



# **Fiscal Year 2019 Program Management Annual Program Evaluation**



# Presentation Overview

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- Purpose and Process
- Capital Program Status
- Capital Program Costs and Schedules
- Adjustments for FY2019
- Summary
- Next Steps



# Purpose

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- Annual evaluation of Metro's capital program
- Reporting to the Board any project budget and schedule changes, and reasons for the changes
- A project management tool bringing greater consistency, transparency, and discipline
- Facilitates financial planning
- Reduces the number of requests to the Board for budget adjustments



# Process

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- A review of project costs and schedules
- Update project capital cost estimates to current conditions, including price trends and changes
- Focus on budget to complete current project phase/milestone
- Include APE results in future fiscal year annual budget review and adoption by the Board

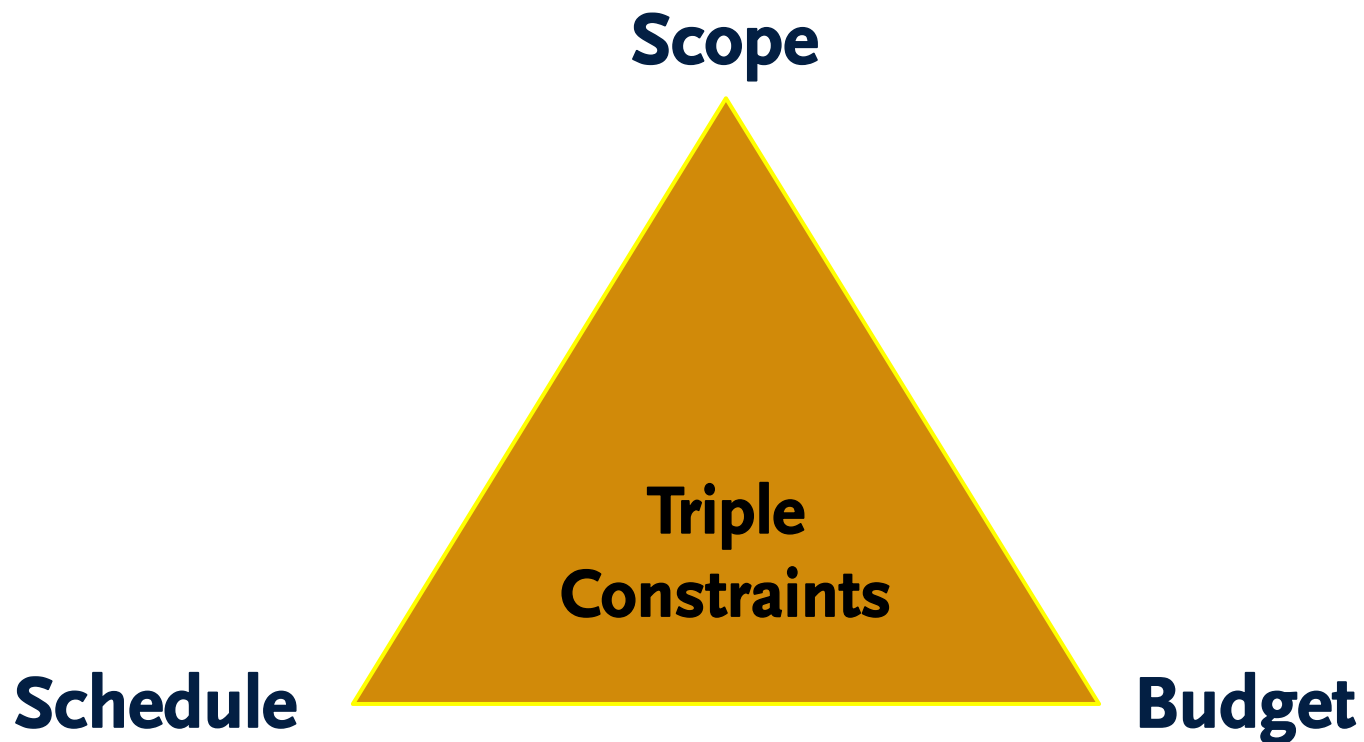


# Project Management

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One side of the triangle cannot be changed without affecting the other sides:



# FY19 Scope

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- Focus on capital projects with total project cost greater than \$5M being managed by Program Management:
  - Major Transit Construction Projects – 6 projects
  - Other Transit Capital Projects – 25 projects
  - Regional Rail Projects – 7 projects
  - Highway Program – 28 projects
- Project budgets in the APE focus on authorized funding amount
- Project funding amounts remain within the annual budget limit approved by the Board



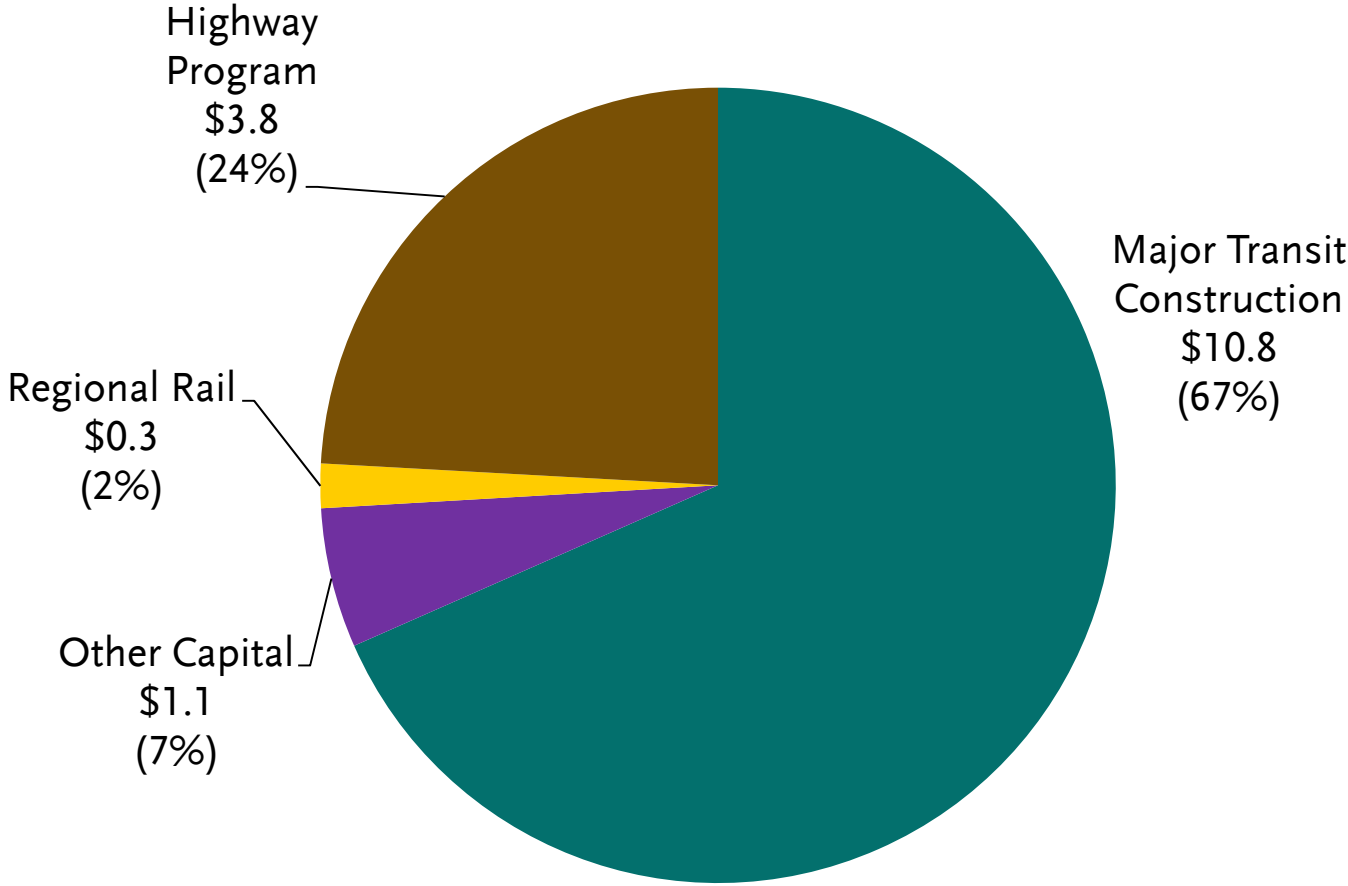
# FY19 Scope

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- In addition to the projects in APE, Program Management also manages/oversees 100+ Operations Capital Improvements and State of Good Repair projects
- In total, Program Management manages and supports volume of 170+ projects with a total authorized value estimated at \$16.8 billion
- Approximately \$16 billion of approved budget in projects are included in the FY19 APE review



# FY19 Current Program: \$16 B



\$ in billions





# Program Highlights

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- Overall Program increased from \$13.8 billion in FY18 to \$16 billion in FY19
- Program dollars approved for Major Transit Construction projects increased 16% from FY18 to FY19
- With implementation of Measure M and 28 by 2028 Initiative, Metro's capital program will grow significantly in the next decade





# Program Challenges

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- Deliver multiple large and complex projects on-time and within budget
- Collaborate with stakeholders to meet community expectations
- Commitment of efficient third party review/approval by various external jurisdictions
- Encourage competitive and qualified pool of contractors, small businesses, and workforce on Metro projects
- Manage cost risks impacted by shortage of skilled workers in a growing construction market
- Maintain sufficient resources and staffing needed to manage and support project delivery
- Achieve continuous improvement in project delivery through innovation and application of best practices



# Strategic Initiatives

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Implement strategic initiatives to bring improved planning, consistency, transparency, and discipline to project delivery:

- Establish more reliable Life-of-Project budgets
- Conduct Annual Program Evaluation of Metro's capital program
- Engage robust management and support services consulting teams to augment technical expertise and resources
- Implement new organizational approaches
- Continue systematic approach for Quality Assurance (on-going)



# Strategic Initiatives

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- Improved Change Control Procedure
- Implemented Project Readiness Procedure
- Implemented Project Delivery Selection Procedure
- Established Program Management Leadership Institute (PMLI)
- Enhanced Risk Management Program
- Improved Best Practices/Lessons Learned Program
- Received Board Delegated Authority for LOP Budget Management on all transit and regional rail projects
  - Quarterly reporting to the Board on Changes and Modifications that are above \$500,000



# Strategic Initiatives

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## Consistent Implementation of Concurrent Non-Project Activities Project for Major Capital Projects

- Concurrent Non-Project Activities Project are implemented on several Metro projects, including Metro Gold Line Eastside Extension Phase 1 Project and the Regional Connector Project
- Intended to track betterments, non-federally eligible costs and other activities not part of the core project scope
- Concurrent Non-Project Activities Project is approved by the Board but budgeted outside of the Board adopted major capital project LOP budget
- This will protect the integrity of the core LOP Budget and improve transparency



# Metro Transit Program



# Metro Transit Capital Projects

Type	Project Budget (in millions)	# of Projects
Major Transit Construction	\$10,804	6
Other Transit Capital	\$1,051	25
Bus Facilities	\$143	9
Rail Facilities	\$242	6
Wayside Systems	\$150	2
Security/Safety	\$124	2
Misc. Capital	\$392	6
Total Transit Capital Program	\$11,855	31





# Metro Transit Capital Program Summary

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## Projects Completion In FY2018

- Metro Pershing Replacement/ Modernization Project (2<sup>nd</sup> Quarter)
- Bus Facility Maintenance Improvements & Enhancements Phase I (Scheduled 4<sup>th</sup> Quarter)
- Metro Blue Line Pedestrian Safety Enhancement at Grade Crossings (Scheduled 4<sup>th</sup> Quarter)



## Project Completion Planned in FY2019:

- Metro Silver Line Improvements and Upgrades



# Metro Transit Capital Program Summary

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## Projects Transitioned from Planning to Program Management in FY18:

- Willowbrook/Rosa Parks Station Improvements Project
- Airport Metro Connector Project (96<sup>th</sup> Street Station)
- Metro Gold Line Eastside Access Project
- Rail to Rail Corridor Active Transportation Connector Project

## Planned Transition from Planning to Program Management in FY19:

- Orange Line Bus Rapid Transit Improvement Project
- North Hollywood to Pasadena Bus Rapid Transit Project
- East San Fernando Valley Transit Corridor Project



# Crenshaw/LAX Transit Project



# Crenshaw/LAX Transit Project

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Project Budget: \$2,058M

Project Completion: October 2019

Project Complete: 79%

## Accomplishments:

- All five tunnel structures are complete
- All six at-grade and aerial stations' structures are complete
- The three underground stations' structures are approaching 80% completion
- Continuing critical track work installation along the southern section of the eight mile alignment
- Systems installation has commenced
- Working closely with community to mitigate any concerns during construction

## Challenges / Risks:

- Limited remaining cost contingency
- Near-term need for concurrent non-project activities to capture Crenshaw/LAX Project non-federal eligible costs and betterments which currently are reducing available project contingency
- Contractor behind schedule and is required to mitigate delays to achieve revised baseline schedule. Metro and contractor mitigating delays to ensure meeting October 30, 2019 revenue service date



# Regional Connector Transit Project



# Regional Connector Transit Project

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**Project Budget:** \$1,756 M

(Excludes finance costs)

**Project Completion:** December 2021

**Project Complete:** 49%

## Accomplishments:

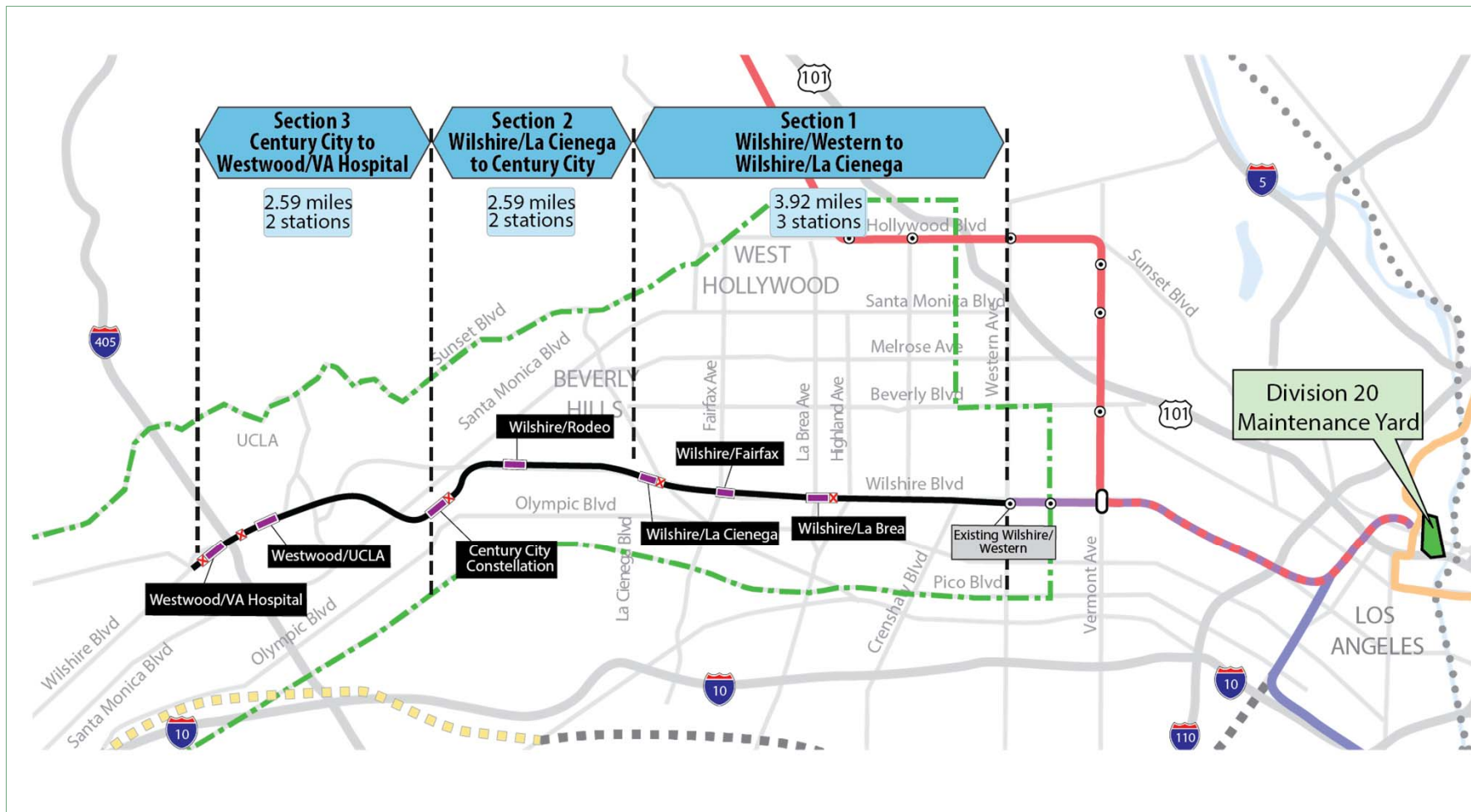
- Successfully completed tunnel boring machine (TBM) operations; retired TBM "Angeli" in mid-January
- Initiated build-out of permanent structural elements at the Grand Av Arts/Bunker Hill Station
- Advanced support of excavation (SOE) installations and utility relocations on Flower Street sufficient to facilitate completion of decking placement from 4th Street to 6th Street; steady state operations are now underway between these stakeholder-sensitive points
- Safely initiated and completed closure of 6th Street east of Flower Street to facilitate key utility relocations in the intersection
- Completed 126" LA County Storm Line relocation along 2nd between Broadway and Spring to allow station box excavation and adjacent building underpinning
- Executed global agreement with contractor which addressed cumulative schedule and cost impacts of numerous utility interferences

## Challenges/Risks:

- Transitioning from a TBM mining-centric priority to permanent station and cut/cover guideway construction
- Securing and retaining sufficient craft labor resources to safely, and efficiently prosecute the work
- Effectively identify and manage risks early to afford broader response options for improving or protecting schedule and costs
- Maintaining stakeholder support for necessary traffic control, extended work-hour permits, and general disruptions inherent to heavy construction in a dense urban setting
- Relocating LADWP underground power assets south of 6th/Flower intersection to allow LADWP forces to complete the cabling and intercepts throughout the area per plan and schedule



# Westside Purple Line Extension Project



# Westside Purple Line Extension Section 1

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**Project Budget: \$2,779 M**  
(Excludes finance costs)

**Forecast Completion: November 2023**  
**Project Complete: 31%**

## Accomplishments:

### FY18

- Completed Wilshire/La Brea Station excavation and began station concrete operations
- Delivery of tunnel boring machines (TBM)
- Completed Wilshire/La Cienega Station street decking and began excavation
- Completed Wilshire/Western TBM retrieval site piling and street decking

### Planned FY19

- Commence Reach 1 tunnel drive from Wilshire/La Brea Station to Wilshire/Western TBM retrieval site
- Complete excavation and temporary TBM support slab at Wilshire/Western TBM retrieval site
- Begin Wilshire/Fairfax Station concrete operations
- Complete excavation at Wilshire/La Cienega Station

## Challenge:

- Potential schedule delay due to differing site conditions





# Westside Purple Line Extension Section 2

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**Project Budget: \$ 2,441M**

(Excludes finance costs)

**Forecast Completion: August 2025**

**Project Complete: 6%**

## Accomplishments:

### FY18

- Completed joint trench civil work, telecom cable pulling and splicing, and Southern California Gas (SCG) utility relocations at Century City Constellation Station
- Completed Southern California Edison (SCE) utility relocations at Wilshire/Rodeo Station
- Began SCG and AT&T utility relocations at Wilshire/Rodeo Station
- Signed Memorandum of Agreement (MOA) with the City of Beverly Hills for third party utility relocations
- Continue property acquisitions, final design, manufacturing of TBMs, and construction mobilization

### Planned FY19

- Complete third party utility relocations civil work at Century City Constellation Station
- Complete final design
- Deliver and assemble tunnel boring machines and begin tunnel mining
- Begin construction of Wilshire/Rodeo Station
- Acquire all subsurface property easements

### Challenge:

- Manage in accordance with the signed MOA with the City of Beverly Hills



# Westside Purple Line Extension Section 3

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Projected Budget through FY19: \$364M

Forecast Completion: TBD

Working Project Estimate: \$3.0 B

(Excludes finance costs)

## Accomplishments:

### FY18

- Submitted Request for Letter of No Prejudice to FTA for the Tunnels Contract
- Issued Stations, Trackwork and Systems Contract solicitation
- Executed the Construction Management Support Services Contract
- Issued the Notice to Proceed (NTP) for Wilshire/UCLA Advanced Utility Relocations

### Planned FY19

- Complete real estate certification process and begin property acquisitions
- Substantially complete Wilshire/UCLA Advanced Utility Relocations
- Continue third party utility relocations
- Issue NTP for Stations, Trackwork and Systems Contract (Planned 4<sup>th</sup> Quarter)
- Complete final design of the Tunnels
- Tunnel boring machine power becomes available
- Receive approval of the Full Funding Grant Agreement from FTA

## Challenges/Risks:

- Secure FTA's funding commitment; may impact cost and schedule
  - Timely receipt of construction and staging areas at the VA Hospital and the Army Reserve to begin construction as currently planned
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# Gold Line Foothill Extension Phase 2B



# Gold Line Foothill Extension Phase 2B

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Project Budget: \$1,407 M

Forecast Completion: 2027

## Accomplishments:

- Ground breaking in December 2017
- Commenced year long Design-Build solicitation for Phase 2B Alignment in November 2017
- Submitted 28 of 50 grade crossing applications to California Public Utility Commission

## Challenges/Risks:

- Construction while under operations and accommodating future projects
- Close coordination with Third Party entities, including SCRRA (Metrolink), San Bernardino County Transportation Authority, and Cities
- Secure commitment from Transit and Intercity Rail Capital Program to fully fund approved budget
- Lawsuits from local jurisdictions



# Patsaouras Plaza Busway Station

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Project Budget: \$ 39.7 M

Project Completion: December 2018

Project Complete: 54%

## Accomplishments:

- Completion of all major design work
- Completion and approval of all bridge falsework and bridge foundations
- Major concrete work is in progress

## Challenges/Risks:

- Third party review/approvals, including the City of Los Angeles and Caltrans, in a timely manner
- Potential budget and schedule impacts due to design changes and unforeseen field conditions during underground construction
- Maintain planned schedule milestones



# Metro Blue Line Signal Rehabilitation Project

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Project Budget: \$ 119 M

Project Completion: April 2021

Project Complete: 14%

## Accomplishments:

- Met Cap & Trade deadline for project funding
- Issued Notice to Proceed to contractor
- Complete 60% design is under review

## Challenges/Risks:

- Track allocation coordination with other projects/maintenance on Metro Blue Line
- Existing aged ductbank/conduits may require replacement, potential additional scope
- Complete the resignaling scope within the scheduled Metro Blue Line shutdown window



New train control



Project adds 4 Crossovers



# Willowbrook/Rosa Parks Station Project

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Approved Budget through FY19: \$36.0 M  
Working Project Estimate: \$ 92.4 M

Forecast Completion: Summer 2020

## Accomplishments:

- Completion of real estate acquisition
- Completion of all final design work
- First contract has been awarded, and procurement of second contract is underway



## Challenges/Risks:

- Continue Third Party cooperation review/approval, including City of Los Angeles, County, Caltrans, Union Pacific, Public Utility Commission to be consistent with project schedule
- Construction phase plan coordination during Metro operations
- Meet groundbreaking deadline for funding



# Emergency Security Operations Center

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Project Budget: \$ 113 M

Forecast Completion: Phase 1 in Dec. 2021

## Accomplishments:

- Completed preliminary engineering drawings in July 2017
- Issued best value design build procurement in 2<sup>nd</sup> quarter 2018
- Completion of Constructability review

## Challenges/Risks:

- Coordination with adjacent Division 20 Portal Widening Turnback and LINK US projects
- Staff intends to provide \$100,000 per stipend agreement for unsuccessful responsive bidders on the design build solicitation to enhance competition
- Staff plans to return to the Board in Winter 2019 for an increase to LOP budget





# Highway Program





# Highway Program Status Summary (Measure R Funded)

#	Project	Current Phase	Estimated Costs through Current Phase (\$mil)	Current Phase Completion
1	I-5 South – Alondra	Construction	\$114.1	Completed
2	I-5 South – Valley View Interchange	Construction	\$631.1	Aug 2022
3	I-5 South – Shoemaker, Rosecrans, Bloomfield	Construction	\$188.2	Mar 2019
4	I-5 South – San Antonio, Imperial Hwy and Orr Day	Construction	\$323.3	Jul 2019
5	I-5 South – Florence	Construction	\$211.7	Jul 2020
6	I-5 South – Carmenita Interchange	Construction	\$419.9	Mar 2018
7	I-5 North – HOV from SR 118 to SR 170	Construction	\$219.5	Completed
8	I-5 North – HOV from SR 170 to North of Buena Vista	Construction	\$94.7	Completed
9	I-5 North – North of Buena Vista to South of Magnolia Blvd	Construction	\$402.4	Jun 2020
10	I-5 North – Magnolia Blvd to SR 134	Construction	\$137.4	Apr 2019



# Highway Program Status Summary (Measure R Funded)

#	Project	Current Phase	Estimated Costs through Current Phase (\$mil)	Current Phase Completion
11	I-5 North HOV Project SR 14 to Parker Road	Plans, Specifications & Estimates (PS&E)	\$42.4	Dec 2018
12	Interstate 605 Corridor Hot Spots – I-605/I-5 Interchange Improvement	Project Approval/Environmental Document (PAED)	\$30.3	Jul 2021
13	Interstate 605 Corridor Hot Spots – I-605/SR 60 Interchange Improvement	PAED	\$41.6	Jul 2021
14	Interstate 605 Corridor Hot Spots – SR-91 Westbound Widening at I-605 Interchange	PAED	\$9.3	Dec 2018
15	Interstate 605 Corridor Hot Spots – I-605 Beverly Interchange Improvement Project	PAED/PS&E	\$3.5	Apr 2019
16	I-605 from SR-91 to South St. Improvements Project	PAED/PS&E	\$4.5	Jan 2019



# Highway Program Status Summary (Measure R Funded)

#	Project	Current Phase	Estimated Costs through Current Phase (\$mil)	Current Phase Completion
17	Interstate 405 Crenshaw Blvd On and Off Ramp Improvements	PS&E	\$20.0	Mar 2020
18	Interstate 405 and I-110 Aux Lane from SR 91 to Torrance Blvd	Construction	\$44.0	Dec 2019
19	I-710 (South) Corridor Improvement Projects	PAED	\$91.0	Sep 2018
20	I-710 (South) Early Action Projects - Soundwall Projects (3 locations)	PS&E & ROW	\$12.7	Aug 2019
21	I-710 (North) Early Action Projects	PAED	\$47.0	Jun 2018
22	Soundwall Package 10	PS&E	\$59.4	Dec 2018
23	Soundwall Package 11	Construction	\$89.2	Dec 2021
<b>Subtotal Measure R Highway Projects</b>			<b>\$3,237.2</b>	

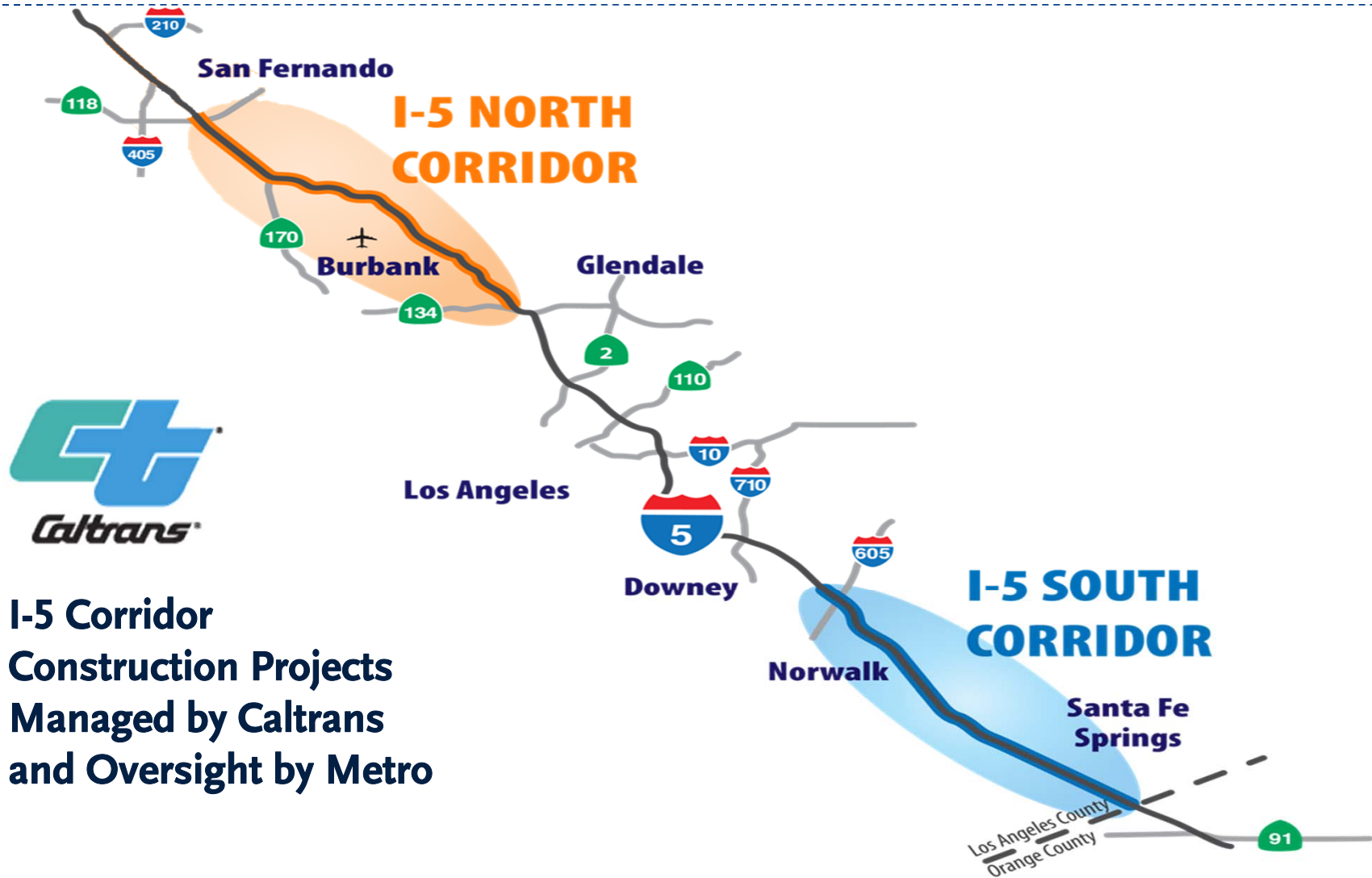


# Highway Program Status Summary (Non-Measure R Funded)

#	Project	Current Phase	Estimated Costs through Current Phase (\$mil)	Current Phase Completion
24	I-10 HOV from Puente Avenue to Citrus Avenue (Seg. 2)	Construction	\$195.6	Apr 2019
25	I-10 HOV from Citrus Avenue to SR 57 (Seg. 3)	Construction	\$268.7	Jan 2022
26	SR-57/SR-60 Interchange Improvements (Eastbound and Westbound flyover off-ramp to Grand Ave, Eastbound on-ramp SR-60)	PS&E and ROW	\$54.0	Jul 2020
27	SR 71: Interstate 10 to Mission Blvd	PS&E and ROW	\$16.0	Dec 2020
28	SR 71: Mission Blvd to Rio Rancho Road	PS&E and ROW	\$40.0	Aug 2019
	<b>Subtotal Non-Measure R Funded Highway Projects</b>		<b>\$574.3</b>	
	<b>TOTAL HIGHWAY PROGRAM</b>		<b>\$3,811.5</b>	



# I-5 Corridor Construction





# I-5 North: SR 118 to SR 134



## PHASE: CONSTRUCTION

Project Managed by Caltrans :

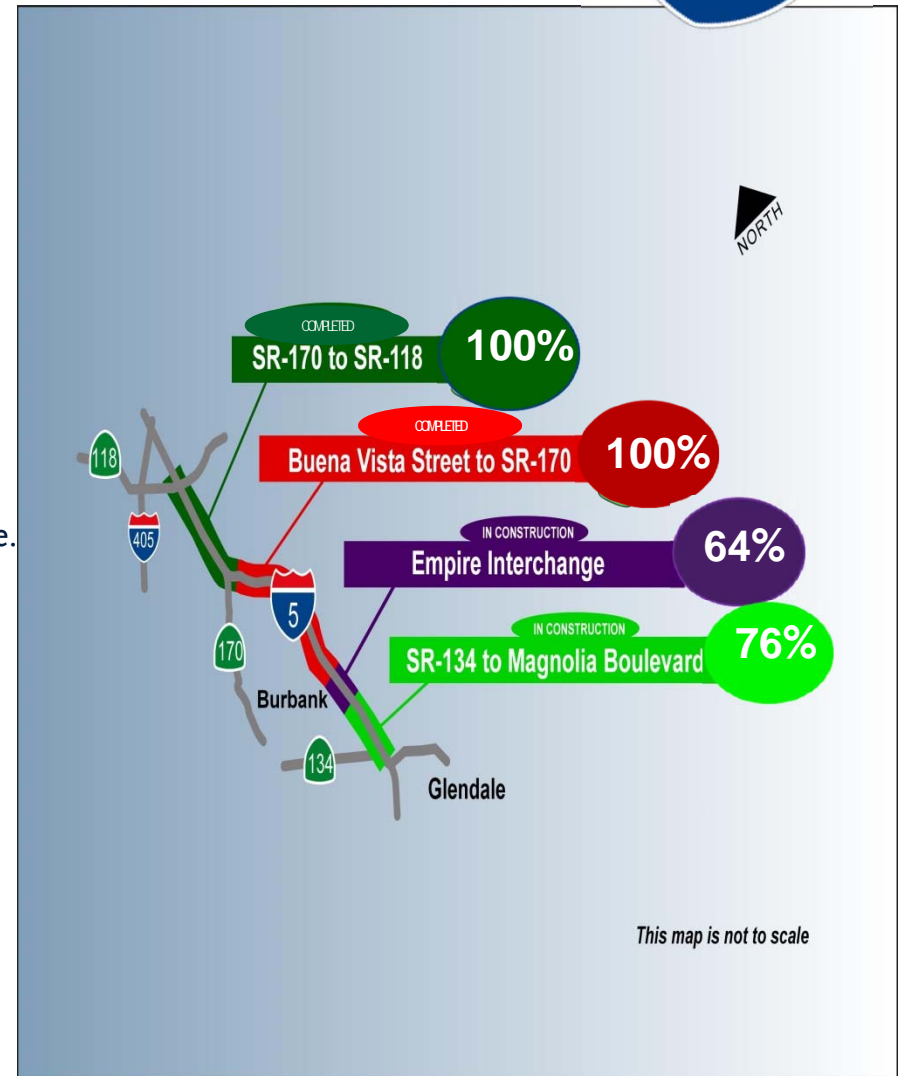
- Approved budget: \$854.0 M
- Estimated Cost to Complete Construction: TBD

### Accomplishments:

- SR118 to SR170 - Construction Completed for new HOV Lanes and HOV Direct Connectors, Open to Traffic and Claims have been settled.
- SR170 to North of Buena Vista – HOV Construction Completed and Open to Traffic.
- North of Buena Vista to Magnolia Blvd including Empire Ave. Interchange – Construction in progress.
- Magnolia Blvd to SR 134 – Construction in progress.

### Challenges/Risks:

- Adverse field conditions (Seg. 4).
- Utility relocation/ Railroad work changes (Seg. 3).
- Survey work related to roadway and structures (Seg.4).
- LA River Bridge construction requires significant changes to avoid working on the River bed. (Seg. 4).
- Several change orders have consumed significant cost contingency
- High risk level on potential schedule and budget impacts





# I-5 South: Orange County Line to I-605



## PHASE: CONSTRUCTION

Project Managed by Caltrans :

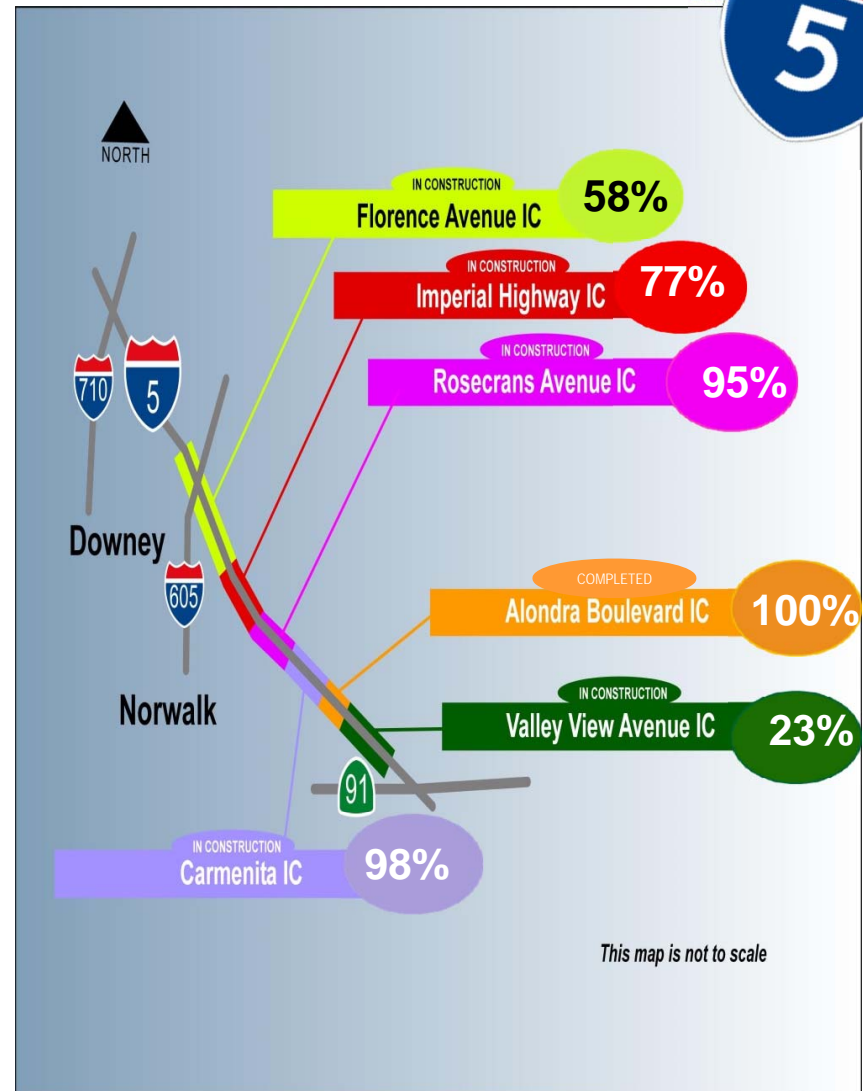
- Approved budget: \$1,888.3 M
- Estimated Cost to Complete Construction: TBD

## Accomplishments:

- Alondra Blvd – Started the pre-final Audit process
- Valley View Avenue – Construction in progress
- Rosecrans Avenue – Open to Traffic January 2018, Construction still in Progress
- Imperial Highway – Construction in progress
- Florence Avenue – Construction in progress
- Carmenita Interchange – Interchange open to traffic fall 2016. Construction on local streets in progress

## Challenges/Risks:

- Extensive utility and ROW relocation
- Adverse field conditions and railroad work
- Schedule delay and potential budget overrun
- Timely resolution of valid contractors' claims
- Low to medium risk level on potential schedule and budget impacts





# I-5 N Capacity Enhancements (SR14 to Parker Road)



## PHASE: Plans, Specifications & Estimates

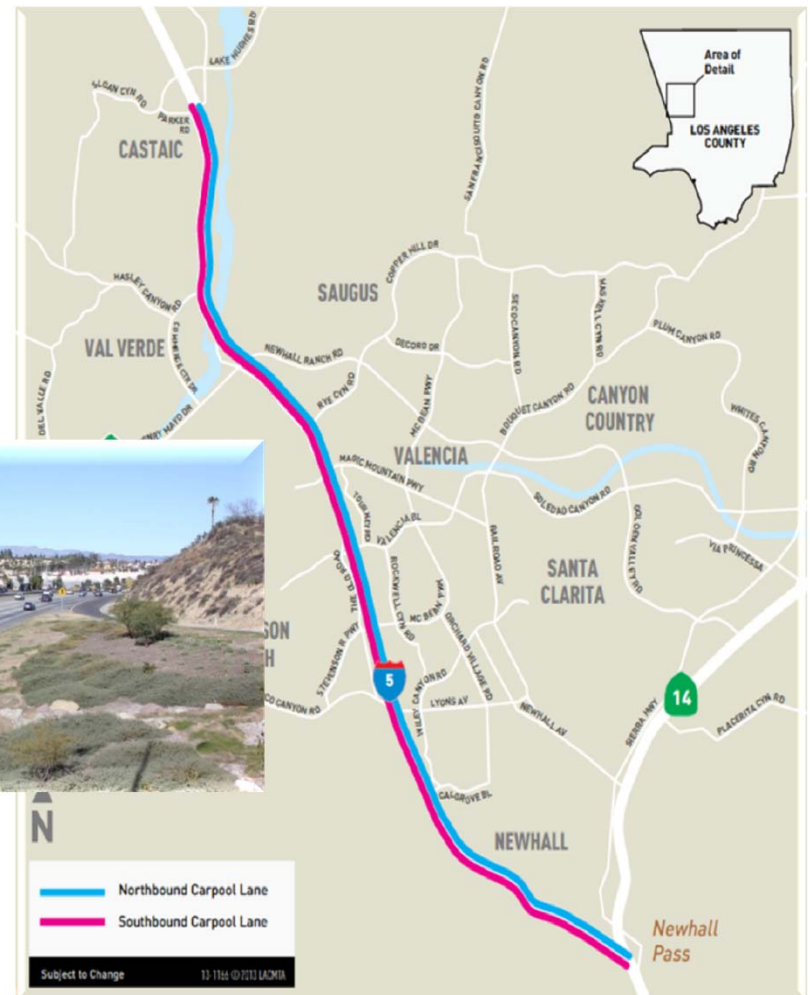
- Approved Budget: \$42.4 M
- Estimated Cost to Complete Design: \$42.4 M

## Accomplishments:

- Awarded the PS&E Contract in June 2016
- 65% of PS&E Plans submitted to Caltrans on schedule in December 2017

## Challenges/Risks:

- Coordination with Caltrans' ongoing pavement rehabilitation project
- Delays with utility company facility relocations
- Right of Way Acquisition Delays



# I-605 “Hot Spots”



## PHASE: Various

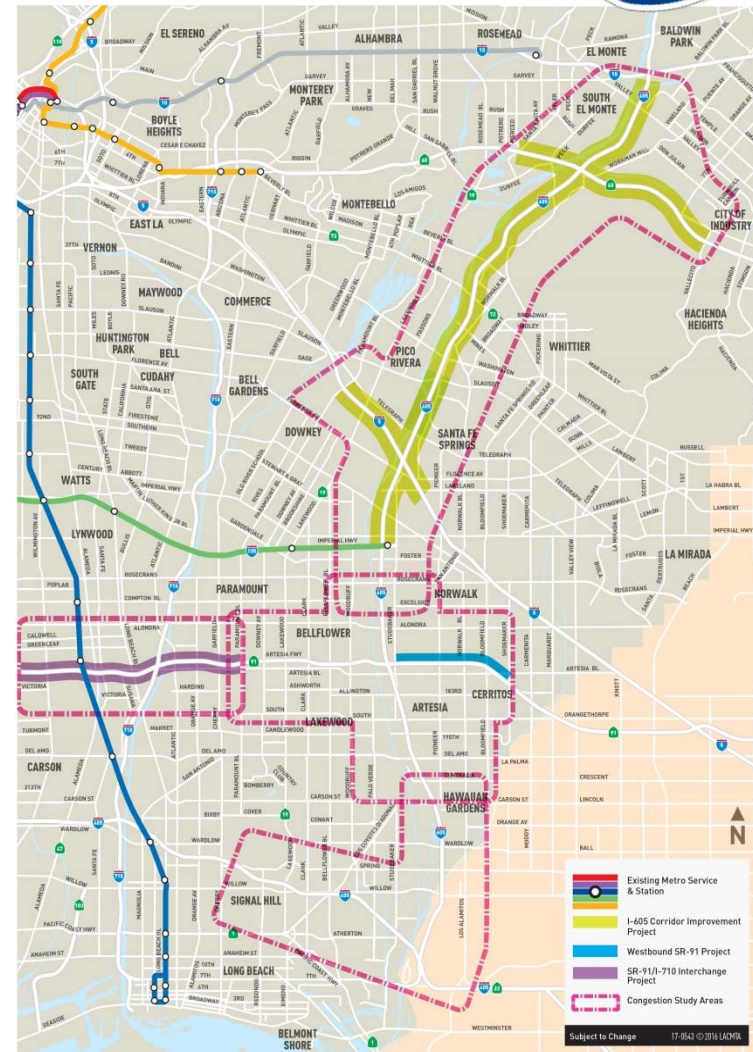
- Approved budget: \$88.7 M
- Estimated Cost to Complete Phase: \$88.7 M

## Accomplishments:

- I-605 Corridor Improvement Project (I-605/I-5 and I-605/SR-60) Commenced PAED in 2015 and 2016, respectively
- Completed I-605 Corridor Improvement Project scoping Meetings in Fall 2016
- I-605/SR-91 Westbound PAED expected May 2018
- Pursuing early action projects during the development of the corridor environmental document

## Challenges/Risks:

- Funding to advance projects to design and construction
- Strategy to resolve: Considering breaking down the mega projects to smaller fundable projects with independent utility and sustainability



# I-710 South Corridor Improvement Projects



Project Phase: Project Approval/Environmental Document

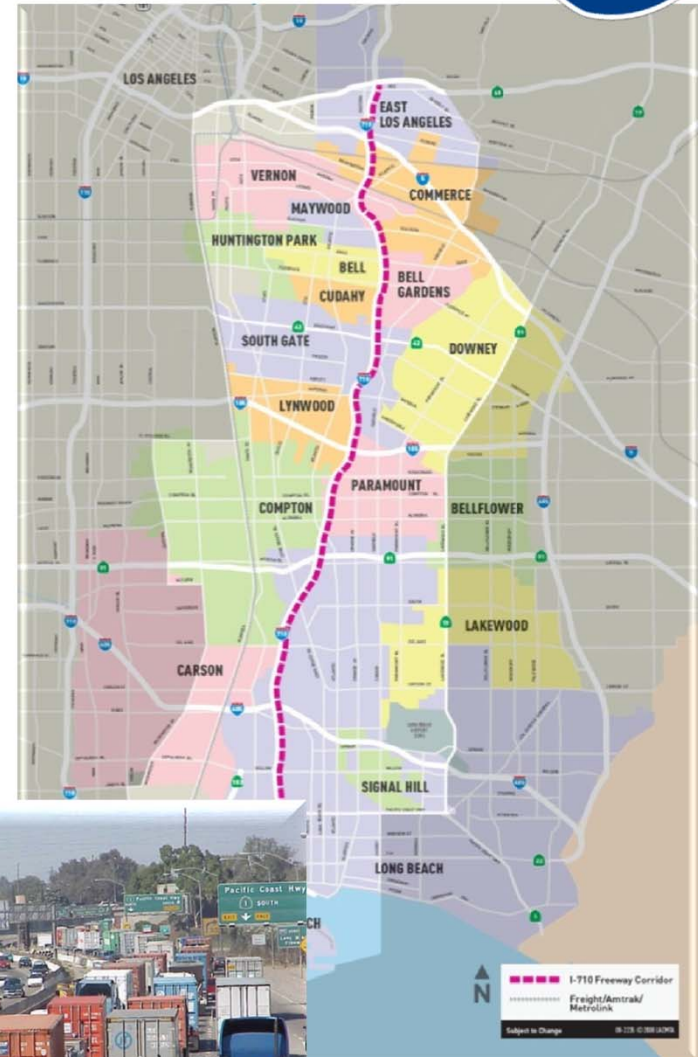
- Approved Budget: \$91.0 M
- Estimated Cost to Complete Phase: \$91.0 M

## Accomplishments:

- Released RDEIR/SDEIS for Public Review in Jul 2017.
- Conducted additional studies as directed by the Board
- Strong collaborative work with the local agencies, communities, and Metro Board members in addressing community concerns
- Alternative 5C approved by Metro Board on March 1, 2018 as the Locally Preferred Alternative
- Pursuing early action projects during the development of the corridor environmental documents

## Challenges/Risks:

- Funding to pursue design and construction of the proposed improvements
- Strategy to resolve: Pursuing implementation of early action projects with independent utility and sustainability
- Proper phasing of the project funding



# I-710 North Early Action Projects



PHASE: Project Approval/Environmental Document

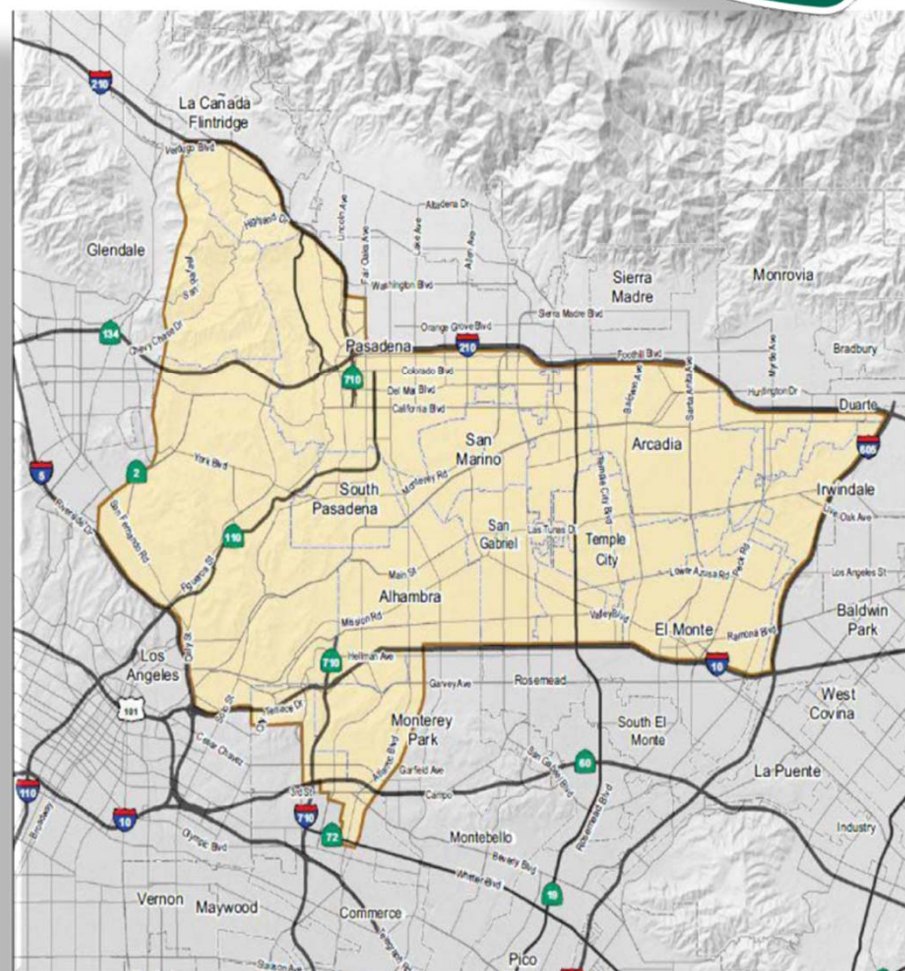
- Approved Budget: \$47.0 M
- Estimated Cost to Complete Phase: \$47.0 M

## Accomplishments:

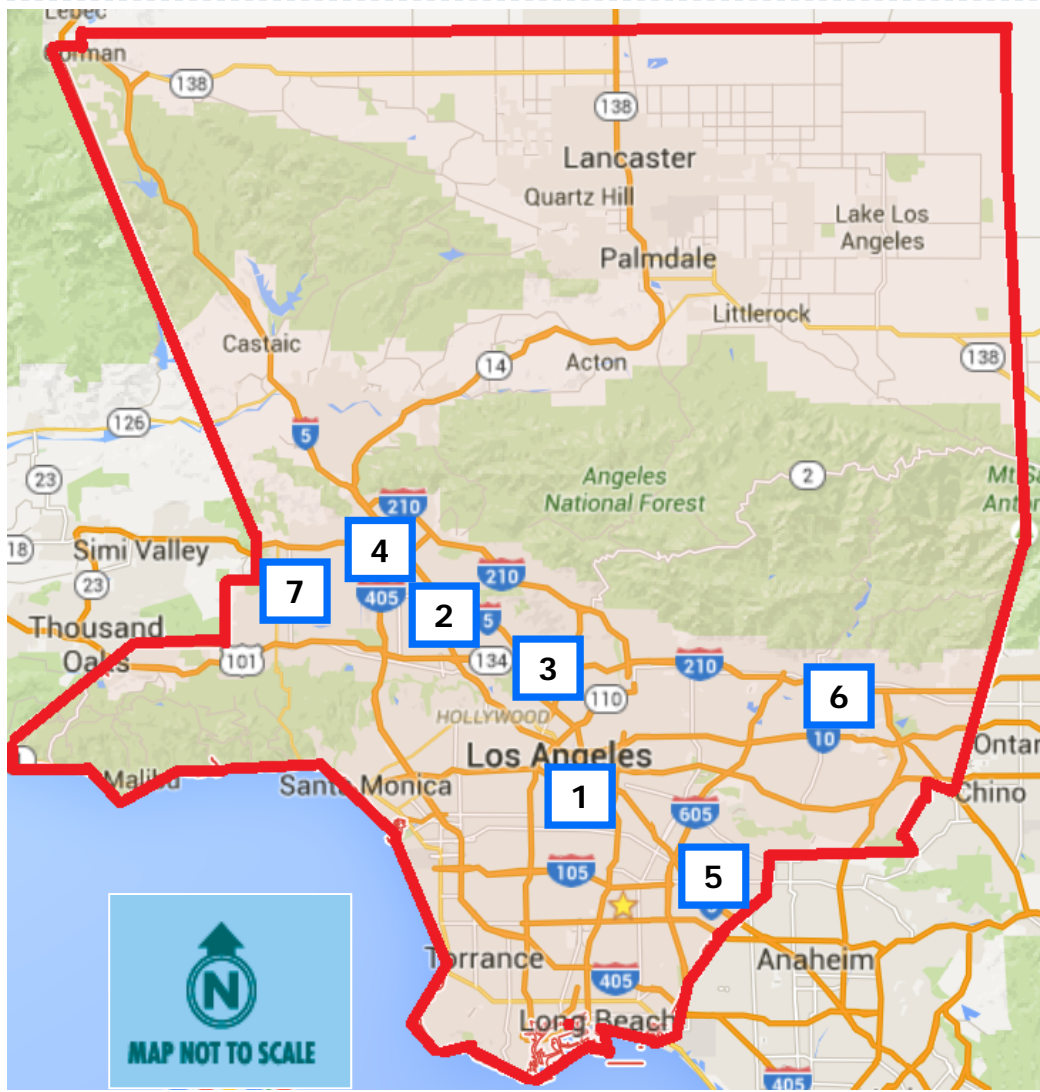
- Environmental Document is being finalized in Spring of 2018
- General agreement has been reached to invest in early action traffic mitigation/congestion relief projects
- Pursuit of early action congestion relief projects will start upon approval of the Final Environmental Document by Caltrans

## Challenges/Risks:

- Consensus among local jurisdictions to apply available funds



# Regional Rail Program



Los Angeles County



1. LINK Union Station
2. Burbank Airport North - Metrolink Station Project
3. Doran Street and Broadway/Brazil Grade Separation Project
4. Brighton to Roxford Double Track Project
5. Rosecrans/Marquardt Grade Separation Project
6. Lone Hill to CP White Double Track Project
7. Raymer to Bernsen Double Track Project

# Regional Rail Program Summary

#	Project	Current Phase	Estimated Costs through Current Phase (\$mil)	Current Phase Completion
1	LINK Union Station Project	Environmental & PE	\$71.6	June 2019
2	Burbank Airport – North Metrolink Station Project	Construction	\$15.0	April 2018
3	Doran Street and Broadway/Brazil Grade Separation Project	Environmental/PE	\$11.6	November 2019
4	Brighton to Roxford Double Track Project	Environmental/ Final Design	\$15.0	October 2019
5	Rosecrans/Marquardt Grade Separation Project	Environmental; Plan, Specification & Estimate Final Design, Real Estate Acq.	\$155.3 (including construction)	September 2022
6	Lone Hill to White Double Track Project	Environmental & Final Design	\$10.0	September 2020
7	Raymer to Bernsen Double Track Project	Environmental & Final Design	\$6.0	June 2020
	<b>Total Regional Rail Program</b>		<b>\$284.5</b>	



# Link Union Station ( LINK US)

Estimated Cost to Complete Environmental/PE:  
Current Phase Completion Date:

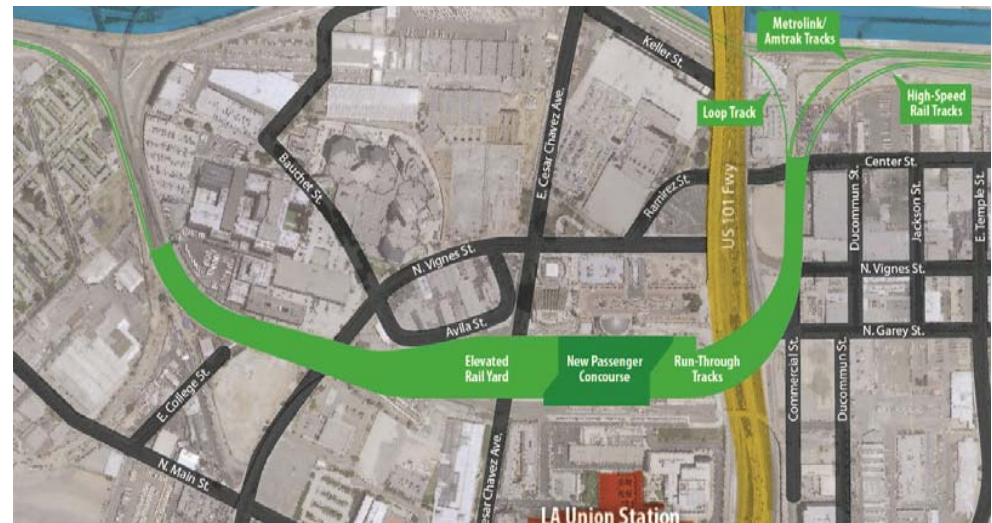
\$71.6 M  
June 2019

## Accomplishments:

- Board approved to proceed with staff recommended alternative 2 in March 2017 with six Regional Rail run-through tracks and two High Speed Rail run-through tracks to be carried forward in the NEPA and CEQA as the locally preferred alternative
- New above-grade concourse concepts and various active transportation linkage options was presented to July 2017 Board
- Worked closely with Division 20 Portal Widening Team in November 2017 to collaborate on design modifications to both the Portal project and the Link US run-through tracks to accommodate each project

## Challenges/Risks:

- Potential return to the Board in June for additional budget in the amount of \$1.2M to accommodating WSAB Line at LAUS rail yard while the WSAB Line is undergoing potential project redefinition
- Funding commitments from HSR on required number of platforms and run-through track
- Board authorization on the preferred alternative will be sought in Summer 2018



# Burbank Airport – North Metrolink Station Project

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Project Budget: \$15.0M

Project Completion: April 2018

## Accomplishments:

- Construction to be completed on-time and under budget
- Ribbon cutting/Grand opening anticipated in mid May 2018
- Revenue Service in May





# Doran Street and Broadway/ Brazil Grade Separation Project

Est. Cost to Complete Environmental/Design: \$11.6 M

Current Phase Completion Date: November 2019

## Accomplishments:

- Completion of Alternative Analysis; starting environmental
- Submittal of Petition to Modify from the proposed one-way interim at-grade improvements at Doran Street to a two-way configuration with quiet zone ready improvements and support for all stakeholders

## Challenges/Risks:

- Secure funding for construction
- Board approval of active transportation elements to the project



# Brighton to Roxford Double Track Project

Estimated Cost to Complete Environmental/PE:

\$15M

Current Phase Completion Date:

October 2019

**Accomplishment:** Completion of 30% Preliminary Engineering

## Challenges/Risks:

- Possibility that East San Fernando Valley Transit Corridor Project could no longer accommodate the second track shown on B&R plans resulting in \$1M increase in design costs and at least \$50M in right-of-way and construction impacts
- If federal funds are applied to the project, a NEPA process would be required; adding significant time to the project schedule
- Secure funding for construction



# Rosecrans/Marquardt Grade Separation Project

Working Project Estimate: \$155.3 M

Phase Completion: September 2022

## Accomplishments:

- California High-Speed Rail Authority (CHSRA) awarded \$76.7 million towards the costs of the Rosecrans/Marquardt
- Metro's Real Estate acquired 2 of 8 full take properties
- California Public Utilities Commission approved the Grade Separation application (GO-88-B)

## Challenges/Risks:

- Project delay of 8 months by CHSRA for execution of the funding agreement (PMFA)
- Funding agreement executions in progress with Caltrans for Section 190 and BNSF Railway



# Lone Hill to White Double Track

Estimated to Complete Environmental/Final Design:

\$10.0 M

Current Phase Completion Date:

September 2020

## Accomplishment:

- Completion of 30% Preliminary Engineering

## Challenges/Risks:

- Return to the Board in Summer to advance the final design
- Secure construction funding



# Raymer to Bernsen Double Track

Estimated Cost to Complete Environmental/Final Design:

\$6.0 M

Current Phase Completion Date:

June 2020

## Accomplishments:

- Environmental Clearance in October 2014
- Project received \$60.8M in STIP funds and Prop \$11.8M in Prop1B to-date for environmental, design and construction costs

## Challenges/Risks:

- Project placed on hold due to community concerns of environmental studies
- Return to the Board in Summer 2018 to request approval for new environmental studies to directly address community concerns



# FY19 Summary

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- New Projects with Planned Adoption of Life-of-Project Budget
  - Crenshaw/LAX Concurrent Non-Project Activities Project
  - Willowbrook/Rosa Parks Station Improvements Project
  - Rail to Rail Active Transportation Corridor Connector Project
  - Division 20 Portal Widening Turnback Facility Project
  - Westside Purple Line Extension Section 3 Project
  
- Existing Projects with Potential Adjustments to LOP Budget (separate Board action):
  - Emergency Security Operations Center
  - Close-out of 7<sup>th</sup> Street/Metro Station Pedestrian Tunnel (BLOC)
  - Division 4 Permeable Pavement and Bioretention Pilot Project
  - I-5 North: SR 118 to SR 134
  - I-5 South: Orange County Line to I-605



# Next Steps

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- Project Managers to manage project scope, budget, and schedule for quality, on-time and within budget delivery
- To present project-specific Life-of-Project budget for Board review and adoption
- Maintain resources and staffing needed to manage and support project delivery
- Seek additional revenue sources needed to fulfill funding commitment required to build and deliver projects, including the 28 by 2028 Initiative



# Appendix: Project Listing by Type

TRANSIT CAPITAL PROJECTS WITH TOTAL PROJECT COSTS > \$5 M		TYPE	LOP BUDGET (\$ MIL.)
1	Bus Rapid Transit Freeway Station Sound Enclosure	Bus Facilities Improvements	\$5.8
2	Fuel Storage Tank Program (FY18 - FY21)	Bus Facilities Improvements	\$13.2
3	Metro Silver Line Improvements & Upgrades	Bus Facilities Improvements	\$7.8
4	Division 3 Master Plan Phases II-IV	Bus Facilities Improvements	\$13.2
5	Division 1 Improvements	Bus Facilities Improvements	\$20.9
7	Bus Facility Maintenance Improvements & Enhancements Phase II	Bus Facilities Improvements	\$20.9
8	Bus Facility Maintenance Improvements & Enhancements Phase III	Bus Facilities Improvements	\$21.7
9	Patsaouras Plaza Bus Station Construction	Bus Facilities Improvements	\$39.8
		<b>Bus Facilities Improvements Total</b>	<b>\$143</b>
10	Crenshaw/LAX Light Rail Transit: Construction	Major Construction	\$2,058.0
11	Regional Connector: Construction	Major Construction	\$1,755.8
12	Westside Purple Line Extension Section 1 Project	Major Construction	\$2,778.9
13	Westside Purple Line Extension Section 2 Project	Major Construction	\$2,440.9
14	Westside Purple Line Extension Section 3 Project	Major Construction	\$363.6 <sup>(a)</sup>
15	Gold Line Foothill Extension Phase 2B Project	Major Construction	\$1,406.9
		<b>Major Transit Construction Total</b>	<b>\$10,804</b>
16	Patsaouras Bus Plaza Paver Retrofit	Misc. Capital Projects	\$9.1
17	Division 20 Portal Widening Turnback Facility	Misc. Capital Projects	\$188.7 <sup>(a)</sup>
18	Division 22 Paint and Body Shop	Misc. Capital Projects	\$11.0
19	Rail to Rail Corridor Active Transportation Connector Project	Misc. Capital Projects	\$11.4 <sup>(a)</sup>
20	Metro Eastside Access Improvements Project	Misc. Capital Projects	\$20.4 <sup>(a)</sup>
21	Airport Metro Connector Project	Misc. Capital Projects	\$151.1 <sup>(a)</sup>
		<b>Misc. Capital Projects Total</b>	<b>\$392</b>
22	Southwestern Maintenance Yard	Rail Facilities Improvements	\$157.0
23	Systemwide Elevator Installations (Vertical Systems)	Rail Facilities Improvements	\$8.0
24	Light Rail Transit Freeway Stations Sound Enclosures	Rail Facilities Improvements	\$8.6
25	Metro Red Line Civic Center Station Escalator/Elevator Modernization	Rail Facilities Improvements	\$12.0
26	Metro Red Line Escalator Replacement/Modernization	Rail Facilities Improvements	\$20.8
27	Willowbrook/Rosa Parks Station Improvement	Rail Facilities Improvements	\$36.0 <sup>(a)</sup>
		<b>Rail Facilities Improvements Total</b>	<b>\$242</b>
28	Metro Gold Line I-210 Barrier Replacement Phase I	Security/Safety	\$11.1 <sup>(b)</sup>
29	Metro Emergency Security Operations Center	Security/Safety	\$112.7
		<b>Security/Safety Total</b>	<b>\$124</b>
30	Metro Blue Line Pedestrian Safety Enhancement at Grade Crossings	Wayside Systems	\$31.4
31	Metro Blue Line Signal System Rehabilitation	Wayside Systems	\$118.9
		<b>Wayside Systems Total</b>	<b>\$150</b>
		<b>TRANSIT CAPITAL TOTAL</b>	<b>\$11,855</b>

(a) Based on projected budget through FY19, prior to Board adoption of life-of-project budget.

(b) Design LOP budget approved for risk assessment study, environmental clearance and final design.



# Appendix: Project Listing by Type

HIGHWAY	TYPE	CURRENT ESTIMATE (\$ MIL.)	
1	I-5 South – Alondra	Measure R Highway Capital Project	\$114.1
2	I-5 South – Valley View Interchange	Measure R Highway Capital Project	\$631.1
3	I-5 South – Shoemaker, Rosecrans, Bloomfield	Measure R Highway Capital Project	\$188.2
4	I-5 South – San Antonio, Imperial Hwy and Orr Day	Measure R Highway Capital Project	\$323.3
5	I-5 South – Florence	Measure R Highway Capital Project	\$211.7
6	I-5 South – Carmenita Interchange	Measure R Highway Capital Project	\$419.9
7	I-5 North – HOV from SR 118 to SR 170	Measure R Highway Capital Project	\$219.5
8	I-5 North – HOV from SR 170 to North of Buena Vista	Measure R Highway Capital Project	\$94.7
9	I-5 North – North of Buena Vista to South of Magnolia Blvd	Measure R Highway Capital Project	\$402.4
10	I-5 North – Magnolia Blvd to SR 134	Measure R Highway Capital Project	\$137.4
11	I-5 North HOV Project SR 14 to Parker Road	Measure R Highway Capital Project	\$42.4
12	I-605 Corridor Hot Spots – I-605/I-5 Interchange Improvement	Measure R Highway Capital Project	\$30.3
13	I-605 Corridor Hot Spots – I-605/SR 60 Interchange Improvement	Measure R Highway Capital Project	\$41.6
14	I-605 Corridor Hot Spots – SR-91 Westbound Widening at I-605 Interchange	Measure R Highway Capital Project	\$9.3
15	I-605 – Beverly Interchange Improvement Project	Measure R Highway Capital Project	\$3.5
16	I-605 from SR-91 to South St. Improvements Project	Measure R Highway Capital Project	\$4.5
17	I-405 Crenshaw Blvd On and Off Ramp Improvements	Measure R Highway Capital Project	\$20.0
18	I-405 and I-110 Aux Lane from SR 91 to Torrance Blvd	Measure R Highway Capital Project	\$44.0
19	I-710 (South) Corridor Improvement Projects	Measure R Highway Capital Project	\$91.0
20	I-710 (South) Early Action Projects - Soundwall Projects (3 locations)	Measure R Highway Capital Project	\$12.7
21	I-710 (North) Early Action Projects	Measure R Highway Capital Project	\$47.0
22	Soundwall Package 10	Measure R Highway Capital Project	\$59.4
23	Soundwall Package 11	Measure R Highway Capital Project	\$89.2
		<b>Measure R Highway Total</b>	<b>\$3,237.2</b>
24	I-10 HOV from Puente Avenue to Citrus Avenue (Seg. 2)	Other Highway Projects	\$195.6
25	I-10 HOV from Citrus Avenue to SR 57 (Seg. 3)	Other Highway Projects	\$268.7
26	SR 57 and SR 60 Mixed Flow Interchange	Other Highway Projects	\$54.0
27	SR 71: Interstate 10 to Mission Blvd	Other Highway Projects	\$16.0
28	SR 71: Mission Blvd to Rio Rancho Road	Other Highway Projects	\$40.0
		<b>Other Highway Total</b>	<b>\$574.3</b>
		<b>HIGHWAY PROGRAM TOTAL</b>	<b>\$3,811.5</b>
REGIONAL RAIL	TYPE	CURRENT ESTIMATE (\$ MIL.)	
1	LINK Union Station Project	Regional Rail	\$71.6
2	Burbank Airport – North Station Project	Regional Rail	\$15.0
3	Doran Street and Broadway/Brazil Safety and Access Project	Regional Rail	\$11.6
4	Brighton to Roxford Double Track Project	Regional Rail	\$15.0
5	Rosecrans/Marquardt Grade Separation Project	Regional Rail	\$155.3
6	Lone Hill to White Double Track Project	Regional Rail	\$10.0
7	Raymer to Bernsen Double Track Project	Regional Rail	\$6.0
		<b>REGIONAL RAIL PROGRAM TOTAL</b>	<b>\$284.5</b>