

I-680 Contra Costa Express Lanes Performance Report 1st Quarter 2022: January - March

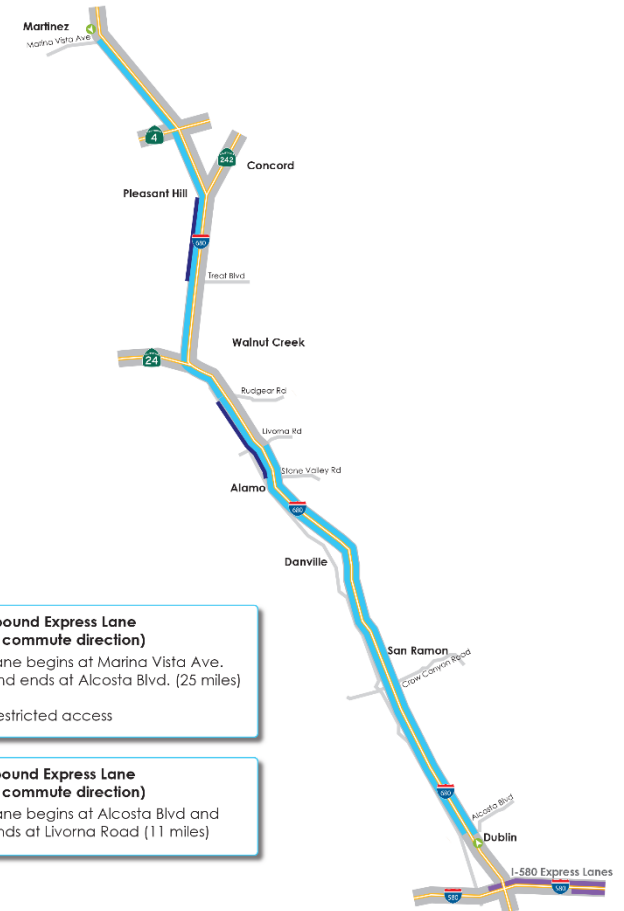


Bay Area Infrastructure Financing Authority
Submitted July 2022

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.



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

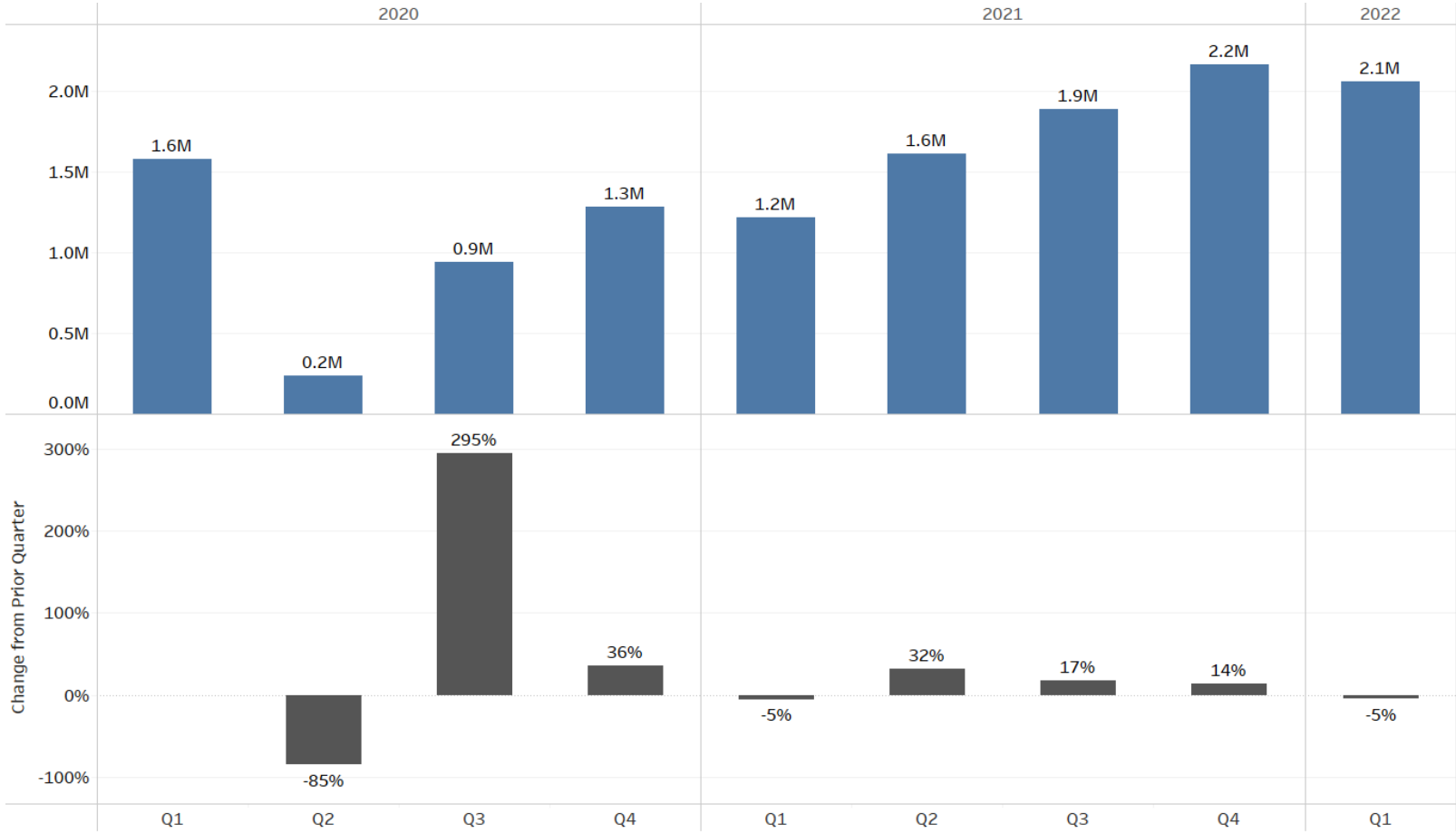
I-680 Contra Costa Express Lanes – Q1 2022 Performance Highlights

- Average daily express lane trips were down 8% from the prior quarter and up 68% from a year ago (Q1 2021). Seasonal trends show that first quarter trips decline from the fourth quarter of the prior year. In addition, the Omicron surge of COVID-19 occurred in Q1 2022.
- The share of toll-free HOV trips was 37%, similar to the share it has been since Q4 2020.
- 13% of express lane trips were violations - express lane trips made with neither a FasTrak account nor a toll tag. The rate is higher than the 11% historical average.
- Quarterly toll revenue was down 22% from Q4 2021. Paid trips fell 7%, and the average toll paid fell 24%. Quarterly toll revenue was up 156% from a year ago (Q1 2021). Paid trips increased 60% and the average toll paid increased 73%.
- Corridor-length northbound travel was slowest between 4 and 5 p.m. when express lane speed averaged 69 mph (9 mph faster than the general purpose lanes) and the average toll paid was \$4.80. Corridor-length southbound travel was slowest between 8 and 9 a.m. when express lane speed averaged 69 mph (10 mph faster than the general purpose lanes) and the average toll paid was \$4.10.
- Spot traffic, characterized by high vehicle volumes and slow speeds, peaked northbound approaching Livorna Rd. between 4 and 5 p.m. when the express lane average speed was 60 mph, 15 mph faster than the average general purpose lane, and the express lane carried 24% fewer vehicles than the average general purpose lane. Spot traffic peaked southbound south of Monument Blvd. between 7:45 a.m. and 8:15 a.m. when the express lane average speed was 51 mph, 12 mph faster than the average general purpose lane, and the express lane carried 32% fewer vehicles than the average general purpose lane.
- Slightly more than half of express lane drivers (52%) did not carry toll tags in their vehicles. These drivers made less than 1 express lane trip per month, while drivers who did carry toll tags in their vehicles made 1.7 trips per month.
- CHP made 1,131 enforcement contacts, of which 24% 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.

Note: Twelve additional southbound express lane miles opened in August 2021.

Express Lane Trips

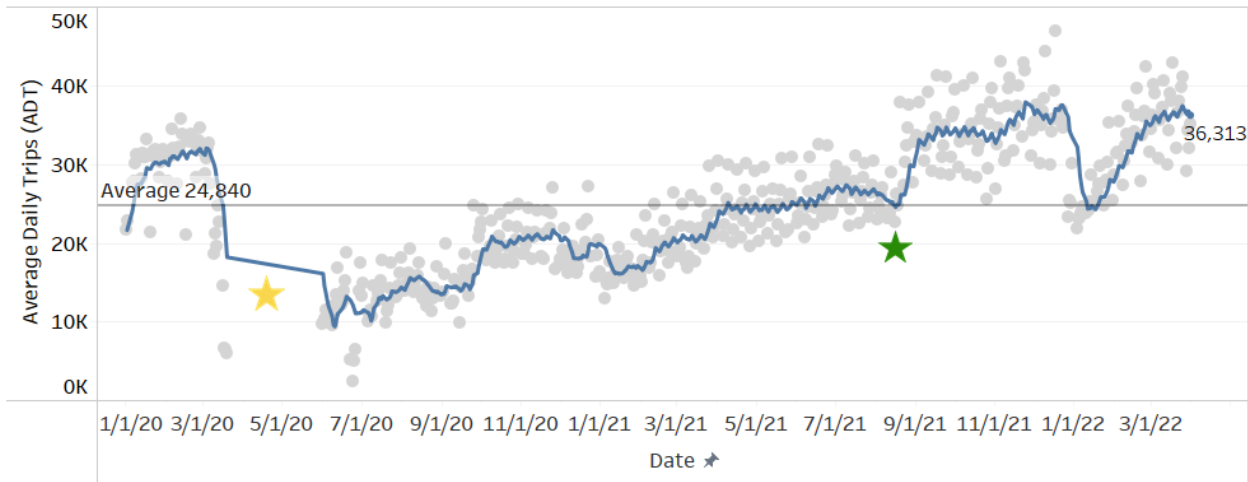


2.1 million express lane trips were made in Q1 2022. Trips were down 5% from the prior quarter (Q4 2021). There is a seasonal trend that first quarter trips decline from the fourth quarter of the prior year. In addition, the Omicron surge of COVID-19 occurred in Q1 2022.

Q1 2022 trips, however, were up 69% from Q1 2021, due to the 12-mile southbound lane extension that opened in August 2021 and the lessening impacts of the COVID-19 pandemic which began in Q1 2020.

Average Daily Express Lane Trip

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



★ Tolling was suspended 3/19/20 and resumed 6/1/20 due to COVID - 19.

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

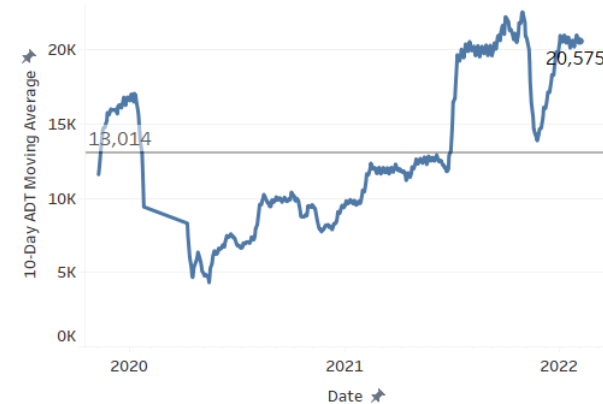
The number of tolling days varies per quarter, so Average Daily Trips (ADT) is best for seeing trends.

ADT from January 2020 through March 2022 was about 25,000 trips. In Q1 2022, it was about 32,000, an 8% decline from the prior quarter and a 68% increase from Q1 2021. ADT reached over 36,000 at the quarter's end.

Northbound (10-day Moving Average)



Southbound (10-day Moving Average)



In Q1 2022, southbound ADT was 34% 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) = 38%

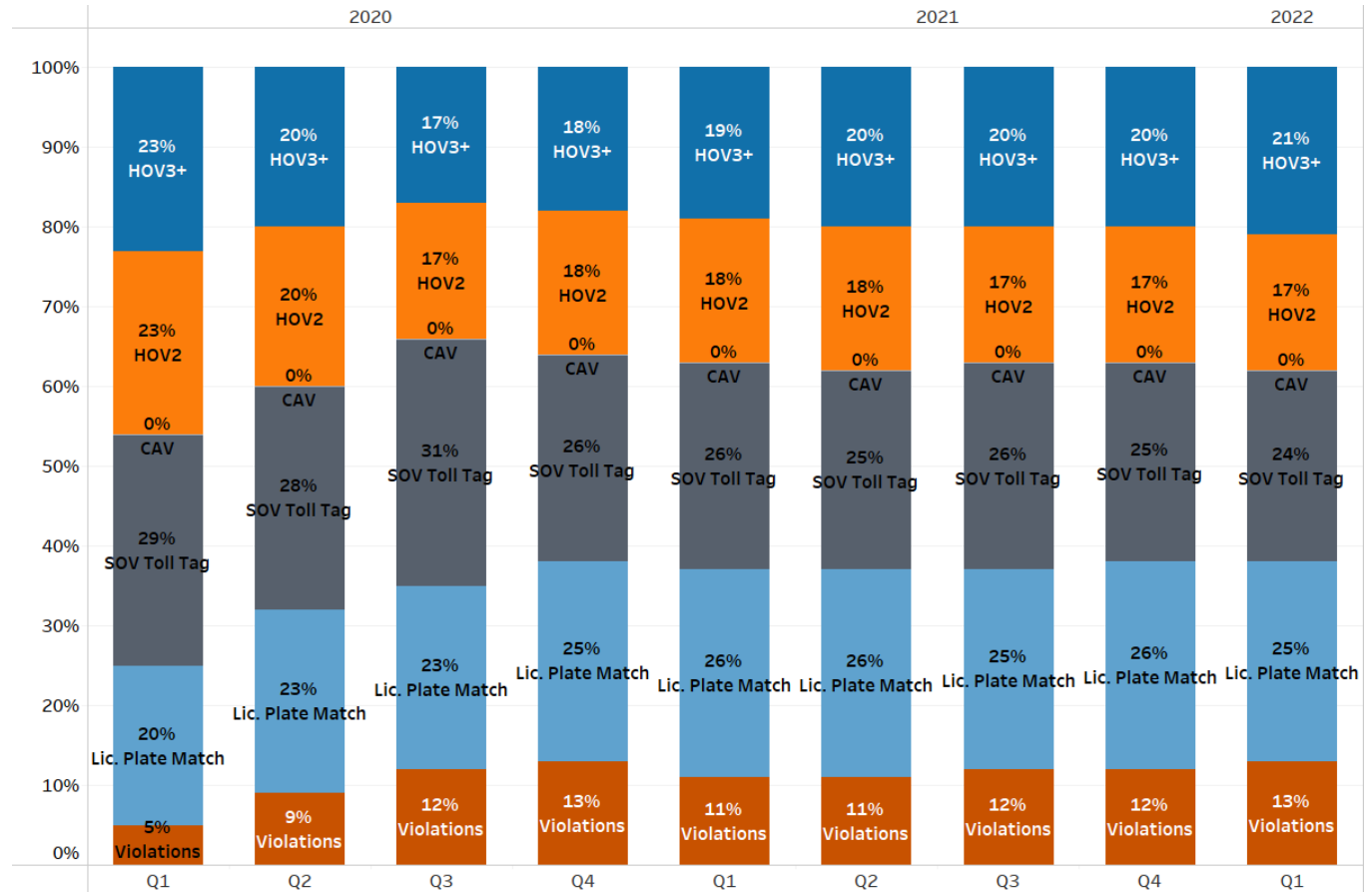
- Up 1% from Q4 2021
- Up 1% from Q1 2021

Paid trips (full toll + half-toll) = 49%

- 49% full toll (SOV toll tag + license plate match) + <1% half toll (CAV (Clean Air Vehicles))
- Down 2% from Q4 2021
- Down 3% from Q1 2021

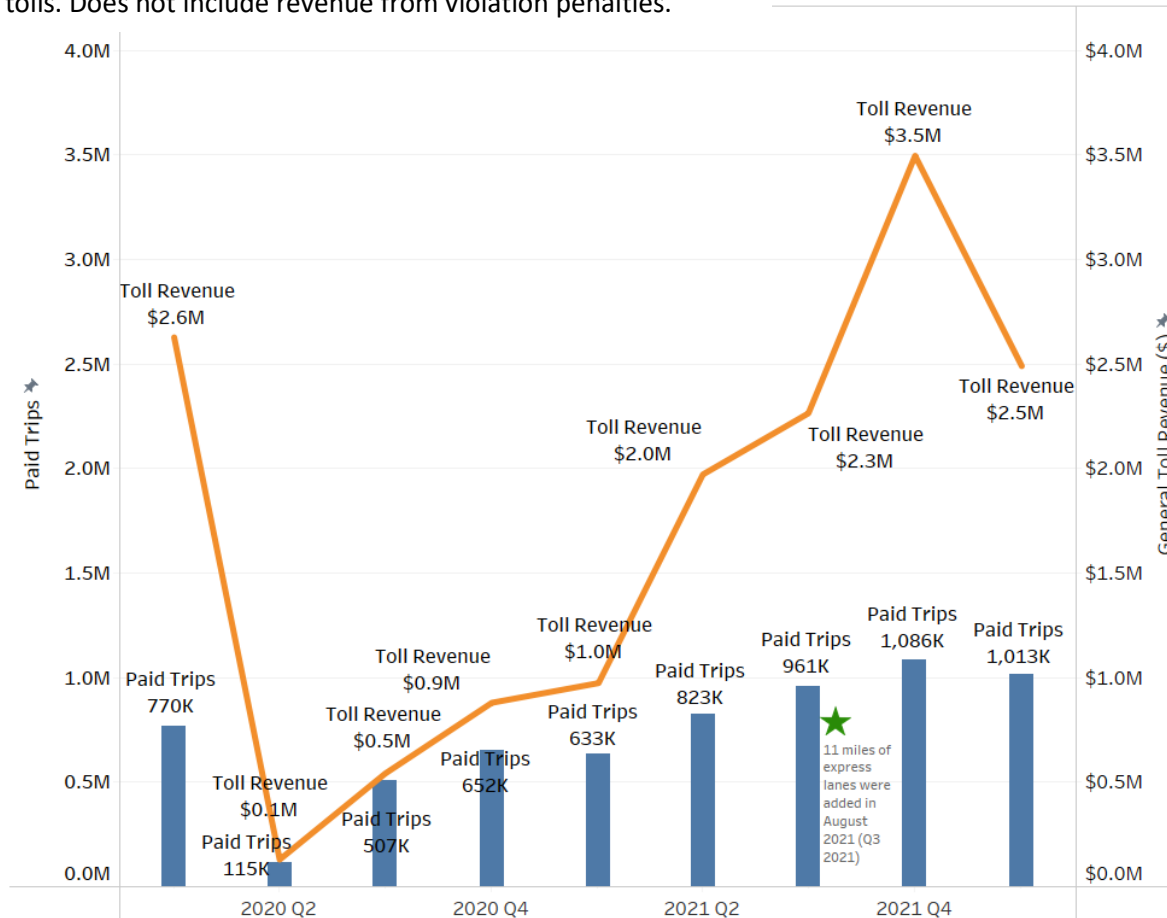
Violation trips = 13%

- No toll tag; license plate not matched to a toll account
- Up 1% from Q4 2021
- Up 2% from Q1 2021



Toll Revenue* and Paid Trips

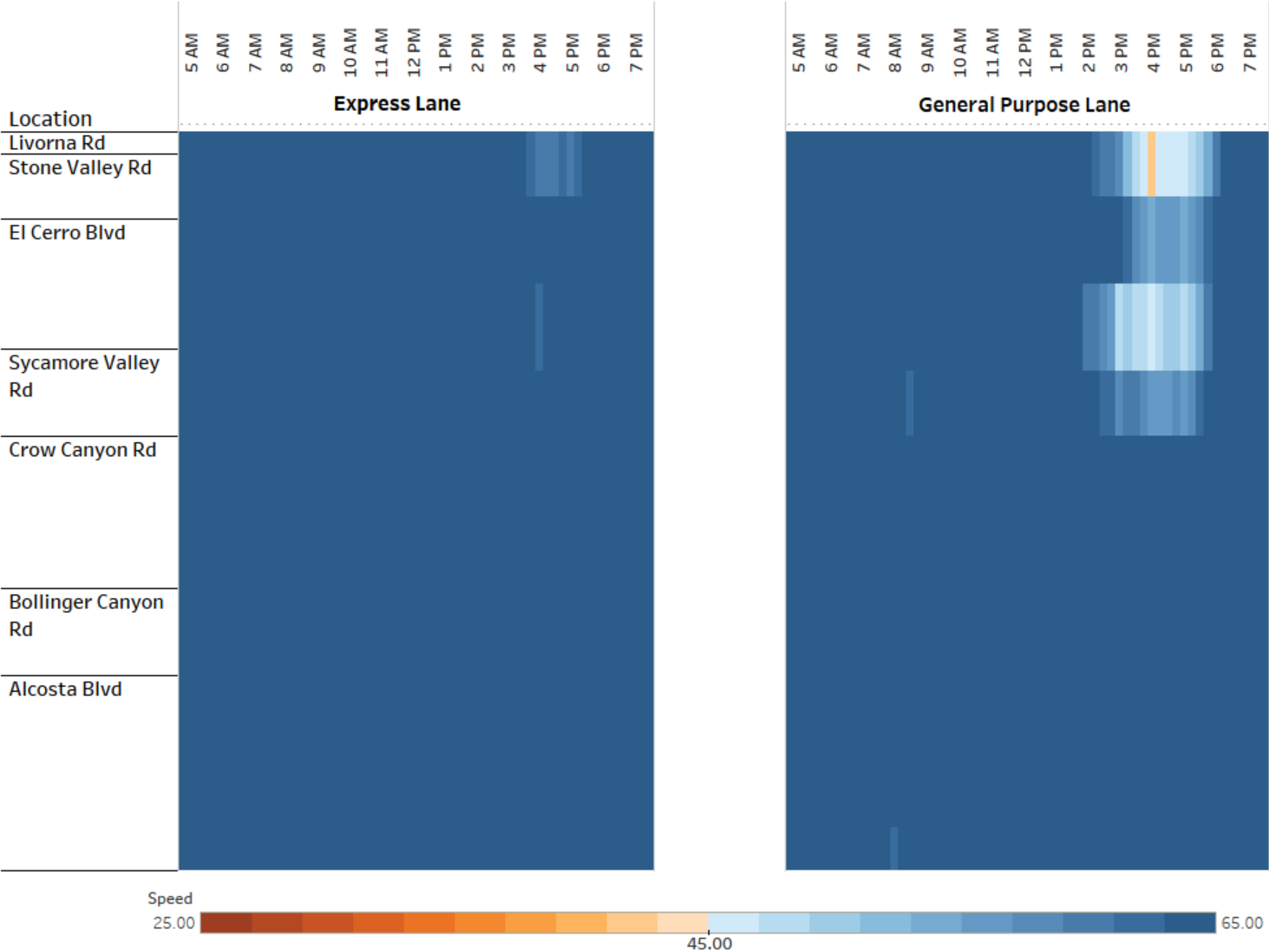
*Revenue from general tolls. Does not include revenue from violation penalties.



Q1 2022 Change	Toll Revenue	Paid Trips**	Average Toll Paid**
from Prior Quarter (Q4 2021)	Down 22%	Down 7%	Down 24%
Year over Year (Q1 2021)	Up 156%	Up 60%	Up 73%

**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 59 mph or faster.

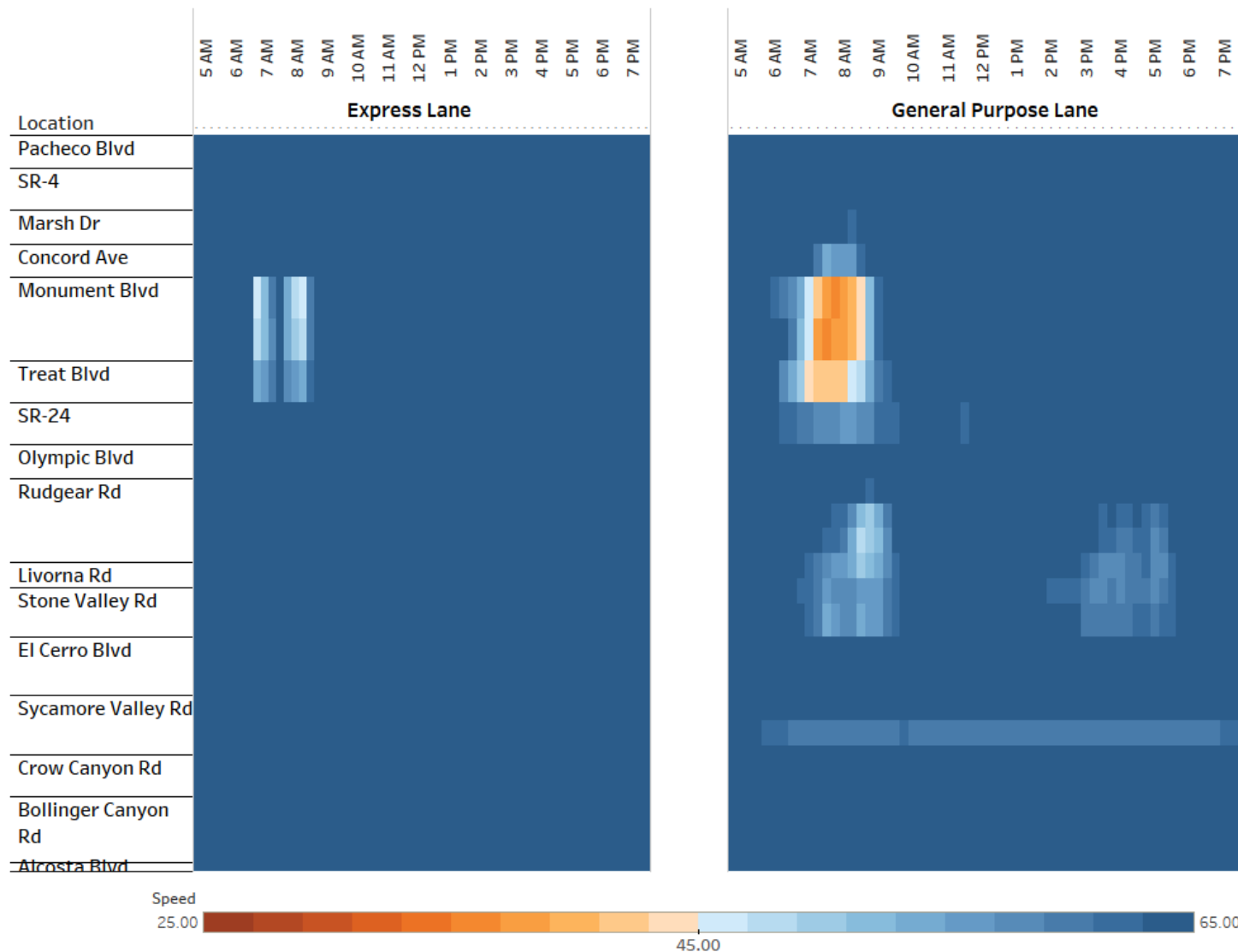
Northbound general purpose lane average speeds slowed below 45 mph at the north end of the corridor around 4 p.m.

Northbound: Quarter Average Peak Traffic and Corridor- Length Speed

Peak Spot Traffic	
Time	4 – 5 p.m.
Location	Approaching Livorna Rd.
Express Lane Speed	60 mph
GP Lane Speed	45 mph
Speed Differential	15 mph
Express Lane Volume	1,100 vehicles
GP Lane Volume	1,440 vehicles

Corridor Length Slowest Travel	
Time	4 – 5 p.m.
Express Lane Speed	69 mph
GP Lane Speed	60 mph
Speed Differential	9 mph

Southbound Speed by Location and Time: Quarter Average



Southbound express lane speeds averaged 65 mph or faster, except between 7 and 9 a.m. between Monument Blvd. and Treat Blvd. when the average fell to as low as 46 mph.

Southbound general purpose lane average speed slowed to as low as 32 mph at that same location and time.

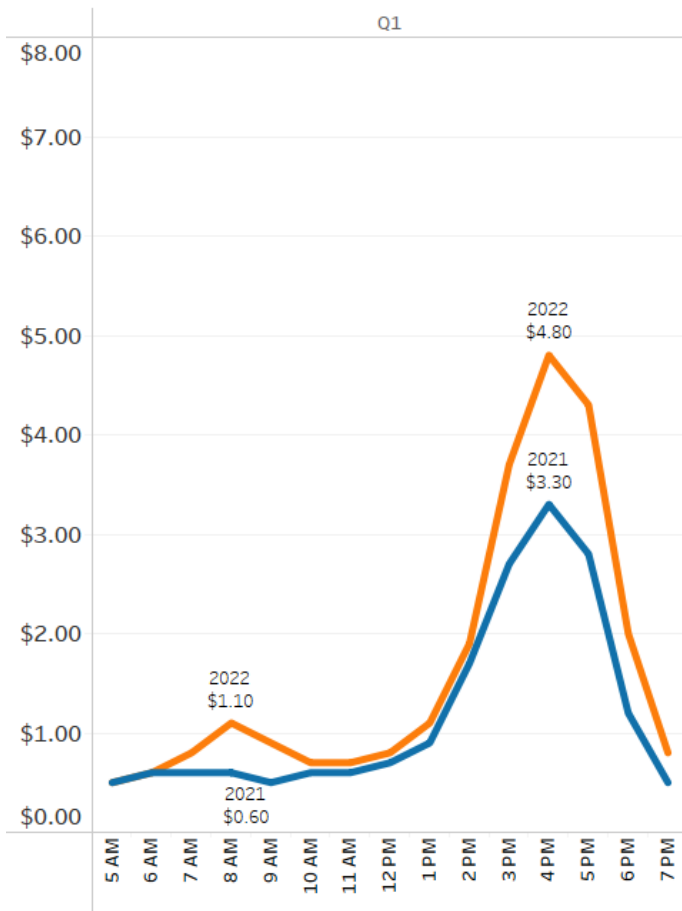
Southbound: Quarter Average Peak Traffic and Corridor- Length Speed

Peak Spot Traffic	
Time	7:45 – 8:15 a.m.
Location	Between Monument Blvd. and Treat Blvd.
Express Lane Speed	51 mph
GP Lane Speed	39 mph
Speed Differential	12 mph
Express Lane Volume	750 vehicles
GP Lane Volume	1,100 vehicles

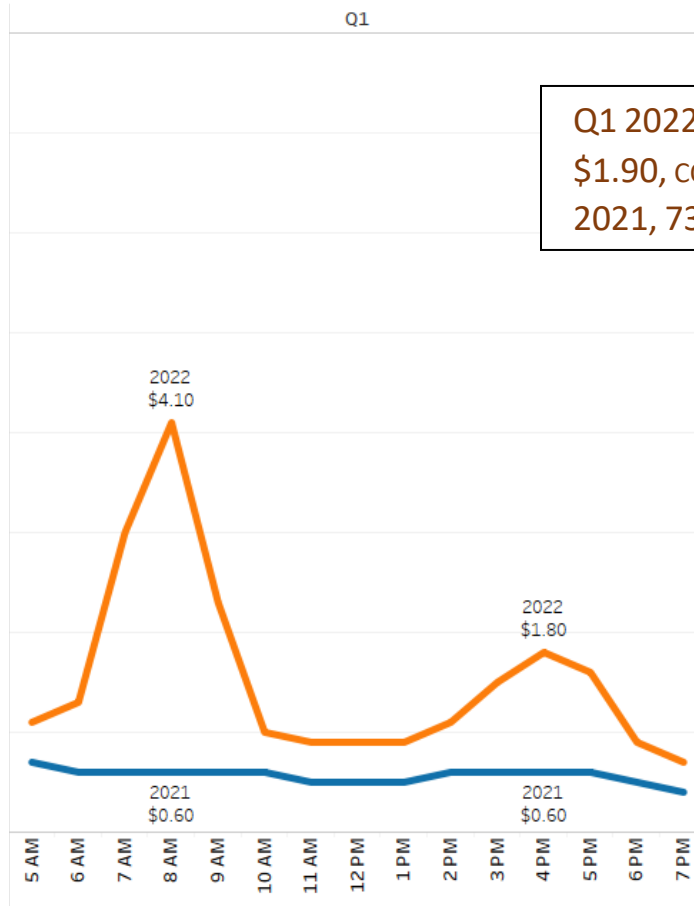
Corridor Length Slowest Travel	
Time	8 – 9 a.m.
Express Lane Speed	69 mph
GP Lane Speed	59 mph
Speed Differential	10 mph

Quarterly Average Toll Paid by Time of Day

Northbound



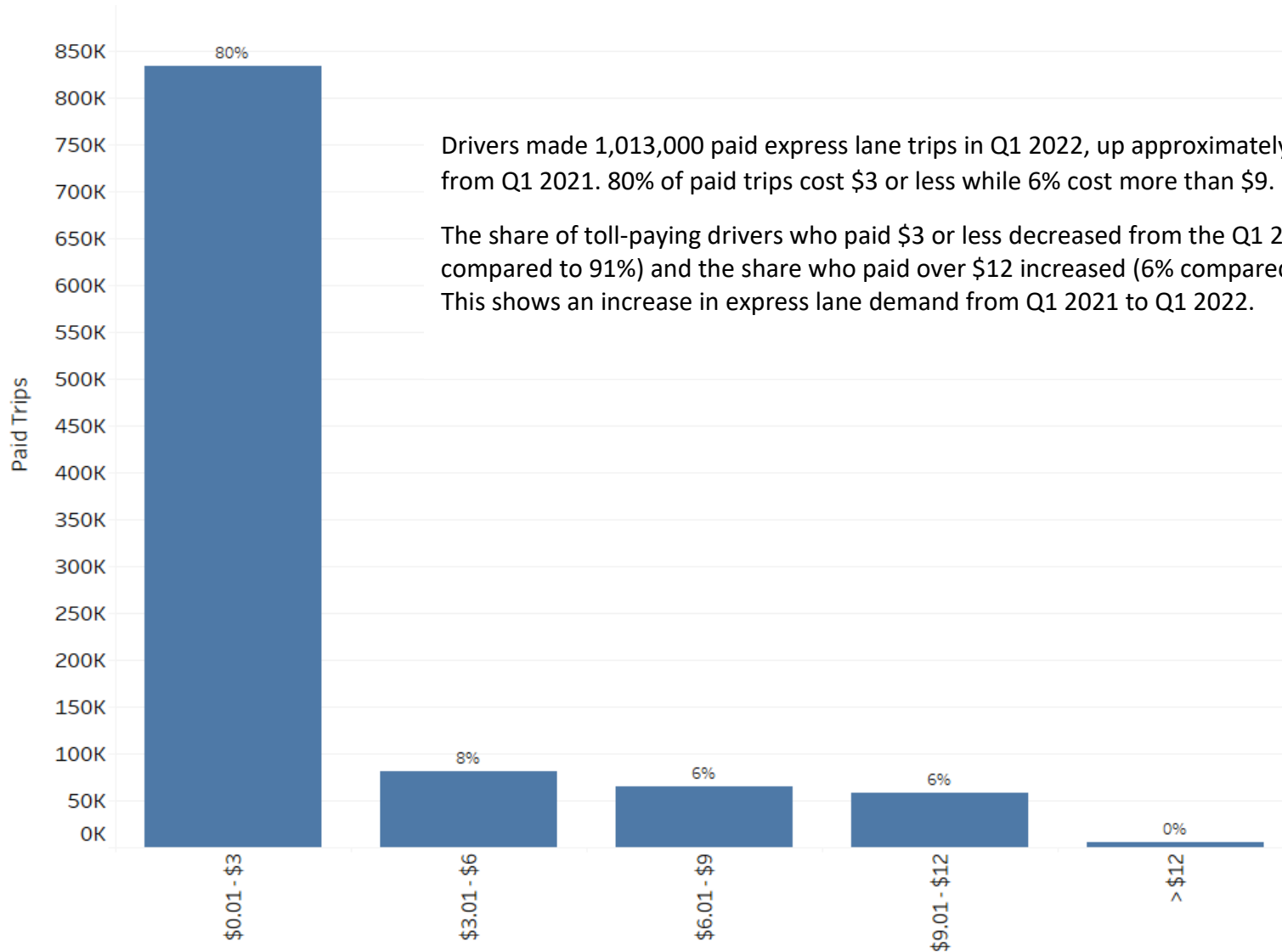
Southbound



Q1 2022 AVERAGE TOLL PAID WAS \$1.90, COMPARED TO \$1.10 IN Q1 2021, 73% HIGHER.

The average toll paid by drivers increased from Q1 2021 to Q1 2022 at all times of day both northbound and southbound. Northbound, the average tolls paid peaked at \$4.80 between 4 and 5 p.m., \$1.50 more than the Q1 2021 peak. Southbound, Q 2022 average tolls paid peaked at \$4.10 between 8 and 9 a.m., \$3.50 more than the Q 2021 peak. The toll increase reflects increased express lane demand as the pandemic evolves.

Toll Distribution



Drivers made 1,013,000 paid express lane trips in Q1 2022, up approximately 60% from Q1 2021. 80% of paid trips cost \$3 or less while 6% cost more than \$9.

The share of toll-paying drivers who paid \$3 or less decreased from the Q1 2021 (80% compared to 91%) and the share who paid over \$12 increased (6% compared to 4%). This shows an increase in express lane demand from Q1 2021 to Q1 2022.

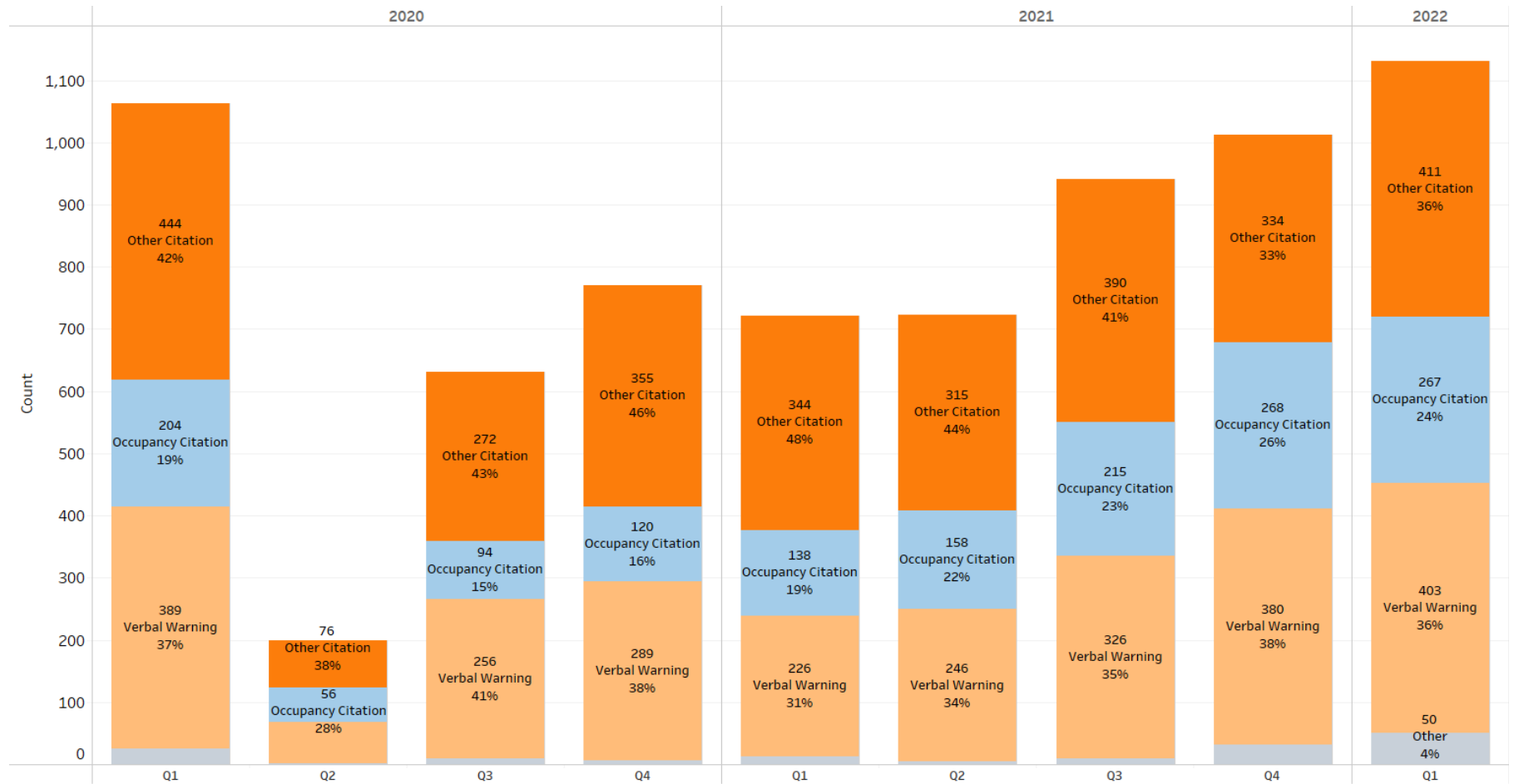
How Drivers Use the Lanes

In Q1 2022, about 531,000 unique vehicles made about 2.1 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	1.35 million (66%)	260,000 (49%)	5.2	121,000 (47% of column B)
License plate – matched to a FasTrak account	533,000 (26%)	180,000 (34%)	3.0	111,000 (62% of column B)
License plate - not matched to a FasTrak account*	169,000 (8%)*	91,000 (17%)	1.9	70,000 (77% of column B)
Total	2.1 million	531,000	4.0	302,000 (57% of column B)

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

CHP Enforcement

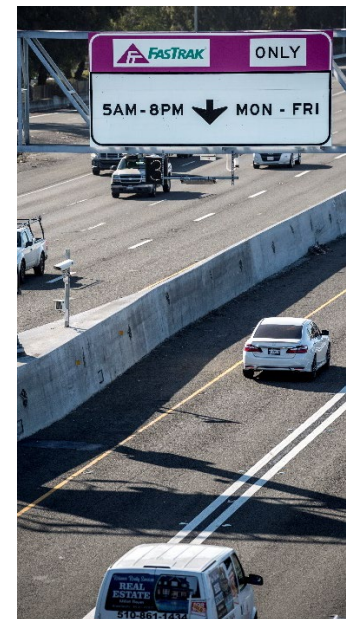


CHP enforcement hours were up 42% from Q1 2021, partly due to the expansion of the express lane in August 2021. This quarter, CHP filled 85% of requested hours and made 1,131 enforcement contacts, 24% of which were related to carpool occupancy violations. The average cost to BAIFA per enforcement contact was \$91.

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



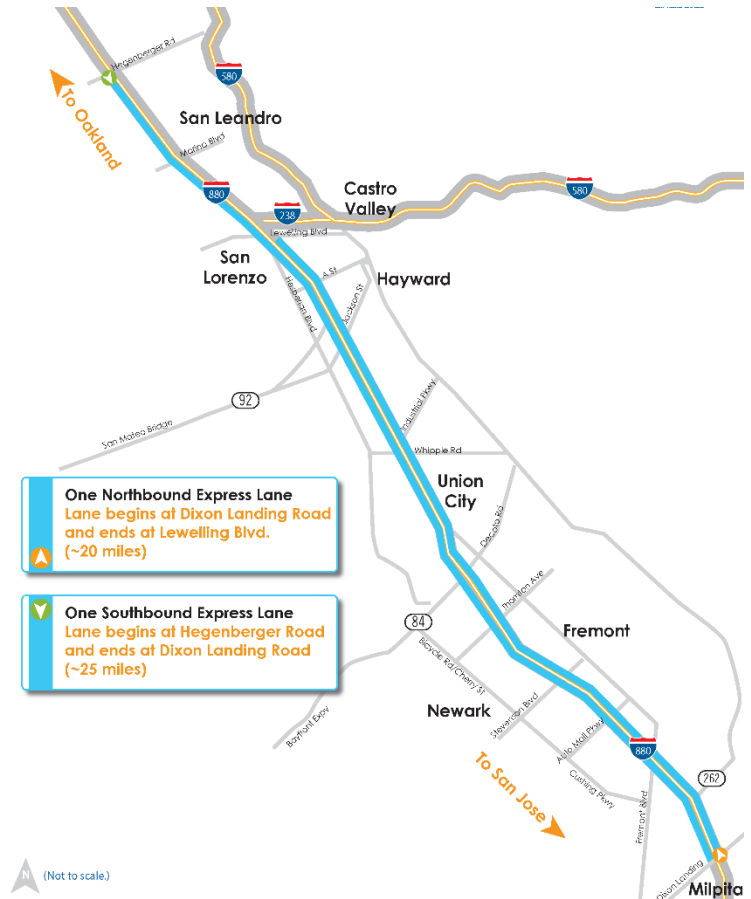
I-880 Express Lanes Performance Report 1st Quarter 2022: January - March



Bay Area Infrastructure Financing Authority
Submitted July 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.

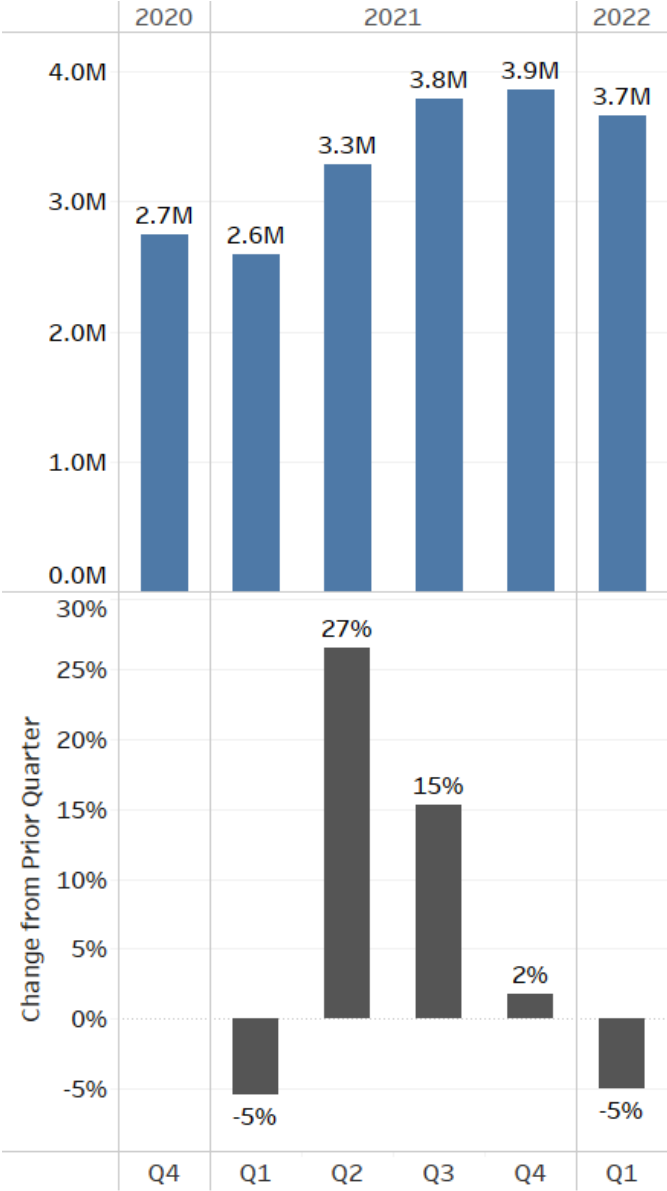
Carpools		All Drivers	
Must Have FasTrak Flex®		Must Have FasTrak®	
Motorcycles are FREE with FasTrak Flex toll tag set to 3+.		Clean Air Vehicles pay half-price tolls with FasTrak CAV toll tag.	

I-880 Express Lanes – Q1 2022 Performance Highlights

- Average daily express lane trips were down 8% from the prior quarter and up 39% from a year ago (Q1 2021). Seasonal trends show that first quarter trips decline from the fourth quarter of the prior year. In addition, the Omicron surge of COVID-19 occurred in Q1 2022.
- The share of toll-free HOV 3+ trips was 36%, up 3% from Q4 2021 and up 12% from Q1 2021. The share of half-price HOV2 trips was 7%, down 1% from Q4 2021 and down 2% from Q1 2021.
- 14% of express lane trips were violations - trips made with neither a toll tag nor a FasTrak account. The rate is the same as the prior quarter and 3% lower than Q1 2021.
- Quarterly toll revenue was down 22% from Q4 2021. Paid trips fell 8%, and the average toll paid fell 12%. Quarterly toll revenue was up 93% from a year ago (Q1 2021). Paid trips increased 23% and the average toll paid increased 85%.
- Corridor-length northbound travel was slowest between 5 and 6 p.m. when express lane speed averaged 59 mph (19 mph faster than the general purpose lanes), and the average toll paid was \$7.40. Corridor-length southbound travel was slowest between 7 and 8 a.m. when express lane speed averaged 64 mph (15 mph faster than the general purpose lanes) and the average toll paid was \$6.60.
- Spot traffic, characterized by high vehicle volumes and slow speeds, peaked northbound around Whipple Rd. between 5 and 6 p.m. when the express lane average speed was 46 mph, 26 mph faster than the average general purpose lane, and average volume was ~1,150 vehicles per hour, 27% more than the average general purpose lane. Spot traffic peaked southbound from Tennyson Rd. to Alvarado Niles Rd. from 7 to 8 a.m. when the express lane average speed was 53 mph, 13 mph faster than the average general purpose lane, and average volume was ~1,350 vehicles per hour, about the same as the average general purpose lane.
- Slightly more than half of express lane drivers (52%) carried toll tags and made an average of 2.7 express lane trips per month. Drivers without FasTrak tags made an average of 1.2 trips per month.
- CHP made 2,060 enforcement contacts, of which 29% 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

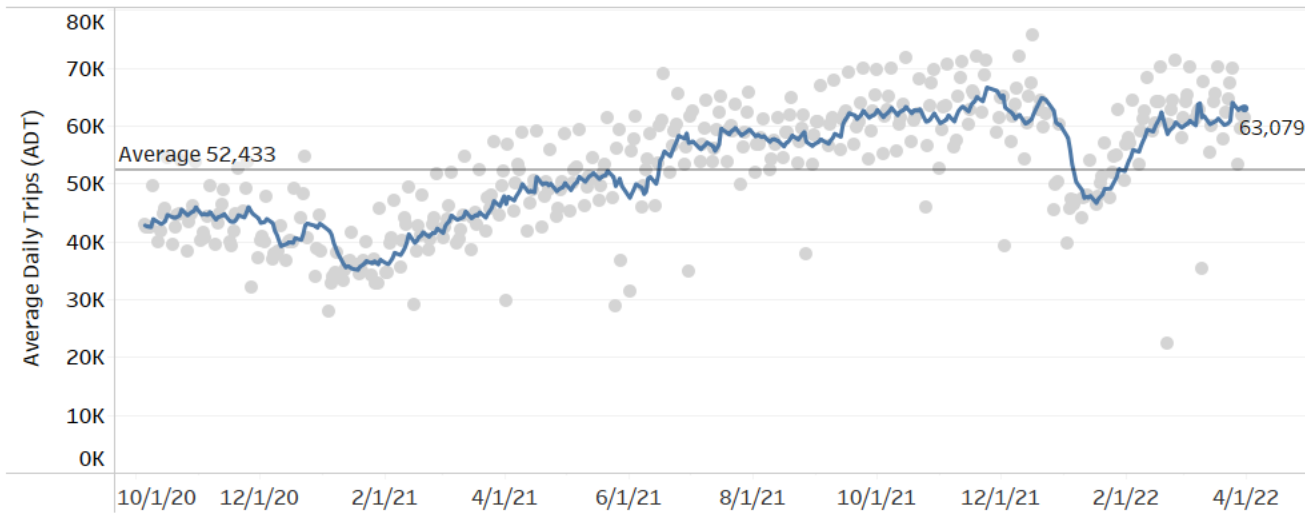


3.7 million express lane trips were made in Q1 2022. Trips were down 5% from the prior quarter (Q4 2021). There is a seasonal trend that first quarter trips decline from the fourth quarter of the prior year. In addition, the Omicron surge of COVID-19 occurred in Q1 2022.

Q1 2022 trips, however, were up 42% from Q1 2021, due to the lessening impacts of the COVID-19 pandemic which began in Q1 2020.

Average Daily Express Lane Trips

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

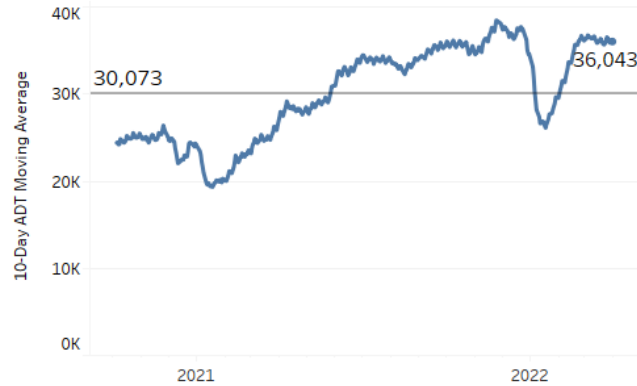


The number of tolling days varies per quarter, so Average Daily Trips (ADT) is best for seeing express lane trip trends. ADT from October 2020 (when the lanes opened) through March 2022 was about 52,000 trips. In Q1 2022, it was about 57,000, an 8% decline from the prior quarter and a 39% increase from Q1 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 32% higher than northbound. More vehicles per mile have used the lanes southbound than northbound.

Trip Type

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

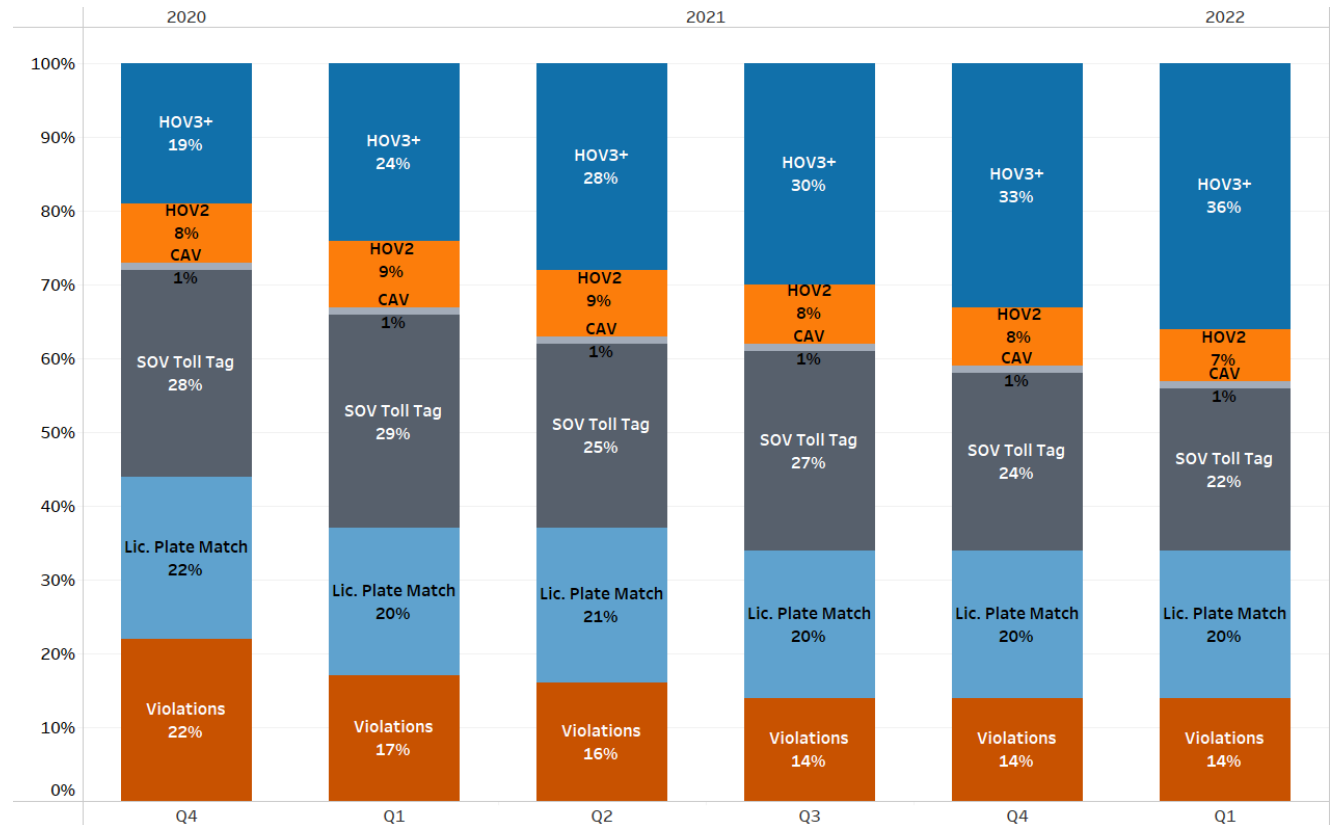
- Up 3% from Q4 2021
- Up 12% from Q1 2021

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

- 42% full toll
- 8% half toll (HOV 2 + CAV (Clean Air Vehicle))
- Down 3% from Q4 2021
- Down 9% from Q1 2021

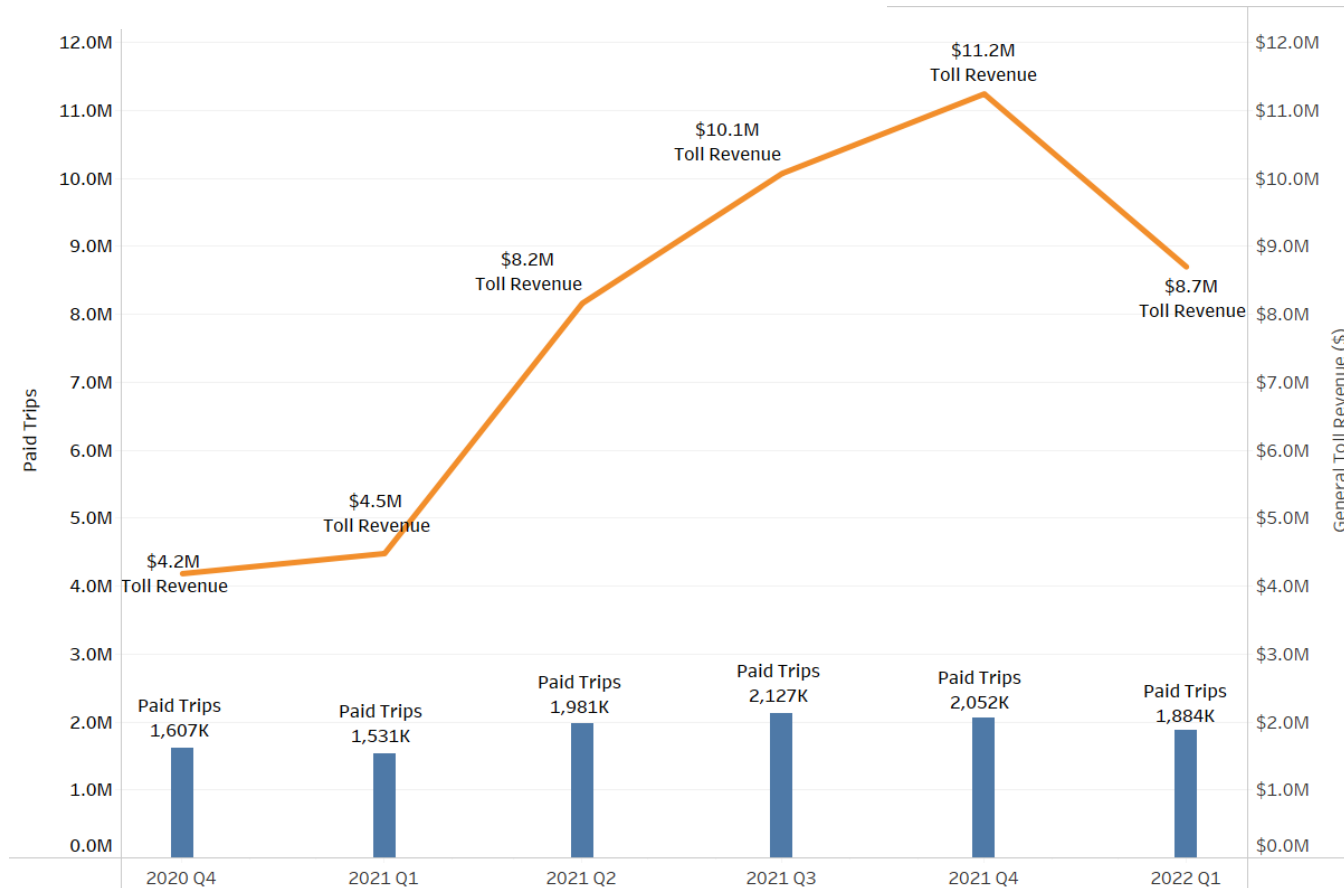
Violation trips = 14%

- No toll tag and license plate not matched to a FasTrak account
- No change from Q4 2021
- Down 17% from Q1 2021



Toll Revenue* and Paid Trips

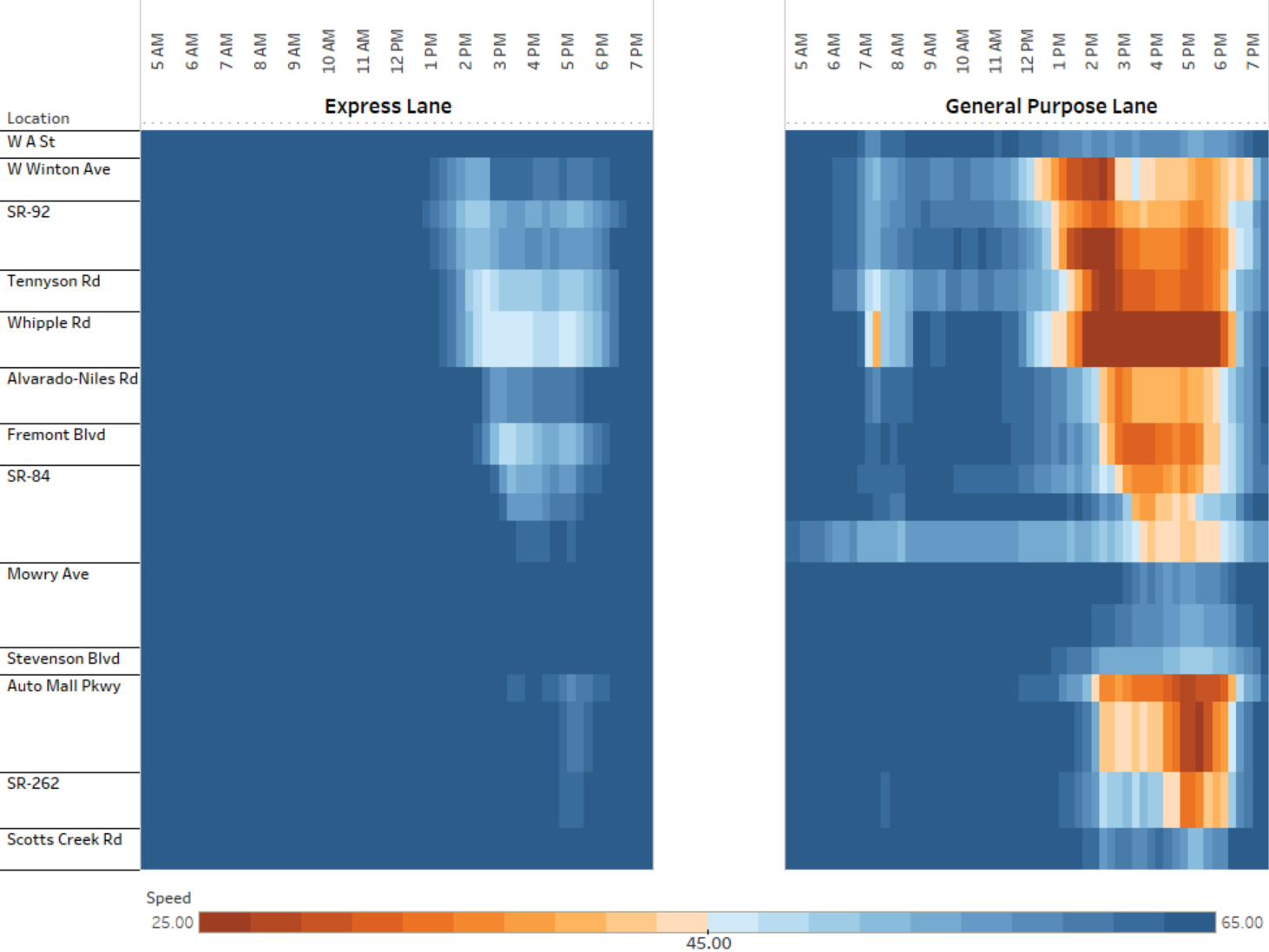
*Revenue from general tolls. Does not include revenue from violation fines.



Q1 2022 Change	Toll Revenue	Paid Trips**	Average Toll Paid**
from Prior Quarter (Q4 2021)	Down 22%	Down 8%	Down 12%
Year over Year (Q1 2021)	Up 93%	Up 23%	Up 85%

**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.

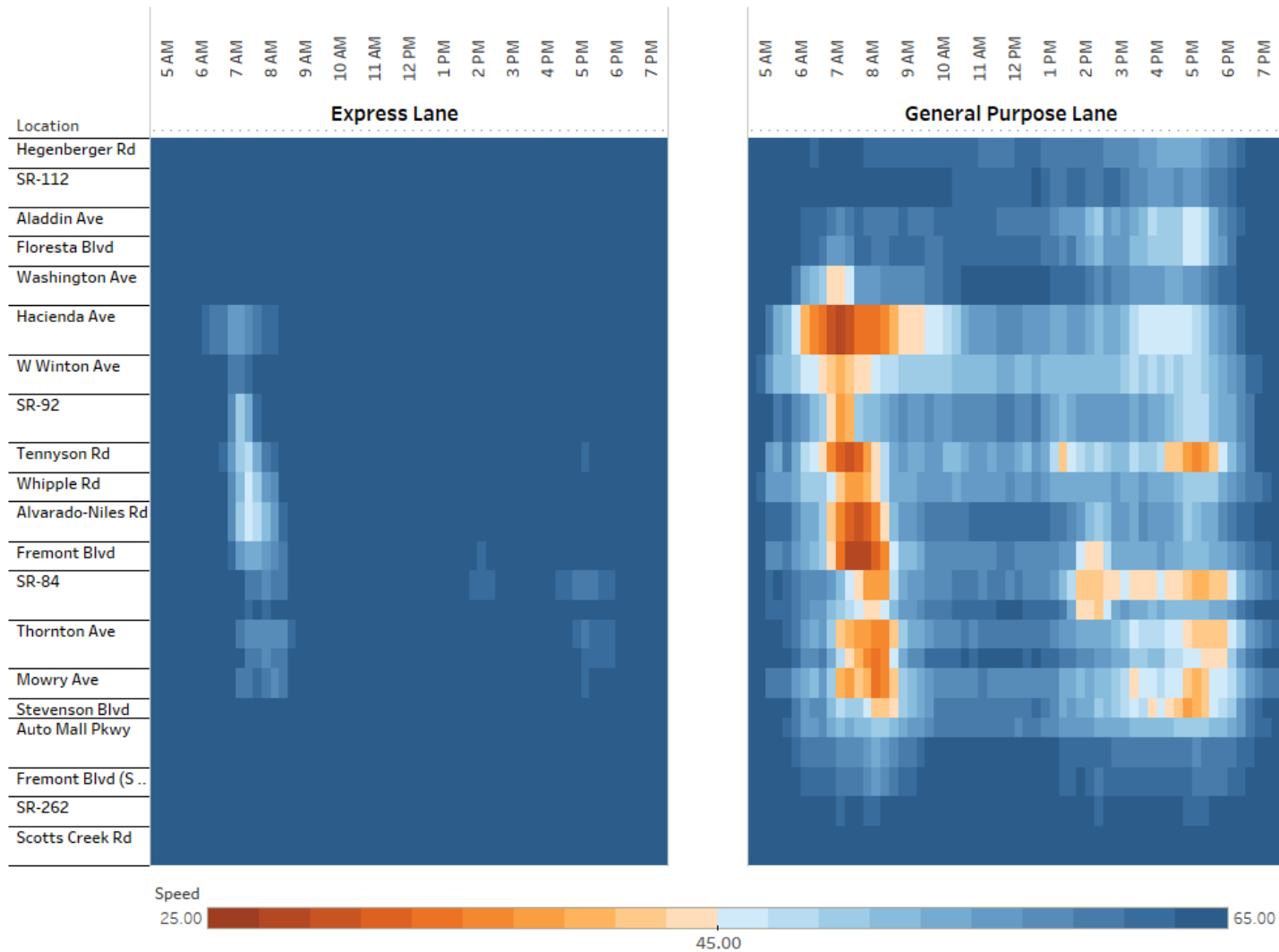
Northbound general purpose lane average speeds fell below 35 mph throughout most of the corridor for most of the afternoon and evening with the slowest speeds occurring for the greatest duration around Whipple Road.

Northbound: Quarter Average Peak Traffic and Corridor-Length Speed

Peak Spot Traffic	
Time	5 - 6 p.m.
Location	Around Whipple Rd.
Express Lane Speed	46 mph
GP Lane Speed	20 mph
Speed Differential	26 mph
Express Lane Volume	~1,150 vehicles
GP Lane Volume	~900 vehicles

Corridor Length Slowest Travel	
Time	5 - 6 p.m.
Express Lane Speed	59 mph
GP Lane Speed	40 mph
Speed Differential	19 mph

Southbound Speed by Location and Time: Quarter Average



Southbound express lane speeds averaged 65 mph or faster throughout most of corridor. The primary exception was from Tennyson Ave. to Fremont Blvd. around 7:30 a.m.

Southbound general purpose lane average speed slowed below 45 mph between 6 and 9 a.m. throughout much of the corridor, and again after 2 p.m., especially from Hwy. 84 to Thornton Ave.

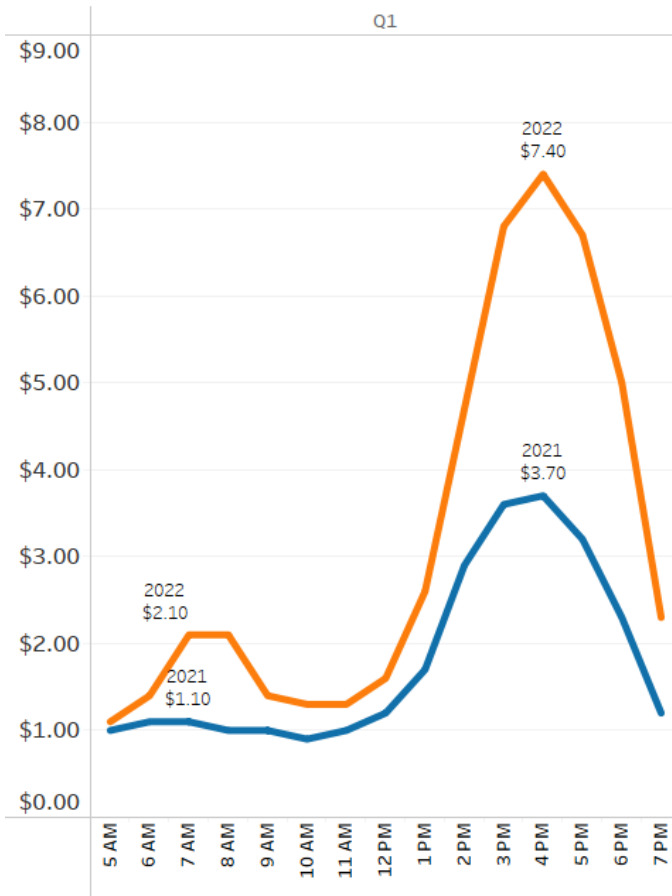
Southbound: Quarter Average Peak Traffic and Corridor- Length Speed

Peak Spot Traffic	
Time	7 – 8 a.m.
Location	From Tennyson Rd. to Alvarado-Niles Rd.
Express Lane Speed	53 mph
GP Lane Speed	40 mph
Speed Differential	13 mph
Express Lane Volume	~1,350 vehicles
GP Lane Volume	~1,350 vehicles

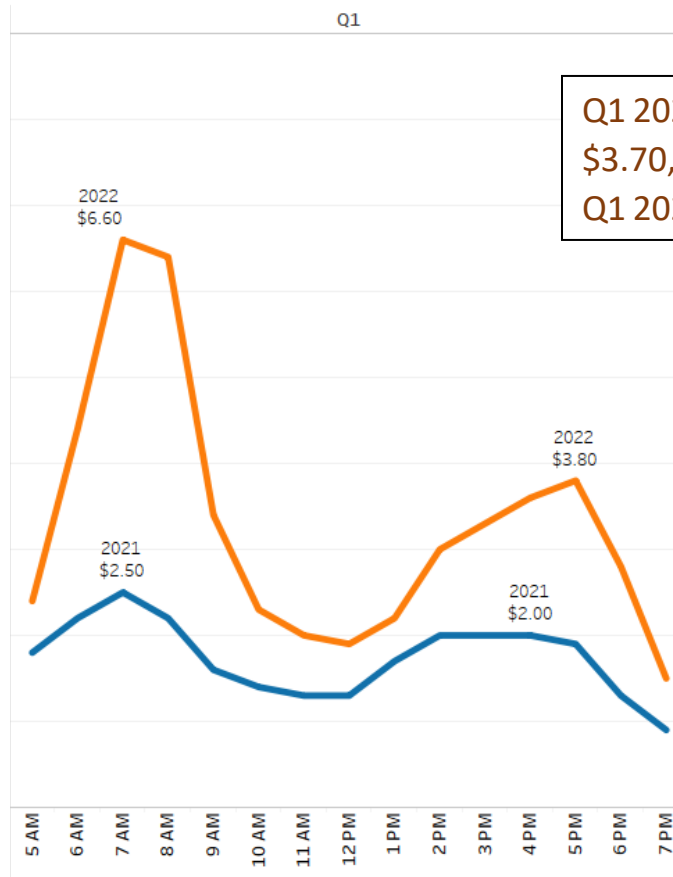
Corridor Length Slowest Travel	
Time	7 – 8 a.m.
Express Lane Speed	64 mph
GP Lane Speed	49 mph
Speed Differential	15 mph

Quarterly Average Toll Paid by Time of Day

Northbound



Southbound



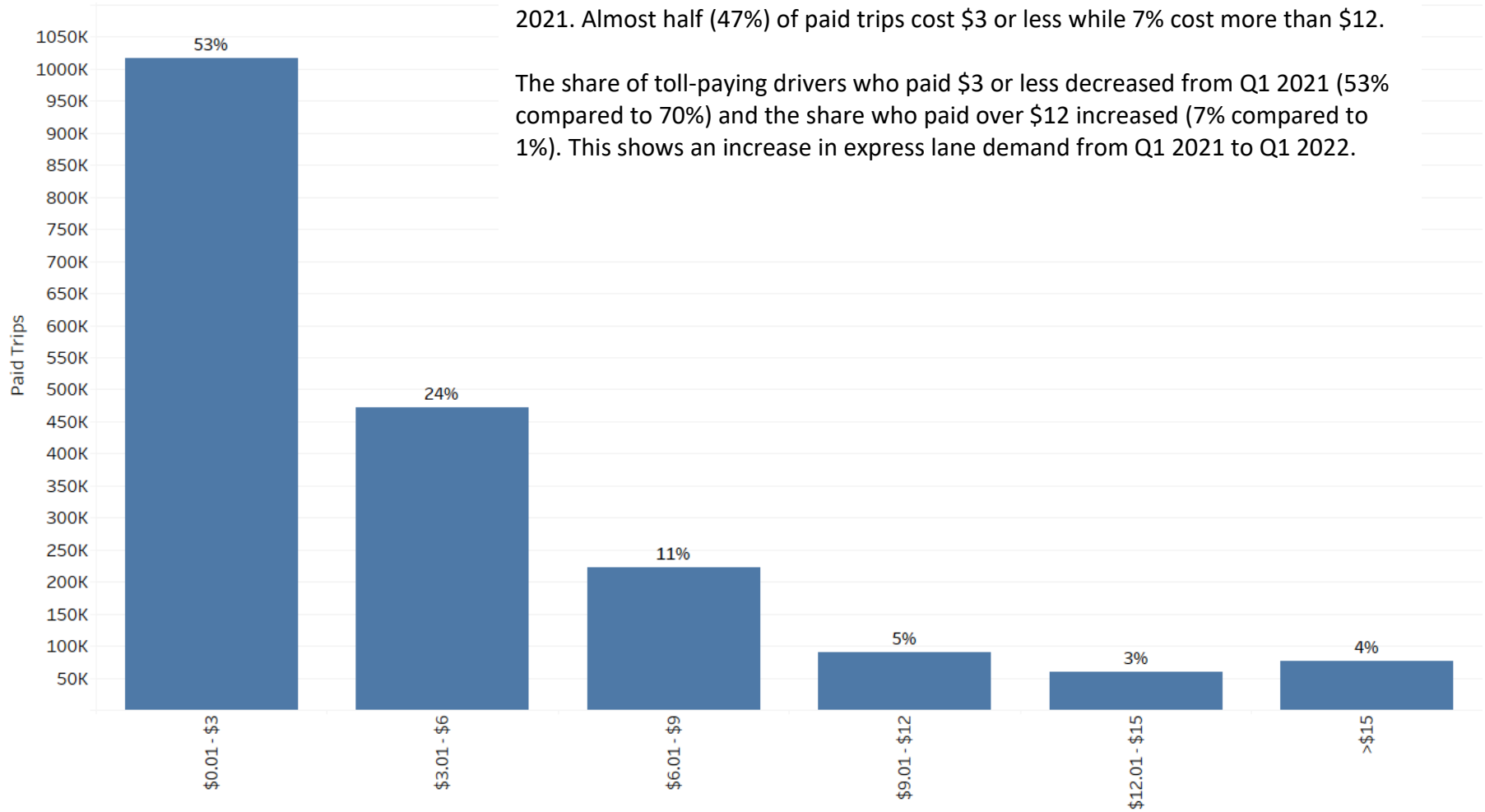
Q1 2022 AVERAGE TOLL PAID WAS \$3.70, COMPARED TO \$2.00 IN Q1 2021, 85% HIGHER

The average toll paid by drivers increased from Q1 2021 to Q1 2022 at all times of day both northbound and southbound. Northbound, Q1 2022 average tolls paid peaked at \$7.40 in the 4 p.m. hour, \$3.40 more than the Q1 2021 peak. Southbound, Q1 2022 average tolls paid peaked at \$6.60 in the 8 a.m. hour, \$4.10 more than the Q1 2021 peak. The toll increase reflects increased express lane demand as the pandemic evolves.

Toll Distribution

Drivers made 2.1 million paid express lane trips, up approximately 40% from Q1 2021. Almost half (47%) of paid trips cost \$3 or less while 7% cost more than \$12.

The share of toll-paying drivers who paid \$3 or less decreased from Q1 2021 (53% compared to 70%) and the share who paid over \$12 increased (7% compared to 1%). This shows an increase in express lane demand from Q1 2021 to Q1 2022.



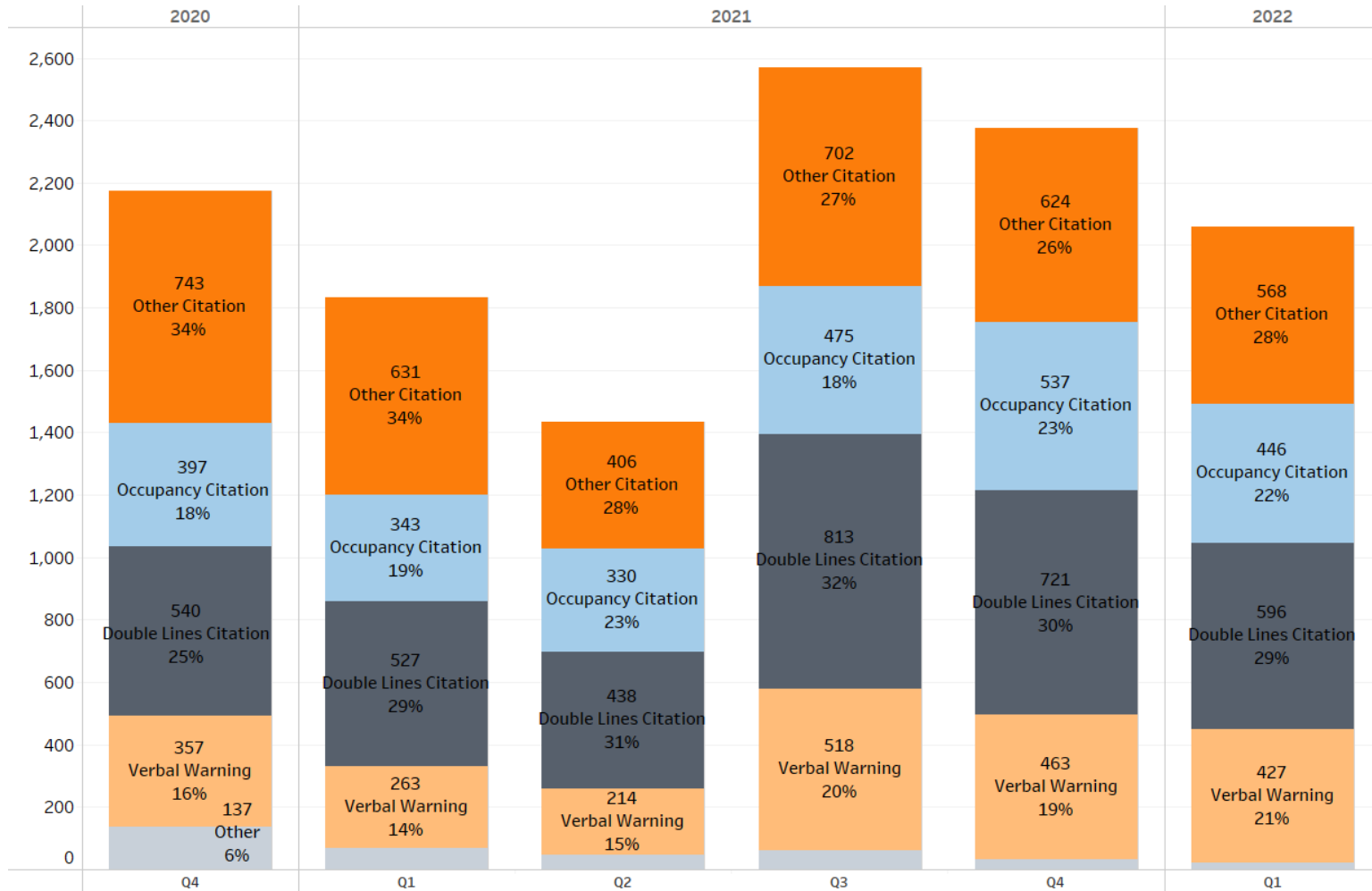
How Drivers Use the Lanes

In Q1 2022, about 650,000 unique vehicles made about 3.7 million express lane trips, as shown in the table below.

	A	B	C	D
	Trips in Quarter	Unique Vehicles	Trips Per Unique Vehicle	Unique Vehicles – Made Only 1 Trip
Vehicles Carrying Toll Tags	2.65 million (71%)	330,000 (51%)	8.0	128,000 (39% of column B)
License plate – matched to a FasTrak account	747,000 (20%)	198,000 (30%)	3.8	111,000 (56% of column B)
License plate - not matched to a FasTrak account*	317,000 (9%)*	122,000 (19%)	2.6	84,000 (69% of column B)
Total	3.7 million	650,000	5.7	323,000 (50% of column B)

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

CHP Enforcement



CHP made 2,060 enforcement contacts in Q1 2022, 29% resulting in citations for crossing double white lines and 22% related to HOV occupancy violations. CHP filled 53% of BAIFA's requested 2,560 enforcement hours. The average cost to BAIFA per enforcement contact was \$78.

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

