



Meeting Notice

1111 Broadway, Suite 800, Oakland, CA 94607

• 510.208.7400

• www.AlamedaCTC.org

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Executive Director

Arthur L. Dao

I-680 Sunol Smart Carpool Lane Joint Powers Authority

Monday, September 11, 2017, 9:30 a.m.

Location:

1111 Broadway, Suite 800
Oakland, CA 94607

Teleconference Location:

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

Mission Statement

The mission of the Alameda County Transportation Commission (Alameda CTC) is to plan, fund, and deliver transportation programs and projects that expand access and improve mobility to foster a vibrant and livable Alameda County.

Public Comments

Public comments are limited to 3 minutes. Items not on the agenda are covered during the Public Comment section of the meeting, and items specific to an agenda item are covered during that agenda item discussion. If you wish to make a comment, fill out a speaker card, hand it to the clerk of the Commission, and wait until the chair calls your name. When you are summoned, come to the microphone and give your name and comment.

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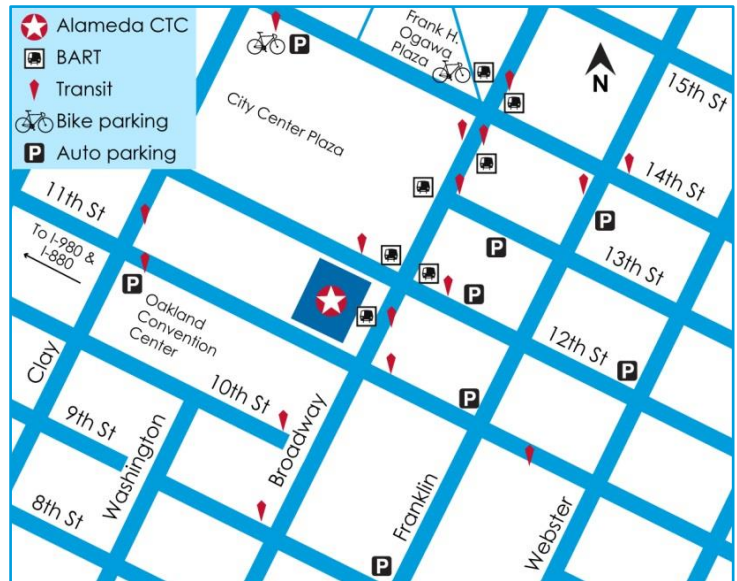
Glossary of Acronyms

A glossary that includes frequently used acronyms is available on the Alameda CTC website at www.AlamedaCTC.org/app_pages/view/8081.

Location Map

★ Alameda CTC
1111 Broadway, Suite 800
Oakland, CA 94607

Alameda CTC is accessible by multiple transportation modes. The office is conveniently located near the 12th Street/City Center BART station and many AC Transit bus lines. Bicycle parking is available on the street and in the BART station as well as in electronic lockers at 14th Street and Broadway near Frank Ogawa Plaza (requires purchase of key card from bikelink.org).



Garage parking is located beneath City Center, accessible via entrances on 14th Street between 1300 Clay Street and 505 14th Street buildings, or via 11th Street just past Clay Street. To plan your trip to Alameda CTC visit www.511.org.

Accessibility

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Meeting Schedule

The Alameda CTC meeting calendar lists all public meetings and is available at www.AlamedaCTC.org/events/upcoming/now.

Paperless Policy

On March 28, 2013, the Alameda CTC Commission approved the implementation of paperless meeting packet distribution. Hard copies are available by request only. Agendas and all accompanying staff reports are available electronically on the Alameda CTC website at www.AlamedaCTC.org/events/month/now.

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I-680 Sunol Smart Carpool Lane Joint Powers Authority Meeting Agenda Monday, September 11, 2017, 9:30 a.m.

1111 Broadway, Suite 800, Oakland, CA 94607

• 510.208.7400

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

1. Pledge of Allegiance

2. Roll Call

3. Public Comment

Chair: Mayor Jerry Thorne, City of Pleasanton

Vice Chair: Lily Mei, City of Fremont

Commissioners/Members: Scott Haggerty, David Haubert,
Lan Diep (Santa Clara Valley Transportation Authority)

Staff Liaison: Elizabeth Rutman

Executive Director: Arthur L. Dao

Clerk: Vanessa Lee

4. Consent Calendar

Page A/I

- 4.1. [Approve the July 10 2017 I-680 Sunol Smart Carpool Lane Joint Powers Authority \(JPA\) meeting minutes.](#)

1

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5. Regular Matters

- 5.1. [Authorize the Executive Director to execute Amendment No. 3 to the Cooperative Agreement with the Bay Area Toll Authority to perform transitioning and testing activities, for toll collection and customer services necessary for the continued operation of the Express Lane facility.](#)

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- 5.2. [I-680 Southbound Monthly Operations Status Update.](#)

7

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- 5.3. [I-680 Project Delivery Status Update.](#)

15

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6. Committee Member Reports

7. Staff Reports

8. Adjournment

Next Meeting: October 9, 2017

All items on the agenda are subject to action and/or change by the Committee.

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I-680 Sunol Smart Carpool Lane Joint Powers Authority Meeting Minutes Monday, July 10, 2017, 9:30 a.m.

4.1

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1. Pledge of Allegiance

2. Roll Call

A roll call was conducted. All members were present with the exception of Commissioner Mei and Commissioner Diep.

3. Public Comment

During this time Art Dao introduced the Steve Mattas, from Meyers Nave LLP, as the legal counsel for the I-680 JPA and I-580 PC Express lane committees

4. Consent Calendar

4.1. Approve the June 12, 2017 I-680 Sunol Smart Carpool Lane Joint Powers meeting minutes.

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

Yes: Thorne, Haggerty, Haubert

No: None

Abstain: None

Absent: Mei, Diep

5. Regular Matters

5.1. Status update on the operation of the I-680 Southbound Express Lane.

Liz Rutman provided an update on the operation of the I-680 Southbound Express Lane as of May 2017. She covered average toll trip data and roadway segment speeds and corridor performance information. Ms. Rutman reviewed average speeds and density, toll rates during operational hours and corridor heat maps. She concluded the update by reviewing estimated versus forecasted revenue for FY2016-17.

This item was for information only.

5.2. Monthly status update of the I-680 Northbound Express Lane Project.

Trinity Nguyen presented a monthly status update on the I-680 Northbound Express Lane project. She stated that since the last update to the committee there was a contractor outreach event held on June 13, 2017 for the I-680 Sunol Express lanes project. She noted that the California Transportation Commission allocated SHOPP funding for pavement rehabilitation for the project and Ms. Nguyen covered project implementation and key achievements for the project. She concluded by reviewing anticipated activities over the next three months and progress on the gap closure from Route 84 to Alcosta.

Commissioner Haubert asked when the construction contract will be approved. Ms. Nguyen stated that the construction contract will be awarded by Caltrans. Art Dao stated that all items to deliver the project that required Commission approval have been completed.

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, September 11, 2017 at 9:30a.m.

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

Attested by:

A handwritten signature in blue ink, appearing to read "Vanessa Lee", is written over a horizontal line.

Vanessa Lee,
Clerk of the Commission



Memorandum

5.1

1111 Broadway, Suite 800, Oakland, CA 94607

• PH: (510) 208-7400

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DATE: September 5, 2017

SUBJECT: I-680 Southbound Express Lane Operations (PN 1408.000): Approval of Amendment No. 3 to Cooperative Agreement with the Bay Area Toll Authority for Regional Customer Service Center Services

RECOMMENDATION: Authorize the Executive Director to execute Amendment No. 3 to the Cooperative Agreement with the Bay Area Toll Authority to perform transitioning and testing activities, for toll collection and customer services necessary for the continued operation of the Express Lane facility.

Summary

Prior to the opening of the I-680 Southbound Express Lane facility to traffic in September 2010, the Sunol Smart Carpool Lane Joint Powers Authority (JPA) entered into a cooperative agreement with the Bay Area Toll Authority (BATA) for toll collection and customer services necessary to operate the Express Lane facility. Toll collection relies on electronic transfer of files between the I-680 toll system and the customer service and account system implemented by BATA's consultant. Anytime there is a change in consultant on either side of the exchange, testing of the file transfers must be performed.

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 Northbound Express Lane and I-680 Southbound Express Lane Access Conversion projects. As a first step in implementation of the new toll system, and to accommodate the construction impacts associated with the projects, Kapsch will implement an interim toll system for the existing I-680 Southbound Express Lane. Staff requests approval of an amendment to the BATA agreement to test the interim toll system's file exchange interface and ensure continued operation of the Express Lane facility.

Background

The I-680 Southbound Sunol Express Lane facility spans over 14 miles from SR 84 near Pleasanton to SR 237 in the City of Milpitas. Motorists using the express lane enjoy travel

time savings and travel reliability benefits as the express lane optimizes the corridor capacity by providing a new choice to drivers. Single occupancy vehicles (SOVs) may choose to pay a toll and travel within the express 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.

Tolls for solo drivers have been collected through an all-electronic toll (AET) collection method by the use of FasTrak® transponders. In January 2010, the JPA entered into an agreement with BATA, the regional customer service center (CSC), to enable AET operation and provide customer services to the patrons. The original agreement was subsequently amended in September 2015 to reduce the unit transaction cost and extend the term of the agreement until December 31, 2016, and amended again in October 2016 to extend the term of the agreement until September 30, 2019. Under this agreement, toll transaction files are exchanged between the current express lane system, which was designed by ETCC, and BATA's CSC.

The I-680 Northbound Express Lane Project (Phase 1 Modified) will construct a new northbound HOV/Express Lane on I-680 from south of Auto Mall Parkway to SR 84. In conjunction with this project, the I-680 Southbound Express Lane Toll System Conversion Project will convert the existing southbound HOV/Express Lane from restricted to continuous access between Andrade Road and SR 262. Both projects will ensure operational consistencies with the I-580 Express Lanes, including implementation of automated toll evasion violation enforcement. In June 2016, the Alameda County Transportation Commission selected Kapsch as the TSI for the I-680 Northbound Express Lane and I-680 Southbound Express Lane Access Conversion projects. Kapsch will design a new tolls system to gather traffic and toll transaction information from the field sensors and exchange files with BATA's CSC for toll collection purposes.

Operation of the existing I-680 Southbound Sunol Express Lane is expected to continue throughout construction. As a first step in implementation of the new toll system, and to accommodate the construction impacts associated with the projects, Kapsch will implement an interim toll system for the existing I-680 Southbound Express Lane. To complete this interim toll system, the interface between the BATA CSC and the new Kapsch toll system must be tested to ensure toll transaction files and transponder status files can be correctly transferred between the systems.

Staff recommends that the JPA approve and authorize the Executive Director to execute Amendment No. 3 to the Cooperative Agreement with BATA to reimburse BATA for their consultant costs to perform transitioning and testing activities necessary for the continued operation of the Express Lane facility. All other terms of the agreement will remain unchanged.

Prior to opening the I-680 Northbound Express Lane for public use, the JPA will have to adopt a toll enforcement ordinance that will include such items as penalties for failure to pay the required tolls; penalties and administrative processes associated with toll evasion violations; and situations when toll evasion notices or penalties will be dismissed or waived. The administrative processes includes items such as processing violation notices, responding to customer inquiries about the notices, and preparing toll operator packages for and representing agency in court proceedings. Staff expects that these administrative processes will be delegated to BATA in a manner consistent with the process approved by the Alameda CTC Commission for the I-580 Express Lanes. Therefore, staff is expecting another amendment to the cooperative agreement with BATA to occur in 2019 to incorporate these new and improved toll collection and customer services.

Fiscal Impact: Approval of Amendment No. 3 to the agreement will encumber \$16,420 in toll revenue funds for expenditure in the Sunol JPA's FY 2017-18 operating budget.

Staff Contact

[Liz Rutman](#), Director of Express Lanes Implementation and Operations

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Memorandum

5.2

1111 Broadway, Suite 800, Oakland, CA 94607

• PH: (510) 208-7400

• www.AlamedaCTC.org

DATE: September 5, 2017

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 June and July 2017. See Attachment A for express lane operation limits.

The June/July 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 average speeds up to 17 mph higher than the general purposes lanes and lesser average lane densities than the general purpose lanes during the morning commute hours.

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.

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 is in

effect with rates changing as frequently as every 15 minutes. California Highway Patrol (CHP) officers provide enforcement services and the California Department of Transportation (Caltrans) provides roadway maintenance services through reimbursable service agreements.

June/July 2017 Operations Update: Over 89,000 and 79,000 express lane toll trips with FasTrak® toll tags were recorded during operational hours in June and July, respectively. Along with the HOV-eligible users, these express lane users generally experience higher speeds and lesser lane densities than the general purpose lanes. Lane density is measured by the number of vehicles per mile per lane and reported as Level of Service (LOS). LOS is a measure of freeway performance based on vehicle maneuverability and driver comfort levels, graded on a scale of A (best) through F (worst).

Table 1 summarizes the speed differentials and LOS at three segments during the morning commute hours in June and July.

Table 1. Speed Differentials and Level of Service for June/July 2017
Morning Commute (5 AM – 11 AM)

Express Lane Segment		Speed Differential Range (mph)	Average Speed Differential (mph)	Average Express Lane LOS	Average General Purpose Lane LOS
June	North (Andrade Rd to Washington Blvd)	10 – 15	13	B	C
	Central (Washington Blvd to SR 262)	14 – 17	15	B	C
	South (SR 262 to Calaveras Rd)	8 – 12	9	A	A
July	North (Andrade Rd to Washington Blvd)	8 – 13	11	B	C
	Central (Washington Blvd to SR 262)	13 – 16	15	B	C
	South (SR 262 to Calaveras Rd)	6 – 10	8	A	A

Attachment B presents the speed and density heat maps for the I-680 corridor during operational hours for the six-month period from January 2017 – June 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, and are used to evaluate whether the express lane is meeting both federal and state performance standards. From January through June, the average speeds in the express lane ranged from 60 to 70 mph during the morning commute hours (5 am to 11 am) with lower speeds occurring between Andrade Road and Sheridan Road; 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 during the morning commute hours between and Sheridan Road and SR 238, and for a short period of time between SR 238 and Auto Mall Parkway. By comparison, the general purpose lanes experienced average speeds as low as 40 mph and LOS D and E throughout portions of the corridor.

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 for June/July 2017

Month	Maximum Posted Toll (Travel Entire Corridor)	Average Assessed Toll (All Trips)
June	\$9.00	\$2.14
July	\$9.00	\$2.19

The estimated gross revenue generated from the I-680 express lanes in fiscal year 2016/17 is \$2.083 million, which is 0.8% less than was forecasted. In July 2017, the estimated gross revenue is \$212,500, which is 15.9% higher than the expected monthly operation budget.

Fiscal Impact: There is no fiscal impact.

Attachments

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

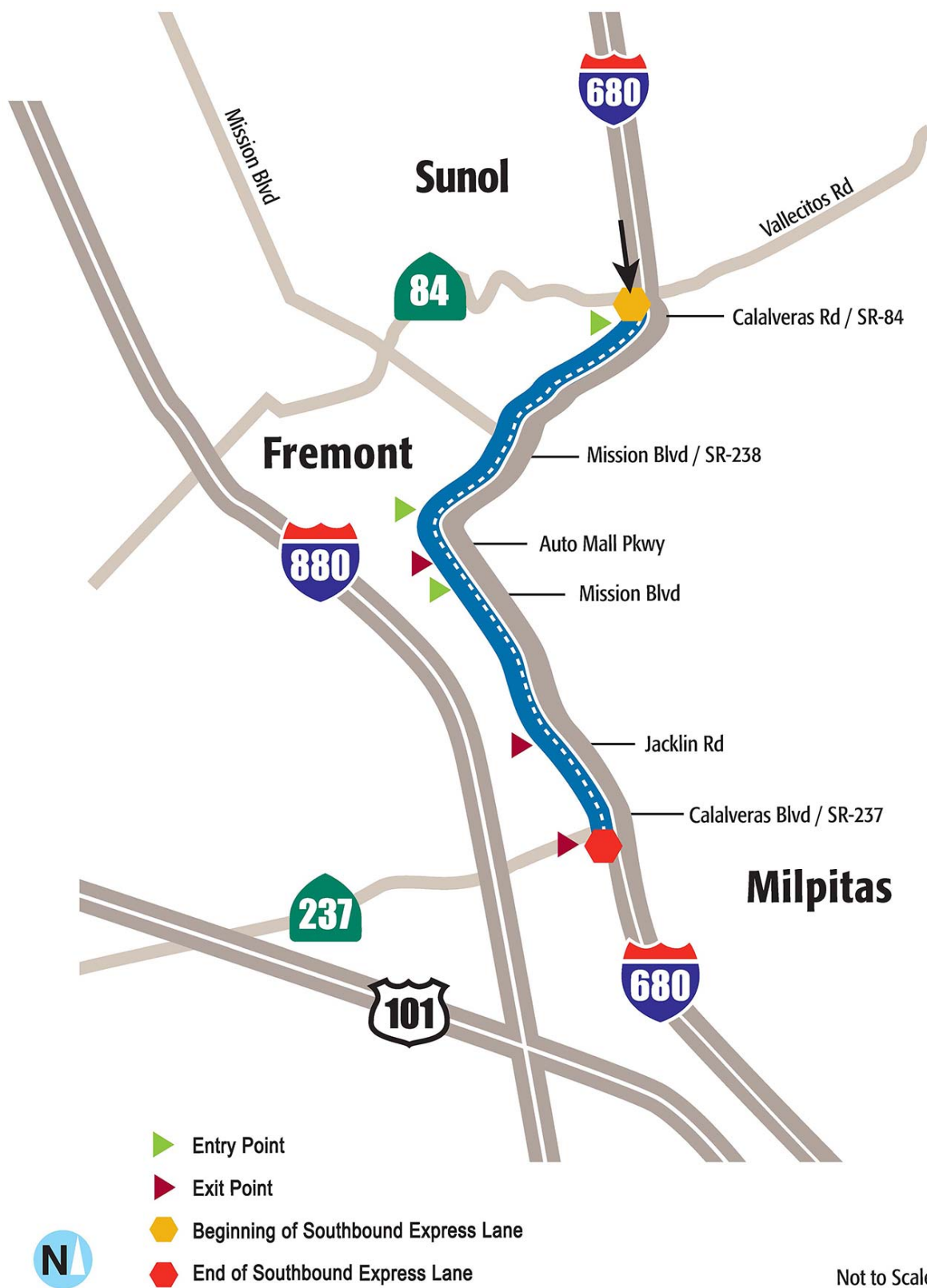
Staff Contacts

[Liz Rutman](#), Director of Express Lane Implementation and Operations

[Ashley Tam](#), Assistant Transportation Engineer

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Sunol I-680 Southbound Express Lane Location Map

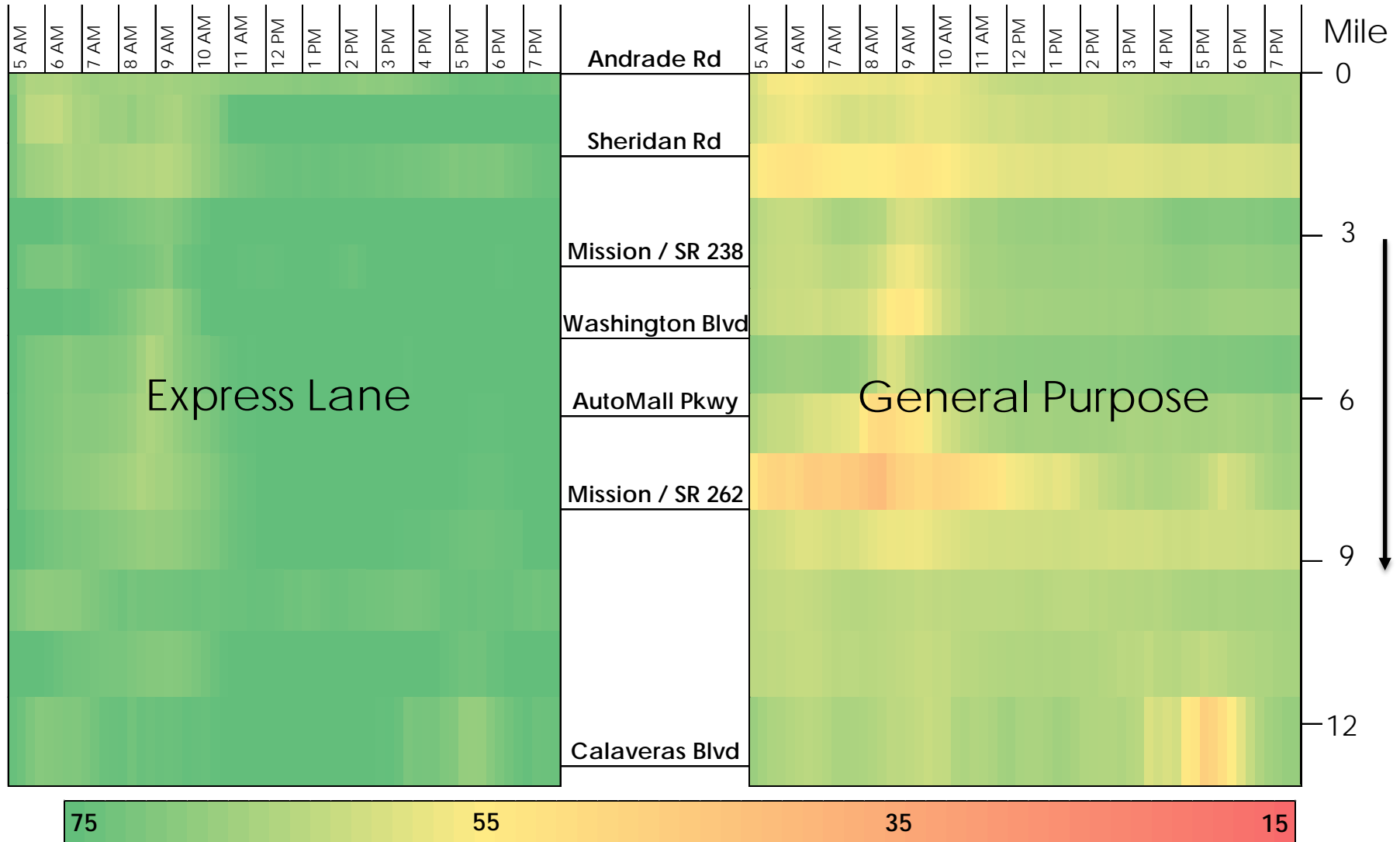


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Average Speed Heat Map

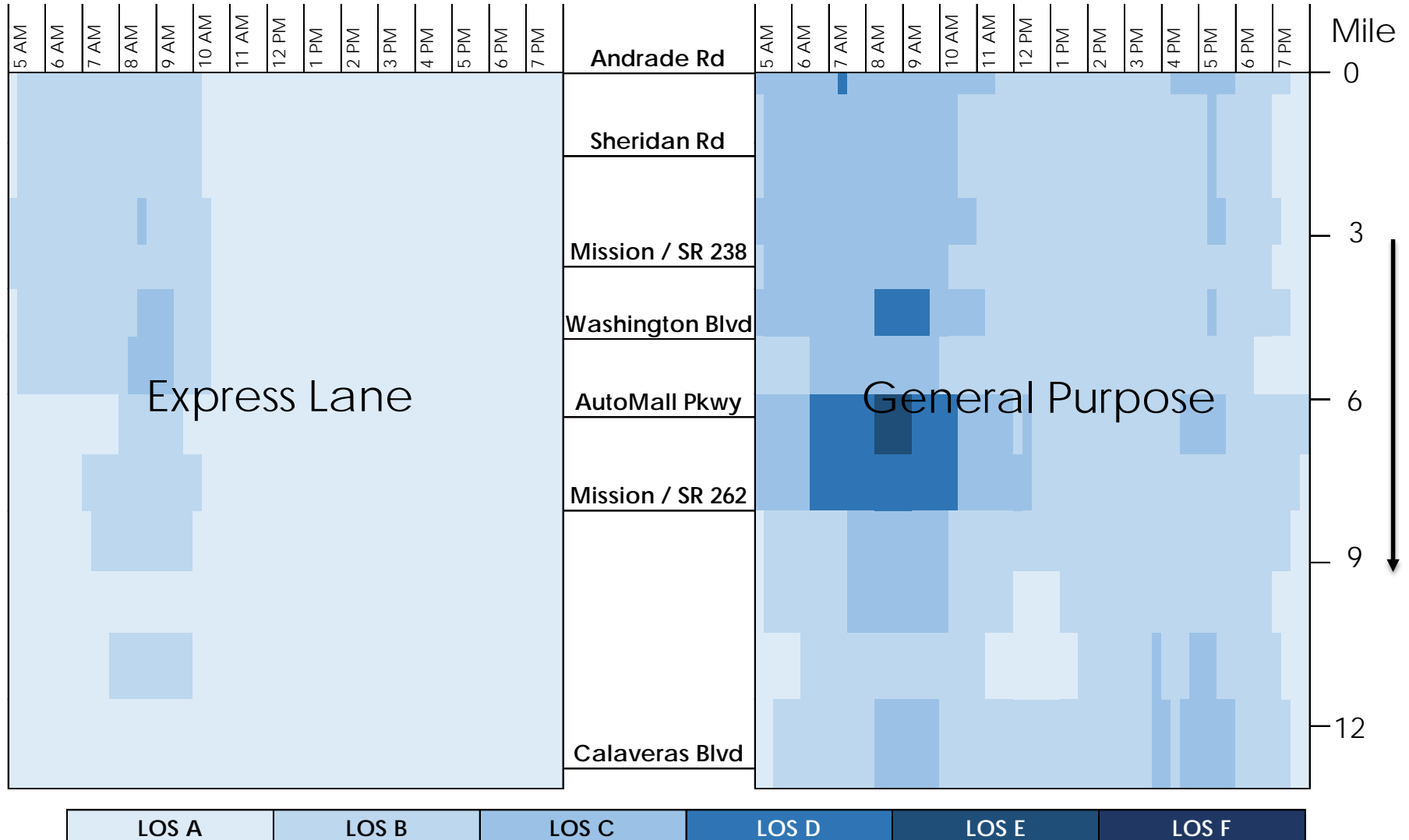
5.2B

Monday-Friday, January 2017– June 2017 (Feb 1-19 unavailable)



Average Density Heat Map

Monday-Friday, January 2017 – June 2017 (Feb 1-19 unavailable)





Memorandum

5.3

1111 Broadway, Suite 800, Oakland, CA 94607

• PH: (510) 208-7400

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DATE: September 5, 2017

SUBJECT: I-680 Northbound Express Lane (PN 1369.000): Monthly Status Update

RECOMMENDATION: Monthly status update of the I-680 Northbound Express Lane project.

Summary

The I-680 Northbound Express Lane project will widen I-680 from SR 237 in Santa Clara County to SR 84 in Alameda County and construct a 14-mile long northbound High Occupancy Vehicle (HOV)/Express Lane in the corridor. The project will be implemented with a phased approach focused on providing immediate operational benefits within current projected funding availability. The I-680 Northbound 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 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 Northbound Express Lane 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 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 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. In June 2016, Kapsch TrafficCom Transportation NA, Inc. was selected to provide Toll System Integration Services. 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.

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.

To provide consistency in the tolling access configuration between I-680 northbound (NB) and southbound (SB) express lanes, the existing SB controlled access tolling configuration is being converted to an open access configuration. The I-680 SB tolling access conversion work is being incorporated into the Phase 1 project. 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:

- Final Plans, Specification & Estimate (PS&E) package submitted to Caltrans on May 1, 2017, marking completion of the final civil design.
- 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.
- California Transportation Commission (CTC) issued a Resolution of Necessity (RON) for the last outstanding parcel on June 28th, 2017.
- Project accomplished Ready to List (RTL) milestone on June 28th, 2017.
- CTC allocated SHOPP funds for pavement rehabilitation work on June 28th, 2017.
- Civil construction contract was advertised on August 14th, 2017 for a seven week advertisement period with target bid opening on October 3, 2017.
- A mandatory pre-bid meeting was held on August 24, 2017 at the Caltrans Pleasanton Construction office.
- Advance tree removal contract is in place and removal of trees conflicting with the project will be performed between October 2017 and February 2018, within the time window allowed by permits.
- 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).

The Phase 1 schedule is as follows:

Final Design (PS&E)	May 1 2017 (A)
Ready To List (RTL)	June 28, 2017 (A)
CTC Vote SHOPP funds	June 28, 2017 (A)
Construction contract advertisement	August 14, 2017 (A)
Bid Opening	October 3, 2017 (T)
Construction contract award	October 2017 (T)
Construction	Early 2018 – 2020
Toll System Installation & Testing	Late 2018 – 2020
Express Lane opening	2020

(A) Denotes actual date achieved.

Fiscal Impact: There is no fiscal impact.

Staff Contact

[Trinity Nguyen](#), Director of Project Delivery

[Liz Rutman](#), Director of Express Lane Implementation and Operations

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