

**METRO EXPRESSLANES
MOTION RESPONSE #43
I-10 EXPRESSLANES PILOT PROGRAM**

**Board of Directors – Ad Hoc Congestion, Highway and Roads Committee
January 16, 2019**



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Board Motion and Response

Director Fasana's motion, amended by Director Solis, requests development of an I-10 ExpressLanes Pilot that increases the toll-free occupancy requirements from HOV2+/HOV3+ to vanpools and transit vehicles only, as a means of preserving the ExpressLanes as a fast, reliable travel option for transit users and all corridor travelers.

- This is Metro staff's report back on:
 - Potential effects of implementing this pilot
 - Key decision points and milestones for implementation
 - Solicitation of feedback and evaluation of potential impacts associated with this pilot, with focus on low-income commuters
- Recommended Action: Authorize the development of an implementation plan for the I-10 ExpressLanes Pilot Program

Summary of Item 8

In the **I-10 ExpressLanes**, the following vehicles travel toll-free:

CURRENT

HOV 3+

DURING PEAK PERIODS

HOV 2+

DURING OFF-PEAK PERIODS

PROPOSED

HOV 5+

AT ALL TIMES

Historical Context



- 1973:** Facility initially opens as a busway.
- 1974:** HOV3+ vehicles temporarily allowed in busway during a 3-month transit strike.
- 1976:** HOV3+ vehicles allowed to use busway during peak periods.
- 1981:** HOV3+ vehicles allowed to use busway at all times.
- 2000:** HOV2 vehicles allowed to use busway during non-peak periods.
- 2013:** Busway converted to ExpressLanes.

I-10 ExpressLanes Performance Challenges

58%

increase in
ExpressLanes trips

from 10,093,413 in FY14
to 15,924,317 in FY18

201%

increase in
HOV-Only minutes

from 1,101 in FY14
to 3,314 in FY18

12.5%

decrease in AM Peak
ExpressLanes speeds

from 60.8 mph in FY14
to 53.2 mph in FY18

- Additional I-10 travel time has been added to the Metro Silver Line schedule to keep buses on time.
- Up to 19% of Foothill Transit Silver Streak buses operate behind schedule.
- Significant proportion of traffic mis-representing vehicle occupancy to improperly obtain toll-free travel.



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Potential Effects of Implementing Pilot

- Overall mobility benefit of approximately **\$3.7 million per day** in time/delay cost savings corridor-wide.
- Increase in ExpressLanes person-throughput by **600 persons/day** (a 4% increase for ExpressLanes throughput)
- Increase in end-to-end travel times in the general-purpose lanes by **4 minutes** on average.
- Increase in congestion of the eastbound I-10 ExpressLanes at I-605 due to forced merging into the general-purpose lanes.
- Improvements in transit travel time reliability, based on qualitative evaluation by subject area experts.
- Provision of a more long-term sustainable toll strategy that is less susceptible to congestion—especially congestion caused by vehicles that mis-represent occupancy.

Impacts to Low-Income Commuters

Survey findings from 479 low-income commuters on I-10

- Very few (3%) have ever used a vanpool on the I-10 ExpressLanes.
- Approximately 50% currently use the I-10 ExpressLanes.
- Under the proposed pilot, respondents indicated they would do the following:

	Would use the ExpressLanes			Would use the General Purpose Lanes
	As SOV/HOV	As transit	As vanpool	
Current ExpressLanes Users	41%	13%	21%	23%
Current General Purpose Lane Users	18%	5%	17%	56%

*Rows will not sum to 100% due to some respondents indicating “another form of transportation” which could include active transportation.

Vanpool Program

- Federally registered vanpool programs require participants to lease vehicles with seating capacity of at least 7 persons. This is a potentially significant barrier to participation.
- To facilitate vanpool participation, staff recommends that the occupancy threshold for toll-free passage be set to 5 persons per vehicle.
- Staff will explore strategies to further incentivize vanpooling for commuters.



Timeframe Considerations



Integration will be required with the **new Back Office System**, expected to come online by early 2020.



Comprehensive outreach strategy to all customers and corridor users requires substantial time to complete.



Significant lead time required to engage a **third-party contractor** to verify vanpools & handle toll exemptions.



Before-and-after study requires a considerable data collection period before go-live.

Key Decision Points and Milestones



Obtained concurrence from Caltrans and FHWA

- As a condition of concurrence, FHWA requires a before-and-after study and significant public outreach.



Collect and analyze additional data on

- Effects on transit operations
- Barriers to ExpressLanes, transit, and vanpool usage
- More detailed assessment of low-income impacts



Develop a formal implementation plan and return to the Board with recommendations in 12–15 months.

- Optimal method of verifying vanpools and handling toll exemptions through integration with ExpressLanes Back Office



- Determine cost associated with implementation

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\$1.4 M
total anticipated
cost