# I-680 Contra Costa Express Lanes Performance Report 3rd Quarter 2022: July - September



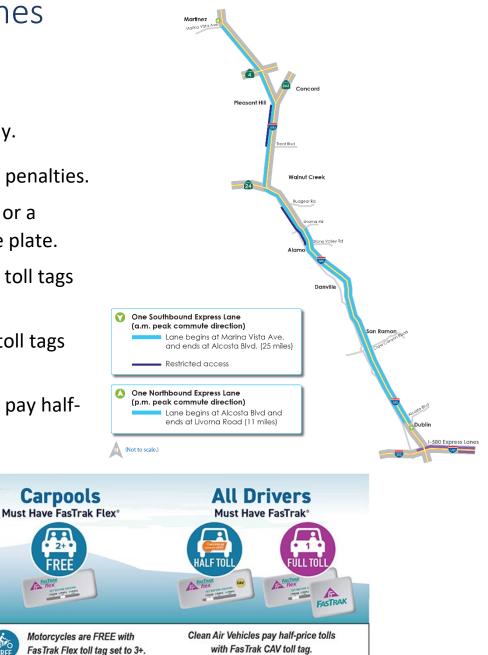
Bay Area Infrastructure Financing Authority Submitted January 2023



## I-680 Contra Costa Express Lanes Policies

- Tolling Hours are 5 a.m. to 8 p.m. Monday Friday.
- All drivers must have a FasTrak<sup>®</sup> account to avoid penalties.
  - Solo drivers can carry a standard FasTrak tag\* or a FasTrak Flex tag set to 1 or pay tolls via license plate.
  - Carpools (2+) travel toll-free with FasTrak Flex toll tags set to 2 or 3+.
  - Motorcycles travel toll-free with FasTrak Flex toll tags set to 3+.
  - Solo-drivers in eligible clean-air vehicles (CAV) pay halfprice tolls with FasTrak CAV toll tags set to 1.

\*Standard FasTrak tags do not have a switch and were issued prior to January 2020.





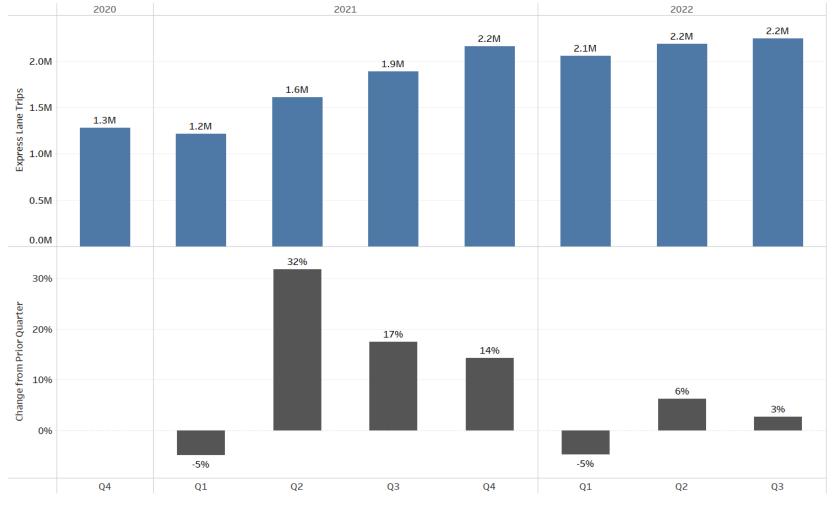
## I-680 Contra Costa Express Lanes – Q3 2022 Performance Highlights

- Q3 2022 marks one year since the 12-mile southbound lane extension opened in August 2021. Over the last four quarters (Q4 2021 – Q3 2022), express lane trips have ranged from 2.1 to 2.2 million per quarter and tolled trips have ranged from 1.0 to 1.1 million per quarter.
- Average daily express lane trips were up 3% from the prior quarter (Q2 2022) and up 19% from a year ago (Q3 2021). The year-over-year increase is due to the southbound lane extension that opened in August 2021 and the lessening impacts of the COVID-19 pandemic.
- The share of toll-free HOV trips was 39%. This share has ranged between 36% and 40% per quarter over the last eight quarters.
- The goal of express lanes is to maximize lane use while keeping traffic moving to encourage carpooling and transit ridership.
- 13% of express lane trips were violations trips made without a FasTrak account or an unfunded FasTrak account. The violation trip share has ranged from 11% to 13% over the last eight quarters.
- Quarterly toll revenue was up 33% from one year ago (Q3 2021); tolled trips increased 13% and the average assessed toll increased 16%. From the prior quarter (Q2 2022), it was up 1%. Tolled trips increased 3% and the average assessed toll increased 5%. Not all tolled trips result in revenue due to toll overrides or insufficient account balances, and some transactions post in the next quarter.
- Corridor-length northbound travel was slowest between 4 and 5 p.m. when express lane speed averaged 68 mph (9 mph faster than the general purpose lanes) and the average toll paid was \$5.40. Corridor-length southbound travel was slowest between 8 and 9 a.m. when express lane speed averaged 86 mph (9 mph faster than the general purpose lanes) and the average toll paid was \$4.10.
- 48% of express lane drivers carried toll tags in their vehicles and made an average of 5.2 I-680 express lane trips in the quarter. Drivers without FasTrak tags in their vehicles, but with FasTrak accounts represented 37% of express lane drivers. This group made an average of 2.9 trips in the quarter. Drivers without FasTrak accounts (15% of drivers) (violators) averaged 2.0 trips per driver in the quarter. Over the last eight quarters 41% to 52% of drivers carried toll tags and made 62% to 68% of express lane trips.
- CHP made 1,032 enforcement contacts, of which 24% resulted in citations related to carpool occupancy.



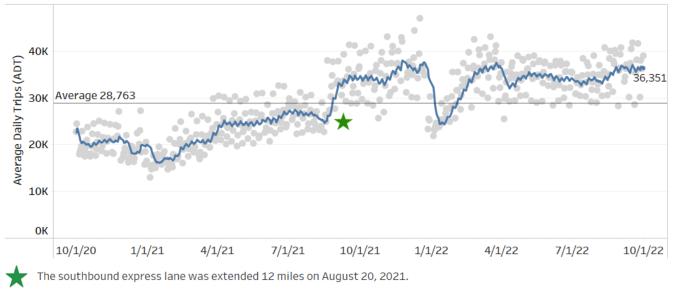
### **Express Lane Trips**

2.2 million express lane trips were made in Q3 2022. Trips were up 3% from the prior quarter (Q2 2022) and up 19% from Q3 2021. The year-over-year increase is due to the 12-mile southbound lane extension that opened in August 2021 and the lessening impacts of the COVID-19 pandemic. Over the last four quarters, express lane trips have ranged from 2.1 to 2.2 million trips.



BAY AREA EXPRESS LANES

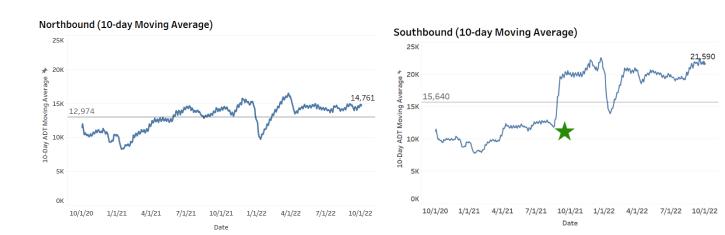
#### Average Daily Express Lane Trips



Average Daily Trips (ADT) (grey dots) with 10-day Moving Average (blue line) (Northbound & Southbound)

The number of tolling days varies per quarter, so Average Daily Trips (ADT) is best for seeing trends.

ADT from Q4 2020 through Q3 2022 was over 28,700 trips. In Q3 2022, it was about 35,000, a 3% increase from the prior quarter and a 19% increase from Q3 2021.



Northbound Q3 2022 ADT was about 14,400 trips, the highest it has been over the last two years.

Southbound Q3 2022 ADT was about 20,600 trips. Southbound ADT has averaged about 19,800 trips since the lane extension opened in August 2021.



## Trip Type

## Toll-free trips (HOV 3+, HOV 2) = 39%

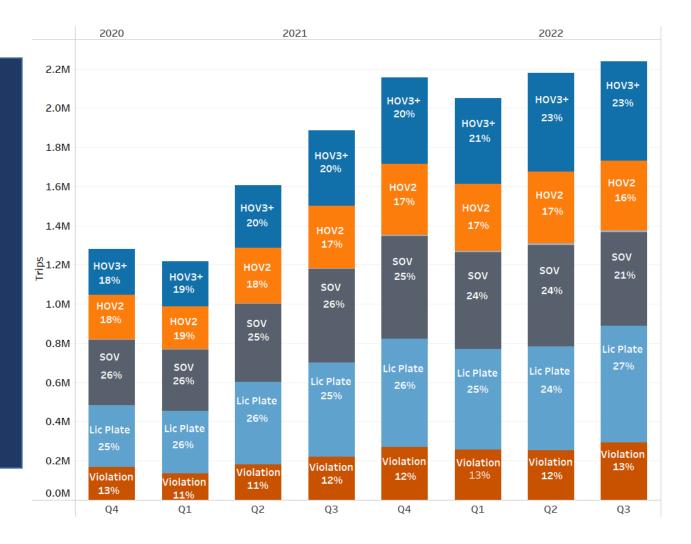
- Share down 1% from Q2 2022
- Share up 2% from Q3 2021

## Tolled trips (full toll + half-toll) = 48%

- 48% full toll (SOV toll tag + license plate match) + <1% half toll (Clean Air Vehicles)
- Share same as Q2 2022
- Share down 3% from Q3 2021

#### Violation trips = 13%

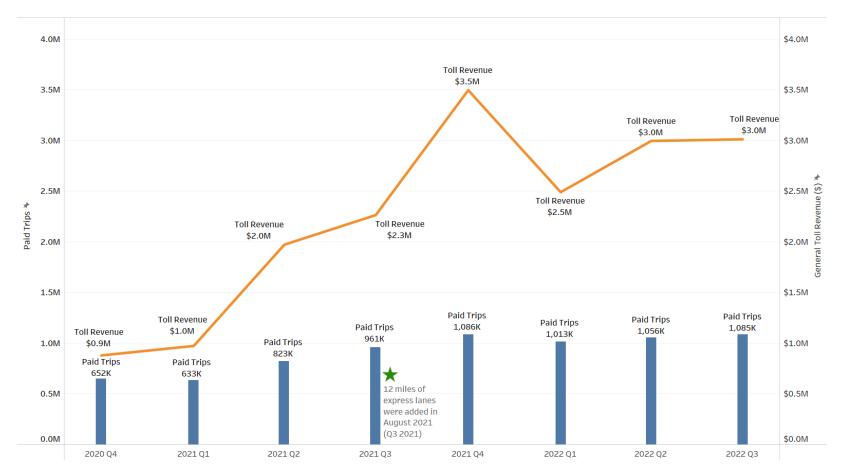
- No toll account + unfunded toll accounts
- Share up 1% from Q2 2022
- Share up 1% from Q3 2021





### Toll Revenue\* and Tolled Trips

\*Revenue from general tolls. Does not include revenue from violation penalties.

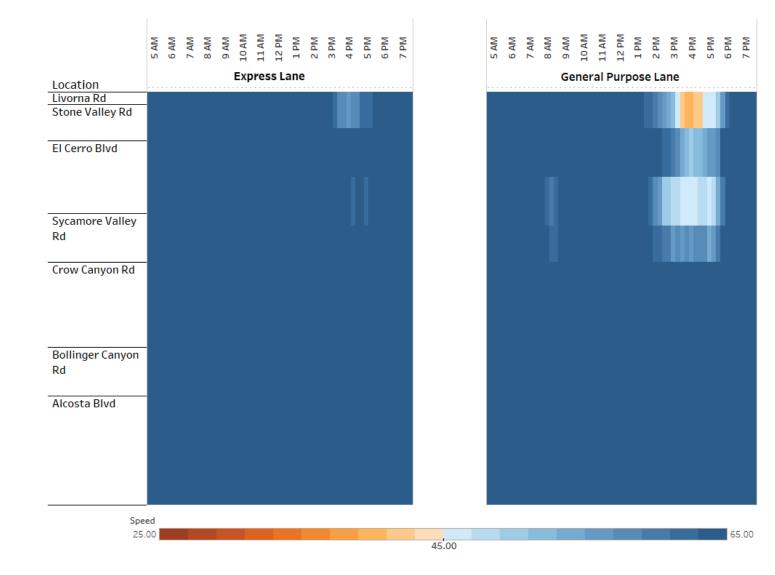


Q2 2022 Change	Toll Revenue	Tolled Trips**	Average Toll Paid**
from Prior Quarter (Q2 2022)	Up 1%	Up 3%	Up 5%
Year over Year (Q3 2021)	Up 33%	Up 13%	Up 16%

\*\*Toll revenue depends on tolled trips, toll overrides, tolls paid in the quarter, and average toll paid. Average toll paid is a function of corridor lane volumes, speeds, and other factors.



#### Northbound Speed by Location and Time: Quarter Average



Northbound express lane speeds averaged 55 mph or faster.

Northbound general purpose lane average speeds slowed below 45 mph at the north end of the corridor between 3:00 and 5:30 p.m. The lowest average general purpose lane speed (39 mph) occurred approaching Livorna Rd. around 4:00 p.m.



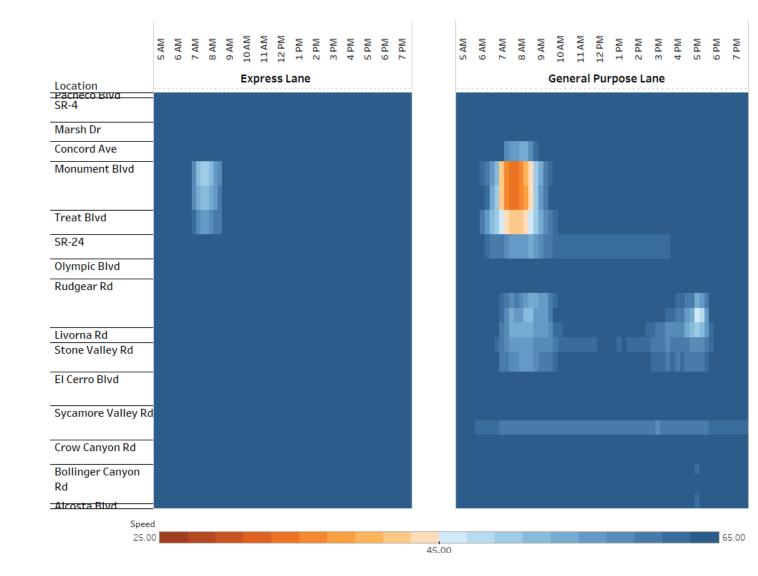
## Northbound: Quarter Average Peak Traffic and Corridor-Length Speed

Peak Spot Traffic			
<b>Time</b> 4 – 5 p.m.			
Location	Approaching Livorna Rd.		
Express Lane Speed 58 mph			
GP Lane Speed 40 mph			
Speed Differential 18 mph			
Express Lane Volume	1,180 vehicles		
GP Lane Volume	1,430 vehicles		

Corridor Length Slowest Travel			
<b>Time</b> 4 – 5 p.m.			
Express Lane Speed	68 mph		
GP Lane Speed 59 mph			
Speed Differential	9 mph		



#### Southbound Speed by Location and Time: Quarter Average



Southbound express lane speeds averaged 65 mph for most of the day throughout the corridor and were always above 45 mph. Average speed slowed to 49 mph between 7:45 and 8:00 a.m. south of Monument Blvd.

Southbound general purpose lane average speed slowed as low as 33 mph at that same location between 7 and 9 a.m. Otherwise, general purpose lane average speeds ranged between 45 and 65+ mph.



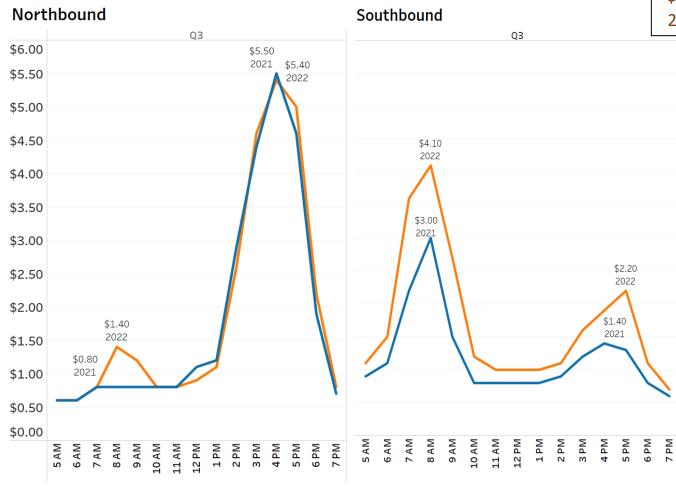
## Southbound: Quarter Average Peak Traffic and Corridor-Length Speed

Peak Spot Traffic			
Time	7 - 8 a.m.		
Location	Between Monument Blvd. and Treat Blvd.		
Express Lane Speed	49 mph		
GP Lane Speed	33 mph		
Speed Differential	16 mph		
Express Lane Volume	960 vehicles		
GP Lane Volume	1,270 vehicles		

Corridor Length Slowest Travel			
<b>Time</b> 8–9 a.m.			
Express Lane Speed	68 mph		
GP Lane Speed	59 mph		
Speed Differential	9 mph		



#### Quarterly Average Toll Paid by Time of Day



Q3 2022 AVERAGE TOLL PAID WAS \$2.20, COMPARED TO \$1.90 IN Q3 2021, 16% HIGHER.

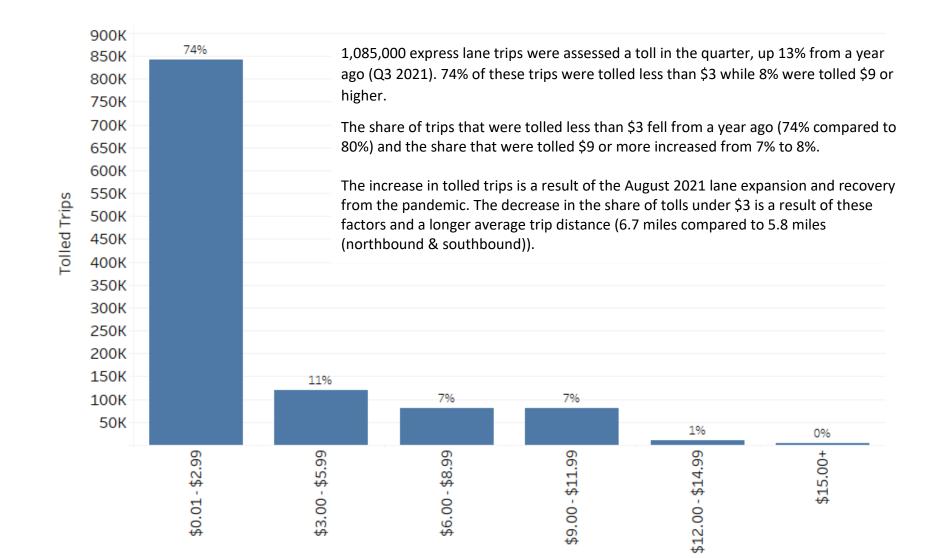
> Q3 2022 northbound average tolls paid by time-of-day were similar to the prior year (Q3 2021). They peaked at \$5.40 between 4 and 5 p.m., \$0.10 lower than the Q3 2021 peak. In the morning, they peaked at \$1.40, \$0.60 more than a year ago.

Southbound tolls paid by timeof-day increased from Q3 2021 to Q3 2022 at all times of day. Southbound, Q3 2022 average tolls peaked at \$4.10 between 8 and 9 a.m., \$1.10 more than the Q3 2021 peak, reflecting post-pandemic demand growth and a 1.5-mile longer average southbound trip distance (7.5 miles vs. 6.0 miles).





### **Toll Distribution**





#### How Drivers Use the Lanes

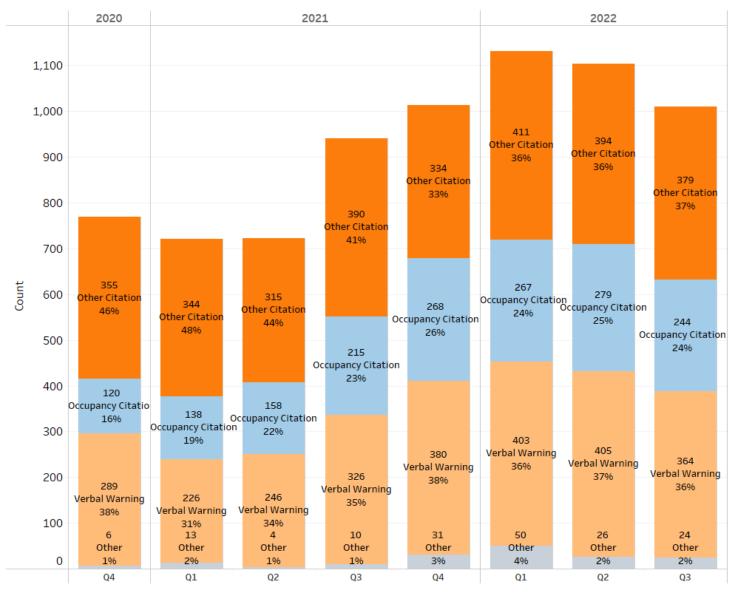
In Q3 2022, about 590,000 unique vehicles made over 2.2 million express lane trips, as shown in the table below.

	A Trips in Quarter	B Unique Vehicles	C Trips Per Unique Vehicle	D Unique Vehicles – Made Only 1 Trip
	• •			
Vehicles Carrying Toll Tags	1.4 million (64%)	280,000 (48%)	5.2	134,000 (48% of column B)
License plate – matched to a	640,000 (28%)	220,000 (27%)	2.9	133,000 (60% of column B)
FasTrak account	640,000 (28%)	220,000 (37%)	2.9	
License plate - not matched to a FasTrak account*	171,000 (8%)	90,000 (15%)	2.0	66,000 (76% of column B)
Total	2.2 million	590,000	3.8	316,000 (56% of column B)

\*The 13% violation rate shown earlier is a result of unmatched trips + matched trips that were unpaid.



## **CHP** Enforcement



CHP provided 811 enforcement hours in the quarter, filling 84% of the hours requested by BAIFA. CHP made 1,032 enforcement contacts, 24% of which were related to carpool occupancy violations. The average cost to BAIFA per enforcement contact was \$99.



For more information, visit <u>expresslanes.511.org</u> or <u>MTC's express lanes page</u>.





## I-880 Express Lanes Performance Report 3rd Quarter 2022: July - September



Bay Area Infrastructure Financing Authority Submitted January 2023



## I-880 Express Lanes Policies

- Tolling Hours are 5 a.m. to 8 p.m. Monday Friday.
- All drivers must have a FasTrak<sup>®</sup> account to avoid penalties.
  - Solo drivers can carry a standard FasTrak tag\* or a FasTrak Flex tag set to 1 or pay tolls via license plate.
  - Carpools (3+) travel toll-free with FasTrak Flex toll tags set to 3+.
  - Carpools (2) pay half-price tolls with FasTrak Flex toll tags set to 2.
  - Motorcycles travel toll-free with FasTrak Flex toll tags set to 3+.
  - Solo-drivers in eligible clean-air vehicles (CAV) pay halfprice tolls with FasTrak CAV toll tags set to 1.

\*Standard FasTrak tags do not have a switch and were issued prior to January 2020.







#### I-880 Express Lanes – Q3 2022 Performance Highlights

- Average daily express lane trips were up 2% from the prior quarter and up 8% from a year ago (Q3 2021).
- The share of toll-free HOV 3+ trips was 38%, up 2% from Q2 2022 and up 8% from Q3 2021. The share of half-price HOV 2 trips was 7%, consistent with Q2 2022 and down 1% from Q3 2021.
- 15% of express lane trips were violations trips made without a FasTrak account or an unfunded FasTrak account. The share is the same as the prior quarter and 2% lower than Q2 2021.
- Quarterly toll revenue was up 7% from the last quarter. The number of tolled trips increased 1% and the average toll assessed increased 9%. Quarterly toll revenue was up 18% from a year ago (Q3 2021). Tolled trips fell 4%, but the average toll assessed increased 27%.

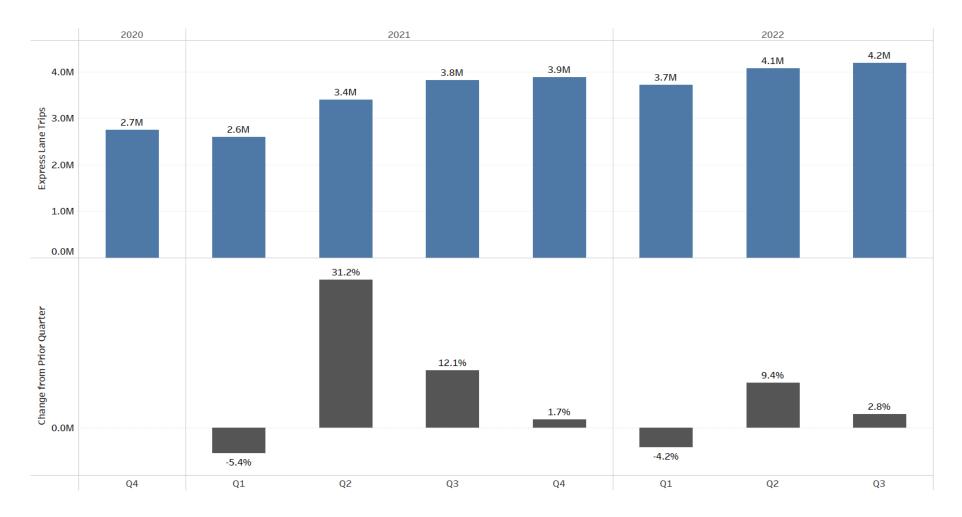
#### The goal of express lanes is to maximize lane use while keeping traffic moving to encourage carpooling and transit ridership.

- Corridor-length northbound travel was slowest between 5 and 6 p.m. when express lane speed averaged 56 mph (19 mph faster than the general purpose lanes), and the average toll paid was \$8.70. Corridor-length southbound travel was slowest between 8 and 9 a.m. when express lane speed averaged 60 mph (15 mph faster than the general purpose lanes) and the average toll paid was \$8.10.
- 52% of express lane drivers carried toll tags in their vehicles and made an average of 8.1 I-880 express lane trips in the quarter. Drivers without FasTrak tags, but with FasTrak accounts (33% of all express lane drivers) made an average of 3.8 trips in the quarter. Drivers without FasTrak accounts (16% of drivers) (violators) averaged 2.8 trips per driver in the quarter. 71% of trips were made by drivers carrying toll tags, the highest share in lane history.
- CHP spent 7% more time patrolling the I-880 express lanes than in the prior quarter resulting in over 3,000 enforcement contacts, 7% more than Q2 2022. Of those, 27% resulted in citations for crossing double white lines and 33% in citations related to carpool occupancy.



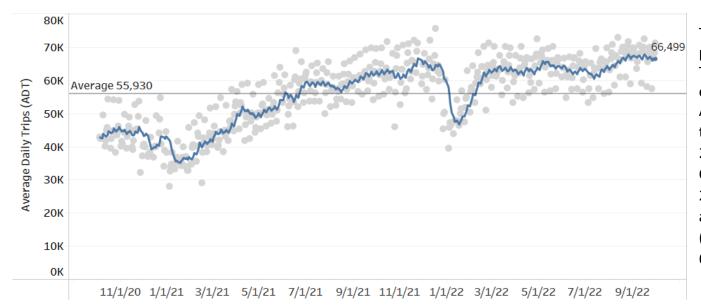
## Express Lane Trips

4.2 million express lane trips were made in Q3 2022. Trips were up 3% from the prior quarter (Q2 2022) and up 10% from a year ago (Q3 2021).



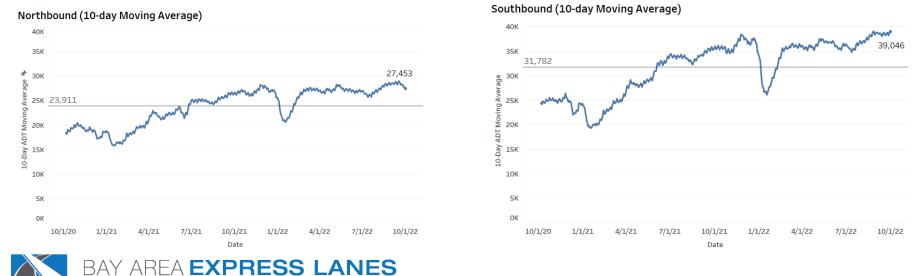


#### Average Daily Express Lane Trips



The number of tolling days varies per quarter, so Average Daily Trips (ADT) is best for seeing express lane trip trends. ADT from October 2020 (when the lanes opened) through June 2022 was about 56,000 trips. In Q3 2022, it was about 60,000, 2% higher than the prior quarter and 8% higher than a year ago (Q3 2021). ADT reached about 66,500 at the quarter's end.

The southbound express lane is 25% longer than the northbound lane, and southbound ADT is 16% higher than northbound.



## Trip Type

#### Toll-free trips (HOV 3+) = 38%

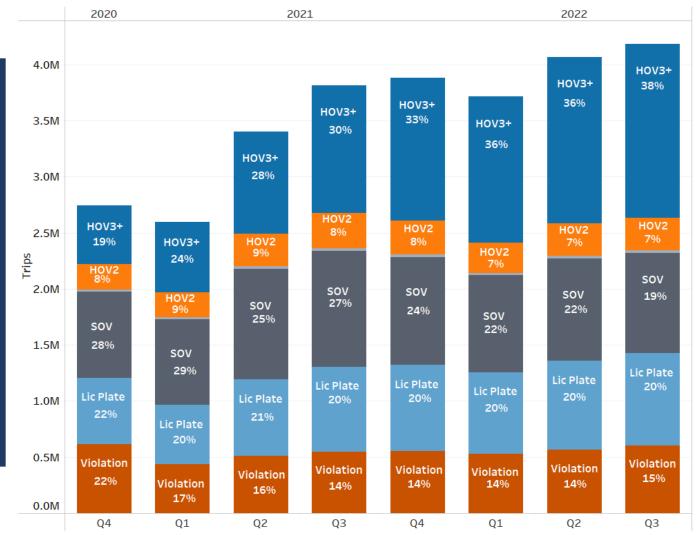
- Share up 2% from Q2 2022
- Share up 8% from Q3 2021

#### Tolled trips (full toll + halftoll) = 47%

- 39% full toll (SOV toll tag + license plate match)
- 8% half toll (HOV 2 + CAV (Clean Air Vehicle)
- Share down 3% from Q2 2022
- Share down 9% from Q3 2021

#### Violation trips = 15%

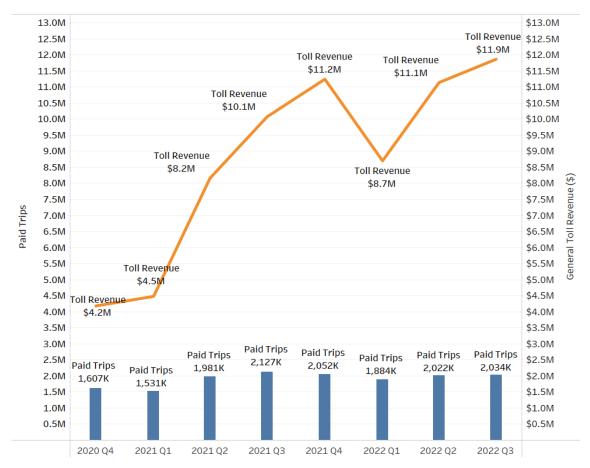
- No toll account + unfunded toll accounts
- Share up 1% from Q2 2022
- Share up 1% from Q3 2021





### Toll Revenue\* and Tolled Trips

\*Revenue from general tolls. Does not include revenue from violation fines.

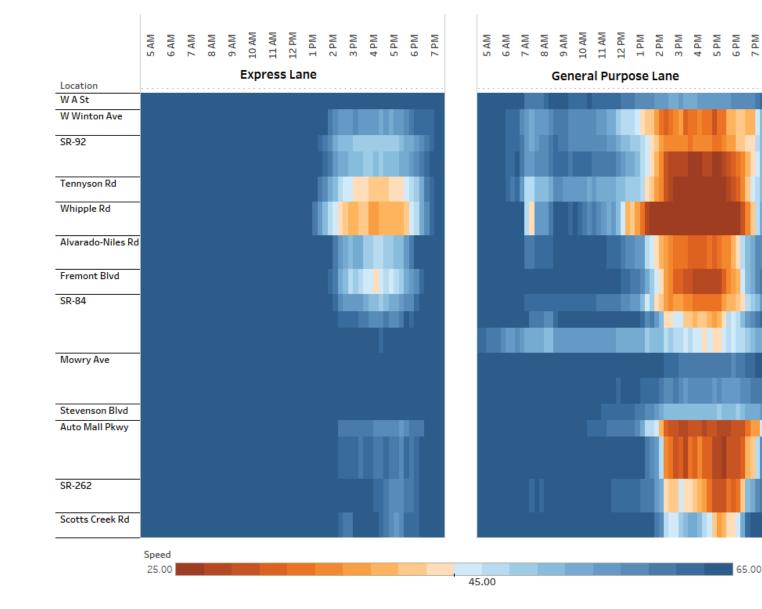


Q2 2022 Change	Toll Revenue	Tolled Trips**	Average Toll Paid**
from Prior Quarter (Q2 2022)	Up 7%	Up 1%	Up 9%
Year over Year (Q3 2021)	Up 18%	Down 4%	Up 27%

\*\*Toll revenue is a function of tolled trips, toll overrides, trips paid in the quarter, and average toll paid. Average toll paid is a function of corridor lane volumes, speeds, and other factors.



#### Northbound Speed by Location and Time: Quarter Average



Northbound express lane quarterly average speeds slowed below 45 mph around Whipple Rd. between 2 and 6 p.m.

Northbound general purpose lane average speeds fell below 35 mph throughout most of the corridor for most of the afternoon and evening with the slowest speeds occurring for the greatest duration around Whipple Road.

65.00



## Northbound: Quarter Average Peak Traffic and Corridor-Length Speed

Peak Spot Traffic			
<b>Time</b> 5 - 6 p.m.			
Location	Around Whipple Rd.		
Express Lane Speed 39 mph			
GP Lane Speed 17 mph			
Speed Differential 22 mph			
Express Lane Volume	~1,170 vehicles		
GP Lane Volume ~780 vehicles			

Corridor Length Slowest Travel			
<b>Time</b> 5 - 6 p.m.			
Express Lane Speed	56 mph		
GP Lane Speed 37 mph			
Speed Differential	19 mph		

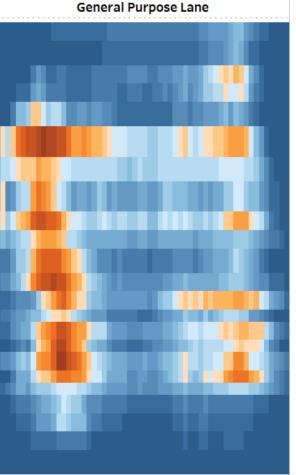


#### Southbound Speed by Location and Time: Quarter Average

45.00



#### 12 PM 10 AM 11 AM 7 PM 5 AM 6 AM 7 AM 8 AM 9 AM 1 PM 2 PM 6 PM 3 PM ΜЧ 5 PM 4



65.00

Southbound average express lane speeds traveled 45 mph or better except for around SR-92 from 7:30 to 8:00 a.m.

Southbound general purpose lane average speed slowed below 45 mph between 6 and 10 a.m. throughout much of the corridor. Speed also intermittently fell below 45 mph after 2 p.m.



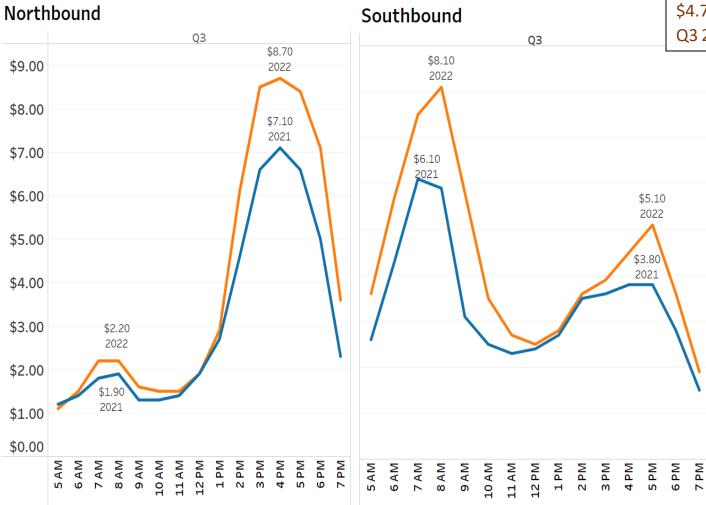
## Southbound: Quarter Average Peak Traffic and Corridor-Length Speed

Peak Spot Traffic			
Time	8–9 a.m.		
Location	From Hacienda Rd. to Alvarado-Niles Rd.		
Express Lane Speed	57 mph		
GP Lane Speed	39 mph		
Speed Differential	18 mph		
Express Lane Volume	1,050 vehicles		
GP Lane Volume	1,130 vehicles		

Corridor Length Slowest Travel			
<b>Time</b> 8–9 a.m.			
Express Lane Speed	60 mph		
GP Lane Speed	45mph		
Speed Differential	15 mph		



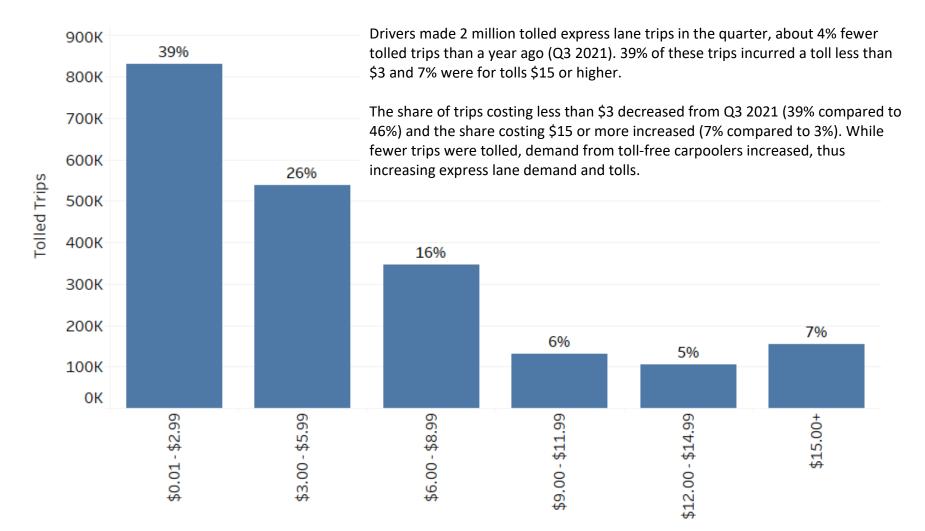
#### Quarterly Average Toll Paid by Time of Day



Q3 2022 AVERAGE TOLL PAID WAS \$4.70, COMPARED TO \$3.70 IN Q3 2021, 27% HIGHER

> The average toll paid increased from Q3 2021 to Q3 2022 at all times of day both northbound and southbound. Northbound, Q3 2022 average tolls paid peaked at \$8.70 in the 4 p.m. hour, \$1.60 more than the Q3 2021 peak. Southbound, Q3 2022 average tolls paid peaked at \$8.10 in the 8 a.m. hour, \$2.00 more than the Q3 2021 peak. The toll increase is due to a 10% increase in express lane trips between Q3 2021 and Q3 2022.

### **Toll Distribution**





#### How Drivers Use the Lanes

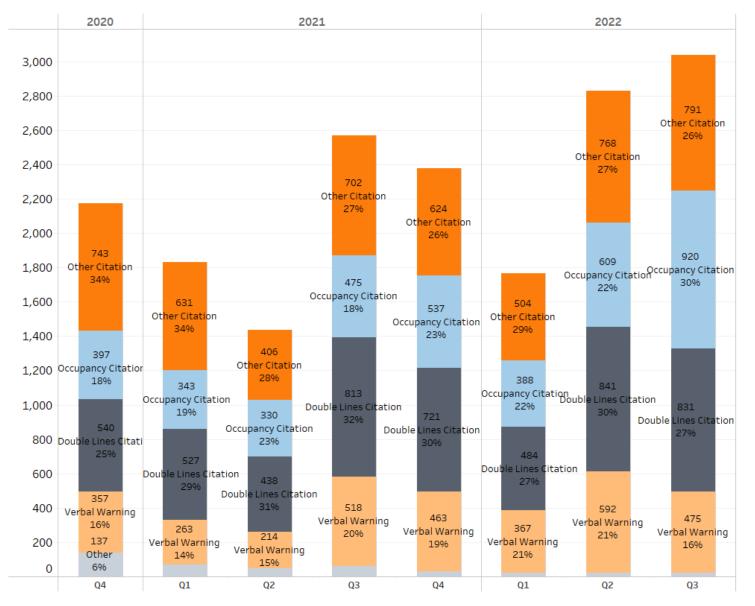
In Q3 2022, about 710,000 unique vehicles made about 4.1 million express lane trips, as shown in the table below.

	A Trips in Quarter	B Unique Vehicles	C Trips Per Unique Vehicle	D Unique Vehicles – Made Only 1 Trip
Vehicles Carrying Toll Tags	3.0 million (71%)	370,000 (52%)	8.1	147,000 (40% of column B)
License plate – matched to a FasTrak account	870,000 (21%)	230,000 (33%)	3.8	129,000 (56% of column B)
License plate - not matched to a FasTrak account*	320,000 (8%)	115,000 (16%)	2.8	78,000 (68% of column B)
Total	4.2 million	711,000	5.8	354,000 (50% of column B)

\*The 14% violation rate shown earlier is a result of unmatched trips + matched trips that were unpaid.



## CHP Enforcement



CHP spent over 1,800 hours patrolling the I-880 express lanes, 7% more hours than the prior quarter, resulting in 7% more enforcement contacts and 50% more HOVrelated citations.

CHP made 3,037 enforcement contacts in Q2 2022 for an average cost to BAIFA of \$75. 27% of contacts resulted in citations for crossing double white lines and 33% in citations related to HOV occupancy.



For more information, visit <u>expresslanes.511.org</u> or <u>MTC's express lanes page</u>.

