

# I-105 ExpressLanes Project



CTC Public Hearing  
September 25, 2019



Metro



# Presentation Agenda



1. ExpressLanes Background
2. I-105 Project Overview
3. Performance Benefits
4. Environmental Documents
5. Funding Plan
6. Public Outreach
7. Schedule



# LA Metro at a Glance



- LA Metro is Los Angeles County's:
  - > Regional Planner
  - > Regional Funding Partner
  - > Regional Designer & Builder
  - > Regional Operator

# ExpressLanes Background



- Initiated as a one-year congestion reduction demonstration project.
  - I-110 opened in November 2012
  - I-10 opened in February 2013
- The ExpressLanes were developed in partnership with FHWA, Caltrans and CHP.
- The Metro Board and California Legislature approved tolling in perpetuity.





# I-10/I-110 ExpressLanes Performance



## From November 2012 to July 2019

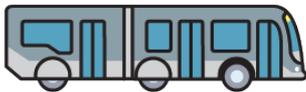


**1,011,177** transponders have been issued

**239,157,480** trips have been taken on ExpressLanes

## Benefits and Incentives

Low-Income Assistance Plan: **19,629** accounts have been opened



Transit Rewards: **\$193,834** in credits have been disbursed to bus patrons



## AM Peak Throughput

ExpressLanes

**109,104** vehicles

**175,028** persons

General Purpose

**97,205** vehicles

**135,887** persons



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Users Pay on average 



**\$5.27** during am peak

**\$3.51** during pm peak

**\$0.90** during off-peak

**0.66%** of users have paid a maximum of **\$22.20**



**\$6.09** during am peak

**\$3.71** during pm peak

**\$1.57** during off-peak

**1.15%** of users have paid a maximum of **\$22.50**



## Users Go Faster & Get There Quicker

Compared to General Purpose Lanes

Average Peak Speed

Average Time Savings\*



**56.3 mph** westbound  
**59.0 mph** eastbound

**13.7 minutes** am peak  
**8.2 minutes** pm peak



**54.1 mph** northbound  
**57.1 mph** southbound

**12.6 minutes** am peak  
**3.0 minutes** pm peak

\*Time savings from FY18



# ExpressLanes Strategic Plan



# I-105 ExpressLanes



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# I-105 Project Background

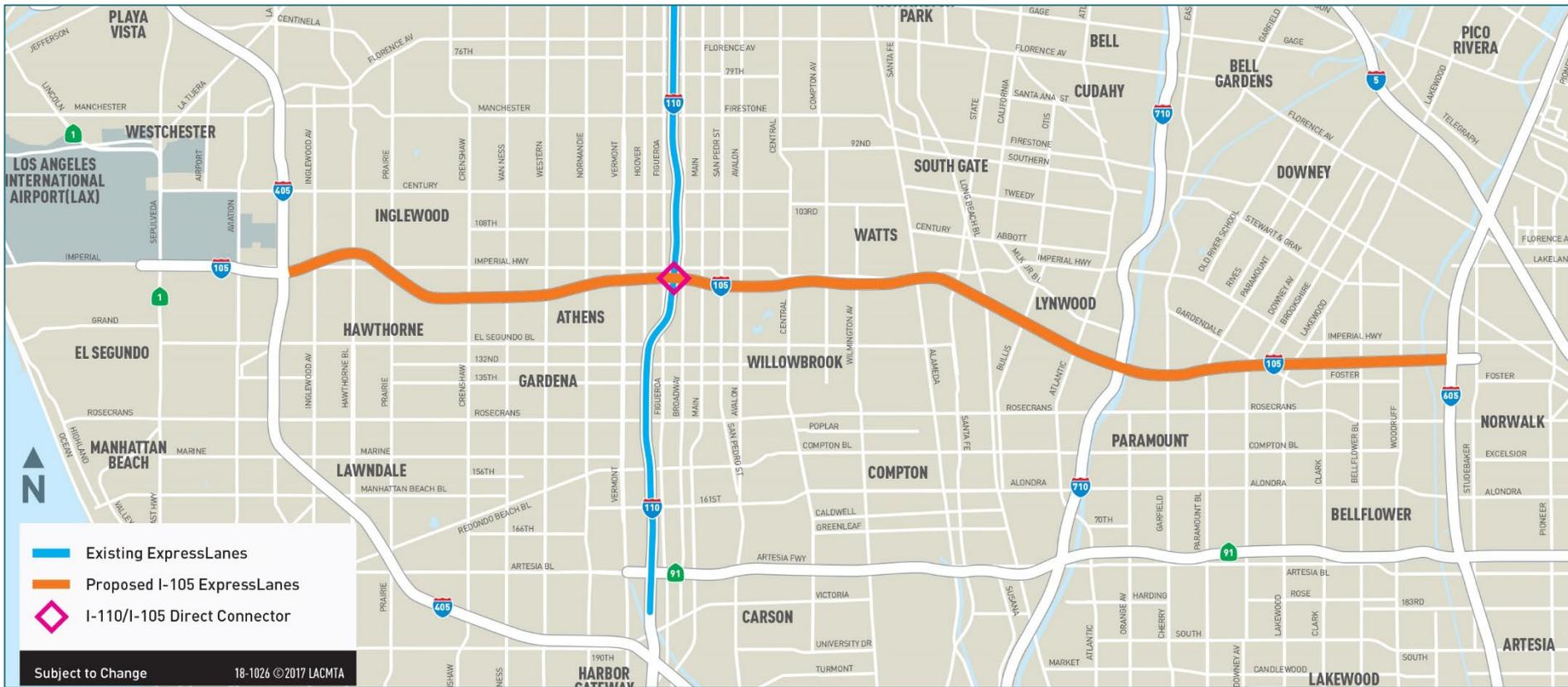


- Project is included in the Los Angeles County ExpressLanes Strategic Plan as a Tier 1 (near-term) project
- Project is included in the SCAG 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS); will be included in the 2020 RTP/SCS
- Caltrans completed the I-105 Project Initiation Document (PID) (Project Study Report-Project Development Support) in September 2015
- The Measure M local transportation sales tax passed in November 2016 provides \$175M for this project
- This project is also included in Metro's Twenty-Eight by '28 initiative to complete 28 transportation projects by the 2028 Olympics

# Project Overview



- The project limits for the proposed ExpressLanes on the I-105 are between the I-405 and I-605, a distance of 15.7 miles



# Project Need

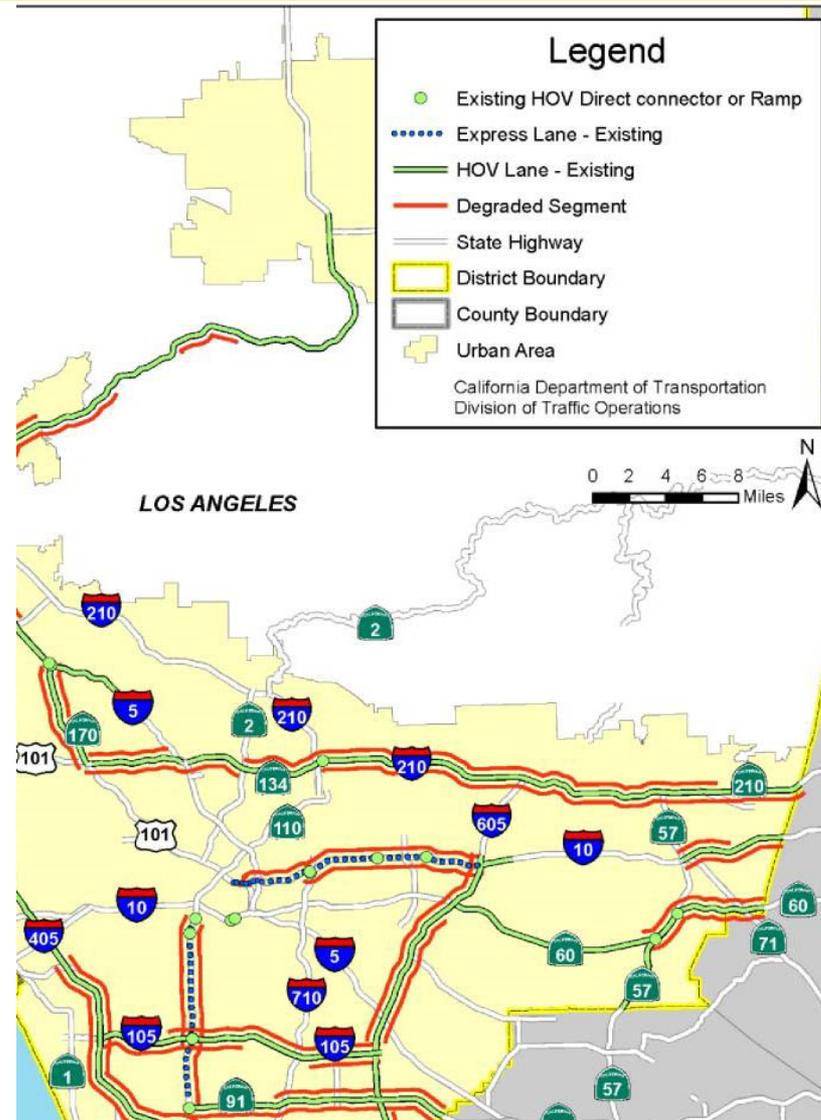


- I-105 experiences heavy demand during peak commute hours that exceeds the freeway's capacity.
- Between 200,000 to 250,000 daily vehicles on an average weekday, some locations as high as 300,000.
- HOV lane is degraded per Federal guidelines (speeds are less than 45 miles per hour during peak periods).
  - It takes 36 minutes to drive the HOV lane eastbound during the PM peak compared to 15 minutes with no congestion.
- Peak period speeds average 25 miles per hour or less in the General Purpose lanes.
  - It takes 43 minutes to drive the corridor eastbound during the PM peak period compared to 15 minutes with no congestion.

# HOV Lane Degradation



- According to the 2017 Caltrans HOV Degradation Report, significant sections of the I-105 HOV lanes are degraded



# Project Purpose

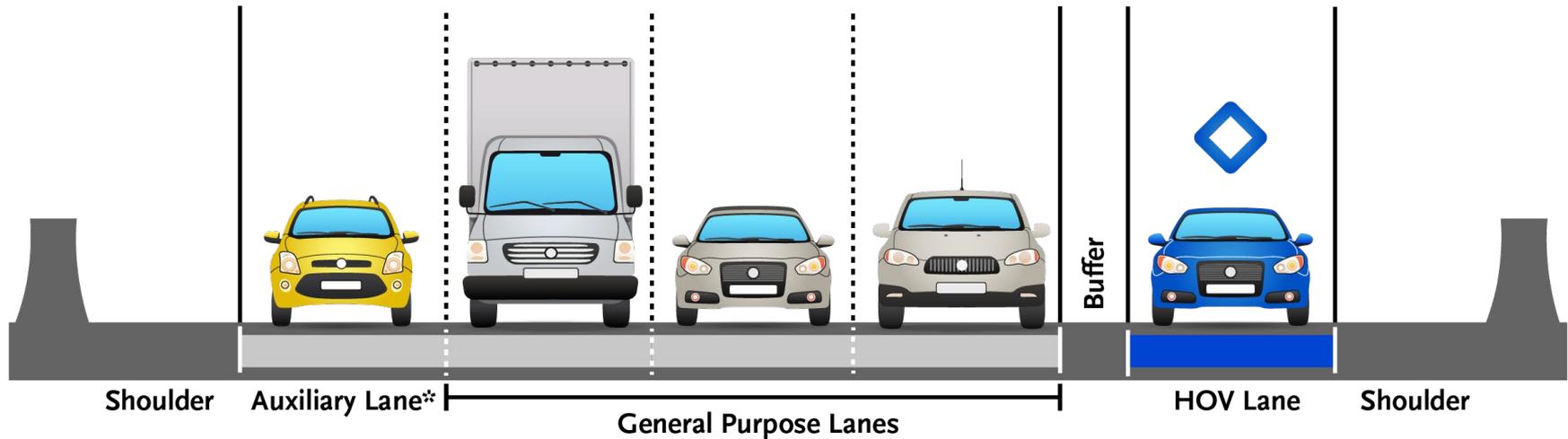


- **Enhance** operations and improve trip reliability and travel times,
- **Improve** traffic flow, and
- **Sustain and proactively manage** mobility within the corridor

# Alternative 1



## Existing Conditions (No Build)



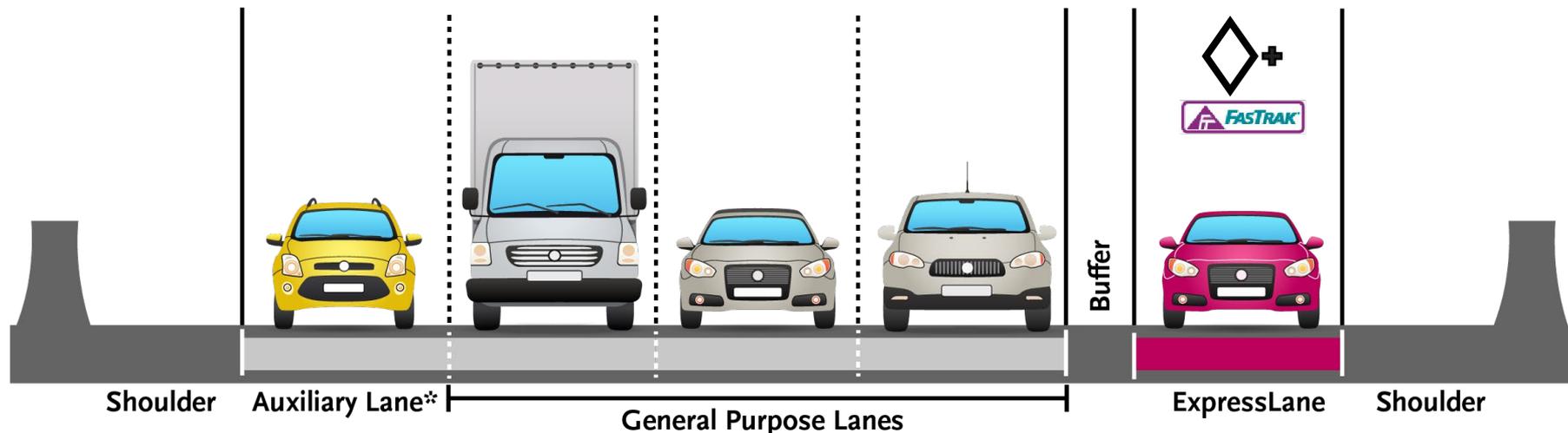
- Graphic illustrates current conditions with no changes
- No additional travel lanes or ramp improvements would be installed

\*Note: Auxiliary Lane is only in certain locations on I-105.

# Alternative 2



## Convert HOV to One (1) ExpressLane (Standard Lane Width)



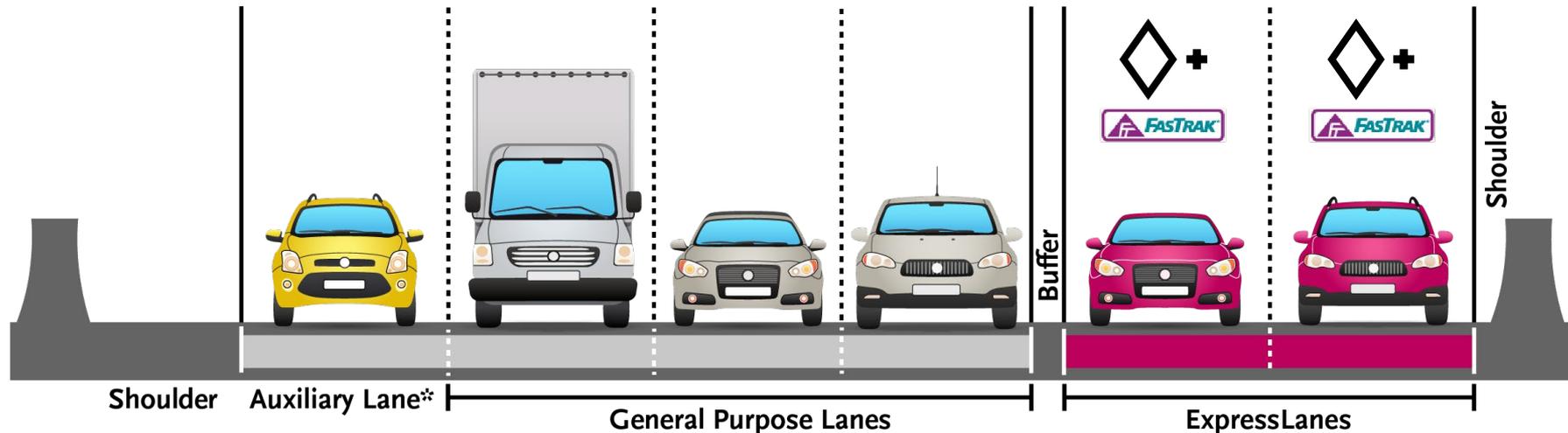
- Convert existing HOV to one (1) ExpressLane in each direction with standard (12 ft) lane width
- Add ExpressLanes toll equipment, signage, pavement markings

\*Note: Auxiliary Lane is only in certain locations on I-105.

# Alternative 3



## Two (2) ExpressLanes (Non-standard Lane Widths)



- Convert existing HOV lane to one (1) ExpressLane and add a second ExpressLane in each direction
- Non-standard lane and shoulder widths
  - Lane could be reduced from 12 ft to 11 ft
- Add ExpressLanes toll equipment, signage, pavement markings
- Potential Limited Right of Way Additions



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\*Note: Auxiliary Lane is only in certain locations on I-105.



# Facility Design



- ExpressLanes will be separated from General Purpose lanes by a double white striped buffer; channelizers possible
- Limited access; will maintain existing ingress/egress locations and add weave lanes at most ingress/egress locations



# Operational Characteristics



For consistency, Metro expects that the operational characteristics for the I-105 ExpressLanes will be **similar to the existing I-10/I-110 ExpressLanes**:

- Operate 24/7
- Utilize dynamic pricing - tolls would vary based on congestion and can refresh as often as every five minutes
- Offer qualifying Clean Air Vehicles a 15% discount
- Enhance transit in the corridor
- Implement the Low Income Assistance Plan, Carpool Loyalty, and Transit Rewards programs
- Occupancy Policy is To Be Determined

- Enforcement will be multi-faceted utilizing technology, facility design, and the California Highway Patrol
- Technology:
  - Enforcement beacons – numeric and beacon display of vehicle occupancy
  - Occupancy detection system – camera system to electronically verify the number of occupants in a vehicle
- Dedicated CHP observation areas and patrols
  - Enforcement beacons co-located with CHP observation areas
- Channelizers to prevent vehicles from crossing double white line

- Caltrans
  - > Preparing and Approving the Environmental Document
  - > Reviewing and approving all design and operation plans, including construction and maintenance activities within state right-of-way.
  - > General maintenance, maintenance of physical infrastructure (pavement, median barriers, structures)
- Federal Highway Administration (FHWA)
  - > Attending regular PDT & ConOps meetings
  - > Reviewing and providing input on Draft documents
  - > 105 ExpressLanes is a “Project of Division Interest” (PODI)

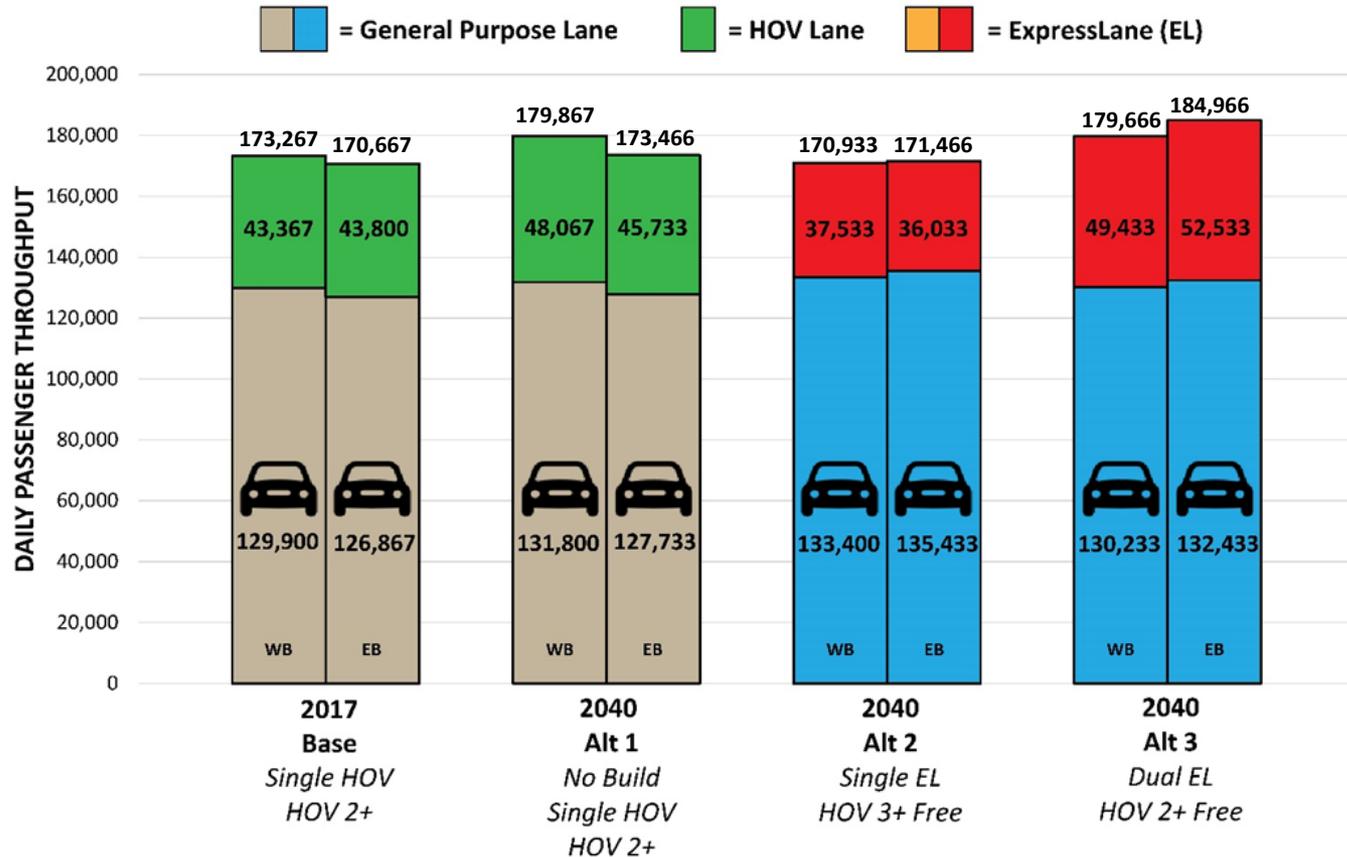
# Performance Benefits



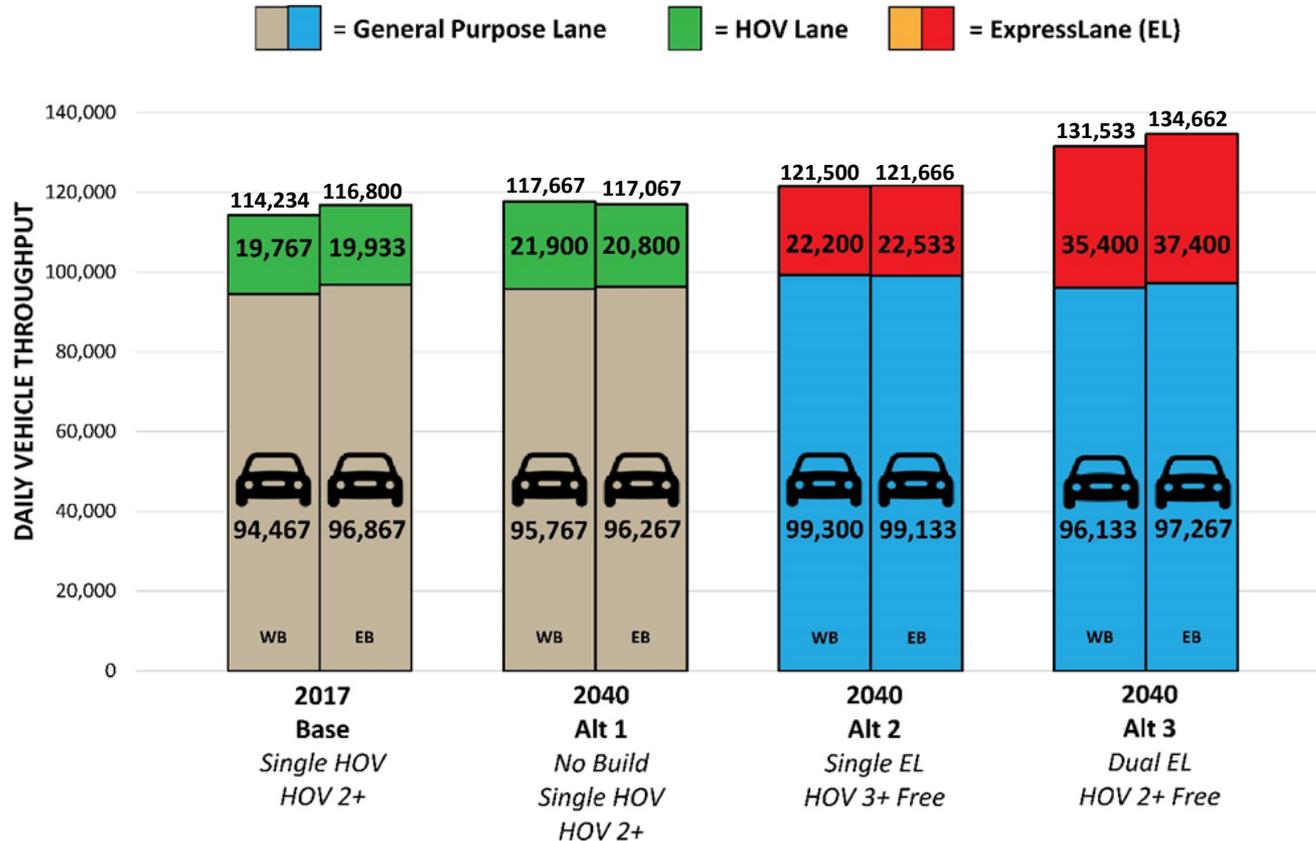
Daily Person Throughput, 2017-2040

	2017 Base	2040 No Build	2017-2040 growth	2017-2040 growth %
General Purpose lanes	256,767	259,533	2,766	1.1%
ExpressLanes	87,167	93,800	6,633	7.6%
Total	343,934	353,333	9,399	2.7%

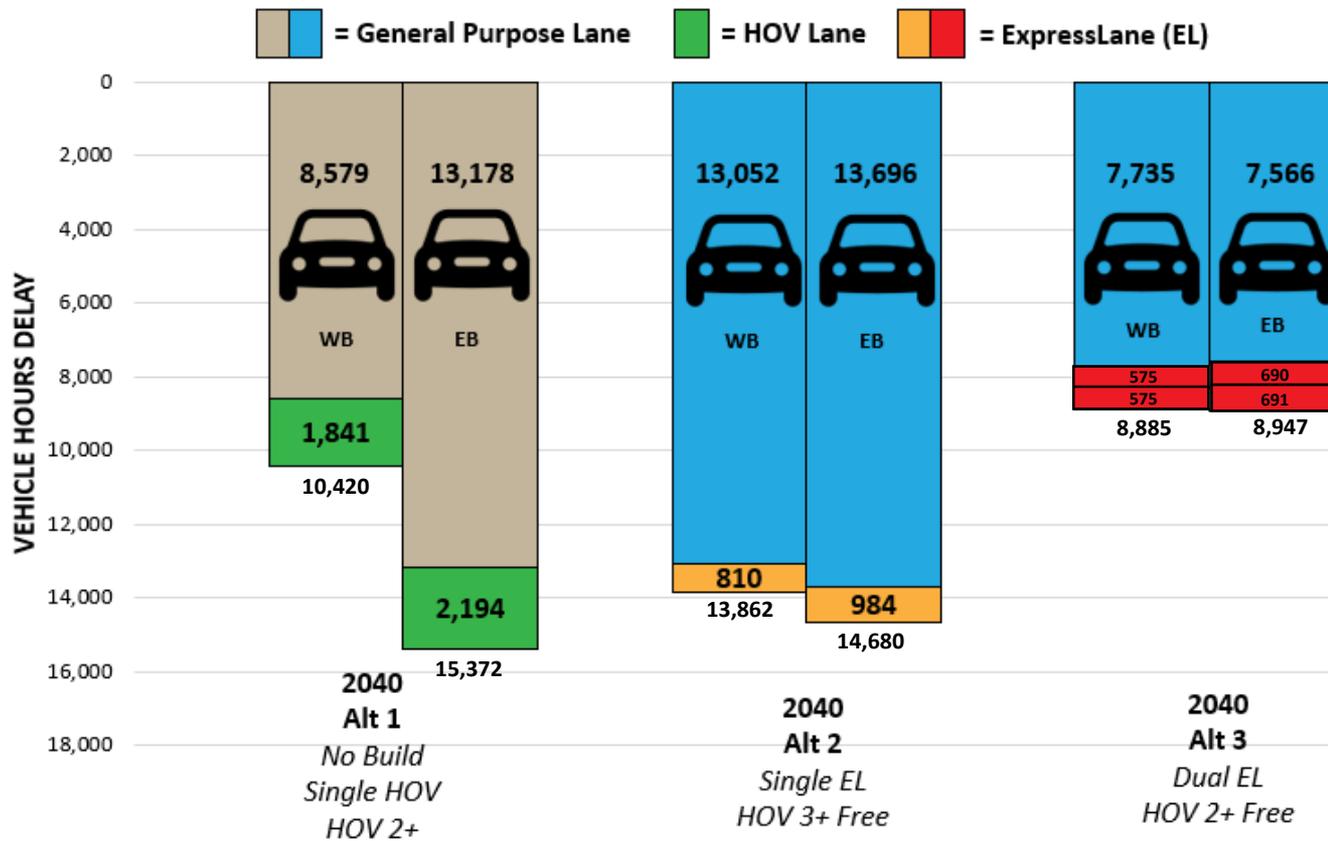
# Daily Person Throughput



# Daily Vehicle Throughput



# Vehicle Hours of Delay



# Travel Time Analysis – GP Lanes



- If ExpressLanes are implemented, the travel time analysis for end to end travel in the General Purpose (GP) lanes shows the following (in minutes):

	2040 No Build	Alternative 2 (convert HOV lane to single ExpressLanes)	Delay/Time Savings (in minutes)	Alternative 3 (convert HOV lane to dual ExpressLanes)	Time Savings (in minutes)
Westbound AM Peak	29	48	19 more	29	0
Eastbound AM Peak	22	19	3 less	17	5 less
Westbound PM Peak	24	21	3 less	18	6 less
Eastbound PM Peak	38	55	17 more	37	1 less

Note:

Alternative 2 assumes HOV3+ free (3 person carpools travel free)

Alternative 3 assumes HOV2+ free (2 person carpools travel free)

# Travel Time Analysis – Expresslanes



- If ExpressLanes are implemented, the travel time analysis for end to end travel in the ExpressLanes shows the following (in minutes):

	2040 No Build	Alternative 2 (convert HOV lane to single ExpressLanes)	Time Savings (in minutes)	Alternative 3 (convert HOV lane to dual ExpressLanes)	Time Savings (in minutes)
Westbound AM Peak	29	17	12 less	18	11 less
Eastbound AM Peak	17	17	0	15	2 less
Westbound PM Peak	22	16	6 less	17	5 less
Eastbound PM Peak	33	17	16 less	18	15 less

Note:

Alternative 2 assumes HOV3+ free (3 person carpools travel free)

Alternative 3 assumes HOV2+ free (2 person carpools travel free)

# Summary of Performance Benefits



## Alternative 2

- Addresses existing HOV lane degradation and would restore HOV lane performance to meet Federal standards
- Modest improvement in vehicle throughput
- Mixed benefit for vehicle delay

## Alternative 3

- Addresses existing HOV lane degradation and would restore HOV lane performance to meet Federal standards
- Reduces daily Vehicle Hours of Delay by 30.9% and travel time for both the ExpressLanes and General Purpose Lanes
- Increases passenger throughput by 3.2%
- Increases vehicle throughput by 13.4%

- **Project Approval/Environmental Document (PA/ED)**
  - › Project Report
  - › Environmental Impact Report (EIR),  
pursuant to California Environmental Quality Act (CEQA)
  - › Environmental Assessment (EA),  
pursuant to National Environmental Policy Act (NEPA)
  - › Caltrans is the CEQA/NEPA Lead Agency for EIR/EA
- Determined to **not** be a “Project of Air Quality Concern” by the SCAG Transportation Conformity Working Group (TCWG)
  - TCWG composed of EPA, FHWA, and Caltrans

# Funding Plan



Source	Project Development	Construction	Total
CMAQ	\$2,607	\$0	\$2,607
Metro Sales Tax Funds	\$62,907	\$0	\$62,907
Other Federal or State Funding	\$0	\$125,000	\$125,000
Other Local/Toll Revenue-Backed Obligations	\$0	\$330,390	\$330,390
<b>Total Programmed</b>	<b>\$65,514</b>	<b>\$455,390</b>	<b>\$520,904</b>

- The current estimated project cost for Alternative 3 (dual ExpressLanes) is \$520,904,000
- The Measure M local sales tax provides \$175M for the project. Some of these funds will be used for project development and the remainder will be used to repay the toll revenue-backed obligations
- “Other Federal or State Funding” may include SB1 grants or other federal grants.

Event Type	Number of Events
Agency and Jurisdictional Briefings	22
Business Roundtable	1
Community Events	26
Pop-Up Booths	4
Presentations	6
Public Meetings	7
Stakeholder Briefings	5
Stakeholder Roundtables	3

- As part of the PA/ED, Metro and Caltrans have initiated an extensive and ongoing outreach program to inform and engage stakeholders in the I-105 corridor.
- To date, 74 meetings, presentations, and outreach events have taken place for this project since February 2018

# Public Meetings



- **Scoping Meetings**
  - › 1 agency and 3 scoping meetings in March 2018
    - Lennox, Watts, and Paramount
- **Stakeholder Roundtable meetings**
- **Community Update Meetings**
  - › Held in April 2019
- **Business Roundtable**
  - › Held in August 2019
- **Public Hearings**
  - › Public hearings will be held when the draft EIR/EA is released

# Outreach Methods



- **Website:** [metro.net/105expresslanes](http://metro.net/105expresslanes)
  - > Contains fact sheets, FAQs, recordings of scoping and community update meetings
- Project email: 105expresslanes@metro.net
- Project hotline: 213.922.6565
- E-blasts – current stakeholder database of almost 2,100 entries
- Social media outreach – targeted ads using Facebook
- Direct mailing within 750 ft. on both sides of the I-105
- Newspaper Advertisements (print and digital)
- Metro Green Line park and ride lots (10) flyer drops

# Implementation Schedule



<b>Project Initiation Document</b>	September 2015
<b>Project Scoping</b>	April 2018
<b>Submit application for tolling authority to CTC</b>	Summer 2019
<b>Draft Environmental Document Circulation</b>	Fall 2019
<b>T&amp;R Investment Grade Study</b>	Fall 2019
<b>Draft Concept of Operations</b>	Fall 2019
<b>Final Environmental Document (EIR/FONSI) Approval</b>	Summer 2020
<b>Project PS&amp;E</b>	Summer 2021
<b>Right of Way Certification</b>	Fall 2021
<b>Release RFP (Ready to List)</b>	Spring 2022
<b>Construction NTP</b>	Fall 2022
<b>Substantial Completion</b>	December 2024
<b>Project Complete</b>	March 2025

# Thank You!

