

I-680 Contra Costa Express Lanes Performance Report 2nd Quarter 2022: April - June

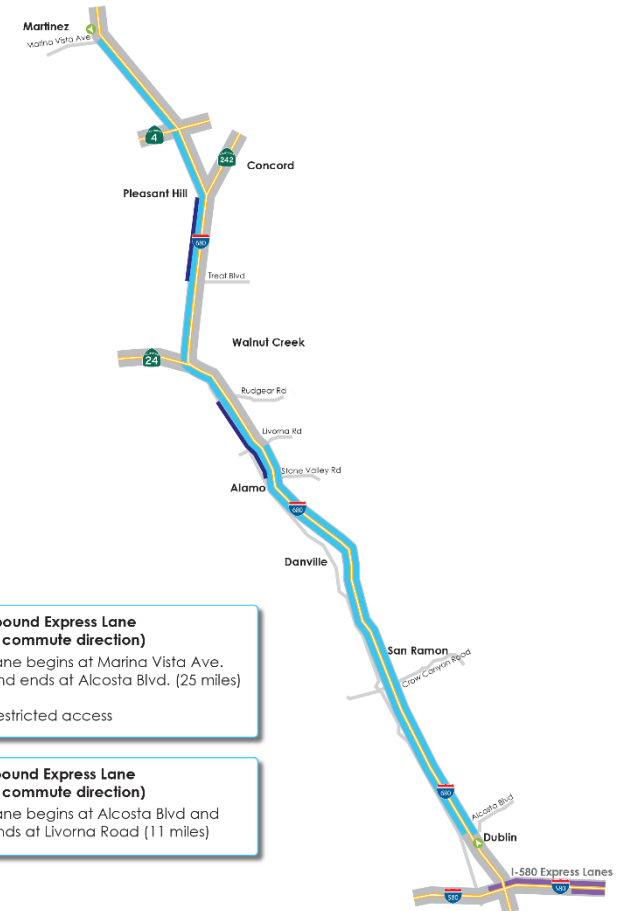


Bay Area Infrastructure Financing Authority
Submitted October 2022

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® 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 half-price tolls with FasTrak CAV toll tags set to 1.

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



The infographic details FasTrak tolling policies:

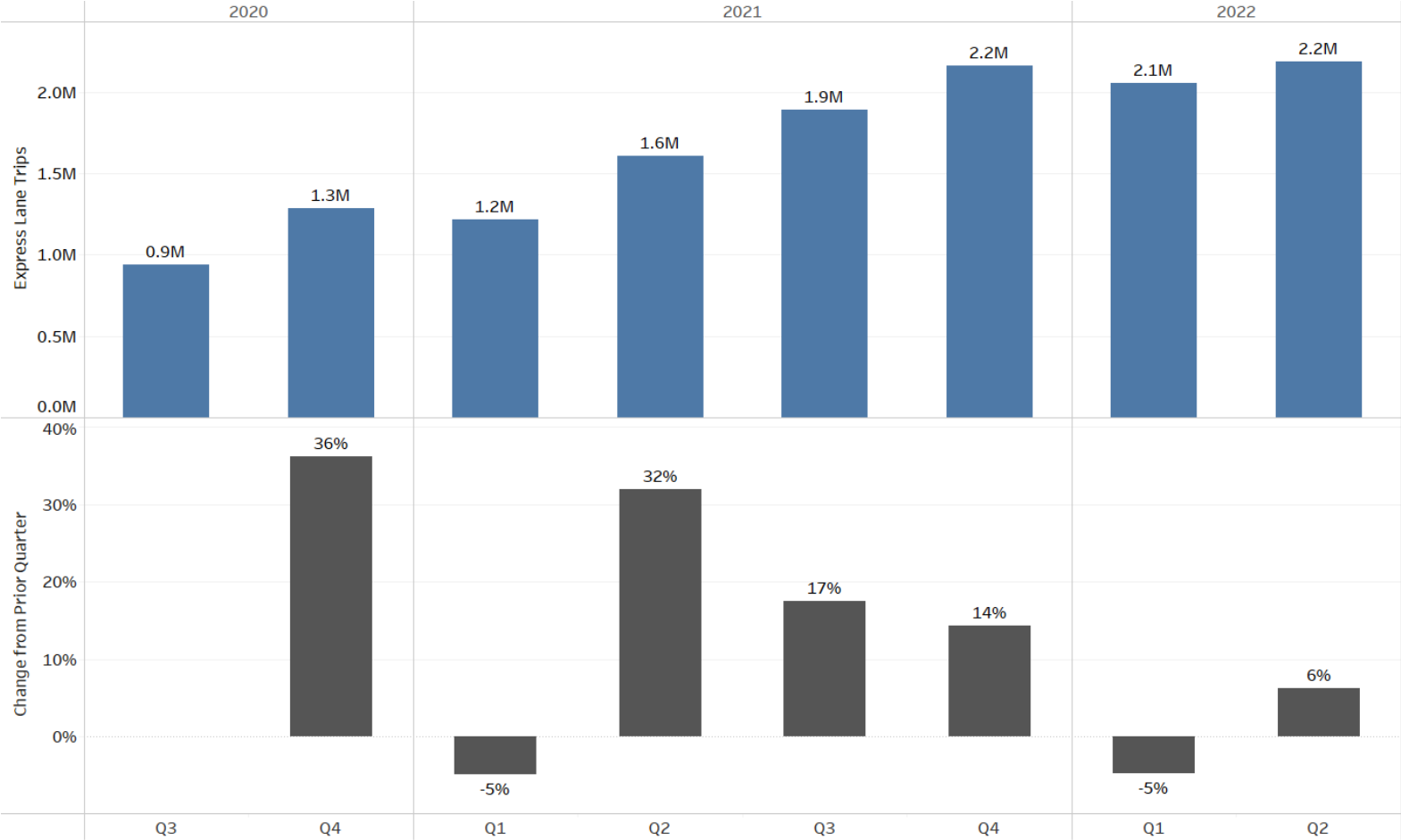
- Carpools (Must Have FasTrak Flex®)**:
 - 2+ people: FREE
 - 2 people: HALF TOLL
 - 1 person: FULL TOLL
- All Drivers (Must Have FasTrak®)**:
 - Motorcycles: FREE with FasTrak Flex toll tag set to 3+.
 - Clean Air Vehicles: pay half-price tolls with FasTrak CAV toll tag.

I-680 Contra Costa Express Lanes – Q2 2022 Performance Highlights

- Q2 2022 was the third straight quarter with 2.1 - 2.2 million express lane trips and aside from the holidays, approximately 34,000 average daily trips, suggesting that express lane usage is stabilizing.
- Average daily express lane trips were up 36% from a year ago (Q2 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.
- The share of toll-free HOV trips was 37%, similar to the share it has been since Q4 2020.
- 12% of express lane trips were violations - trips made without a FasTrak account or an unfunded FasTrak account – similar to the rates observed over the last seven quarters.
- Quarterly toll revenue was up 20% from the last quarter as the number of tolled trips grew 4% and the average toll assessed increased 11%. Versus a year ago (Q2 2021), toll revenue grew 52% as tolled trips increased 29% and the average assessed toll increased 40%.
- Corridor-length northbound travel was slowest between 4 and 5 p.m. when express lane speed averaged 67 mph (9 mph faster than the general purpose lanes) and the average toll paid was \$5.90. Corridor-length southbound travel was slowest between 8 and 9 a.m. when express lane speed averaged 70 mph (11 mph faster than the general purpose lanes) and the average toll paid was \$3.90.
- Northbound traffic peaked approaching Livorna Rd. between 4 and 5 p.m. when the express lane average speed was 56 mph, 17 mph faster than the average general purpose lane, and the express lane carried 15% fewer vehicles than the average general purpose lane. Southbound traffic peaked south of Monument Blvd. between 7 and 8 a.m. when the express lane average speed was 57 mph, 17 mph faster than the average general purpose lane, and the express lane carried 11% fewer vehicles than the average general purpose lane.
- 52% 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, but with FasTrak accounts (34% of all express lane drivers) made an average of 2.9 trips in the quarter. Drivers without FasTrak accounts (15% of drivers) (violators) averaged 1.9 trips per driver in the quarter.
- CHP made 1,104 enforcement contacts, of which 25% resulted in citations related to carpool occupancy.

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

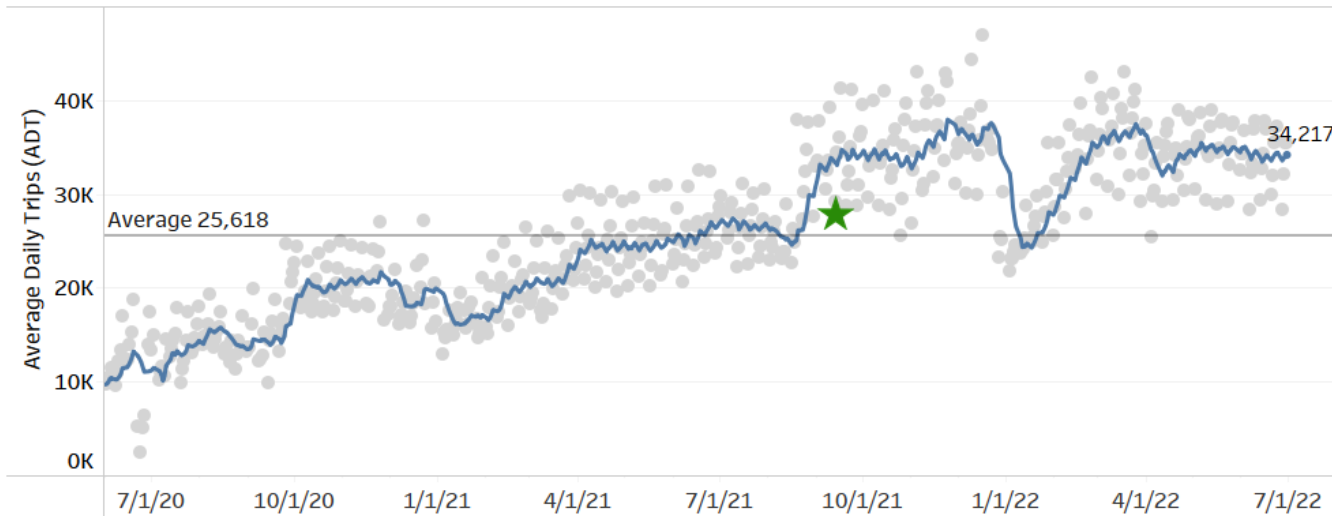
Express Lane Trips



2.2 million express lane trips were made in Q2 2022. Trips were up 6% from the prior quarter (Q1 2022) and up 36% from Q2 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.

Average Daily Express Lane Trips

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



★ The southbound express lane was extended 12 miles on August 20, 2021.

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

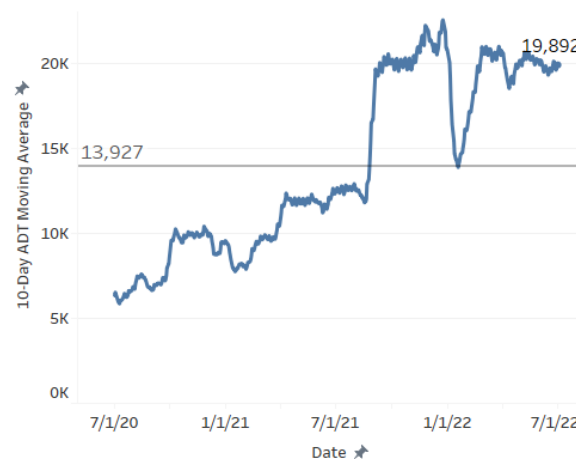
ADT over the last two years (Q3 2020 through Q2 2022) was over 25,000 trips. In Q2 2022, it was about 34,000, a 36% increase from Q2 2021.

Despite a seasonal holiday dip, ADT appears to be stabilizing over the last three quarters at around 34,000 trips.

Northbound (10-day Moving Average)



Southbound (10-day Moving Average)



In Q2 2022, southbound ADT was 38% higher than northbound, but the southbound express lane is over twice the length of the northbound lane. More vehicles per mile have used the lanes northbound than southbound.

Trip Type

Toll-free trips (HOV 3+, HOV 2) = 40%

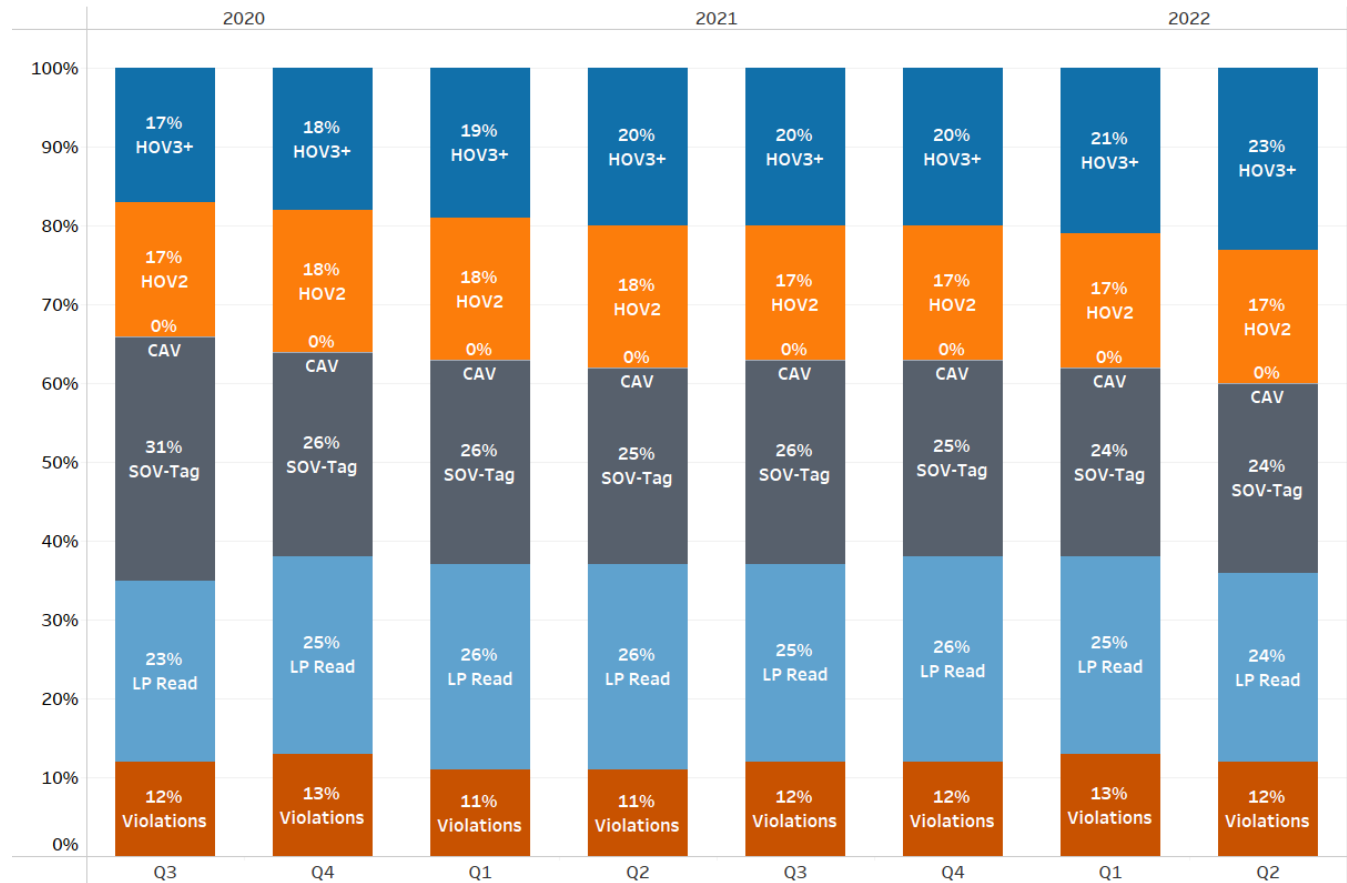
- Share up 2% from Q1 2022
- Share up 2% from Q2 2021

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

- 48% full toll (SOV toll tag + license plate match) + <1% half toll (Clean Air Vehicles)
- Share down 1% from Q1 2022
- Share down 3% from Q2 2021

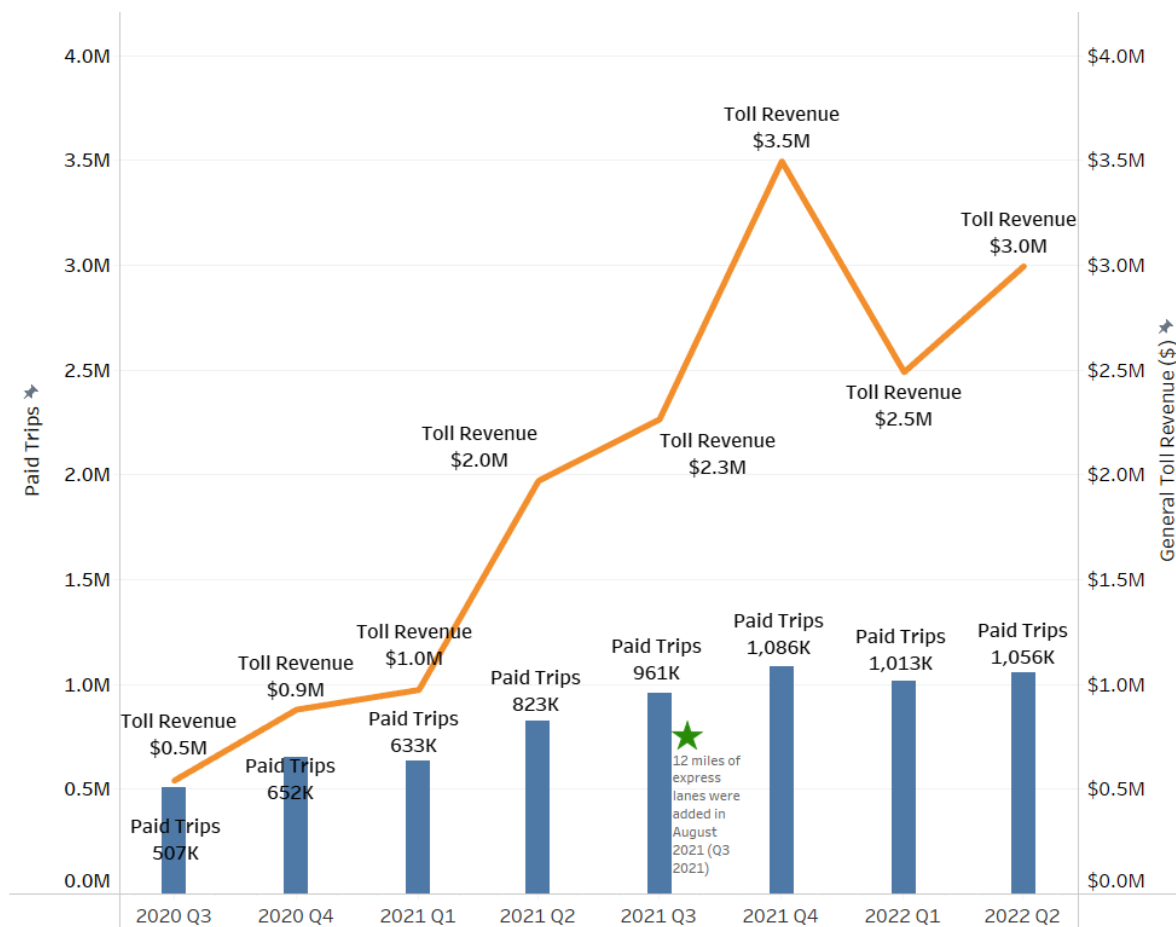
Violation trips = 12%

- No toll account + unfunded toll accounts
- Share down 1% from Q1 2022
- Share up 1% from Q2 2021



Toll Revenue* and Paid Trips

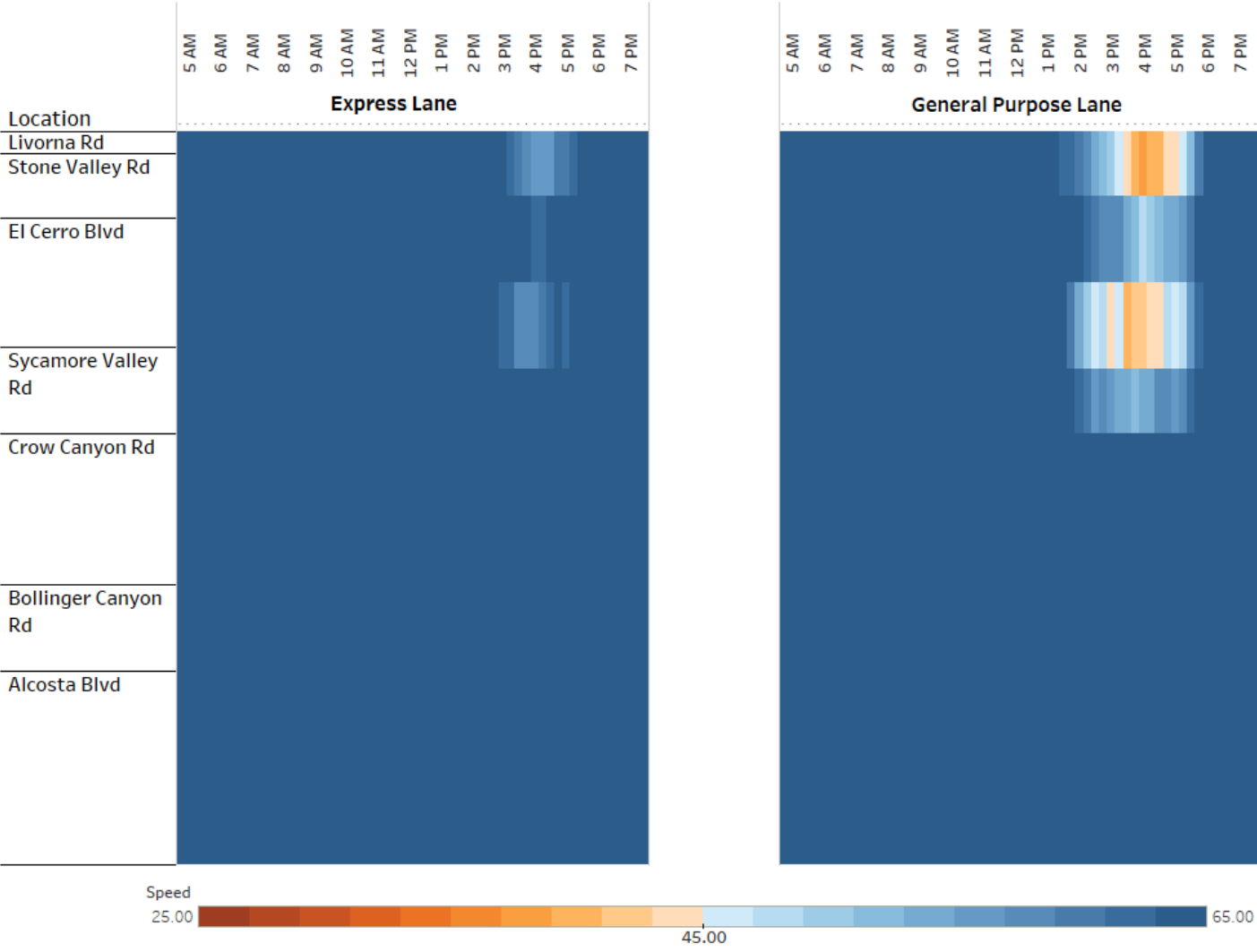
*Revenue from general tolls. Does not include revenue from violation penalties.



Q2 2022 Change	Toll Revenue	Paid Trips**	Average Toll Paid**
from Prior Quarter (Q1 2022)	Up 20%	Up 4%	Up 11%
Year over Year (Q2 2021)	Up 52%	Up 29%	Up 40%

**Toll revenue is a function of paid trips 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.

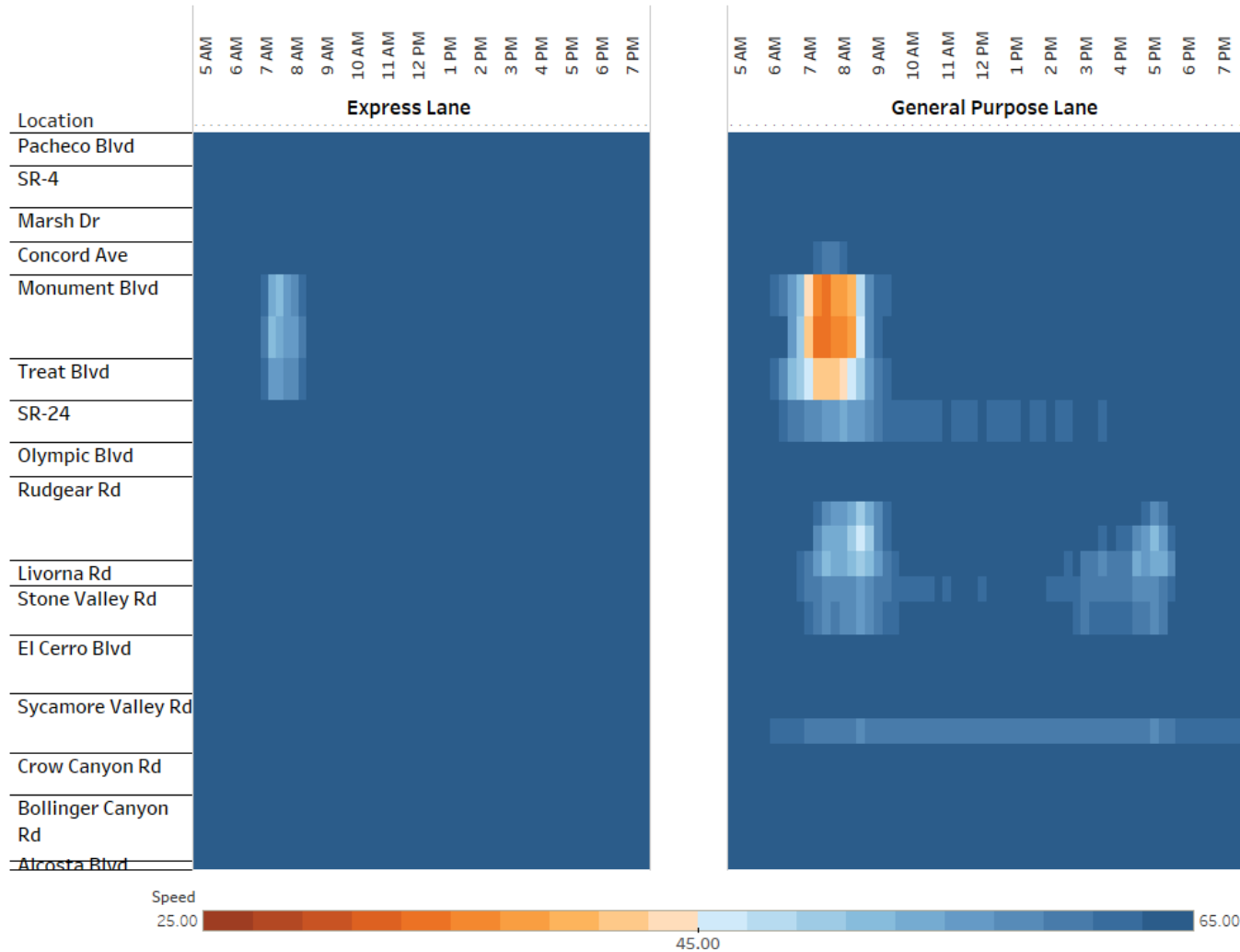
Northbound general purpose lane average speeds slowed below 45 mph at the north end of the corridor between 3:00 and 5:30 p.m. The lowest average general purpose lane speed (37 mph) occurred approaching Livorna Rd. around 4:00 p.m.

Northbound: Quarter Average Peak Traffic and Corridor- Length Speed

Peak Spot Traffic	
Time	4 – 5 p.m.
Location	Approaching Livorna Rd.
Express Lane Speed	56 mph
GP Lane Speed	39 mph
Speed Differential	17 mph
Express Lane Volume	1,220 vehicles
GP Lane Volume	1,440 vehicles

Corridor Length Slowest Travel	
Time	4 – 5 p.m.
Express Lane Speed	67 mph
GP Lane Speed	58 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 51 mph between 7 and 8:30 a.m. between Monument Blvd. and SR-24.

Southbound general purpose lane average speed slowed as low as 34 mph at that same location and time. Otherwise, general purpose lane average speeds ranged between 45 and 65+ mph.

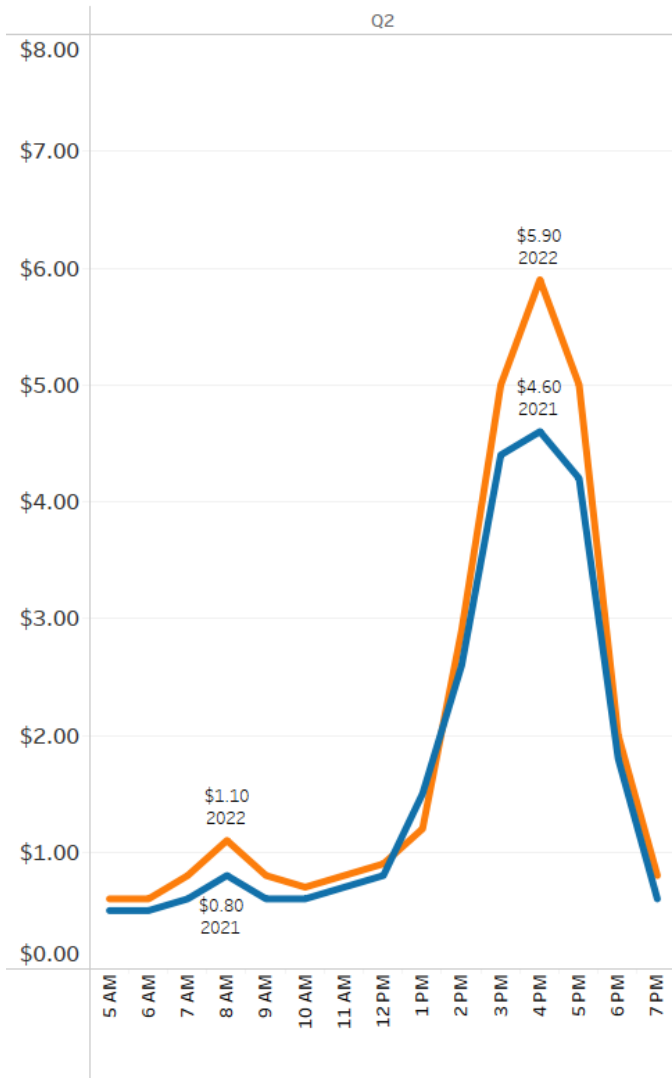
Southbound: Quarter Average Peak Traffic and Corridor- Length Speed

Peak Spot Traffic	
Time	7 - 8 a.m.
Location	Between Monument Blvd. and Treat Blvd.
Express Lane Speed	57 mph
GP Lane Speed	40 mph
Speed Differential	17 mph
Express Lane Volume	1,040 vehicles
GP Lane Volume	1,170 vehicles

Corridor Length Slowest Travel	
Time	8 - 9 a.m.
Express Lane Speed	70 mph
GP Lane Speed	59 mph
Speed Differential	11 mph

Quarterly Average Toll Paid by Time of Day

Northbound



Southbound



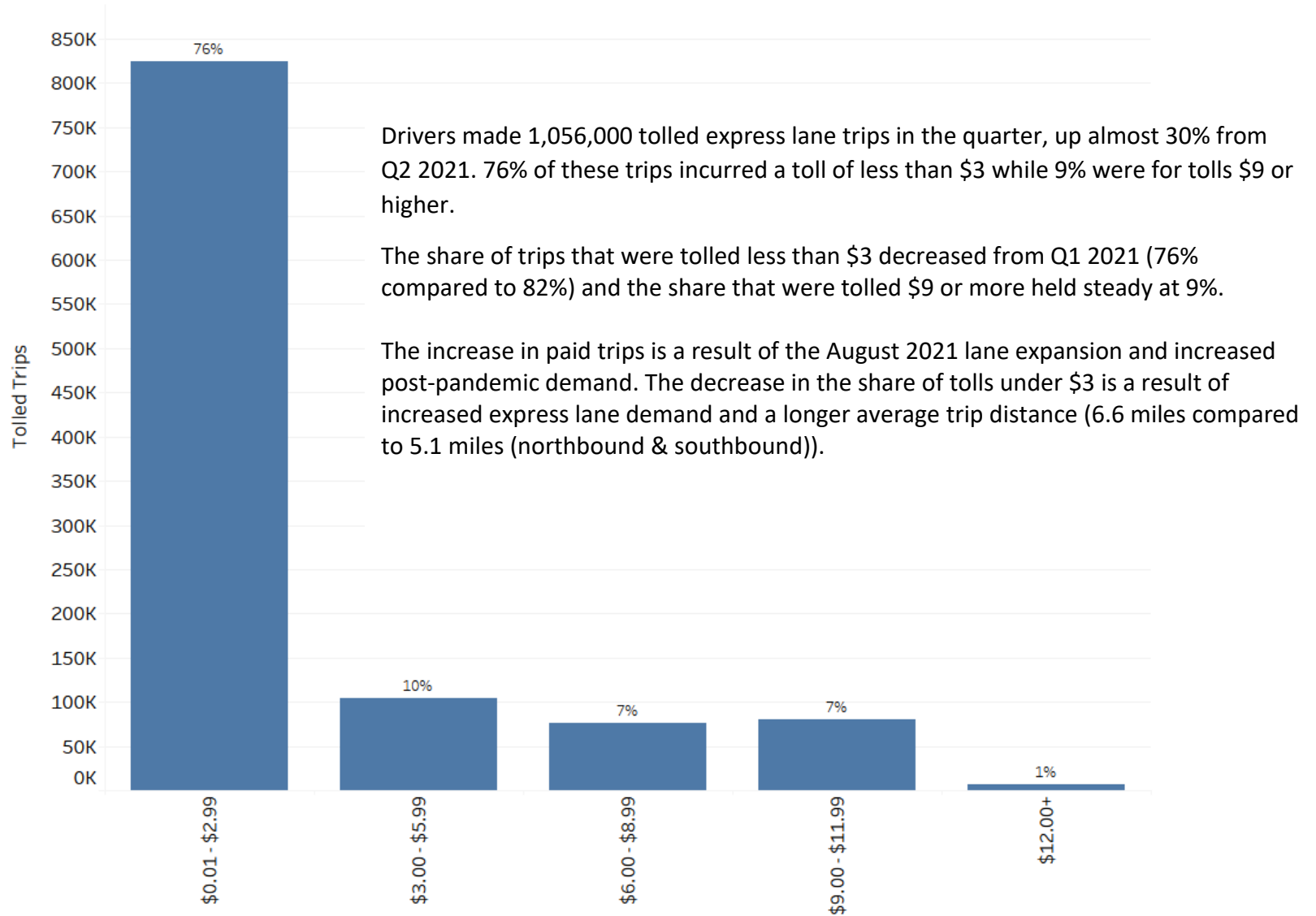
Q2 2022 AVERAGE TOLL PAID WAS \$2.10, COMPARED TO \$1.50 IN Q2 2021, 40% HIGHER.

The average toll paid increased from Q2 2021 to Q2 2022 at nearly all times of day both northbound and southbound.

Northbound, Q2 2022 average tolls paid peaked at \$5.90 between 4 and 5 p.m., \$1.30 more than the Q1 2021 peak, reflecting increased express lane demand as the pandemic evolved. The northbound average trip distance stayed the same year-over-year.

Southbound, Q2 2022 average tolls incurred peaked at \$3.90 between 8 and 9 a.m., \$3.20 more than the Q2 2021 peak, reflecting post-pandemic demand growth and a 3-mile longer average southbound trip distance (7.4 miles vs. 4.4 miles).

Toll Distribution



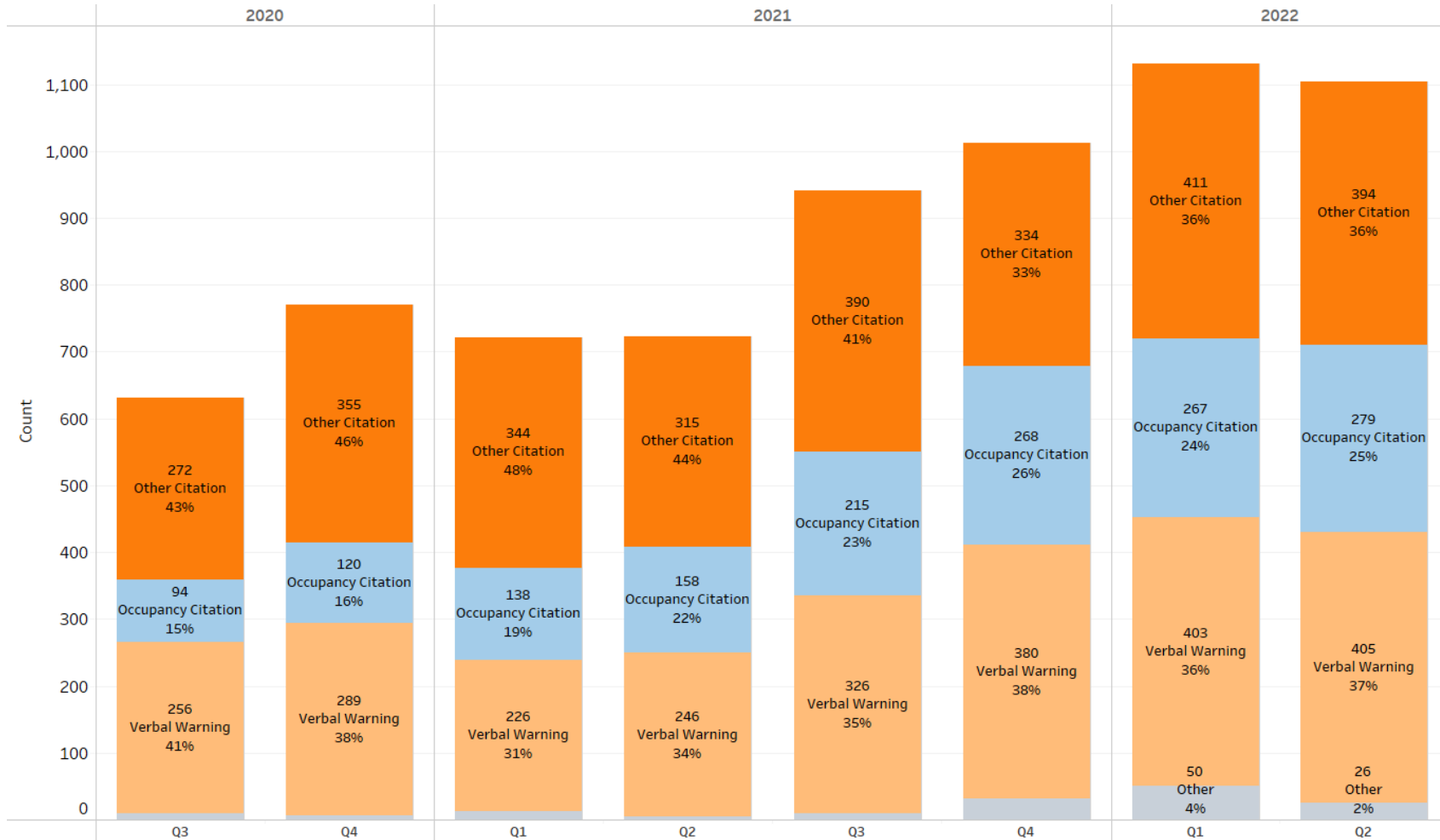
How Drivers Use the Lanes

In Q2 2022, about 562,000 unique vehicles made about 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	1.5 million (64%)	290,000 (52%)	5.2	136,000 (47% of column B)
License plate – matched to a FasTrak account	548,000 (24%)	190,000 (34%)	2.9	118,000 (62% of column B)
License plate - not matched to a FasTrak account*	158,000 (7%)	82,000 (15%)	1.9	62,000 (76% of column B)
Total	2.2 million	562,000	3.9	316,000 (56% of column B)

*The 12% violation rate shown earlier is a result of unmatched trips + matched trips that were unpaid.

CHP Enforcement



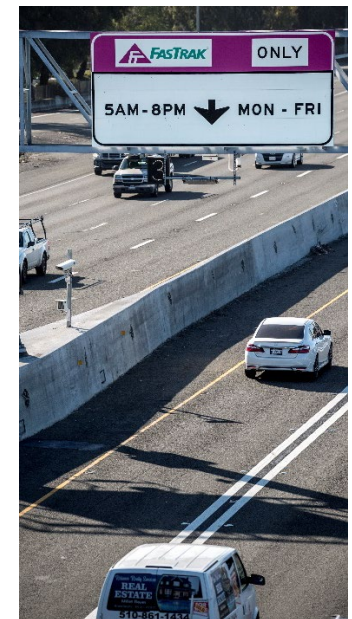
CHP provided 960 enforcement hours in the quarter, filling 88% of requested hours. CHP made 1,104 enforcement contacts, 25% of which were related to carpool occupancy violations. The average cost to BAIFA per enforcement contact was \$96.

For more information, visit expresslanes.511.org or [MTC's express lanes page](#).



I-880 Express Lanes Performance Report

2nd Quarter 2022: April - June



Bay Area Infrastructure Financing Authority
Submitted October 2022

I-880 Express Lanes Policies

- Tolling Hours are 5 a.m. to 8 p.m. Monday – Friday.
- All drivers must have a FasTrak® 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 half-price tolls with FasTrak CAV toll tags set to 1.



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

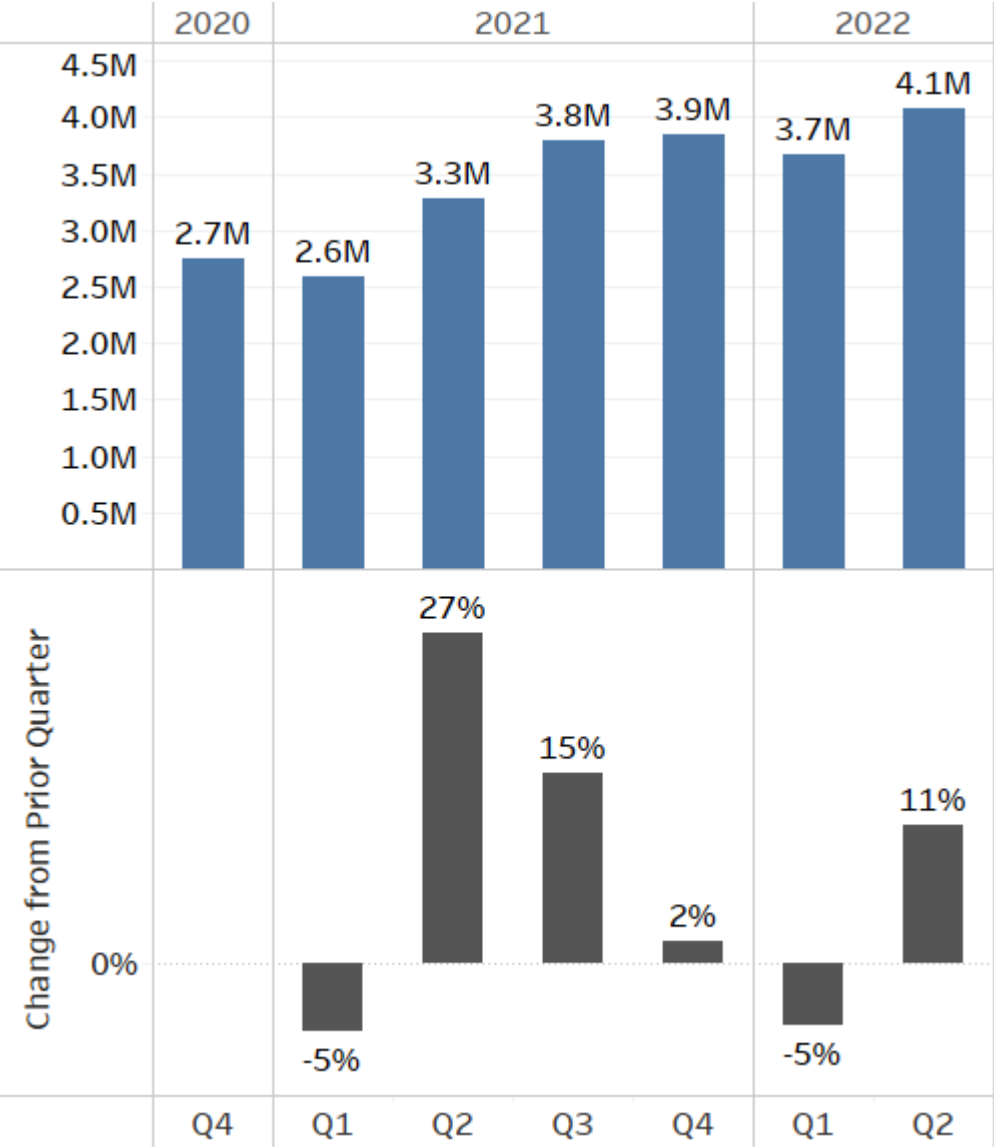
Carpools		All Drivers	
Must Have FasTrak Flex®		Must Have FasTrak®	
FREE	HALF TOLL	HALF TOLL	FULL TOLL
Motorcycles are FREE with FasTrak Flex toll tag set to 3+.		Clean Air Vehicles pay half-price tolls with FasTrak CAV toll tag.	

I-880 Express Lanes – Q2 2022 Performance Highlights

- Average daily express lane trips were up 11% from the prior quarter and up 24% from a year ago (Q2 2021).
- The share of toll-free HOV 3+ trips was 36%, consistent with Q1 2022 and up 8% from Q2 2021. The share of half-price HOV2 trips was 7%, consistent with Q1 2022 and down 2% from Q2 2021.
- 14% 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 28% from the last quarter as the number of tolled trips increased 7% and the average toll assessed increased 16%. Quarterly toll revenue was up 36% from a year ago (Q2 2021) as tolled trips increased 2% and the average toll assessed increased 43%.
- Corridor-length northbound travel was slowest between 5 and 6 p.m. when express lane speed averaged 57 mph (19 mph faster than the general purpose lanes), and the average toll paid was \$8.60. Corridor-length southbound travel was slowest between 8 and 9 a.m. when express lane speed averaged 62 mph (15 mph faster than the general purpose lanes) and the average toll paid was \$7.50.
- Northbound traffic peaked around Whipple Rd. between 5 and 6 p.m. when the express lane average speed was 42 mph, 25 mph faster than the average general purpose lane, and average vehicle volume was ~1,200 vehicles per hour, 41% more than the average general purpose lane. Southbound traffic peaked from Tennyson Rd. to Alvarado Niles Rd. from 8 to 9 a.m. when the express lane average speed was 55 mph, 16 mph faster than the average general purpose lane, and average volume was ~1,200 vehicles per hour, slightly more the average general purpose lane.
- 53% of express lane drivers carried toll tags in their vehicles and made an average of 7.2 I-880 express lane trips in the quarter. Drivers without FasTrak tags, but with FasTrak accounts (32% of all express lane drivers) made an average of 4.0 trips in the quarter. Drivers without FasTrak accounts (16% of drivers) (violators) averaged 4.2 trips per driver in the quarter.
- CHP hours spent patrolling the I-880 express lanes were 18% higher than in prior quarters resulting in 2,831 enforcement contacts, 40% more than average. Of those, 30% resulted in citations for crossing double white lines and 22% were related to carpool occupancy.

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

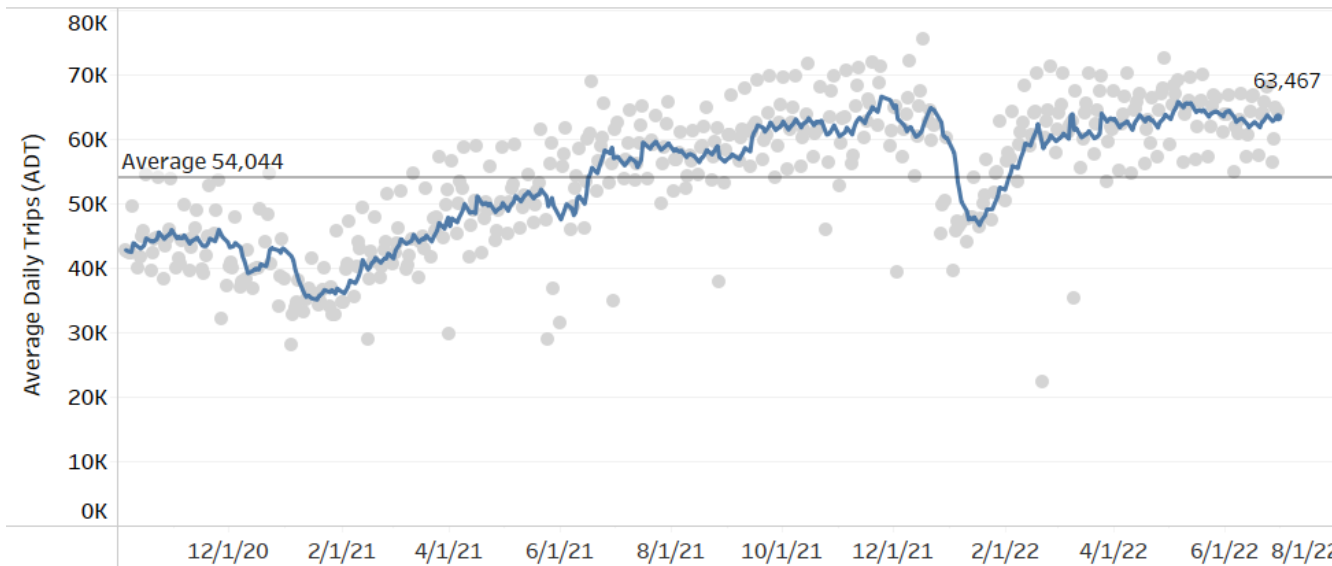
Express Lane Trips



4.1 million express lane trips were made in Q2 2022. Trips were up 11% from the prior quarter (Q1 2022) and up 24% from a year ago (Q2 2021). The year-over-year increase is due to the lessening impacts of the COVID-19 pandemic.

Average Daily Express Lane Trips

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

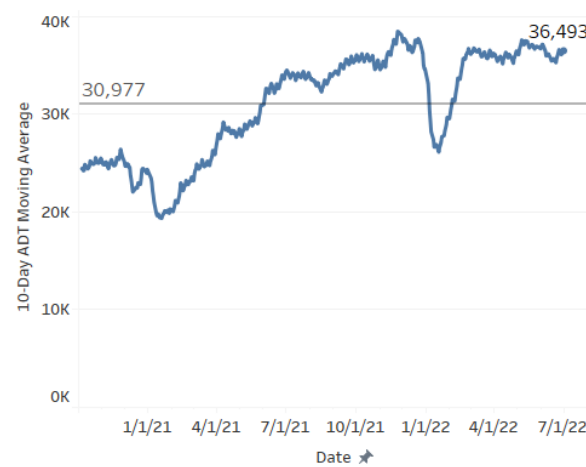


The number of tolling days varies per quarter, so Average Daily Trips (ADT) is best for seeing express lane trip trends. ADT from October 2020 (when the lanes opened) through June 2022 was about 54,000 trips. In Q2 2022, it was about 64,000, 12% higher than the prior quarter and 25% higher than a year ago (Q2 2021). ADT reached over 63,000 at the quarter's end.

Northbound (10-day Moving Average)



Southbound (10-day Moving Average)



The southbound express lane is 25% longer than the northbound lane, and southbound ADT is 33% higher than northbound. More vehicles per mile have used the lanes southbound than northbound.

Trip Type

Toll-free trips (HOV 3+) = 36%

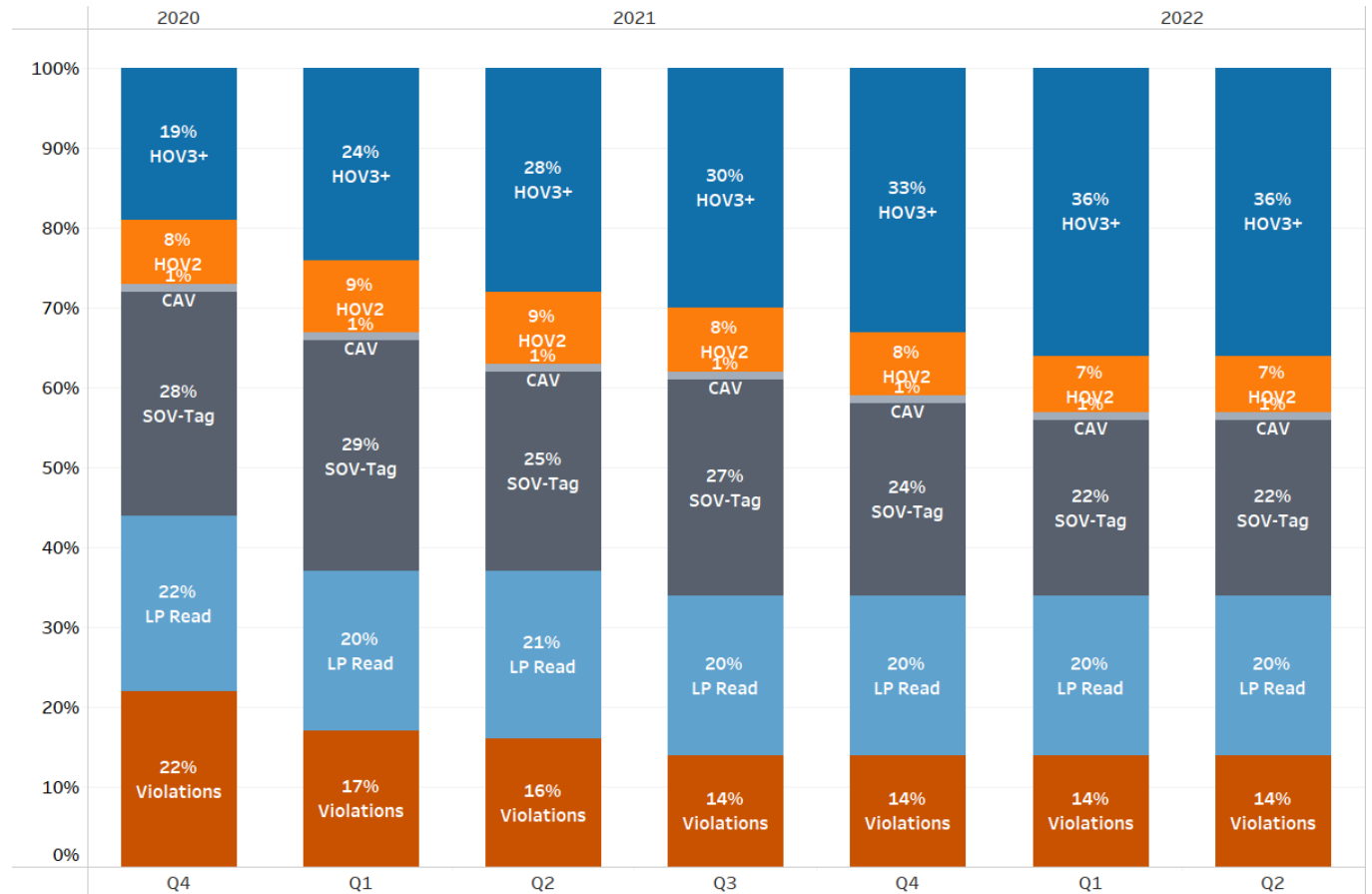
- Same share as Q1 2022
- Share up 8% from Q2 2021

Tolled trips (full toll + half-toll) = 50%

- 42% full toll (SOV toll tag + license plate match)
- 8% half toll (HOV 2 + CAV (Clean Air Vehicle))
- Same share as Q1 2022
- Share down 6% from Q2 2021

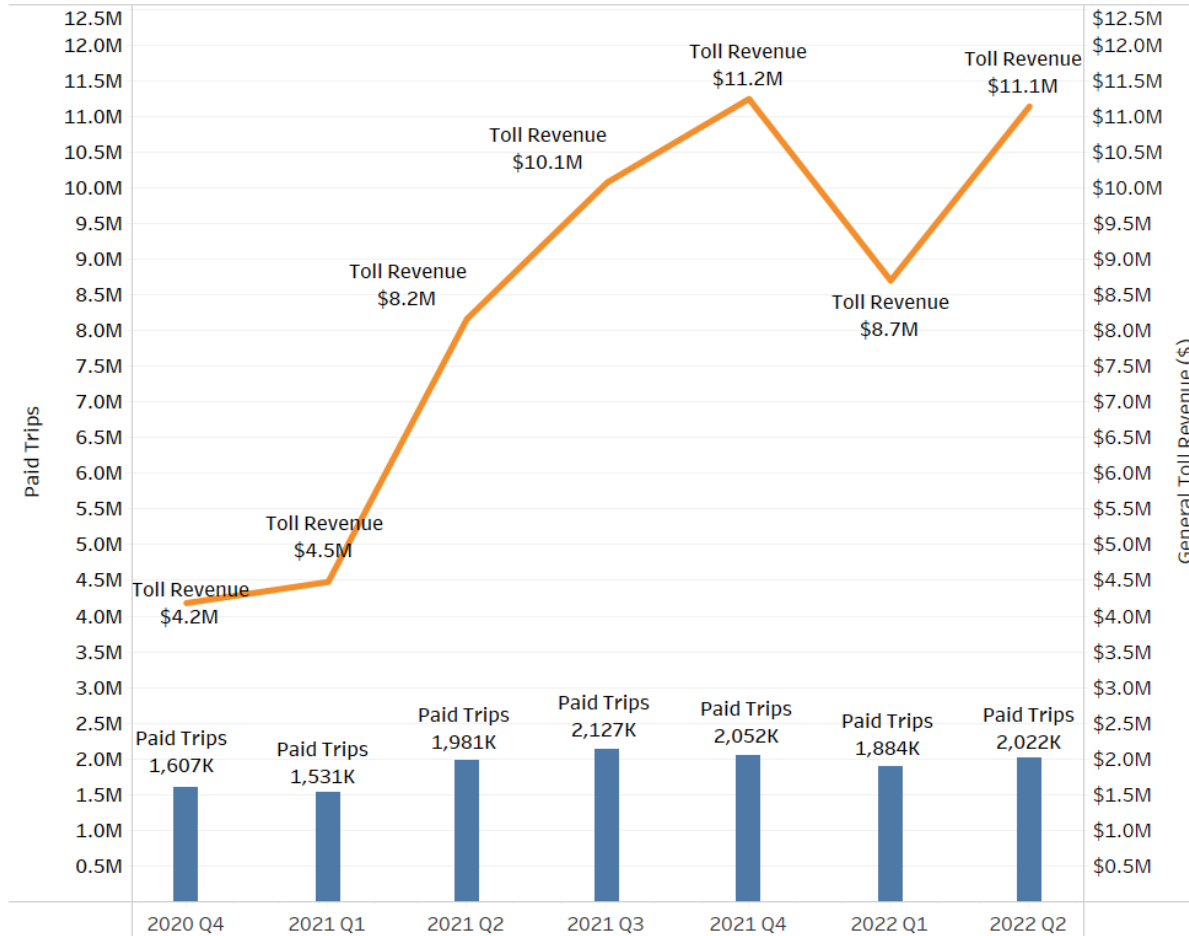
Violation trips = 14%

- No toll account + unfunded toll accounts
- Same share as Q1 2022
- Share down 2% from Q2 2021



Toll Revenue* and Paid Trips

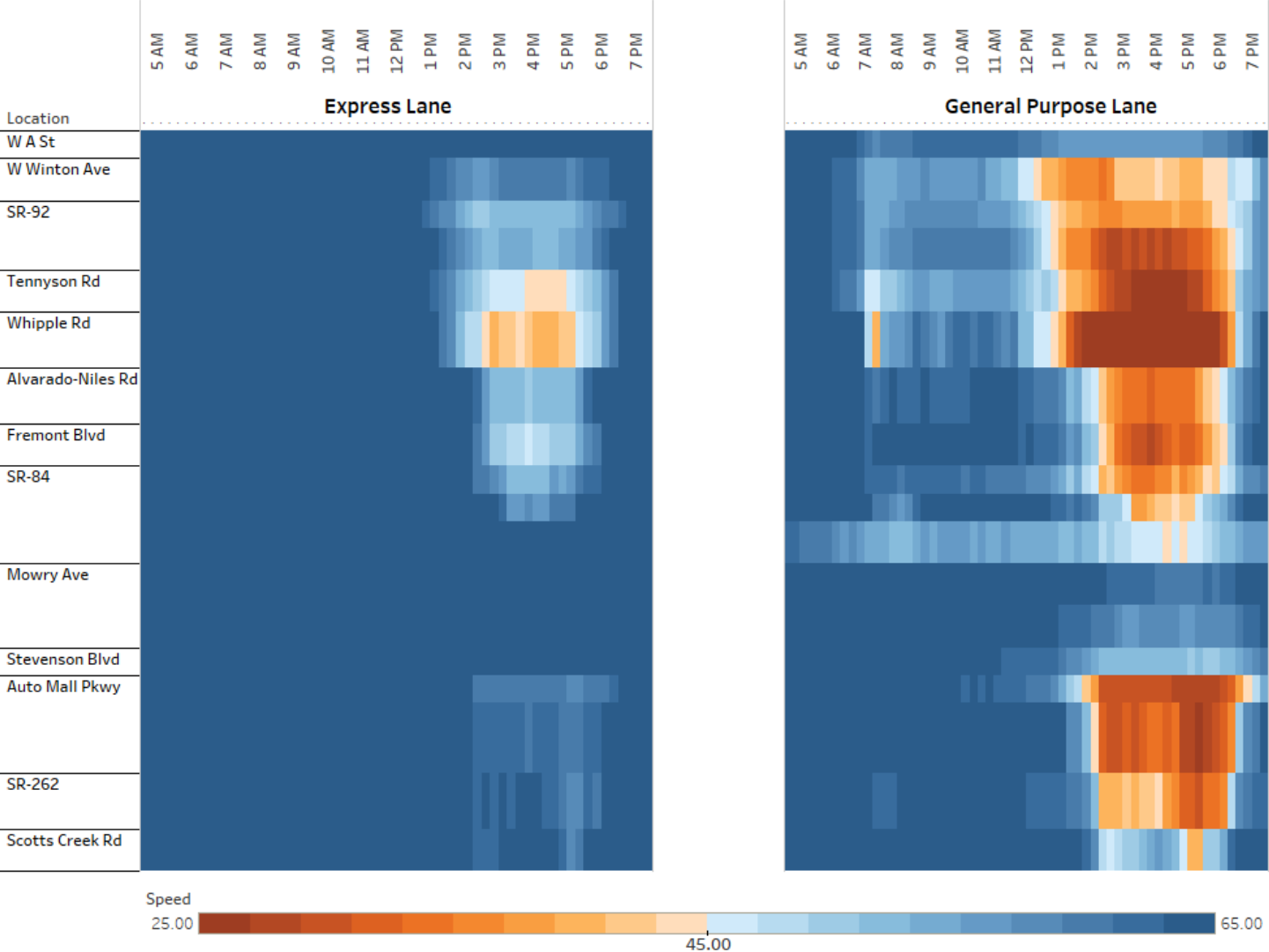
*Revenue from general tolls. Does not include revenue from violation fines.



Q2 2022 Change	Toll Revenue	Paid Trips**	Average Toll Paid**
from Prior Quarter (Q1 2022)	Up 28%	Up 7%	Up 16%
Year over Year (Q2 2021)	Up 36%	Up 2%	Up 43%

**Toll revenue is a function of paid trips 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.

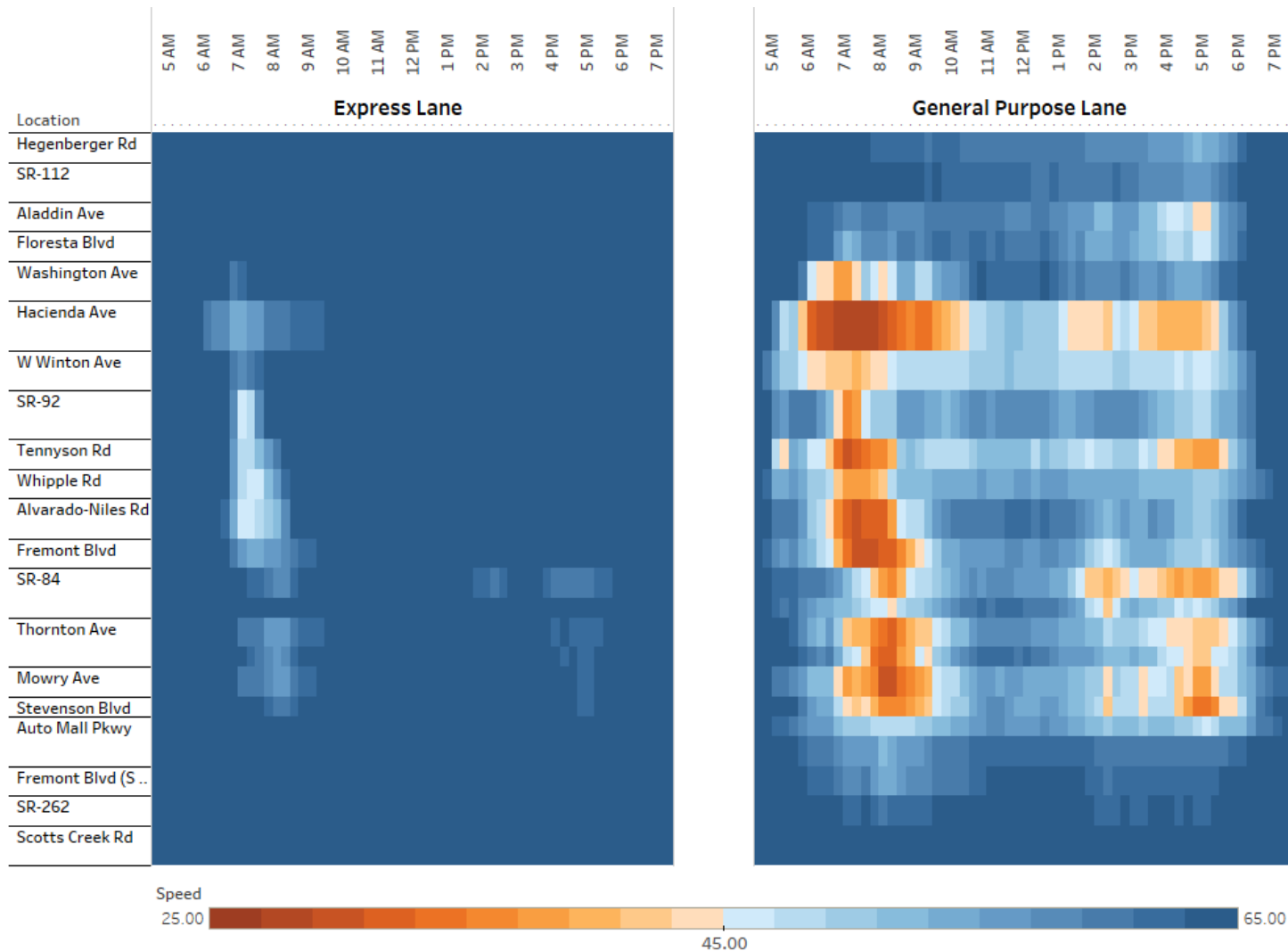
Northbound general purpose lane average speeds fell below 35 mph throughout most of the corridor for most of the afternoon and evening with the slowest speeds occurring for the greatest duration around Whipple Road.

Northbound: Quarter Average Peak Traffic and Corridor-Length Speed

Peak Spot Traffic	
Time	5 - 6 p.m.
Location	Around Whipple Rd.
Express Lane Speed	42 mph
GP Lane Speed	17 mph
Speed Differential	25 mph
Express Lane Volume	~1,200 vehicles
GP Lane Volume	~850 vehicles

Corridor Length Slowest Travel	
Time	5 - 6 p.m.
Express Lane Speed	57 mph
GP Lane Speed	38 mph
Speed Differential	19 mph

Southbound Speed by Location and Time: Quarter Average



Southbound average express lane speeds fell close to 45 mph from SR-92 to Fremont Blvd. from about 7 a.m. to 8:30 a.m. Otherwise, speed in the express lane was faster and mostly 65 mph or faster.

Southbound general purpose lane average speed slowed below 45 mph between 6 and 9 a.m. throughout much of the corridor, and even until 10 a.m. approaching SR-92. Speed also intermittently fell below 45 mph after 2 p.m.

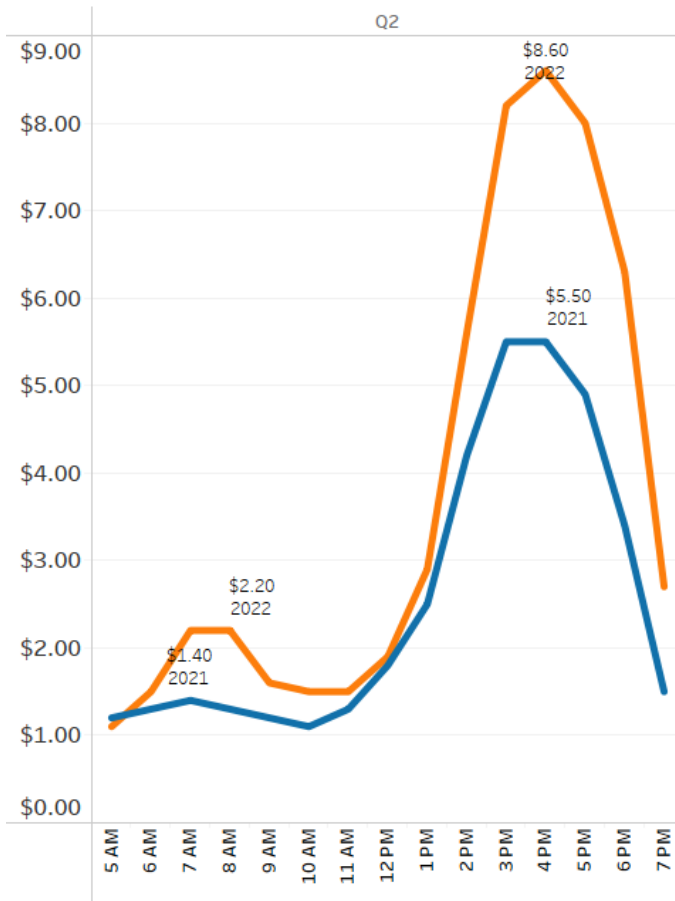
Southbound: Quarter Average Peak Traffic and Corridor- Length Speed

Peak Spot Traffic	
Time	8–9 a.m.
Location	From Tennyson Rd. to Alvarado-Niles Rd.
Express Lane Speed	55 mph
GP Lane Speed	39 mph
Speed Differential	16 mph
Express Lane Volume	~1,200 vehicles
GP Lane Volume	~1,170 vehicles

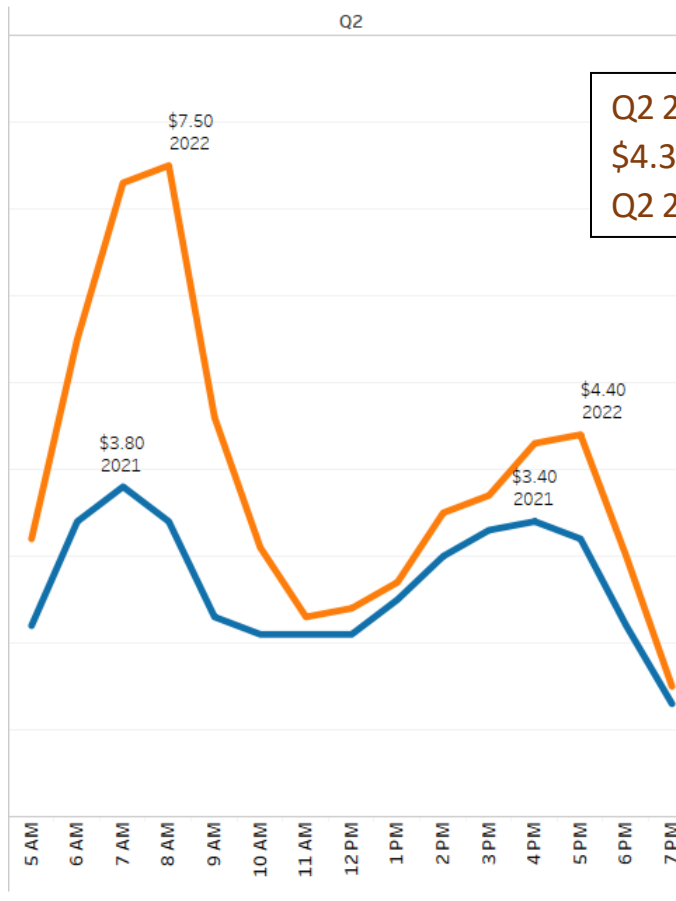
Corridor Length Slowest Travel	
Time	8–9 a.m.
Express Lane Speed	62 mph
GP Lane Speed	46 mph
Speed Differential	15 mph

Quarterly Average Toll Paid by Time of Day

Northbound



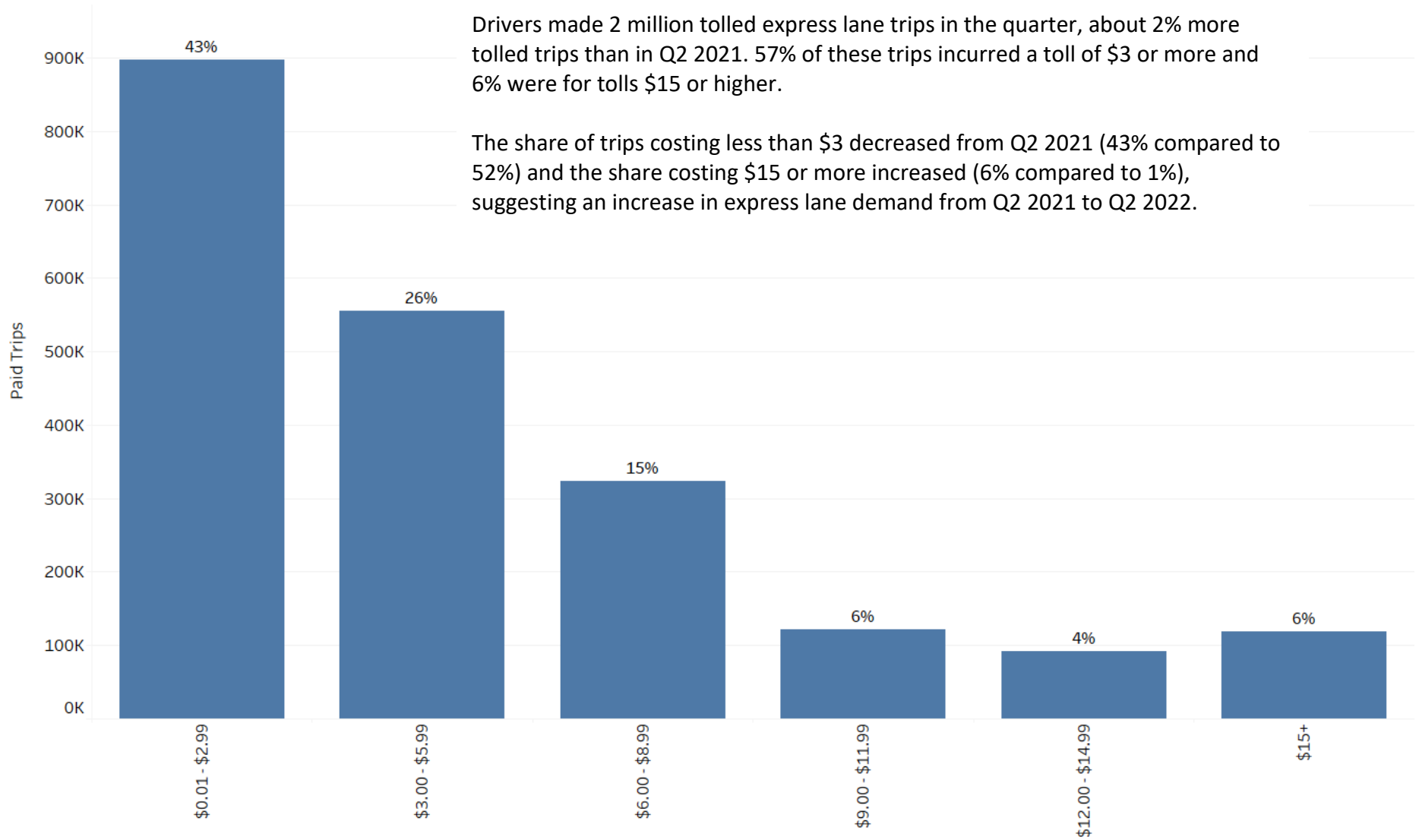
Southbound



Q2 2022 AVERAGE TOLL PAID WAS \$4.30, COMPARED TO \$3.00 IN Q2 2021, 43% HIGHER

The average toll paid increased from Q2 2021 to Q2 2022 at all times of day both northbound and southbound. Northbound, Q2 2022 average tolls paid peaked at \$8.60 in the 4 p.m. hour, \$3.10 more than the Q2 2021 peak. Southbound, Q2 2022 average tolls paid peaked at \$7.50 in the 8 a.m. hour, \$3.70 more than the Q2 2021 peak. The average trip distances northbound and southbound increased about 2.5%, so the toll increase is most likely due to increased express lane demand as the pandemic evolves.

Toll Distribution



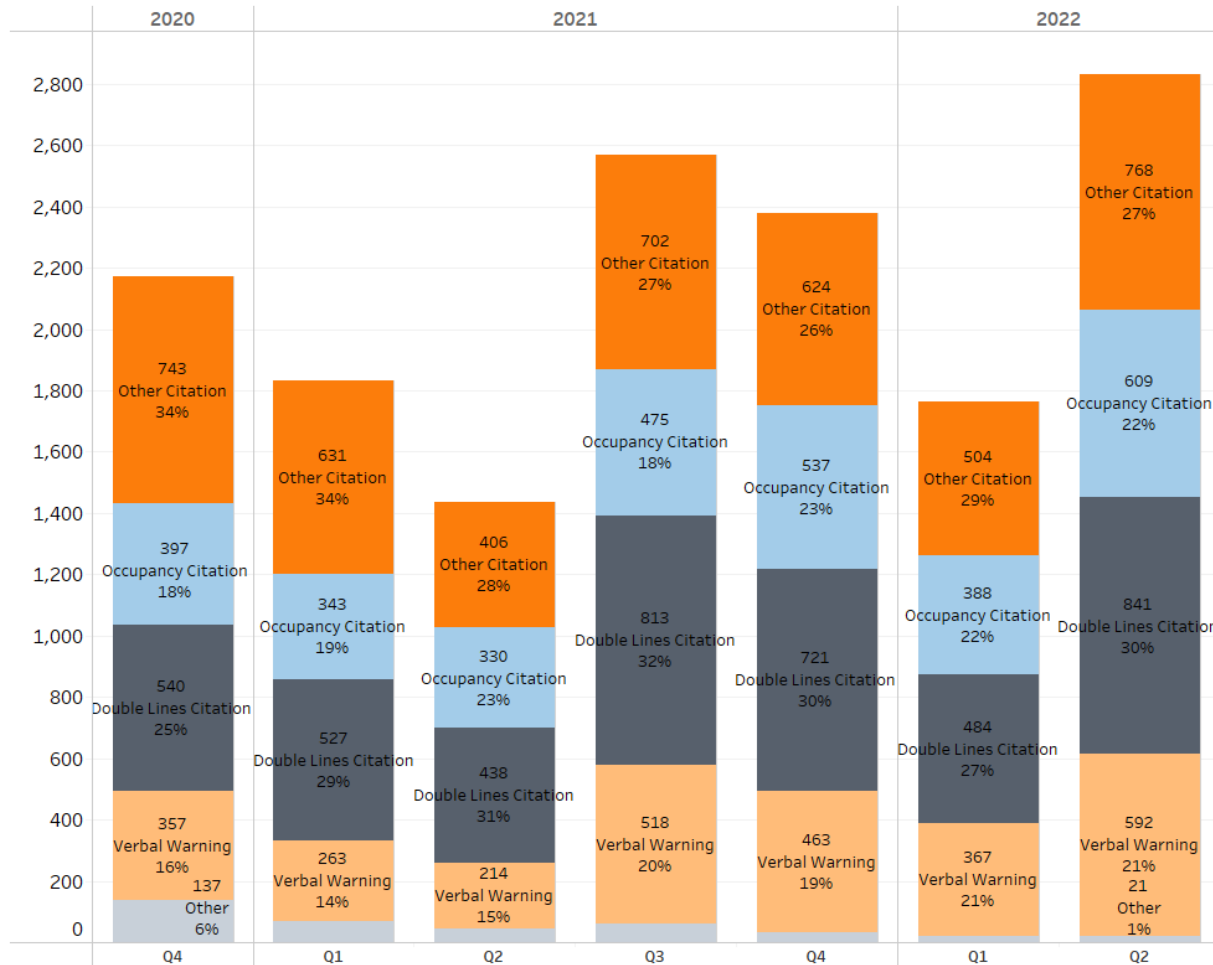
How Drivers Use the Lanes

In Q2 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	2.7 million (67%)	374,000 (53%)	7.2	146,000 (39% of column B)
License plate – matched to a FasTrak account	890,000 (22%)	224,000 (32%)	4.0	125,000 (56% of column B)
License plate - not matched to a FasTrak account*	470,000 (11%)	113,000 (16%)	4.2	77,000 (68% of column B)
Total	4.1 million	711,000	5.7	368,000 (52% of column B)

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

CHP Enforcement



CHP hours spent patrolling the I-880 express lanes were 18% higher than in prior quarters. CHP's increased attention in the corridor resulted in 40% more enforcement contacts, 48% more HOV-related citations, 43% more double-white line crossing citations, and 63% more verbal warnings compared to averages from the prior six quarters.

CHP made 2,831 enforcement contacts in Q2 2022, 30% resulting in citations for crossing double white lines and 22% related to HOV occupancy violations. The average cost to BAIFA per enforcement contact was \$75.

For more information, visit expresslanes.511.org or [MTC's express lanes page](#).

