

I-5 South Construction Projects



Metro

Gateway Cities Transportation Summit
February 9, 2018

I-5 South Construction Projects



- Improve access, efficiency, and integration of multi-modal transportation system
- Improve safety and system performance
- Substantially increase capacity to handle forecasted traffic demands
- Expand the HOV system along Interstate 5 from SR-14 to SR-134 and from the Orange County line to I-605
- Enhance community sustainability and livability by improving air and noise quality



Metro

I-5 South Construction Projects



Segment	Length (Miles)	Scope of Work
Carmenita Rd. Interchange	1.5	❖ Freeway widening to 10 lanes including an HOV lane in each direction ❖ New 10-lane Carmenita bridge with a new railroad grade separation ❖ Realignment of frontage roads: Firestone Boulevard, Freeway Drive, Carmenita Road, Arctic Circle, Molette Street and Excelsior Drive.
Alondra Blvd (Segment 1) North Fork Coyote Creek to Marquardt Avenue	1	❖ Freeway widening to 10 lanes including an HOV lane in each direction ❖ Reconstruct Alondra Boulevard overcrossing bridge
Valley View Ave (Segment 2) Artesia Boulevard to North Fork Coyote Creek	1	❖ Freeway widening to 10 lanes including an HOV lane in each direction ❖ Reconstruct Valley View Avenue Interchange
Rosecrans Ave (Segment 3) Shoemaker Avenue to Silverbow Avenue	1	❖ Freeway widening to 10 lanes including one HOV in each direction ❖ Reconstruct Rosecrans and Bloomfield Avenue Bridges
Imperial Hwy (Segment 4) Silverbow Avenue to Orr and Day Road	2	❖ Freeway widening to 10 lanes including one HOV in each direction ❖ Widen Imperial Highway, Pioneer Boulevard, and Norwalk Blvd bridges
Florence Ave (Segment 5) Orr and Day Road overhead crossing to the San Gabriel River Freeway (Interstate 605) bridge	1	❖ Freeway widening to 10 lanes including one HOV in each direction ❖ Widen structures at Florence Avenue and Orr and Day Road and reconfigure Florence Avenue Interchange.
	7.5	

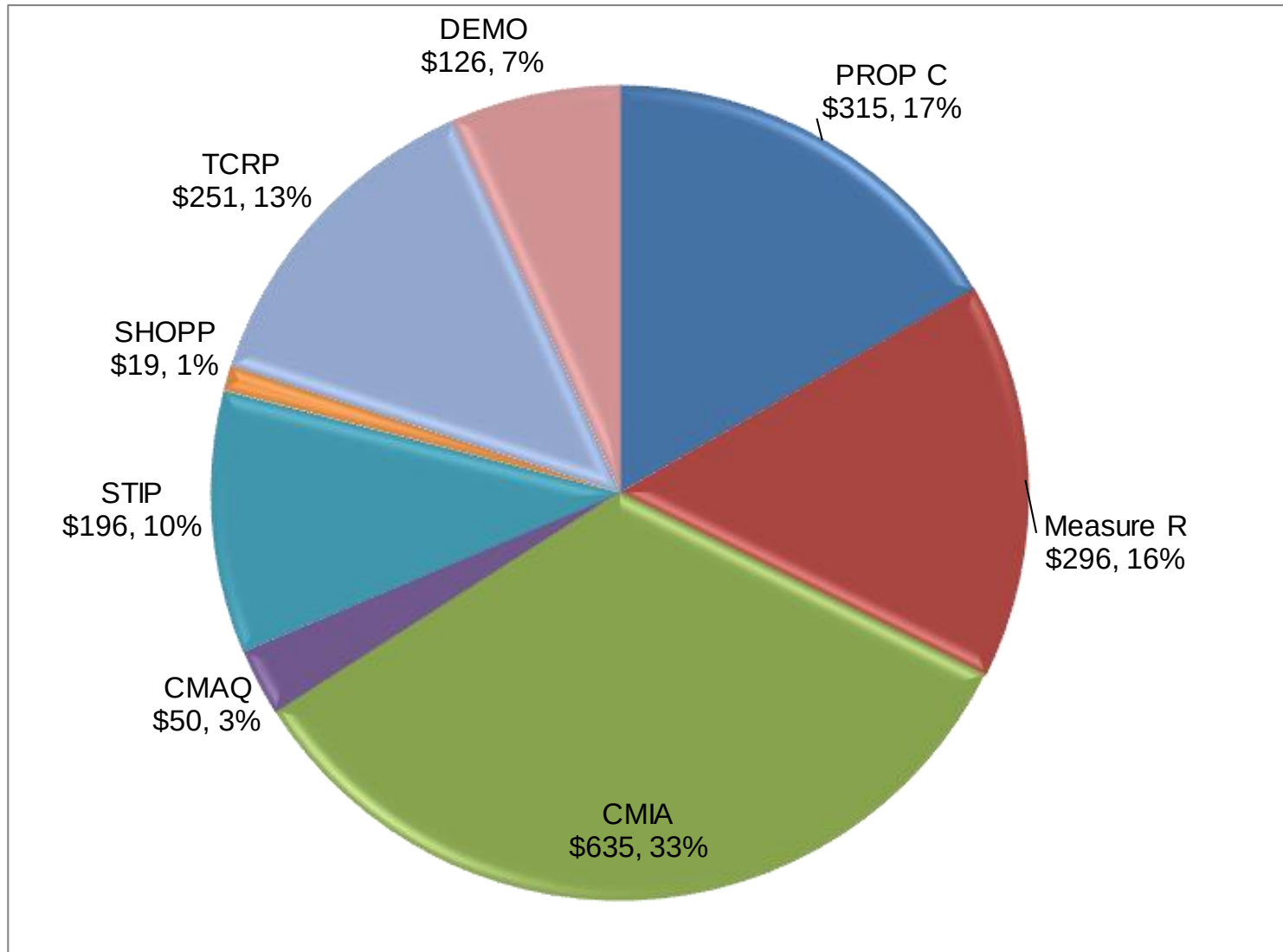
I-5 South Construction Projects



SEGMENT	Scheduled Completion	% Completed To Date	Risk	Current Issues
Carmenita Rd. Interchange	Completed	100%	N/A	R/W close out process
Alondra IC (Segment 1)	Completed	100%	N/A	R/W Mitigation Work
Valley View Ave. IC (Segment 2)	Late 2022	24%	Yes	- Utilities relocations Delay(Water, Power, Gas and Gasoline) - Slab Bridge Redesign Delay
Rosecrans IC (Segment 3)	Early 2019	97%	Yes Low	Claims
Imperial Hwy IC (Segment 4)	Late 2019	78%	Yes High	- Claims (R/W Delay, Utilities relocations) - Delayed by Florence Project – 9 months
Florence Ave. IC (Segment 5)	Late 2020	60%	Yes High	- Utilities Relocations - Orr & Day Bridge Demolition Delay - Noise and vibration mitigation

I-5 South Construction Projects

Fund Sources



I-5 South Construction Mitigation Projects

In late 2009, I-5 JPA developed a list of projects on local streets to mitigate the impacts of the I-5 South project construction. These projects were submitted in 2 separate lists.

- List 1: \$6.645 million in mitigations. Approved by Metro Board. 100% Completed
- List 2: \$14.1 million. Approved by Metro Board. 97% Invoiced
- Additional need TBD

Mobility. Environment. Community. Economy. Technology



I-710 Corridor Project EIR/EIS

metro.net

I-710 Project Update

Gateway Cities Transportation Summit

February 9, 2018



Metro[®]



THE PORT OF LOS ANGELES 

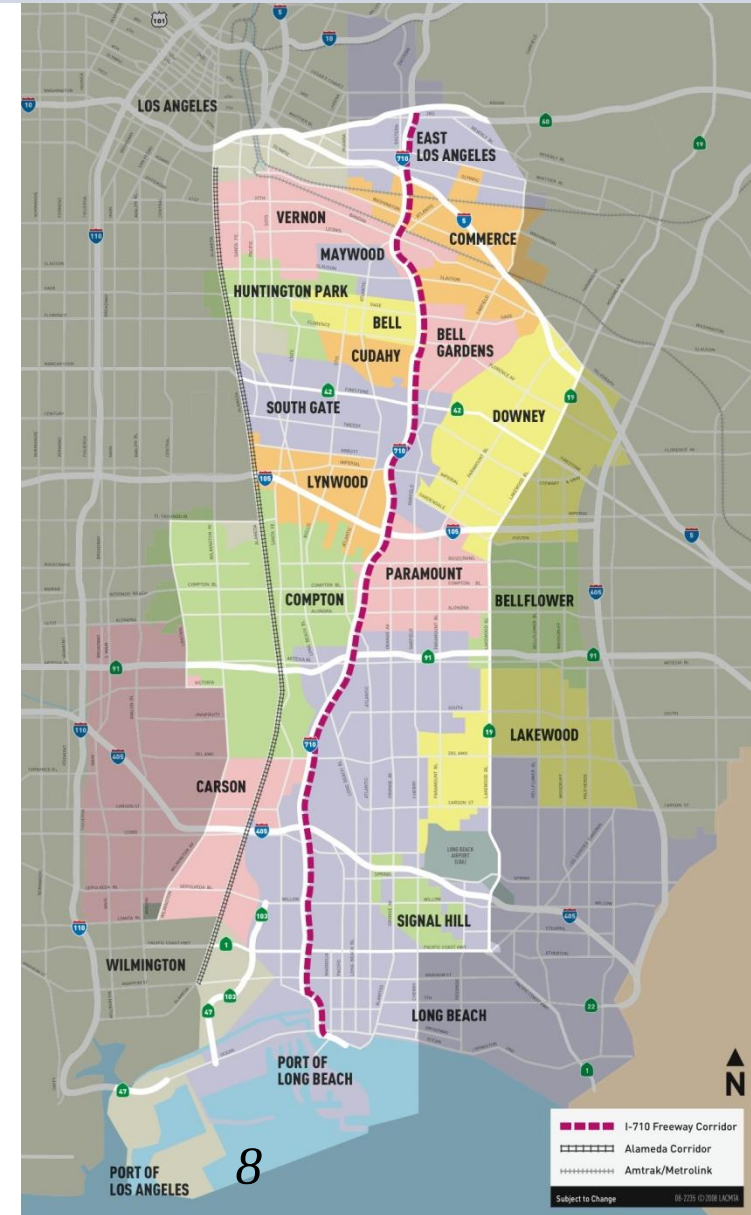


I-710 Study Area

- 19 miles
- 16 Cities / Communities
- Multi-Agency Partnership
- Community-Driven Process
- Focus on Green Technology
- Context-Sensitive Design
- Funding Sources
 - Measure R - \$590 Million
 - Measure M - \$500 Million
- \$65 Million spent to date on Environmental Phase



Metro



I-710 Remaining Alternatives

Alternative 1: Future Travel Conditions without
(No Build) Further Transportation Improvements

Alternative 5C: Improves capacity, enhances safe
operation, and modernizes the freeway
(\$6 Billion)

Alternative 7: All improvements under Alt. 5C + a
“Clean Emission” Freight Corridor
(\$10 Billion)

Typical Sections

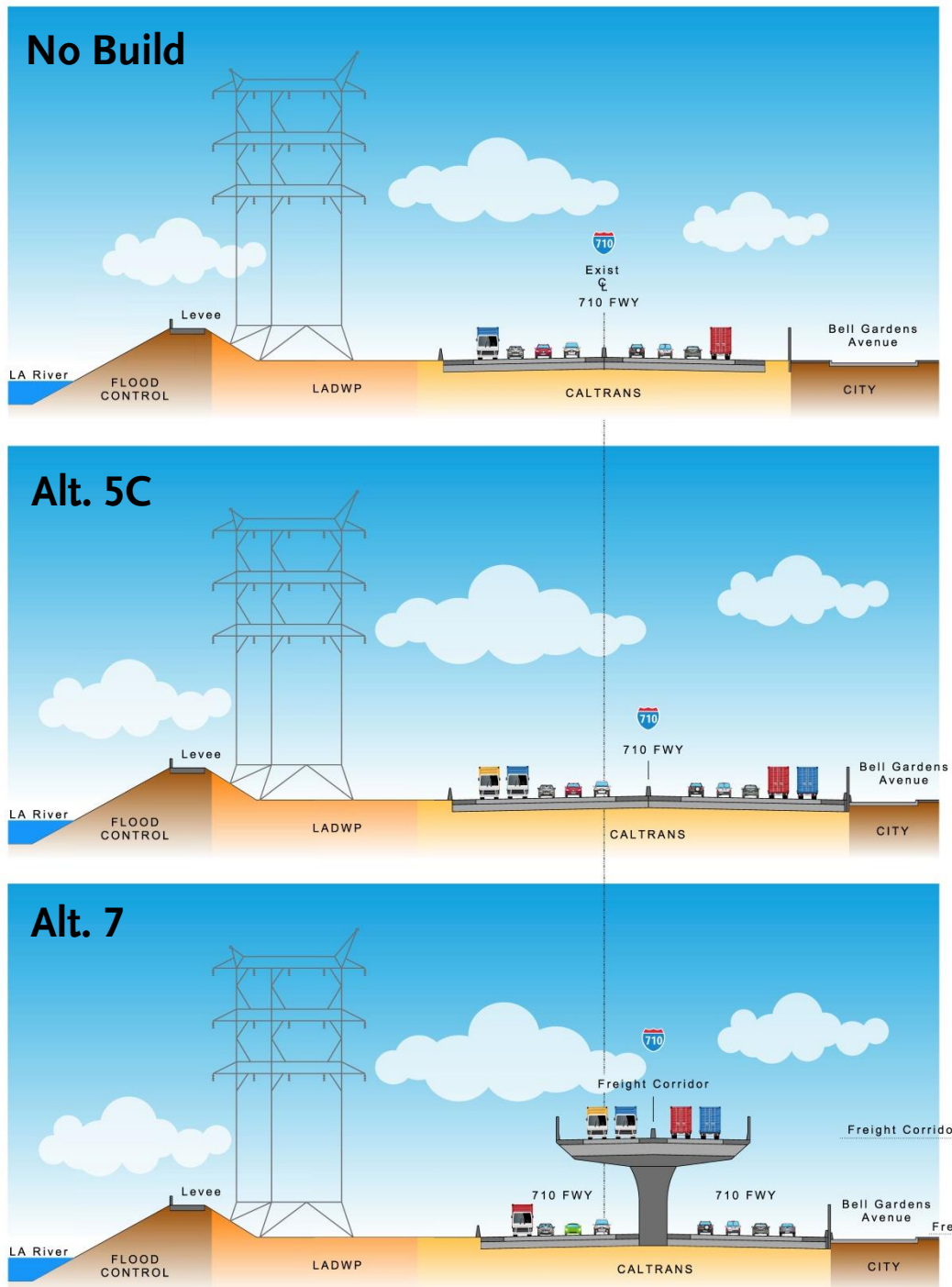
Between Firestone Blvd. and
Florence Ave.

For illustrative purposes

Configuration varies
throughout the corridor



Metro



I-710 Build Alternatives

Both Alternative 5C and Alternative 7 include:

- Assumption of maximum goods movement by rail
- TSM/TDM/ITS improvements
- Transit improvements
- Active transportation improvements (bike / ped. connections)
- Consideration of a Public-Private Partnership (PPP) for financing, delivery, and operation
- I-710 Zero-/Near Zero- Emissions truck deployment program
- I-710 Community health & benefit programs

Motion 22.1 – Considerations for Maximizing Benefits

Completed and Integrated

- Evaluated right-of-way avoidance designs (Alternative 7)
- Considered ZE Truck–Only option for freight corridor (Alternative 7)
- Evaluated high frequency express bus transit along I-710
- Evaluated separate bike path projects within the Study Area
- Integrated five new pedestrian/bike bridges
- Verified application of Complete Streets treatments
- Considered other elements to maximize mobility and minimize impacts within study area

To Be Done During Construction

- Transit Incentives
- Local Hire Provisions
- Bike/Ped Safety Plan



Metro

Public Circulation

- July 21, 2017: Recirculated Draft Environmental Document released to public
 - October 23, 2017: 90-day comment period closed
 - Public Hearings:
 - 8/23/17 Commerce
 - 8/26/17 Paramount
 - 8/31/17 Long Beach
-
- Community Briefings:
 - 10/18/17 East Los Angeles
 - 10/19/17 Long Beach



Summary of Public Comments

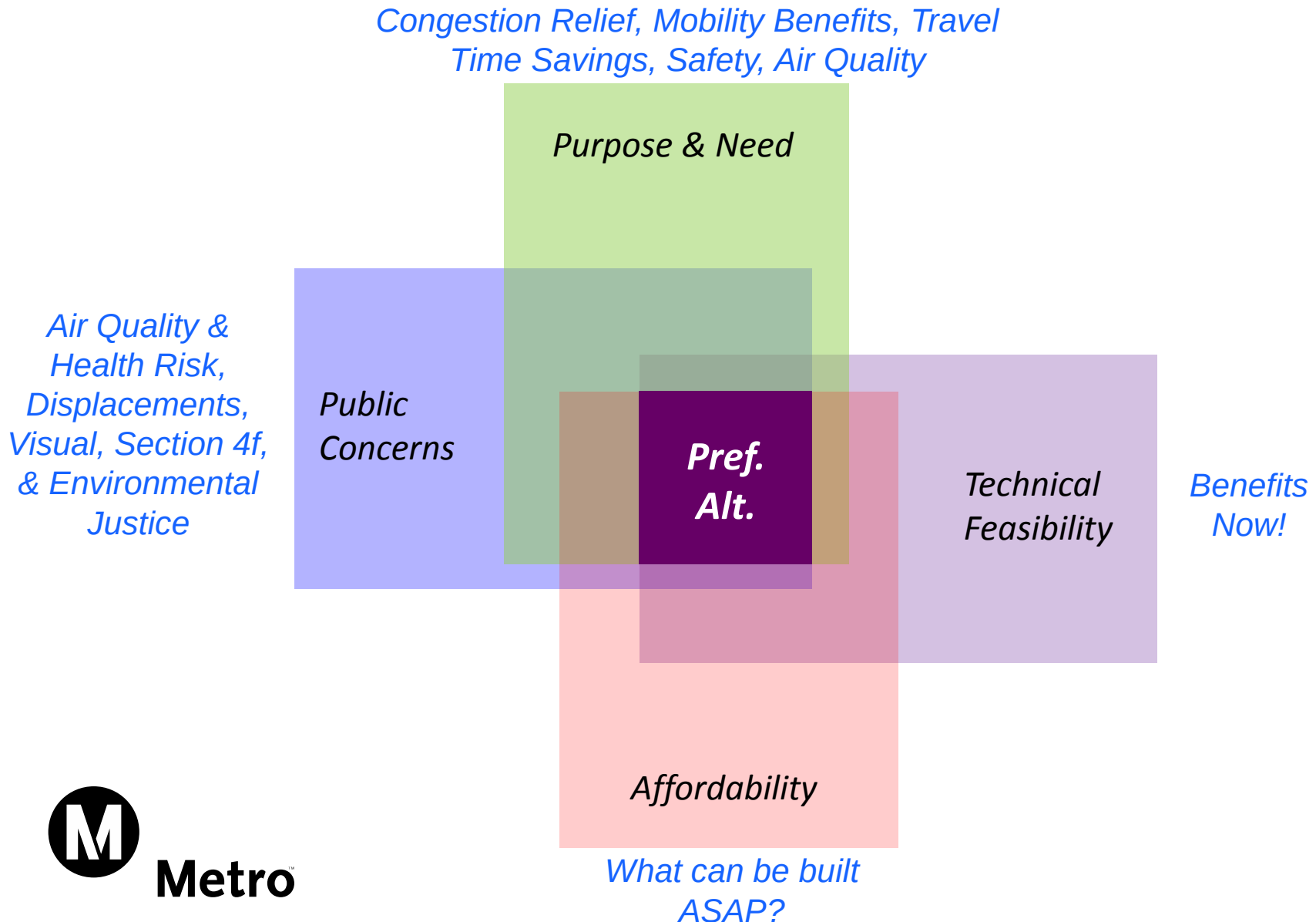
Key Issues & Concerns:

- Regardless of Alternative Selected, Preference for full Zero Emissions Technologies
- Right-of-Way Impacts (i.e. avoid residential relocations and impacts to Bell Shelter and Long Beach Multi-Service Center)
- Concerns about peak-hour parking restrictions on nearby streets
- Duration of construction and impacts including ramp and street closures
- Need for more bike and pedestrian connections to LA River trail



- Environmental justice and air quality concerns for communities near I-710
- Need to include local hire provisions (in construction)
- Need to fully utilize freight rail and the Alameda Corridor

How is the Preferred Alternative Determined?



Comparison of Benefits and Impacts

		Evaluation Factor	Measure	Alternative 5C	Alternative 7
Benefits	Mobility Benefits		Reduction in Vehicle Hours of Delay		
	Congestion Relief		Improvement in I-710 Level of Service (LOS)		
	Travel Time Improvements		I-710 Auto / Trucks		
	Safety Benefits		Freight Corridor - Trucks		
	Safety Benefits		Removes Operational Conflicts		
	Air Quality		Separates Cars & Trucks		
	Air Quality		Diesel Particulate Matter and Nitrogen Oxides (NOx)		*
	Air Quality		Least Amount of PM 2.5		
	Air Quality		Greenhouse Gases		



Metro

* Assumes incentive funding for 18,350 ZE/NZE Trucks to use the Freight Corridor (compared to 4,000 ZE/NZE Trucks under Alt. 5C). Incentive funding would be pursued under either alternative, but it's subject to availability.

Best

Comparison of Benefits and Impacts, cont.

Evaluation Factor		Measures	Alternative 5C	Alternative 7
Impacts	Parks, rec. areas, refuges, and historic sites	Partial Impacts		
		Full Impacts		
	EJ Impacts	Least Adverse Effect to EJ Populations		
	Visual Impacts	Fewest Visual Impacts		
	ROW Impacts	Residential Displacements		
		Business Displacements		
		Sensitive Facilities Displacements		
Cost	Air Quality Cost Benefit	\$ per lbs. Diesel Particulate Matter Reduced		
		\$ per lbs. NOx Reduced		
	Cost / Affordability	Total Project Cost		
		Affordability	*	
	Constructability	Possible phasing and implementation of Early Action Projects		

* Based on implementation of Early Action Projects

Comparison of Benefits and Impacts, cont.

Visual Impacts



View from LARIO Trail, Looking Southwest at the I-710/SR-91 Interchange, in the City of Long Beach

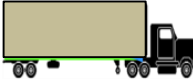
Right of Way Impacts

	Homes	Businesses
Alt. 5C	109	158
Alt. 7	121	206



Metro

Compare NZE & ZE Truck Performance

	Conventional Diesel Truck 	Near Zero Emission Truck 	Zero Emission Truck 
			
Diesel Particulate Matter* (DPM) (lb/10,000 miles)	0.12	0	0
Nitrogen Oxides* (NO _x) (lb/10,000 miles)	38.7	3.9	0
Greenhouse Gases* (GHG) (MT CO ₂ /10,000 miles)	15.1	15.1	0
Subsidy: per Truck**	\$ 0	\$25,000	\$65,775
Number of Trucks per \$100 million of Funding	N/A	4,000 Trucks	1,520 Trucks

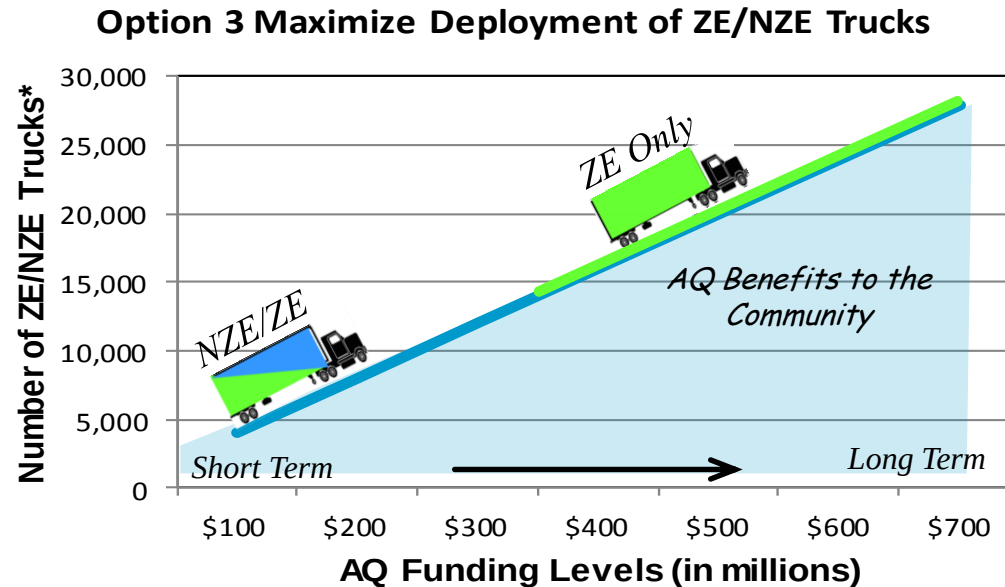


Metro

* Running Exhaust emission factors are based on EMFAC2014 for heavy-heavy duty trucks in Los Angeles County for calendar year 2035.

** Unit costs represent incremental, average costs of zero emissions trucks (battery electric, fuel cell vehicles) from I-710 Zero Emissions Truck Commercialization Study, assuming pre-2035 deployment (Calstart, 2013).

I-710 ZE/NZE Deployment Strategy



Maximize Number of “Clean Emissions” Trucks and Air Quality Benefits

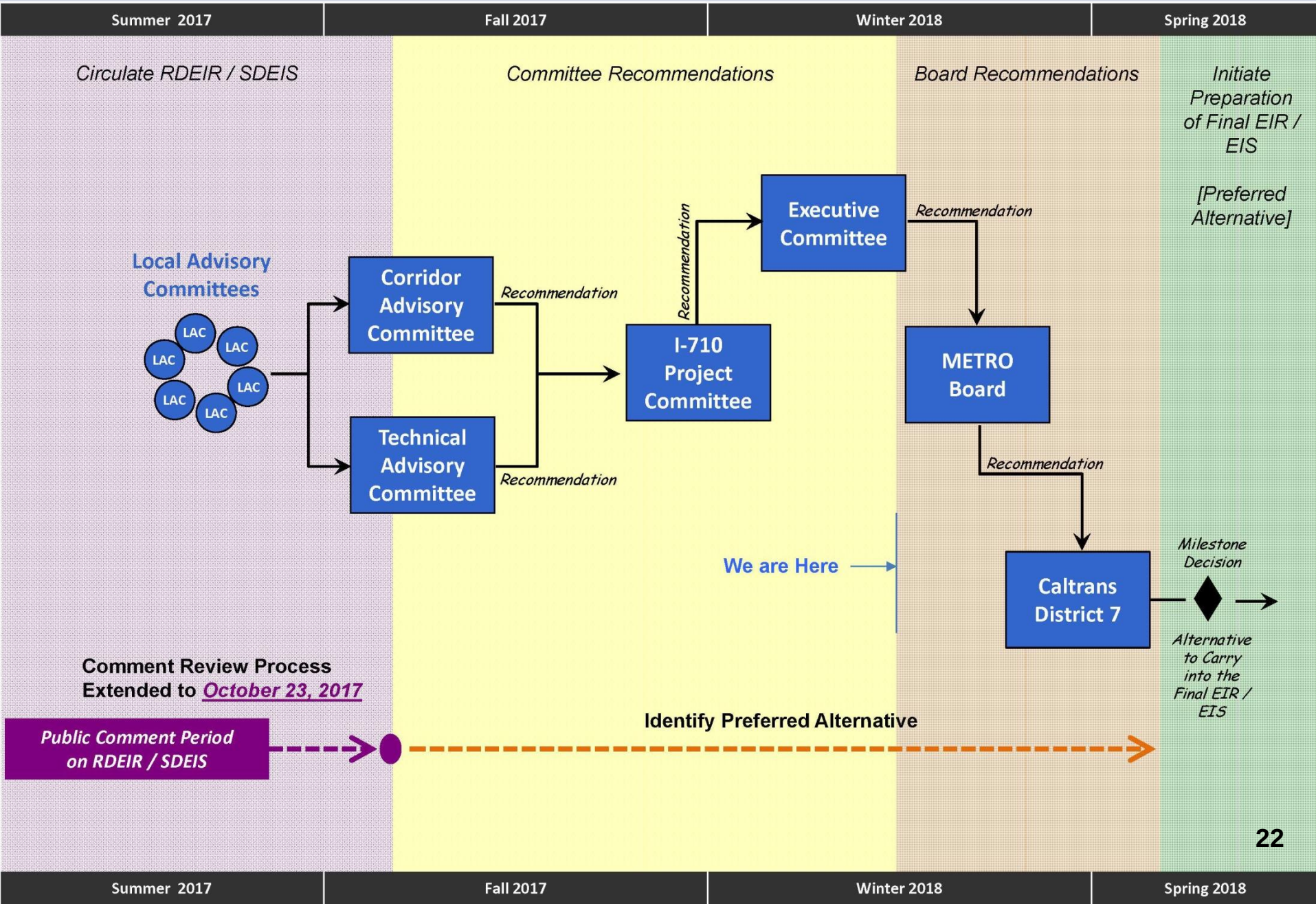
- *Begin with mix of zero and near zero emission trucks in the near term*
- *Transition to zero emission trucks in the future years, as zero emission truck technologies become commercially available and as unit prices drop.*
- *Partner with SCAQMD, EPA, CARB to pursue grant funding outside of the project programmed funds to support health-benefit investments.*



Metro

Project Schedule: What's Next?

Major Milestone: Select Alternative



Next Steps

Winter 2018

- *Metro Board to adopt the Preferred Alternative for FEIR/FEIS*
- *Initiate Work on FEIR/FEIS for Preferred Alternative*
- *Coordinate with Air Agencies to:*
 - *Refine and Enhance I-710 Zero and Near Zero Emissions Truck Program*
 - *Develop and Seek AQ Funding*

Spring 2018

- *Identify scopes and order of pursuit of Early Action highway improvement projects based on Independent Utility, Benefits, and availability of funds*

Summer 2018

- *Complete the Environmental Process*
- *Caltrans to approve the Final Environmental Document*

Winter 2019

- *Release RFPs for Final Design of Early Action Projects*



Metro



“Hot Spots” Program



Metro

Gateway Cities Transportation Summit
February 9, 2018



“Hot Spots” Program

Program Summary

- 2012 Feasibility Study
- Identified congestion “hot spots” along I-5, SR-91, I-405, and I-605
- Freeway widening/additional lanes, ramp reconfigurations, arterial intersection enhancements, signage, and safety features
- Planning studies and environmental documents are in progress for various projects
- Estimated total cost of projects in the corridor: \$5+ billion
- Measure R Funding: \$590 Million
- Measure M Funding: \$ 1 Billion

INTERSTATE

5

CALIFORNIA

91

INTERSTATE

CALIFORNIA

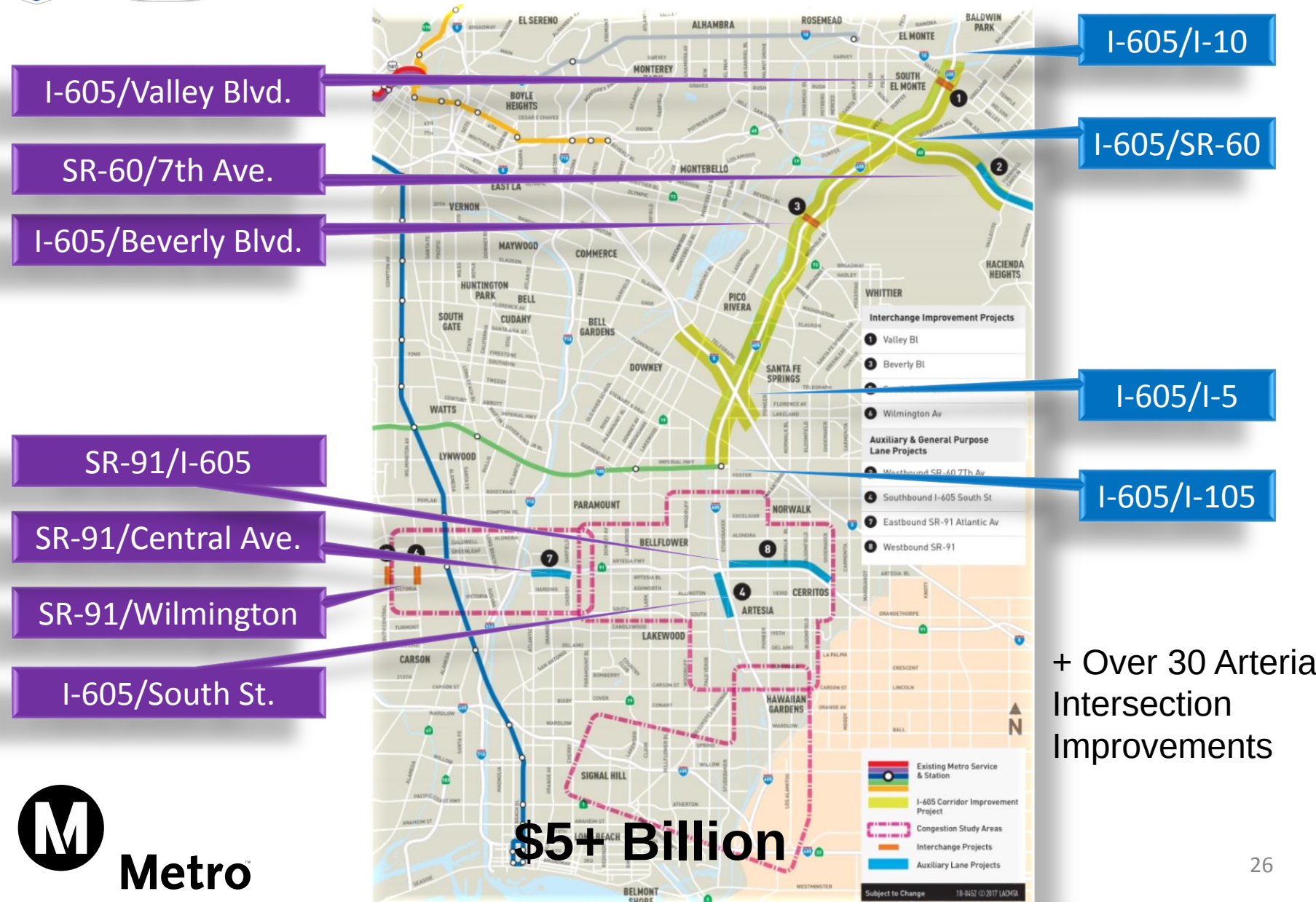
405

INTERSTATE

CALIFORNIA

605

“Hot Spots” Program





“Hot Spots” Program

Early Action Projects

Freeways

- Seven Projects ranging from \$12-\$80 million
- Interchange improvements and auxiliary lanes
- Simple environmental clearance (e.g. CE)
- Timeline: 3-5 years

Arterials

- \$136 Million allocated in Measure R— more funds in Measure M
- \$84.5 Million programmed to date (30+ projects)
- Metro or local agencies will advance the projects
- All local project construction by local agencies

I-605 Corridor Improvements



Project Goals

- Ease congestion and improve overall throughput
- Improve freeway/interchange operations, connectivity, mobility, and travel times
- Enhance safety

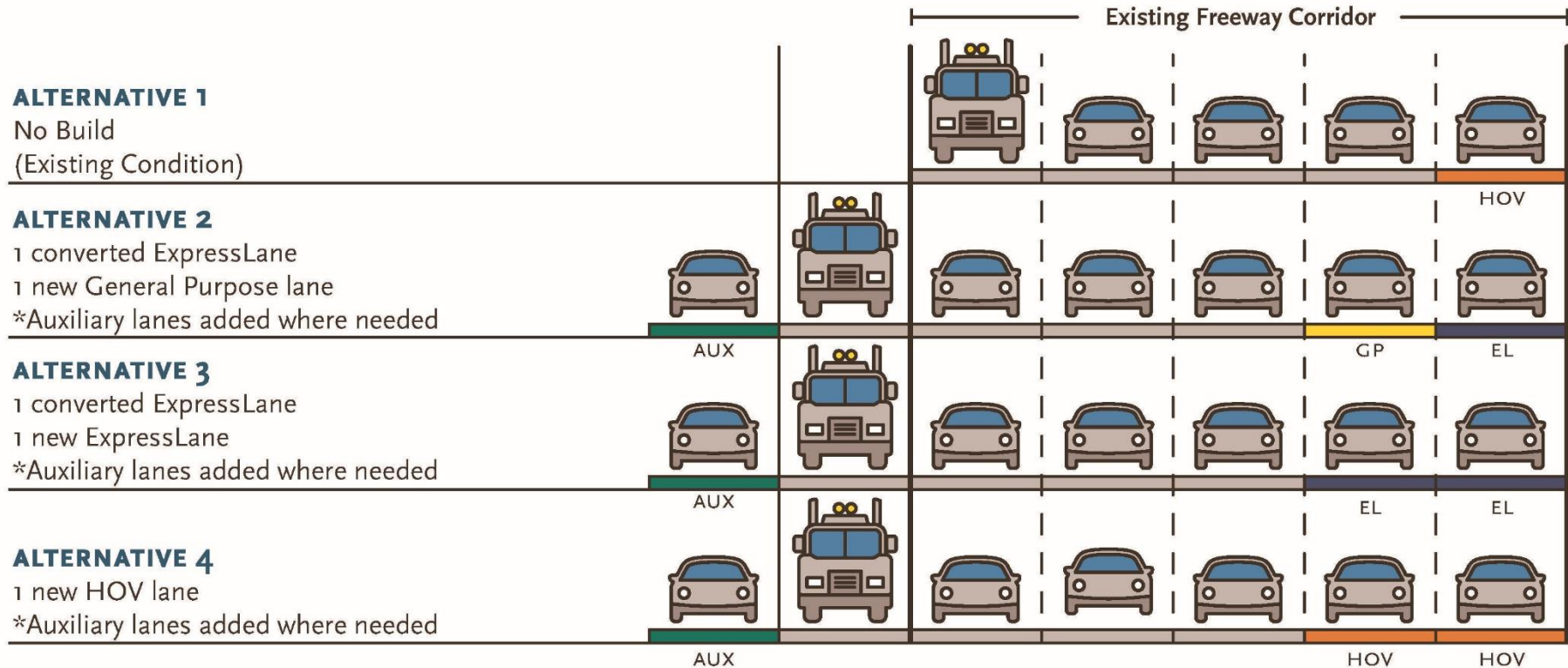
Timeline

- Fall 2015: I-605 Corridor EIR/EIR started
- December 2016: Scoping comments by the Environmental Protection Agency (EPA) requested consideration of ExpressLanes
- January 2017: Metro Board of Directors approved the Countywide ExpressLanes Strategic Plan
- October 2017: Inclusion of ExpressLanes in the I-605 EIR/EIS Build Alternatives

I-605 Corridor Improvements



Proposed Alternatives: I-605



I-605 Corridor Improvements



Proposed Improvements

I-605 Improvements:

- Add one NB and one SB lane either as a general purpose, HOV, or express lane
- Add auxiliary lanes as needed between on- and off-ramps
- Improvements to interchanges

SR-60 Improvements:

- WB SR-60: Add one GP lane from I-605/SR-60 Interchange to Hacienda Blvd.
- EB SR-60: Add one GP lane from I-605/SR-60 Interchange to 7th Ave.
- WB SR-60: Add auxiliary lanes ahead of the I-605/SR-60 interchange

I-5 Improvements:

- NB and SB: Add new HOV lanes from Florence Av to Rio Hondo Channel
- Add auxiliary lanes as needed between on- and off-ramps
- Improvements to interchanges

I-605 Corridor Improvements



HOV/EL Direct Connectors Being Considered

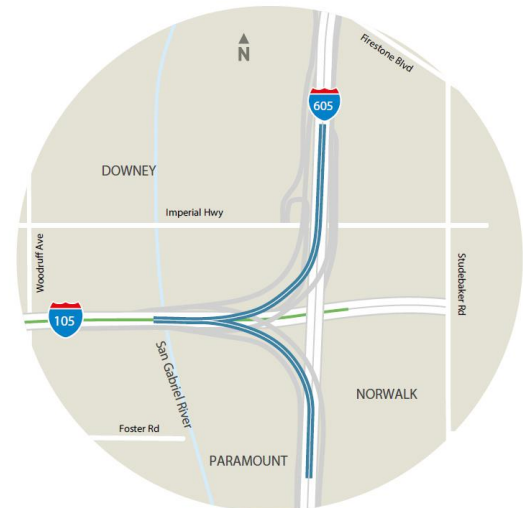
I-605/I-10 Direct Connectors:

- Add HOV or Express Lane direct connector from north I-605 to west I-10 with reverse movement



I-605/I-105 Direct Connectors:

- Add HOV or Express Lane direct connectors from north I-605 to west I-105 with reverse movement
- Add HOV or Express Lane direct connector from south I-605 to west I-105 with reverse movement



I-605 Corridor Improvements



Key Milestones: Environmental Process

WE
ARE
HERE

PUBLIC
SCOPING
PERIOD
COMPLETED
FALL 2016

ENVIRONMENTAL
ANALYSIS
& TECHNICAL
STUDIES
2017-2019

RELEASE OF
DRAFT EIR/EIS &
PUBLIC HEARING
FALL 2019

RESPOND TO
COMMENTS &
SELECT PREFERRED
ALTERNATIVE
SPRING 2020

FINAL
EIR/EIS & RECORD
OF DECISION
SPRING 2021

PUBLIC INVOLVEMENT



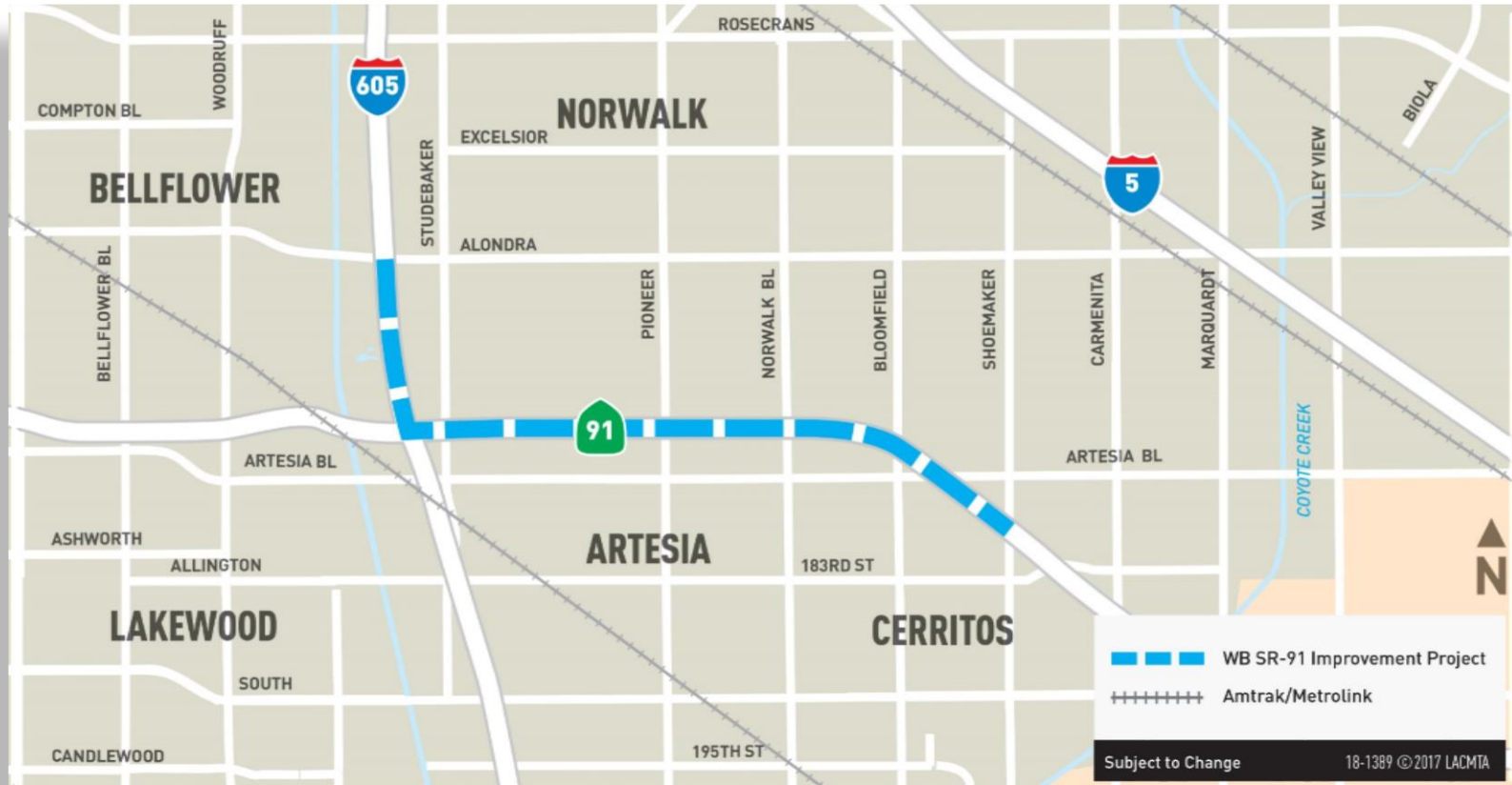
Community Outreach

- Conducted 6 public Scoping Meetings and 2 Agency Scoping Meetings in October and November 2016
- Provided project update briefings to:
 - Cities in the project area
 - State and Federal elected officials in the Gateway Cities region
 - Agencies
- Held Community Update Meetings on February 6, 7, and 8, in Pico Rivera, Norwalk, and Whittier

WB SR-91 Improvements Project

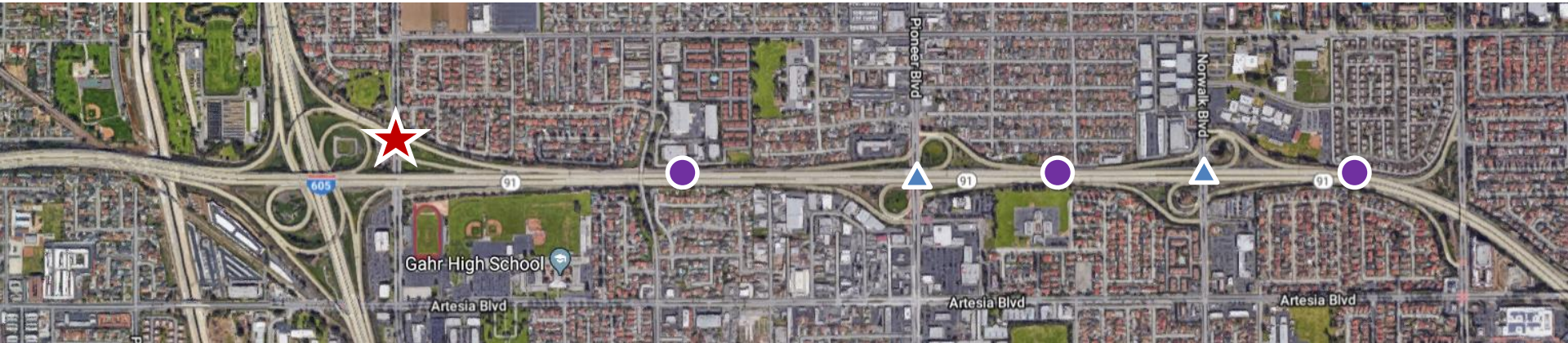


Project Limits



- Approximately 3 miles long
- From Shoemaker Ave. to the I-605/SR-91 Interchange and continuing up the I-605 to Alondra Blvd.
- Includes improvements on Pioneer Blvd., Norwalk Blvd., Bloomfield Ave., and Artesia Blvd.

Existing Conditions



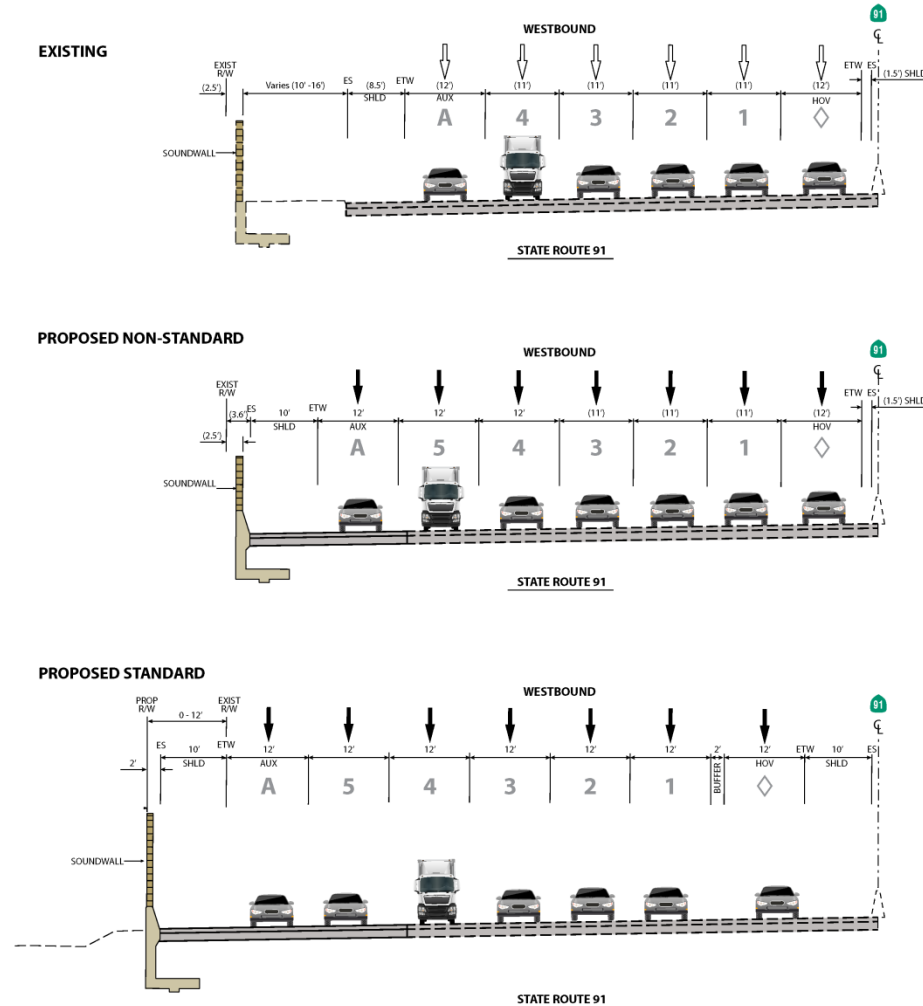
- ★ Westbound SR-91 to the I-605 connector ramp is heavily congested
 - 2 lane connector from westbound SR-91 splits to 1 lane southbound I-605 and 1 lane northbound I-605
- Short weave (merge) distance between each on- and off-ramp
- ▲ Deficient ramp configuration

WB SR-91 Improvements



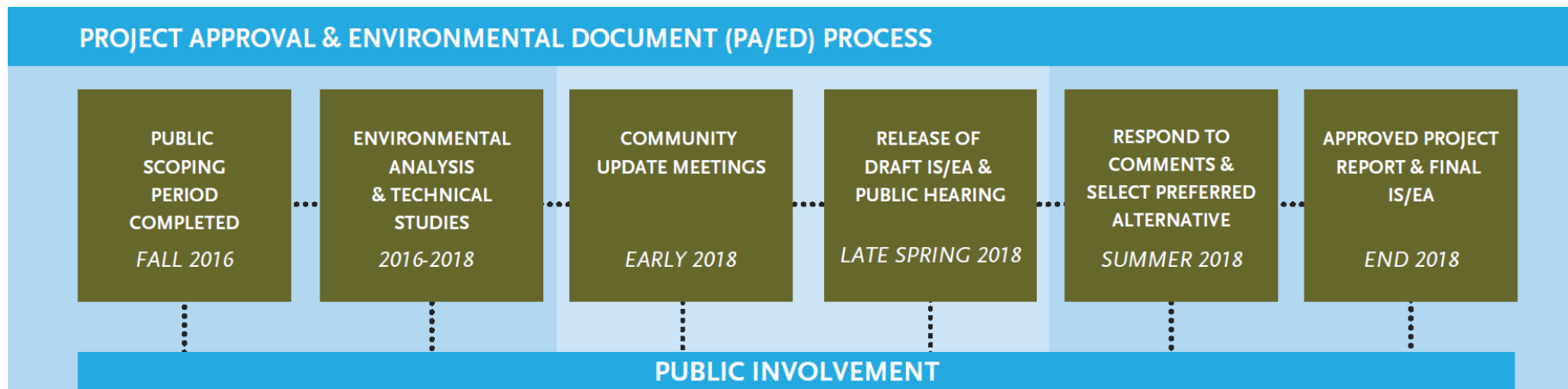
Proposed Improvements

- Add 1 general purpose lane in the westbound direction
- Upgrade the 1-lane I-605 northbound connector to 2 lanes
- Maintain auxiliary lanes between all on- and off-ramps
- Enhance freeway on- and off-ramps
- Replace overcrossings at Gridley Rd and Bloomfield Av
- Improve arterial streets in the vicinity of the freeway ramp intersections for bikes and pedestrians



Environmental Update and Schedule

- Preparation of technical studies:
 - Land Use
 - Social & Economic
 - Traffic Circulation
 - Right-of-Way
 - Noise, Air Quality
 - Parks
- Environmental study will assess impacts





Gateway Cities Highway Program Manager

Ernesto Chaves

Sr. Director

213.418.3142

chavese@metro.net

I-605 Capital Improvements

Isidro Pánuco

Project Manager

213.922.4091

i605corridor@metro.net

metro.net/605hotspots

SR 91 & Arterial Programs

Carlos Montez

Project Manager

213.922.4782

wbsr91@metro.net

metro.net/605hotspots

Thank You!



Metro

METRO EXPRESSLANES

Gateway Cities Council of Governments Transportation Summit



Metro

Thursday, February 08, 2018

ExpressLanes Background



- Initiated as a one-year demonstration project
 - I-110 opened in November 2012
 - I-10 opened in February 2013
- Metro Board approved continuation of the operation of the ExpressLanes in 2014 and the Legislature allowed tolling in perpetuity in 2015



Business Rules



- All vehicles (except buses, motorcycles, & emergency response) required to have a FasTrak® transponder
- Dynamically priced
- Single Occupant Vehicles (SOV) Pay Toll at all times
- I-10 - HOV 3+ Toll-free peak hours; HOV 2 off-peak
- I-110 - HOV 2+ Toll-free at all times
- \$40 to open account, \$1 per month account maintenance fee



Operational Performance through December 31, 2017



- Total accounts opened: 664,329
- Total transponders issued: 801,757
- Total vehicle trips on I-110: 113,840,290
- Total vehicle trips on I-10: 61,721,674
- Average Travel Speeds – AM Peak (FY17)
 - I-110 NB: 51.7
 - I-10 WB: 54.4
- Average travel time savings – AM Peak (FY17)
 - I-110 NB: 13.3 minutes
 - I-10 WB: 15 minutes



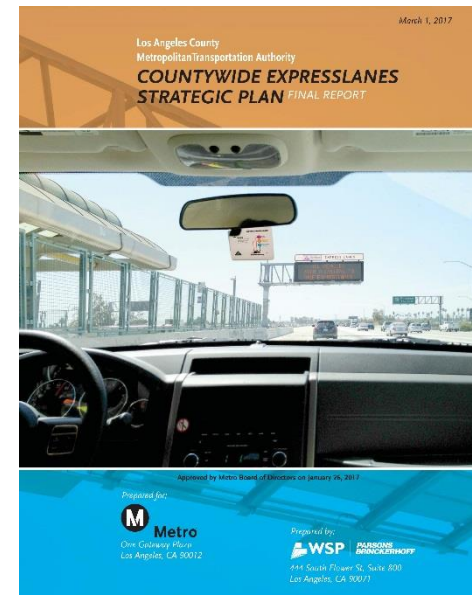
ExpressLanes Strategic Plan



- Approved January 2017, the Metro Board directed the development of an ExpressLanes Strategic Plan
- The Strategic Plan analyzed the mobility benefits and financial feasibility of converting existing, in construction, and planned HOV lanes to ExpressLanes

Projects were placed into three tiers:

- Tier 1 – near-term (within 5-10 years)
- Tier 2 - mid-term (within 15 years)
- Tier 3 - longer-term (within 25 years)



Recommended Strategic Plan Projects



Metro

ExpressLanes Planning Studies - Underway



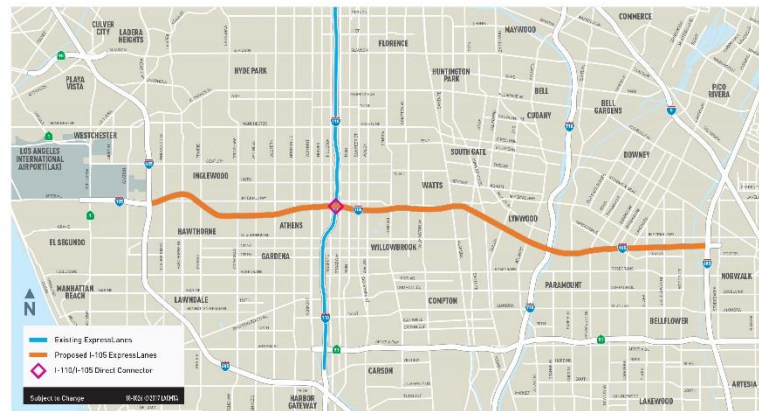
I-105

- Project Study Report (PSR) approved by Caltrans in September 2015
- I-105 is included as a Tier 1 project (5-10 years)
- Metro is partnering with Caltrans to prepare Project Approval/Environmental Document (PAED), Traffic and Revenue Study and Concept of Operations
- Scoping meetings scheduled for late March 2018

I-605

- Project Approval/Environmental Document (PA/ED), Traffic and Revenue Study, Concept of Operations in progress

I-105 ExpressLanes Project

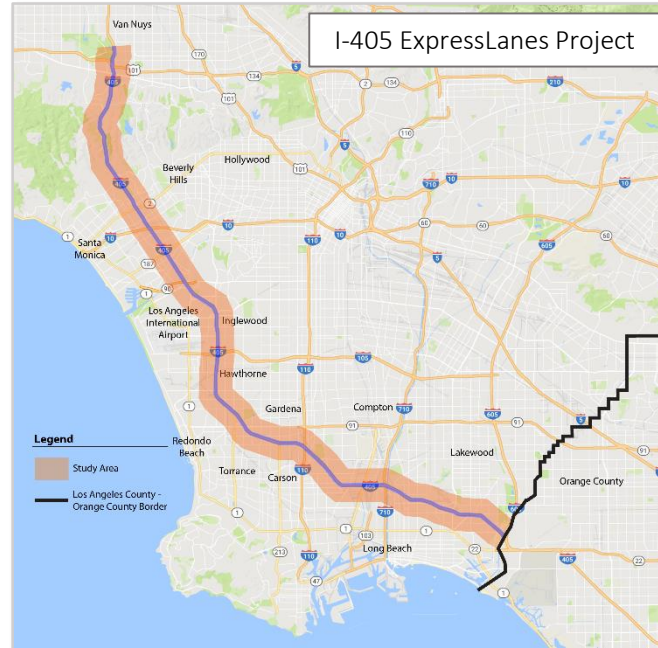


Additional ExpressLanes Studies - Planned



I-405

- Project Study Report (PSR) to analyze ExpressLanes alternatives in the 405 corridor
- Study limits are the US-101 to the LA/Orange County line
- Expect to begin study in mid 2018



Department Contacts



Philbert Wong

I-105 Project Manager

WongP@metro.net

213.418.3137

Stephanie Blanco

I- 605 Project Manager

BlancoS@metro.net

213.418.3252

Ayda Safaei

Community Relations Manager

SafaeiA@metro.net

213.418.3128

