



I-580 Express Lane Policy Committee Meeting Minutes Monday, October 9, 2017, 10:00 a.m.

3.1

1111 Broadway, Suite 800, Oakland, CA 94607 • PH: (510) 208-7400 • www.AlamedaCTC.org

1. Roll Call

A roll call was conducted. All members were present with the exception of Commissioner Miley, Commissioner Kaplan and Commissioner Valle.

Subsequent to the roll call:

Commissioner Miley and Commissioner Kaplan arrived during item 4.1.

2. Public Comment

There were no public comments.

3. Consent Calendar

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

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

Yes: Marchand, Haggerty, Haubert, Thorne

No: None

Abstain: None

Absent: Miley, Kaplan, Valle

4. Regular Matters

4.1. I-580 Express Lanes (PN 1373.002): Monthly Operations Update.

Ashley Tam provided an update on the operation of I-580 Express Lanes for August 2017. She shared information on the corridor performance specifically average daily trips and speed/density data locations. Ms. Tam also covered speed and density heat maps, and average daily toll rates. She concluded by providing information on maximum toll rates and express lane financials.

Commissioner Haggerty wanted to know if the lane is recovering toll amounts from violators with no toll tags. Liz Rutman stated that of the 21% of the violators that had no toll tags, approximately half are FasTrak users who use their license plate linked to their FasTrak accounts to pay the toll. The remainder are users who don't have a toll tag and incur a violation fee that is either paid through violation notice, DMV holds, or collections.

Commissioner Kaplan asked what the total max toll amount is. Ms. Rutman stated that the system has a cap of \$9 and \$13 in the eastbound and westbound directions, respectively, but there is no commission-approved maximum toll amount.

Commissioner Kaplan wanted to know if there is any consideration in changing the cap since the statistics stated that users are reaching the max toll amount often. Ms. Rutman stated that in the eastbound direction, the max is reached almost daily and this is due to the use of dynamic pricing. She noted that dynamic pricing is used as a congestion management tool and one thing to consider is that raising the toll

amount slightly will not significantly affect the level of service or provide additional congestion relief for the users.

This item was for information only.

5. Committee Member Reports

There were no committee reports.

6. Staff Reports

There were no staff reports.

7. Adjournment/ Next Meeting

The next meeting is:

Date/Time: Monday, November 13, 2017 at 10:00a.m.

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

Attested by:



Vanessa Lee, Clerk of the Commission



DATE: November 6, 2017

SUBJECT: I-580 Express Lanes (PN 1373.002): Monthly Operation Update

RECOMMENDATION: Receive a status update on the operation of I-580 Express Lanes

Summary

The Alameda CTC is the project sponsor of the I-580 Express Lanes, located in the Tri-Valley corridor through the cities of Dublin, Pleasanton, and Livermore, which are now in operation having opened to traffic on February 19th and 22nd of 2016. See Attachment A for express lane operation limits.

The September 2017 operations report indicates that the new express lane facility continues to provide travel time savings and travel reliability throughout the day. Express lane users experienced 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-580 Express Lanes, extending from Hacienda Drive to Greenville Road in the eastbound direction and from Greenville Road to San Ramon Road/Foothill Road in the westbound direction, were opened to traffic on February 19th and 22nd of 2016 in the eastbound and westbound directions, respectively. See Attachment A for express lane operation limits. Motorists using the I-580 Express Lanes facility benefit from travel time savings and travel reliability as the express lanes optimize the corridor capacity by providing a new choice to drivers. Single occupancy vehicles (SOVs) may choose to pay a toll and travel within the express lanes, while carpools, clean-air vehicles, motorcycles, and transit vehicles enjoy the benefits of toll-free travel in the express lanes.

An All Electronic Toll (AET) collection method has been employed to collect tolls. Toll rates are calculated based on real-time traffic conditions (speed and volume) in express and general purposes lanes and can change as frequently as every three minutes. California Highway Patrol (CHP) officers provide enforcement services and the California Department of Transportation (Caltrans) provides roadway maintenance services through reimbursable service agreements.

September 2017 Operations Update: Over 654,000 express lane trips were recorded during operational hours in September, an average of approximately 32,300 daily trips. Table 1 presents the breakdown of trips based on toll classification and direction of travel; these percentages have remained consistent for the last eight months. Pursuant to the Commission-adopted “Ordinance for Administration of Tolls and Enforcement of Toll Violations for the I-580 Express Lanes,” if a vehicle uses the express lanes without a valid FasTrak® toll tag then the license plate read by the Electronic Tolling System is used to either assess a toll either by means of an existing FasTrak account to which the license plate is registered or by issuing a notice of toll evasion violation to the registered vehicle owner. Approximately half of all trips by users without a toll tag are assessed tolls via FasTrak account.

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

Trip Classification		Percent of Trips ¹
By Type	HOV-eligible with FasTrak flex tag	41%
	SOV with FasTrak standard or flex tag	38%
	No valid toll tag in vehicle ¹	21%
By Direction	Westbound	46%
	Eastbound	54%

1. Excludes “trips” by users that had no toll tag and either no license plate or one that could not be read by the Electronic Tolling System with sufficient accuracy that a toll could be assessed.

Express lane users generally experience higher speeds and lesser lane densities than the general purpose lanes. Lane density is measured by the number of vehicles per mile per lane and reported as Level of Service (LOS). LOS is a measure of freeway performance based on vehicle maneuverability and driver comfort levels, graded on a scale of A (best) through F (worst). Table 2 summarizes the average speed differentials and LOS at four locations in each of the westbound and eastbound directions during respective commute hours for September. This table provides an overall snapshot of the express lane benefits for the month during commute hours.

Attachment B presents the speed and density heat maps for the I-580 corridor during revenue hours for the six-month period from April 2017 – September 2017. These heat maps are a graphical representation of the overall condition of the corridor, showing the average speeds and densities along the express lane corridor and throughout the day for both the express and general purpose lanes, and are used to evaluate whether the express lane is meeting both federal and state performance standards. During these six months, the average speeds in the westbound express lane ranged from 50 to 70 mph during the morning commute hours (5 am to 11 am) with the lower speeds occurring

between Isabel Avenue and Hacienda Road. The express lane operated at LOS C or better at most times, with a short half-hour period of LOS D experienced near Fallon Road in the morning commutes. By comparison, the general purpose lanes experienced average speeds as low as 40 mph and LOS D throughout several sections of the corridor. During the evening commute, the westbound lanes reflect a small period of reverse-commute congestion between Hacienda Road and San Ramon Road from 5 pm to 6 pm, though the express lane continued to operate at LOS A or better during this time. Outside of the commute hours, express lane users experience average speeds of 70 mph or higher and average LOS A.

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

Direction	I-580 in the Vicinity of	Speed Differential Range (mph)	Average Speed Differential (mph)	Average Express Lane LOS	Average General Purpose Lane LOS
Westbound Morning Commute: 5 am – 11 am	North First Street	5 - 8	6	A	C
	North Livermore Ave	2 - 5	4	B	C
	Fallon Road	11 - 17	14	B	C
	Santa Rita Road	9 - 17	12	B	C
Eastbound Evening Commute: 2 pm – 7 pm	Hacienda Drive	19 - 26	22	C	E
	Airway Blvd	6 – 11	8	B	C
	North Livermore Ave	7 – 12	10	B	C
	North First Street	13 - 20	15	B	C

In the eastbound direction, average express lane speeds from April 2017 through September 2017 ranged from 20 to 70 mph during the evening commute hours (2 pm – 7 pm) with the lowest speeds occurring at the eastern terminus of the express lanes, between Vasco Road and Greenville Road. Average express lane speeds throughout the rest of the day exceeded 70 mph. Most of the express lane corridor operates at LOS C better during the evening commute hours, with limited sections of degraded LOS at the western end of the express lanes between 3 pm and 5 pm and at the eastern terminus between 4 pm and 6 pm. The express lanes averaged LOS B or better throughout the rest of the day in all locations. By comparison, the general purpose lanes experienced lower speeds and degraded levels of services for longer periods of time than the express lane during the evening commute hours.

Table 3 presents the maximum posted toll rates to travel the entire corridor in each direction, along with the average toll assessed to non-HOV users, for September 2017.

Table 3. Toll Rate Data for September 2017

Direction	Maximum Posted Toll (Travel Entire Corridor)	Average Assessed ¹ Toll (All Toll Trips)
Westbound	\$11.00 (1 of 20 days)	\$2.30
Eastbound	\$9.00 (18 of 20 days)	\$3.37

¹ Assessed toll is the toll rate applied to non-toll-free trips and reflects potential revenue generated by the trip. Not all potential revenue results in actual revenue received.

During Fiscal Year 2017-18, the I-580 Express Lanes have recorded nearly 2.06 million total trips. Total gross revenues received include \$3.08 million in toll revenues and \$1.08 million in violation fees and penalties.

Staff is coordinating education and outreach with partner agencies including CCTA, MTC, 511 Contra Costa as well as local CMAs to promote consistent messaging and accessible information about the I-580, I-680 Sunol, and the I-680 Contra Costa County express lanes, which opened on October 9, 2017.

Fiscal Impact: There is no fiscal impact.

Attachments

- A. I-580 Corridor Express Lane Location Map
- B. I-580 Corridor Heat Maps April 2017 – September 2017

Staff Contact

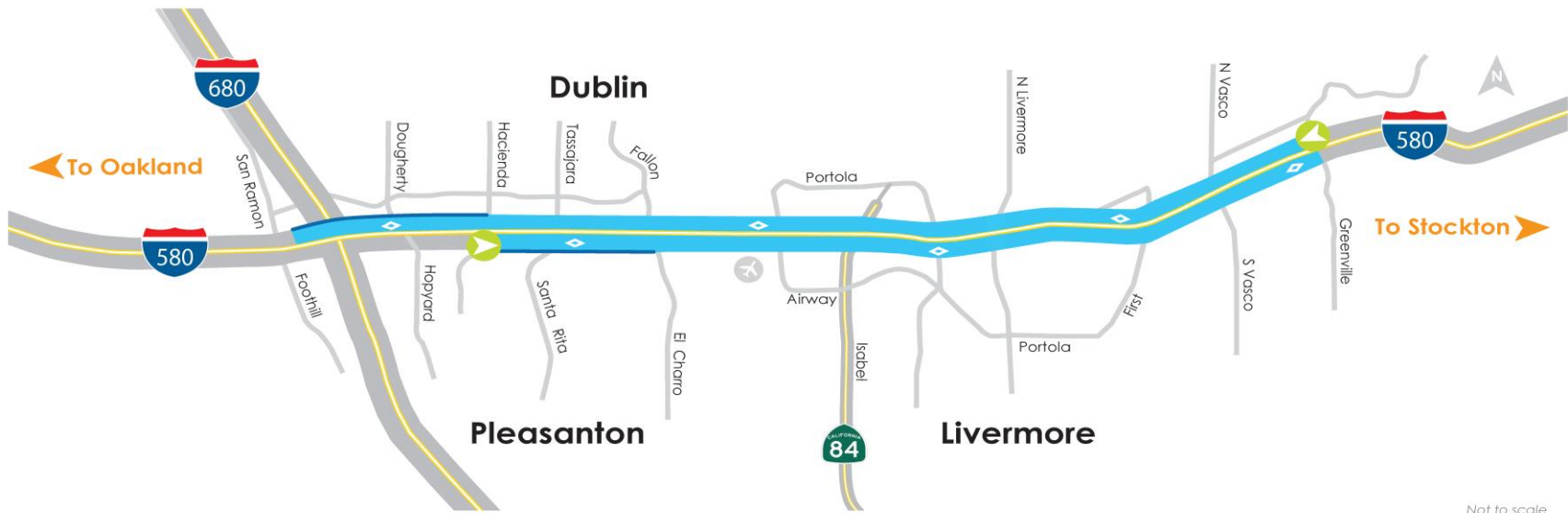
[Liz Rutman](#), Director of Express Lanes Implementation and Operations

[Ashley Tam](#), Assistant Transportation Engineer



I-580 Express Lanes Project Location Map

4.1A



Not to scale



Two Eastbound Express Lanes

Lanes begin at Hacienda

No entry/exit from eastbound express lanes from Hacienda to Fallon / El Charro.

Please note: For access to Santa Rita Road, do not enter express lanes.



One Westbound Express Lane

Lane begins at Greenville

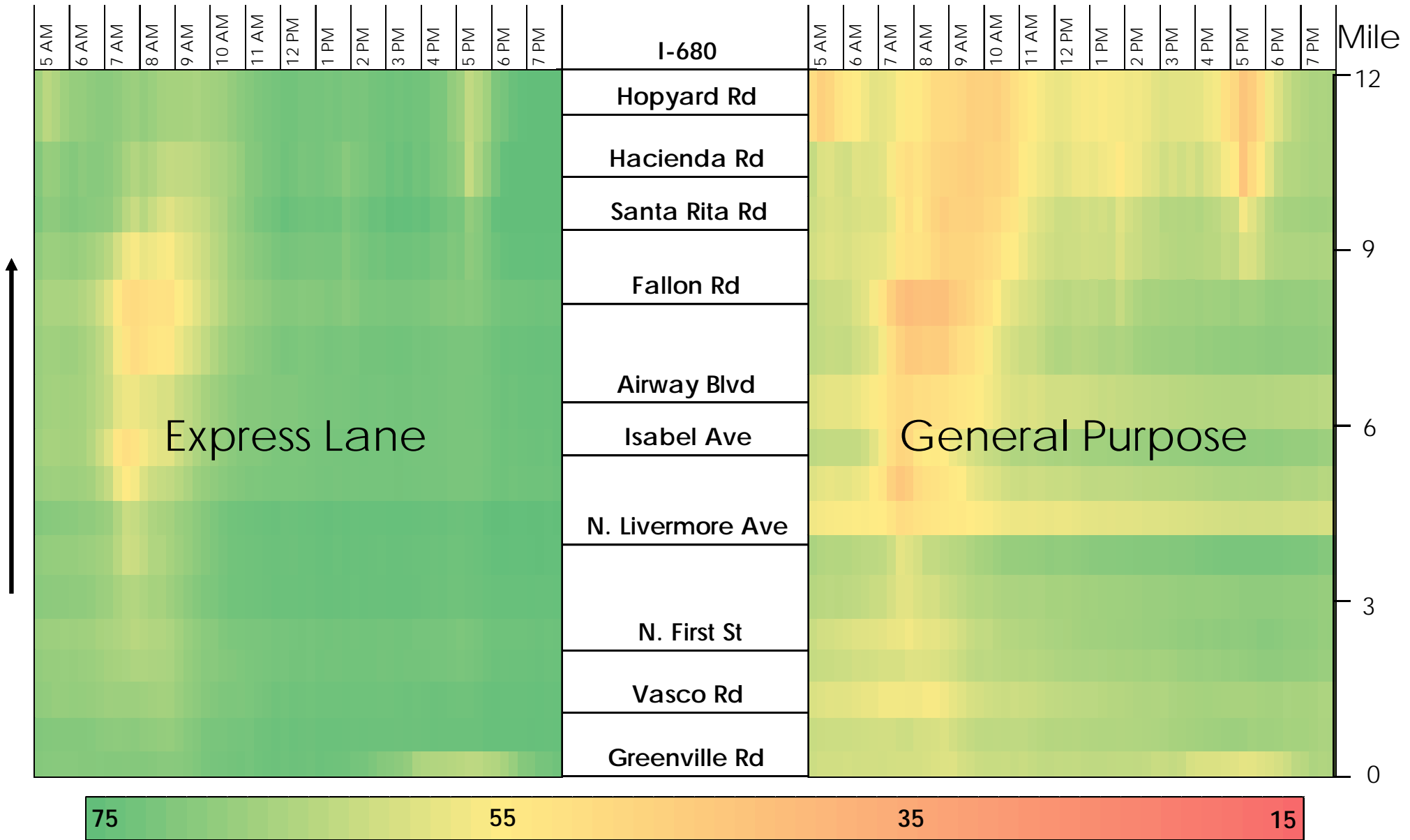
No entry/exit from westbound express lane from Hacienda to end.

Please note: For access to I-680 or Dougherty, exit express lane before Hacienda.

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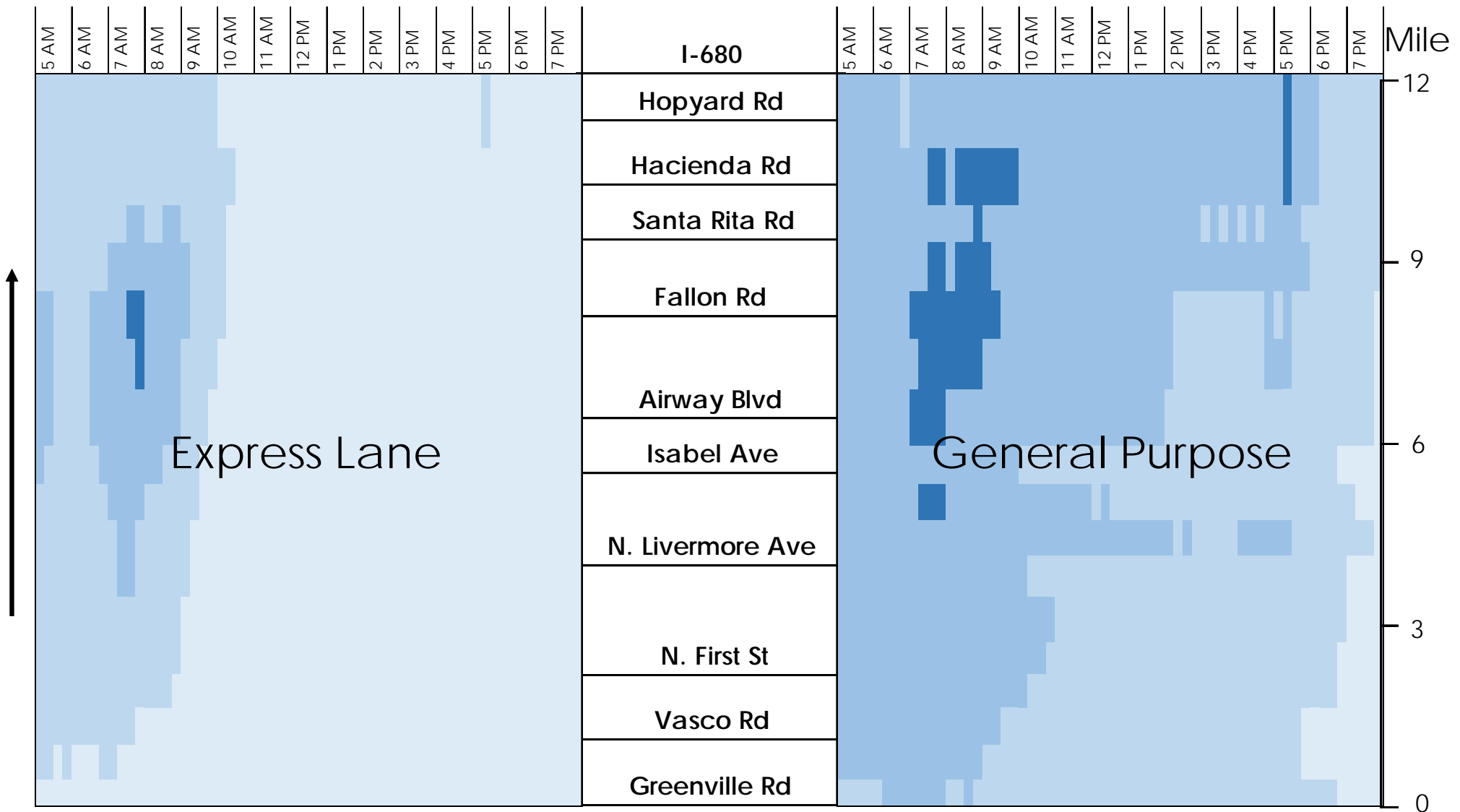
Westbound I-580 Corridor Speed Heat Maps

Monday-Friday, April 2017 – September 2017



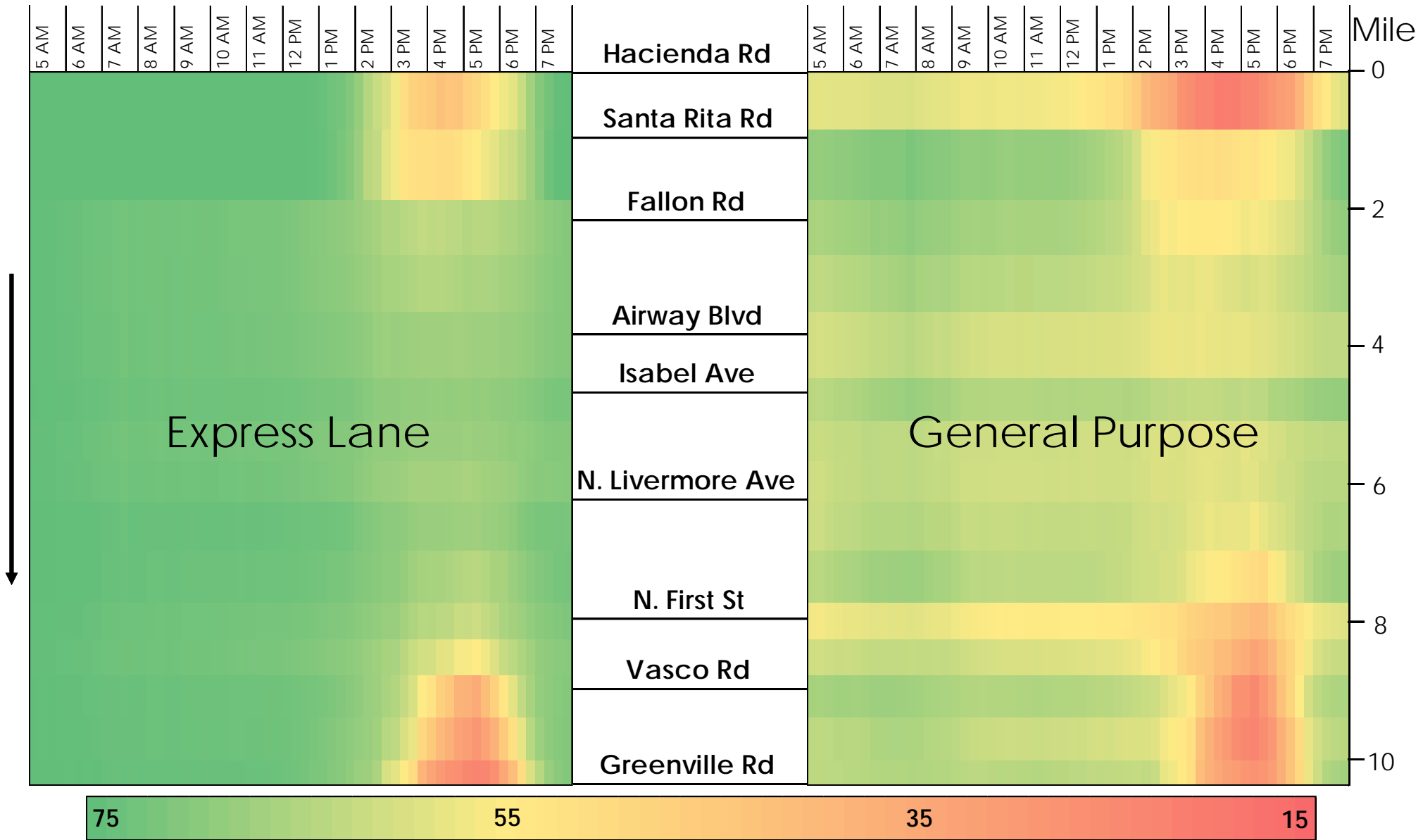
Westbound I-580 Corridor Density Heat Maps

Monday-Friday, April 2017 – September 2017



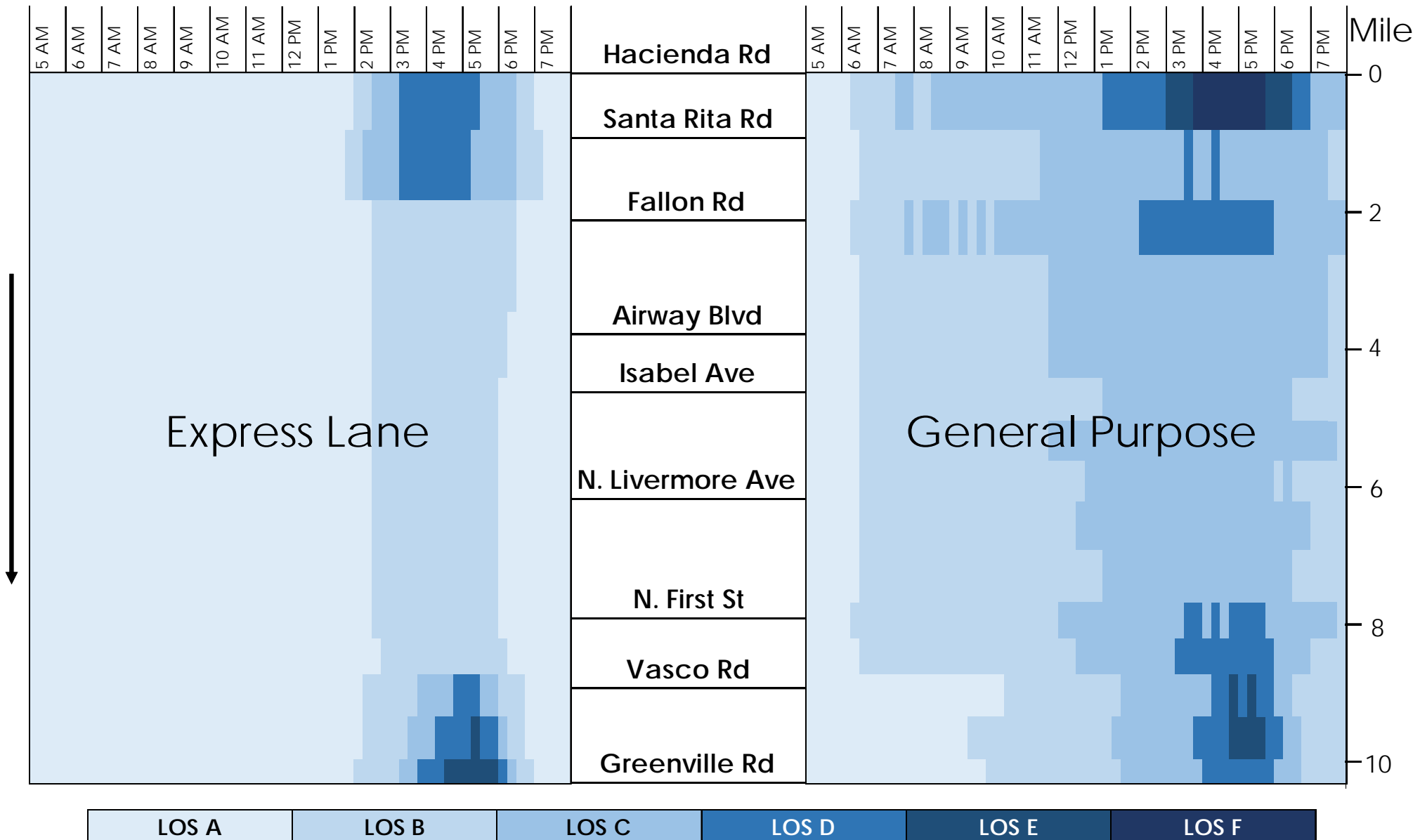
Eastbound I-580 Corridor Speed Heat Maps

Monday-Friday, April 2017 – September 2017



Eastbound I-580 Corridor Density Heat Maps

Monday-Friday, April 2017 – September 2017





Memorandum

1111 Broadway, Suite 800, Oakland, CA 94607

• 510.208.7400

• www.AlamedaCTC.org

DATE: November 6, 2017

SUBJECT: I-580 Express Lanes Evaluation Study: Professional Services Agreement with System Metrics Group, Inc.

RECOMMENDATION: Approve and authorize the Executive Director, or a designee to negotiate and execute Professional Services Agreement with System Metrics Group, Inc. for a not-to-exceed amount of \$500,000 for the I-580 Express Lanes Evaluation Study.

Summary

The Alameda County Transportation Commission (Alameda CTC) is the project sponsor and operating agency of the I-580 Express Lanes. This project was opened to traffic on February 19th and 22nd of 2016. Assembly Bill (AB) 574 requires a report on the findings, conclusions, and recommendations of the I-580 Express Lanes to be completed within three years of the first revenue day. After over a year of operation, express lane traffic and usage has stabilized such that it is suitable to evaluate the performance of the I-580 Express Lanes.

In July of this year, the Commission approved the release of a request for proposals (RFP) for professional services to perform the I-580 Express Lanes Evaluation Study (Study) and authorized the Executive Director to negotiate a professional services agreement with the top-ranked firm. Staff released the RFP on September 7, 2017 and proposals were due on October 5, 2017. Four proposals were received and reviewed by a panel consisting of three Alameda CTC staff from Planning and Express Lanes groups. Based on the review of the proposals and interviews, the panel selected System Metrics Group, Inc. as the top-ranked firm.

Staff recommends that the Commission approve and authorize the Executive Director, or a designee to negotiate and execute Professional Services Agreement with System Metrics Group, Inc. for a not-to-exceed amount of \$500,000 for the I-580 Express Lanes Evaluation Study. The resulting contract will be funded by I-580 Express Lanes operations revenues and will span 18 months.

Background

The I-580 Express Lanes, extending from Hacienda Drive to Greenville Road in the eastbound direction and from Greenville Road to San Ramon Road/Foothill Road in the westbound direction, were opened to traffic on February 19 and 22, 2016 in the

eastbound and westbound directions, respectively. The I-580 Express Lanes corridor is the second of two corridors authorized by AB 2032 (Dutra) for express lane operations in Alameda County. Under this legislation, the first express lane to open was the I-680 Sunol Express Lane corridor, which has been in operations since September 2010 and is owned by the Sunol Smart Carpool Joint Powers Authority but operated by Alameda CTC. AB 574 (Torrico) has subsequently amended AB 2032 (Dutra) to allow permanent operations of the express lanes authorized in AB 2032 (Dutra).

The authorizing legislation (AB 2032) requires an “after” study to be completed no later than three years after the I-580 Express Lanes opened to traffic. The Study will fulfill this requirement for the I-580 Express Lanes and result in a report Alameda CTC will submit to the California State Legislature on findings, conclusions, and recommendations concerning the I-580 Express Lanes. The report will include an analysis of the effect of the express lanes on the adjacent general purpose lanes. A similar evaluation report for the southbound I-680 Express Lane was completed and submitted to the legislature in June 2013.

Prior to construction of the I-580 Express Lanes, “before” conditions data, particularly travel time, speed, and occupancy, were collected and documented and are available for use during the Study for a comprehensive evaluation of the I-580 Express Lanes.

The Study will begin in December 2018 with data collection in spring of 2018 to be consistent with the timeline for data collection of the “before” conditions. Staff anticipates draft evaluation findings will be shared with the Commission in October 2018, with a final report completed and sent to the Legislature by February 2019. Should performance results warrant additional assessment, an optional task to conduct a geometric and/or operational assessment of the express lanes will be included in the contract and would be completed in June 2019. The entire duration of the contract will be 18 months.

Procurement: In order to provide the consultant resources necessary for the successful completion of the Study, Alameda CTC released RFP No. R18-0006 in September 2017. Alameda CTC received four proposals on October 5, 2017 from the following firms:

- Cambridge Systematics, Inc.
- Kittelson & Associates, Inc.
- System Metrics Group, Inc.
- TJKM Transportation Consultants

An independent selection panel of three Alameda CTC staff from Planning and Express Lanes groups reviewed the proposals and selected all four (4) firms for interview. Consultant interviews were conducted on October 27, 2017.

Proposers were evaluated and scored based on their knowledge and understanding of the required services; management approach and staffing plan to performing the scope of work efficiently and effectively; qualifications of the proposer firm; and effectiveness of the interview.

At the conclusion of the evaluation process, the selection panel ranked the teams in the following order:

- System Metrics Group, Inc.
- Cambridge Systematics, Inc.
- Kittelson & Associates, Inc.
- TJKM Transportation Consultants

The Professional Services Agreement scope will include:

- Development of performance measures
- Data collection of “after” conditions and summarizing available “before” data
- Evaluation of performance measures
- Documentation of findings in Draft and Final Evaluation Study Reports
- Presentations to the Committee and Commission of evaluation findings
- Development of the Evaluation Study Report for the Legislature
- Optional assessment of geometric and/or operational enhancements regarding the continuous access configuration and/or other design features based on the outcome of the evaluation findings.

System Metrics Group, Inc. is a well-established consulting firm with a local office in the Bay Area. In the event Alameda CTC does not reach agreement with System Metrics Group, Inc., negotiations will proceed with the second highest ranked proposer from the ranking list, shown above.

Recommendation: Staff recommends that the Commission approve and authorize the Executive Director, or a designee to negotiate and execute Professional Services Agreement with System Metrics Group, Inc. for a not-to-exceed amount of \$500,000 for the I-580 Express Lanes Evaluation Study.

Levine Act Statement: The System Metrics Group, Inc. team did not report a conflict in accordance with the Levine Act.

Fiscal Impact: The fiscal impact of approving this item is \$500,000. The action will authorize I-580 toll revenue funds to be used for subsequent expenditure. Budget has been included in the approved I-580 Express Lane Operations budget for FY 2017-18 and will be included in the FY 2018-19 I-580 Express Lane Operations budget as appropriate.

Staff Contacts

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

[Saravana Suthanthira](#), Principal Transportation Planner

[Kristen Villanueva](#), Senior Transportation Planner

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