



# I-580 Express Lane Policy Committee Meeting Minutes Monday, October 10, 2016, 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 Haubert and Commissioner Kaplan.

### Subsequent to the roll call:

Commissioner Kaplan arrived during item 4.1.

## 2. Public Comment

There were no public comments.

## 3. Consent Calendar

### 3.1. Approval of the I-580 Express Lane PC September 12, 2016 Meeting Minutes

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

*Yes: Marchand, Haggerty, Harrison, Thorne, Miley*

*No: None*

*Abstain: None*

*Absent: Haubert, Kaplan*

## 4. Regular Matters

### 4.1. Receive a status update on the operation of I-580 HOV/Express Lane

Liz Rutman provided an update on the I-580 HOV/Express Lane for the month of August 2016. She shared the corridor performance information such as the express lane trip totals broken down by toll tag type and by westbound and eastbound direction, month-over-month average daily express lane trips, average travel speed and density "heat" maps, and average daily toll rates and revenue.

Commissioner Haggerty asked for a comparison between the number of toll trips on I-580 and I-680 during August. Liz stated that I-680 had 88,000 toll trips compared to I-580 which had approximately 350,000 toll trips. Commissioner Haggerty requested a slide comparison between I-580 and I-680 for future meetings. Liz said that she can show the data but since I-680 does not include license plate capture technology, they are not equivalent express lane facilities.

Commissioner Haggerty asked if there are drivers who use the HOV setting on their toll tag to HOV to avoid violations. Liz stated that this is possible but it is not a large percentage of the violations.

Commissioner Haggerty asked about the status of enforcement. Liz said she would bring the statistics to the Committee next month.

Commissioner Miley asked if the demand coming from San Joaquin County has been measured. Art answered that the congestion on the Altamont Pass is probably a combination of the grade and trips generated from San Joaquin County; however, staff has not collected that data. Liz stated that motorists encounter slower speeds in the Altamont Pass due to poor pavement conditions and fewer lanes, but speeds increase and congestion decreases due to the additional lanes westbound lanes coming into Alameda County after the Altamont Pass.

Commissioner Kaplan asked if trucks can use the express lanes. Liz said they are prohibited from doing so by state law.

Commissioner Kaplan asked if we have a net revenue chart. Liz stated that there is currently no chart provided as financials are expected to be finalized next month and will be analyzed on an annual basis.

*This item was for information only.*

**5. Committee Member Reports**

There were no committee member reports.

**6. Staff Reports**

Art Dao stated that the Commission retreat was scheduled for November 18, 2016.

**7. Adjournment/ Next Meeting**

The next meeting is:

Date/Time: Monday, November 14, 2016 @ 10:00 a.m.

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

Attested by:



Vanessa Lee, Clerk of the Commission



**DATE:** November 7, 2016

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

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

## Summary

The Alameda CTC is the project sponsor of the I-580 Corridor Express Lane Projects along the I-580 corridor in the Tri-Valley that are now in operation, 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 September 2016 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 up to 26 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 express lane operation limits. Motorists using the I-580 Express Lanes facility enjoy travel time savings and travel reliability benefits 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 officers provide enforcement services and Caltrans provides roadway maintenance services through reimbursable service agreements.

**September 2016 Operation Update:** During the 22 days of September express lane operations, there were over 675,000 total express lane trips recorded. Table 1 presents the breakdown of trips based on toll classification and direction of travel. The percent of users without FasTrak® flex tags continued to decline, dropping to 25% in September, with a corresponding increase toll tag usage by HOV users of about 1%. 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 our customer service representatives either assess tolls to the matching FasTrak account or issues a notice of toll evasion violation to the registered vehicle owner based on the license plate read by the Electronic Tolling System. Of those motorists without a toll tag, approximately 57% of the trips were matched to existing FasTrak accounts by means of license plate information. The percentage of trips resulting in violation notices is thus less than 11% this month.

Table 1. Express Lane Trips by Type and Direction for September 2016

Trip Classification		Percent of Trips
By Type	HOV-eligible with FasTrak flex tag	33%
	SOV with FasTrak standard or flex tag	42%
	No Tag or Invalid Tag	25%
By Direction	Westbound	46%
	Eastbound	54%

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).

During September 2016, express lane users experienced average travel speeds up to 26 mph greater than the average speeds in the general purpose lanes, with greater speed differentials in the more congested segments of the corridor. Express lanes also operate at better LOS than adjacent general purpose lanes during commute times. Table 2 summarizes the speed differentials and LOS at four locations in each of the westbound and eastbound directions during the morning and evening commute hours, respectively.

Table 2. Speed Differentials and Level of Service for September 2016

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	7	A	C
	North Livermore Ave	2 - 5	4	B	C
	Fallon Road	4 - 13	9	B	C
	Santa Rita Road	9 - 19	13	B	C
Eastbound Evening Commute: 2 pm – 7 pm	Hacienda Road	19 - 26	23	C	E
	Airway Blvd	7 - 12	9	B	C
	North First Street	7 - 9	8	A	C
	Vasco Road	9 - 22	14	B	C

Attachment B presents the speed and density heat maps for the I-580 corridor during revenue hours for the five-month period from April – September 2016. 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 April through September, the average speeds in the westbound express lane ranged from 55 to 70 mph during the morning commute hours (5 am to 11 am) with lower speeds occurring between Isabel Avenue and Fallon 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 only for a short period of time in the middle of the corridor (Isabel Avenue to Fallon Road). By comparison, the general purpose lanes experienced speeds as low as 40 mph and LOS D for much longer periods of time, throughout a greater portion of the corridor.

In the eastbound direction, average corridor speeds from April through September ranged from 20 to 70 mph during the evening commute hours (2 pm – 7 pm) with the lowest speeds occurring only at the eastern terminus of the express lanes, between North First Street and Greenville Road; average 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 eastern terminus of the express lanes between 3 pm and 6:30 pm; average LOS B or better was realized throughout the rest of the day in all locations. By comparison, the general purpose lanes experienced similar low speeds but with LOS F for much longer periods of time throughout a greater portion of the corridor. The degraded service at the east end of the corridor improved for both the express and general purpose lanes when Caltrans opened a new general purpose lane on June 30, 2016 from Greenville Road to Flynn Road. Future heat

maps will reflect significant improvement for express lane performance, though congestion between Greenville Road and I-205 during the evening commute causes almost daily queues that extend into the eastbound express lanes.

Posted toll rates have yet to hit the operational maximum toll rates to travel the entire length of the corridor, which is currently set at \$13.00 and \$9.00 for westbound and eastbound, respectively. 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.

Table 3. Toll Rate Data for September 2016

Direction	Maximum Posted Toll (Travel Entire Corridor)	Average Assessed Toll (All Trips)
Westbound	\$7.50	\$1.82
Eastbound	\$5.75	\$1.79

Through September 2016, the I-580 Express Lanes have recorded over 4.6 million total trips and generated over \$5.05 million in gross toll revenues.

In 2010, the Commission adopted a minimum toll of \$0.30 for I-580 Express Lanes. The currently implemented minimum toll rate is \$0.30 for a single zone. Upon evaluation of the operating costs, staff has recommended to the Executive Director that the minimum toll on I-580 be raised to \$0.50. Per the I-580 Express Lane Toll Policy adopted by the Commission in September 2015, the adjustment of the minimum and maximum toll rates within the constraints set by the Policy is delegated to the Executive Director. The new minimum rate of \$0.50 will be implemented effective January 1, 2017.

Public outreach and education activities continue throughout the I-580 corridor commute shed. These efforts are planned through the end of Fiscal Year 2016/17 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. Current activities include outreach via social media and advertising on Waze.

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

**Attachments**

- A. I-580 Corridor Express Lane Location Map
- B. I-580 Corridor Heat Maps April – September 2016

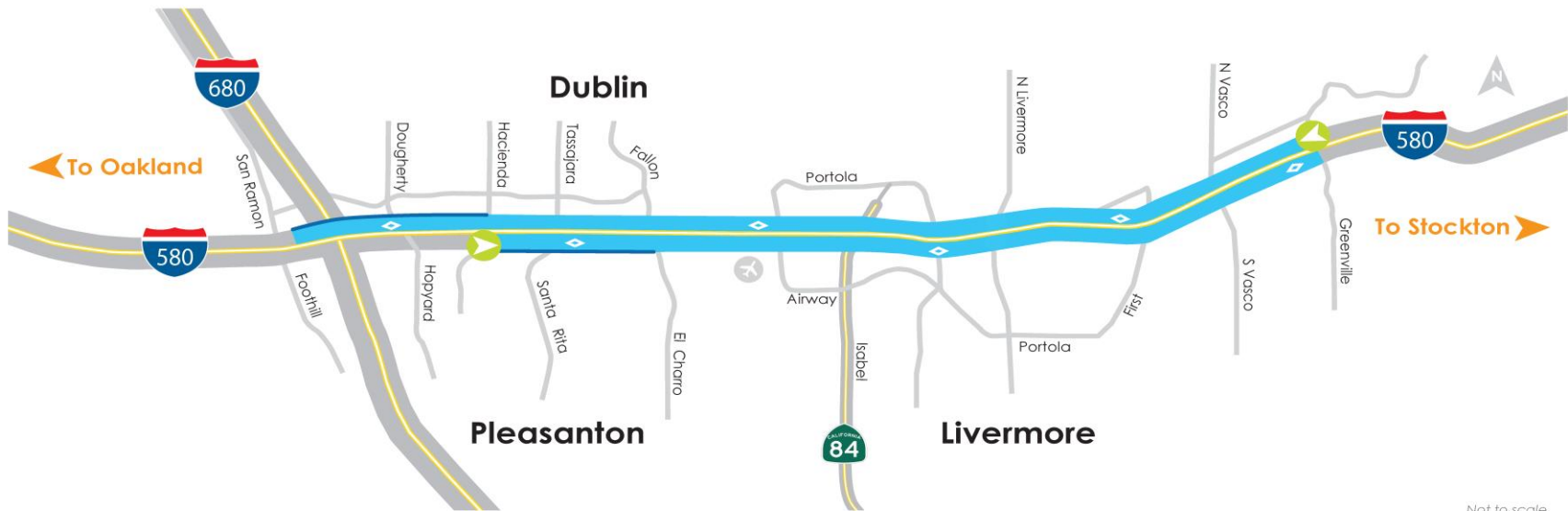
**Staff Contact**

[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.

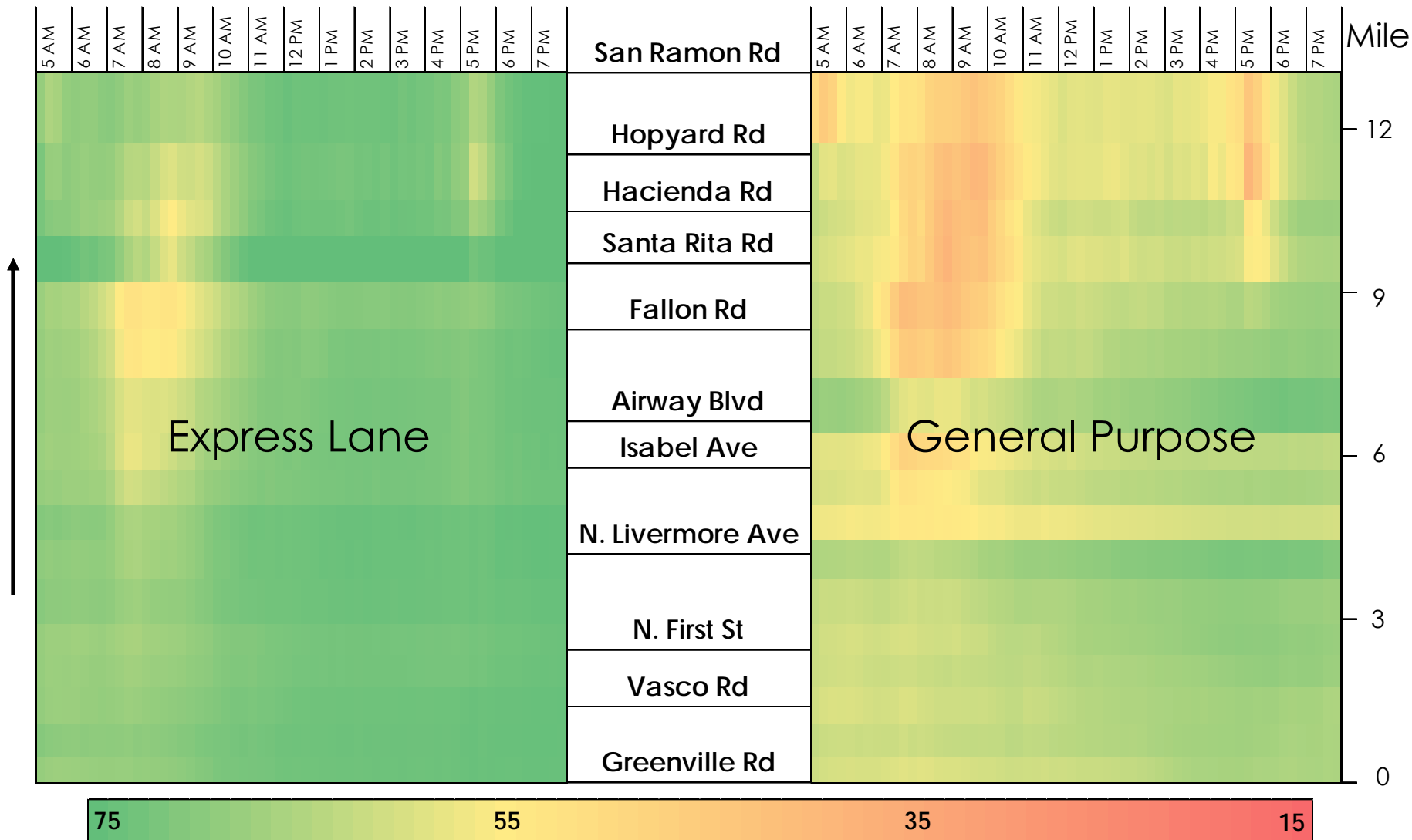
**Please note:** For access to I-680 or Dougherty, exit express lane before Hacienda.

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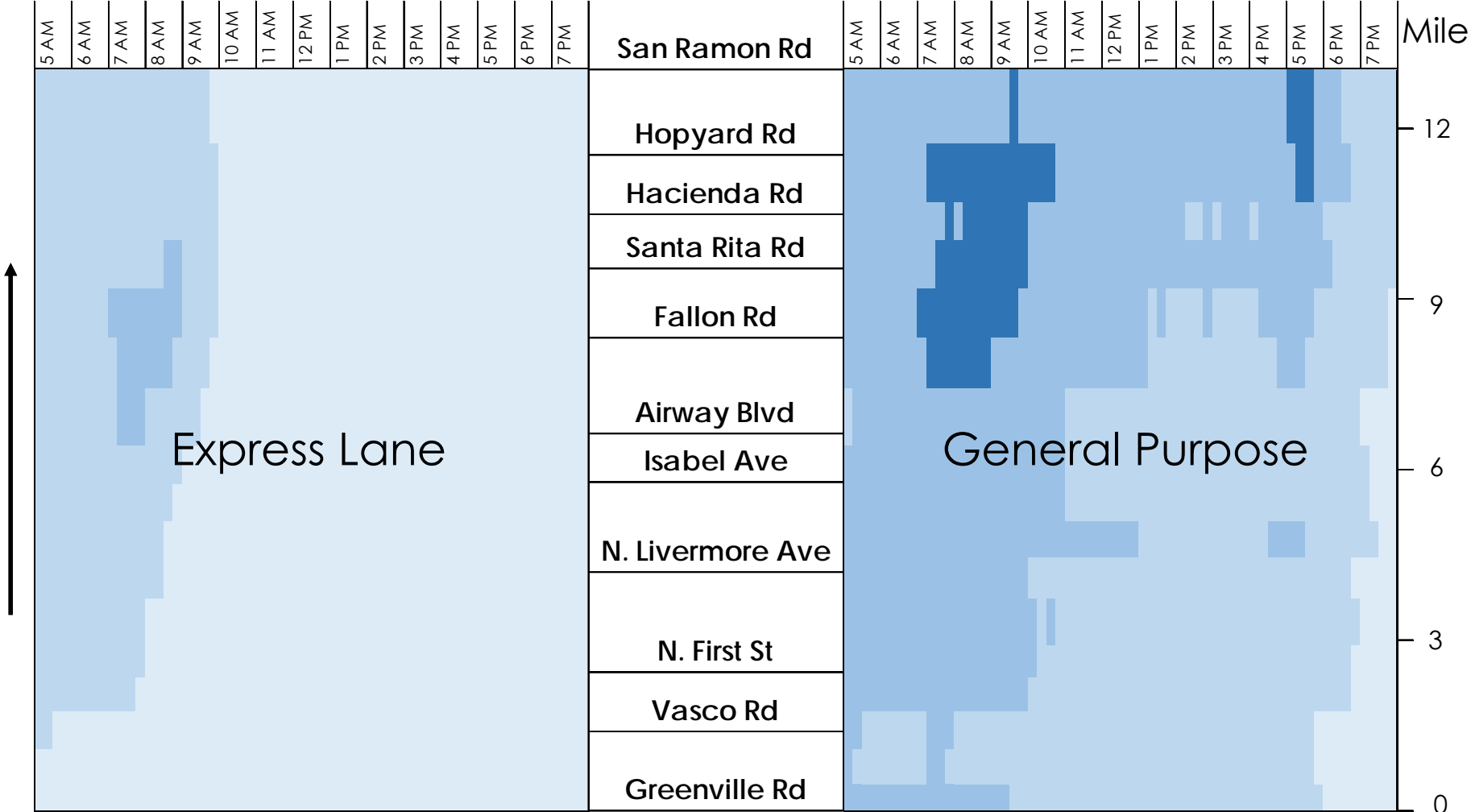
# Westbound I-580 Corridor Speed Heat Maps

Monday-Friday, April 2016 – September 2016



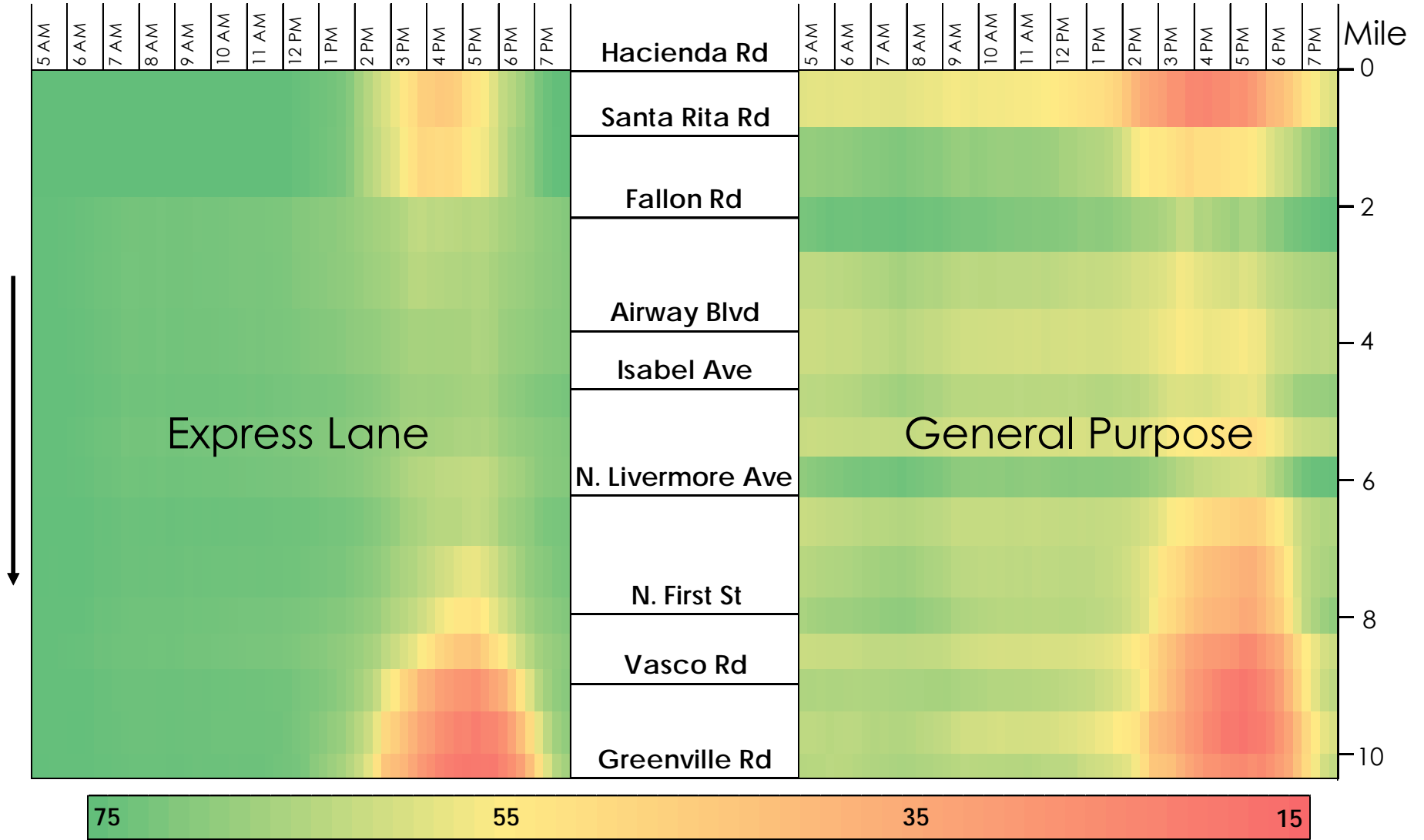
# Westbound I-580 Corridor Density Heat Maps

Monday-Friday, April 2016 – September 2016



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