol Smart Carpool Lane Joint Powers Authority Draft Audited Annual Financial Report for the Year Ended June 30, 2017. Ahmad Gharaibeh from Vavrinek, Trine, Day & Co., LLP presented financial highlights of the audited financial report and expressed what is considered to be an unmodified audit or clean opinion.

Commissioner Haggerty asked what events could potentially effect operation of the lane considering the close operating margin. Art Dao stated that risks and tort liability exposure could have negative effects on operation of the lane.

Commissioner Haggerty asked if there is legislative relief that the agency can seek as a toll lane operator that protects the agency in areas that include state highway right of way. Mr. Dao stated that the state is self-insured and he noted that the agency has a maintenance agreement with Caltrans that is being reviewed by staff and legal counsel to access the agency’s true liability and exposure to Caltrans for operating the lane.

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

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

5.3. I-680 Southbound Express Lane: Monthly Operations Status Update.

Liz Rutman provided an update on the I-680 Southbound Express lane for the month of September. She covered average toll trip data and roadway segment speeds and corridor performance information. Ms. Rutman also reviewed average speeds and density, toll rates during operational hours and corridor heat maps. She concluded the update by reviewing estimated versus forecasted revenue.

This item was for information only.
5.4. I-680 Project Delivery Status Update.
Trinity Nguyen provided an updated on the I-680 Project Delivery Status Update. She noted that bids for the construction contract opened on October 3, 2017, with the lowest bidder being under the estimate. She noted that the tree cutting contractor was effected by the Sonoma county wildfires, however, the contract is on-call, so Caltrans will go to the next bidder to have them perform the tree trimming. Mr. Dao noted that the construction contracts are owned by Caltrans and not the Sunol JPA.

Commissioner Mei encouraged expediting the process for the tree trimming contract in order to avoid weather delays. Ms. Nguyen stated that the tree trimming contract is not as dependent on weather as other construction contractors.

This item was for information only.

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

7. Staff Reports
There were no staff reports.

8. Adjournment/ Next Meeting
The next meeting is:

Date/Time: Monday, January 8, 2018 at 9:30a.m.
Location: Alameda CTC Offices, 1111 Broadway, Suite 800, Oakland, CA 94607

Attested by:

Vanessá Lee,
Clerk of the Commission
This page intentionally left blank
DATE: January 2, 2018

SUBJECT: I-680 Sunol Southbound Express Lane (PN 1408.000): Monthly Operations Update

RECOMMENDATION: Receive a status update on the operation of the I-680 Southbound Express Lane

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 October and November 2017. 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 along the corridor. 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-680 Sunol Southbound Express Lane spans approximately 14 miles from SR 84 near Pleasanton to SR 237 in the City of Milpitas. See Attachment A for the operational limits of the express lane. Motorists using the express lane benefit from travel time savings and travel reliability as the express lane optimizes the corridor capacity by providing a new 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.
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 plan is in effect with rates changing as frequently as every 15 minutes.

**October/November 2017 Operations Update:** The original Toll System Integrator (TSI) for the I-680 Southbound Express Lane was Electronic Transaction Consultants Corporation (ETCC). In June 2016, the Alameda County Transportation Commission selected Kapsch TrafficCom Transportation NA, Inc. (Kapsch) as the TSI for the I-680 Express Lane Project, which will construct a new northbound express lane and convert the existing southbound express lane to continuous access. As a first step in implementation of the new toll system, and to accommodate the construction impacts associated with the Project, Kapsch has implemented an interim toll system for the existing I-680 Southbound Express Lane. The traffic sensors initially deployed throughout the corridor are not necessary either for the time-of-day pricing or for the ultimate system yet to be constructed. Therefore, they were not integrated into the interim toll system and traffic data is consequently limited to only the four toll point locations and to only the express lane speeds and volumes until the Project construction is completed with new traffic sensors installed and the new lanes are opened for use.

Over 88,000 express lane toll trips were recorded during operational hours in October, an average of approximately 4,000 per day. There were nearly 74,000 express lane toll trips recorded in November, or 3,700 average daily trips. Along with the HOV-eligible users, these 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). 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-680 corridor during operational hours for the six-month period from April 2017 – September 2017. These heat maps are a graphical representation of the overall performance of the express lane corridor, showing the average speeds and densities along the corridor throughout the day for both the express and general purpose lanes. Because the traffic sensors are no longer in use, this is the last time these heat maps will be presented until new data is available from the new lane sensors. During the six months shown in these maps, express lane users experience average speeds greater than 60 mph with LOS C or better at all times. 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 1 summarizes the speed and LOS at four points along the express lane corridor during the morning commute hours in October and November. Although comprehensive traffic data is not currently available, daily observation of the corridor via closed circuit
television cameras monitored by Alameda CTC staff suggest that the express lanes provided higher speeds and better LOS than the general purpose lanes in both October and November.

Table 1. Speeds and Level of Service in Express Lane
Morning Commute (5 AM – 11 AM)

<table>
<thead>
<tr>
<th>Express Lane Location</th>
<th>October Average Speed Range (mph)</th>
<th>October Average Speed (mph)</th>
<th>October Average Express Lane LOS</th>
<th>November Average Speed Range (mph)</th>
<th>November Average Speed (mph)</th>
<th>November Average Express Lane LOS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andrade Rd</td>
<td>62 - 71</td>
<td>65</td>
<td>B</td>
<td>65 - 72</td>
<td>68</td>
<td>B</td>
</tr>
<tr>
<td>Vargas Rd</td>
<td>69 - 77</td>
<td>72</td>
<td>B</td>
<td>67 - 74</td>
<td>71</td>
<td>B</td>
</tr>
<tr>
<td>Washington Blvd</td>
<td>53 - 75</td>
<td>65</td>
<td>C</td>
<td>44 - 76</td>
<td>61</td>
<td>C</td>
</tr>
<tr>
<td>Mission Blvd SR 262</td>
<td>65 - 74</td>
<td>69</td>
<td>B</td>
<td>69 - 76</td>
<td>72</td>
<td>B</td>
</tr>
</tbody>
</table>

Table 2 presents the maximum posted toll rates to travel the entire southbound express lane corridor and the average toll assessed to non-HOV users.

Table 2. 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>October</td>
<td>$9.00</td>
<td>$2.97</td>
</tr>
<tr>
<td>November</td>
<td>$9.00</td>
<td>$3.09</td>
</tr>
</tbody>
</table>

The estimated gross revenue generated from the I-680 Sunol express lane to date in Fiscal Year 2017/18 is $1.17 million, while the forecast operation budget is $920,000.

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

**Attachments**

A. I-680 Southbound Express Lane Location Map
B. I-680 Southbound Corridor Heat Maps April 2017 – September 2017

**Staff Contacts**

Liz Rutman, Director of Express Lane Implementation and Operations
Ashley Tam, Assistant Transportation Engineer
Sunol I-680 Southbound Express Lane Location Map
This page intentionally left blank
I-680 Sunol Corridor Average Speed Heat Map
Monday-Friday, April 2017–September 2017

Express Lane

General Purpose

Andrade Rd
Sheridan Rd
Mission / SR 238
Washington Blvd
AutoMall Pkwy
Mission / SR 262
Calaveras Blvd

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

0 3 6 9 12

Mile

75 55 35 15

I-680 Sunol SMART Carpool Lane Joint Powers Authority | September 2017 Status Update
DATE: January 2, 2018

SUBJECT: I-680 Sunol Express Lanes (PN 1369.000): Monthly Status Update

RECOMMENDATION: Monthly status update of the I-680 Sunol Express Lanes project.

Summary
The I-680 Sunol Express Lanes Project will provide enhanced mobility for motorists in both the northbound and southbound directions as a combination of two projects. The I-680 Sunol Express Lane project will widen I-680 from SR 237 in Santa Clara County to SR 84 in Alameda County and ultimately construct a 14-mile long northbound High Occupancy Vehicle (HOV)/Express Lane in the corridor. The project is being implemented with a phased approach focused on providing immediate operational benefits within current projected funding availability. The I-680 Sunol Express Lane - Phase 1 (Phase 1) project, will provide 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.

Currently, there is heavy afternoon congestion on I-680 Northbound from Scotts Creek Boulevard to Andrade Road. Traffic studies have confirmed that it is caused by two bottleneck locations affecting northbound I-680 between SR 237 and SR 84 during weekday evening commutes between 2pm and 7pm. The bottlenecks occur: 1) near
Washington Boulevard and 2) at the lane drop at the truck scales (located between Sheridan Road and Andrade Road). 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. The following is a detailed discussion of work in progress and/or upcoming major tasks.

**Project Implementation Approach**

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.

**Project activities already completed and anticipated over the next three months:**

- Alameda CTC held a Contractor’s Outreach event on June 13th, 2017 to encourage prime contractors and toll system specialty contractors to team and bid on the contract when advertised by Caltrans. A mandatory pre-bid meeting was held on August 24, 2017 at the Caltrans Pleasanton Construction office.
- The civil construction contract was advertised by Caltrans on August 14th, 2017.
- Four bids were received and opened on October 3rd, 2017.
- Caltrans received bid protests during the award phase from the 2\textsuperscript{nd} and 3\textsuperscript{rd} lowest bidders regarding DBE goals and unit pricing. The bid protests were resolved after several weeks of evaluation.
- Bay Cities Paving & Grading Inc. of Concord, CA was awarded the construction contract on November 16\textsuperscript{th}, 2017 in the amount of $106,974,086.45. This amount is 8.57\% under the Engineer’s Estimate of $117 million.
- Removal of trees conflicting with the project began in November 2017 and will complete by February 2018, within the time window allowed by permits.
- Civil construction is anticipated to begin in February 2018 after approval of initial submittals.
- Schedule milestones will be refined after approval of the contractor’s baseline CPM schedule, anticipated in early 2018. Opportunities to improve the delivery milestones will be re-evaluated at that time.
- 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).
- A project groundbreaking event is tentatively planned for March 2018.

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

**Attachment**

A. I-680 Sunol Express Lanes Progress Update

**Staff Contacts**

Trinity Nguyen, Director of Project Delivery

Liz Rutman, Director of Express Lane Implementation and Operations
This page intentionally left blank
I-680 Sunol Express Lanes
Progress Update: January 2018

Advertise: 8/14/2017
 Bid Opening: 10/3/2017
 Award: 11/16/17

1st Working Day: Feb 2018

Open NB & SB Express Lanes: Nov 2020

All PG&E Services Connected; Fiber Optic Trunk & CCTV’s Complete: Feb 2020

Early Tree Removal: 75% Nov 2017 - Jan 2018
Contract Approval: 100% Nov 2017 - Dec 2017
Initial Submittals (55 Days): 25% Dec 2017 - Feb 2018

Construction: Feb 2018 (0%)

ETS Installation (Segment A): Nov 2018 - Feb 2019
ETS Installation (Segment B): Jul 2019 - Nov 2019
ETS Installation (Segment C): Apr 2019 - Jun 2019

Paving - Northbound: Jul 2020 - Aug 2020
SB Express Lane Out of Revenue Service: Aug 2020 - Nov 2020
Paving - Southbound: Aug 2020 - Oct 2020
ETS Site Acceptance Testing: Aug 2020 - Nov 2020

Groundbreaking: Mar 2018
Ribbon Cutting: Nov 2020
This page intentionally left blank