



# Meeting Notice

1111 Broadway, Suite 800, Oakland, CA 94607

• 510.208.7400

• [www.AlamedaCTC.org](http://www.AlamedaCTC.org)

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Arthur L. Dao

## I-580 Express Lane Policy Committee

**Monday, March 13, 2017, 10:00 a.m.**

**1111 Broadway, Suite 800  
Oakland, CA 94607**

### **Mission Statement**

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

### **Public Comments**

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

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### **Reminder**

Please turn off your cell phones during the meeting. Please do not wear scented products so individuals with environmental sensitivities may attend the meeting.

### **Glossary of Acronyms**

A glossary that includes frequently used acronyms is available on the Alameda CTC website at [www.AlamedaCTC.org/app\\_pages/view/8081](http://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](http://www.511.org).

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# I-580 Express Lane Policy Committee Meeting Agenda Monday, March 13, 2017, 10:00 a.m.\*

\*Or immediately following the I-680 Sunol SMART Carpool Lane Joint Powers Authority meeting

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**Chair:** Mayor John Marchand, City of Livermore  
**Vice Chair:** Supervisor Nate Miley, Alameda County, District 4  
**Commissioners:** Scott Haggerty, David Haubert, Jerry Thome  
**Ex-Officio Members:** Rebecca Kaplan, Richard Valle  
**Staff Liaison:** Elizabeth Rutman  
**Executive Director:** Arthur L. Dao  
**Clerk:** Vanessa Lee

- |   |             |            |
|---|-------------|------------|
| 1. Roll Call  |             |            |
| 2. Public Comment   |             |            |
| 3. Consent Calendar   | <b>Page</b> | <b>A/I</b> |
| 3.1. <a href="#">Approve the February 13, 2017 I-580 Express Lane PC meeting minutes.</a> | 1           | A          |
| 4. Regular Matters  |             |            |
| 4.1. <a href="#">Status update on the operation of I-580 Express Lane.</a>                | 3           | I          |
| 5. Committee Member Reports   |             |            |
| 6. Staff Reports  |             |            |
| 7. Adjournment  |             |            |

**Next Meeting:** April 10, 2017

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

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**1. Roll Call**

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

**2. Public Comment**

There were no public comments.

**3. Consent Calendar**

**3.1. Approve the January 9, 2017 I-580 Express Lane PC Meeting Minutes**

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

Yes: Marchand, Haggerty, Haubert, Thorne, Valle

No: None

Abstain: None

Absent: Kaplan, Miley

**4. Regular Matters**

**4.1. Status update on the operation of I-580 Express Lane**

Liz Rutman provided an update on the operation of I-580 Express Lane for the month of December 2016. She shared information on the corridors performance specifically average daily trips, express lane transaction breakdowns and speed/density data locations. Liz also covered speed and density heat maps, average daily toll rates and gross revenue that included three months of toll violation penalties.

Commissioner Haggerty asked when the toll rate reached \$6.25 and \$7.50 and how many times were those rates reached. Liz responded that she will bring that information back to the Committee.

Commissioner Haubert stated that if the toll rate increases much higher commuters may decide to take the street thereby, increasing traffic on local streets. Art Dao stated that Alameda CTC will continue to watch the toll rates.

Commission Haubert requested that staff present the toll rates and possible traffic increase on local streets with tri-valley residents to get the word out on how the traffic flow may impact their throughput. He suggested that a before and after study will be good to share with the residents. Liz informed the Committee that the data to provide a before and after snapshot will be available in 2018.

Commissioner Haggerty asked if the I-580 Express Lane is more costly to operate than I-680 Express Lane and how much does it cost to operate I-580. Liz responded that the I-580 Express Lane is more costly to operate because of the processing of toll violation notices and the system integrator that performs the manual image review.

Art Dao responded that even though the gross revenues are known, the net after expenditures is not and Alameda CTC staff working on determining the net after expenses. Art stated that staff will bring back to the Committee the actual costs to operate the I-580 Express Lane.

*This item was for information only.*

**5. Committee Member Reports**

There were no committee member reports.

**6. Staff Reports**

There were no staff reports.

**7. Adjournment/ Next Meeting**

The next meeting is:

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

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

Attested by:



Vanessa Lee, Clerk of the Commission



# Memorandum

4.1

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

**DATE:** March 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 Corridor 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 19<sup>th</sup> and 22<sup>nd</sup> of 2016. See Attachment A for express lane operation limits.

The January 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 average speeds of 4 to 21 mph greater than the average speeds in the general purpose lanes, along with lesser average lane densities than the general purpose lanes, in the most congested segments of the corridor.

## Background

The I-580 Corridor 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. 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 carpool, 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. California Highway Patrol (CHP) officers provide enforcement services and the California Department of Transportation (Caltrans) provides roadway maintenance services through reimbursable service agreements.

**January 2017 Operation Update:** Over 580,000 express lane trips were recorded during operational hours in January, an average of approximately 27,700 daily trips. This 9 percent decrease from the 30,500 average trips per day in December 2016 is reflective of both a 5 decrease in total corridor traffic and an increase in posted toll rates from December to January that is discussed in more detail below.

Table 1 presents the breakdown of trips based on toll classification and direction of travel. 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 FasTrak toll tag then the vehicle is either assessed a toll by means of an existing FasTrak account or issuing a notice of toll evasion violation to the registered vehicle owner based on the license plate read by the Electronic Tolling System. The percent of users without a valid toll tag saw a decrease from a 24% average over the last three months to just 21% in January.

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

Trip Classification		Percent of Trips
By Type	HOV-eligible with FasTrak flex tag	37%
	SOV with FasTrak standard or flex tag	41%
	No Tag or Invalid Tag	21%
By Direction	Westbound	44%
	Eastbound	56%

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 January. This table provides an overall snapshot of the express lane benefits for the month.

Attachment B presents the speed and density heat maps for the I-580 corridor during revenue hours for the six-month period from August 2016 to January 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. From August through January, 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 lower speeds occurring between Isabel Avenue and



Santa Rita Road; average speeds throughout the rest of the day exceeded 70 mph. The express lane operated at LOS B or better at all times, with LOS B occurring only for a short period of time in the middle of the corridor (Isabel Avenue to Santa Rita Road). By comparison, the general purpose lanes experienced speeds as low as 35 mph and LOS D for much longer periods of time, throughout a greater portion of the corridor. During the evening commute, the westbound lanes experience a small period reverse-commute congestion between San Ramon Road and Hacienda Road from 5 pm to 6 pm, though the express lane continued to operate at LOS B or better during this time.

Table 2. Speed Differentials and Level of Service for January 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	4 - 7	6	A	C
	North Livermore Ave	2 - 6	4	B	C
	Fallon Road	3 - 9	7	B	C
	Santa Rita Road	8 - 13	10	B	C
Eastbound Evening Commute: 2 pm – 7 pm	Hacienda Road	15 - 26	21	C	E
	Airway Blvd	8 - 12	10	B	C
	North First Street	2 - 8	5	A	C
	Vasco Road	8 - 11	11	A	C

In the eastbound direction, average express lane speeds from August 2016 through January 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. The express lane operated primarily at LOS B or C from during the evening commute hours, with small sections of degraded LOS at the western end of the express lanes between 3 pm and 5 pm, as well as the eastern terminus between 4 pm and 6 pm; average LOS B or better was realized throughout the rest of the day in all locations. By comparison, the general purpose lanes experienced lower speeds and LOS F at the western end of the corridor, and speeds and LOS similar to the express lanes but for a longer period of time at the eastern end of the corridor, 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 January 2017. On January 1, 2017, the minimum toll for any SOV trip in the express lanes was raised from

\$0.30 to \$0.50. In addition, the toll rate pricing plan was adjusted to improve the flow for HOVs traveling in the express lane during periods of peak congestion. The net effect was a 9 percent reduction in SOV trips in the corridor and 14 percent increase in total assessed tolls charged. The general purpose lane traffic was approximately 4% lower than the previous month; there was no measurable change to the number of toll-free trips in the express lanes.

Table 3. Toll Rate Data for January 2017

Direction	Maximum Posted Toll (Travel Entire Corridor)	Average Assessed <sup>1</sup> Toll (All Trips)
Westbound	\$9.75	\$2.07
Eastbound	\$7.75	\$2.25

<sup>1</sup> Assessed toll is the toll rate applied to the trip and reflects potential revenue generated by the trip. Not all potential revenue results in actual revenue received.

Through January 2017, the I-580 Express Lanes have recorded over 7.1 million total trips. Total gross revenues received include over \$8.1 million in toll revenues and nearly \$1.4 million in violation penalties.

Public outreach and education activities throughout the I-580 corridor commute shed continue in order to increase awareness of the express lanes, promote the benefits of the lanes, emphasize proper use of the facility, and encourage the public to obtain FasTrak® and FasTrak® flex toll tags. This month a new public education advertising campaign was launched to emphasize that properly mounted toll tags are required for all users of the express lanes, and that carpools require FasTrak flex, and to promote carpooling along the corridor. The campaign includes radio announcements during traffic reports, social media ads, and outdoor bus and gas station advertising.

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

### Attachments

- A. I-580 Corridor Express Lane Location Map
- B. I-580 Corridor Heat Maps August – January 2017

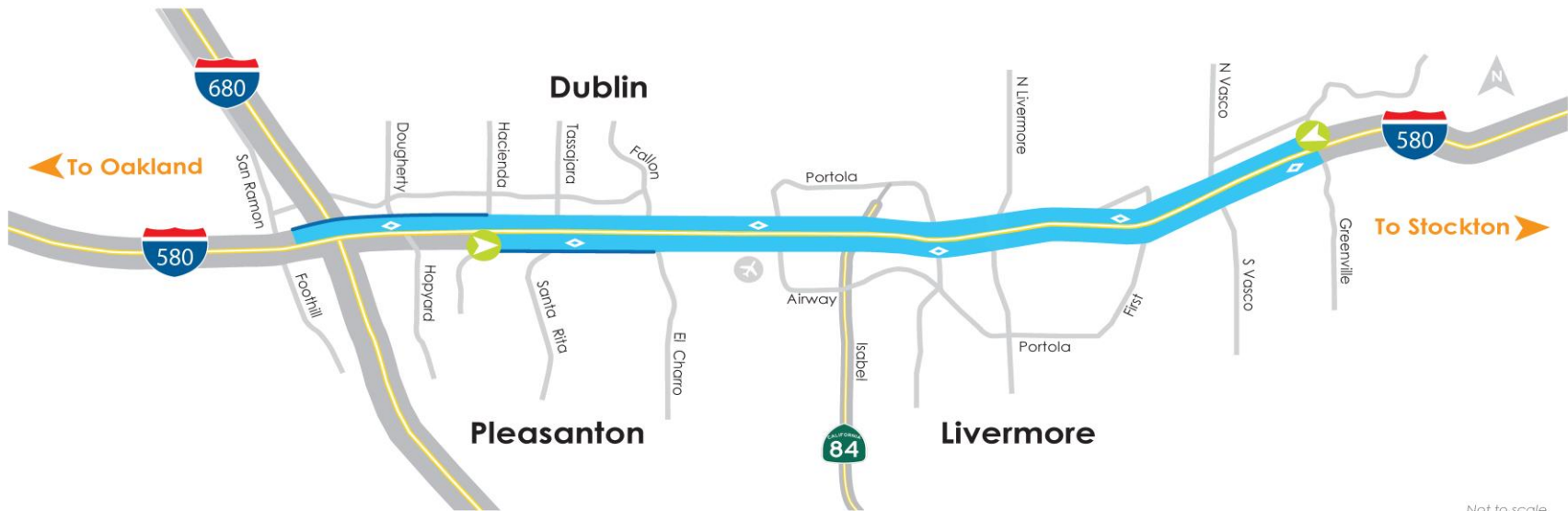
### Staff Contact

[Liz Rutman](#), Express Lanes Operation and Maintenance Manager



# 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

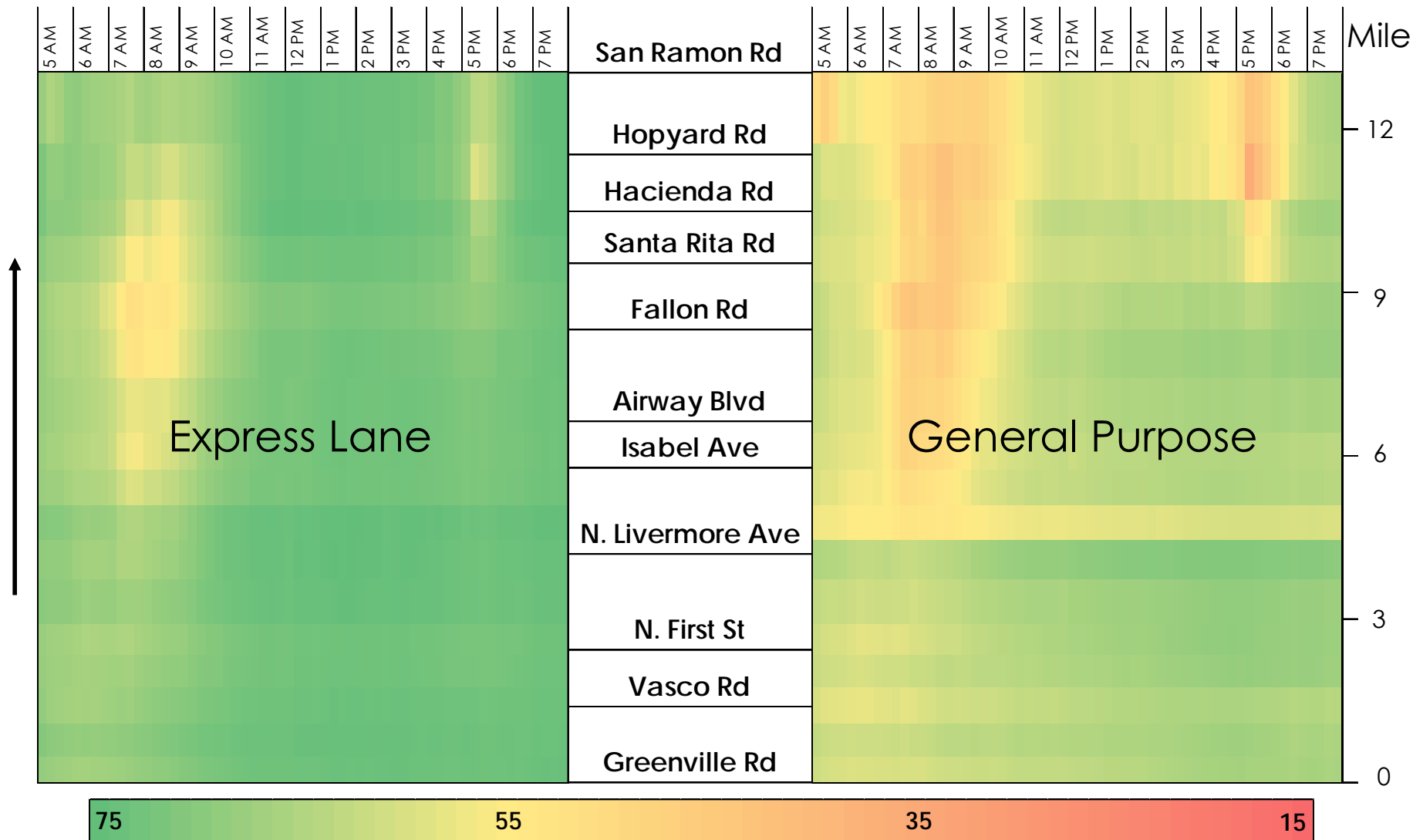
No entry/exit from westbound express lane from Hacienda to end.

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

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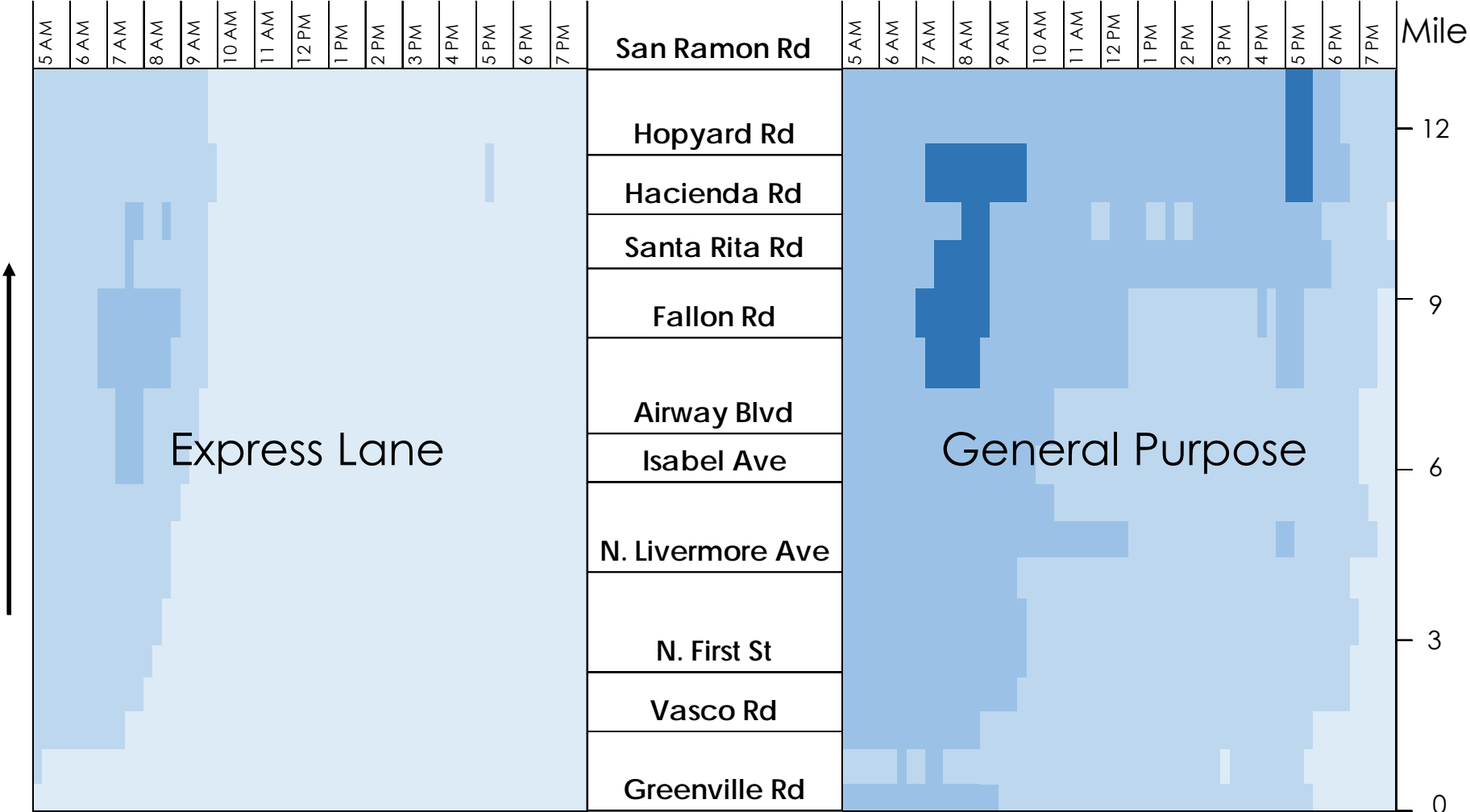
# Westbound I-580 Corridor Speed Heat Maps

Monday-Friday, August 2016 – January 2017



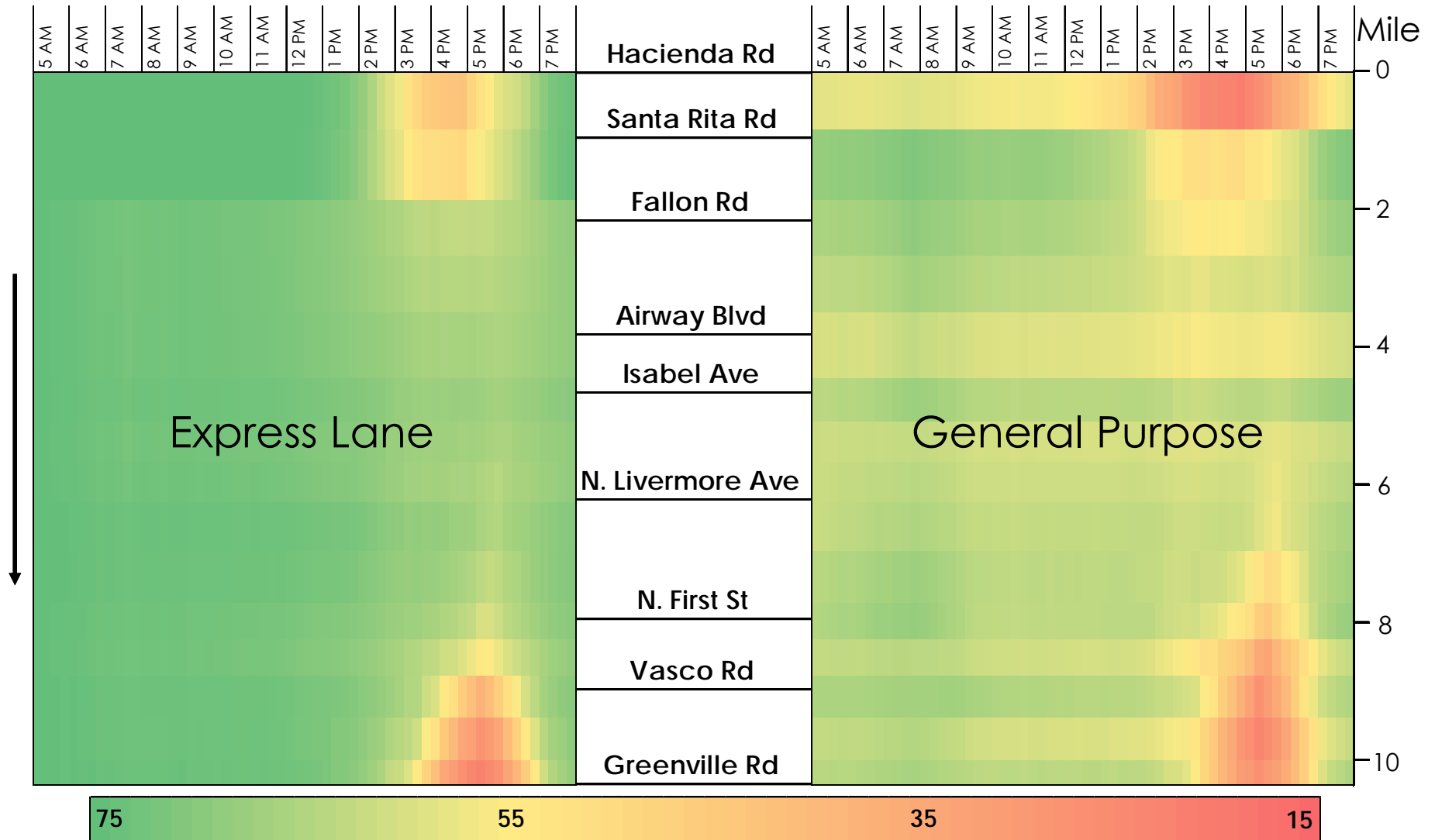
# Westbound I-580 Corridor Density Heat Maps

Monday-Friday, August 2016 – January 2017



# Eastbound I-580 Corridor Speed Heat Maps

Monday-Friday, August 2016 – January 2017



# Eastbound I-580 Corridor Density Heat Maps

Monday-Friday, August 2016 – January 2017

