



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

Committee Chair:	Jerry Thorne, City of Pleasanton	Executive Director	Arthur L. Dao
Vice Chair:	Lily Mei, City of Fremont	Staff Liaison:	<a href="#">Liz Rutman</a>
Members:	Scott Haggerty, David Haubert, Lan Diep (Santa Clara VTA)	Clerk of the Commission:	<a href="#">Vanessa Lee</a>

### 1. Call to Order/Pledge of Allegiance

### 2. Roll Call

### 3. Public Comment

### 4. Consent Calendar Page/Action

- |   |   |   |
|---|---|---|
| 4.1. <a href="#">Approve the March 12, 2018 I-680 Sunol Smart Carpool Lane Joint Powers Authority (JPA) Meeting Minutes</a> | 1 | A |
| 4.2. <a href="#">I-680 Sunol SMART Carpool Lane JPA Annual Report</a>   | 5 | I |

### 5. Regular Matters

- |  |    |   |
|--|----|---|
| 5.1. <a href="#">I-680 Express Lanes (PN 1408.000): Approve Amendment No. 5 to Service Agreement 10R390000 with the California Highway Patrol to extend the term of the agreement for two additional years and an additional budget of \$850,000 for a total not-to exceed amount of \$2,500,000</a> | 17 | A |
| 5.2. <a href="#">Interstate 680 Express Lanes Expenditure Plan</a>   | 23 | I |
| 5.3. <a href="#">I-680 Southbound Express Lane: Monthly Operations Status Update</a>   | 29 | I |
| 5.4. <a href="#">I-680 Sunol Express Lanes (PN 1369.000): Monthly Status Update</a>  | 35 | I |

### 6. Committee Member Reports

### 7. Staff Reports

### 8. Adjournment

Next Meeting: Monday, May 14, 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:

### Commission Chair

Supervisor Richard Valle, District 2

### Commission Vice Chair

Mayor Pauline Cutter,  
City of San Leandro

### AC Transit

Board President Elsa Ortiz

### Alameda County

Supervisor Scott Haggerty, District 1  
Supervisor Wilma Chan, District 3  
Supervisor Nate Miley, District 4  
Supervisor Keith Carson, District 5

### BART

Director Rebecca Saltzman

### City of Alameda

Mayor Trish Spencer

### City of Albany

Councilmember Peter Maass

### City of Berkeley

Councilmember Kriss Worthington

### City of Dublin

Mayor David Haubert

### City of Emeryville

Mayor John Bauters

### City of Fremont

Mayor Lily Mei

### City of Hayward

Mayor Barbara Halliday

### City of Livermore

Mayor John Marchand

### City of Newark

Councilmember Luis Freitas

### City of Oakland

Councilmember At-Large  
Rebecca Kaplan  
Councilmember Dan Kalb

### City of Piedmont

Vice Mayor Teddy Gray King

### City of Pleasanton

Mayor Jerry Thorne

### City of Union City

Mayor Carol Dutra-Vernaci

### Executive Director

Arthur L. Dao

Description	Date	Time
Alameda County Technical Advisory Committee (ACTAC)	May 10, 2018	1:30 p.m.
Finance and Administration Committee (FAC)	May 14, 2018	8:30 a.m.
I-680 Sunol Smart Carpool Lane Joint Powers Authority (I-680 JPA)		9:30 a.m.
I-580 Express Lane Policy Committee (I-580 PC)		10:00 a.m.
Planning, Policy and Legislation Committee (PPLC)		10:30 a.m.
Programs and Projects Committee (PPC)		12:00 p.m.
Independent Watchdog Committee (IWC)	July 9, 2018	5:30 p.m.
Paratransit Technical Advisory Committee (ParaTAC)	September 11, 2018	9:30 a.m.
Alameda CTC Commission Meeting	April 26, 2018	2:00 p.m.
Paratransit Advisory and Planning Committee (PAPCO)	May 21, 2018	1:30 p.m.
Bicycle and Pedestrian Community Advisory Committee (BPAC)	June 28, 2018	5:30 p.m.

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).

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# I-680 Sunol Smart Carpool Lane Joint Powers Authority Meeting Minutes Monday, March 12, 2018, 9:30 a.m.

4.1

1111 Broadway, Suite 800, Oakland, CA 94607 • PH: (510) 208-7400 • 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 Mei and Commissioner Diep.

Commissioner Narum was present as an alternate for Commissioner Thorne.

### Subsequent to the roll call

Commissioner Mei arrived during Item 5.1. Commissioner Diep arrived during Item 5.1

## 3. Public Comment

There were no public comments.

## 4. Consent Calendar

### 4.1. Approve the February 12, 2018 I-680 Sunol Smart Carpool Lane Joint Powers Authority (JPA) meeting minutes.

*Commissioner Haubert moved to approve the Consent Calendar. Commissioner Haggerty seconded the motion. The motion passed with the following votes:*

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

## 5. Regular Matters

### 5.1. Approve the I-680 Sunol SMART Carpool Lane JPA FY2017-18 Mid-Year Budget Update

Patricia Reavey recommended that the Authority approve the I-680 Sunol SMART Carpool Lane JPA FY2017-18 Mid-Year Budget Update. She noted that update adjusts the beginning net position of the current budget to tie to the ending net position in the audited financial statements for FY2016-17; redefines expense categories between operating and non-operating expenses; increases revenue projections for the fiscal year; reallocates budget authority between expense line items; and increases overall budget authority by \$78,145 related to operations and maintenance costs. All changes together increase the net position by almost \$596,000, primarily due to the update to the beginning net position from the audited financial statements. The projected ending net position is made up of \$1.5 million of maintenance reserves, \$1.5 million of operational risk reserves, capital assets net of depreciation of almost \$1.5 million, and unrestricted funds of about \$292,000. She concluded by stating that the fiscal impact for the approval of this item is to provide additional budget authority of \$78,145 for operating and non-operating expenses to be paid from toll revenues for total budget authority of \$2,438,077 for FY2017-18.

Commissioner Haggerty asked what unrestricted funds meant. Ms. Reavey stated that unrestricted funds are funds that are not set aside for maintenance or mitigating risks related to operations.

Commissioner Haggerty wanted to know what the risk reserve was for. Ms. Reavey noted that these are funds set-aside for unexpected operational risk or needs. Mr. Dao noted that the agency does not own the freeway system, and under an agreement with Caltrans, the agency is responsible for maintaining certain aspects of the lane, which in the event of an incident, could leave the agency's finances at risk.

Commissioner Narum asked if there is a goal or target amount to keep in the reserve. Ms. Reavey stated that there is no targeted amount set in the unrestricted funds.

Commissioner Diep wanted to know if there is a target amount that the agency is trying to meet in regards to the operational risk reserve. Ms. Reavey stated that staff is working with legal counsel to identify that target in the expenditure plan.

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

Yes: Narum, Mei, Haggerty, Haubert, Diep

No: None

Abstain: None

Absent: None

## **5.2. Express Lane System Manager/Program Support Update**

Liz Rutman presented an update on the express lane system manager/ program support. She noted that the current System Manager for I-680 was procured in 2016 to support the new northbound express lane implementation. That agreement, which includes an optional task to provide operational support services, will culminate in System Acceptance of the new I-680 Express Lanes Project at the end of the one-year warranty period in 2021. With a growing express lane program for both the Sunol JPA and Alameda CTC, there is a need for additional strategic and policy advice and program support, a scope for which the current System Manager team was not solicited. Alameda CTC staff will be seeking approval to release an RFP for System Manager whose scope will include provision of Express Lane Program Support Services associated with the I-680 Sunol Express Lanes.

Commissioner Haggerty asked how many consultants are working on operations of the lane. Mr. Dao and Ms. Rutman stated that there is one system integrator and one system manager overseeing the integrator work for the I-680 Express Lanes.

Commissioner Haggerty asked if the agency has had discussions with MTC on having one region-wide system integrator. Mr. Dao noted that there are very few firms who do system integrator work, but there is a desire to have one integrator operating for the entire Bay Area express lane network.

*This item was for information only.*

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

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

*This item was for information only.*

**5.4. I-680 Project Delivery Status Update.**

Trinity Nguyen presented an update on the I-680 project delivery status, which included scheduled milestones as well as delivery milestones. Jhay Delos Reyes presented an update on the SR-262 (Mission Boulevard) Cross Connector project including a summary of existing studies and examples of possible alternatives.

Commissioner Haggerty asked if there was a possibility to have an express lane on the Route 84 expressway. Mr. Dao noted that Route 84 is not included in the express lane legislation but staff could research that option, conduct a white paper, and bring information back to the Authority.

*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, April 9, 2018 at 9:30a.m.

Location: Alameda CTC Offices, 1111 Broadway, Suite 800, Oakland, CA 94607

Attested by:



Vanessa Lee,  
Clerk of the Commission

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# Memorandum

4.2

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• 510.208.7400

• www.AlamedaCTC.org

**DATE:** April 2, 2018

**TO:** I-680 Sunol Smart Carpool Lane Joint Powers Authority

**FROM:** Liz Rutman, Director of Express Lanes Implementation and Operations

**SUBJECT:** I-680 Sunol SMART Carpool Lane JPA Annual Report

## Recommendation

This item is to inform the Committee that the I-680 Southbound Sunol Express Lane FY2016-17 Annual Report has been prepared and completed for distribution as amended by the Admin Code. This item is for information only.

## Summary

Staff provides the Sunol Smart Carpool Lane Joint Powers Authority (JPA) Board the attached I-680 Southbound Sunol Express Lane FY2016-17 Annual Report, which includes key project and lane information and milestones, corridor usage, toll rate data, and financial information.

## Background

This seventh annual report is responsive to the JPA Administrative Code requirement that the managing agency shall prepare or oversee the preparation of an annual report to the governing board and the member agencies.

## Attachment:

- A. I-680 Southbound Sunol Express Lane FY2016-17 Annual Report

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Sunol Smart Carpool Lane Joint Powers Authority  
Alameda County Transportation Commission

4.2A

# I-680 Sunol Southbound Express Lane



# Annual Report

FY2016-17



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## Message from the Chair



September 20, 2017 marked the seven-year anniversary of the first express lane opening in Northern California. Since opening, more than 4.7 million solo drivers have chosen to use the I-680 Sunol Express Lane, reaching their destinations at speeds generally 10-15 mph faster than the general purpose lanes. During fiscal year 2016-17, more than 965,000 vehicles that would have used the general purpose lanes paid a toll to use the express lane, reducing congestion within the corridor while maintaining reliability within the high-occupancy vehicle (HOV) lane.



The next step in the evolution of the corridor is the implementation of the I-680 Sunol addition, a new northbound express lane parallel to the existing southbound express lane along the Sunol Grade and conversion of the existing I-680 Sunol southbound express lane to a continuous access system. Construction of these projects is slated to begin in early 2018.

— **Mayor Jerry Thorne,**  
City of Pleasanton,  
Chair, Sunol Smart Carpool  
Lane Joint Powers Authority

**"The express lane functions with excellent service levels.**

**Carpoolers, toll-paying solo drivers and general purpose lane users all continue to benefit from the lane."**

— **Arthur L. Dao,** Executive Director, Alameda CTC



During the morning commute, motorists in the express lane travel 10-15 mph faster than those traveling in general purpose lanes.



# The I-680 Sunol Southbound Express Lane

Since it opened in September 2010 as Northern California’s first express lane facility, more than 4.7 million solo drivers have chosen to get to their destination faster by using the I-680 Sunol Express Lane. Located on a 14-mile stretch of southbound Interstate 680 from Highway 84 south of Pleasanton to Highway 237 in Milpitas, the express lane was designed to manage growing traffic congestion on I-680 and to provide people with a new commute choice between the East Bay and Silicon Valley. It is governed by the Sunol Smart Carpool Lane Joint Powers Authority (Sunol JPA).



set to 2 or 3+. The California Highway Patrol (CHP) provides toll enforcement to prevent access and toll violations. In fiscal year 2016-17, CHP issued more than 400 citations for HOV violations.

**Access to the carpool lane by toll-paying users is regulated to ensure reliable travel times. In FY2016-17, express lane drivers enjoyed average speeds 10-15 mph faster than speeds in general purpose lanes ...**



The I-680 Sunol Express Lane operates Monday through Friday from 5 a.m. to 8 p.m. The operation is fully electronic, with no tollbooths, so customers do not need to slow down or stop to pay. Solo drivers who want to use the lane need a FasTrak® toll tag (a standard tag or the Flex tag that became available in mid-2015). Each time drivers use the express lane, the toll amount is deducted from their FasTrak account balance. Carpools, motorcycles, transit vehicles and permitted zero- and low-emission vehicles with HOV-eligible stickers may use the express lane for free without a toll tag, with a standard FasTrak stored in its mylar bag or with a FasTrak Flex toll tag

Usage of the toll lane has increased steadily since opening. During FY2016-17, more than 965,000 toll-payers used the express lane, an 18 percent increase over the previous year. Toll rates were dynamically priced based on real-time traffic conditions in the corridor. Assessed tolls averaged \$2.21 per trip. An estimated 25 percent of all express lane users this year were toll-paying. Access to the lane by toll-paying users is regulated to ensure reliable travel times for carpool lane users; express lane drivers enjoyed average speeds 10-15 mph faster than speeds in general purpose lanes in the most congested segment of the corridor, during the morning commute.

## Express Lane Performance

The express lane corridor has seen increased traffic in all lanes over the past several years. In FY2016-17, as compared to FY2015-16, the average daily volume increases for both the express and general purpose lanes were approximately 14 percent.

Even with annual increases in usage, the express lane continues to function with excellent service levels. This is due, in part, to the dynamic pricing which helps keep congestion in the express lane at a manageable level. Moreover, general purpose lane users continue to benefit from having over 4 percent of traffic that would otherwise be in the general purpose lanes use the express lanes as toll-paying solo drivers. Overall, approximately 14 percent of the total volume in the corridor used the express lane.

Figures 1-4 that start on the next page help to answer key questions relating to the existing I-680 Sunol Southbound Express Lane:

- **What benefits does the express lane provide?**
- **Where are corridor users going?**
- **How much does it cost to use the express lane?**



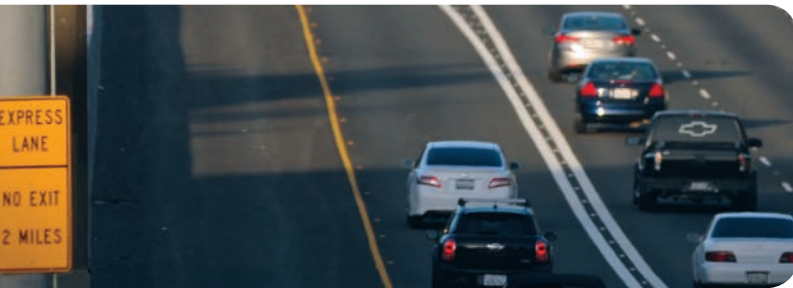
**The I-680 Sunol Express Lane is part of the major commute route connecting the Tri-Valley Area (Dublin, Livermore and Pleasanton) with South Bay cities and Silicon Valley businesses.**



Figure 1

## Heat Maps - Monitoring the Corridor

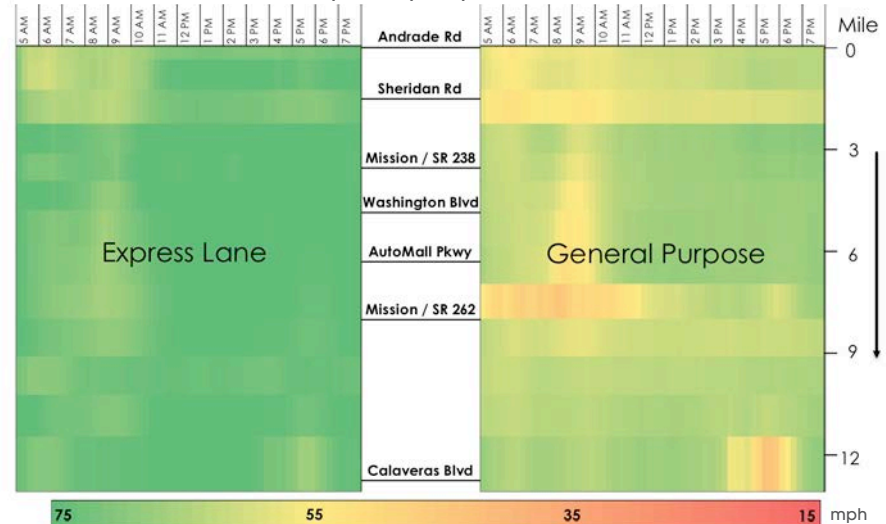
These heat maps are graphical representations of the overall condition of the corridor, showing the average speeds and level of service (LOS) along the express lane corridor and throughout the day for both the express and general purpose lanes. These maps show the benefits that express lane users experience. The scale bar at the bottom indicates the meaning of the color variations in the map. 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).



Average speeds in the express lane ranged from 55 to 70 mph during the morning commute hours (5 a.m. to 11 a.m.) with lower speeds occurring in the vicinity of Sheridan Road and Auto Mall Parkway; average speeds throughout the rest of the day exceeded 70 mph. The express lane operated at LOS C or better at all times, with LOS C occurring in the peak hour in between Washington Boulevard and Auto Mall Parkway. By comparison, the general purpose lanes experienced average speeds as low as 40 mph and LOS D for much longer periods of time and throughout a greater portion of the corridor.

### I-680 Sunol Average Speed Heat Map

Monday-Friday, July 2016-June 2017



### I-680 Sunol Average Density Heat Map

Monday-Friday, July 2016-June 2017

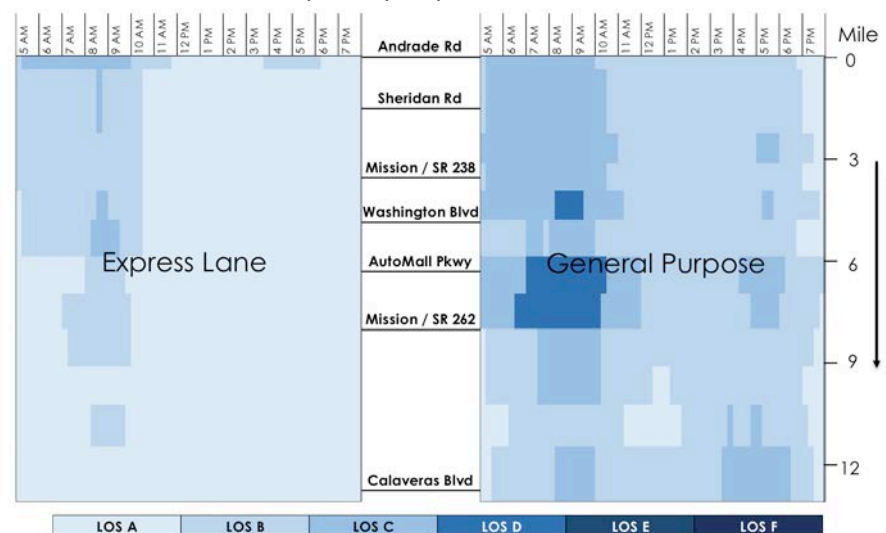




Figure 2

## Speed Differentials – Express Lane Benefits

During the morning commute period (5-11 a.m.), motorists in the express lane traveled 10-15 mph faster than those traveling in general purpose lanes. The average morning peak speed differential was the greatest in the central segment, which is typically the most congested portion of the corridor.

Segment	Avg Speed Differential (mph)
North	9
Central	14
South	10

### I-680 Sunol Corridor

Monday–Friday, FY2016-17  
5 a.m. to 11 a.m.



Figure 3

## Destination Chart – Evaluating Express Lane Usage

Approximately 41 percent of toll users within the corridor travel the entire length from Andrade Road to Calaveras Boulevard, and 68 percent originate at the first entrance, Andrade Road. Almost 93 percent travel the segment between Washington Boulevard and Mission Boulevard, making it the most utilized, and generally most congested, segment within the corridor.

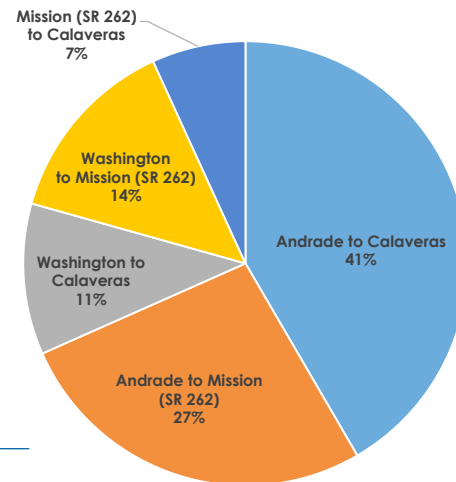
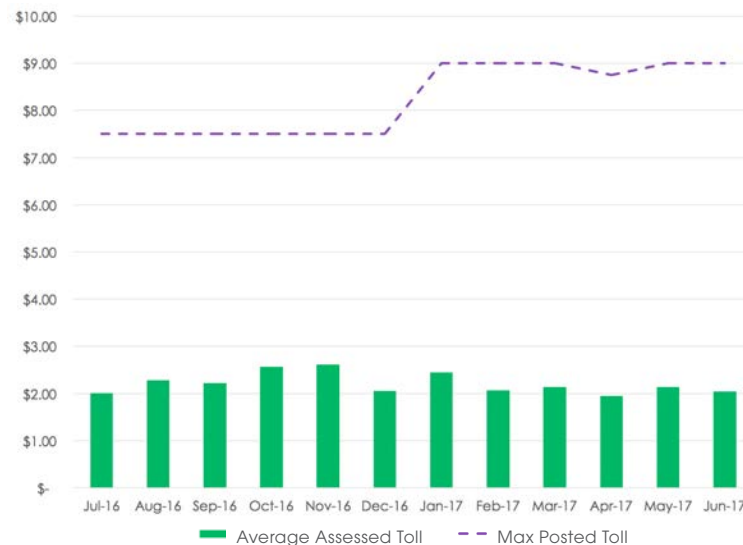


Figure 4

## Toll Rates – Keeping Express Lanes Flowing

In 2016, toll rates ranged from \$0.30 minimum to a set maximum value of \$7.50. In January 2017, the minimum and maximum tolls increased for the first time since opening in 2010, to range from \$0.50 to \$9.00. During FY2016-17, the average peak-period (5-11 a.m.) posted toll rate to travel the entire corridor was \$3.24, and to travel just the central segment from Washington Boulevard to Mission Boulevard (SR 262) was \$1.41.

The average assessed toll for all tolled trips in FY2016-17 ranged from \$1.94 to \$2.61, depending on the month.



JUMP TO WEBSITE:

<https://www.alamedactc.org/680Express>

I-680 Sunol Southbound Express Lane • FY2016-17 Annual Report • page 7

## Financial Information, FY 2016-17

When the Sunol JPA was formed in 2010, it agreed to reinvest the net revenues derived from the express lanes directly back into the project corridor. Toll revenues are used to first pay for operating and maintaining the I-680 Express Lane, and then to fund additional transit and transportation projects in the corridor, such as the new express lane project on northbound I-680 that will break ground in early 2018.

- Total net position increased by \$0.15 million or 3.4 percent from \$4.54 million to \$4.70 million as of June 30, 2017, as compared to June 30, 2016. This increase is mostly due to a decrease in liabilities related to an accrual for project management services. Capital assets, net of accumulated depreciation, comprised \$1.59 million or 33.7 percent of the total net position at June 30, 2017.
- For the year ended June 30, 2017, cash and cash equivalents increased by \$0.03 million or 1.0 percent from \$3.40 million to \$3.43 million. This increase is mostly related to toll revenue collections which were slightly more than operating expenses paid during the fiscal year.
- Operating revenue was \$2.08 million during fiscal year 2017, a negligible decrease of \$0.08 million or 3.7 percent from fiscal year 2016.

- The Sunol JPA's total operating expenses including depreciation were \$1.94 million during fiscal year 2017, an increase of \$0.07 million or 3.5 percent from fiscal year 2016. This is a nominal increase in operating expenses over the prior fiscal year. Operating expenses of \$1.72 million for fiscal year 2017 were primarily comprised of program operations and maintenance costs.

**Toll revenues are used to first pay for operating and maintaining the I-680 Express Lane, and then to fund additional transit and transportation projects in the corridor, such as the new express lane project on northbound I-680 that will break ground in early 2018.**



# Coming Soon: I-680 Sunol Northbound Express Lane

The I-680 Sunol Express Lane is part of the growing San Francisco Bay Area Express Lanes Network. On completion in 2035, the Bay Area will have 550 miles of express lanes operated by the Metropolitan Transportation Commission, Santa Clara Valley Transportation Authority (VTA) and Alameda CTC. These agencies, as well as the Contra Costa Transportation Authority and the Solano Transportation Authority, are working together to convert existing carpool lanes into express lanes and to close gaps in the carpool network.

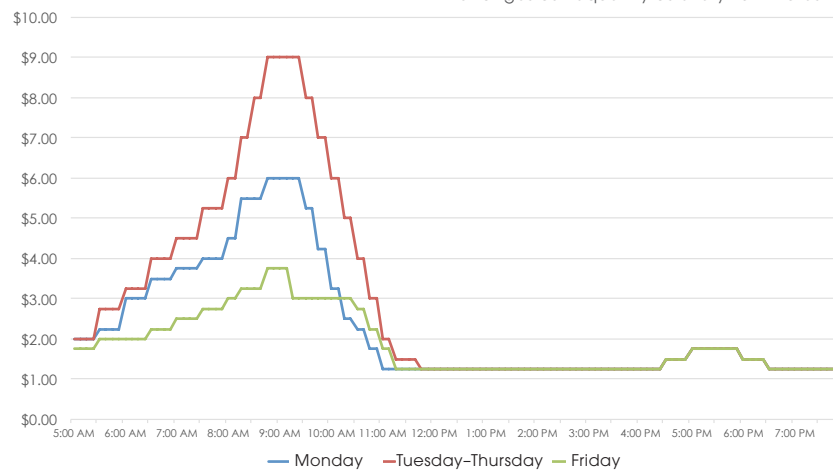


Construction of the Sunol JPA's northbound I-680 Sunol Express Lane from Mission Boulevard (SR 262) to Vallecitos Road (SR 84) began in early 2018. The existing southbound lane will concurrently be converted from a restricted access to a continuous access facility, allowing for more users to take advantage of express lane benefits. The new northbound and converted southbound express lanes will open to traffic in 2020. While the I-680 Northbound Express Lane is under construction, the existing I-680 Southbound lane is expected to remain in operation, but some lane shifts will be required. In anticipation of upcoming construction impacts, the existing southbound express lane deployed static time-of-day pricing in July 2017 and will do so until the new express lane goes live. The scheduled toll rates to travel the entire length of the express lane are shown in Figure 5 below.

**Figure 5: I-680 Sunol Express Lane Static Toll Rate**

Full Corridor Travel, Starting July 2017

- Time-of-day pricing
- Changes as frequently as every 15 minutes



### Sunol Smart Carpool Lane Joint Powers Authority

The Sunol Smart Carpool Lane Joint Powers Authority is an independent joint powers authority created to operate the I-680 Express Lane. Its board of directors consists of five elected officials, four voting members from Alameda County and one voting member from Santa Clara County. Voting rights were determined based on each county's share of road miles within the corridor (approximately one-fifth of corridor miles are within Santa Clara County).

The Sunol JPA meets monthly, and meetings are open to the public. Meeting agendas and minutes are posted on the Alameda CTC website at <http://www.alamedactc.org/events/upcoming/>

### Partnerships

The Alameda County Transportation Commission, the California Department of Transportation and the California Highway Patrol provide services to the Sunol JPA contractually. For toll collection, the Sunol JPA has an agreement with the Bay Area Toll Authority to use its FasTrak® electronic toll-collection system.

### More Information

For more information about the I-680 Express Lane and future express lane projects, visit <http://www.alamedactc.org/ExpressLanes>.

Visit [www.bayareaexpresslanes.org](http://www.bayareaexpresslanes.org) for more information about the envisioned regionwide express lane network.

### Sunol JPA Members

**Chair:** Jerry Thorne, City of Pleasanton Mayor,  
Alameda CTC Commissioner

**Vice Chair:** Lily Mei, City of Fremont Mayor,  
Alameda CTC Commissioner

**Members:** Lan Diep, San Jose City Councilmember,  
VTA Board Member

Scott Haggerty, Alameda County Supervisor, District 1,  
Alameda CTC Commissioner

David Haubert, City of Dublin Mayor,  
Alameda CTC Commissioner

**Staff Liaison:** Arthur L. Dao, Alameda CTC Executive Director  
Liz Rutman, Alameda CTC Director of Express Lanes  
Implementation and Operations

**Website:** [www.alamedactc.org/680Express](http://www.alamedactc.org/680Express)

**Facebook:** [www.facebook.com/AlamedaCountyExpressLanes](http://www.facebook.com/AlamedaCountyExpressLanes)

**Address:** Alameda County Transportation Commission  
Sunol Smart Carpool Lane Joint Powers Authority  
1111 Broadway, Suite 800, Oakland, CA 94607





# Memorandum

5.1

1111 Broadway, Suite 800, Oakland, CA 94607

• 510.208.7400

• www.AlamedaCTC.org

**DATE:** April 2, 2018

**TO:** I-680 Sunol Smart Carpool Lane Joint Powers Authority

**FROM:** Liz Rutman, Director of Express Lanes Implementation and Operations

**SUBJECT:** I-680 Express Lanes (PN 1408.000): Approve and authorize the Executive Director to execute Amendment No. 5 to Service Agreement 10R390000 with the California Highway Patrol to extend the term of the agreement for two additional years with an additional budget of \$850,000 for a total not-to exceed amount of \$2,500,000

## Recommendation

It is recommended that the Committee approve and authorize the Executive Director to execute Amendment No. 5 to Service Agreement 10R390000 with the California Highway Patrol to extend the term of the agreement for two additional years and add additional budget of \$850,000 for a total not-to exceed amount of \$2,500,000.

## Summary

The Alameda CTC, acting as the managing agency of the JPA, operates and maintains the I-680 Sunol Southbound Express Lane to provide travel reliability for the public. The JPA maintains an agreement with the California Highway Patrol (CHP) to provide the necessary patrol and enforcement services that are an essential element of maintaining optimal operations on the Express Lane. The current agreement expires on June 30, 2018 and will expend over 90% of the current total budget. An extension of this service agreement to June 2020, along with the corresponding increase in budget, will ensure continued coverage by the CHP necessary for the I-680 Sunol Express Lane operation.

## Background

Pursuant the California Streets and Highway Code Section 149.5, the agreement between the JPA and the CHP identifies procedures for enforcement by the CHP to prohibit unauthorized use of the express lanes and authorizes reimbursement of this state agency for the enforcement activities. On a regular basis, the CHP officers are present in the corridor to pullover suspected toll violators in addition to enforcing overall traffic safety. It is necessary to

continue CHP-provided enforcement services even alternative violation enforcement strategies cannot detect all types of unauthorized use.

Through a cooperative effort with CHP, adjustments to the staffing plan were made beginning in January 2018. These changes have increased staffing and enabled CHP to fill the shifts more consistently, significantly increasing the patrol hours devoted to the express lane corridor. Consequently, as shown in Attachment A, the monthly enforcement contacts and express lane violation citations have more than doubled since this change. In addition, the enhanced visibility of CHP patrols within the corridor is expected to create a deterrent to toll evasion.

Table A below summarizes the contract actions related to Agreement No. 10R390000. The current agreement expires on June 30, 2018, and an extension of this service agreement will ensure continued coverage by the CHP necessary for the I-680 Southbound Express Lane operation.

**Table A: Summary of Agreement No. 10R390000**

<b>Agreement Status</b>	<b>Work Description</b>	<b>Value</b>	<b>Total Not-to-Exceed Value</b>
Original Agreement August 2010	traffic control services for patrol and enforcement of the facility	\$368,653	\$368,653
Amendment No. 1 June 2011	traffic control services for patrol and enforcement of the facility (1 year extension)	\$106,347	\$475,000
Amendment No. 2 June 2012	traffic control services for patrol and enforcement of the facility (2 year extension)	\$350,000	\$825,000
Amendment No. 3 June 2014	traffic control services for patrol and enforcement of the facility (2 year extension)	\$400,000	\$1,225,000
Proposed Amendment No. 4 June 2016	traffic control services for patrol and enforcement of the facility (2 year extension)	\$425,000	\$1,650,000
<i>Proposed Amendment No. 5 April 2018</i>	<i>traffic control services for patrol and enforcement of the facility (2 year extension)</i>	<i>\$850,000</i>	<i>\$2,500,000</i>
<b>Total Amended Agreement Not-to-Exceed Amount</b>			<b>\$2,500,000</b>

**Fiscal Impact:** The fiscal impact for approving this item is \$850,000 of toll-revenue funds, which will be included in the I-680 Sunol Express Lane Operating Budgets adopted for FY18-19 and FY 19-20.

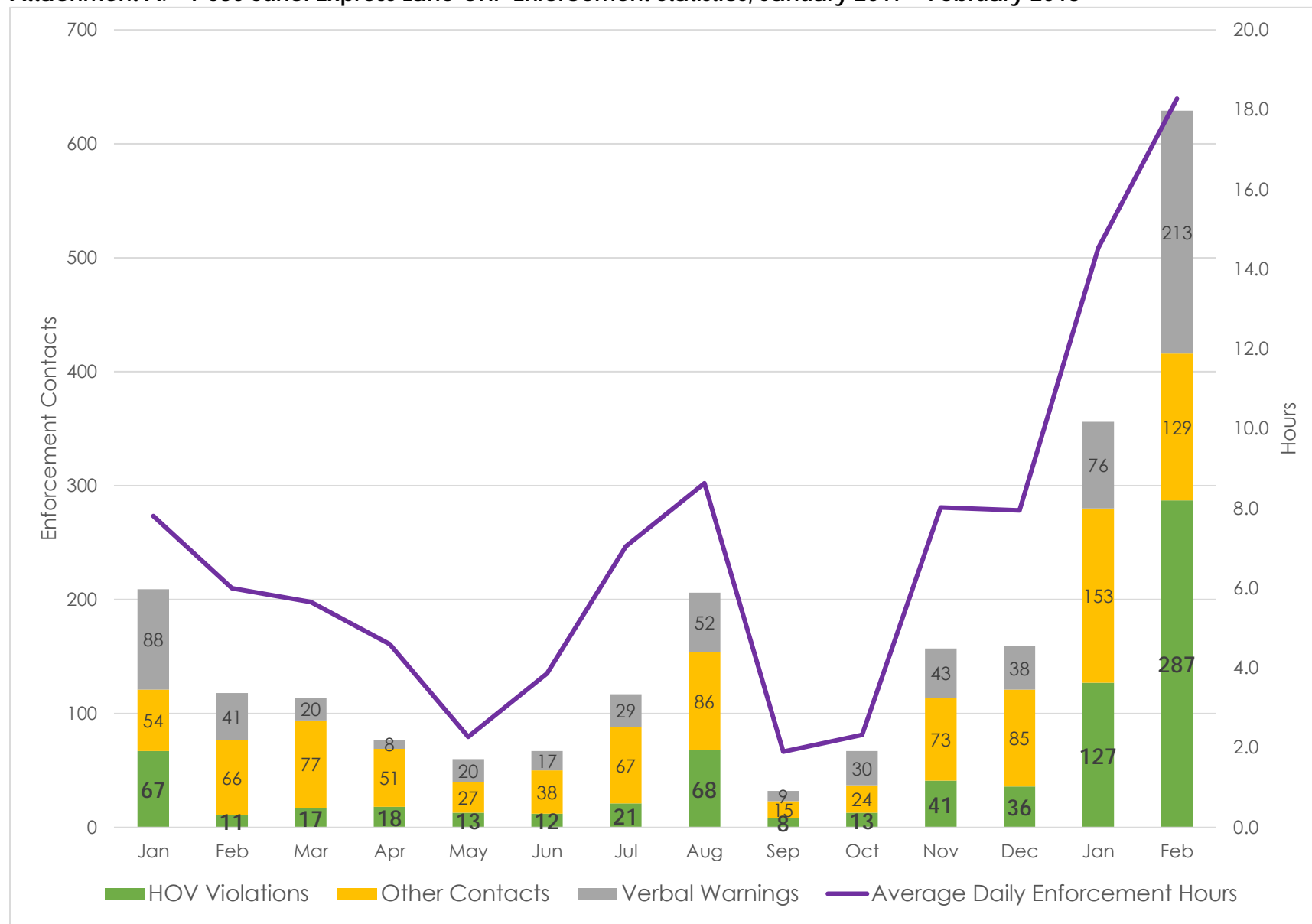
**Attachment:**

- A. CHP Express Lane Enforcement Statistics, January 2017 – February 2018

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Attachment A. – I-680 Sunol Express Lane CHP Enforcement Statistics, January 2017 – February 2018



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# Memorandum

5.2

1111 Broadway, Suite 800, Oakland, CA 94607

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• www.AlamedaCTC.org

**DATE:** April 2, 2018

**TO:** I-680 Sunol Smart Carpool Lane Joint Powers Authority

**FROM:** Liz Rutman, Director of Express Lanes Implementation and Operations  
Patricia Reavey, Deputy Executive Director of Finance and Administration

**SUBJECT:** Interstate 680 Express Lanes Expenditure Plan

## Recommendation

It is recommended that the Committee approve the Interstate 680 Express Lanes Expenditure Plan Development approach.

## Summary

Authorized under California State Assembly Bill (AB) 2032 in September 2004, the Sunol Smart Carpool Lane Joint Powers Authority (JPA) implemented the Interstate (I-680) Sunol Southbound Express Lane to manage congestion along a 14 mile corridor from SR 84 near the City of Pleasanton to SR 237 in the City of Milpitas. The express lane facility opened to traffic in September 2010. The Alameda County Transportation Commission (Alameda CTC) is the managing agency for the express lane.

AB 2032 directs that the revenue generated from the express lanes be available to the administering agency for the direct expenses related to the operation (including collection and enforcement), maintenance, and administration of the program. All remaining net revenues are to be allocated pursuant to an expenditure plan adopted biennially by the administering agency for transportation purposes within the corridor that may include funding for the construction of high-occupancy vehicle facilities and the improvement of transit services that directly service the corridor.

Through Fiscal Year 2014-15, Alameda CTC subsidized operations and maintenance of the I-680 Sunol Express Lane with local grant funding. Beginning with Fiscal year 2015-16, such subsidies were no longer necessary. However, while the I-680 Sunol Smart Carpool Lane is solvent and able to pay their bills as they become due, the financial position of the express

lanes does not yet allow for projected unrestricted net revenues in any substantial amount that could be allocated to fund other transportation projects in the 680 corridor.

Based on an assessment of operational risk completed by staff for the I-580 Express Lanes in conference with legal counsel and the many similarities of the agreements between Caltrans and the Alameda CTC for the I-580 Express Lanes and the Sunol Smart Carpool Lane JPA for the I-680 Express Lane for operations and maintenance, it has been recommended by legal counsel that an Operational Risk Reserve for both the I-580 Express Lanes and the I-680 Express Lanes be established at the \$20 million level. While a clear path toward reaching that goal can be established for the I-580 Express Lanes (as demonstrated in the expenditure plan going to Alameda CTC's I-580 Express Lane Policy Committee today), with the limited net income available annually on the I-680 Express Lane, it will take far more time to meet the goal.

In reviewing the updated budget for fiscal year 2017-18 approved by the I-680 Sunol Smart Carpool Lane Joint Powers authority last month, the agency will need to set aside an additional \$18.5 million in future years before it would have any excess net revenues to program towards capital needs in an expenditure plan. Staff recommends that development of an expenditure plan be deferred until such time as an operational risk reserve balance of \$20 million is projected to be established within the following five year period and a more substantial net revenue balance is expected to be available for programming towards capital project needs.

## **Background**

AB 2032 directs that the revenue generated from the express lanes be available to the administering agency for the direct expenses related to the operation (including collection and enforcement), maintenance, and administration of the program. All remaining net revenues are to be allocated pursuant to an expenditure plan adopted biennially by the administering agency for transportation purposes within the corridor that may include funding for the construction of high-occupancy vehicle facilities and the improvement of transit services that directly service the corridor.

Staff has prepared the I-680 Express Lanes Financial Projection, Fiscal Year 2016-2017 through Fiscal Year 2017-2018 (Financial Projection), shown in Attachment A. This projection reflects the following categories of committed expenditures:

- Operations & Maintenance Expenses
- Express Lane Administration Expenses
- Required Maintenance Contribution to fund anticipated non-operating expenditures forecasted in the following years
- Required Operational Risk Reserve, accumulated up to the goal of \$20 million

The goal for the Operational Risk Reserve was developed in consultation with Alameda CTC's legal counsel and is consistent with the I-580 Express Lanes program goals. Due to the inability

to project when the target reserve levels would be achieved, the Financial Projection does not support the development of an expenditure plan at this time.

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

**Attachment:**

- A. Interstate 680 Express Lanes Financial Projection, Fiscal Year 2016-2017 through Fiscal Year 2017-2018

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<b>I-680 Express Lanes Financial Projection</b>		Year 1 <b>FY 16-17</b>	Year 2 <b>FY 17-18</b>	Year 3 <b>FY 18-19</b>
<b>Notes</b>		<b>Actual</b>	<b>Budgeted</b>	<b>Projected</b>
<b>In thousands of dollars</b>				
Total Revenues	1	\$2,094	\$2,500	\$2,600
<b>Committed Expenses</b>				
Operations & Maintenance Expense	2	\$1,654	\$2,195	\$2,200
Express Lane Administration Expense	2	\$61	\$126	\$129
Net Surplus/(Deficit) Before RM and ORR		\$379	\$179	\$271
Required Maintenance (RM) Contribution	3	\$500	\$500	\$0
Required Operational Risk Reserve (ORR) Contribution	4	\$0	\$1,500	\$500
<b>Unrestricted Net Position</b>		<b>(\$121)</b>	<b>(\$1,821)</b>	<b>(\$229)</b>
<b>Cumulative Maintenance Contribution</b>	5	<b>\$1,000</b>	<b>\$1,500</b>	<b>\$1,500</b>
<b>ASSUMPTIONS</b>				
1 Operating Revenue growth estimated at 3% per year starting with FY 17-18.				
2 Operations and Maintenance Expense and Administrationn Expense growth estimated at 2% per year starting in FY 18-19.				
3 Set asides for maintenance are required based on anticipated future technology upgrades, civil infrastructure replacement, and/or pavement rehabilitation needs for the subsequent year and/or subsequent few years as needed based on the balance in the Cumulative Maintenance Contribution account.				
4 Operational Risk Reserves are to be accumulate up to the target of \$20 million, depending on available net operating surplus.				
5 The Beginning Net Position carried over from FY 15-16, net of investments in capital assets, is \$2,734,000, comprised of \$500,000 Cumulative Maintenance Reserve and \$2,234,000 Unrestricted Net Position.				

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# Memorandum

5.3

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**DATE:** April 2, 2018

**TO:** I-680 Sunol Express Lane Joint Powers Authority

**FROM:** Liz Rutman, Director of Express Lanes Implementation and Operations

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

## 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 February 2018. See Attachment A for express lane operation limits.

The February 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 time savings and 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 plan has been in effect with rates changing as frequently as every 15 minutes.

### February 2018 Operations Update:

Over 76,000 express lane toll trips were recorded during operational hours in February, an average of approximately 3,800 per day. 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 1 summarizes the express lane speed and LOS at four points along the corridor during the morning commute hours in February. Although comprehensive traffic data is not currently available, daily observation of the corridor via closed circuit television cameras monitored by Alameda CTC staff suggests that the express lane continually provides higher speeds and better LOS than the general purpose lanes, particularly during peak commute hours.

Table 1. Speeds and Level of Service in Express Lane in February 2018  
Morning Commute (5 AM – 11 AM)

Express Lane Location	Average Speed Range (mph)	Average Speed (mph)	Average Express Lane LOS
Andrade Rd	62 - 84	71	B
Vargas Rd	64 - 83	72	B
Washington Blvd	40 - 86	66	C
Mission Blvd SR 262	69 - 84	75	B

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 for February 2018.

Table 2. Toll Rate Data for February 2018

Maximum Posted Toll (Travel Entire Corridor)	Average Assessed Toll (All Trips)
\$9.00	\$3.13

The estimated gross revenue generated from the I-680 Sunol express lane to date in Fiscal Year 2017-18 is \$1.8 million, while the forecast operation budget is \$1.5 million.

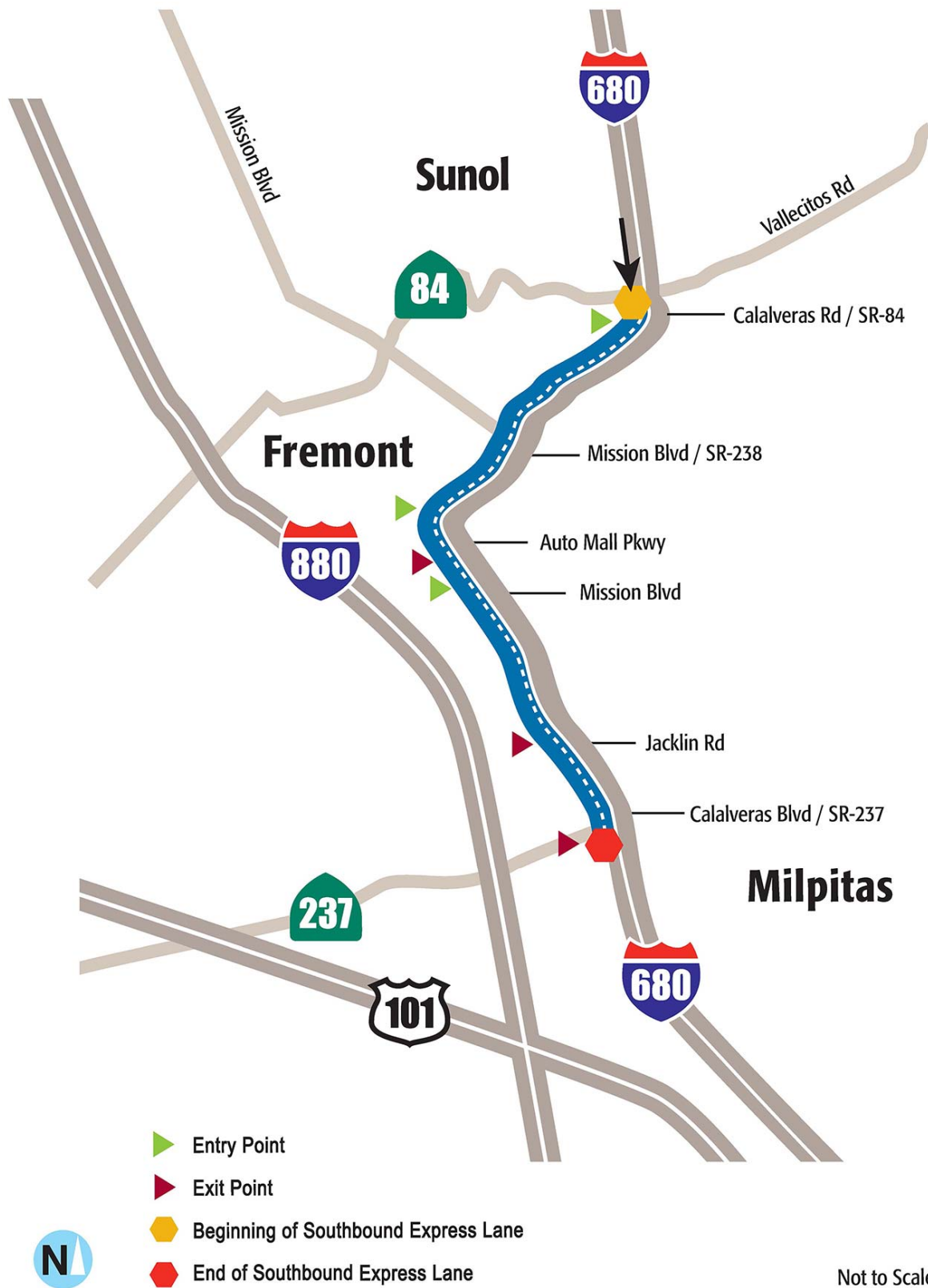
**Fiscal Impact:** There is no fiscal impact associated with the requested action.

**Attachment:**

A. I-680 Southbound Express Lane Location Map

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## Sunol I-680 Southbound Express Lane Location Map



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# Memorandum

5.4

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• www.AlamedaCTC.org

**DATE:** April 2, 2018

**TO:** Projects and Programs Committee

**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 projects. This item is for information only.

## 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 recently completed and/or anticipated for the next three months:**

- Civil construction began on March 5, 2018 after approval of required initial submittals. Progress to date is satisfactory.
- Visible work activities for the three months ahead will include:
  - Lane closures will be placed, primarily at night, to provide safe working areas for work on or near mainline 680 lanes
  - Placement of temporary barrier (K-rail) along the inside and outside shoulders of northbound I-680 to allow for median work and outside widening work
  - Clearing and grubbing of outside widening areas
  - Replacement of failed pavement slabs throughout the project limits
  - Early civil work for electric service points will continue through August 2018
  - Structure and retaining wall work will begin at both the Sheridan Road and Calaveras Road interchanges
  - Overhead tolling and sign gantries will begin to be constructed in the median, starting from the southern end of the project and proceeding northerly
- Schedule milestones will be refined after approval of the contractor's baseline Critical Path Method (CPM) schedule, anticipated in April 2018. Opportunities to improve the delivery milestones will be re-evaluated after approval and subsequent partnering discussions with the contractor.
- 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 April 19<sup>th</sup> 2018.

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

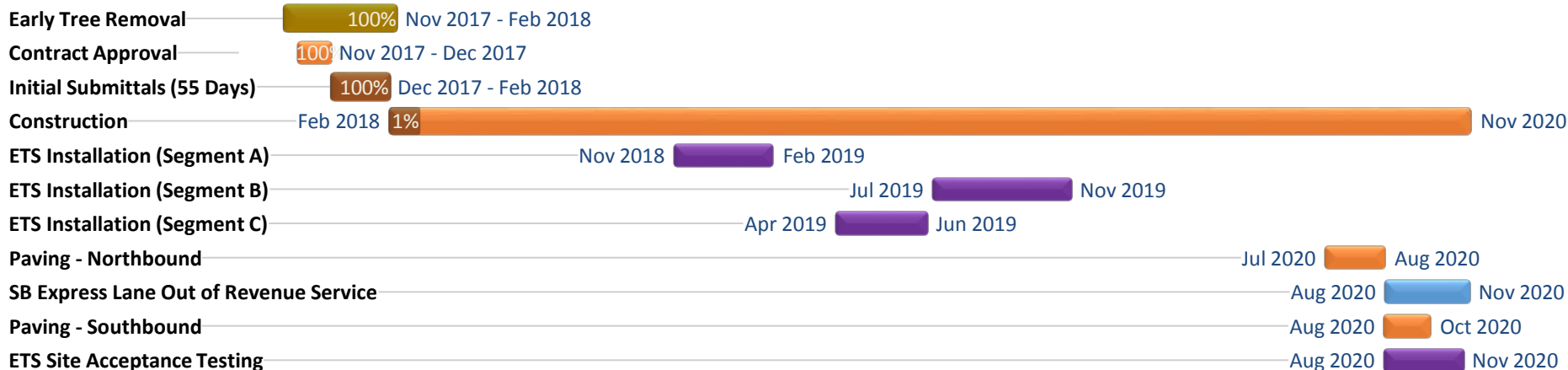
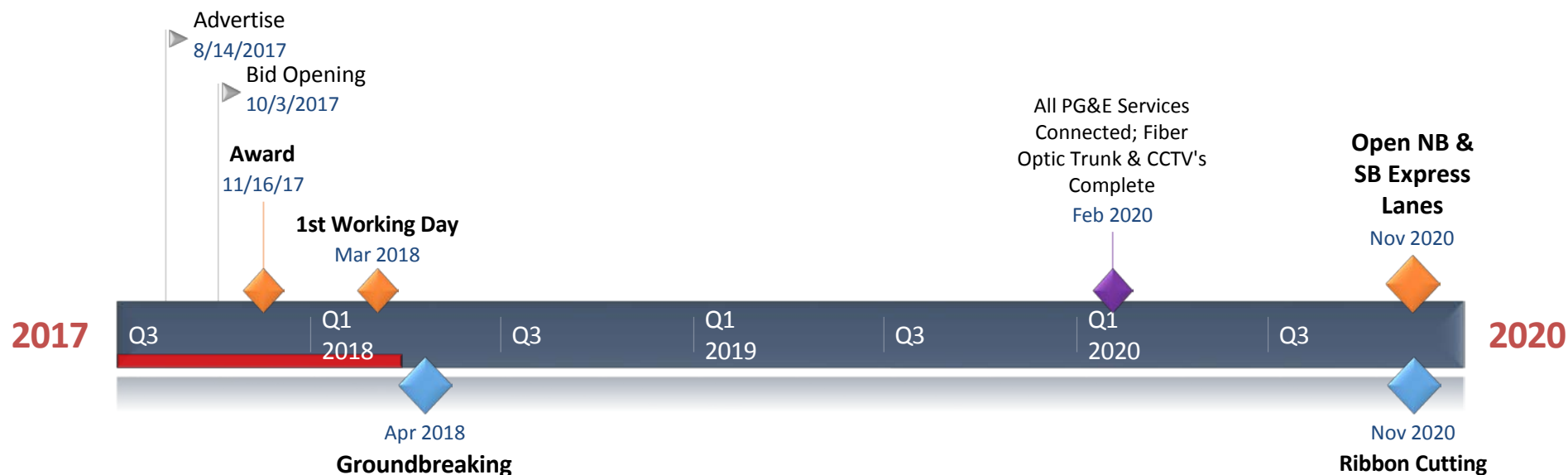
**Attachment:**

- A. I-680 Sunol Express Lanes Progress Update

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# I-680 Sunol Express Lanes

Progress Update: April 2018



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