

Meeting Agenda

Bay Area Infrastructure Financing Authority

Authority Members:

Scott Haggerty, Chair Amy Worth, Vice Chair
Federal D. Glover, Carol Dutra-Vernaci, James P. Spering

Non-Voting Member: Tony Tavares

Wednesday, December 18, 2019

9:30 AM

Board Room - 1st Floor

This meeting is scheduled to be webcast live on the Metropolitan Transportation Commission's website: <http://mtc.ca.gov/whats-happening/meetings> and will take place at 9:30 a.m.

1. Roll Call / Confirm Quorum

Quorum: A quorum of this committee shall be a majority of its regular voting members (3).

2. Pledge of Allegiance

3. Compensation Announcement (Secretary)

4. Consent Calendar

- 4a. [19-1340](#) Minutes of the November 20, 2019 meeting
- Action:* Authority Approval
- Attachments:* [4a 11-20-2019_BAIFA_Draft_Minutes_v1.pdf](#)
-
- 4b. [19-1343](#) BAIFA Financial Statements for Q1 FY 2019-20
- Action:* Information
- Presenter:* Raymond Woo
- Attachments:* [4b_BAIFA_Q1_FY2019-20_Financials.pdf](#)
-
- 4c. [19-1341](#) MTC Express Lanes Quarterly Report: Third Quarter, July - September, 2019
- Action:* Information
- Presenter:* Lisa Klein
- Attachments:* [4c_MTC_ExpressLanes_Q3'2019_Report.pdf](#)

5. Approval

5a. [19-1342](#) Public Hearing: Proposed BAIFA Toll Facility Ordinance Amendment

A public hearing on proposed tolling rules for the future I-880 Express Lanes and tolling rule changes for the already-open I-680 Contra Costa Express Lanes.

Action: Public Hearing

Presenter: Pierce Gould

Attachments: [5a_BAIFA Toll Facility Ordinance Public Hearing.pdf](#)

6. Public Comment / Other Business

7. Adjournment / Next Meeting

The next meeting of the Bay Area Infrastructure Financing Authority is scheduled to be held on Wednesday, January 22, 2020 at the Bay Area Metro Center, 375 Beale Street, San Francisco, CA 94105.

Public Comment: The public is encouraged to comment on agenda items at Authority meetings by completing a request-to-speak card (available from staff) and passing it to the Authority secretary. Public comment may be limited by any of the procedures set forth in Section 3.09 of MTC's Procedures Manual (Resolution No. 1058, Revised) if, in the chair's judgment, it is necessary to maintain the orderly flow of business.

Meeting Conduct: If this meeting is willfully interrupted or disrupted by one or more persons rendering orderly conduct of the meeting unfeasible, the Chair may order the removal of individuals who are willfully disrupting the meeting. Such individuals may be arrested. If order cannot be restored by such removal, the members of the Authority may direct that the meeting room be cleared (except for representatives of the press or other news media not participating in the disturbance), and the session may continue.

Record of Meeting: Authority meetings are recorded. Copies of recordings are available at a nominal charge, or recordings may be listened to at MTC offices by appointment. Audiocasts are maintained on MTC's Web site (mtc.ca.gov) for public review for at least one year.

Accessibility and Title VI: MTC provides services/accommodations upon request to persons with disabilities and individuals who are limited-English proficient who wish to address Commission matters. For accommodations or translations assistance, please call 415.778.6757 or 415.778.6769 for TDD/TTY. We require three working days' notice to accommodate your request.

可及性和法令第六章: MTC 根據要求向希望來委員會討論有關事宜的殘疾人士及英語有限者提供服務/方便。需要便利設施或翻譯協助者，請致電 415.778.6757 或 415.778.6769 TDD / TTY。我們要求您在三個工作日前告知，以滿足您的要求。

Acceso y el Título VI: La MTC puede proveer asistencia/facilitar la comunicación a las personas discapacitadas y los individuos con conocimiento limitado del inglés quienes quieran dirigirse a la Comisión. Para solicitar asistencia, por favor llame al número 415.778.6757 o al 415.778.6769 para TDD/TTY. Requerimos que solicite asistencia con tres días hábiles de anticipación para poderle proveer asistencia.

Attachments are sent to Authority members, key staff and others as appropriate. Copies will be available at the meeting.

All items on the agenda are subject to action and/or change by the Authority. Actions recommended by staff are subject to change by the Authority.



Metropolitan Transportation Commission

375 Beale Street, Suite 800
San Francisco, CA 94105

Legislation Details (With Text)

File #: 19-1340 **Version:** 1 **Name:**

Type: Minutes **Status:** Consent

File created: 11/12/2019 **In control:** Bay Area Infrastructure Financing Authority

On agenda: 12/18/2019 **Final action:**

Title: Minutes of the November 20, 2019 meeting

Sponsors:

Indexes:

Code sections:

Attachments: [4a 11-20-2019_BAIFA_Draft_Minutes_v1.pdf](#)

Date	Ver.	Action By	Action	Result
------	------	-----------	--------	--------

Subject:
Minutes of the November 20, 2019 meeting

Recommended Action:
Authority Approval



Bay Area Metro Center
375 Beale Street
San Francisco, CA 94105

Meeting Minutes

Bay Area Infrastructure Financing Authority

Authority Members:

***Scott Haggerty, Chair Amy Worth, Vice Chair
Federal D. Glover, Carol Dutra-Vernaci, James P. Spering***

Non-Voting Member: Tony Tavares

Wednesday, November 20, 2019

1:40 PM

Yerba Buena Conference Room - 1st Floor

Call Meeting to Order

1. Roll Call/Confirm Quorum

Present: 5 - Commissioner Glover, Chair Haggerty, Commissioner Spering, Vice Chair Worth
and Commissioner Dutra-Vernaci

Non-Voting Member Absent: Commissioner Tavares

2. Consent Calendar

Approval of the Consent Calendar

**Upon the motion by Commissioner Spering and the second by Vice Chair Worth,
the Consent Calendar was unanimously approved by the following vote:**

Aye: 5 - Commissioner Glover, Chair Haggerty, Commissioner Spering, Vice Chair Worth
and Commissioner Dutra-Vernaci

2a. [19-1214](#) Minutes of the October 23, 2019 meeting

Action: Authority Approval

3. Approval

- 3a. [19-1215](#) Funding Agreement - San Mateo 101 Express Lanes Civil Construction:
San Mateo County Transportation Authority (SMCTA) (\$50,000,000)

A request for approval of a funding agreement to allocate \$50 million to SMCTA, which will serve as a pass-through agency in providing funds towards the San Mateo 101 civil construction.

Action: Authority Approval

Presenter: Jim Macrae

Rich Hedges was called to speak.

Upon the motion by Commissioner Spering and the second by Commissioner Glover, the funding agreement with the San Mateo County Transportation Authority was unanimously approved. The motion carried by the following vote:

Aye: 5 - Commissioner Glover, Chair Haggerty, Commissioner Spering, Vice Chair Worth and Commissioner Dutra-Vernaci

4. Public Comment / Other Business

5. Adjournment / Next Meeting:

The next meeting of the Bay Area Infrastructure Financing Authority is scheduled to be held at 9:30 a.m. on Wednesday, December 18, 2019 at the Bay Area Metro Center, 375 Beale Street, San Francisco, CA 94105. Please note this December meeting date is scheduled to take place on the 3rd Wednesday instead of the 4th Wednesday due to the holiday season.

Legislation Details (With Text)

File #: 19-1343 **Version:** 1 **Name:**

Type: Report **Status:** Consent

File created: 11/12/2019 **In control:** Bay Area Infrastructure Financing Authority

On agenda: 12/18/2019 **Final action:**

Title: BAIFA Financial Statements for Q1 FY 2019-20

Sponsors:

Indexes:

Code sections:

Attachments: [4b_BAIFA_Q1_FY2019-20_Financials.pdf](#)

Date	Ver.	Action By	Action	Result
------	------	-----------	--------	--------

Subject:
BAIFA Financial Statements for Q1 FY 2019-20

Presenter:
Raymond Woo

Recommended Action:
Information

Bay Area Infrastructure Financing Authority (BAIFA)

December 18, 2019

Agenda Item 4b

BAIFA Financial Statements for Q1 FY 2019-20

Background: Attached are the BAIFA financial statements for the first quarter ending September 30, 2019. Major financial highlights include:

- (1) **Operating:** Total operating revenue of \$3.5 million tracks with budget projections. Majority of the Express Lanes (EL) operating revenue is generated from general toll collection which recorded a \$2.9 million revenue at the end of the first quarter.

Total operating expense of \$363 thousand, is only 2.5% of the approved budget. As we get closer to midyear, administration, maintenance and depreciation expenses will kick in giving us a more accurate financial picture.

Overall, the EL operations reports a \$3 million surplus as of the end of September.

- (2) **Capital Programs:** The Bay Area Toll Authority (BATA) has been housing the approved \$345 million Capital Program Budget since the establishment of this project in FY 2012-13. As the first EL entered into operation in FY 2017-18, and with more entering the operating phase in the near future, it is appropriate to transfer the capital project to BAIFA. Staff was authorized by BATA in June 2019 to transfer the budget and fixed asset balance of the EL program to BAIFA in FY 2019-20. Staff is in the process of amending the EL capital budgets in BATA and BAIFA to reflect the audited balance, which will be transferred to BAIFA.

- (3) **Actions under Executive Director Contract signature authority:** please see Attachment A, page 3.

If you have any questions about this report, please contact Brian Mayhew at (415) 778-6730.

Recommendation: None. This item provided as information only.

Attachments: Attachment A –BAIFA Financial Statements for first quarter ending September 30, 2019


Therese W. McMillan

Agenda Item 4b Attachment A

BAIFA Operating Budget As of September 2019

	FY 2019-20	Actual	Curent Budget Balance Over/(Under)	% of Budget (col 2/1)	Year Expired	Encumbrances	YTD Total (Enc+YTD)
	Budget	YTD					
Revenue:							
1 General Toll Revenue	12,000,000	2,935,958	(9,064,042)	24.5%	25.0%	0	2,935,958
2 Violation Revenue	1,900,000	444,165	(1,455,835)	23.4%	25.0%	0	444,165
3 Interest Revenue	360,000	85,652	(274,348)	23.8%	25.0%	0	85,652
Total Revenue	14,260,000	3,465,775	(10,794,225)	24.3%	25.0%	0	3,465,775
Expense:							
FasTrak Operations and Maintenance							
1 RCSC Operations	1,620,000	0	(1,620,000)	0.0%	25.0%	0	0
2 Banking/Credit Card Fees	420,000	69,133	(350,867)	16.5%	25.0%	384,224	453,357
3 BATA Finaninal Services	270,000	37,480	(232,520)	13.9%	25.0%	232,520	270,000
4 Collections/DMV Expenses	520,000	0	(520,000)	0.0%	25.0%	0	0
FasTrak O&M Subtotal	2,830,000	106,613	(2,723,387)	3.8%	25.0%	616,744	723,357
Express Lanes & Backhaul Operations and Maintenance							
5 Operating Center	650,000	0	(650,000)	0.0%	25.0%	0	0
6 California Highway Patrol Enforcement	660,000	0	(660,000)	0.0%	25.0%	0	0
7 Roadway Maintenance	1,803,000	37,156	(1,765,844)	2.1%	25.0%	188,272	225,428
8 Toll System Operations & Maintenance	2,852,000	0	(2,852,000)	0.0%	25.0%	0	0
9 Utility Service	44,000	2,877	(41,123)	6.5%	25.0%	41,122	43,999
Express Lanes and Backhaul O&M Subtotal	6,009,000	40,033	(5,968,967)	0.7%	25.0%	229,394	269,427
Express Lanes Administration							
10 Salaries, Benefits & Overhead	1,515,000	173,870	(1,341,130)	11.5%	25.0%	0	173,870
11 Professional/Consultant Service	330,000	0	(330,000)	0.0%	25.0%	0	0
12 Audit/Accounting	121,000	37,692	(83,308)	31.2%	25.0%	15,755	53,447
13 Insurance	74,000	3,068	(70,932)	4.1%	25.0%	0	3,068
14 Other	50,000	1,978	(48,022)	4.0%	25.0%	2,000	3,978
Express Lanes Admin Subtotal	2,090,000	216,608	(1,873,392)	10.4%	25.0%	17,755	234,363
Other/Transfer							
15 Transfer from/(to) Reserve	(419,000)	0	419,000	0.0%	25.0%	0	0
16 Depreciation	3,750,000	0	3,750,000	0.0%	25.0%	0	0
Total Transfer In (out)	3,331,000	0	3,331,000	0.0%	25.0%	0	0
Total Expense	14,260,000	363,254	(7,234,746)	2.5%	25.0%	863,893	1,227,147
Operating Surplus (Shortfall)	0	3,102,521					

Agenda Item 4b Attachment A

BAIFA EL Capital Projects As of 9/30/2019 - Life to Date

	Project Title	Total Budget	Actual	Encumbrance	Balance Remaining
952					
6840	Program Costs: Planning, Coordination & Management	8,627,449	347,258	-	8,280,191
6841	Centralized Toll System	11,953,628	-	1,026,519	10,927,109
6842	CC-680 Southern Segment Conversion	1,694,716	-	103,931	1,590,785
6843	Capitalized Start-up O&M	11,209,781	-	76,028	11,133,753
6844	ALA-880 Conversion	42,821,171	421	1,961,476	40,859,274
6845	CC-680 Northern Segment - Southbound Conversion	46,477,925	30,000	382,637	46,065,288
6847	Program Contingency	2,847,677	-	-	2,847,677
6849	SOL-80 Express Lane Conversion	6,903,660	-	-	6,903,660
6851	84/Dumbarton Bridge	0	-	-	-
6852	92/San Mateo Bridge	0	-	-	-
6853	San Mateo 101	95,000,000	8,797	-	94,991,203
	Express Lanes Total	\$227,536,007	\$386,476	\$3,550,591	\$223,598,940

Note 1: Audited EL Capital expense recorded in BATA Fund 849 as of 6/30/19 was \$231,912,548

Note 2: Budget balance of the \$345 million budget funded by BATA/SAFE to be rebudgetted in BAIFA EL Capital Fund 952 in FY2019-20 is \$113,273,572. The LTD capital budget in both BATA and BAIFA will be amended to reflect this update.

PURCHASE ORDERS EXECUTED BY EXECUTIVE DIRECTOR
\$2,500-\$200,000

		Jul - Sept 19
AT&T		\$147,475
	<i>Data Transferring Service</i>	
Digital 365 Main LLC		\$77,953
	<i>Data Transferring Service</i>	
PG&E		\$44,000
	<i>Utility Service</i>	

Legislation Details (With Text)

File #: 19-1341 **Version:** 1 **Name:**

Type: Report **Status:** Consent

File created: 11/12/2019 **In control:** Bay Area Infrastructure Financing Authority

On agenda: 12/18/2019 **Final action:**

Title: MTC Express Lanes Quarterly Report: Third Quarter, July - September, 2019

Sponsors:

Indexes:

Code sections:

Attachments: [4c_MTC_ExpressLanes_Q3'2019_Report.pdf](#)

Date	Ver.	Action By	Action	Result
------	------	-----------	--------	--------

Subject:
MTC Express Lanes Quarterly Report: Third Quarter, July - September, 2019

Presenter:
Lisa Klein

Recommended Action:
Information

Bay Area Infrastructure Financing Authority (BAIFA)

December 18, 2019

Agenda Item 4c

MTC Express Lanes Quarterly Report: Third Quarter, July - September 2019

Subject: An overview of capital project delivery progress for MTC Express Lanes and operational performance of MTC's I-680 Contra Costa Express Lanes.

Background: MTC issues Express Lanes Program reports quarterly. The report summarizes major developments, project schedules and risks, and compares forecast costs with BAIFA's Express Lanes Program Expenditure Plan as well as the operational performance of BAIFA's open express lanes.

I-680 Contra Costa Southern Segment Operations – Performance for the third quarter of 2019 is highlighted below (see *Appendix C* of the attached report for more detail).

- Drivers made 2.0 million trips, similar to the prior quarter and the same quarter a year ago. Daily express lane trips averaged 32,600.
- Paid trips were 1.1 million, a 5% decline from the prior quarter and a 3% decline from the same quarter a year ago.
- Peak period express lane speeds were 9 to 13 miles per hour (mph) faster than the general purpose lanes, similar to the same quarter a year ago. While peak period speeds average 60 mph throughout the corridor, several congested location speeds dropped below 45 mph frequently. Staff is adjusting the toll algorithm to improve speeds.
- 41% of trips were by vehicles declared as toll-free, which has been highly consistent in 2019. Toll violators, which are vehicles without FasTrak® accounts, crept up from 4% to 6% of all trips.
- Monthly average tolls paid ranged from \$5.20 to \$5.90 in the northbound p.m. peak hour, and from \$3.80 to \$5.80 in the southbound a.m. peak hour. When traffic flowed well in the non-peak hours, the average toll paid was \$1.40 northbound and \$1.20 southbound. Average tolls paid were mostly similar to the same quarter a year ago. The highest posted toll was \$8.50 in each direction, and was paid by just 4% of tolled drivers.
- CHP performed 89% of requested enforcement hours and made 1,600 enforcement contacts, down from 91% and 1,800 respectively in the same quarter a year ago.

Express Lanes Capital Delivery – Project activity is highlighted below (see *Section I. Program Highlights* and *Section III. Capital Delivery* of the attached report for more detail).

- **I-880 Alameda:** Civil construction is near complete. The toll system integrator is continuing toll system, electrical and fiber installation. Delays to toll system work have pushed the planned opening date to late summer 2020, and the risk of further delay remains. In anticipation of opening, BAIFA is in the process of adopting tolling rules through a public process.
- **I-680 Contra Costa Northern Segment Southbound:** Civil construction continues with a focus on building retaining walls, widening ramps and the highway at various locations, installing new concrete median barriers, and eventually installing overhead sign structures. Caltrans has begun its review of the toll system design prior to issuing an encroachment permit.
- **I-80 Solano:** The project remains shelf-ready in the event construction funds become available.

Issues: None

Recommendation: This item is presented for information only.

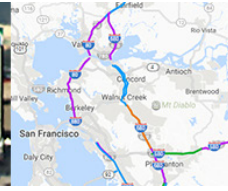
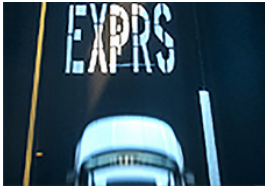
Attachments: MTC Express Lanes Quarterly Report: Third Quarter, July - September 2019



Therese W. McMillan



BAY AREA EXPRESS LANES



MTC Express Lanes Quarterly Report 3rd Quarter, July - September, 2019

Submitted: December 2019

BAIFA
BAY AREA INFRASTRUCTURE
FINANCING AUTHORITY



METROPOLITAN
TRANSPORTATION
COMMISSION

TABLE OF CONTENTS

I.	Program Highlights	1
II.	Program Overview	3
	A. Program Description	3
	B. Operating Authority	4
	C. MTC Express Lane Project Funding	5
III.	Capital Delivery	6
	A. Schedule	6
	B. Capital Costs	7
	C. Change Management	8
	D. Risk Management Plan	8
	E. Active Capital Project Summaries	10
IV.	Operations	20
	Appendices	A-1
	A. Express Lanes Overview	A-2
	B. Completed Capital Project Summaries	A-5
	C. I-680 Contra Costa Express Lanes Operations Report	A-7

I. PROGRAM HIGHLIGHTS

The purpose of this report is to summarize the progress of delivering Metropolitan Transportation Commission (MTC) Express Lanes. The report covers the third quarter of 2019, July 1 to September 30.

The California Transportation Commission (CTC) approved MTC's application to implement and operate its 270-mile express lane network on October 27, 2011. Soon thereafter, work began to environmentally clear the first phase of express lane conversion projects and produce a Concept of Operations describing how the Express Lanes will operate. The first of MTC's express lanes opened in October 2017 on I-680 in Contra Costa County. Several additional projects are at varying stages of development.

Project Development & Construction	3 rd Quarter 2019 Highlights	Current Activities
I-880 Alameda (ALA-880) San Leandro to Milpitas <i>Hegenberger Road/Lewelling Boulevard to Dixon Landing Road</i>	<ul style="list-style-type: none"> Civil construction work is near complete as of September 2019. The toll system integrator continued installation of toll system equipment, electrical and fiber. 	<ul style="list-style-type: none"> The toll system integrator will continue installation of roadside cabinets, toll system equipment in the median, variable toll message signs, CCTVs and connections of electrical and fiber conduits. MTC staff continues outreach activities in advance of BAIFA adopting tolling rules, and is preparing materials for a customer education campaign. Monthly construction notices and ramp closure/detour notices continue to be sent.
I-680 Contra Costa Southern Segment (CC-680 South) Walnut Creek to San Ramon <i>Livorna Road/Rudgear Road to Alcosta Boulevard</i>	<ul style="list-style-type: none"> See Appendix C for second quarter performance data. 	<ul style="list-style-type: none"> Project complete; see Appendix B for archived summary.
I-680 Contra Costa Northern Segment Southbound (CC-680 North SB) Martinez to Walnut Creek <i>Marina Vista Boulevard to Rudgear Road/SR 242</i>	<ul style="list-style-type: none"> The civil contractor completed barrier removal activities and foundations for new overhead sign structures in the median of I-680 between SR-242 and SR-24. 	<ul style="list-style-type: none"> The civil contractor will continue construction of 5 retaining walls and ramp and highway widening at various locations. Completion of the new concrete barrier between SR-242 and North Main Street is expected in October 2019. The contractor will then erect new overhead sign structures in various locations throughout the corridor. The replacement planting design is being updated based on Caltrans' comments with work anticipated to start spring 2020. Caltrans started its review of the toll system integrator's design package for issuance of an encroachment permit.
I-80 Solano (SOL-80) Fairfield to Vacaville <i>Red Top Road to I-505</i>	<ul style="list-style-type: none"> USDOT announced that the project was not selected for an Infrastructure for Rebuilding America grant. 	<ul style="list-style-type: none"> The project is shelf-ready should construction funds become available. MTC and STA staff continue to explore other potential funding sources.

Project Development & Construction	3 rd Quarter 2019 Highlights	Current Activities
Program Management	<ul style="list-style-type: none"> Staff developed a draft amendment to the BAIFA Toll Facility Ordinance for proposed tolling rules on the I-880 Express Lanes. 	<ul style="list-style-type: none"> Staff continues to develop a 10-year strategic plan to help prioritize express lanes funding and delivery in the region. Staff continues to implement the I-880 Stakeholder and Customer Outreach Plan by meeting with stakeholder agencies to discuss project progress and future lane operations, coordinating with partners on messaging and outreach strategies, and developing materials about how the I-880 Express Lanes work. At the October 2019 BAIFA meeting, staff presented proposed tolling rules for the I-880 Express Lanes, including half-price tolls for 2-person vehicles and clean air vehicles. The presentation initiated a multi-month process to solicit public feedback prior to an adoption vote by BAIFA in early 2020.
Toll System	<ul style="list-style-type: none"> The toll system integrator and the FasTrak® back office finished testing an updated regional interface control document to enable the two systems to communicate and share FasTrak 6C tag compliant data. The integrator went live with the Host 6C software updates. 	<ul style="list-style-type: none"> The toll system integrator will update the lane-side equipment software to finalize the 6C enhancements and allow for 6C tag tolling.

II. PROGRAM OVERVIEW

A. Program Description

MTC and partner agencies are implementing a regional network of express lanes called Bay Area Express Lanes. Upon completion, Bay Area Express Lanes will comprise 600 miles of express lanes operated by MTC, the Valley Transportation Authority (VTA), the Alameda County Transportation Commission (Alameda CTC), the Sunol Smart Corridors Joint Powers Authority (Sunol JPA), and the San Mateo County Express Lanes Joint Powers Authority (San Mateo JPA).

Primary objectives for Bay Area Express Lanes include:

- Create a seamless network of HOV lanes to encourage carpools, vanpools and express buses;
- Make the best use of HOV lane capacity;
- Provide reliable travel times for solo drivers; and
- Better manage all lanes to keep traffic moving.

MTC's portion of the Bay Area Express Lanes, referred to as MTC Express Lanes, will include 270 miles of express lanes – 150 miles of converted high occupancy vehicle (HOV) lanes and 120 miles of new lanes – on I-80 in Alameda, Contra Costa and Solano Counties; I-880 in Alameda County; I-680 in Contra Costa and Solano counties; and the westbound approaches to the Bay Bridge, San Mateo Bridge and Dumbarton Bridge. In addition, MTC will operate 45 miles of new and converted lanes on US-101 in San Mateo County for the San Mateo JPA.

Appendix B includes an overview of how express lanes operate.

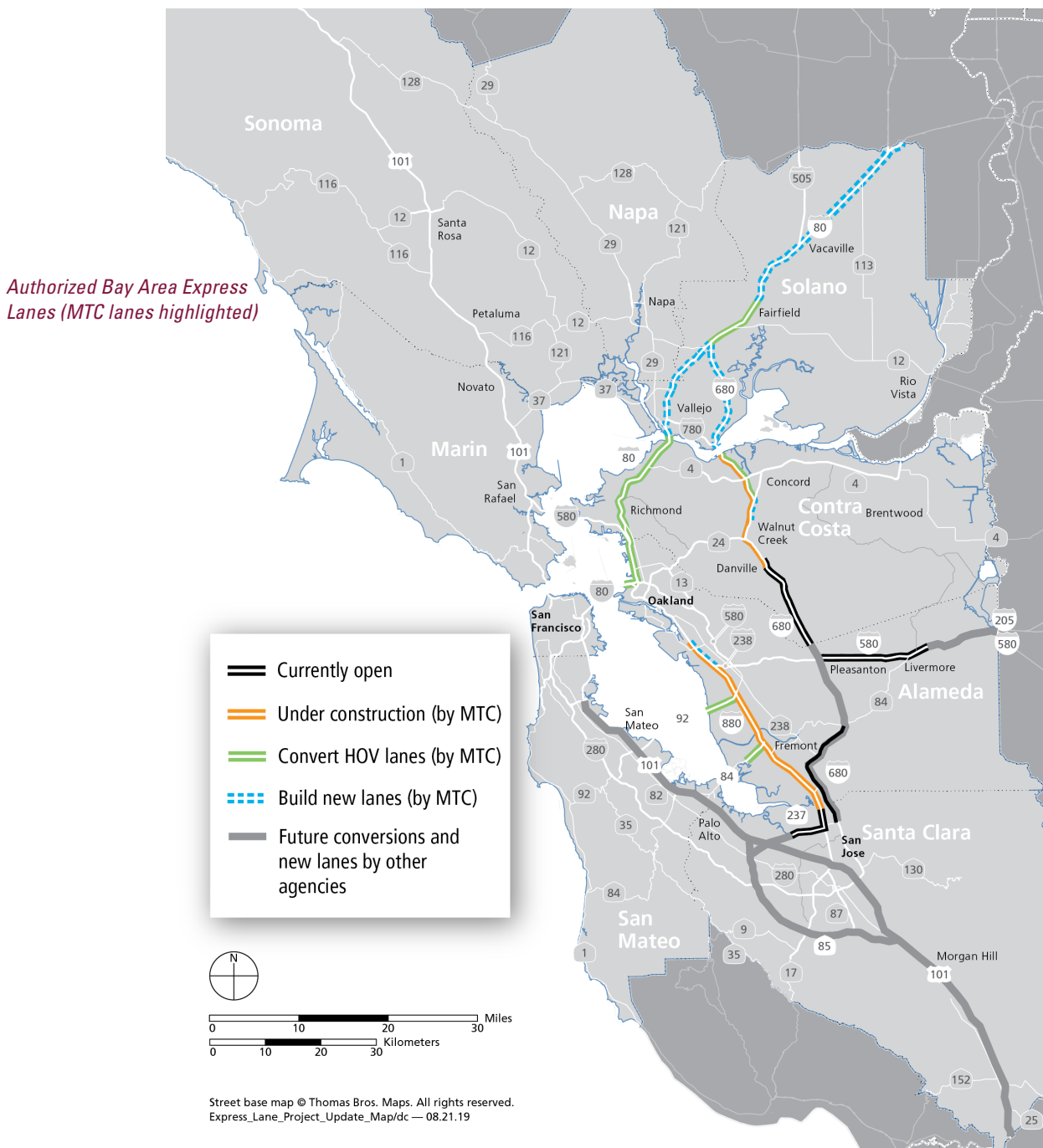


Map of Authorized Bay Area Express Lanes Network

B. Operating Authority

MTC and the Bay Area Toll Authority (BATA) have formed a joint powers authority to develop and operate MTC Express Lanes. The joint powers authority, known as the Bay Area Infrastructure Financing Authority (BAIFA), is composed primarily of representatives of the three counties where the express lanes are located: Alameda, Contra Costa and Solano. BAIFA is responsible for policy and operational decisions such as toll rates, project phasing and use of revenue. BAIFA will also operate the toll system on US-101 in San Mateo County under contract to San Mateo County transportation agencies, which are responsible for project delivery, operational policy and use of revenue.

The map below highlights MTC's portion of state-authorized Bay Area Express Lanes and shows where lanes will be converted from HOV lanes and where new lanes will be added.



C. MTC Express Lane Project Funding

MTC is using existing funding to convert existing HOV lanes to express lanes and to conduct environmental studies and design on some gap closure projects, so they are “shelf-ready” should construction funding become available. This will allow MTC to open as much of its 270-mile network as quickly as possible.

The table below lists the projects that comprise MTC Express Lanes according to current funding status.

County	Route	Project	Geographical Limits	Miles	Environmental	Design	Construction
NEAR-TERM CONVERSIONS AND GAP CLOSURE OPPORTUNITY PROJECTS							
ALA	880	I-880 Alameda	Between San Leandro and Milpitas <i>Hegenberger Rd./Lewelling Blvd. to Dixon Landing Rd.</i>	51	●	●	●
CC	680	I-680 Contra Costa Southern Segment	Between Walnut Creek and San Ramon <i>Livorna Rd./Rudgear Rd. to Alcosta Blvd.</i>	23	●	●	●
CC	680	I-680 Contra Costa Northern Segment Southbound	Martinez to Walnut Creek <i>Marina Vista Blvd. to Rudgear Rd.</i>	11	●	●	●
SOL	80	I-80 Solano	Fairfield to Vacaville <i>Red Top Rd. to I-505</i>	36	●	●	○
MID-TERM CONVERSIONS AND GAP CLOSURE OPPORTUNITY PROJECTS							
ALA/ CC	80	I-80 and Westbound Approaches to the Bay Bridge	Between Crockett and Bay Bridge <i>Cummings Skyway to Bay Bridge; I-80, I-580, I-880 and West Grand approaches to Bay Bridge</i>	44	◐	○	○
ALA/ SM	84	Dumbarton Bridge Western Approach	Fremont/Newark <i>I-880 to Dumbarton Bridge</i>	3	●	○	○
ALA/ SM	92	San Mateo Bridge Westbound Approach	Hayward <i>I-880 to San Mateo Bridge</i>	3	●	○	○
CC	680	I-680 Contra Costa Northbound Express Lane Completion	Walnut Creek to Benicia <i>North Main St. to Marina Vista Blvd.</i>	9	●	○	○

KEY




● Funded ◐ Partially Funded ○ Unfunded

ALA = Alameda, CC = Contra Costa, SM = San Mateo, SOL = Solano




III. CAPITAL DELIVERY

A. Schedule

The schedule summary below reflects the “open to traffic” dates of the original “baseline” schedule, and the current completion forecast for the projects that are fully funded.

Project	Baseline Opening	Forecast Opening	Confidence Level	Detail Page
I-880 Alameda (ALA-880) San Leandro and Milpitas <i>Hegenberger Rd./Lewelling Blvd. to Dixon Landing Rd.</i>	Spring 2019	Summer 2020		13
I-680 Contra Costa Southern Segment (CC-680 South) Walnut Creek and San Ramon <i>Livorna Rd./Rudgear Rd. to Alcosta Blvd.</i>	Fall 2016	Fall 2017 Actual		A-5
I-680 Contra Costa Northern Segment Southbound (CC-680 North SB) Martinez to Walnut Creek <i>Marina Vista Blvd. to Rudgear Rd.</i>	Fall 2018	Fall 2021		16

KEY

-  Within schedule shown.
-  Identified potential risks that may significantly impact schedule if not mitigated. See *Section III.D Risk Management Plan* for further discussion of schedule risk.
-  Known impact to schedule, changes forthcoming.

B. Capital Costs

The cost summary below shows: 1) the costs of each express lane [corridor or segment] including planning, design and construction of the civil infrastructure, and installation and integration of the backhaul communications and toll system, and 2) programwide costs including planning and design, and implementation of centralized elements of the backhaul network and toll system. The total cost estimate includes the full estimated cost to complete MTC Express Lanes. The approved Expenditure Plan fully funds the first three projects listed below, the environmental and design phases for the I-80 projects in Solano County, and the environmental phase for the westbound approaches to the San Mateo and Dumbarton Bridges. The expended-as-of amounts shown represent the unaudited amount of BATA Express Lane funds expended through September, 2019. The confidence level assessment reflects potential risks to each project budget; for more information, see Section III.D Risk Management Plan.

Project ⁽¹⁾	Total Cost Estimate ⁽²⁾	Cost Estimate, Funded Phases ⁽³⁾	Regional Measure 2 Funds (allocated)	Other Funding (allocated)	BAIFA Express Lane Funds ⁽⁴⁾			Percent Complete ⁽⁵⁾	Confidence Level ⁽⁶⁾
					July 2018 Amendment	Sept. 2018 Amendment	Expended as of 9/30/19		
NEAR-TERM CONVERSIONS AND GAP CLOSURE OPPORTUNITY PROJECTS									
Costs shown in millions of escalated dollars									
I-880 Alameda	139.1	139.1			135.5	139.1	102.6	85%	<div></div>
I-680 Contra Costa Southern Segment	54.0	54.0			55.6	54.0	52.3	99%	<div></div>
I-680 Contra Costa Northern Segment Southbound ⁽⁷⁾	127.4	127.4	19.4	54.3	51.3	53.6	17.0	40%	<div></div>
I-80 Solano	228.2	33.3	15.2		19.0	18.1	11.6	20%	<div></div>
Centralized Toll System	32.4	32.4			33.6	32.4	20.9	85%	<div></div>
Program Planning, Coordination & Management	28.4	28.4			28.4	28.4	20.6	75%	<div></div>
Program Contingency	6.1	6.1			5.1	2.9			<div></div>
Capitalized Start-up O&M	16.0	16.0			16.0	16.0	4.9		<div></div>
MID-TERM CONVERSIONS AND GAP CLOSURE OPPORTUNITY PROJECTS									
I-80 Alameda/Contra Costa and Westbound approaches to the Bay Bridge (I-80, I-580, I-880, West Grand)	193.0	5.0	5.0						
Dumbarton Bridge Westbound Approach (SR-84)	9.0	0.3			0.3	0.3	0.3	5%	
San Mateo Bridge Westbound Approach (SR-92)	10.0	0.4			0.4	0.4	0.4	5%	
I-680 Contra Costa Northbound Express Lane Completion ⁽⁸⁾	390.0	21.5	1.5	20.0				5%	
Centralized & Program Costs & Start-Up O&M - Gap Closures & Future Conversions	TBD								
TOTALS	1,233.6	463.9	41.1	74.3	345.2	345.2	230.6	71%	

⁽¹⁾ Other Gap Closure and Extension projects not shown: ALA-880 extension northbound from Lewelling to Hegenberger; SOL-80 gap closure from Carquinez Bridge to Red Top Road; SOL-80 extension east of I-505; SOL-680 gap closure from Benicia to Cordelia

⁽²⁾ Total Cost Estimate represents current estimated cost to complete each project.

⁽³⁾ Cost Estimate, Funded Phases represents current estimated cost to complete phases that are funded for each project.

⁽⁴⁾ BAIFA Express Lane Funds represent the funds that have been allocated from the BATA budget and transferred to the BAIFA budget.

⁽⁵⁾ Percent completes shown are based on the achievement of major milestones, whether those milestones were completed using BAIFA funds or other funds. Projects that have completed milestones using other funds include I-680 Contra Costa Northern Segment Southbound and I-80 Solano.

⁽⁶⁾ ● = Within budget, ● = identified potential risks that may significantly exceed budget if not mitigated, ● = Known impacts to budget - changes forthcoming.

⁽⁷⁾ Cost represents the total for HOV Completion and Conversion to Express Lanes. Other funds committed to the HOV Completion portion include Measure J (\$38.7M) and STIP (\$15.6M).

⁽⁸⁾ Represents completion of HOV lane through Walnut Creek to SR-242 and conversion of existing HOV lane north of SR-242, which were previously listed separately.

C. Change Management

The change management process captures the changes in the program that have an impact on the approved scope, schedule and budget baselines. There were no change to the MTC Express Lanes Program budget in the third quarter of 2019.

D. Risk Management Plan

MTC manages risk at both the program and contract level by identifying risks that could negatively impact the program's cost and schedule, and assigning responsibility to the person best positioned to manage each risk. Risks managed at the contract level are associated with contingency funding authorized by BAIFA for specific contracts. Risks managed at the program level would draw upon the program contingency line item in the Express Lanes Expenditure Plan. Staff regularly review the risk exposure and mitigation plans at both the contract and program level.

Chart #1 shows the median risk exposure for the program-level risks using Monte Carlo analysis. As of September 30, 2019, the risk exposure stands at \$5.5 million, which is higher than the \$4.9 million reported last quarter. This increase is due to the increase in probability and cost impacts of delay in opening the 880 Express Lanes.

Chart #2 tracks the program's cost forecast and risk exposure as compared to the authorized program budget. Consistent with the amendment to the Expenditure Plan that was adopted on September 26, 2018, the amount of BATA Express Lane Funds allocated to specific express lanes projects is \$342.3 million, plus program contingency, for a total authorized budget of \$345.2 million.

The current program contingency of \$2.9 million would fall short if the risk exposure of \$5.5 million were to be realized. While there are few individual risks with major cost impacts, there

are many risks with minor cost impacts, resulting in an overall significant risk exposure. Staff remains diligent in managing cost and risk while seeking new funding opportunities.

The top contributors to the program-level risk exposure and the associated mitigation strategies are as follows:

I-880 Alameda

- The most significant risk affecting cost and schedule relates to toll system delays that impact the opening of I-880. The toll system integrator has been delayed significantly for reasons including challenges coordinating with civil construction, weather, equipment delays, tight labor market affecting hiring of qualified staff, and staff shared with competing projects. Additionally, there will be delays in delivery of toll sign LED inserts, known as "bricks". The bricks are used to display the toll rates and hence are critical to the operation of the express lanes. MTC is working with the manufacturer to understand the delivery schedule for the remaining bricks, and is developing a mitigation strategy in the event that all of the bricks are not delivered by the time the express lane is ready to open. MTC staff will continue to work with the toll system integrator to mitigate schedule delays.
- MTC staff is working actively to mitigate risks relating to toll system and backhaul conflicts with previously undisclosed Caltrans projects under construction in the

Chart #1: Median Risk Exposure (\$M)

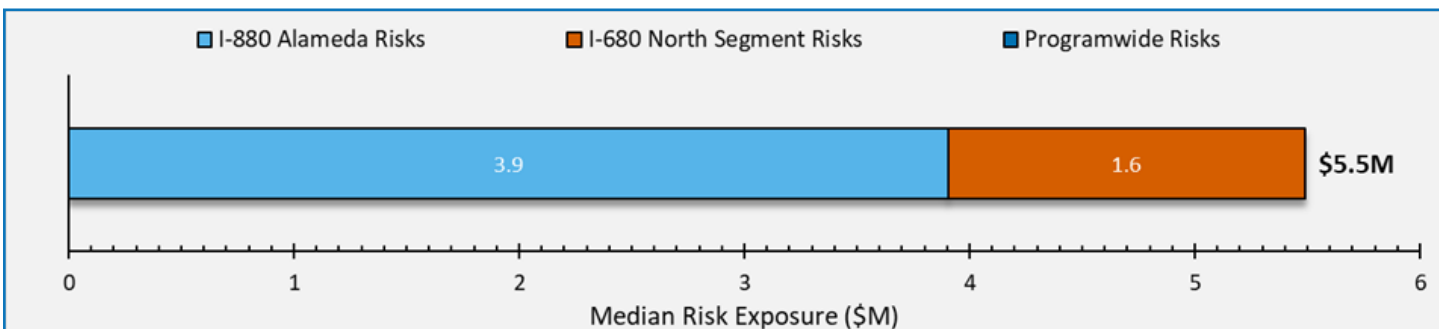


Chart #1 shows the contribution of each project's risks toward the total program risk exposure. Risk exposure is calculated using Monte Carlo simulation.

corridor. BAIFA has provided field marking services to locate facilities underground for Caltrans. BAIFA is also working with Caltrans to determine mitigation strategies, such as convening workshops to identify conflicts during project design, and providing maps of toll system and backhaul asset locations for future reference. Many of these mitigation strategies have proven successful in identifying project conflicts on the corridor, however, the risk remains significant due to the large number of ongoing projects.

- Another risk previously noted in this report relates to Caltrans requiring BAIFA and other express lanes operators to change the agreed-upon approach to toll segment pricing, affecting the toll system, signage and public information. Staff has coordinated with Caltrans on this issue. BAIFA will move forward with its current design. This risk will be monitored, but is no longer identified as significant for the program at this time.

I-680 Contra Costa Northern Segment Southbound

- The most significant schedule risk at this time is due to the toll system integrator working in tight sequence on I-880, I-680 North and US-101. MTC has identified a significant concern relating to schedule overlap between the US-101 Southern Segment and the most recent I-680 North schedule. MTC escalated these concerns to toll

system integrator executives to communicate the need for additional staff and installation managers. MTC will continue to track the schedules of both corridors, and ensure mitigation measures are in place to reduce schedule impacts.

- An additional risk that could affect schedule relates to a Caltrans-managed safety project in the corridor. Thus far, this risk has been managed well, due in part to the civil contractor holding both contracts and working with sub-contractors to ensure on-going coordination. Additional schedule risks are being monitored, including potential delay to civil contract delivery caused by unanticipated field conditions, contract specifications, weather and PG&E utility connections.
- Risks that could affect cost relate to the potential for change in signage requirements by Caltrans that may apply to express lanes, additional work resulting from unanticipated field conditions encountered during construction, and conflicts between express lane or backhaul equipment and new Caltrans projects. MTC staff continues to coordinate with Caltrans to minimize cost impacts.

Programwide Risks

- There are no programwide risks of major concern at this time.

Chart #2: Program Cost Forecast and Risk Exposure vs. Authorized Budget (\$M)

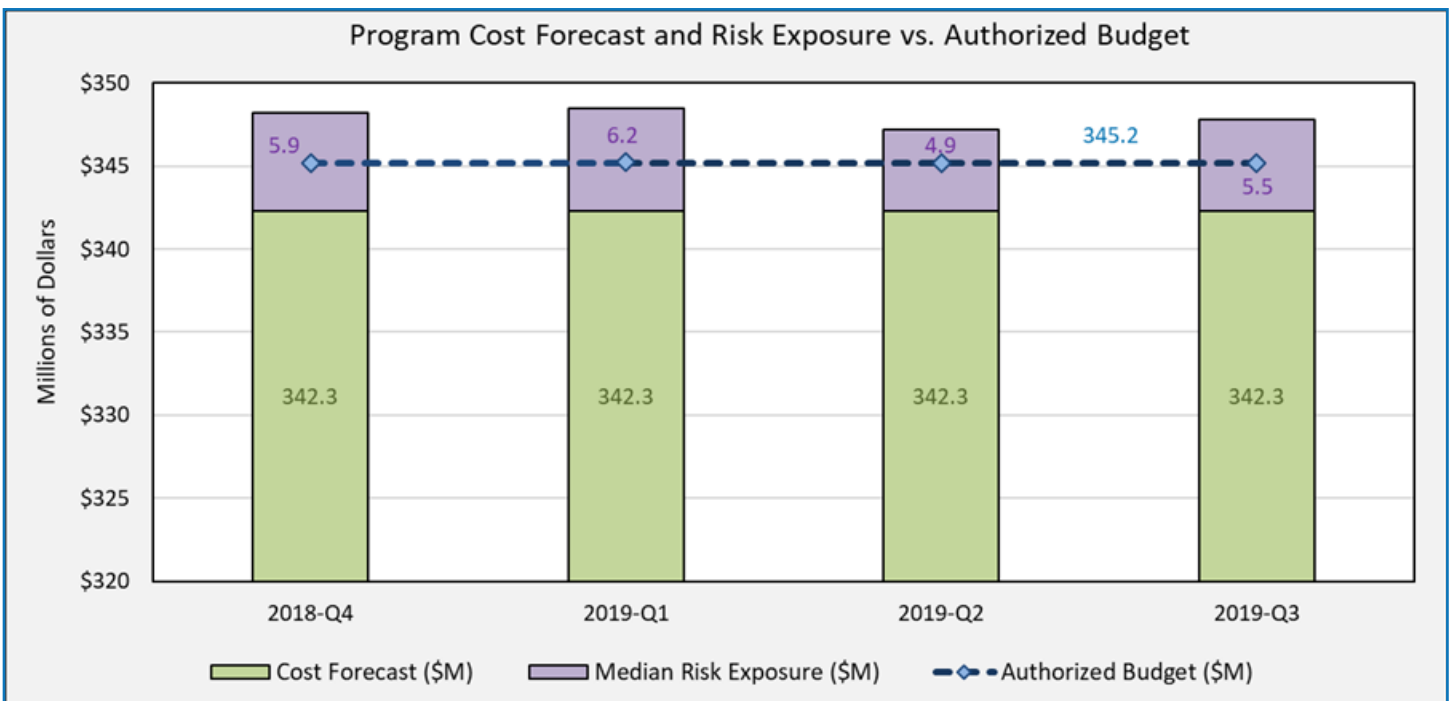


Chart #2 shows the program cost forecast and risk exposure as compared to the authorized program budget.

E. Active Capital Project Summaries

Centralized Functions

Toll System and Program Management, Planning and Regional Coordination

Total Estimated Cost

\$32.4 million for the Centralized Toll System

\$28.4 million for Program Planning, Coordination and Management

Schedule

Centralized Toll System was ready for the opening of the I-680 Contra Costa Southern Segment on October 9, 2017.

Program Planning, Coordination and Management is ongoing through the opening of the funded projects.

Project Description

The Centralized Toll System includes the elements of the toll system that are needed to toll all the express lanes, as well as the backhaul communications network components, such as fiber optic cable and leased line services, that transport toll data from MTC lanes to host and toll operations data centers. Centralized toll system work includes designing and implementing the hardware and software for dynamic toll setting and trip building, integration with the FasTrak® Customer Service Center, and acquiring spare parts.

Program management, planning and regional coordination tasks include managing the expenditure plan, cost, schedule and risk; developing the express lane business rules and toll ordinance; conducting customer education and outreach; building out the Regional Operations Center and developing operating procedures; planning for future express lanes; and coordinating with partner agencies to offer a seamless experience for drivers.

Program Management Highlights and Progress

- Staff developed a draft amendment to the BAIFA Toll Facility Ordinance for proposed tolling rules on the I-880 Express Lanes.

Current Program Management Activities

- In partnership with other express lane operators, staff continues to develop a 10-year strategic plan to help prioritize express lanes funding and delivery in the region. This work is being coordinated with MTC's Planning Section to inform Plan Bay Area 2050.
- Staff is implementing the I-880 Stakeholder and Customer Outreach Plan by meeting with stakeholder agencies to discuss project progress and future lane operations, and coordinating with partners on messaging and outreach strategies.
- Staff began to develop materials to educate customers about how the I-880 Express Lanes work. The materials will be the backbone of a Customer Education Campaign starting about 3 months before the lanes open.
- At the October 2019 BAIFA meeting, staff presented proposed tolling rules for the new I-880 Express Lanes that would be amended into BAIFA's Toll Facility Ordinance if adopted, including half-price tolls for 2-person vehicles and clean air vehicles. The presentation initiated a multi-month process to solicit public feedback prior to an adoption vote by BAIFA in early 2020.

Toll System Highlights and Progress

- The toll system integrator contract was awarded in June 2014.
- Buildout of the Regional Operations Center was finished in March 2017.
- The toll system went live to the public on October 9, 2017.
- In December 2018, the toll system integrator contract was extended to June 2023 to include the I-680 Northern Segment. The change removed the I-80 Solano express lanes from the contract. It will be added back when construction funding is secured.
- The I-680 Southern Segment Operations Test concluded in April 2019. Operations testing is a system acceptance test. The Operations & Maintenance (O&M) phase, which includes a one-year warranty period, began in May 2019.
- The toll system integrator and the FasTrak® back office finished testing an updated regional interface control document to enable the two systems to communicate and share FasTrak 6C tag compliant data. The integrator went live with the Host 6C software updates on September 30, 2019.

Current Toll System Activities

- The toll system integrator will update the lane-side equipment software to finalize the 6C enhancements and allow for 6C tag tolling in October 2019.
- The I-680 Southern Segment Operations Test revealed inefficiencies in how the toll system builds tolled trips. Staff determined these inefficiencies are too costly and risky to not address before I-880 opens. As a result, the toll system integrator will build an image review enhancement before I-880 opens, at no cost to BAIFA, to improve data quality and streamline trip building. There will be a cost per image reviewed, but the cost structure incentivizes less image review. The average cost per image is estimated to be 7 cents. BAIFA and the toll system integrator are finalizing negotiations for the image review contract change order.



Close-up of toll system equipment under sign (enforcement beacons, reader antennae and laser trigger)

Photos courtesy of Noah Berger



Overhead hours of operation sign and toll system equipment on the I-680 Express Lanes



Overhead pricing sign on the I-680 Express Lanes

I-880 Alameda (ALA-880)

Oakland to Milpitas

Hegenberger Road/Lewelling Boulevard to Dixon Landing Road

Total Cost Estimate

\$139.1 million

Scheduled Open Date

Summer 2020

Project Description

The project converts the existing I-880 HOV lanes that run from Hegenberger Road to Dixon Landing Road in the southbound direction and from Dixon Landing Road to Lewelling Boulevard in the northbound direction to express lanes.

The conversion involves lane striping and installing sign structures, signs, FasTrak[®] toll tag readers, traffic monitoring video cameras, lighting, a data communications network and California Highway Patrol observation areas. The highway is also being widened in three locations to accommodate merge lanes into and out of the express lanes. It will result in 51 express lane miles between Oakland and Milpitas.

The express lanes conversion project is being coordinated with a median barrier reconstruction project and a pavement resurfacing project, both led by Caltrans. The median barrier reconstruction project installed foundations and other infrastructure required for the express lanes for a large portion of the corridor.

Project Highlights and Progress

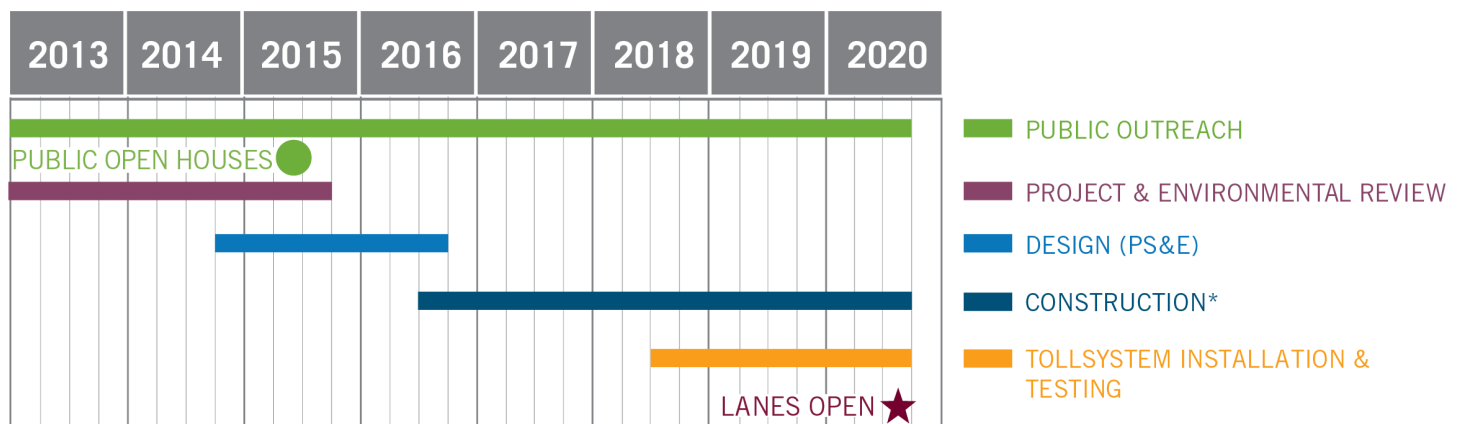
- Public open house was held in March 2015.
- Preliminary engineering report and environmental document were completed in October 2016.
- The express lanes civil contractor began construction in September 2017.
- Caltrans approved the toll system design and issued the encroachment permit for the toll system integrator in March 2018.
- MTC's express lanes scope of work delivered through Caltrans' median barrier contract was completed in the second quarter of 2018, including barrier demolition, express lane sign structure foundations and light foundations.
- Caltrans completed its technical review to determine I-880 hours of operation (5am to 8pm, Monday through Friday) and high occupancy vehicle threshold (3 or more persons) in fall 2018.
- Caltrans finalized the design of fiber laterals to connect its freeway management equipment to the communications backhaul in December 2018.
- In March 2019, the civil contractor successfully removed two existing overhead sign bridge structures at the SR-92 interchange and installed two new ones.
- At strategic points in the project timeline, staff performed outreach and education about I-880 design, construction and proposed operations including with members of low-income communities (2012); corridor city staff (2015 & 2019); and corridor elected officials (2017 & 2019).



Current Project Activities

- Civil construction work is near complete as of September 2019. Remaining work includes installation of fiber laterals to connect Caltrans' freeway management equipment to the communications backhaul, which will occur from fall 2019 through spring 2020. All PG&E service connections are installed, with the exception of one at Marina Boulevard. Final pavement striping is planned in spring 2020.
- The toll system integrator will continue installation of roadside cabinets, toll system equipment in the median, variable toll message signs, CCTVs and connections of electrical and fiber conduits from Dixon Landing Road to SR-92, which is 60% complete, and from SR-92 to Hegenberger Road, which is 10% complete. Toll system equipment installation for the full project is expected to be completed in spring 2020 and will be followed by testing.
- MTC staff is meeting with city staff in the I-880 corridor and with business advocacy groups to review proposed operating policies. MTC staff is following a public process for BAIFA to amend its toll ordinance to include I-880. Staff continues to draft customer education materials about how the lanes will work for a customer education campaign. A separate effort to form 3-person carpools in the I-880 corridor will be spearheaded by MTC's 511 Carpool Program. Monthly construction notices and ramp closure/detour notices continue to be sent.

Project Schedule by Phase



*Includes I-880 median barrier improvements.

Project Cost

Total Cost Estimate ⁽¹⁾	Cost Estimate, Funded Phases ⁽²⁾	Regional Measure 2 Funds (allocated)	Other Funding (allocated)	BAIFA Express Lane Funds ⁽³⁾			Percent Complete ⁽⁴⁾
				July 2018 Amendment	Sept. 2018 Amendment	Expended as of 9/30/19	
139.1	139.1			135.5	139.1	102.6	85%

Costs shown in millions of escalated dollars.

⁽¹⁾ Total Cost Estimate represents current estimated cost to complete each project.

⁽²⁾ Cost Estimate, Funded Phases represents current estimated cost to complete phases that are funded for each project.

⁽³⁾ BAIFA Express Lane Funds represent the funds that have been allocated from the BAIFA budget.

⁽⁴⁾ Percent complete shown is based on the achievement of major milestones whether those milestones were completed using BAIFA funds or other funds.

The cost estimate for this project includes planning, design, construction, utilities, backhaul communications and toll system integration.



Toll system equipment on I-880



Overhead signs, including 'do not cross' message for future access restriction on I-880



Elevated view of enforcement area on I-880 in Fremont

I-680 Northern Segment Southbound (CC-680 North SB)

Martinez to Walnut Creek

Benicia Bridge to Rudgear Road

Total Cost Estimate

\$127.4 million (\$53.6 million to be funded by BAIFA)

Scheduled Open Date

Fall 2021

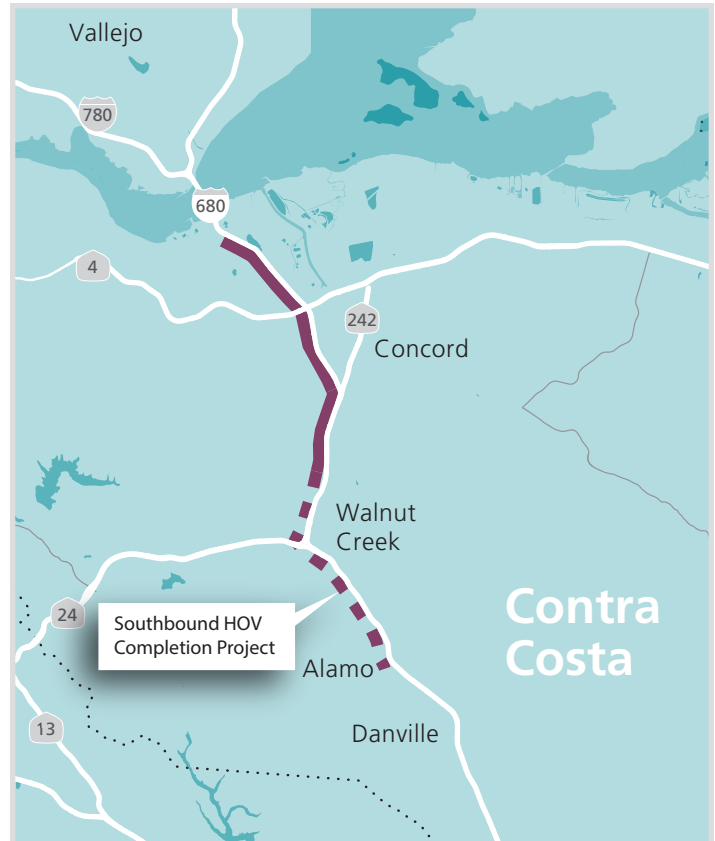
Project Description

The project will convert 11 miles of the existing HOV lane on southbound I-680 from just south of Marina Vista Avenue in Martinez to North Main Street in Walnut Creek into an express lane. It also includes express lane elements for the I-680 Southbound HOV Completion Project. Once complete, I-680 will have a continuous southbound express lane from Martinez to the Alameda County line.

Civil construction will be delivered by the Contra Costa Transportation Authority (CCTA). MTC will install toll and communications equipment and will operate the express lanes.

Project Highlights and Progress

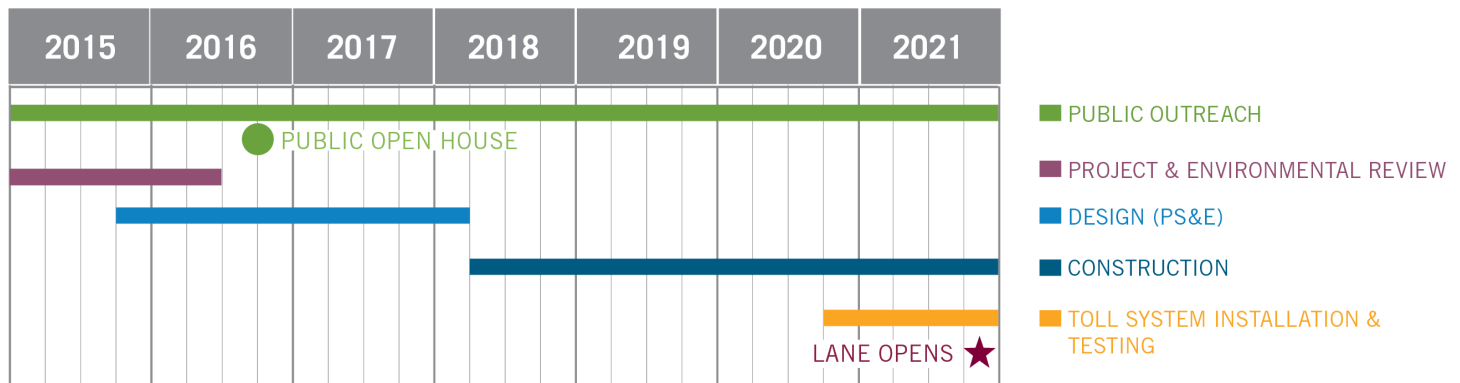
- Caltrans signed the environmental document in December 2016 and approved the Project Report in August 2017. Caltrans completed a revalidation in September 2017.
- A contract to remove trees along southbound I-680 in Walnut Creek between South Main Street and Livorna Road was awarded in October 2017, and work was completed in December 2017.
- All utility relocations were completed as of August 2018.
- Construction started October 1, 2018, and a ground-breaking event was held October 3, 2018.
- In December 2018, the toll system integrator contract was extended to June 2023 to include the I-680 Northern Segment.
- In May 2019, the backhaul contractor successfully rerouted the backhaul fiber between SR-24 and Livorna Road in Walnut Creek to allow for lane widening, and the toll system integrator participated in switching the live toll equipment from the old to the new fiber.
- In June 2019, CCTA and Caltrans executed an amendment to incorporate Caltrans oversight of landscape work and the first year of plant establishment into their cooperative agreement.
- In June 2019, the civil contractor completed construction of the new concrete median barrier on I-680 between the Benicia-Martinez Bridge and SR-242. Temporary railing was removed and traffic was returned to its original configuration. In September 2019, the civil contractor completed barrier removal activities and foundations for new overhead sign structures in the median of I-680 between SR-242 and SR-24.
- In September 2019, BAIFA and Caltrans executed a cooperative agreement for Caltrans oversight of the toll system integrator design and installation.



Current Project Activities

- The civil contractor will continue construction of 5 retaining walls along I-680 southbound with anticipated completion in October 2019 of retaining wall no. 1 between Rudgear Road and Livorna Road and retaining wall no. 5 between the I-680 southbound on and off ramps to South Main Street. The civil contractor will also continue with ramp and highway widening at various locations on I-680 southbound between Monument and Olympic Boulevards. Completion of the new concrete barrier between SR-242 and North Main Street is expected in October 2019. The contractor will then erect new overhead sign structures in various locations throughout the corridor.
- The replacement planting design is being updated based on Caltrans' comments. Final design is expected in October 2019 with work anticipated to start spring 2020.
- Caltrans started its review of the toll system integrator's design package for issuance of an encroachment permit.

Project Schedule by Phase



Project Cost

Total Cost Estimate ⁽¹⁾	Cost Estimate, Funded Phases ⁽²⁾	Regional Measure 2 Funds (allocated)	Other Funding (allocated)	BAIFA Express Lane Funds ⁽³⁾			Percent Complete ⁽⁴⁾
				July 2018 Amendment	Sept. 2018 Amendment	Expended as of 9/30/19	
127.4	127.4	19.4	54.3	51.3	53.6	17.0	40%

Costs shown in millions of escalated dollars.

The cost estimate for this project includes planning, design, construction, utilities, backhaul communications and toll system integration.

⁽¹⁾ Total Cost Estimate represents current estimated cost to complete each project.

⁽²⁾ Cost Estimate, Funded Phases represents current estimated cost to complete phases that are funded for each project.

⁽³⁾ BAIFA Express Lane Funds represent the funds that have been allocated from the BAIFA budget.

⁽⁴⁾ Percent complete shown is based on the achievement of major milestones whether those milestones were completed using BAIFA funds or other funds.



Concrete pour for retaining wall no. 1 on I-680 in Alamo/Walnut Creek



Concrete piles for bridge widening on I-680 at South Main Street in Walnut Creek



Rebar placement for bridge widening on I-680 at South Main Street in Walnut Creek

I-80 Solano (SOL-80)

Fairfield to Vacaville

Red Top Road to I-505

Total Cost Estimate

\$228.2 million

Scheduled Open Date

2023, subject to funding

Project Description

This project will convert the existing eastbound and westbound HOV lanes to express lanes between Red Top Road and Air Base Parkway in Fairfield. Conversion work includes striping lanes and installing sign gantries, signs, FasTrak® toll tag readers and traffic-monitoring video cameras.

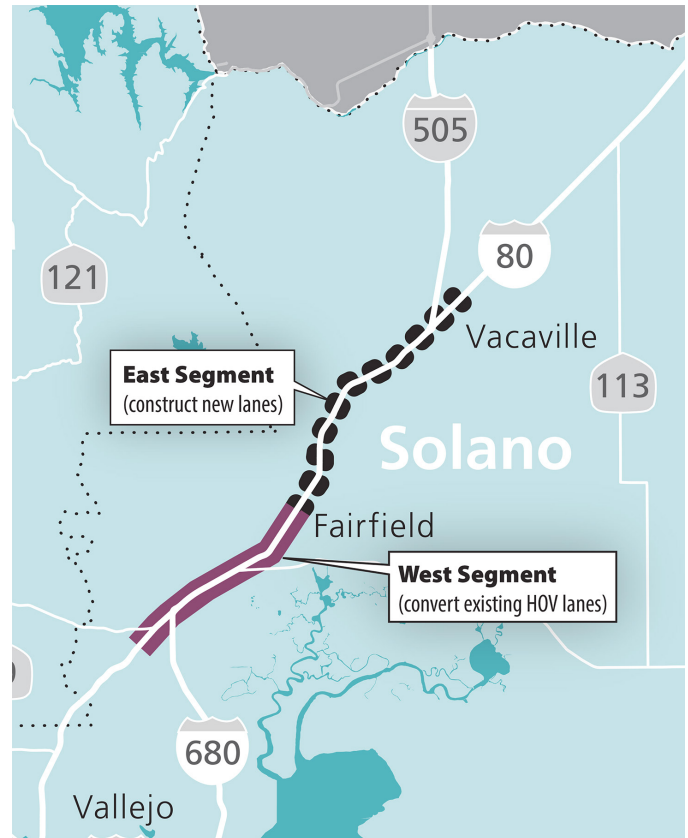
The project will also construct new eastbound and westbound lanes between Air Base Parkway and I-505 in Vacaville. In this section, the highway will be widened along with the installation of express lane striping, signage and equipment. The project will result in 36 miles of express lanes on I-80 in Solano County.

The Solano Transportation Authority (STA) is the lead agency for environmental clearance and civil design.

Caltrans will advertise and award the construction contract, and a blended Caltrans/STA team will administer construction. MTC will install toll and communications equipment and will operate the express lanes.

Project Highlights and Progress

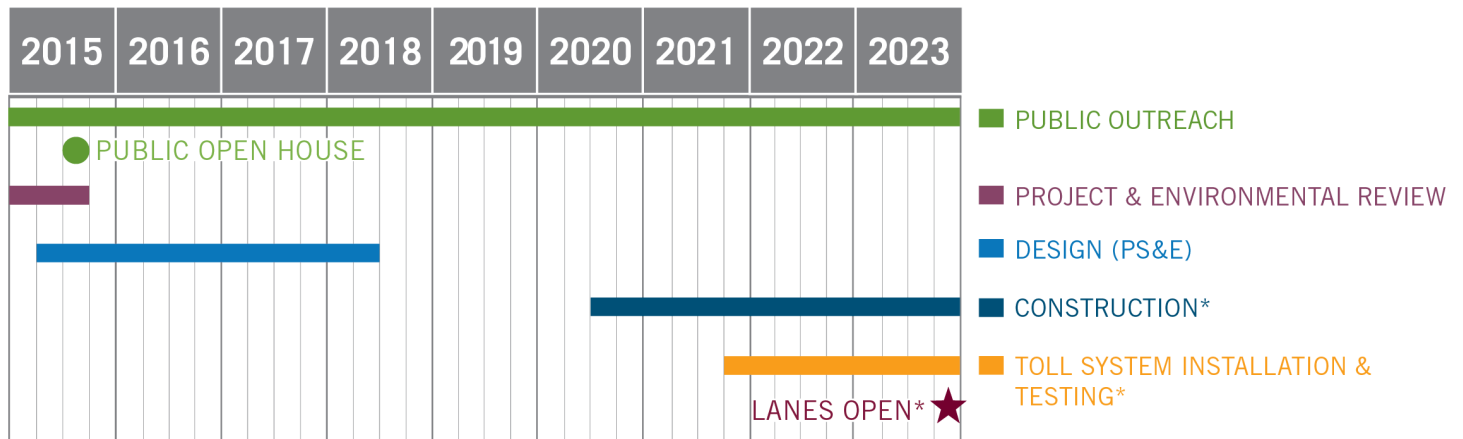
- A public open house was held in August 2015.
- The preliminary engineering report and environmental document were completed in December 2015.
- The final design document was approved by Caltrans in March 2018.
- The project reached the Ready-to-List milestone in April 2018.
- Caltrans submitted this project for a Federal INFRA grant in March 2019. In July 2019, the US Department of Transportation announced that the project was not selected for the grant.



Current Project Activities

- The project is shelf-ready should construction funds become available.
- MTC and STA staff continue to explore other potential funding sources.

Project Schedule by Phase



* Funding for these activities is not yet secured.

Project Cost

Total Cost Estimate ⁽¹⁾	Cost Estimate, Funded Phases ⁽²⁾	Regional Measure 2 Funds (allocated)	Other Funding (allocated)	BAIFA Express Lane Funds ⁽³⁾			Percent Complete ⁽⁴⁾
				July 2018 Amendment	Sept. 2018 Amendment	Expended as of 9/30/19	
228.2	33.3	15.2		19.0	18.1	11.6	20%

The cost estimate for this project includes planning, design, construction, utilities, backhaul communications and toll system integration.

Costs shown in millions of escalated dollars.

- (1) Total Cost Estimate represents current estimated cost to complete each project.
- (2) Cost Estimate, Funded Phases represents current estimated cost to complete phases that are funded for each project.
- (3) BAIFA Express Lane Funds represent the funds that have been allocated from the BAIFA budget.
- (4) Percent complete shown is based on the achievement of major milestones whether those milestones were completed using BAIFA funds or other funds.

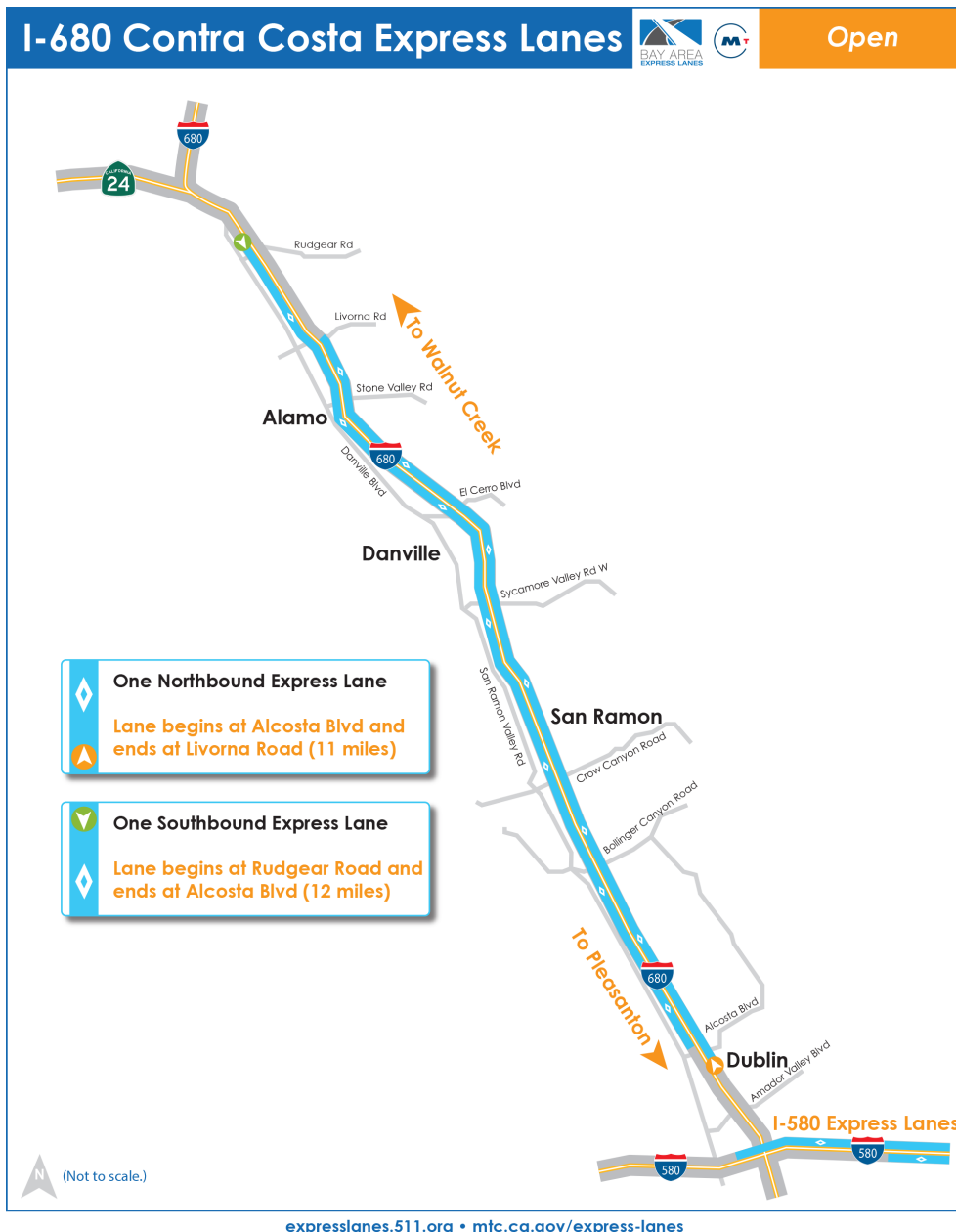
IV. OPERATIONS

I-680 Contra Costa Express Lanes

The I-680 Contra Costa Express Lanes opened October 9, 2017. The lanes run 11 miles northbound from Alcosta Boulevard to Livorna Road and 12 miles southbound from Rudgear Road to Alcosta Boulevard. Regional Operations Center staff monitor equipment and lane performance, make toll rate adjustments, and coordinate with the California Highway Patrol (CHP) and Caltrans on incident management. The FasTrak® Customer Service Center issues toll tags, handles toll invoicing and collections, and provides customer service. Toll tag and vehicle occupancy requirements are enforced automatically by the

toll system and manually by the CHP under contract to BAIFA. A 'backhaul' fiber network and supplemental leased-line services offer fast and secure transfer of tolling data. Roadway maintenance is also funded by the express lanes. Program and contractor staff perform public outreach and education, track and report on program performance and analyze traffic, and support operations in other ways as needed. Operating revenue and expenses are reported quarterly to BAIFA.

See **Appendix C** for a summary of this quarter's express lanes performance.



Rules of the Road

- Hours are Monday through Friday, 5 a.m. – 8 p.m.
- Tolls change based on traffic congestion; there is no maximum toll
- All vehicles in the express lane must use a FasTrak® or FasTrak Flex® toll tag
- Carpools of 2 or more people, eligible clean air vehicles, motorcycles and transit buses travel toll-free with a properly set FasTrak Flex® toll tag
- Learn more at expresslanes.511.org

APPENDICES

APPENDIX A

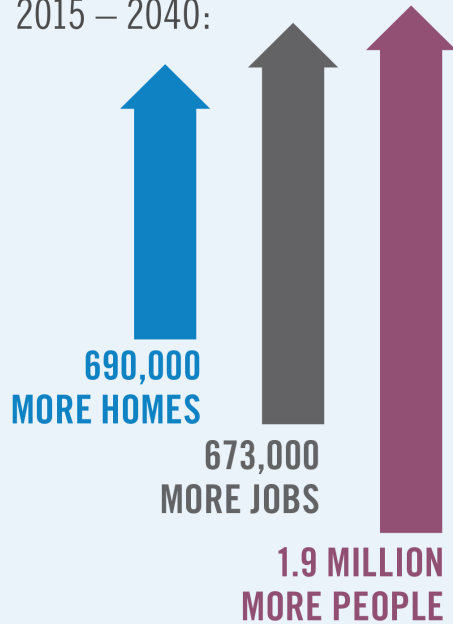
Express Lanes Overview

1. Why Express Lanes?

The Bay Area lacks the necessary transportation funding and land to build enough transportation capacity to keep up with regional growth. Bay Area Express Lanes maximize use of our highways by A) filling any empty space in existing HOV lanes,

B) improving operations in existing HOV lanes through better carpool enforcement and strategies to prevent lane slowdowns, and C) filling gaps in the HOV lane system to encourage more carpooling.

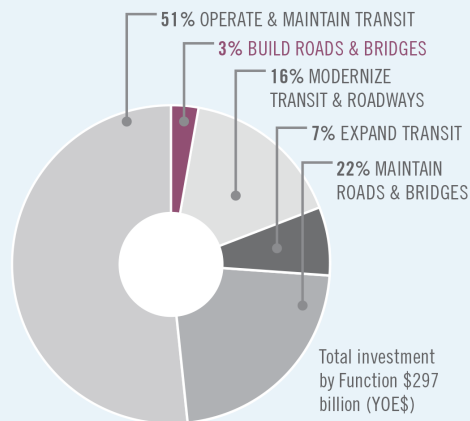
REGIONAL GROWTH 2015 – 2040:



Data Source: Plan Bay Area 2040 (2017).

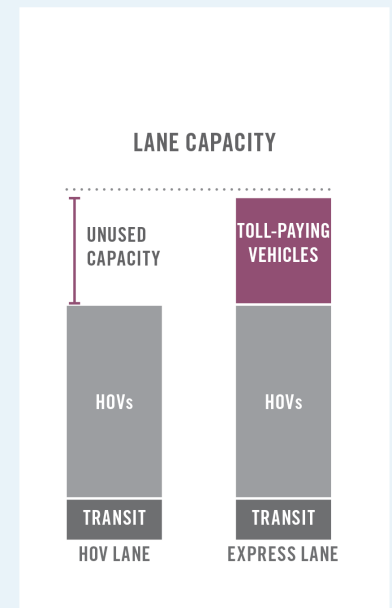
REGIONAL INVESTMENT BY 2040:

ONLY 3% OF THE REGION'S
TRANSPORTATION DOLLARS WILL BE
USED TO BUILD NEW ROADS.



Data Source: Plan Bay Area 2040 (2017).

HOW EXPRESS LANES HELP:



2. How Express Lanes Work

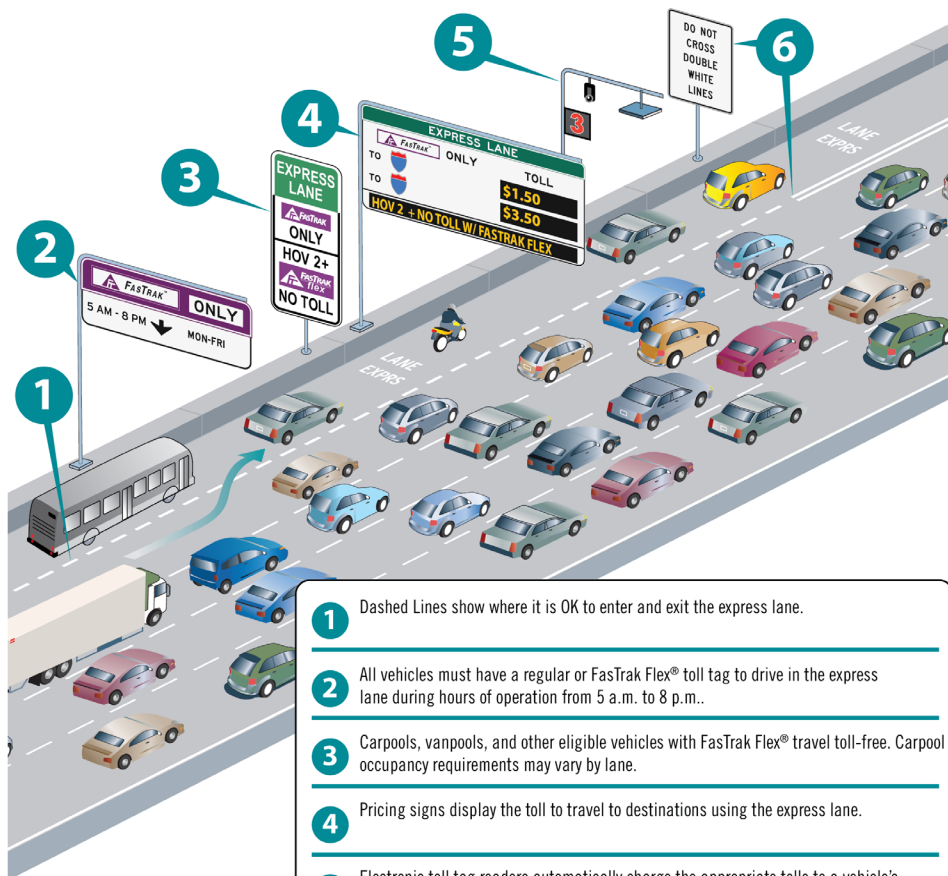
MTC Express Lanes are free to carpoolers, vanpoolers, motorcycles, eligible clean air vehicles and transit buses.

Solo drivers can choose to pay tolls to use the lanes.

Tolls for solo drivers are collected electronically via FasTrak[®], as on Bay Area toll bridges.

Overhead electronic pricing signs display the current toll rates, which increase as traffic congestion increases and decrease as traffic congestion decreases.

Carpools, qualifying clean-air vehicles and other toll-exempt vehicles must use a FasTrak Flex[®] toll tag set to "2" or "3+" to travel toll-free. Solo drivers pay to use the lanes with either a standard FasTrak[®] toll tag or a FasTrak Flex[®] toll tag set to "1." Drivers should move the switch before driving.



- 1 Dashed Lines show where it is OK to enter and exit the express lane.
- 2 All vehicles must have a regular or FasTrak Flex[®] toll tag to drive in the express lane during hours of operation from 5 a.m. to 8 p.m..
- 3 Carpools, vanpools, and other eligible vehicles with FasTrak Flex[®] travel toll-free. Carpool occupancy requirements may vary by lane.
- 4 Pricing signs display the toll to travel to destinations using the express lane.
- 5 Electronic toll tag readers automatically charge the appropriate tolls to a vehicle's FasTrak[®] account. Numeric beacons show CHP the number of people in the vehicle for occupancy enforcement.
- 6 Double white lines show where it is illegal to enter and exit the express lane. These access limitations improve traffic flow.

The figure to the left explains how to use Bay Area Express Lanes. MTC Express Lanes will be mostly "open" access, meaning drivers will enter and exit the express lanes similar to how they enter and exit HOV lanes today. Areas prone to excessive weaving or other safety concerns may have access restrictions to control entry and exit at these locations. Signage and lane striping will identify these entry and exit locations. Limiting access is a way to improve travel speeds in express lanes.

3. System Technology and Elements

MTC Express Lanes are implemented by overlaying communications equipment on new and existing freeway infrastructure. Express lanes implementation requires four discrete elements that are integrated through design, construction and operations, including:

Civil Infrastructure (Highway Modifications)

For lane conversions, the civil infrastructure consists of sign structures, sign panels, lane striping, and conduit work for power and communications. For gap closure and extension projects, the civil infrastructure includes highway widening to add lanes as well as the signage and communications equipment required for conversions.

The civil contractor will put in place the foundations and structures upon which the toll systems contractor will install the toll equipment. In addition, the civil contractor will construct the infrastructure necessary to provide power and communications to the toll system.

Toll System

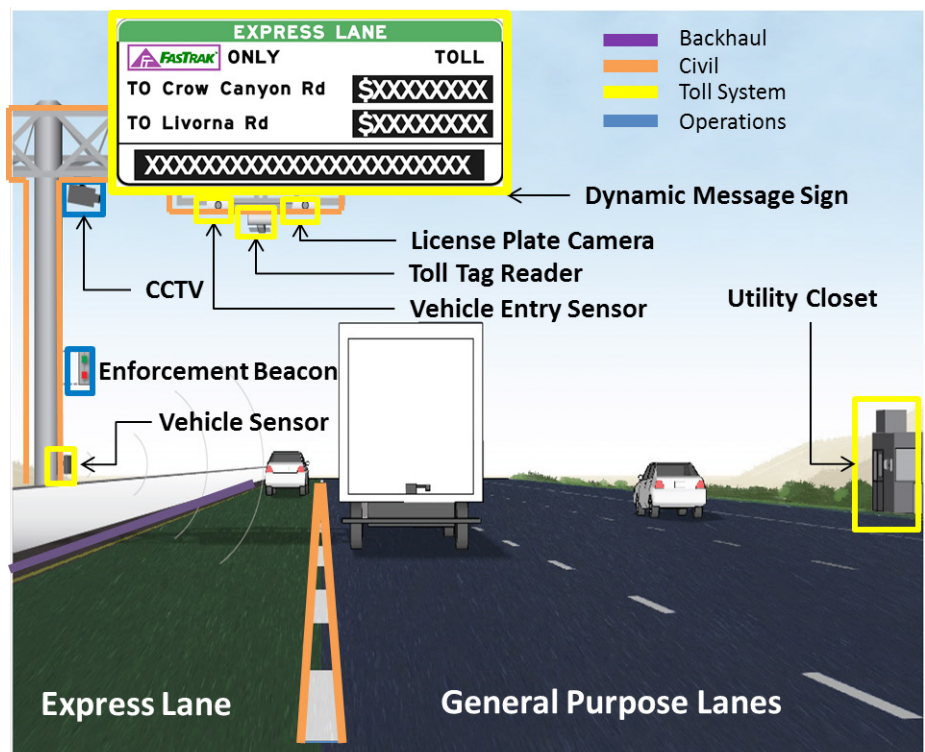
The toll system consists of two components, the in-lane system and the back-end “host” system. The lane system consists of all the equipment on the highway needed to operate the toll system including toll tag readers, cameras and vehicle detection. The host system serves as the brain of the toll system, which collects and processes all the data from the highway and sends it to the regional customer service center for billing.

Backhaul Communications Network

The backhaul network is the communication line along which data collected in the lanes is sent to the toll host system, operations center and regional customer service center. The backhaul contractor will install new conduit and communications fiber as well as utilize existing Caltrans, BART and other infrastructure to build the network. The backhaul network is being designed with the expectation that it will become part of a broader regional communications network.

Operations

The operations element consists of everything that is needed to successfully operate the express lanes including: an operations center, the regional customer service center, enforcement, public outreach, performance monitoring and ongoing maintenance. An express lanes Regional Operations Center has been established in the Bay Area Metrocenter building in San Francisco where operators actively monitor the condition of the lanes and coordinate with Caltrans and the California Highway Patrol to ensure that the lanes operate efficiently.



For illustrative purposes only

APPENDIX B

Completed Capital Project Summaries

I-680 Contra Costa Southern Segment (CC-680 South)

Walnut Creek to San Ramon

Livorna Road/Rudgear Road to Alcosta Boulevard

Total Program Estimate

\$55.6 million

Open Date

Fall 2017

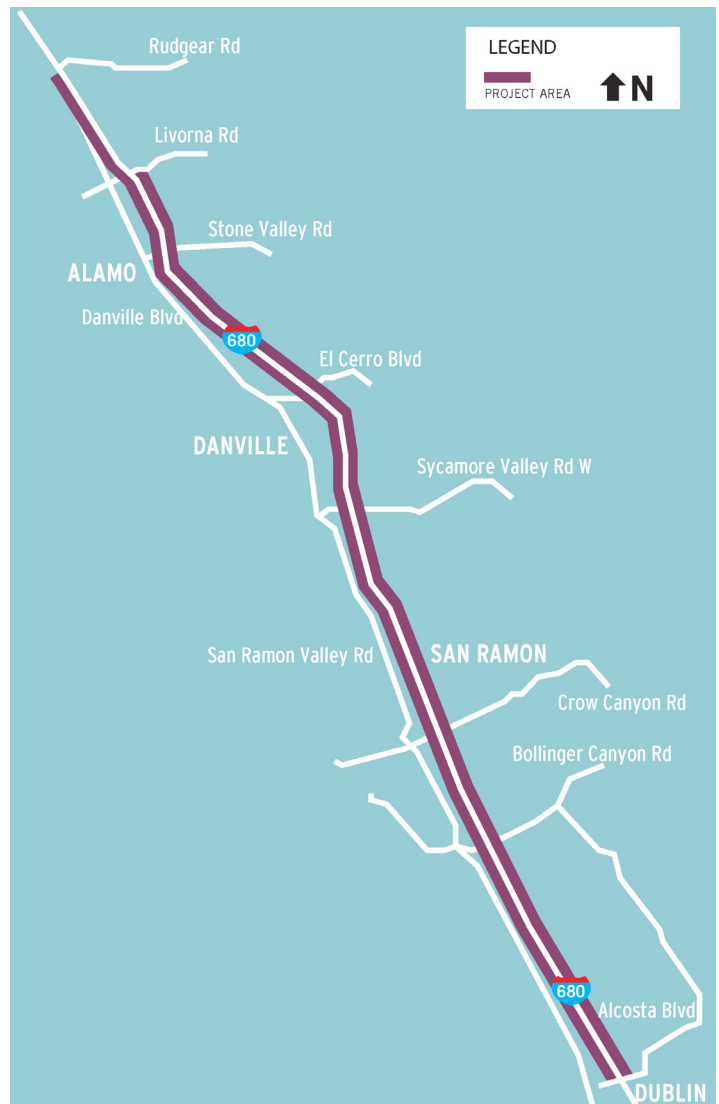
Project Description

The project converts existing HOV lanes to express lanes on I-680 from Rudgear Road to Alcosta Boulevard in the southbound direction and from Alcosta Boulevard to Livorna Road in the northbound direction. It will result in 23 express lane miles through San Ramon, Danville, Alamo and southern Walnut Creek. No widening or additional lanes will be added to the freeway.

This conversion project includes striping lanes and installing sign gantries, signs, FasTrak® toll tag readers, and traffic monitoring video cameras. In addition, the project installs equipment and observation areas to help the California Highway Patrol enforce proper use of the lanes.

Project Highlights and Progress

- Public open house was held in March 2014.
- Preliminary engineering report and environmental document were completed in August 2014.
- Final design for both the backhaul communication network and the toll system were completed in December 2015.
- Final roadway design was completed in April 2015. Civil construction was completed in May 2017.
- Backhaul contractor completed installation of 26 miles of fiber optic cable in June 2017.
- Corridor Testing was completed in August 2017.
- Toll system equipment and software was finalized and tested in September 2017.
- Backhaul operations and maintenance started in October 2017.
- The toll system went live to the public on October 9, 2017.



Current Project Activities

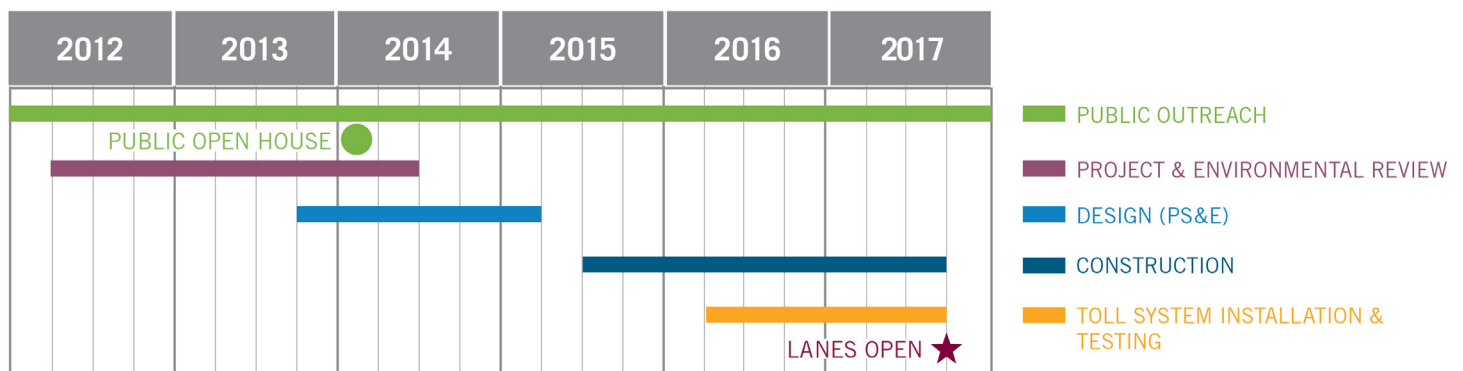
- The integrator is fine tuning field equipment and addressing punch list items in preparation for Operations Testing in summer of 2018. This test verifies the toll system meets all specifications and leads to the maintenance phase of operations.
- The Backhaul contractor completed project 'as-built' documentation and is performing ongoing operations of the communications network.
- Beginning in this Quarterly Report, since civil construction is complete and the express lanes are open, this capital project will be archived in Appendix B and no further updates will be made to the project summary.

I-680 Contra Costa Express Lanes regulatory sign.

Photos courtesy of Noah Berger.



Project Schedule by Phase



Project Cost

Program Estimate ⁽¹⁾	Cost Forecast ⁽²⁾	Regional Measure 2 Funds (allocated)	BAIFA Express Lane Funds ⁽³⁾			Physical % Complete ⁽⁴⁾
			Dec. 2015 Amendment	June 2017 Amendment	Expended through 3/31/18	
55.6	55.6		55.6	55.6	49.7	98%

Costs shown in millions of escalated dollars.

The program estimate for this project includes planning, design, construction, utilities, backhaul communications and toll system integration.

⁽¹⁾ Program estimate represents current estimated cost to complete each project.

⁽²⁾ Cost forecast represents current estimated cost to complete phases that are funded for each project.

⁽³⁾ BAIFA Express Lane Funds represent the funds that have been allocated from the BAIFA budget.

⁽⁴⁾ Physical percent complete shown is based on the achievement of major milestones whether those milestones were completed using BAIFA funds or other funds.

APPENDIX C

I-680 Contra Costa Express Lanes Operations Report

I-680 Contra Costa Express Lanes Performance 3rd Quarter 2019 - July - September



Rules of the Road

- Hours: 5 a.m. to 8 p.m. Monday - Friday
- FasTrak® required
- Carpools (2+), eligible clean-air vehicles & motorcycles travel toll-free with FasTrak Flex®



Summary of Performance Highlights



- Drivers made 2 million total trips in the express lanes in Q3 2019; similar to the prior quarter (Q2 2019) and the same quarter a year ago (Q3 2018). Daily express lane trips averaged 32,600 compared to 32,400 in Q2 2019 and 32,800 in Q3 2018.

- Paid trips were 1,103,000, a 5% decline from Q2 2019, which had 1,164,000 paid trips, and a 3% decline from Q3 2018, which had 1,135,000 paid trips.

- Peak period express lane speeds were 9 to 13 miles per hour faster than the general purpose lanes. Express lane and general purpose lane speeds were not much different from the prior year.

- While peak hour lane speeds average over 60 mph throughout the corridor, speeds at the most congested locations drop below 45 mph on 71% of the days in the quarter northbound and 95% of the days in the quarter southbound.

- 41% of trips were by vehicles declared as toll-free. This percentage has been highly consistent in 2019. Toll violators, which are vehicles without FasTrak® accounts, increased slightly in Q3 2019 to 6% of all trips. This could be due to out-of-town summer travelers, although the effect was not observed in Q3 2018.

- Monthly average tolls paid ranged from \$5.20 to \$5.90 in the northbound p.m. peak hour. The monthly average was more volatile in the southbound a.m. peak hour, ranging from \$3.80 to \$5.80. When traffic flowed well in the non-peak hours, the average toll paid was \$1.40 northbound and \$1.20 southbound.



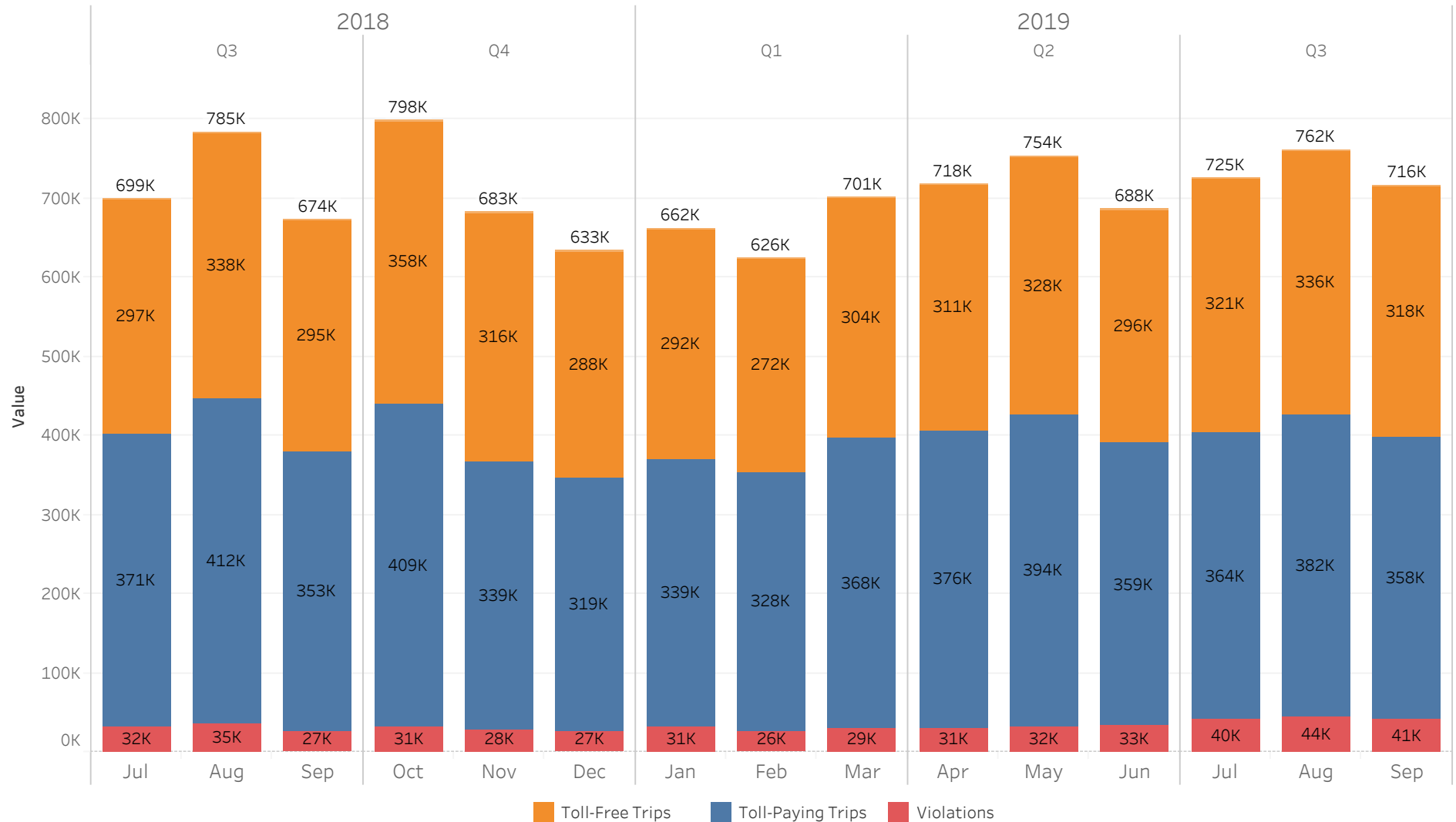
- The highest posted toll to travel the entire corridor during the quarter was \$8.50, the same as last quarter. It was reached in the a.m. and p.m. peak periods in both directions and was paid by just 4% of tolled drivers.

- Average tolls paid in Q3 2019 were similar to Q3 2018 in the both directions. The greatest change was a \$0.70 drop in the northbound p.m. peak hour.

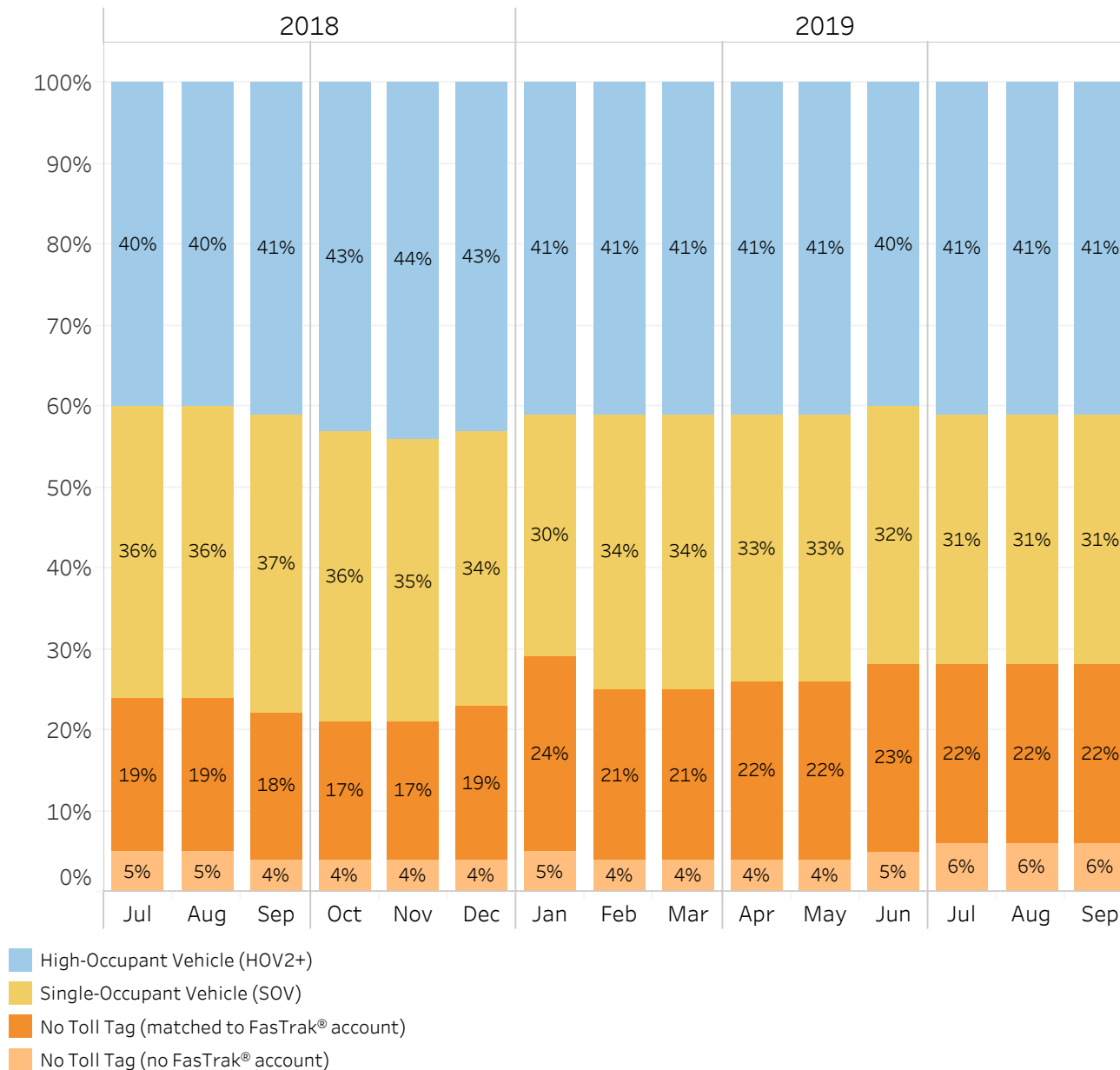
- CHP filled 89% of requested enforcement hours and made about 1,600 enforcement contacts in Q3 2019, down from 91% of requested hours and 1,800 enforcement contacts in Q3 2018.

Express Lane Trips

Over 16.6 million express lane trips have been taken since the I-680 Contra Costa express lanes opened in October 2017. In Q3 2019, 2 million trips were taken, about the same as in Q3 2018. Toll paying trips fell 3% and toll-free trips rose 2% from the same quarter last year. Average daily trips (ADT) for the quarter was 32,600 compared to 36,800 in Q2 2018. ADT since opening is 32,600.



Express Lane Trip Types



- The share of toll-free trips taken in carpools, clean air vehicles, etc. has held steady at 41% since January 2019. This is a very slight increase from Q3 2018.

- In the last 15 months, the share of tolled trips ranged from 52% to 56% of all trips, and was 54% in Q3 2019.

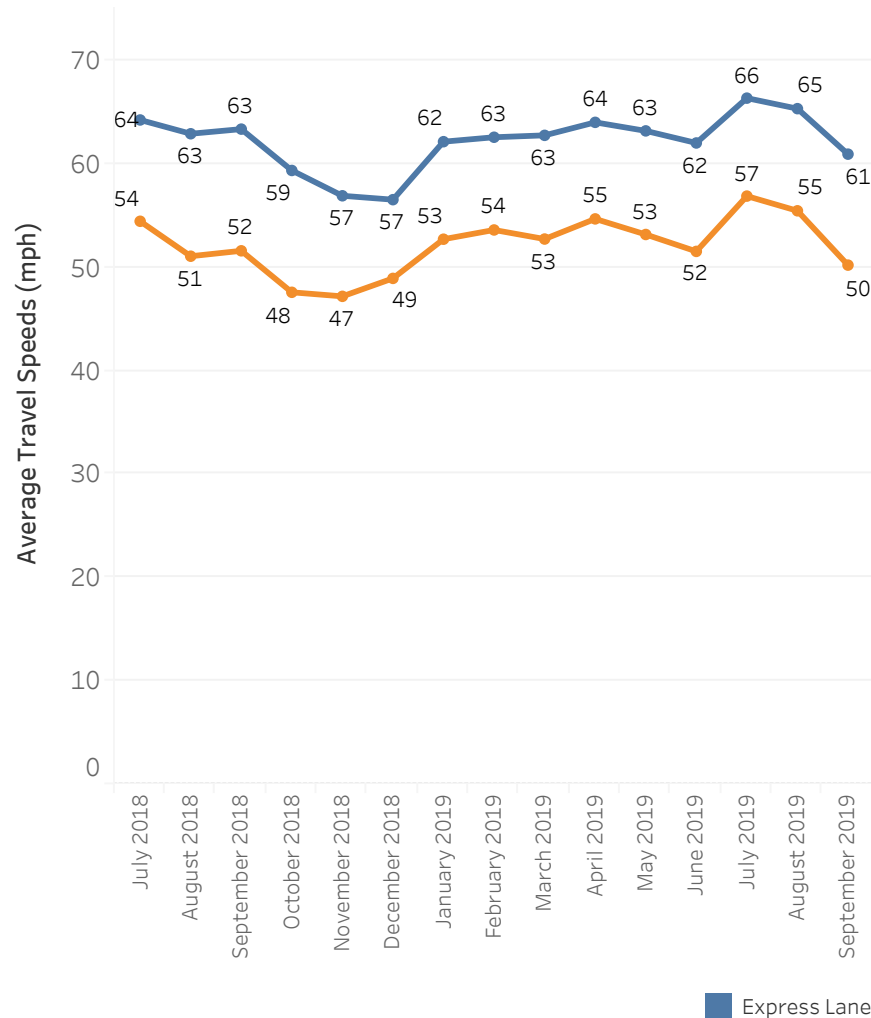
- The share of vehicles without a FasTrak® toll tag or account (toll violators) increased in Q3 2019 to 6%. This is likely due to out of region visitors in summer months.

Percentages of SOVs and HOVs are based on toll tag settings read by the toll system.

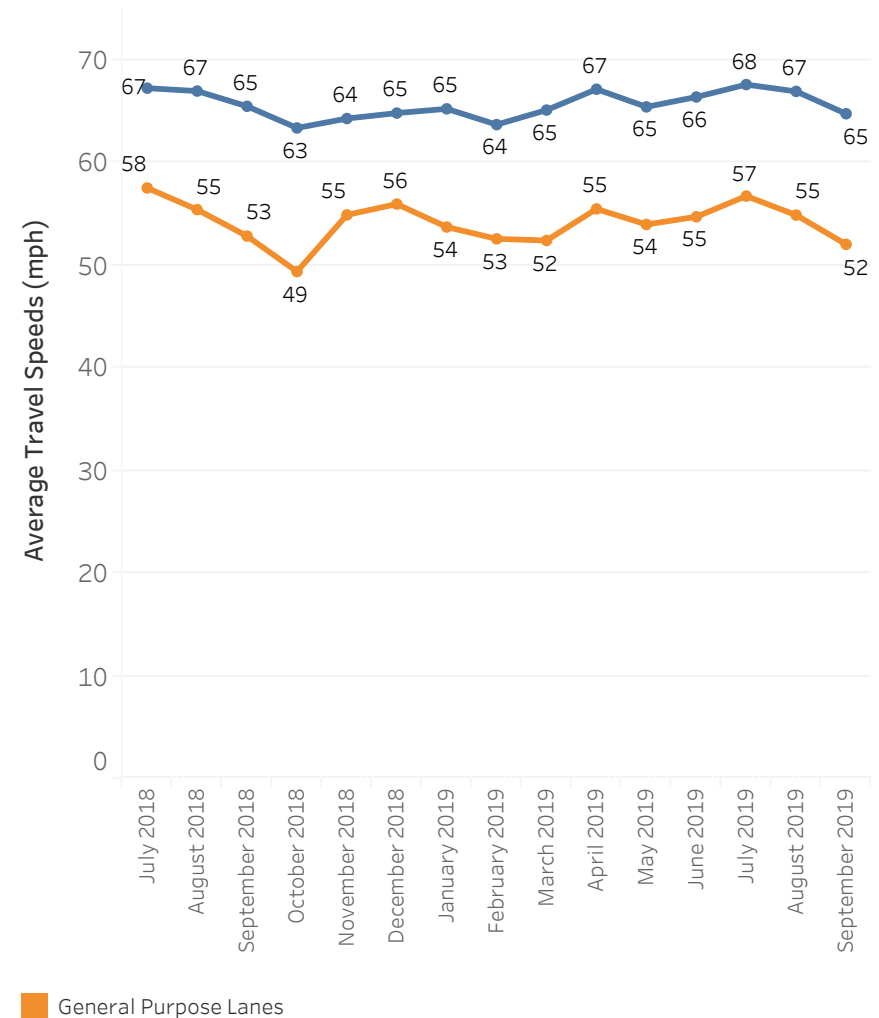
Peak Hour Average Corridor Traffic Speeds

Average corridor speeds in the northbound and southbound express lanes ranged from 9 to 13 miles per hour faster than speeds in the general purpose lanes. The northbound express lane and general purpose lane corridor speed averages were slightly higher from a year ago (Q3 2018) in July and August, but slightly lower in September. Southbound, speeds were similar from a year ago.

Northbound P.M. Peak Hour (5 - 6pm)

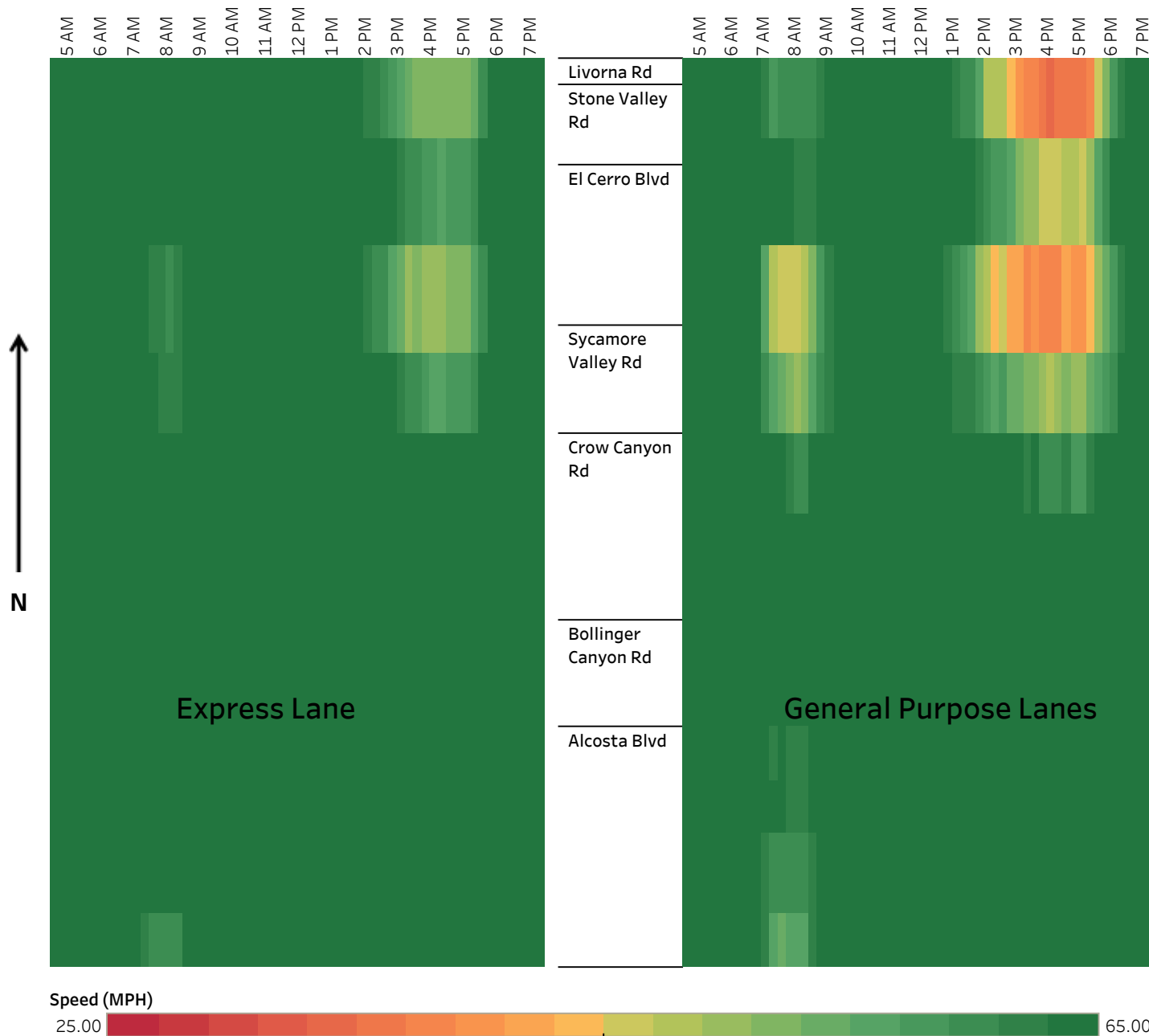


Southbound A.M. Peak Hour (8 - 9am)



Speeds are averaged over the distance of the express lane. Peak hours are defined as the hours with lowest average corridor speeds across all lanes.

Northbound Speeds by Location & Time

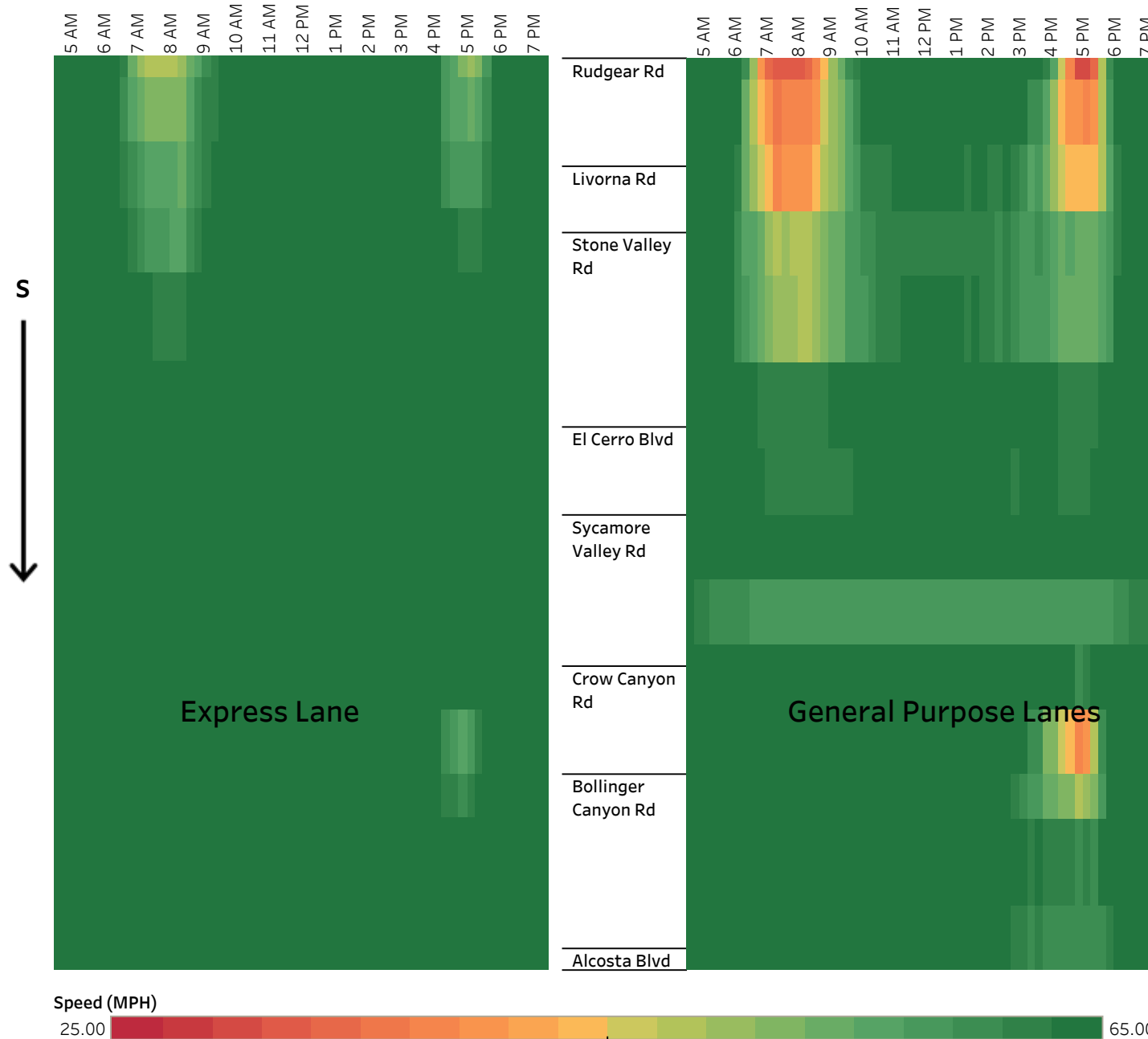


Congestion originating north of the express lane regularly caused slowdowns in the general purpose lanes in the p.m. peak.

In peak hour congestion, express lane users traveled 9 to 11 mph faster than general purpose lane users in Q3 2019.

Traffic flowed well in all lanes between 9 a.m. and 2 p.m.

Southbound Speeds by Location & Time



Slowdowns occurred in the general purpose lanes between Rudgear Rd. and El Cerro Blvd. in the a.m. and p.m. peak periods and between Crow Canyon Rd. and Bollinger Canyon Rd. in the p.m. peak.

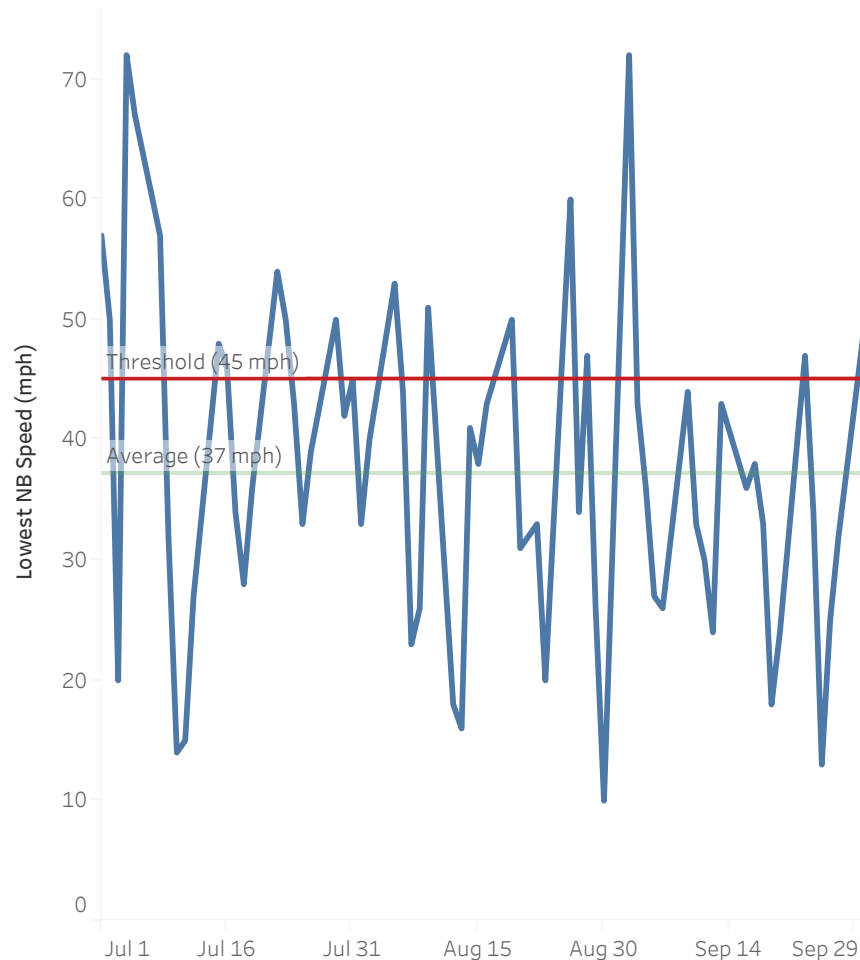
In Q3 2019, express lane users traveled faster during these slowdowns than general purpose lane users by an average of 11 to 13 mph.

Traffic flowed well in all lanes between 10 a.m. and 4 p.m.

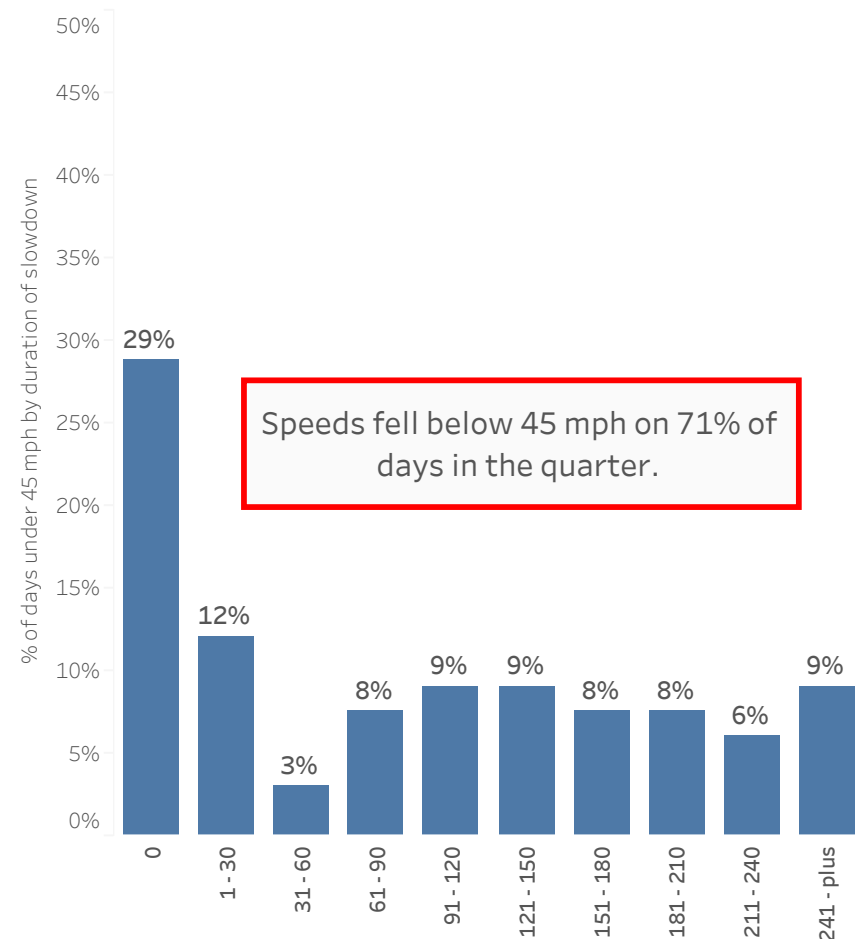
Lowest NB Exp Lane Speed - near El Cerro

While corridor-wide northbound express lane speeds average over 60 mph, speeds often drop below 45 mph between Sycamore Valley Rd. and El Cerro Blvd. The lowest daily speeds at this location averaged 37 mph in the quarter. At this location, speeds fell below 45 mph on 71% of days in the quarter. On 15% of the days, the slow speeds lasted less than an hour, and on 17% of the days, they lasted 1 to 2 hours. 40% of the days in the quarter experienced the slow speeds for more than 2 hours.

Lowest daily NB speed between Sycamore Valley Rd. and El Cerro Blvd. (mph)



% of days with speeds under 45 mph by duration (minutes per day) between Sycamore Valley Rd. and El Cerro Blvd. NB

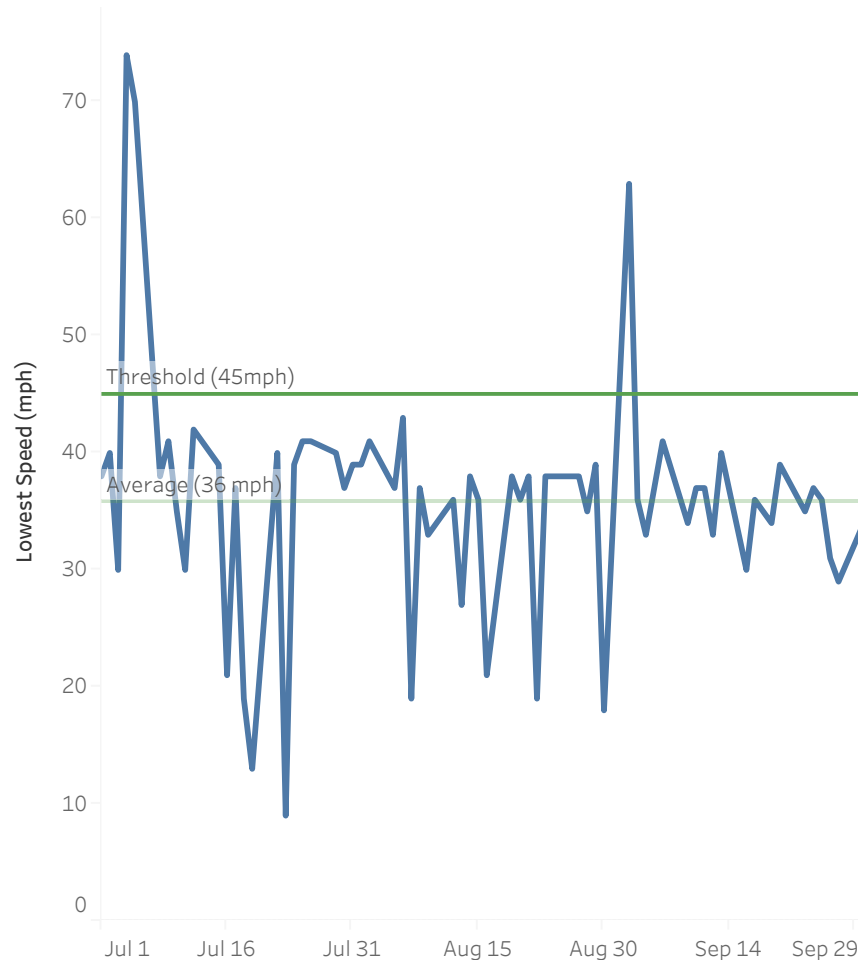


X axis is the minutes per day the NB express lane fell below 45 mph between Sycamore Valley Rd. and El Cerro Blvd.

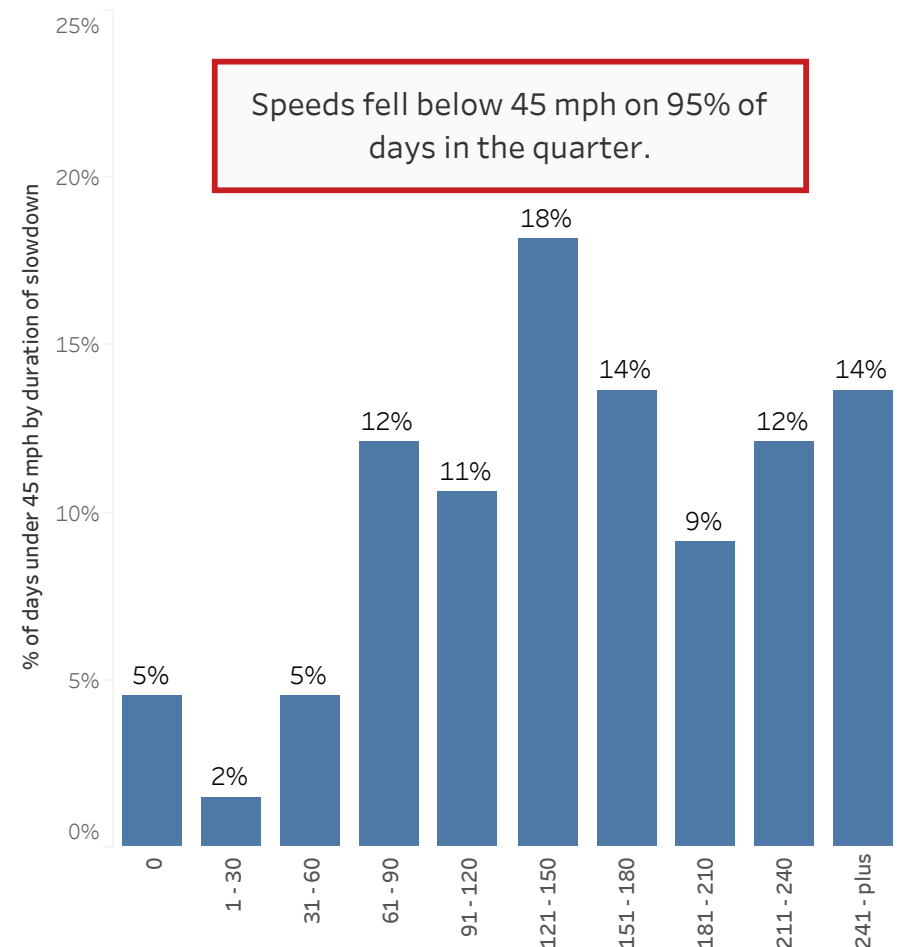
Lowest SB Exp Lane Speed - near Livorna

While southbound corridor-wide express lane speeds average over 60 mph, speeds frequently drop below 45 mph between Rudgear Rd. and Livorna Rd. The lowest daily speeds at this location averaged 36 mph and fell below 45 mph on nearly all (95%) of the days in the quarter. When speeds fell below 45 mph, they did so for quite a while. The slowdowns lasted between 1 to 2 hours 23% of the days and were longer than 2 hours on 67% of the days.

Lowest daily SB speed between Rudgear Rd. and Livorna Rd. (mph)



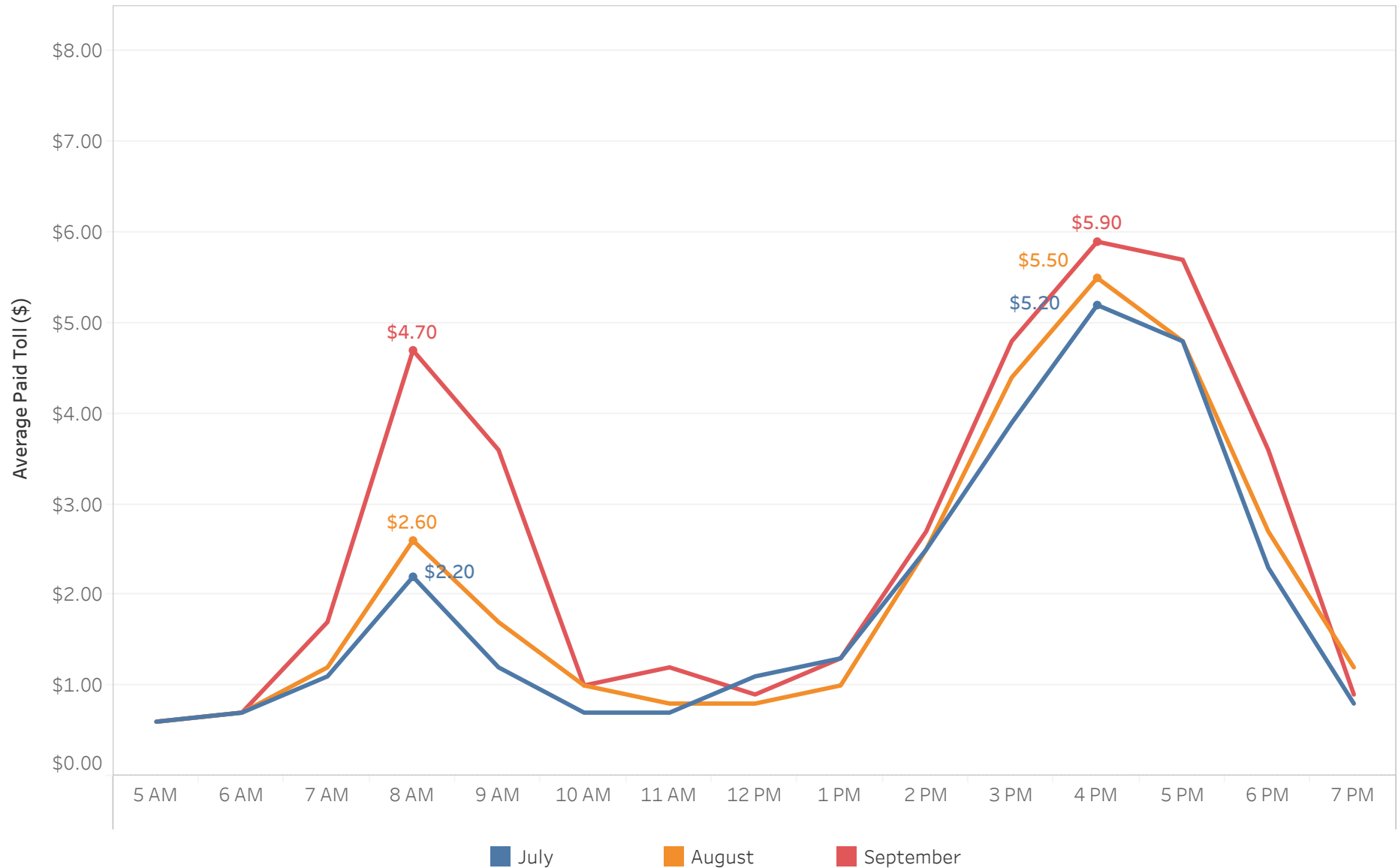
% of days with speeds under 45 mph by duration (minutes per day) between Rudgear Rd. and Livorna Rd. SB



X axis is the minutes per day that the SB express lane fell below 45 mph between between Rudgear Rd. and Livorna Rd.

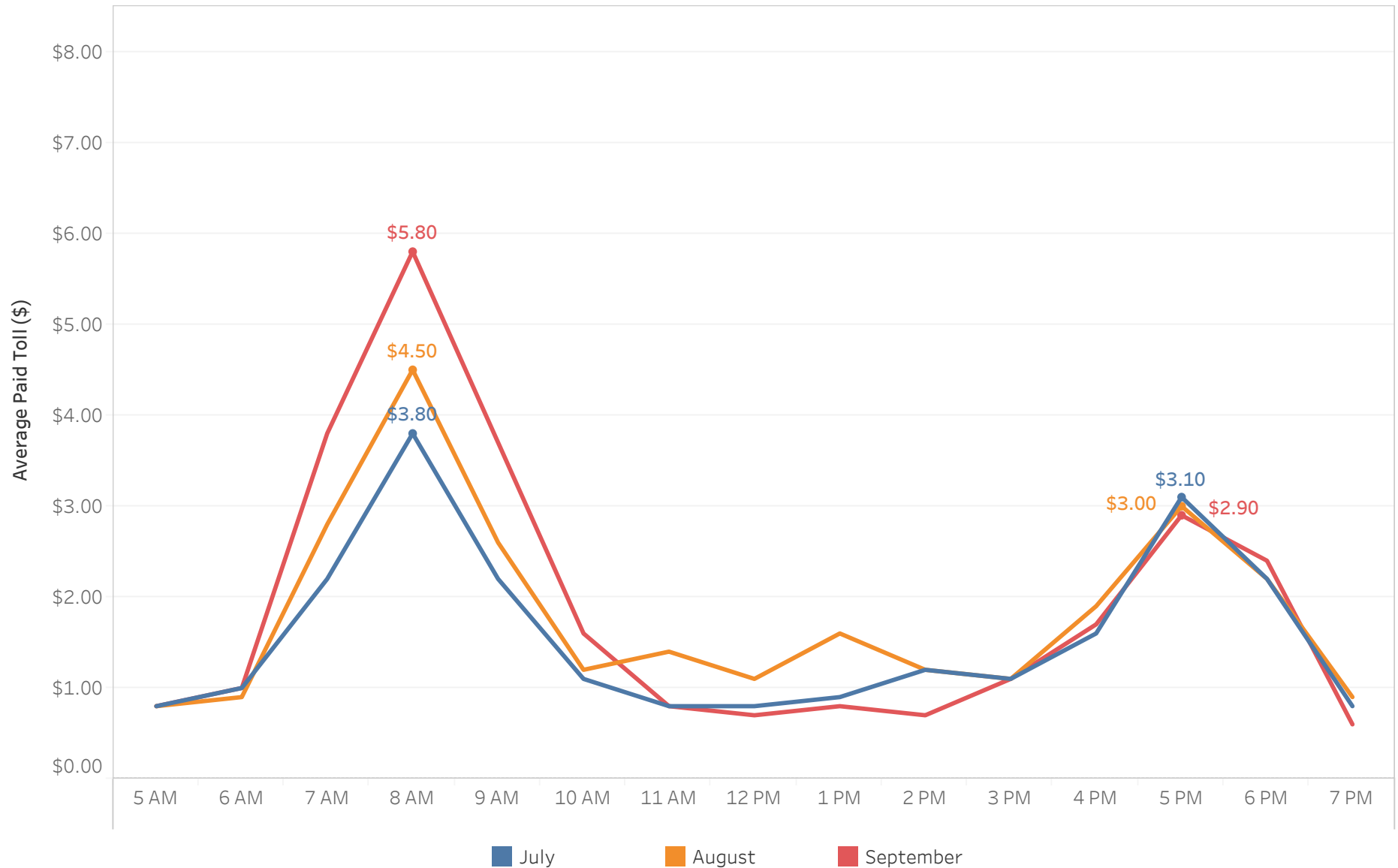
Northbound Tolls

The graph below shows the average toll paid by time of day for the northbound direction. The highest toll posted to travel the entire corridor was \$8.50. Mid-day, when northbound traffic flowed well between 9 a.m. and 2 p.m., the average northbound toll paid was \$1.40.



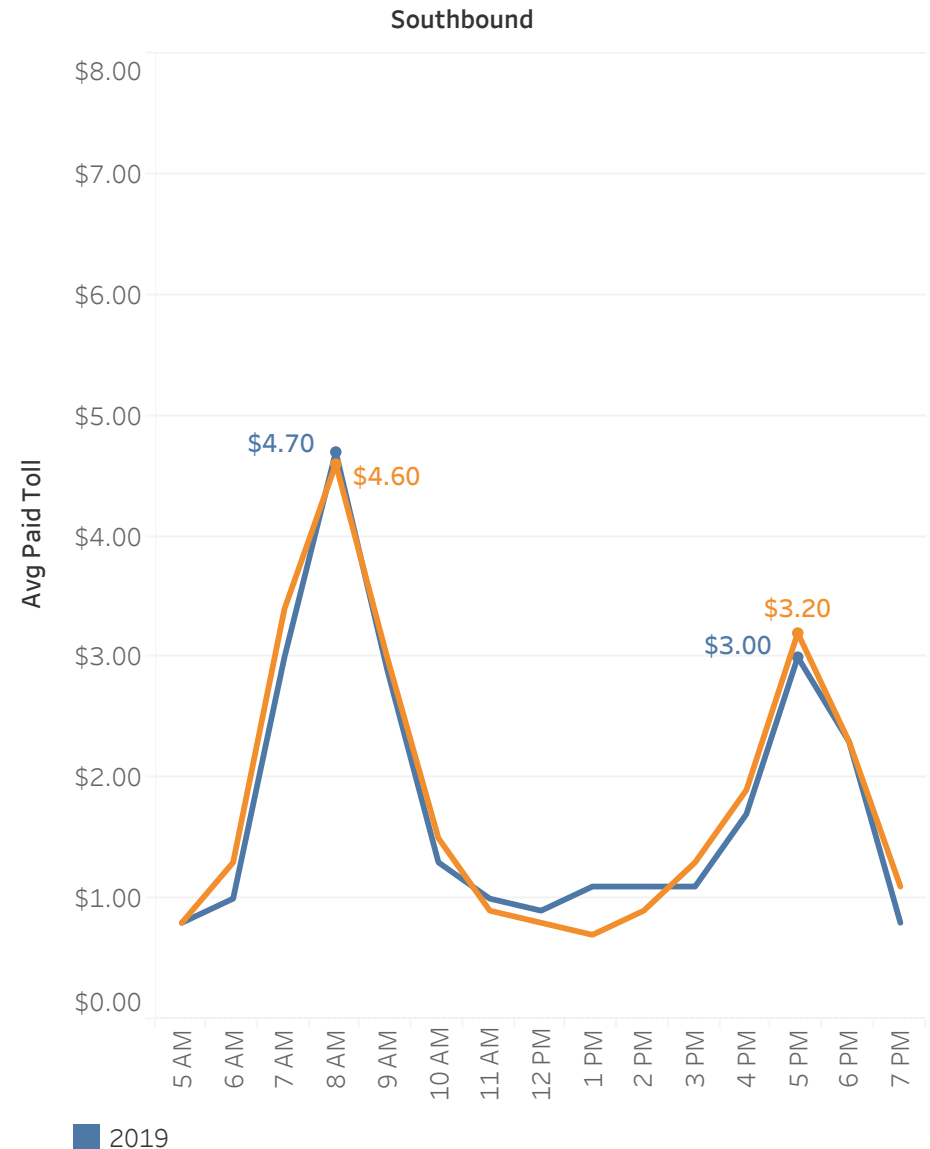
Southbound Tolls

The graph below shows the average toll paid by time of day for the southbound direction. The highest toll posted to travel the entire corridor was \$8.50. Mid-day, when southbound traffic flowed well between 10 a.m. and 4 p.m., the average southbound toll paid was \$1.20.

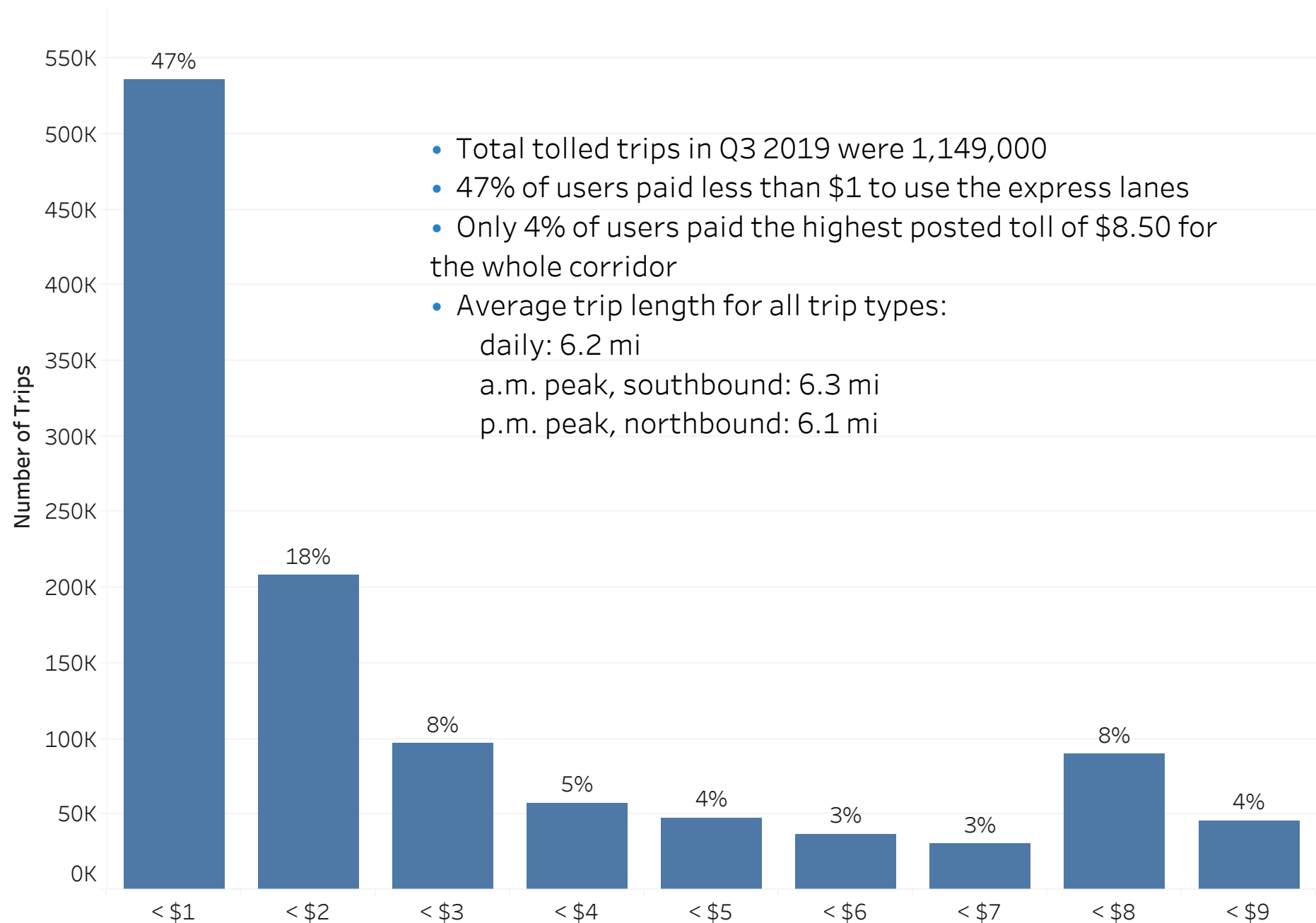


Average Tolls Paid

Average tolls paid were similar between Q3 2018 and Q3 2019. In the northbound lanes, the p.m. peak average toll paid fell \$0.70.



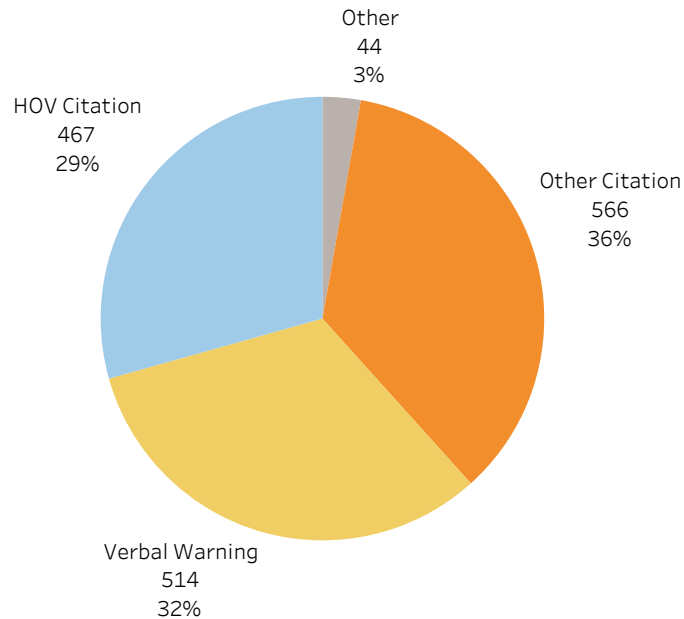
Toll Distribution



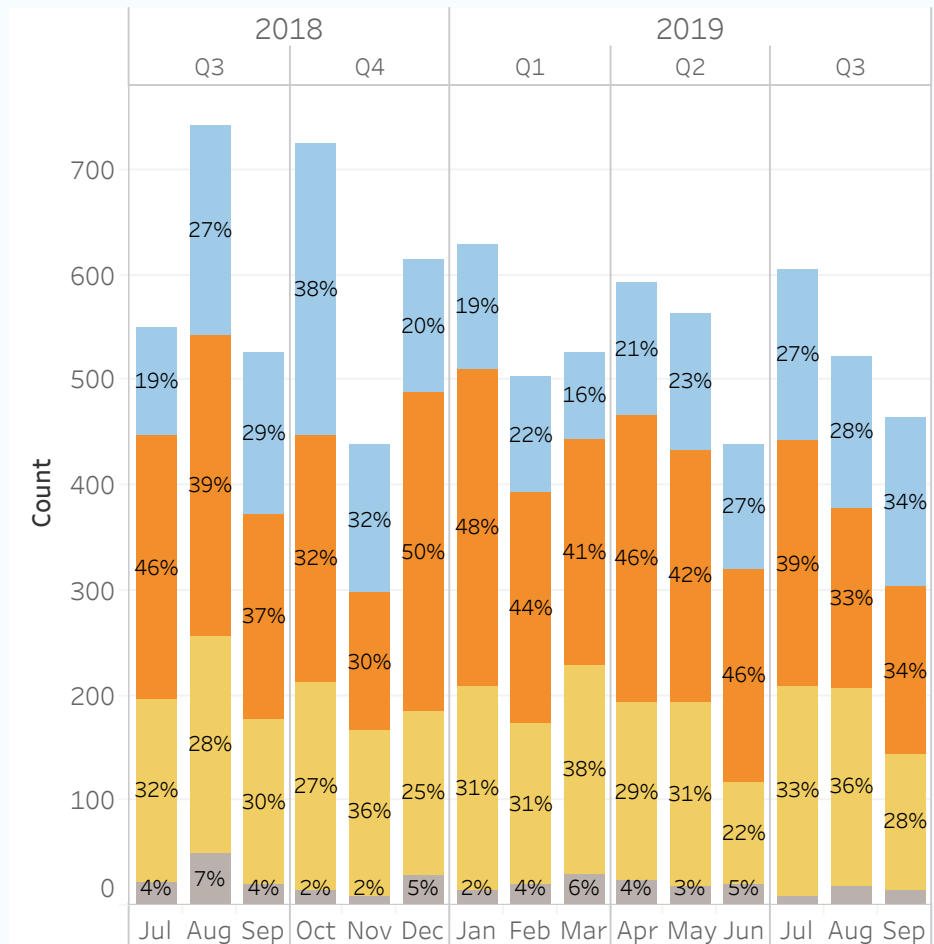
CHP Enforcement

CHP made about 1,600 enforcement contacts in Q3 2019, 29% of which resulted in citations for HOV occupancy violations. CHP filled 89% of requested enforcement hours, down slightly from 91% of requested hours and 1,800 enforcement contacts in Q2 2018.

Total Enforcement Contacts
(July - September 2019)



Total Enforcement Contacts



■ HOV Citation
 ■ Other Citation
 ■ Verbal Warning
 ■ Other

For more information, go to: mtc.ca.gov/express-lanes



Legislation Details (With Text)

File #: 19-1342 **Version:** 1 **Name:**
Type: Report **Status:** Public Hearing
File created: 11/12/2019 **In control:** Bay Area Infrastructure Financing Authority
On agenda: 12/18/2019 **Final action:**
Title: Public Hearing: Proposed BAIFA Toll Facility Ordinance Amendment

A public hearing on proposed tolling rules for the future I-880 Express Lanes and tolling rule changes for the already-open I-680 Contra Costa Express Lanes.

Sponsors:

Indexes:

Code sections:

Attachments: [5a_BAIFA Toll Facility Ordinance Public Hearing.pdf](#)

Date	Ver.	Action By	Action	Result
------	------	-----------	--------	--------

Subject:

Public Hearing: Proposed BAIFA Toll Facility Ordinance Amendment

A public hearing on proposed tolling rules for the future I-880 Express Lanes and tolling rule changes for the already-open I-680 Contra Costa Express Lanes.

Presenter:

Pierce Gould

Recommended Action:

Public Hearing

Bay Area Infrastructure Financing Authority (BAIFA)

December 18, 2019

Agenda Item 5a

Public Hearing: Proposed BAIFA Toll Facility Ordinance Amendment

Subject: A public hearing on proposed tolling rules for the future I-880 Express Lanes and tolling rule changes for the already-open I-680 Contra Costa Express Lanes.

Background: At its December 2019 meeting, BAIFA will hold a public hearing on its proposed amended and restated Toll Facility Ordinance (see Attachment A). In October, staff gave BAIFA an overview of the proposed amendment, which would add tolling rules for the future I-880 Express Lanes in Alameda County as well as update some tolling rules for the I-680 Express Lanes in Contra Costa County (see Attachment B). The toll ordinance is required by statute to enforce toll violations. BAIFA's proposed amended and restated Toll Facility Ordinance specifies its tolling rules in the context of Caltrans-approved operational policy so all rules are transparent for the public.

Proposed tolling rules for the I-880 Express Lanes include:

- **Hours of operation:** 5 am to 8 pm (Caltrans approved)
- **HOV eligibility:** 3 or more persons (Caltrans approved)
- **Scaled tolls:** Solo drivers would pay the full toll. Vehicles with 2 persons and clean air vehicles (CAVs) would pay 50 percent of the full toll. Eligible HOVs with 3 or more persons would pay no toll. In addition, a minimum toll of \$0.50 per toll zone would apply.
- **FasTrak® required:** All vehicles must have a FasTrak® account, and vehicles eligible for reduced tolls must use a FasTrak Flex® toll tag.
- **Enforcement and Toll Violation Penalties:** Toll enforcement would be automated using license plate cameras. If a vehicle is not associated with a FasTrak® account, a violation notice would be issued by the toll system. Toll violation penalties would be set equal to those charged by BATA, currently \$25 for the first notice and \$70 for the second notice. CHP would enforce vehicle occupancy requirements and other rules.

In addition, proposed updates of tolling rules for the I-680 Express Lanes are:

- Increase the existing minimum toll from \$0.30 to \$0.50; and
- Set toll rates for CAVs to 50 percent of the full toll.

BAIFA's proposed amended and restated Toll Facility Ordinance has been posted on MTC's website since November 14 at <https://mtc.ca.gov/whats-happening/events/public-hearings> and www.mtc.ca.gov/express-lanes. The amended and restated ordinance has also been available at MTC's offices in 'The Hub' on the 1st floor of the Bay Area Metro Center and are on file with the Secretary of BAIFA. The public comment period began on November 18 per the Notice of Public Hearing published in newspapers and an MTC press release. Staff held two open houses in the I-880 corridor on December 3 and 11, and alerted the public to the opportunity to provide comments through social media and local stakeholder agencies. The written public comment period ends December 18 at 5:00 p.m. after the Public Hearing. Staff will summarize comments received and the agency's response at the January 22, 2020 BAIFA meeting prior to a scheduled adoption vote at that same meeting.

Issues:

In October, Commissioners raised several questions about the proposed tolling rules:


- **Should clean air vehicles (CAVs) pay more than the proposed 50 percent toll?**

Staff recommends BAIFA proceed with a 50 percent toll for CAVs now and revisit the toll amount in the future. Key reasons include:

- Consistency with state-owned bridges and VTA, which began charging CAVs a 50 percent toll on the SR-237 express lanes in November 2019;
 - Simple public messaging – offering a 50 percent toll for both CAVs and vehicles with two persons allow BAIFA to more effectively communicate the large number of changes associated with the I-880 express lane opening, thereby easing the transition for travelers; and
 - It balances goals to improve operations and reduce greenhouse gas emissions championed by the state, local governments, transportation and air quality agencies – and allows us to adjust as needed, given potential based on future shifts in policy and impacts of CAVs on lane performance.
- **How should BAIFA address equity for low-income travelers?**
Staff acknowledges this area deserves more attention and recommends we take the opportunity to “listen and learn” before embracing a particular approach. Staff plans to leverage planned equity engagement in the coming months by MTC and efforts by other local agencies to engage low-income people and learn about equity solutions from their perspective for the best program outcome. Staff will seek agreement with other express lanes operators for a consistent approach to equity.
 - **How can the region achieve consistency in tolling rules?** Staff expects significant consistency across all open express lanes by the end of 2020, but that as the express lane network grows, a more sustainable model for decision-making would be advantageous. Staff proposes to re-engage partner agencies and Commissioners on this topic starting in early 2020. Models for consideration include, but are not limited to: an MOU among agencies committing to adopting consistent rules; a Joint Policy Committee to consider and recommend consistent rules; a single regional express lane agency.

Recommendation: This item is for information only in anticipation of the public hearing.

Attachments: Attachment A: Proposed BAIFA Amended and Restated Toll Facility Ordinance
Attachment B: October 23, 2019 BAIFA Presentation
Attachment C: December 18, 2019 BAIFA Presentation
Attachment D: Correspondence Received


Therese W. McMillan

**BAY AREA INFRASTRUCTURE FINANCING AUTHORITY
TOLL FACILITY ORDINANCE**

July 27, 2016
(as amended and restated January 22, 2020)

**BAY AREA INFRASTRUCTURE FINANCING AUTHORITY
TOLL FACILITY ORDINANCE**

The Bay Area Infrastructure Financing Authority ordains as follows:

Section 1. Purpose.

The purpose of this ordinance is to establish tolls and a toll collection process for the BAIFA toll facilities, to establish civil penalties for the evasion of those tolls or noncompliance with other policies set forth in this ordinance, and to establish a program that addresses how motorists can enroll and participate in BAIFA's toll facility program.

Section 2. Scope.

Every motorist entering a BAIFA toll facility shall be subject to and must abide by this ordinance.

Section 3. Definitions.

These definitions apply to this ordinance. Unless specifically defined below, the words and phrases used in this ordinance shall have the same meaning as they have in common usage. When not inconsistent with the context, words used in the present tense include the future tense, words in the plural number include the singular number, and words in the singular number include the plural number. The words "shall" and "must" are always mandatory and not merely directive.

"Applicable toll" means the toll for a vehicle entering a BAIFA toll facility established by this ordinance as determined from information collected by the FasTrak® system.

“Attachment A to this ordinance” means Attachment A to this ordinance as amended from time to time pursuant to Section 10.

“Authorized emergency vehicle” means a vehicle satisfying all of the conditions specified in Vehicle Code section 21655.5 or section 23301.5 for an exemption from paying a toll on a BAIFA toll facility.

“BAIFA” means the Bay Area Infrastructure Financing Authority, a joint exercise of powers agency formed under the California Joint Exercise of Powers Act with jurisdiction over the operation of the BAIFA toll facilities.

“BAIFA toll facility” means each high occupancy vehicle lane within the geographic jurisdiction of MTC that is operated by BAIFA as a toll lane and that is listed in Attachment A to this ordinance.

“BAIFA toll facility website” means the website at <http://mtc.ca.gov/express-lanes>.

“BATA” means the Bay Area Toll Authority.

“Caltrans” means the State of California Department of Transportation.

“Clean air vehicle” means a motor vehicle described in Section (b)(5) of Section 166 of Title 23 of the United States Code that displays a valid decal, label or other identifier issued pursuant to Vehicle Code Section 5205.5(a) or any other California law that enables toll-free or reduced-rate passage on the BAIFA toll facilities.

“CTOC” means the California Toll Operators Committee.

“Discount” means a reduced-rate toll expressed as a percent of the full toll.

“FasTrak®” or “FasTrak® system” means the electronic toll collection system administered by BATA for the BAIFA toll facilities, as well as the electronic toll collection systems administered by other members of CTOC.

“FasTrak® Account” means an account by that name established with BATA or any other CTOC member.

“FasTrak Flex® toll tag” means a FasTrak® toll tag featuring a switch for indicating the number of occupants in the vehicle.

“FasTrak® toll tag” means a FasTrak® electronic toll payment device issued by BATA (or any other member of CTOC) that meets the specifications of California Code of Regulations Title 21. “FasTrak® toll tag” includes non-revenue FasTrak® toll tags and FasTrak Flex® toll tags.

“High occupancy vehicle” means a vehicle with the minimum number of occupants specified by BAIFA for entering a BAIFA toll facility zone as a high occupancy vehicle as set forth in Attachment A to this ordinance and as displayed on BAIFA signs and other official signs or traffic control devices.

“Hours of operation” of a BAIFA toll facility zone means the hours when BAIFA is operating the BAIFA toll facility on any day within the maximum hours of operation set forth in Attachment A to this ordinance and as displayed on BAIFA signs and other official signs or traffic control devices. The hours of operation of a BAIFA toll facility zone shall not extend beyond the hours when the zone is otherwise restricted to use by high occupancy vehicles.

“HOV 3+” means a high occupancy vehicle requirement of three or more occupants.

“HOV 2+” means a high occupancy vehicle requirement of two or more occupants.

“Motorist” means the registered owner, rentee, lessee, or driver of a vehicle.

“MTC” means the Metropolitan Transportation Commission.

“Non-revenue FasTrak® toll tag” means a FasTrak® toll tag that does not result in a toll being charged.

“Over-the-road bus serving the public” means a bus that is characterized by an elevated passenger deck located over a baggage compartment and that serves the public.

“Pay-by-plate” means use of on-road vehicle license plate identification recognition technology to accept payment of tolls in accordance with BATA or CTOC policies.

“Penalty” means the monetary amounts assessed as civil penalties for each Violation, including the unpaid tolls and the toll evasion penalty, and shall constitute a toll evasion penalty under Vehicle Code Section 40252.

“Public transportation vehicle” means a public transportation vehicle as defined in Section 166 of Title 23 of the United States Code that meets BAIFA’s requirements for identifying public transportation vehicles specified at the BAIFA toll facility website.

“Segment” means two or more zones of a BAIFA toll facility that are designated as a BAIFA toll facility segment by the executive director of BAIFA.

“Vehicle Code” means the California Vehicle Code.

“Violation” has the meaning assigned in Section 8.2.

“Zone” means the portion of each BAIFA toll facility listed in Attachment A to this ordinance as a zone.

Section 4. Timing.

The tolls and Penalties for Violations imposed by this ordinance shall apply to motorists entering a BAIFA toll facility zone from and after the date and time when BAIFA opens the BAIFA toll facility zone for use by the public as a toll facility, unless explicitly stated otherwise in Attachment A to this ordinance.

Section 5. Toll Tag or Pay-by-Plate Account Required.

5.1 Every motorist traveling in a BAIFA toll facility during its hours of operation is required to be in a vehicle with either (1) a properly-mounted and properly-functioning FasTrak® toll tag on board, or (2) valid vehicle license plates properly attached pursuant to Vehicle Code Section 4850.5 or 5200, and, in either case, being associated with a valid FasTrak® account having a balance sufficient to pay the applicable toll. Every motorist traveling in a BAIFA toll facility during its hours of operation is required to pay the applicable toll using that FasTrak® account.

5.2 To be “properly-mounted” means that, except as specified in Section 5.3, the FasTrak® toll tag shall be located in or on the vehicle in a location so as to be accurately read by the FasTrak® system and be visible for the purposes of enforcement at all times while the vehicle is located in the BAIFA toll facility.

5.3 A motorcyclist shall use any one of the methods specified in Vehicle Code Section 23302(a)(3) to comply with the requirement to have a properly-mounted FasTrak Flex® toll tag, as long as the FasTrak Flex® toll tag is able to be read by BAIFA’s detection equipment.

5.4 Every motorist entering a BAIFA toll facility during its hours of operation and having a FasTrak Flex® toll tag must use the toll tag to accurately declare the number of occupants in the vehicle or, if permitted under Section 7, accurately indicate toll-exempt or Discount status.

5.5 A license plate account surcharge as specified in Attachment A to this ordinance shall apply to pay-by-plate toll payments.

Section 6. Tolls.

6.1 Each motorist entering a BAIFA toll facility during its hours of operation who is not entitled to an exemption from tolls under Sections 7.1(B) through (F), inclusive, or Sections 7.4 or 7.5, shall be charged the then-applicable toll. The tolls charged by BAIFA are intended to manage the demand to use BAIFA toll facilities by varying the toll amount that is charged as established from time to time by the executive director of BAIFA. The amount charged may be determined pursuant to a methodology approved by the executive director of BAIFA, but the resulting tolls shall not be less than the minimum tolls set forth in Attachment A to this ordinance; provided, however, that the executive director of BAIFA may elect to reduce the minimum toll per zone during off-peak hours if the executive director determines, in consultation with Caltrans, that such reduction is necessary to alleviate traffic congestion in the non-tolled lanes. The current tolls upon entering a BAIFA toll facility zone or segment shall be displayed on BAIFA signs. BAIFA reserves the right to adjust tolls dynamically and in real-time. As such, the toll applicable to a motorist entering a BAIFA toll facility zone or segment is the toll displayed on the last BAIFA pricing sign before such motorist enters the zone or segment. Further, the total toll charged is determined based on the zones or segments of the BAIFA toll facility in which such motorist is detected. General information about tolls for BAIFA toll facilities is available online at the BAIFA toll facility website.

Section 7. Exemptions from Tolls; Discount Tolls.

7.1 The following vehicles are exempt from paying tolls imposed by this ordinance.

(A) vehicles entering a BAIFA toll facility outside the hours of operation of that facility.

(B) high occupancy vehicles.

(C) motorcycles.

- (D) public transportation vehicles and over-the-road buses that serve the public.
- (E) California Highway Patrol vehicles policing a BAIFA toll facility.
- (F) authorized emergency vehicles.

7.2 To enjoy the exemption from tolls afforded under Section 7.1(B), (C), (D), (E) or (F), every motorist entering a BAIFA toll facility during its hours of operation who is entitled to that exemption must use a properly-mounted FasTrak Flex® toll tag to accurately indicate a toll-exempt status or follow such other methods for indicating eligibility for exemption as shall be specified by BAIFA at the BAIFA toll facility website. Otherwise, such motorist entering a BAIFA toll facility during its hours of operation shall be charged the applicable toll.

7.3 Motorists having a properly-mounted, non-revenue FasTrak® toll tag are exempt from paying tolls and Penalties for Violations imposed by this ordinance.

7.4 Two-occupant vehicles traveling in a HOV 3+ BAIFA toll facility shall pay the applicable discounted toll, if any, specified for vehicles with two persons in Attachment A to this ordinance. To be eligible for the discounted toll, two-occupant vehicles must use a properly-mounted FasTrak Flex® toll tag to accurately indicate their occupancy status (by switching the tag to the '2' setting) or follow such other methods for indicating eligibility for the discount as shall be specified by BAIFA online at the BAIFA toll facility website. An exception is for class I vehicles designed by the manufacturer to be occupied by not more than two persons, including the driver; in this case, if the vehicle is occupied by two persons, the vehicle qualifies as toll-exempt, but must use a properly-mounted FasTrak Flex® toll tag switched to the '3+' setting or follow such other methods for indicating eligibility for exemption as shall be specified by BAIFA at the BAIFA toll facility website.

7.5 Motorists driving clean air vehicles shall be eligible to claim the discounted toll, if any, specified for clean air vehicles in Attachment A to this ordinance. Clean air vehicles must use a properly-mounted FasTrak Flex® toll tag to accurately indicate clean air vehicle status (by switching the tag to the '2' or '3' setting) or follow such other methods for indicating eligibility for the discount as shall be specified by BAIFA online at the BAIFA toll facility website.

Section 8. Enforcement and Penalties.

8.1 This ordinance adopts and incorporates by this reference, as though fully set forth herein, the administrative procedures and penalties in Article 4, Chapter 1 of Division 17 of the Vehicle Code as amended from time to time hereafter. The processing of notices of toll evasion violations and notices of delinquent toll evasion violations shall be conducted in accordance with those procedures and penalties by BATA, as the processing agency for BAIFA within the meaning of Section 40253 of the Vehicle Code. The FasTrak® Regional Customer Service Center Policies set forth in Attachment A to BATA Resolution No. 52, Revised, as amended from time to time, shall be applicable to the BAIFA toll facilities and this ordinance (except to the extent they conflict with the provisions of this ordinance) and are hereby adopted and incorporated by reference into this ordinance as though fully set forth herein.

8.2 It shall be a Violation to:

- (A) fail to comply with Section 5.1;
- (B) fail to comply with Section 5.2;
- (C) fail to comply with Section 5.3; or
- (D) fail to comply with Section 5.4.

8.3. The Penalties for Violations under this ordinance shall be the penalties set forth in Attachment A to this ordinance.

8.4 Vehicle occupancy violations while in the BAIFA toll facilities, including using a FasTrak Flex® toll tag to declare an occupancy status for toll exempt or discounted tolls when such declaration is not permitted hereunder, and other moving violations while in the BAIFA toll facilities, including entry into a BAIFA toll facility by a vehicle that is not authorized by the laws of the State of California to travel in such facility, are subject to citation by the California Highway Patrol.

8.5 BAIFA may use any lawful method to verify compliance with requirements for Discount and toll-exempt trips in the BAIFA toll facilities. Toll violations, including using a FasTrak Flex® toll tag to declare an occupancy status for toll exempt or discounted tolls when such declaration is not permitted hereunder, are subject to enforcement by BAIFA, as detailed in Sections 8.1 and 8.2 or as specified by BAIFA online at the BAIFA toll facility website, with Penalties as provided in Section 8.3.

8.6 BAIFA or BATA may access data saved electronically by the toll system in order to investigate Violations under this ordinance. Such data may include, but is not limited to, the vehicle license plate number, FasTrak Flex® toll tag setting, and FasTrak® toll tag account number, as permitted by law.

Section 9. Severability.

The provisions of this ordinance are severable, and if any provisions of this ordinance, or application of any provision of this ordinance to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this ordinance, shall not be affected thereby.

Section 10. Amendment.

The provisions of this ordinance, including Attachment A to this ordinance, may be amended from time to time in accordance with the procedures set forth in Section 50020 and following of the California Government Code. The concurrence in or consent to any such amendment by any federal or State of California entity with jurisdiction over highways shall be obtained before that amendment is adopted, but only to the extent expressly required by federal or California law.

Section 11. Delegated Authority.

Any action permitted to be taken or decision permitted to be made by the executive director of BAIFA hereunder may be taken or made by a designee of the executive director.

Section 12. Effective Date.

This amended and restated ordinance will take effect and be in force 30 days after its adoption; and the existing Toll Facilities Ordinance shall remain in full force and effect at all times until this amended and restated ordinance becomes effective. Upon adoption, this amended and restated ordinance shall be signed by the Chair of the governing board of BAIFA and shall be published by the Secretary of BAIFA once, within 15 days of its adoption, in a newspaper of general circulation printed and published in the City and County of San Francisco, California, and in a newspaper of general circulation in each of Alameda County, Contra Costa County, and Solano County, California.

BAY AREA INFRASTRUCTURE FINANCING AUTHORITY

Scott Haggerty, Chair

The above ordinance was first adopted by the Bay Area Infrastructure Financing Authority at a regularly-scheduled meeting of BAIFA held in San Francisco, California, on July 27, 2016, and amended and restated by the Authority at a regularly-scheduled meeting of BAIFA held in San Francisco, California, on January 22, 2020.

ATTACHMENT A TO
BAY AREA INFRASTRUCTURE FINANCING AUTHORITY TOLL FACILITY ORDINANCE

Facilities and Tolls

Under the Bay Area Infrastructure Financing Authority Toll Facility Ordinance, the minimum toll per zone, the hours of operation, and Discounts available for high occupancy vehicles (HOVs) and clean air vehicles for each BAIFA toll facility listed below shall be as set forth in this table:

BAIFA Toll Facilities and Zones	Minimum Toll per Zone	Maximum Hours of Operation	HOV Requirement and Occupancy Discount*	Clean Air Vehicle Discount*
I-680 San Ramon to Walnut Creek Two zones southbound: <ol style="list-style-type: none"> 1. Crow Canyon Zone: Rudgear Road to Crow Canyon Road 2. Alcosta Zone: Crow Canyon Road to Alcosta Boulevard Two zones northbound: <ol style="list-style-type: none"> 3. Crow Canyon Zone: Alcosta Boulevard to Crow Canyon Road 4. Livorna Zone: Crow Canyon Road to Livorna Road 	\$0.50	Monday to Friday from 5AM to 8PM	100% for two or more persons (HOV 2+)	100% until the I-880 Oakland to Milpitas Toll Facility opens to paying traffic, at which time the CAV Discount shall be 50%
I-880 Oakland to Milpitas Six zones southbound: <ol style="list-style-type: none"> 1. Washington/238 Zone: Hegenberger Road to Washington Avenue/238 2. Tennyson Zone: Washington Avenue/238 to Tennyson Road 3. Alvarado-Niles Zone: Tennyson Road to Alvarado-Niles Road 4. Thornton Zone: Alvarado-Niles Road to Thornton Avenue 5. Auto Mall Zone: Thornton Avenue to Auto Mall Parkway 6. Dixon Landing Zone: Auto Mall Parkway to Dixon Landing Road Five zones northbound: <ol style="list-style-type: none"> 7. Auto Mall Zone: Dixon Landing Road to Auto Mall Parkway 8. Mowry Zone: Auto Mall Parkway to Mowry Avenue 9. Decoto/84 Zone: Mowry Avenue to Decoto Road/84 10. Whipple Zone: Decoto Road/84 to Whipple Road 11. Hesperian/238 Zone: Whipple Road to Hesperian Boulevard/238 	\$0.50	Monday to Friday from 5AM to 8PM	100% for three or more persons (HOV 3+) 50% for two persons, with the exception of 100% for two persons in a class 1 vehicle designed by the manufacturer to be occupied by no more than two persons, including the driver.	50%

**Discounts cannot be combined across discount categories; for example, a two-person clean air vehicle on I-880 cannot receive a 100% discount (50% for two persons plus 50% for clean air vehicle).*

For all BAIFA toll facilities, the surcharge for “pay-by-plate” transactions shall be \$0.

Penalties for Violations

All Violations

1st Notice
Toll + \$25 penalty

2nd Notice
Toll + \$70 penalty

Exceptions:

1. If the violation is determined to be the fault of the toll agency.
2. For 1st time offense, a non-customer can open a FasTrak® account and the \$25 penalty will be waived.
3. For FasTrak® account holders in good standing, toll-only will be posted to the account balance. If the account balance is less than the amount of the toll, the account balance must be brought to the opening balance amount prior to posting the violation toll amount.

A processing fee will be applied to violations sent to the Department of Motor Vehicles (DMV) for a registration hold in the amount of the DMV recording fee authorized pursuant to Vehicle Code Section 4773 (currently \$3, as said amount may subsequently be revised by the DMV).

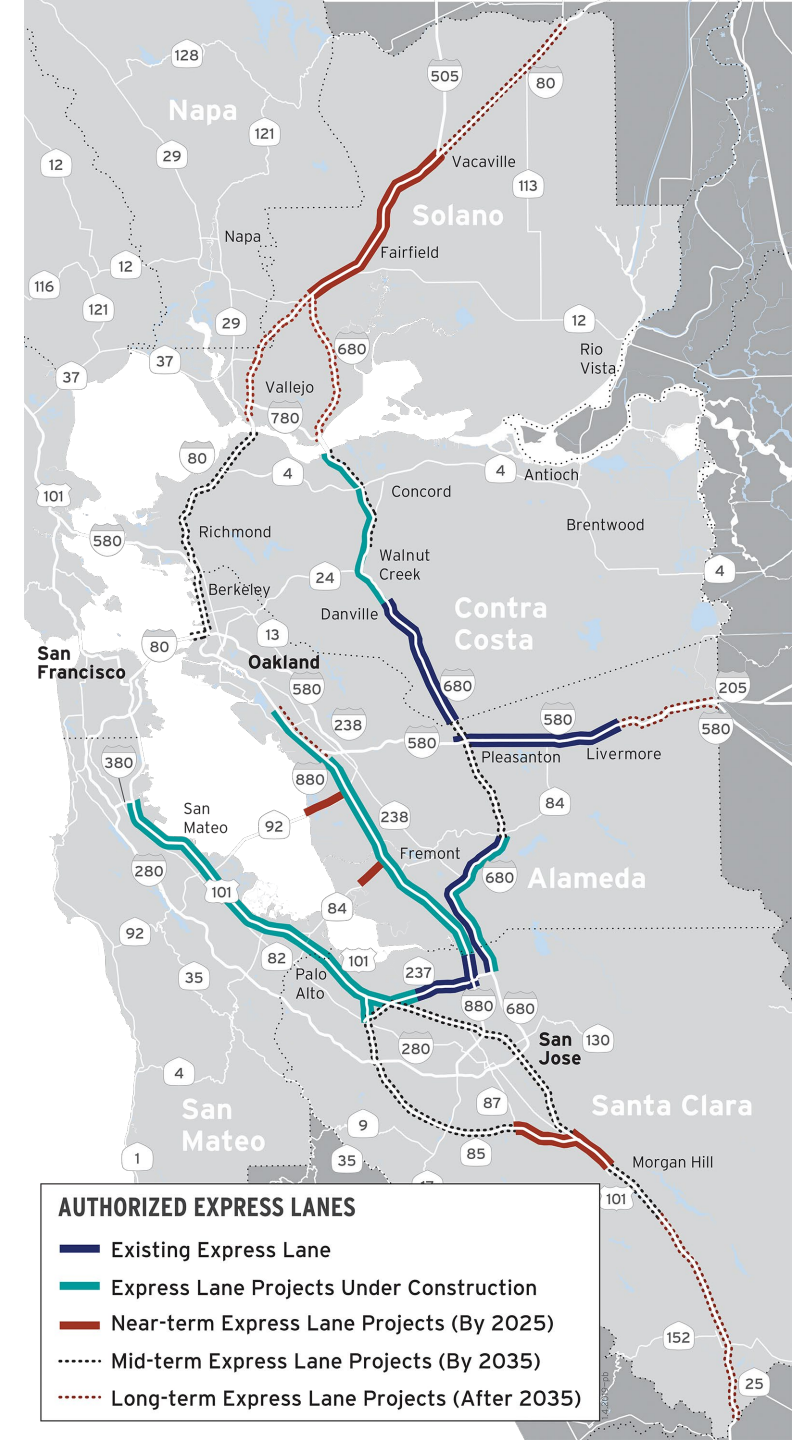
Toll Facility Ordinance Amendment: I-880 Express Lanes

Bay Area Infrastructure Financing Authority
October 23, 2019



Why Express Lanes?

- Improve HOV lane performance to offer better service to carpools and buses
- Offer a more reliable trip for everyone
- Move more people with existing capacity
- Expand network for carpools and buses

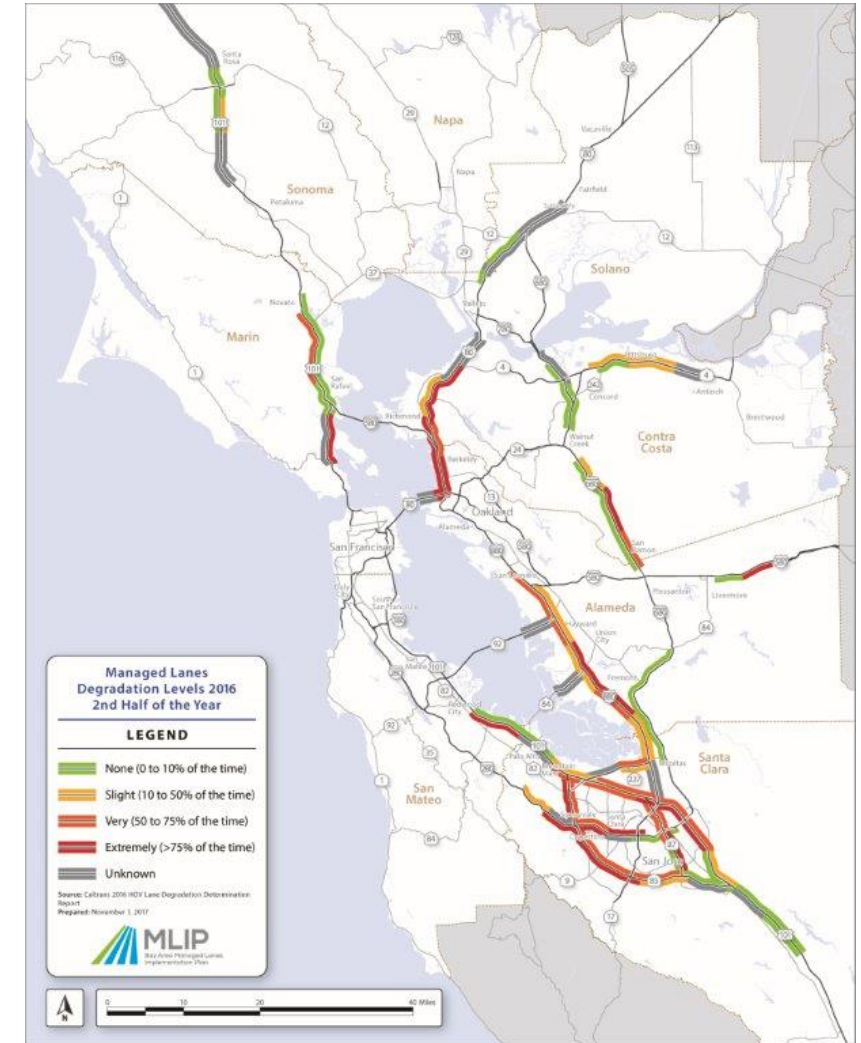


HOV Lanes are Stressed

- 69% of Bay Area HOV lane miles degraded (2017)
- Explored in Managed Lanes Implementation Plan (2015-2017)





Factors:

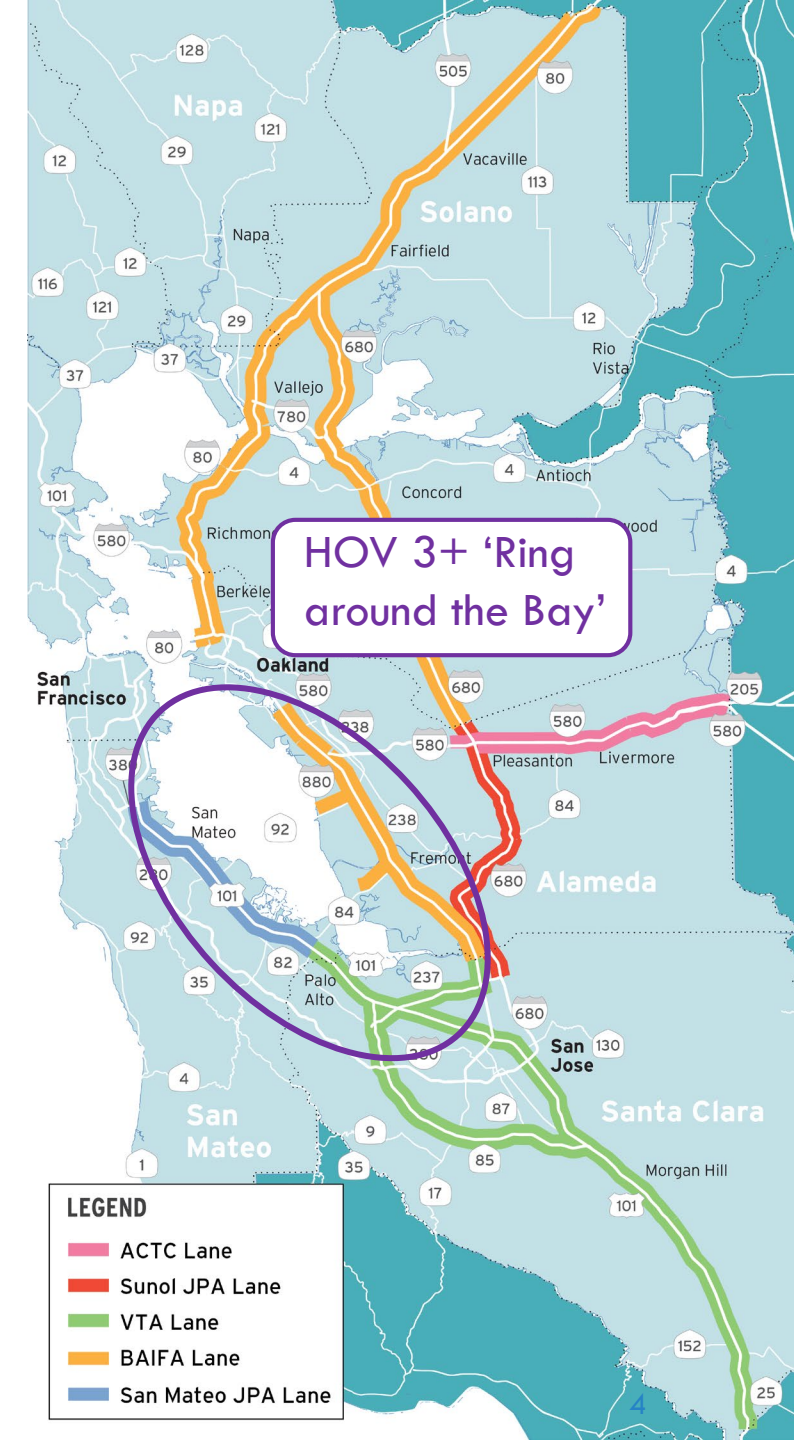
- More traffic, including carpools
- Limited enforcement options leads to HOV violators: 24% average (AM Peak)
- Clean air vehicle (CAV) growth continues: About 90,000 decals issued in Bay Area in 2019
- Hours of operation and HOV eligibility do not always align with traffic



Ring around the Bay: Congested, Connected, Consistent

- Conversions of degraded HOV lanes on I-880, SR-237 and US-101 in 2020 and 2021 represent opportunity and necessity
- Connected lanes should have consistent policies
- Agencies must work together
 - Caltrans: freeway HOV policy
 - BATA: bridge HOV policy
 - Express lanes operators: toll policy

Policy Alignment	Toll Facility
Summer 2020	   Dumbarton & San Mateo-Hayward Bridge Approaches
Fall 2021	



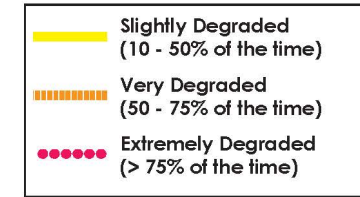
I-880 HOV Lanes Today

- HOV 2+
- 90% of corridor is very or extremely degraded
- 20% of vehicles are HOV violators (e.g. solo drivers)
- 20% of vehicles are Clean Air Vehicles

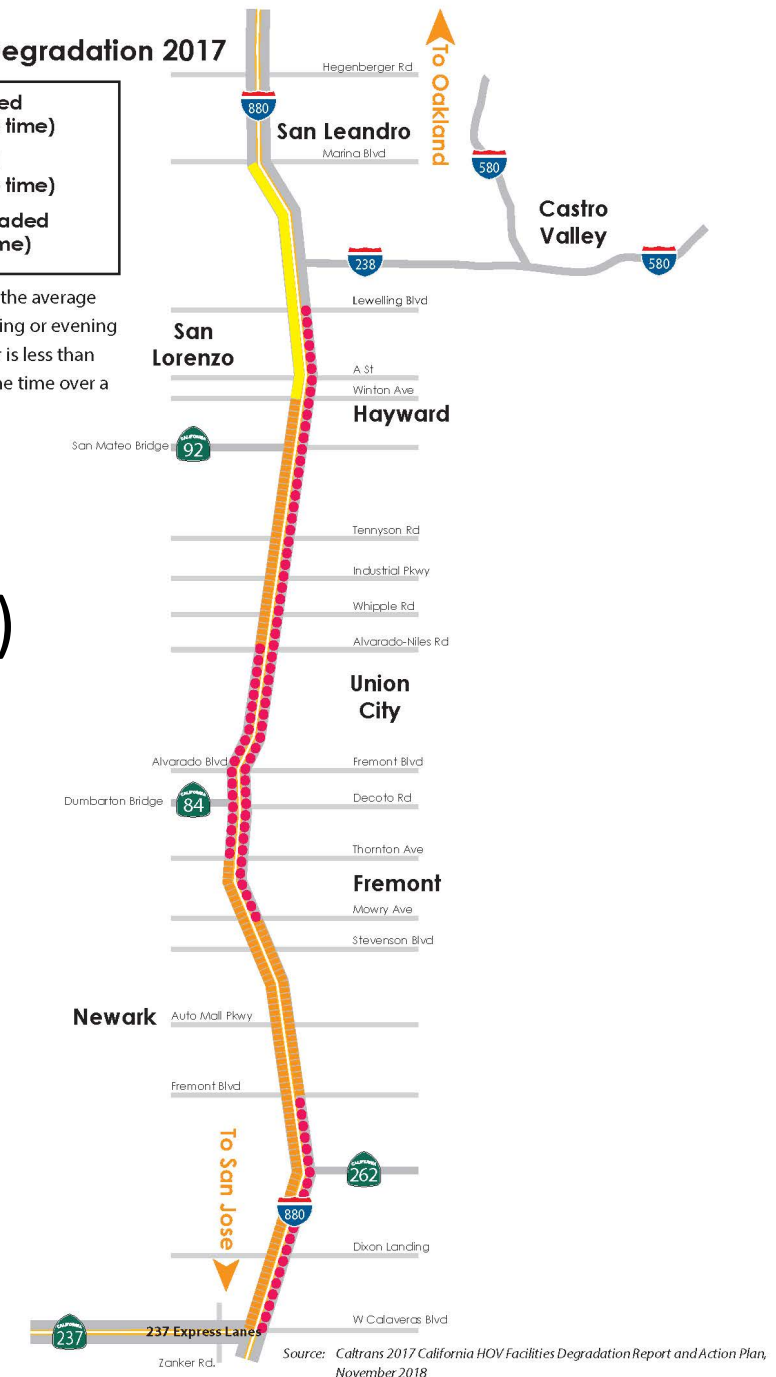
Unreliable, but opportunity for improvement

**Data collected on I-880 northbound in Fremont during PM peak in 2018; consistent with MLIP data from 2015*

I-880 HOV Lane Degradation 2017



An HOV facility is degraded if the average traffic speed during the morning or evening weekday peak commute hour is less than 45 mph for ore than 10% of the time over a consecutive 180-day period.



Source: Caltrans 2017 California HOV Facilities Degradation Report and Action Plan, November 2018

I-880 Express Lanes: Project Status

Conversion of HOV lanes to tolled express lanes

Civil construction
largely complete
(Summer 2019)

Customer
Education
(Spring 2020)

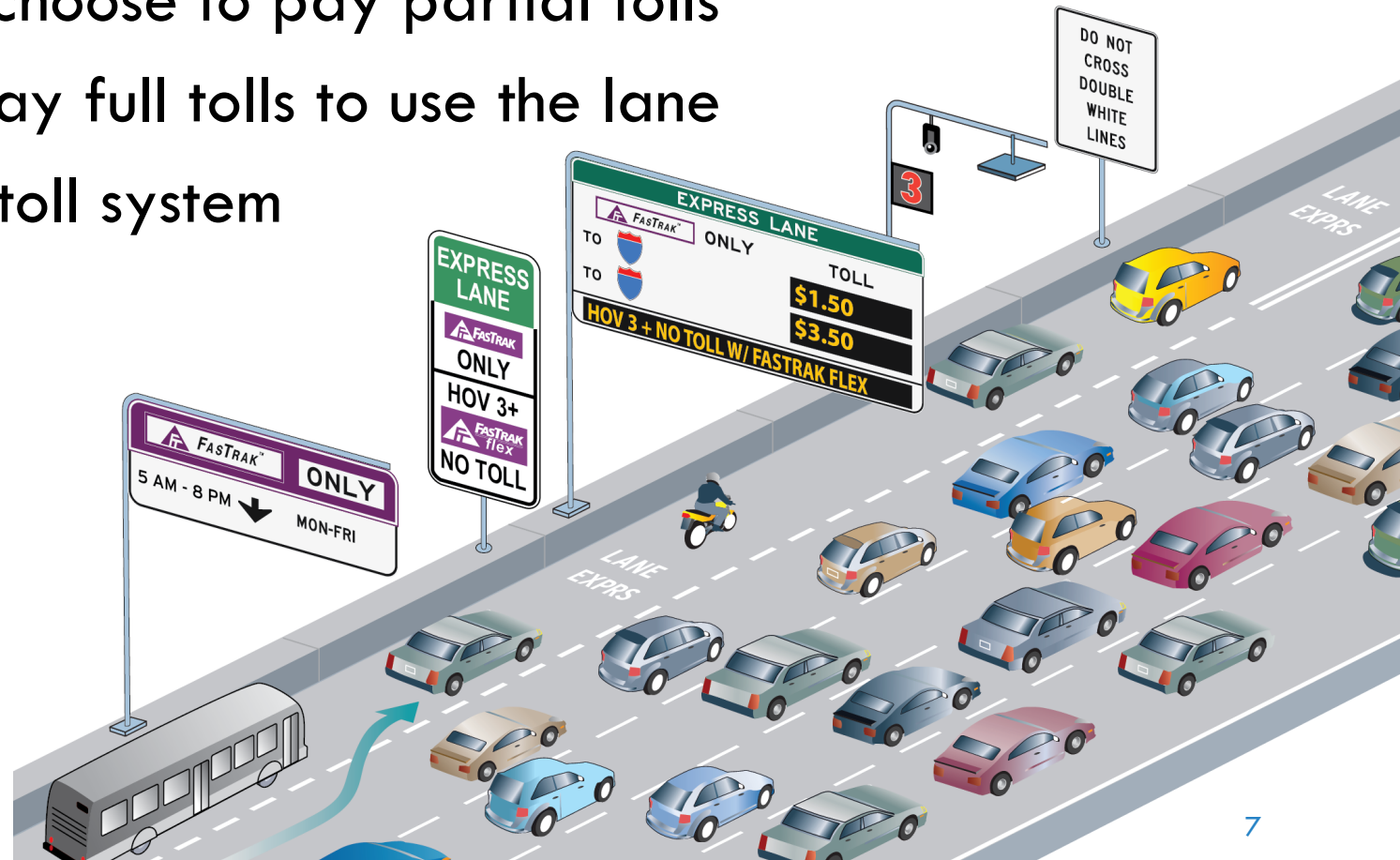
Toll system
installation &
testing; lane
striping
complete
(Spring 2020)

Tolling begins
(Summer 2020)



How Express Lanes Work

- Tolls can change every 5 minutes based on traffic
- Eligible carpools, vanpools, buses, motorcycles & CAVs can use the lane for free or choose to pay partial tolls
- Solo drivers can choose to pay full tolls to use the lane
- Enforcement is enhanced by toll system technology



Proposed I-880 Tolling ‘Road Map’

Rule	880 HOV Lane Today	880 Express Lane When Open	Why?
Operating Hours <i>(Caltrans approved)</i>	5am to 9am 3pm to 7pm	5am to 8pm	Manage non-recurrent traffic Regional consistency
★ HOV Eligibility <i>(Caltrans approved)</i>	HOV 2+	HOV 3+	Meet federal speed requirements Encourage higher person throughput
★ Scaled Tolls <i>(BAIFA adoption proposed)</i>	No	\$0.50 min per zone; no max Solo drivers: full toll 2 Persons & CAVs: 50% toll HOV 3+: no toll	Meet federal speed requirements ‘Ring around the Bay’ consistency Encourage higher person throughput
★ FasTrak Required <i>(BAIFA adoption proposed)</i>	No	Yes	Enable payment & improve enforcement Regional consistency
Enforcement <i>(BAIFA adoption proposed)</i>	Manual (CHP)	Manual (CHP) and Automated (toll system) Auto. toll violations match BATA: \$25 1 st notice; \$70 2 nd notice	Ensure drivers follow tolling rules Regional consistency

High-Occupancy Vehicle (HOV) Eligibility

- ▶ HOV 3+ when lanes open

Decision Factors:

- Severe degradation as HOV 2+ facility
- Meet federal speed requirements
- Part of 'Ring around the Bay' concept for toll policy consistency

HOV 3+ 'Ring
around the Bay'



HOV 3 +
IS 3
OR MORE
PERSONS
PER
VEHICLE

Scaled Tolls & Toll Zones

- ▶ Dynamic pricing
- ▶ Min. toll per zone: \$0.50; no max. toll
- ▶ Scaled tolls:
 - Full toll: Solo drivers
 - 50% toll: 2 persons & CAVs
 - No toll: HOV 3+, buses, motorcycles
- ▶ Specifies toll zones

Decision Factors:

- Consistency with other express lanes
- Meet federal speed requirements



Rules of the Road (Proposed for BAIFA adoption)

FasTrak[®] Required



- ▶ FasTrak account required
- ▶ Legacy FasTrak toll tag OK for solo driver
- ▶ FasTrak Flex[®] toll tag required for toll-exempt or reduced toll trips
- ▶ CAVs (red or purple stickers) required to register for a new CAV FasTrak Flex toll tag
- ▶ No FasTrak account? Toll violation (penalties match BATA bridges)

Decision Factors:

- Consistency with other express lanes and bridges
- Enable occupancy declaration and improve enforcement

Proposed I-680 Express Lanes Tolling Changes

- ▶ Increase minimum zone toll to \$0.50
- ▶ Require CAVs to register for a new CAV FasTrak Flex toll tag and pay 50% toll

Decision Factors:

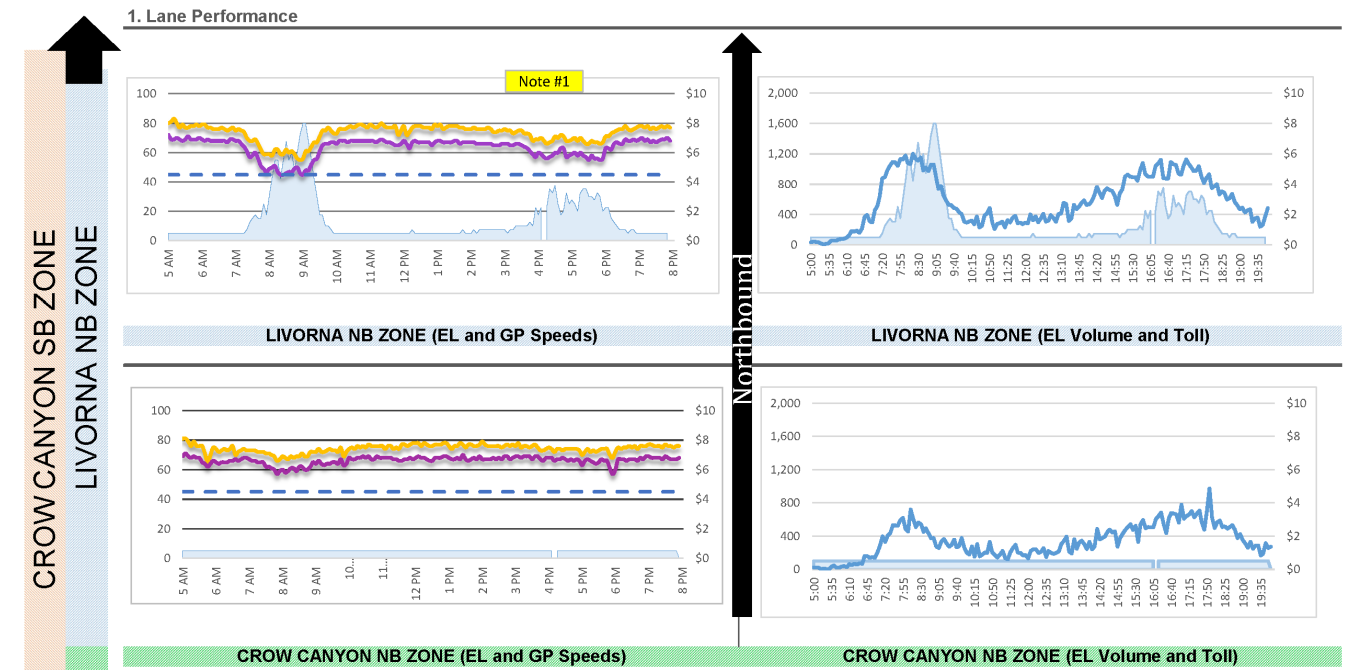
- Actual tolling practice (to cover cost)
- Consistency with other express lanes

Rule	I-680 Today	I-680 Proposed
Operating Hours*	5 AM – 8 PM	Same
HOV Eligibility*	HOV 2+	Same
FasTrak Required	Yes	Same
★ Scaled Tolls (BAIFA adoption proposed)	Zone toll: \$0.30 min; no max Solo Driver: full toll HOV 2+: no toll CAV: no toll	Zone toll: \$0.50 min; no max Solo Driver: Same HOV 2+: Same CAV: 50% toll
Enforcement	Manual (CHP) and Automated (toll system) Auto. toll vios. match BATA: \$25 1 st notice; \$70 2 nd notice	Same

* Caltrans approved

What to expect when 880 opens?

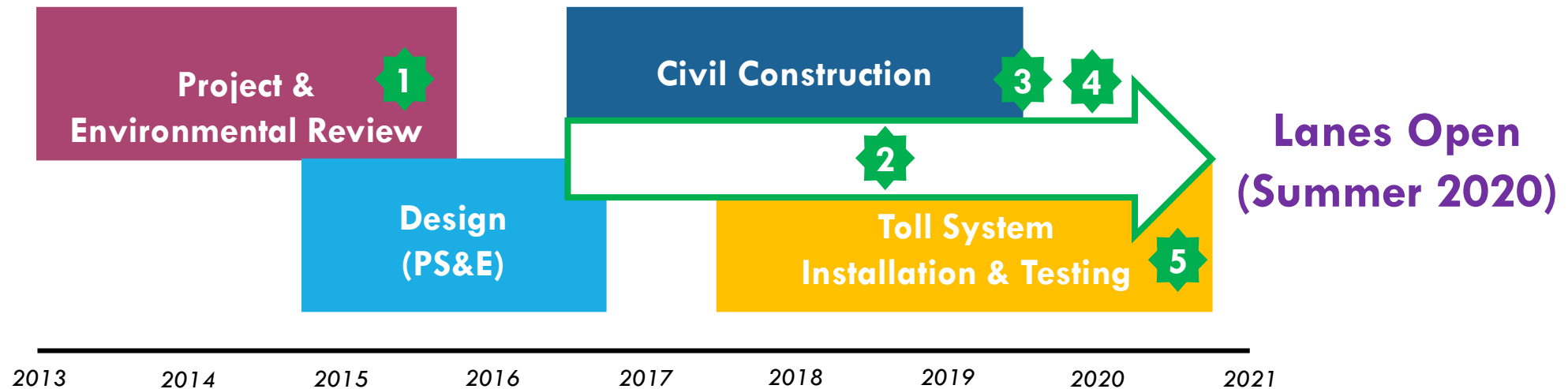
- Public learning curve
 - Tolling 'rules of the road'
 - Where to get in and out of the lanes given partial access restrictions
- Daily traffic monitoring and analysis
- Adjustments as needed after reasonable 'break-in' period



Example of daily monitoring of I-680 Contra Costa Express Lanes

I-880 Express Lanes Outreach Overview

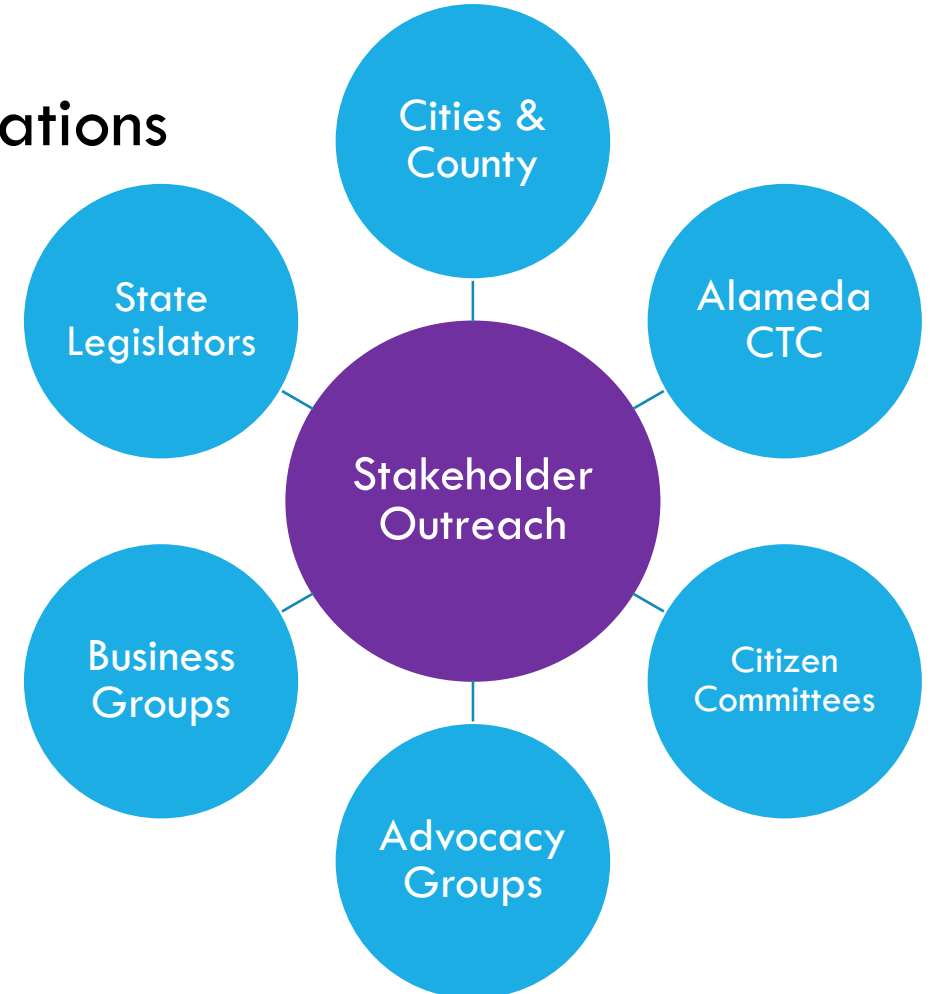
- 1** Stakeholder & Public Outreach (2015)
- 2** On-going Project Updates (2016 – 2020)
- 3** Stakeholder Outreach (Spring-Fall 2019)
- 4** Public Notice & Toll Ordinance (Fall-Winter 2019/20)
- 5** Customer Education Campaign (Spring-Summer 2020)



Stakeholder Outreach (Spring-Fall 2019)

Purpose:

- Update stakeholders on proposed operations
- Leverage local communication channels
- Offer additional public meetings



Customer Education (Spring-Fall 2020)

6 months before opening:

- ▶ Post educational information to web as available



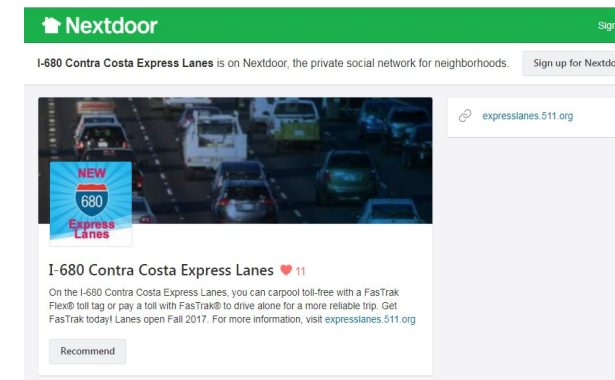
Print & Online



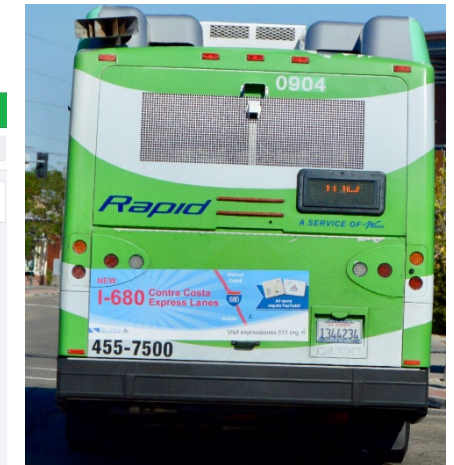
On-Corridor Banners

3 months before opening:

- ▶ I-880 Express Lanes: Explain 'rules of the road' and get FasTrak®



Social Media



Bus Tails

Examples of collateral from I-680 Express Lanes

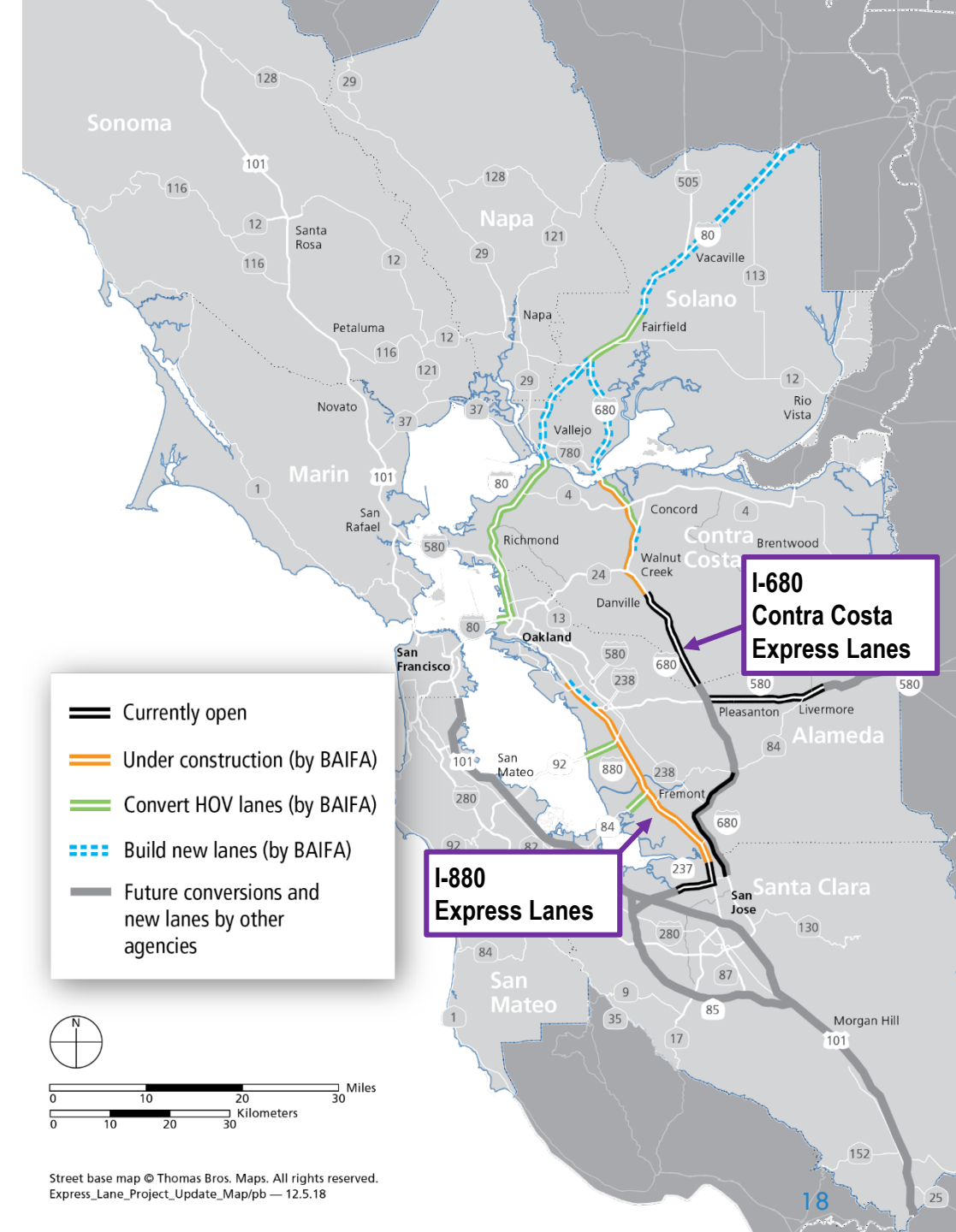
Carpool Support

- ▶ Advertising, employer outreach and community-based outreach
- ▶ “Be Three, Go Free” carpool rewards and incentive campaign
- ▶ New ridematching system and on-going carpool app partnerships
- ▶ Vanpool Subsidy Program
- ▶ Employer commute management tools and employer partnerships
- ▶ Promote commuter parking lots



BAIFA Toll Ordinance Overview

- Adopted July 2016 before I-680 opened
- Allows BAIFA to enforce toll violations
- Documents BAIFA's toll policy in context of Caltrans HOV policy, for transparency
- Proposed action: Amend before I-880 opens and for changes on I-680, for consistency



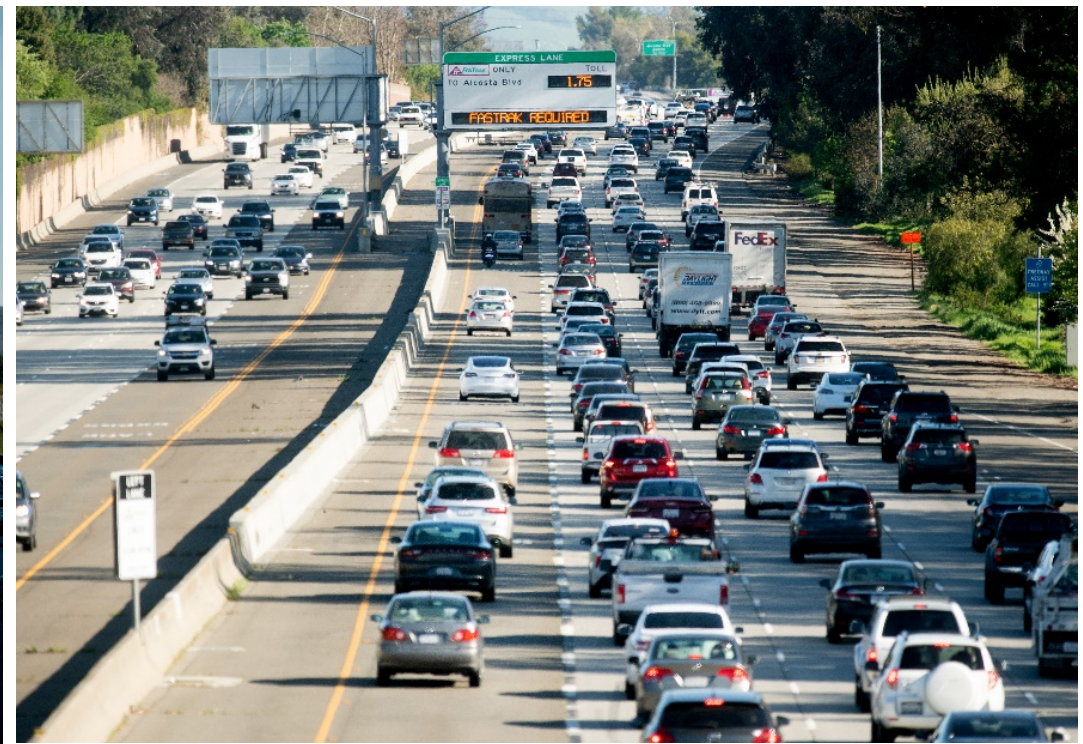
Proposed Schedule: Public Outreach & Toll Ordinance Adoption

2019			2020	
October	November	December	January	February
Information Item at BAIFA on Oct 23	Newspaper Publication no later than Nov 18 & 25	Public Hearing at BAIFA on Dec 18	Ordinance Adoption at BAIFA on Jan 22	Ordinance Effective on Feb 21
	Public comment starts Nov 18	2 Public Open Houses in I-880 Corridor: Dec 3 & 11		
		Public comment ends Dec 18		

- ▶ 3 BAIFA agenda items over 4 consecutive months
- ▶ 2 public open houses in I-880 corridor with extensive outreach to community-based organizations
- ▶ Online 'open house' from Nov. 18 to Dec. 18

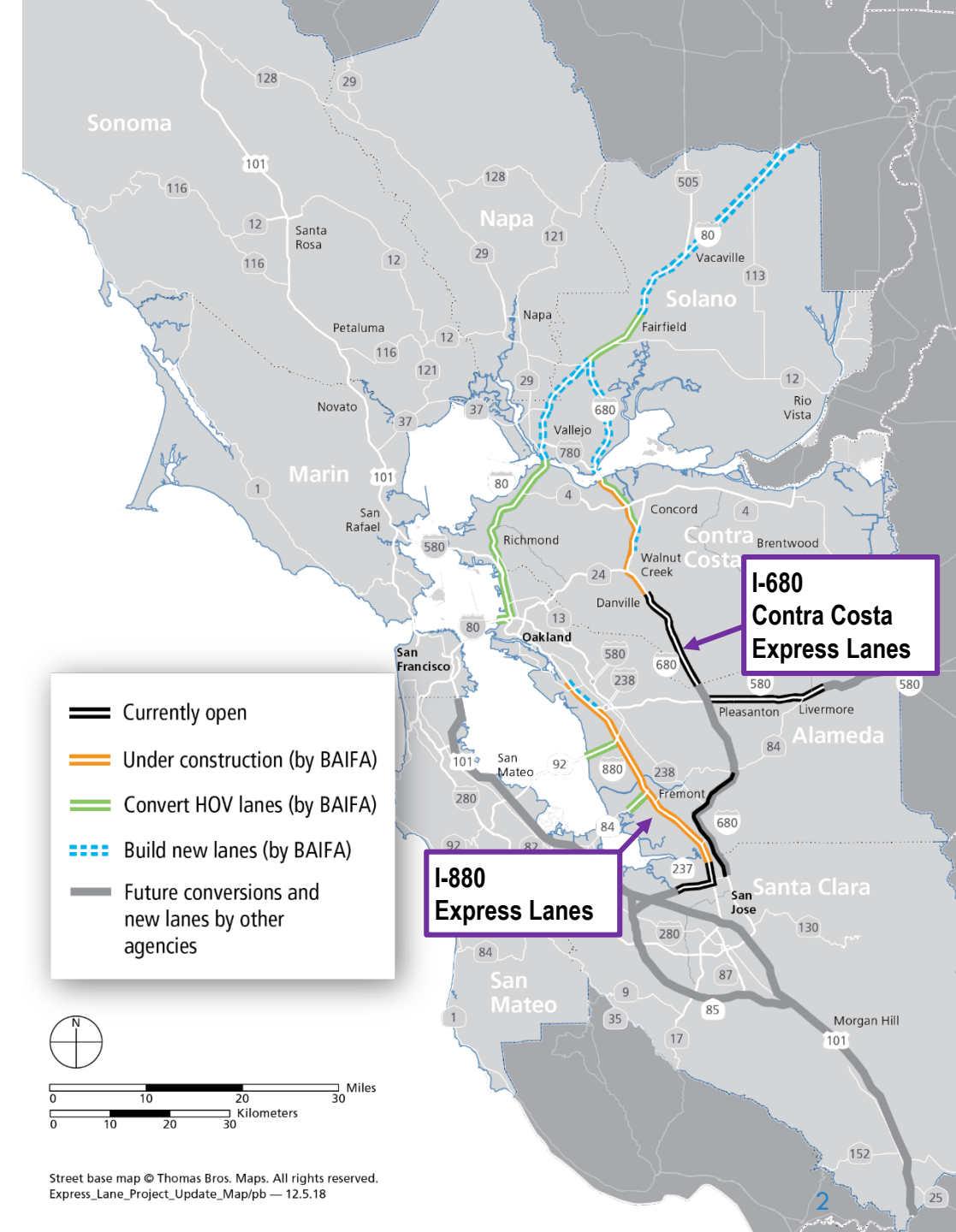
Toll Facility Ordinance Amendment: Public Hearing

Bay Area Infrastructure Financing Authority
December 18, 2019



BAIFA Toll Ordinance Overview

- Adopted July 2016 before I-680 Contra Costa opened
- Allows BAIFA to enforce toll violations
- Documents BAIFA's toll policy in context of Caltrans HOV policy, for transparency
- Proposed action: Amend before I-880 opens and for changes on I-680 Contra Costa, for consistency



Status of Adoption Process

YOU ARE HERE

2019			2020	
October	November	December	January	February
Information Item at BAIFA on Oct 23 ✓	Newspaper Publication no later than Nov 18 & 25 ✓	Public Hearing at BAIFA on Dec 18	Ordinance Adoption at BAIFA on Jan 22	Ordinance Effective on Feb 21
	Public comment starts Nov 18 ✓	2 Public Open Houses in I-880 Corridor: Dec 3 & 11 ✓		
		Public comment ends Dec 18		

Rules of the Road (Proposed for BAIFA adoption)

Proposed I-880 Tolling 'Road Map'

Rule	880 HOV Lanes Today	880 Express Lanes When Open	Why?
Operating Hours <i>(Caltrans approved)</i>	5am to 9am 3pm to 7pm	5am to 8pm	Manage non-recurrent traffic Regional consistency
HOV Eligibility <i>(Caltrans approved)</i>	HOV 2+	HOV 3+	Meet federal speed requirements Encourage higher person throughput
★ Scaled Tolls <i>(BAIFA adoption proposed)</i>	No	\$0.50 min per zone; no max Solo drivers: full toll 2 Persons & CAVs: 50% toll HOV 3+: no toll	Meet federal speed requirements 'Ring around the Bay' consistency Encourage higher person throughput
★ FasTrak Required <i>(BAIFA adoption proposed)</i>	No	Yes	Enable payment & improve enforcement Regional consistency
★ Enforcement <i>(BAIFA adoption proposed)</i>	Manual (CHP)	Manual (CHP) and Automated (toll system) Auto. toll violations match BATA: \$25 1 st notice; \$70 2 nd notice	Ensure drivers follow tolling rules Regional consistency

Rules of the Road (Proposed for BAIFA adoption)

Proposed I-680 Express Lanes Tolling Changes

Rule	I-680 Express Lanes Today	I-680 Express Lanes Proposed
Operating Hours*	5 AM – 8 PM	Same
HOV Eligibility*	HOV 2+	Same
FasTrak Required	Yes	Same
★ Scaled Tolls (BAIFA adoption proposed)	Zone toll: \$0.30 min; no max Solo Driver: full toll HOV 2+: no toll CAV: no toll	Zone toll: \$0.50 min; no max Solo Driver: Same HOV 2+: Same CAV: 50% toll
Enforcement	Manual (CHP) and Automated (toll system) Auto. toll vios. match BATA: \$25 1 st notice; \$70 2 nd notice	Same

* Caltrans approved

★ Proposed for BAIFA adoption

When I-880 opens:

- ▶ Increase minimum zone toll to \$0.50
- ▶ Require CAVs to register for a new CAV FasTrak Flex toll tag and pay 50% toll

Decision factors:

- ▶ Actual tolling practice (to cover cost)
- ▶ Consistency with other express lanes

Clean Air Vehicle (CAV) Tolls

Question: Should CAVs pay more than the proposed 50% toll?

Recommendation: Proceed with proposal for CAVs to pay a 50% toll, and revisit as necessary in light of various policy and implementation factors

Rationale:

- ▶ Consistency with state-owned bridges and VTA SR-237
- ▶ Simple message
- ▶ Uncertainty in policy landscape
- ▶ Air District perspective



Equity for Low-Income Individuals

Question: How should BAIFA address equity for low-income travelers?

Recommendation: Leverage equity studies at MTC and other agencies as well as Plan Bay Area 2050 to engage low-income individuals, learn about barriers and opportunities related to express lanes and inform a regional policy regarding equity.

Rationale:

- ▶ Follow a deliberate, inclusive approach for the best outcome
- ▶ Coherent regional policy requires understanding equity in the context of toll bridges and other express lanes
- ▶ People of all incomes value the choice to use the express lanes

October BAIFA Discussion & Next Steps:

Tolling Rule Consistency

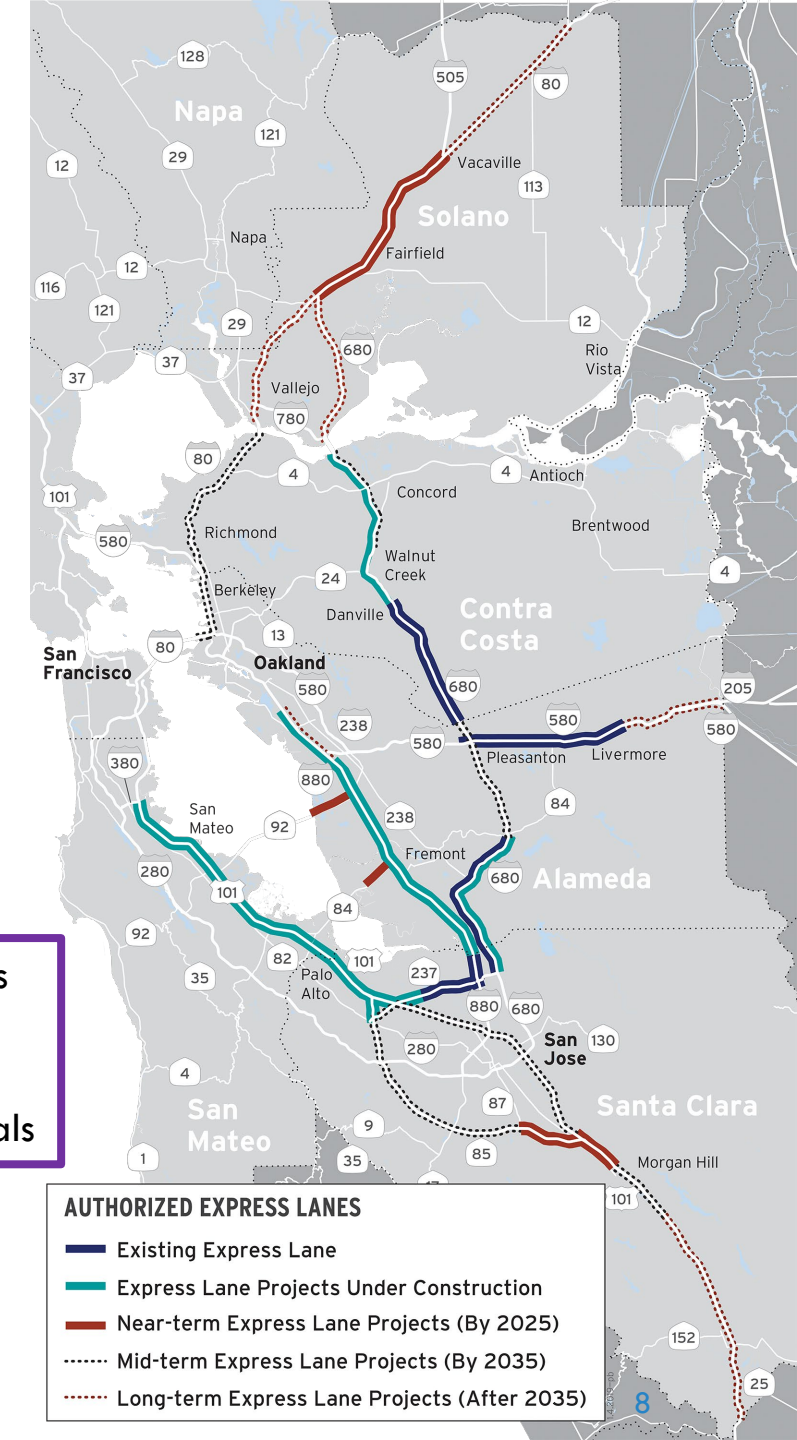
Question: How can the region achieve consistency in tolling rules?

Recommendation: Reengage partner agencies and Commissioners on a decision-making model in early 2020.

Tolling Rule	Bay Area Express Lanes*		
	Today	2020	2021
5 a.m. to 8 p.m.	4	5	7
HOV2+ no toll	4	3	3
HOV3+ no toll & 2-person toll discount	0	2	4
CAV toll discount	1	5	7
FasTrak account required; FasTrak Flex for toll discounts; Automated enforcement; Penalties: \$25 1 st notice, \$70 2 nd (waived if open account)	3	5	7

Requires
future
Board
approvals

*Four open today; five
in 2020; seven by 2021



Next Steps

2019			2020	
October	November	December	January	February
Information Item at BAIFA on Oct 23 ✓	Newspaper Publication no later than Nov 18 & 25 ✓	Public Hearing at BAIFA on Dec 18	Ordinance Adoption at BAIFA on Jan 22	Ordinance Effective on Feb 21
	Public comment starts Nov 18 ✓	2 Public Open Houses in I-880 Corridor: Dec 3 & 11 ✓		
		Public comment ends Dec 18		

- ▶ Public comment summary
- ▶ Adoption vote
- ▶ Newspaper publication
- ▶ Effective 30 days after adoption



**BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT**

ALAMEDA COUNTY

John J. Bauters
Pauline Russo Cutter
Scott Haggerty
Nate Miley

CONTRA COSTA COUNTY

John Gioia
David Hudson
Karen Mitchoff
Mark Ross

MARIN COUNTY

Katie Rice
(Chair)

NAPA COUNTY

Brad Wagenknecht

SAN FRANCISCO COUNTY

Gordon Mar
Shamann Walton
Tyrone Jue
(SF Mayor's Appointee)

SAN MATEO COUNTY

David J. Canepa
Carole Groom
Davina Hurt

SANTA CLARA COUNTY

Margaret Abe-Koga
Cindy Chavez
(Secretary)
Liz Kniss
Rod G. Sinks
(Vice Chair)

SOLANO COUNTY

James Sperring
Lori Wilson

SONOMA COUNTY

Teresa Barrett
Shirlee Zane

Jack P. Broadbent
EXECUTIVE OFFICER/APCO

Connect with the
Bay Area Air District:



December 3, 2019

Therese McMillan, Executive Director
Metropolitan Transportation Commission
Bay Area Metro Center
375 Beale Street
San Francisco, CA 94105

RE: Support of 50% tolls for Zero Emissions Vehicles as part of changes to Bay Area Infrastructure Finance Authority's (BAIFA) existing Toll Facility Ordinance

Dear Ms. McMillan,

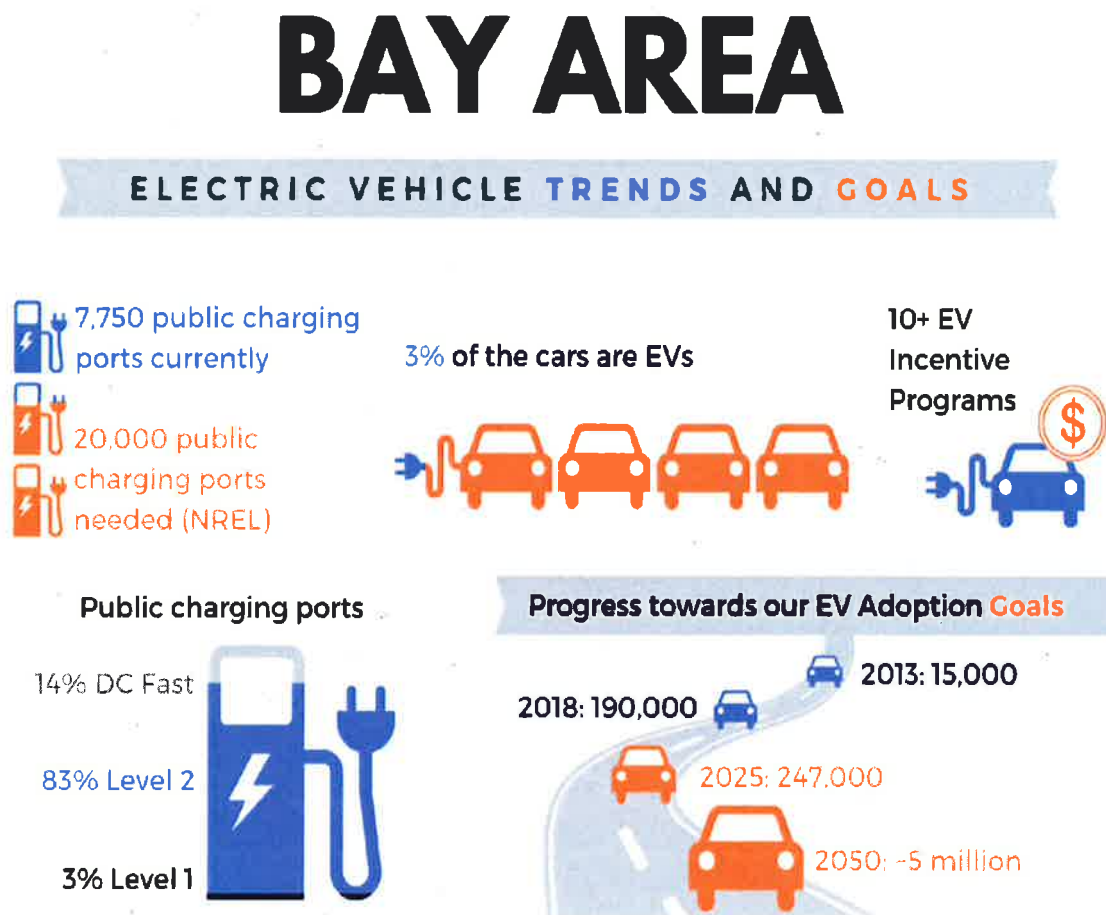
I'm writing on behalf of the Bay Area Air Quality Management District (Air District) to request BAIF support 50% toll fees for Zero Emissions Vehicles (ZEV) to access the new express lanes on Interstate 880 (I-880) as part of the changes you are making to the existing Toll Facility Ordinance. The Air District believes that such incentives are still necessary to spur ZEV adoption and that additional deployment of these vehicles is key to reducing impacts of air pollution in low income and communities of color along Bay Area Highways.

First, let me start by stating the Air District is a strong proponent of any measures that will reduce congestion – a significant contributor to increased emissions (greenhouse gases, particulate matter, criteria, and toxic air pollutants) - on the I-880 corridor. The Metropolitan Transportation Commissions (MTC's) goals for the I-880 express lane project of 1) improving high occupancy vehicle lane performance to offer better service to carpools and buses; 2) moving more people using the existing road capacity; and 3) expanding the road network available for carpools and buses; are aligned with the Air District's objectives to reduce emissions from on-road vehicles to protect local health, regional air quality and the global climate.

However, it should be noted, that studies performed as part of the Air District's Community Health Risk Reduction Program show significant inequity in health risk from the air pollution associated with on-road sources in communities of color and low-income adjacent to Bay Area highways. The Air District is targeting significant reductions of toxic air contaminants and particulate matter in those communities – especially those in the I-80 and I-880 corridors – by providing over \$200 million to on-road and mobile source ZEV and emissions reductions projects in 2019 and 2020. Additionally, both the California Air Resources Board and the Air District are working on a suite of new regulatory, planning, and legislative measures to further reduce those emissions; however, it will take time to get those efforts in place.

In the interim, the Air District believes that it will be necessary to provide additional incentives to hasten the transition of on-road vehicles to ZEV. The Air District's 2017 Clean Air Plan (CAP) shows that on-road sources of air pollution emit approximately 23% of reactive organic gases and 43% of nitrogen oxides - precursors of regional smog; 12% of particulate matter emissions - those that penetrate deepest into the lungs with the potential to cause most health impacts; 24% of toxic air contaminants; and 41% of greenhouse gases (GHG) in the Bay Area. Based on the need to reduce these emissions and the GHG emissions goals of MTC's Plan Bay Area, MTC and the Air District have adopted a joint policy to further the deployment of ZEV. This policy targets the deployment of 247,000 ZEV on Bay Area Roads by 2025 – see Figure 1.

Figure 1 – Bay Area ZEV Trends and Goals



Currently, with fewer than 200,000 ZEV's deployed on Bay Area roads, the Air District believes that it is too soon to remove HOV lane use and discount incentives. This is because on the adoption curve for new technologies, the Air District believes

December 3, 2019

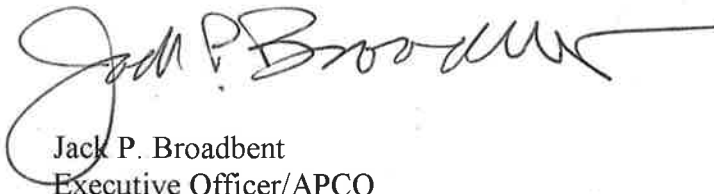
that ZEV are still in the “early adopter” phase of consumer acceptance. Studies¹ and anecdotal information from ZEV advocacy groups such as Plug in America and Veloz show that HOV lane incentives are a powerful tool in pushing ZEV vehicle sales and adoption. In fact, the footnoted study below states that ... *roughly one quarter of California PEV registrations during 2010-2013 were a result of the HOV lane policy...*

While the Air District agrees that ZEV incentives cannot last forever, they need to be reviewed with the perspective of how close we are collectively to achieving our regional health, air quality, GHG, equality and mobility goals without taking any of those metrics in isolation.

The Air District is happy to work with MTC staff to better explain the metrics in our ZEV, CAP or Community Health Risk Reduction Programs and look forward to our continued partnership in reducing the risk and emissions from our roadways.

If you have any questions or comments regarding this letter, please contact Damian Breen at (415) 749-5041 or dbreen@baaqmd.gov.

Yours sincerely,



Jack P. Broadbent
Executive Officer/APCO

¹ How does the presence of HOV lanes affect plug-in electric vehicle adoption in California? A generalized propensity score approach - Tamara L. Sheldon and J.R. DeShazo, Department of Economics, University of South Carolina and Luskin School of Public Affairs, University of California, Los Angeles - 2016