

# **Metro**

*Los Angeles County Metropolitan Transportation Authority  
One Gateway Plaza  
3rd Floor Board Room*



## **Agenda - Final**

**Thursday, March 16, 2017**

**9:00 AM**

**One Gateway Plaza, Los Angeles, CA 90012,  
3rd Floor, Metro Board Room**

### **Construction Committee**

*Sheila Kuehl, Chair*

*Robert Garcia, Vice Chair*

*Mike Bonin*

*Jacquelyn Dupont-Walker\**

*Janice Hahn*

*Carrie Bowen, non-voting member*

*Phillip A. Washington, Chief Executive Officer*

*\*Via Telephone:*

*Renaissance Denver Stapleton*

*3801 Quebec Street*

*Denver, CO 80207*

**METROPOLITAN TRANSPORTATION AUTHORITY BOARD RULES**  
(ALSO APPLIES TO BOARD COMMITTEES)

**PUBLIC INPUT**

A member of the public may address the Board on agenda items, before or during the Board or Committee's consideration of the item for one (1) minute per item, or at the discretion of the Chair. A request to address the Board should be submitted in person at the meeting to the Board Secretary. Individuals requesting to speak on more than three (3) agenda items will be allowed to speak up to a maximum of three (3) minutes per meeting. For individuals requiring translation service, time allowed will be doubled.

Notwithstanding the foregoing, and in accordance with the Brown Act, this agenda does not provide an opportunity for members of the public to address the Board on any Consent Calendar agenda item that has already been considered by a Committee, composed exclusively of members of the Board, at a public meeting wherein all interested members of the public were afforded the opportunity to address the Committee on the item, before or during the Committee's consideration of the item, and which has not been substantially changed since the Committee heard the item.

The public may also address the Board on non-agenda items within the subject matter jurisdiction of the Board during the public comment period, which will be held at the beginning and/or end of each meeting. Each person will be allowed to speak for up to three (3) minutes per meeting and may speak no more than once during the Public Comment period. Speakers will be called according to the order in which the speaker request forms are received. Elected officials, not their staff or deputies, may be called out of order and prior to the Board's consideration of the relevant item.

In accordance with State Law (Brown Act), all matters to be acted on by the MTA Board must be posted at least 72 hours prior to the Board meeting. In case of emergency, or when a subject matter arises subsequent to the posting of the agenda, upon making certain findings, the Board may act on an item that is not on the posted agenda.

**CONDUCT IN THE BOARD ROOM** - The following rules pertain to conduct at Metropolitan Transportation Authority meetings:

**REMOVAL FROM THE BOARD ROOM** The Chair shall order removed from the Board Room any person who commits the following acts with respect to any meeting of the MTA Board:

- a. Disorderly behavior toward the Board or any member of the staff thereof, tending to interrupt the due and orderly course of said meeting.
- b. A breach of the peace, boisterous conduct or violent disturbance, tending to interrupt the due and orderly course of said meeting.
- c. Disobedience of any lawful order of the Chair, which shall include an order to be seated or to refrain from addressing the Board; and
- d. Any other unlawful interference with the due and orderly course of said meeting.

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## DISCLOSURE OF CONTRIBUTIONS

The State Political Reform Act (Government Code Section 84308) requires that a party to a proceeding before an agency involving a license, permit, or other entitlement for use, including all contracts (other than competitively bid, labor, or personal employment contracts), shall disclose on the record of the proceeding any contributions in an amount of more than \$250 made within the preceding 12 months by the party, or his or her agent, to any officer of the agency, additionally PUC Code Sec. 130051.20 requires that no member accept a contribution of over ten dollars (\$10) in value or amount from a construction company, engineering firm, consultant, legal firm, or any company, vendor, or business entity that has contracted with the authority in the preceding four years. Persons required to make this disclosure shall do so by filling out a "Disclosure of Contribution" form which is available at the LACMTA Board and Committee Meetings. Failure to comply with this requirement may result in the assessment of civil or criminal penalties.

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**323.466.3876 x2**

*Español*

**323.466.3876 x3**

한국어

日本語

中文

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ภาษาไทย

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General Information/Rules of the Board - (213) 922-4600

Internet Access to Agendas - [www.metro.net](http://www.metro.net)

TDD line (800) 252-9040

**NOTE: ACTION MAY BE TAKEN ON ANY ITEM IDENTIFIED ON THE AGENDA**

**CALL TO ORDER****ROLL CALL****APPROVE Consent Calendar item: 12.**

Consent Calendar items are approved by one motion unless held by a Director for discussion and/or separate action.

CONSENT CALENDAR

12 RECEIVE AND FILE report by the Program Management Chief Officer. [2017-0109](#)

Attachments: [Attachment A - Program Management Chief Officer's Report - March 2017](#)

NON-CONSENT

5 RECEIVE AND FILE report on FY2018 Program Management Annual Program Evaluation (APE). [2017-0047](#)

Attachments: [Attachment A - FY18 Annual Program Evaluation \(APE\) Presentation](#)

**(ALSO ON FINANCE, BUDGET AND AUDIT COMMITTEE)**

13 AUTHORIZE the Chief Executive Officer to execute two Easement Agreements allowing construction of a portion of the **Hope/2nd Street Pedestrian Bridge to be built on, and Metro patron access across, private property owned by the Broad Museum.** [2017-0023](#)

Attachments: [Attachment A - July 2014 Board Motion 77](#)  
[Attachment B - Conceptual Design](#)  
[Attachment C - Site Plan](#)  
[Attachment D - Draft Plat Diagram](#)  
[Attachment E - Conceptual Signage Plan](#)  
[Presentation - Hope 2nd Street Bridge](#)

**(ALSO ON EXECUTIVE MANAGEMENT COMMITTEE)**

**26** CONSIDER:[2017-0146](#)

- A. APPROVING the award of and authorize the Chief Executive Officer to execute a cost-plus fixed fee Contract No. AE66758000 to perform preliminary engineering and complete final design for the **Core Capacity Enhancements at Division 20 for a Portal Widening and Turnback Facility** to T.Y. Lin International, Inc., in an amount not-to-exceed \$10,265,661, subject to resolution of any protests;
- B. AUTHORIZING Contract Modification Authority in the amount of \$2,053,132 (20% of the not-to-exceed contract award value) and authorize the CEO to execute individual Contract Modifications within the Board approved Contract Modification Authority;
- C. INCREASING anticipated expenditures and authorization from \$3.5M to \$17.2M to include contract amounts and modification authority requested in A and B, and Metro staff support costs through Final Design;
- D. ENTERING into Letters of No Prejudice (LONP) with the State of California as needed to ensure the eligibility of reimbursement of State funds for design work required to begin before State funds are available;
- E. FINDING the Division 20 Portal Widening and Turnback Facility is exempt from the California Environmental Quality Act (CEQA) pursuant to Public Resources Code Section 21080, subdivision (b) (10);
- F. ADOPTING the Final Initial Study/Mitigated Negative Declaration (IS/MND) for the Division 20 Portal Widening and Turnback Facility, and the recommended Mitigation Monitoring and Reporting Program (MMRP) of the Final IS/MND; and
- G. ASSURING that the final design in this action preserves the ability to construct a potential future station in the vicinity of 6th Street in the Arts District.

**Attachments:** [Attachment A - Procurement Summary Div 20.pdf](#)  
[Attachment B - DEOD Summary.pdf](#)  
[Attachment C - Div 20 Portal Widening Turnback.pdf](#)  
[Attachment D - Motion Downtown Los Angeles Arts District Connectivity.pdf](#)

**Adjournment**

Consideration of items not on the posted agenda, including: items to be presented and (if requested) referred to staff; items to be placed on the agenda for action at a future meeting of the Committee or Board; and/or items requiring immediate action because of an emergency situation or where the need to take immediate action came to the attention of the Committee subsequent to the posting of the agenda.



**Board Report**

**File #:** 2017-0109, **File Type:** Informational Report

**Agenda Number:** 12

**CONSTRUCTION COMMITTEE  
MARCH 16, 2017**

RECEIVE AND FILE report by the Program Management Chief Officer.

**DISCUSSION**

Receive update report covering the month of March 2017 (attachment A) by the Program Management Chief Officer.

**ATTACHMENTS**

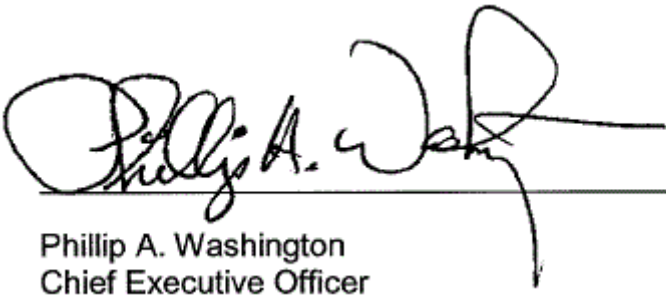
Attachment A - Program Management Chief Officer's Report - March 2017

Prepared by:

- **Crenshaw/LAX** - Charles Beauvoir, Deputy Executive Officer, Project Mgmt., (213)299-3095
- **Regional Connector** - Gary Baker, Deputy Executive Officer, Project Mgmt., (213)893-7191
- **Westside Purple Line Ext 1** - James Cohen, DEO Project Mgmt., (213)922-7911
- **Westside Purple Line Ext 2** - Michael McKenna, EO Project Mgmt., (213)312-3132
- **Patsaouras Plaza Busway Station** - Timothy Lindholm, EO Project Engr., (213)922-7297
- **Presentation** - Yohana Jonathan, Departmental System Analyst, (213)922-7592

Reviewed by:

Richard Clarke, Chief Program Management Officer, (213)922-7557



Phillip A. Washington  
Chief Executive Officer

# **Program Management Chief Officer's Report**

## **Project Status Report**

Presented By

**Richard Clarke**

Chief Program Management Officer

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March 2017











**Construction Committee**

Los Angeles County Metropolitan Transportation Authority





# PROJECT BUDGET & SCHEDULE STATUS SUMMARY CHART

Project	Cost Performance	Schedule Performance	Comments
Crenshaw/LAX			Due to heavy rains in January the design-builder is forecasting a four week delay to the Project critical path. With limited schedule contingency available Metro and design-builder are discussing potential schedule mitigations. The remaining cost contingency is approaching the 3% Project Reserve level.
Regional Connector			Board approved LOP increase. Schedule re-baselined.
Westside Purple Line Extension-Section 1			Overall construction progress is 15.5% complete versus 9.3% planned.
Westside Purple Line Extension-Section 2			CMSS awarded on December 2, 2016. FFGA executed by FTA on December 15, 2016, and TIFIA loan obtained on December 20, 2016.
Patsaouras Plaza			Demolition activities has started. Utility relocation and foundation work started in January 2017 with major construction work in February 2017. Schedule negotiations in progress to determine revised substantial completion date.

March 2017



On target



Possible problem



Major issue



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Construction Committee

Los Angeles County Metropolitan Transportation Authority

# CRENSHAW/LAX TRANSIT PROJECT

◇ BUDGET	Current	Forecast
TOTAL COST	\$2,058M	\$2,058M

◇ SCHEDULE	Current	Forecast
REVENUE OPERATION	Oct 2019	Nov 2019

- Overall project progress is nearing 60% complete. However, heavy rains in January impacted planned progress. Schedule mitigation measures are under discussion with design-builder.
- Harriet holed through at MLK Jr. Station and mining of final section to Leimert Park Station is on schedule.
- All six underground structures on schedule.
- Street widening continues in Park Mesa Heights area.
- Southwestern Yard design-builder continues site excavation, underground utilities, and main shop foundation concrete.



Special trackwork has commenced in Inglewood right-of-way    HDPE liner installation at north portal near Leimert Park

March 2017



On target



Possible problem



Major issue

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Los Angeles County Metropolitan Transportation Authority



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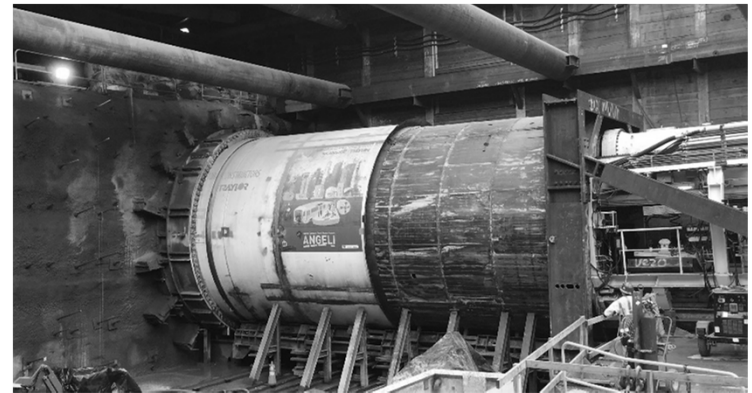
# REGIONAL CONNECTOR TRANSIT CORRIDOR

OK BUDGET		
	Current	Forecast
TOTAL COST	\$1,810M	\$1,810M

\* Includes Board approved LOP plus Planning and Finance costs.

OK SCHEDULE		
	Current	Forecast
REVENUE OPERATION	2021	2021

- Overall Project Progress is 31%, Construction is 27% and Final Design is 96% complete
- TBM mining operations have been initiated
- Pile installation, decking and utility hanging continue under 2<sup>nd</sup>/Broadway Station Area
- At the 2<sup>nd</sup>/Hope Station Box, the last portions of excavation are underway to allow for placement of the invert which will extend through mid-May
- On Flower Street, deck beam and panel installation continues on weekends; utility hanging, water line and power relocation continues Monday through Friday
- The TBM Recovery Shaft at 4<sup>th</sup>/Flower continues to be excavated and readied for arrival of the TBM in June



TBM mining underway



Installation of deck beams on Flower Street

March 2017



On target



Possible problem



Major issue

Construction Committee

Los Angeles County Metropolitan Transportation Authority



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# WESTSIDE PURPLE LINE EXTENSION – SECTION 1

## OK BUDGET

	Current	Forecast
TOTAL COST*	\$3,154M	\$3,154M

\* Includes Board approved LOP plus Planning and Finance costs.

## OK SCHEDULE

	Current	Forecast
REVENUE	Oct 2024	Nov 2023
OPERATION	FFGA	

Overall Project Progress is 15.5 % complete vs. 9.3% planned

### Tunnels, Stations, Trackwork and Systems Design-Build Contract

- Excavation for the Wilshire/La Brea Station that started on October 12, 2016 continues beneath the concrete deck.
- The Wilshire/Fairfax pile installation operation completed on February 8, 2017. Wilshire/Fairfax Station decking commenced on the weekend of February 11, 2017. There are 18 weekend closures planned for this operation.
- The installation of the sound wall and instrumentation is on-going at Wilshire/La Cienega Station. The Wilshire/La Cienega Station piling operation is scheduled to start in March 2017.
- The jet grouting operation along Wilshire Boulevard at the cross passages continues. This work along the tunnel section from Wilshire/La Brea to Wilshire/Western is scheduled to continue through July 2017.
- Tunnel Boring Machines (TBMs) are being fabricated for delivery at the end of 2017. Tunneling is planned to start in 2018.



Excavation at Wilshire/La Brea Station



Wilshire/Fairfax Decking – Stage 1 Excavation Area

March 2017



On target



Possible problem



Major issue

Construction Committee

Los Angeles County Metropolitan Transportation Authority



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# WESTSIDE PURPLE LINE EXTENSION – SECTION 2

## BUDGET

	Current	Forecast
<b>TOTAL COST</b>	<b>\$2,530M</b>	<b>\$2,530M</b>

\* Includes Board approved LOP plus Planning and Finance costs.

## SCHEDULE

	Current	Forecast
<b>REVENUE OPERATION</b>	<b>Dec 2026</b>	<b>Aug 2025</b>

- On January 31, 2017, the Notice of Award was issued for the Design/Build contract (C1120) for the final design and construction of the Project. Notice to Proceed is anticipated by April 2017.
- Construction of the telecom joint trench is proceeding at the Century City Constellation Station. Duct bank completion is anticipated in April 2017, followed by cable pulling/splicing in August 2017.
- AT&T and LADWP Power design plans for the same area have been approved by LABOE.
- Advanced utility relocations are anticipated to begin at the Wilshire/Rodeo Station in April 2017. Concurrence by the City of Beverly Hills on the utilities final design plans are underway.
- Property acquisitions needed for construction staging are underway.



Telecom Joint Trench Construction along Constellation Boulevard

March 2017



On target



Possible problem



Major issue


Construction Committee


Los Angeles County Metropolitan Transportation Authority



Metro

# PATSAOURAS PLAZA BUSWAY STATION

 BUDGET	Current	Forecast
TOTAL COST	\$39.7M	\$39.7M

 SCHEDULE	Current	Forecast
SUBSTANTIAL COMPLETION	Dec 2017	TBD

- Vignes On/Off ramp closed Jan 3, 2017 to allow for utility relocation and foundation work to start.
- Bridge overhead demolition and utility relocation is ongoing.
- Ramirez St and Center St closures will be approved by DOT by the end of February.
- Drilling subcontractor mobilization delayed until March due to weather issues.
- ADL remediation ongoing, although progress slowed by wet weather
- Schedule negotiations in progress to determine revised substantial completion date



Vignes Closure



Edge of Deck Removal



Utility Relocation



Industrial Waste Tanks

March 2017



On target



Possible problem



Major issue

Construction Committee

Los Angeles County Metropolitan Transportation Authority



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# Crenshaw/LAX

## Pending Change Order

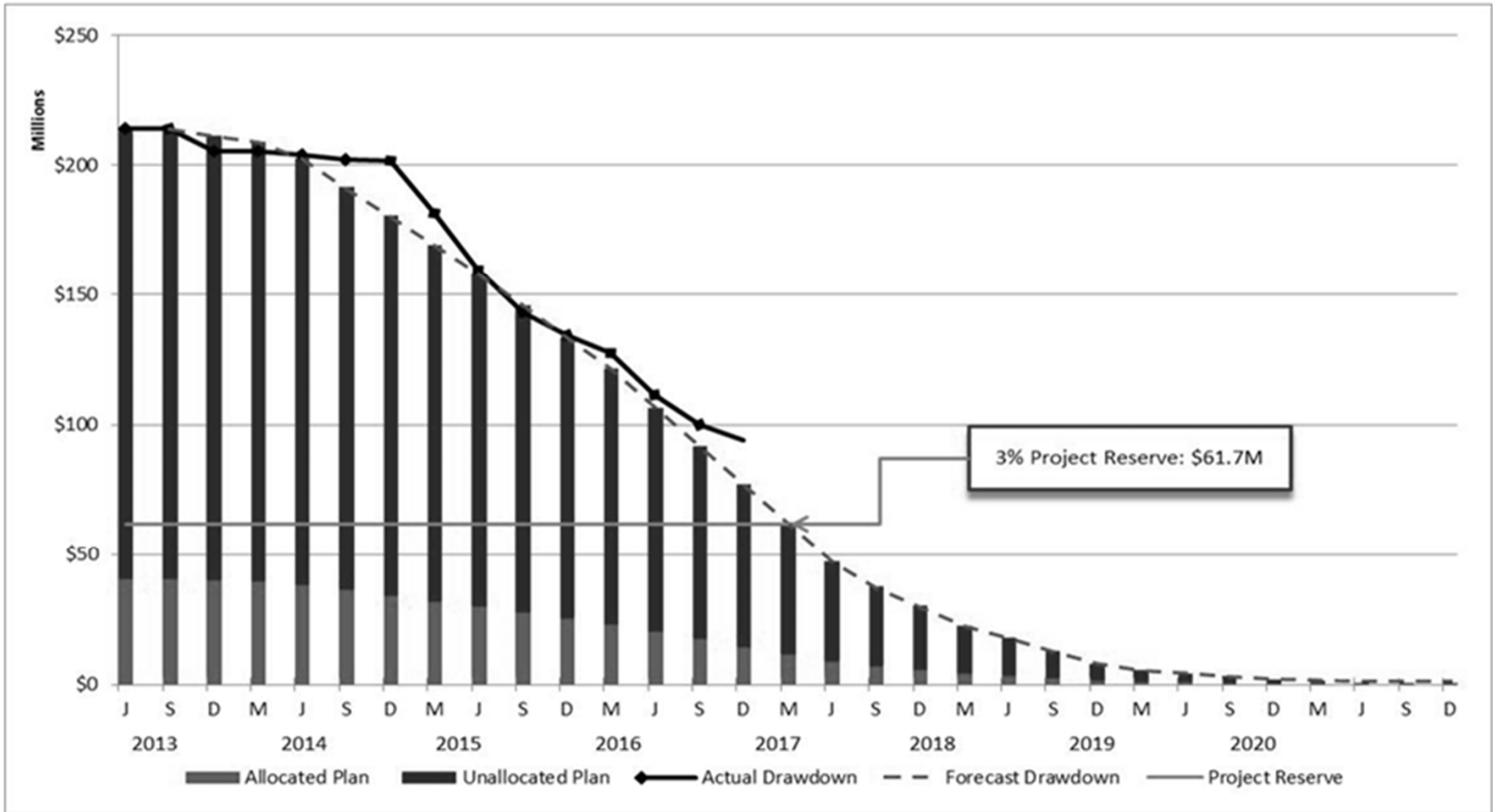
January 2017

Change Notice #	Description	Number of Mod/ Change Orders	Cost Value
<b>TOTAL VALUE OF EXECUTED CONTRACT MODIFICATIONS AND APPROVED CHANGE ORDERS</b>		<b>239</b>	<b>\$31,207,340</b>
<b>TOTAL PENDING MODIFICATIONS AND CHANGE ORDERS ROUGH ORDER OF MAGNITUDE COST</b>		<b>30</b>	<b>\$3,712,794</b>
<b>CONTRACT C0988</b>			
MOD 00201	Design Deluge System at Expo Crossover		Less than \$1 million
MOD 00202.1	Turnback and Speed Restrictions		Less than \$1 million
MOD 00222	Non-Compliance DBE Req. Assesm Agrmt		Less than \$1 million
CO 00129	Elimination Crossover Sta 56+57.50		Less than \$1 million
MOD 00224.1	Pedestrian Lights Slauson Station		Less than \$1 million
CO 00137	TPSS #10 Build-Out & LADWP Power		Less than \$1 million
MOD 00225	Contaminated Soil Testing & Remvl		Less than \$1 million
MOD 00226	Maint. ROW Adj. Properties La Colina		Less than \$1 million
MOD 00229	Century & Aviation Unknown 8" Utilit		Less than \$1 million
CO 00064.2	Crenshaw Landscaped Median Rendering		Less than \$1 million
MOD 00198.1	Station Signage Revision (ADA)		Less than \$1 million
MOD 00234	LADOT Fiber Optic Cable Betterment		Less than \$1 million
MOD 00240	Construction- Tree Well Brick Pavers		Less than \$1 million
MOD 00181	TPSS No. 1 New Power Transmission		Less than \$1 million
MOD 00219.1	Qwest Potholing-Sta214+00 to STA 257		Less than \$1 million
MOD 00242	Grade Crossings Bell Noise Reduction		Less than \$1 million
MOD 00245	Crenshaw Landscaped Median Rendering		Less than \$1 million
CO 00136	Relocate Qwest Pullbox at Hindry Ave		Less than \$1 million
CN 00229	Unsuitable Soils for Subgrade RW192		Less than \$1 million
CN 00238	Centinela Crossing Tree Preser-Const		Less than \$1 million
CN 00239	Centinela Crossings/Eucalyptus-Const		Less than \$1 million
CN 00241	Update Station Customer Signage Cons		Less than \$1 million
CN 00231	Trash Removal at MSE Wall 111		Less than \$1 million
CN 00278	Additional Curb Ramps at Westmount		Less than \$1 million
CN 00293	Asbestos Cement Pipe Aviation & 111		Less than \$1 million
CN 00322	Metro Specification Rev Rail Welding		Less than \$1 million
CN 00325	Clarify Rail Welding Inspection Req.		Less than \$1 million
CN 00326	Segment C Design Revisions per LADOT		Less than \$1 million
CN 00328	Black Diamond Vault 5436 Crenshaw Bl		Less than \$1 million
CN 00333	Abandoned 8" and 10" Oil Pipeline		Less than \$1 million
<b>TOTAL MODIFICATIONS AND CHANGE ORDERS</b>		<b>269</b>	<b>\$34,920,134</b>

# Crenshaw/LAX

January 2017

## Project Cost Contingency Drawdown

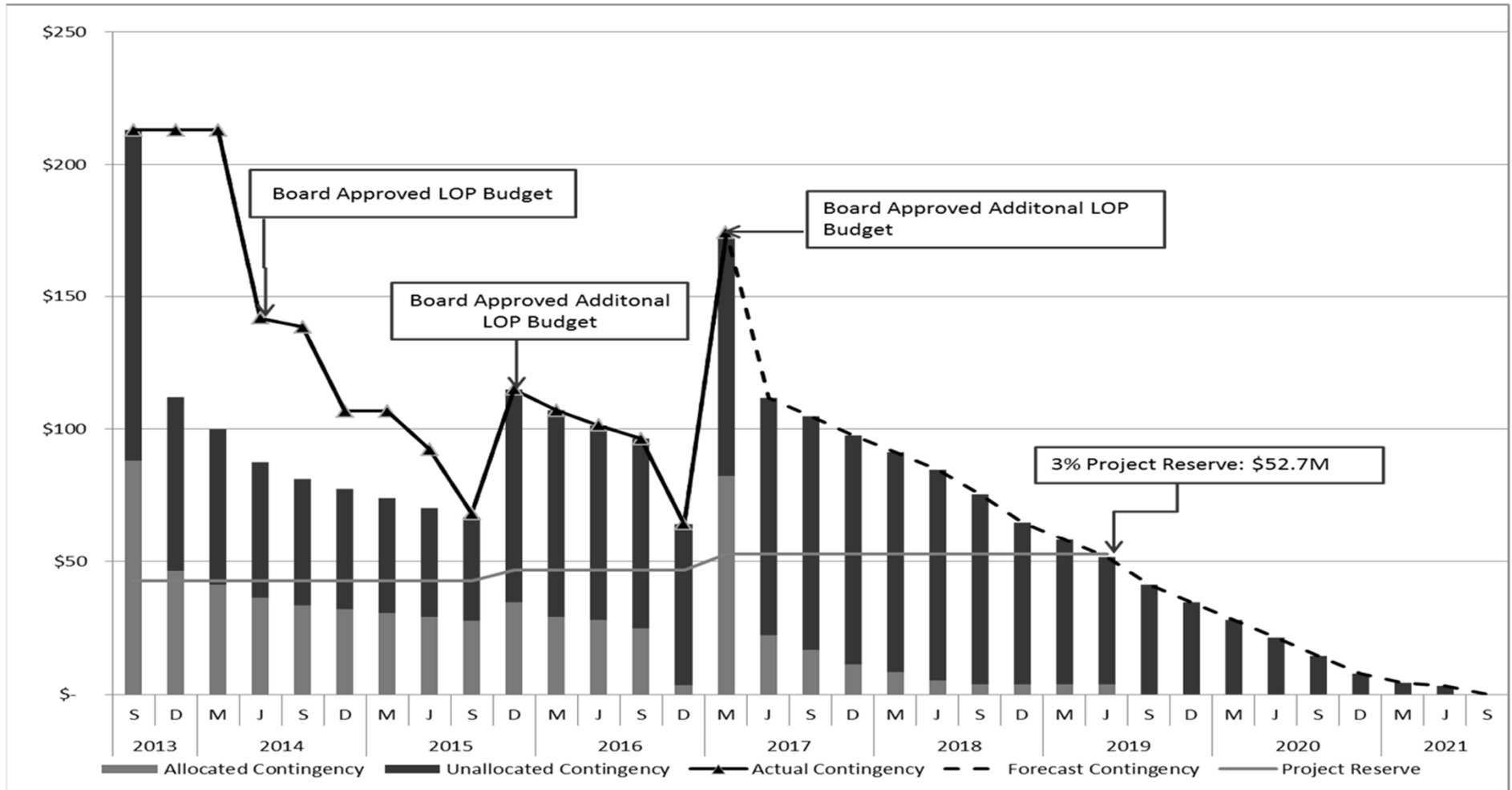




# Regional Connector Pending Change Order

Change Notice #	Description	Number of Mod/Change Orders	Cost Value
	<b>TOTAL VALUE OF ALL EXECUTED CONTRACT MODIFICATIONS AND CHANGE ORDERS:</b>	<b>83</b>	<b>\$ 126,269,665</b>
	<b>TOTAL PENDING MODIFICATIONS ROUGH ORDER OF MAGNITUDE COST:</b>	<b>33</b>	<b>\$ 77,114,009</b>
	1st/Alameda Bumpout (Construction)		Less Than \$1 Million
	Flower Street Modification: future 2-way Traffic /Bumpout/Ped Lighting (Construction Only)		Between \$1 and \$5 Million
	Revise Metro Rail Station Signage and Incorporate Metro Underground Station Signage (Construction)		Less Than \$1 Million
	Add Wye Junction Fan Plant - Construction		Between \$10 and \$15 Million
	Fully Coupled Dynamic Analysis for SEM Cavern		Less Than \$1 Million
50.0	Revisions to TPIS Requirements -Construction		Less Than \$1 Million
66.0	Commonwealth Agreement Provisions		Less Than \$1 Million
68.0	Flower Street Zanja Additional Potholing		Less Than \$1 Million
72.0	Relocate Zayo Ductbank at 2nd/Broadway		Less Than \$1 Million
78.0	ATT Ductbank Relocation @ Hewitt		Less Than \$1 Million
79.0	Deputy Grading Inspector 2nd/Broadway Station SOE		Less Than \$1 Million
86.0	Flower Maintenance of Traffic (MOT) West Piles		Less Than \$1 Million
87.0	Support Veolia 24" Chilled Water Pipes at 2nd/Hope Station		Less Than \$1 Million
99.0	Option 3 Pedestrian Bridge Revisions / Broad Coordination (Construction)		Between \$1 and \$5 Million
91.2	Option 3 Pedestrian Bridge Revisions / Broad Coordination (Design)		Less Than \$1 Million
103.0	1st/Central Station HMI Units for Escalator Controllers		Less Than \$1 Million
104.0	Add One Add 'I VHF Radio Operational Channel - Design Only		Less Than \$1 Million
	Add One Add 'I VHF Radio Operational Channel - Construction		Less Than \$1 Million
105.0	Revise Flower SOE to Construct TBM Retrieval Pit (Construction)		Between \$1 and \$5 Million
106.0	Revisions to Metro Optical Network Switch		Less Than \$1 Million
107.0	Delays and schedule mitigation measures, electrical and water utility relocation costs, add 'I fire life safety engineering and other design and construction changes		More than \$15 Million
108.0	Revision to Wye Junction Fan Plant Design		Less Than \$1 Million
109.0	Testing & Repair of insulation Joints (Waterline)		Less Than \$1 Million
	Revise Communication Radio System SOW (Construction)		Less Than \$1 Million
111.0	Spray-on Acoustical Finishes Additional Quantities		Between \$1 and \$5 Million
112.0	DSC -Pea gravel in waterline trench		Less Than \$1 Million
	DSC - Miscellaneous buried object in tie-back removal		Less Than \$1 Million
	Infrastructure for Insite Wireless in Tunnels		Less Than \$1 Million
	2nd St. Mid Block T.C. Revisions/Relocate Traffic Controller @ 2nd/Spring		Less Than \$1 Million
117.0	Broadway Power Utility Vault Steel Bases (Cradles)		Less Than \$1 Million
	Add Perforated Metal Dropped Ceiling at 2nd/Hope Station Plaza - Construction		Less Than \$1 Million
	Waterline Alignment Modifications on Flower		Less Than \$1 Million
	Revised Emergency Walkways at Curves (30" to 35") - Construction		Less Than \$1 Million
	<b>TOTAL MODIFICATIONS/CHANGE ORDERS</b>	<b>116</b>	<b>\$ 203,383,674</b>

# Regional Connector Project Cost Contingency Drawdown



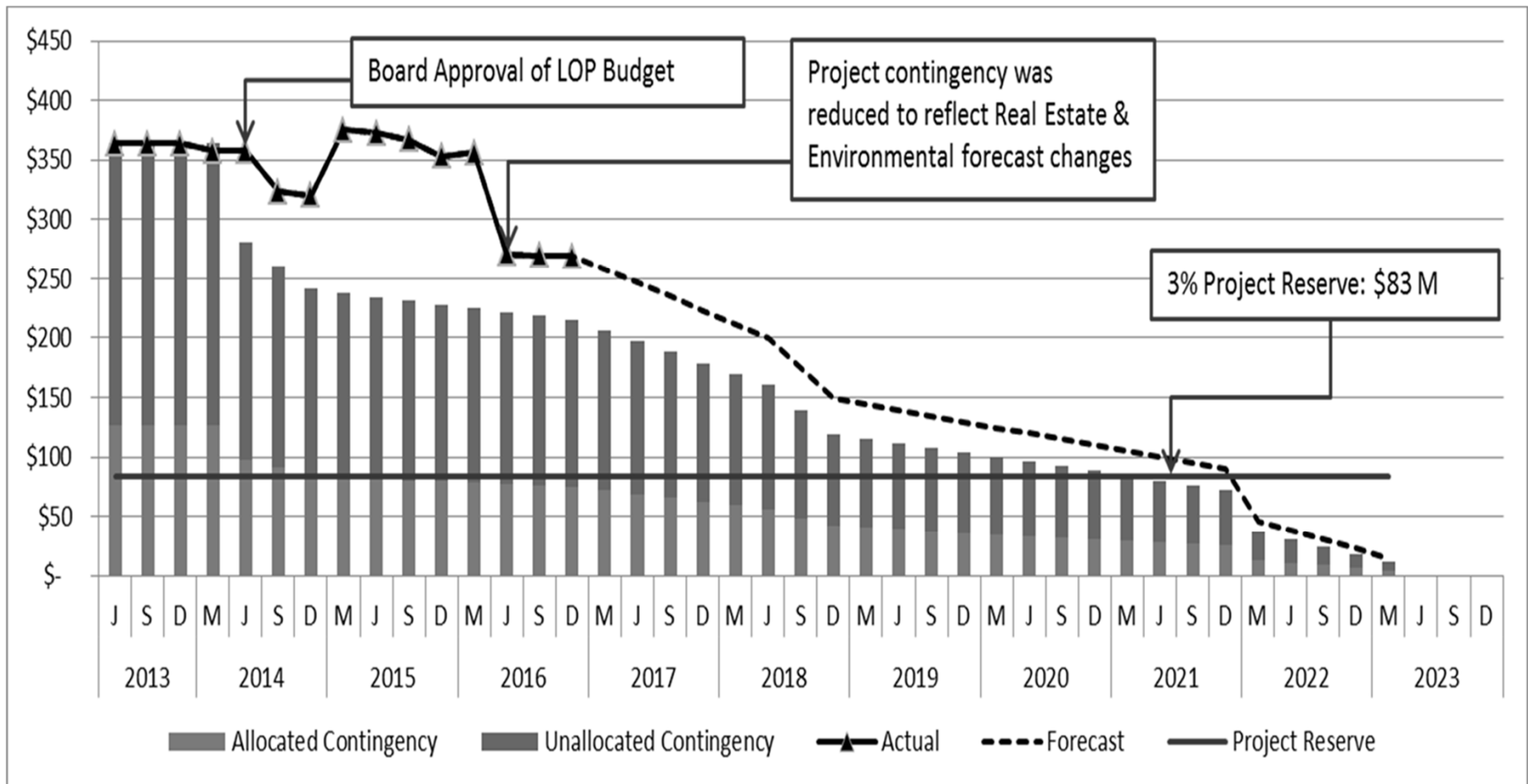
# Westside Purple Line Ext. Section 1 Pending Change Order

January 2017

Change Notice #	Description	Number of Mod/ Change Orders	Cost Value
<b>TOTAL VALUE OF ALL EXECUTED CONTRACT MODIFICATIONS AND CHANGE ORDERS:</b>		<b>131</b>	<b>\$ 10,959,182</b>
<b>TOTAL PENDING MODIFICATIONS ROUGH ORDER OF MAGNITUDE COST:</b>		<b>18</b>	<b>\$ 2,989,401</b>
<b>CONTRACT C1045</b>		<b>15</b>	
CN-25	Metro Furnished Equipment Tpis		Less Than \$1 Million
CN-26	Betterment: Median Reconstruction At San Vicente Blvd		Less Than \$1 Million
CN-31.1	Station Canopy Changes		Less Than \$1 Million
CN-32	Pin Station (Identifier) Changes		Less Than \$1 Million
CN-37.1	Rev Metro Furnished Fujitsu 9500 Equipment To Be Furnished By Contractor		Less Than \$1 Million
CN-39	Revisions To Metro Station Signage Standards		Less Than \$1 Million
CN-42.2	Radio System Redundancy		Less Than \$1 Million
CN-43	Isolate Track Circuits At Western		Less Than \$1 Million
CN-46	Plaza Level Elevator Canopy Changes		Less Than \$1 Million
CN-48.1	Bike Enclosure Electrical Power & Communication Additions		Less Than \$1 Million
CN-53	Additional Material Testing - Deck Panels		Less Than \$1 Million
CN-54	Additional Geotech Monitoring At Fairfax (Support Of Deviation Request)		Less Than \$1 Million
CN-57	LA Cienega - Additional Extensometer Monitors		Less Than \$1 Million
CN-58	Civil - DU4 Tree Change, DU4 Bike Share Paving, All STA - Auth Pkg Sgns		Less Than \$1 Million
CN-59	La Cienega Permit Fees		Less Than \$1 Million
<b>CONTRACT C1078</b>		<b>3</b>	
CN-8	Relocation Of 8-Inch Sanitary Sewer		Less Than \$1 Million
CN-11	Schedule Impacts Due To Third Party		Less Than \$1 Million
CN-12	Betterment: City of LA Motorized Access Gate		Less Than \$1 Million
<b>TOTAL MODIFICATIONS/CHANGE ORDERS:</b>		<b>149</b>	<b>\$ 13,948,583</b>

# Westside Purple Line Ext. Section 1 Project Cost Contingency Drawdown

January 2017





## Board Report

File #: 2017-0047, File Type: Informational Report

Agenda Number: 5.

### FINANCE, BUDGET, AND AUDIT COMMITTEE

MARCH 15, 2017

### CONSTRUCTION COMMITTEE

MARCH 16, 2017

**SUBJECT: FISCAL YEAR 2018 PROGRAM MANAGEMENT ANNUAL PROGRAM EVALUATION (APE)**

**ACTION: RECEIVE AND FILE**

#### **RECOMMENDATION**

RECEIVE AND FILE report on **FY2018 Program Management Annual Program Evaluation (APE)**.

#### **ISSUE**

The Annual Program Evaluation (APE) is a priority initiative created to evaluate Metro's capital program annually. Given the challenges of managing a multi-billion dollar capital program, a comprehensive review of the risks associated with the cost and schedules of the program is conducted on an annual basis. This report summarizes the results of the FY2018 APE review performed by Program Management.

#### **DISCUSSION**

The APE initiative is a comprehensive evaluation of Metro's capital program, including Transit, Highway, and Regional Rail projects. As part of the APE process, staff reviewed and updated project costs and schedule to current conditions, challenges, and risks. Any changes to project budgets/schedules and the reasons for the adjustments are to be reported to the Board once annually for approval. In addition, APE serves as a project management tool bringing greater consistency, transparency, and discipline to better manage and deliver Board-approved projects. The APE is a dynamic tool, which is updated annually as projects move towards completion and any changes approved by the Board are incorporated.

#### **FY2018 APE Results**

For the FY2018 APE, Program Management focused on new and carry-over projects to FY2018 with project cost estimated at \$5 million or greater. Program Management staff evaluated sixty (60) projects, including 28 Transit projects, 25 Highway projects, and 7 Regional Rail projects (see Attachment A for a complete project listing) which total approximately \$13.8 billion. Compared to the FY17 APE review, the FY18 program size has increased 25% or approximately by \$2.8 billion.

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The major focus remains on managing the projects within the Board-approved life-of-project (LOP) budgets and schedules established for these projects. A summary of the potential adjustments to the Metro's capital program in FY18 is reported in the FY2018 Program Management APE presentation (Attachment A, page 41).

### Program Challenge

With the recently approved Measure M program added to the Measure R program, Metro is currently undertaking the largest transportation capital program in the nation, which creates an unprecedented challenge to project delivery. Recognizing staffing is a key factor to project delivery, Program Management is committed to developing strengths in its capacity and capability to ensure the multi-billion dollar capital program can be successfully managed.

### **FINANCIAL IMPACT**

The FY18 Program Management APE report does not have any specific budgetary or financial impacts. The APE report serves as an annual and early notice instrument to assess the scope, cost and schedule risk items affecting the respective projects under the oversight of Program Management. Risk items affecting scope, cost and schedule are identified on a project by project basis within the APE Presentation (Attachment A).

Should any of the potential project risks affecting scope, cost and schedule parameters be realized, the Chief Program Management Officer and affected project staff will return to the Board with separate board report recommendations to address the identified risks and adjust the project element (s) of the Board adopted project parameters.

### **NEXT STEPS**

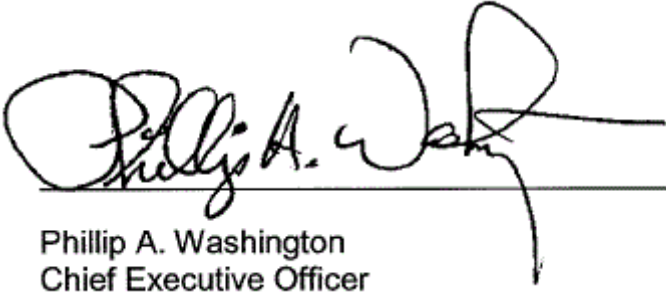
Program Management will request the resources required for project delivery success through the FY18 Budget process for Board approval. Project managers will manage to deliver projects safely, on-time and within the Board-approved budgets. Staff will continue to provide the Board with monthly updates on the project status throughout the year. The next FY2019 Program Management APE report will be presented to the Board in Spring 2018.

### **ATTACHMENTS**

Attachment A - Fiscal Year 2018 Program Management Annual Program Evaluation (APE) presentation

Prepared by: Brian Boudreau, Senior Executive Officer, Program Control (213) 922-2474

Reviewed by: Richard Clarke, Chief Program Management Officer, (213) 922-7557



Phillip A. Washington  
Chief Executive Officer



**Fiscal Year 2018  
Program Management  
Annual Program Evaluation  
(APE)**





# Presentation Overview

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- APE Purpose and Process
- Capital Program Status
- Capital Program Cost
- Adjustments for FY2018 APE
- Summary
- Next Steps



# APE 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



# APE Process

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- A review of project costs and schedule
- 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

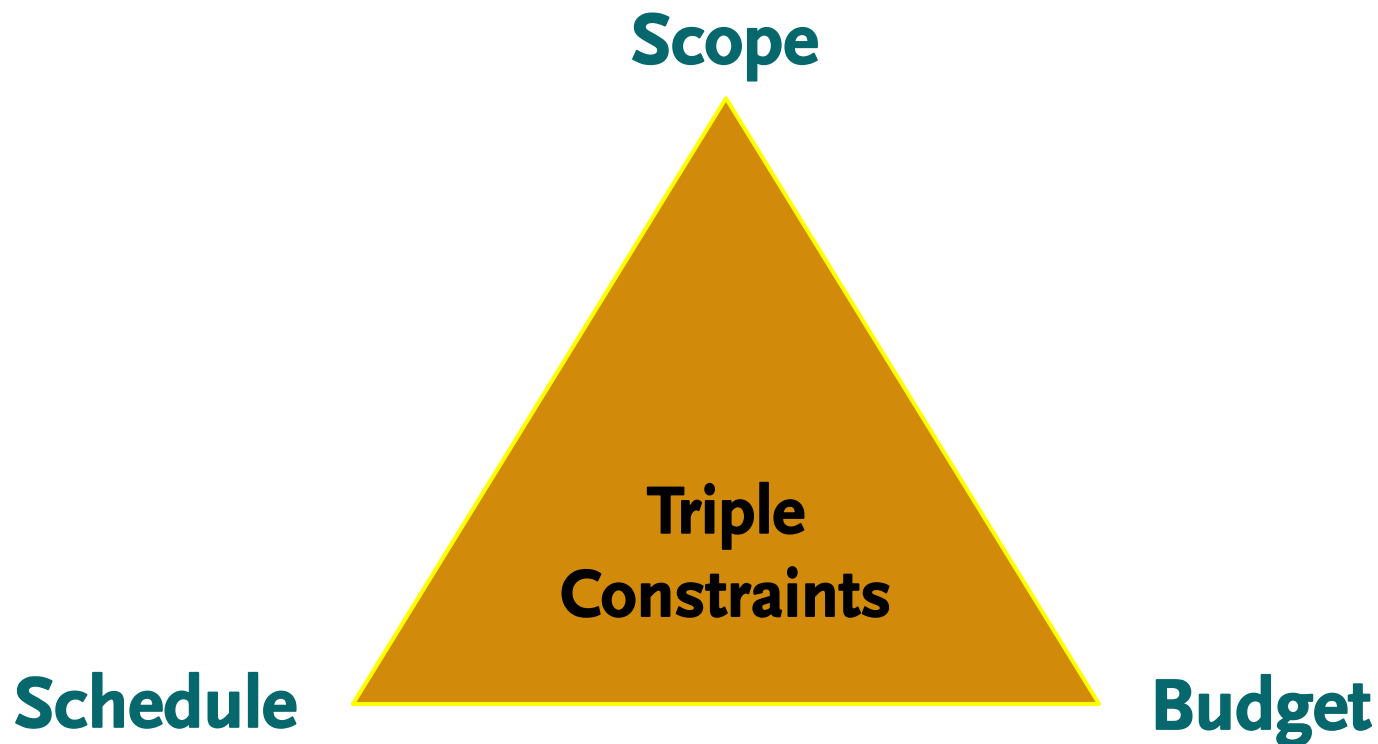


# Project Management

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



# FY18 APE 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 – 5 projects
  - Other Transit Capital Projects – 23 projects
  - Regional Rail Projects – 7 projects
  - Highway Program – 25 projects
- Project budgets in the APE focus on authorized funding amount



## FY18 APE Scope

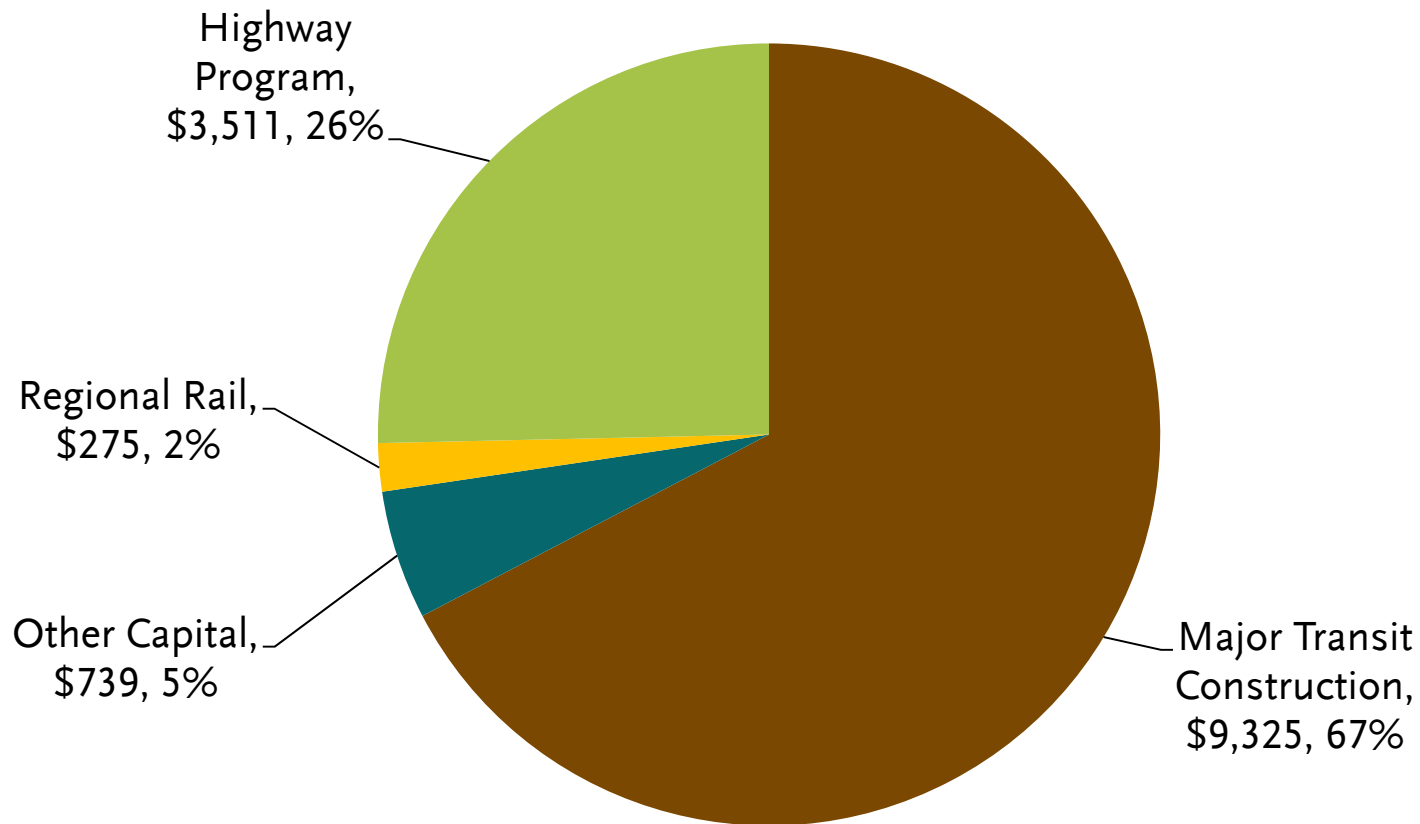
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- In addition to the projects in APE, Program Management also manages/oversees additional 100+ projects, including facilities, Operations improvement, and State of Good Repair projects
- In total, Program Management manages and supports a volume of 160+ projects with a total authorized value at estimated approximately \$15 billion
- Approximately \$13.8 billion projects are included in the FY18 APE review



# FY18 APE Current Program: \$13.8 B

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# Program Highlights

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- Overall Program increased 25% from approximately \$11 billion in FY17, to approximately \$13.8 billion in FY18
- Program dollars committed to Major Transit Construction projects increased approximately \$2.5 billion from FY17 to FY18
- With implementation of the Measure M program, Metro's Capital Program is expected to continually grow





# Program Challenges

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- Secure sufficient resources and staffing in a timely manner needed to manage and support project delivery
- Collaborate with stakeholders to meet community expectations
- Commitment of efficient Third Party review/approval by various external jurisdictions and Caltrans
- Encourage competitive and qualified pool of contractors, small businesses, and workforce on Metro projects
- Deliver multiple large and complex projects on-time and within budget
- Achieve continuous improvement in project delivery through innovation, application of best practices and high standards



# Metro Transit Program



# Metro Transit Capital Projects

Type	Project Budget	# of Projects
Major Transit Construction	\$9,325	5
Other Transit Capital	\$739	23
Rail Facilities Improvements	\$229	6
Bus Facilities Improvements	\$225	10
Wayside System	\$124	2
Security/Safety	\$124	2
Miscellaneous Capital	\$37	3
<b>Total Transit Capital Program</b>	<b>\$10,064</b>	<b>28</b>

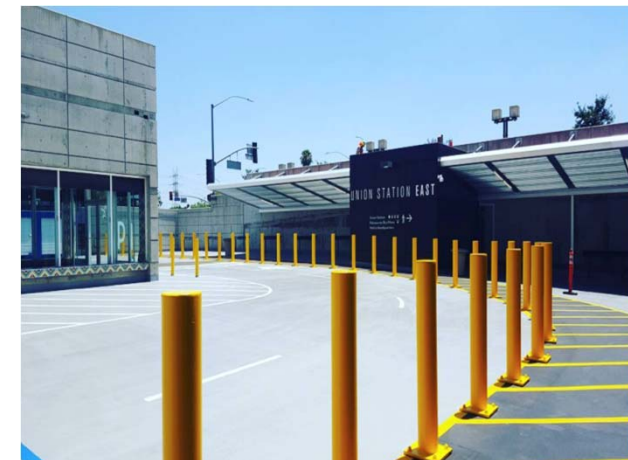


# Metro Transit Capital Program Status

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## 5 Projects Completed in FY2017

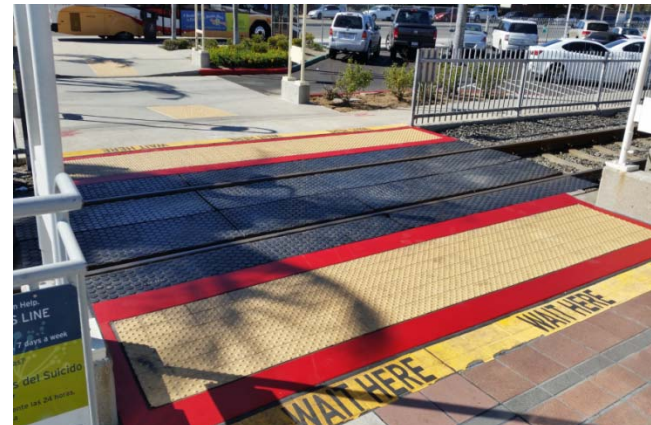
- Metro Red Line to Orange Line Underpass at North Hollywood Station – August 2016
- Patsaouras Bus Plaza Paving Reconstruction Project (Initial Phase) – October 2016
- 7th Street/Metro Station Pedestrian Tunnel (BLOC) – January 2017
- Fuel Storage Tank System Enhancements (FY15 – FY17) – March 2017
- Division 3 Master Plan Phase II-IV – June 2017



# Metro Transit Capital Program Status

## 5 Projects Planned to be Completed In FY2018

- Metro Red Line Escalator Replacement/Modernization Project – August 2017
- Metro Blue Line Pedestrian Safety Enhancement at Grade Crossings – October 2017
- Bus Facility Maintenance Improvements & Enhancements Phase I – December 2017
- Metro Silver Line Improvements and Upgrades – December 2017
- El Monte Busway & Transit Center Expansion – December 2017



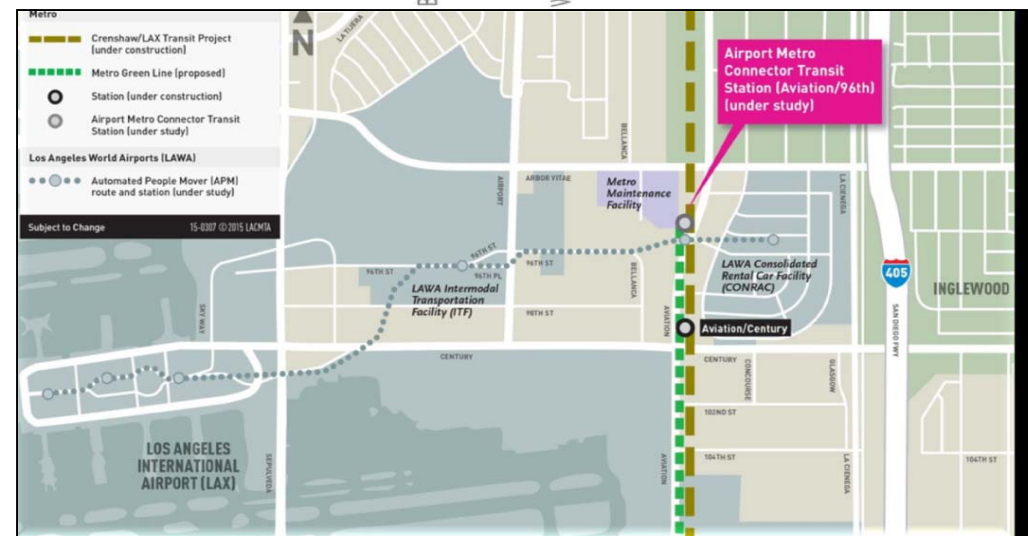
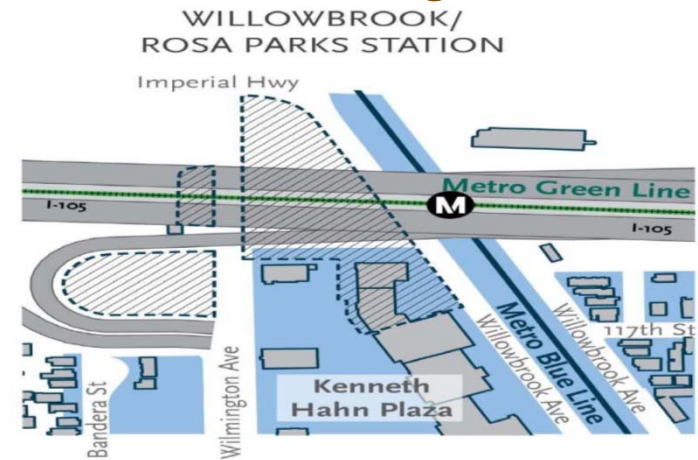
Photos after safety pedestrian improvements at Metro Blue Line's Wardlow Station in Long Beach.



# Metro Transit Capital Program Status

## 4 Projects with Planned Transition from Planning to Program Management in FY18:

- Willowbrook/Rosa Parks Station Improvements Project – Spring 2017
- Airport Metro Connector Project (96<sup>th</sup> Street Station) – Fall 2017
- Metro Gold Line Eastside Access Project – Winter 2017
- River to Rail Corridor Active Transportation Connector Project – Spring 2018



# Crenshaw/LAX Transit Project



# Crenshaw/LAX Transit Project

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Project Budget: \$2,058M

Project Completion: October 2019

Project Complete: 60%

## Accomplishments:

- Nearing the 60% construction completion mark for the project
- Final design of base work is complete with continuing design of change work
- Contractor and Metro agreed on a revised baseline schedule that supports the planned revenue service date of October 2019
- Contractor on schedule per revised baseline schedule

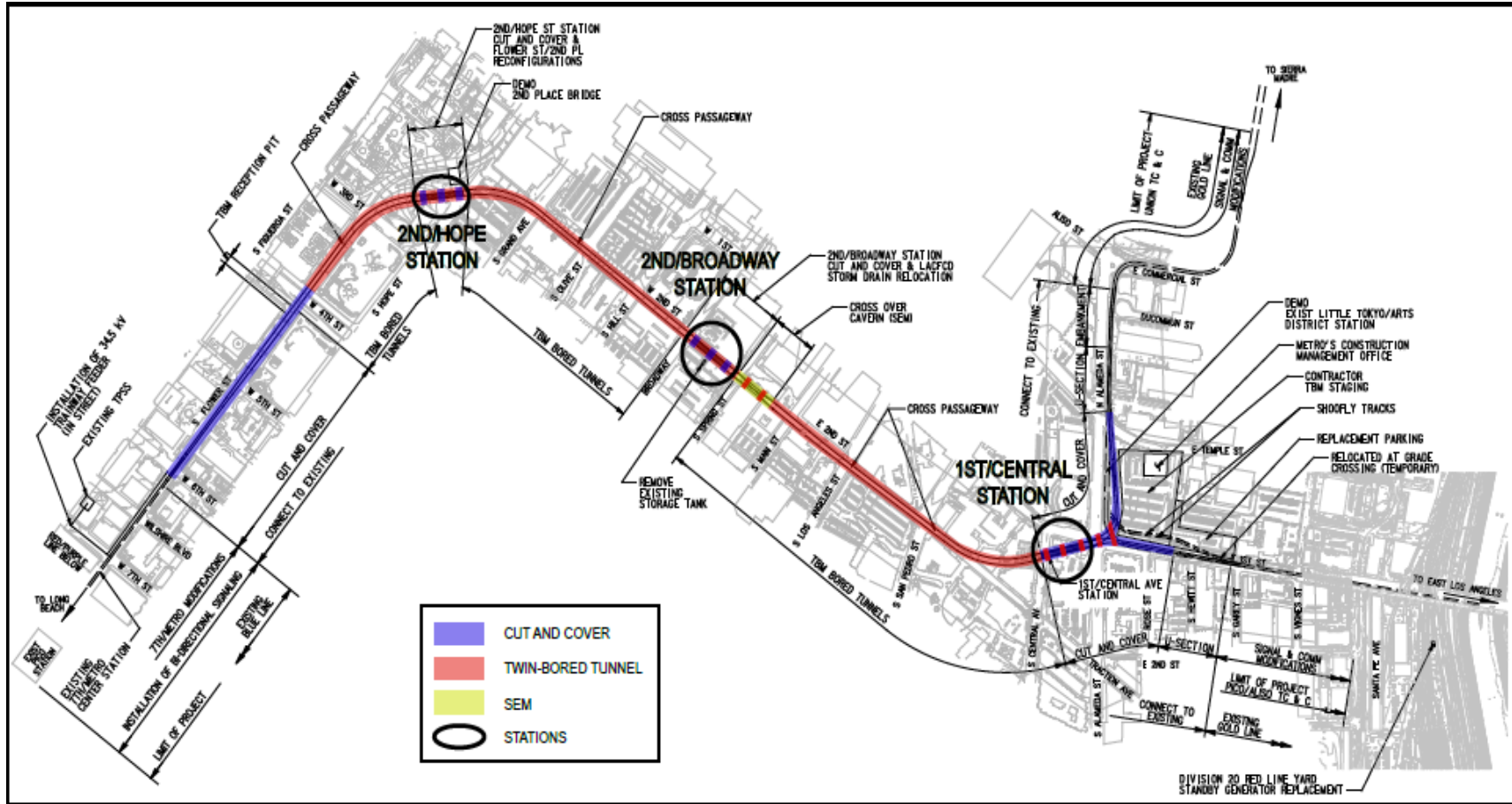
## Challenges / Risks:

- Maintain planned schedule milestones
- Minimal schedule contingency exists in the revised baseline schedule
- Future schedule delays could be mitigated by Metro accelerating planned work but cost of acceleration may add pressure on completing the project on budget
- Heavier than expected winter rains impacting construction work
- Continuous efforts meeting community expectations
- Third party approvals of work in a timely manner





# Regional Connector Transit Project



# Regional Connector Transit Project

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**Project Budget:** \$1,755.8 M

\*Excludes finance costs

**Project Completion:** 2021

**Project Complete:** 31%

## Accomplishments:

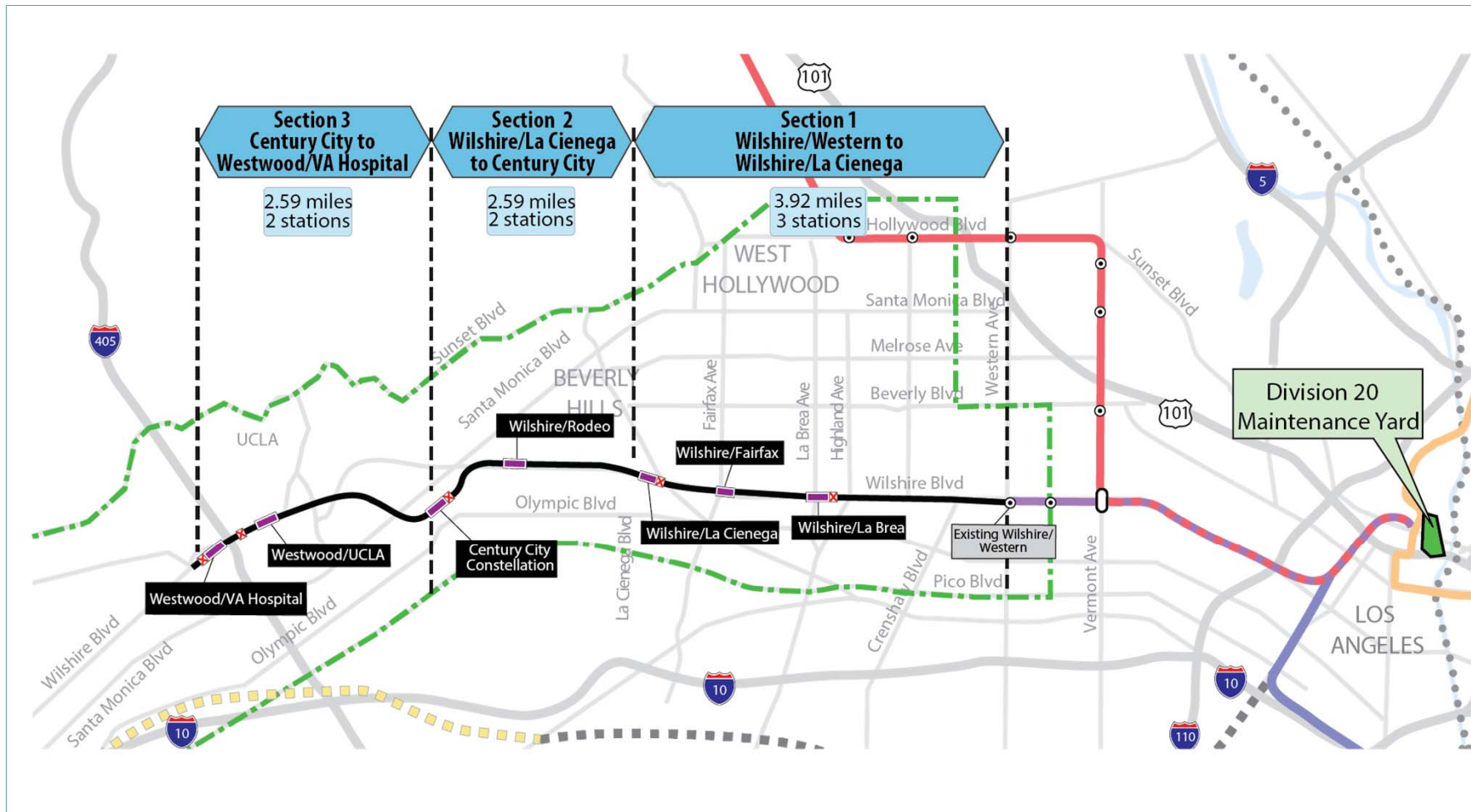
- Successfully launched boring machine “Angeli” for tunneling operations
- Initiated build-out of permanent structural elements at the 1st/Central Station
- Advanced support of excavation (SOE) installations on Flower Street sufficient to facilitate commencement of decking and excavation works
- Safely completed excavation of 2nd/Hope Station Box to an average depth of 100 feet
- Completed 3rd Party utility relocations at 2nd/Broadway Station

## Challenges/Risks:

- Obtaining continued City of LA support for, and approval of, the necessary traffic control and extended work hour permits to effectively work in a dense urban setting
- Safely prosecute the first leg of tunneling operations, and the timely excavation of the related tunnel boring machine recovery shaft on Flower Street
- Relocating LADWP underground power assets around 6th/Flower in support of Flower Street-South SOE and downstream schedule operations



# Westside Purple Line Extension Project



# Westside Purple Line Extension Section 1

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**Project Budget: \$2,778.9M**  
(Excludes finance costs)

**Forecast Completion: November 2023**  
**Project Complete: 15%**

## Accomplishments:

### FY17

- Achieved substantial completion on Wilshire/La Cienega advanced utility relocation (AUR), ahead of schedule and within budget
- Private utility relocations have been completed at the Wilshire/Fairfax Station area
- Private utility relocations on schedule for completion at the Wilshire/La Cienega Station area
- Complete final design on contracts for Tunnels, Stations, Trackwork & Systems and Division 20 Maintenance of Way/Non-Revenue Vehicle Facility
- Begin Wilshire/Fairfax Station decking and excavation operations
- Award contract for heavy rail vehicles procurement

### Planned FY18

- Complete excavation at Wilshire/La Brea Station and Wilshire/Fairfax Station
- Begin Wilshire/La Brea Station concrete operations
- Delivery of tunnel boring machines to project site
- Begin Wilshire/La Cienega Station decking

## Challenge/Risk:

- Third party approvals of design and construction in a timely manner
- 



# Westside Purple Line Extension Section 2

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**Project Budget: \$ 2,440.9 M**

(Excludes finance costs)

**Forecast Completion: August 2025**

## Accomplishments:

### FY17

- FTA executed the Full Funding Grant Agreement (FFGA)
- U.S. Department of Transportation issued the TIFIA Loan
- Issued Contract Notice-to-Proceed (NTP) for Construction Management Support Services
- Began utility relocations at Century City Constellation Station and Wilshire/Rodeo Station
- Awarded contract and issue NTP for Tunnels, Stations, Trackwork and Systems
- Continue property acquisitions

### Planned FY18

- Begin final design
- Procure tunnel boring machines
- Begin major construction
- Continue third party utility relocations at Century City Constellation and Wilshire/Rodeo Stations
- Continue property acquisitions

## Challenge:

- Seek opportunities to accelerate project delivery by 2024



# Westside Purple Line Extension Section 3

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Projected Budget through FY18: \$291.2M      Forecast Completion: TBD  
Working Project Estimate:                      \$2.9 B

## Accomplishments:

FY17

- Request FTA's approval to Enter into Engineering
- Continue timely submittals required to seek an Early Systems Work Agreement or Letter of No Prejudice with the FTA for the Design/Build Tunnel Contract

## Planned FY18

- Receive FTA's approval to Enter into Engineering (planned for 1<sup>st</sup> Quarter FY18)
- Award contracts and issue NTPs for the Tunnel Contract and Westwood/UCLA Advanced Utility Relocations
- Initiate procurement for Stations, Track and Systems contract

## Challenges/Risks:

- Secure FTA's funding commitment
- Obtain sufficient capacity and capability in a timely manner required to deliver project
- Provide temporary and permanent power



# Patsaouras Plaza Busway Station

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Project Budget: \$ 39.7 M

Project Completion: November 2018

## Accomplishments:

- Completed final design
- Started project construction

## Challenges/Risks:

- Continued Third Party cooperation review/approval, including Caltrans, to be consistent with project schedule
- Potential budget and schedule impacts due to design changes or underground conditions
- Heavier than expected winter rains impacting construction work



# Metro Blue Line Signal Rehabilitation Project

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Project Budget: \$ 93.6 M

Project Completion: August 2020

## Accomplishments:

- Secured additional funding from State Cap & Trade Transit and Intercity Rail Capital Program (TIRCP) for \$38.5 million
- Design-build procurement well underway

## Challenges/Risks:

- Track allocations coordination with other projects/maintenance on Metro Blue Line
- Existing aged ductbank/conduits may require replacement, potential additional scope
- Additional right-of-way needed for new Slauson Interlocking bungalow near 51<sup>st</sup> Street
- Meet Cap & Trade deadline for funding
- Awaiting proposals; may impact project budget



New train control

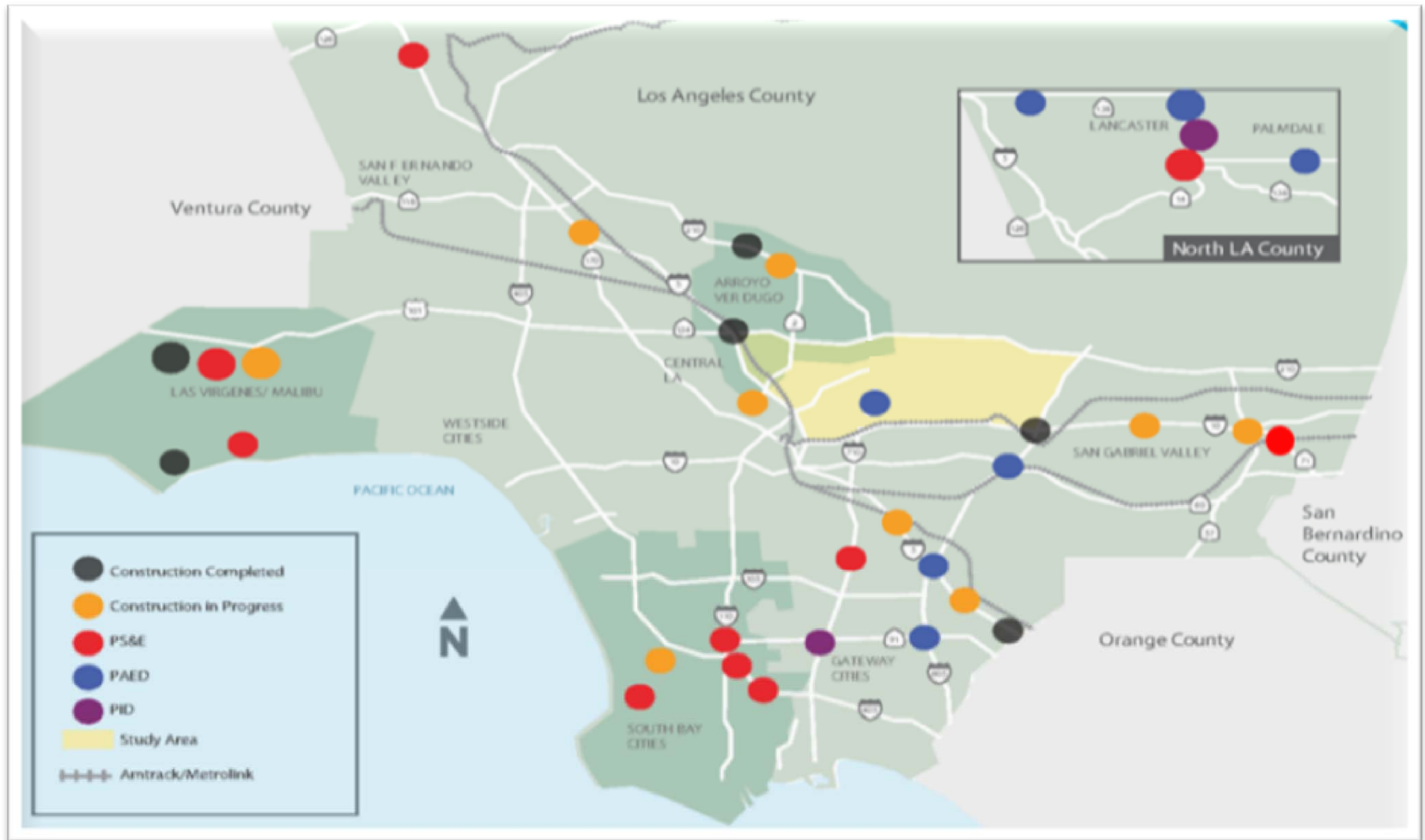


Project adds 4 Crossovers





# Highway Program





# Highway Program Status Summary (Measure R Funded)

#	Project	Current Phase	Estimated Cost of Current Phase (\$mil.)	Phase Completion
1	I-5 South – Alondra	Construction	\$114.07	Completed
2	I-5 South – Valley View Interchange	Construction	\$631.12	Aug 2022
3	I-5 South – Shoemaker, Rosecrans, Bloomfield	Construction	\$188.22	July 2018
4	I-5 South – San Antonio, Imperial Hwy and Orr Day	Construction	\$323.29	April 2019
5	I-5 South – Florence	Construction	\$211.67	Sep 2019
6	I-5 South - Carmenita Interchange	Construction	\$419.88	Dec 2018
7	I-5 North - HOV from SR 118 to SR 170	Construction	\$219.49	Completed
8	I-5 North - HOV from SR 170 to North of Buena Vista	Construction	\$94.72	Completed
9	I-5 North – North of Buena Vista to South of Magnolia Blvd	Construction	\$402.38	May 2020
10	I-5 North - Magnolia Blvd to SR 134	Construction	\$137.37	Dec 2019



# Highway Program Status Summary (Measure R Funded)

#	Project	Current Phase	Estimated Cost of Current Phase (\$mil.)	Phase Completion
11	I-5 North HOV Project SR 14 to Parker Road	Plan, Specification & Estimate (PS&E)	\$31.0	Dec 2018
12	Interstate 605 Corridor Hot Spots – I-605/I-5 Interchange Improvement	Project Approval / Environmental Document (PAED)	\$20.84	Mar 2019
13	Interstate 605 Corridor Hot Spots – I-605/SR 60 Interchange Improvement	PAED	\$30.0	Feb 2020
14	Interstate 605 Corridor Hot Spots – I-605/SR 91 Interchange Improvement	PAED	\$7.8	May 2019
15	Interstate 605 Corridor Hot Spots – I-710/SR 91 Interchange Improvement	Project Study Report / Project Development Support (PSR/PDS)	\$2.6	June 2017
16	Interstate 405 Crenshaw Blvd On and Off Ramp Improvements	PS&E	\$10.3	Aug 2016
17	Interstate 405 and I-110 Aux Lane from SR 91 to Torrance Blvd	PS&E	\$9.0	Jul 2017
18	SR 138 I-5 to SR 14	PAED	\$25.0	Apr 2017
19	I-710 South	PAED	\$91.0	Sep 2018
20	I-710 South Early Action Projects - Soundwall Projects (3 locations)	PS&E	\$12.7	Feb 2018
<b>Subtotal Measure R Highway Projects</b>			<b>\$2,982.45</b>	



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

#	Project	Current Phase	Estimated Cost of Current Phase (\$mil.)	Phase Completion
21	I-10 HOV from Citrus Avenue to SR 57	Construction	\$264.4	Nov 2021
22	I-10 HOV from Puente Avenue to Citrus Avenue	Construction	\$195.6	Apr 2019
23	SR 57 and SR 60 Mixed Flow Interchange ** (Eastbound and Westbound flyover off-ramp to Grand Ave, Eastbound on-ramp SR-60)	PS&E	\$13.0*	Sep 2020
24	SR 71: Interstate 10 to Mission Blvd **	PS&E and ROW	\$16.0	Dec 2019
25	SR 71: Mission Blvd to Rio Rancho Road **	PS&E and ROW	\$40.0	Dec 2019
Subtotal Non-Measure R Funded Highway Projects			\$529.0	
Total Highway Program			\$3,511.45	

\* Initial Budget Estimate is through completion of Design

\*\* These are projects with completed PAED and in Approved 2009 LRTP and 2014 SRTP



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

Project Phase: Plan, Specification & Estimate

Approved Budget: \$31.4 M

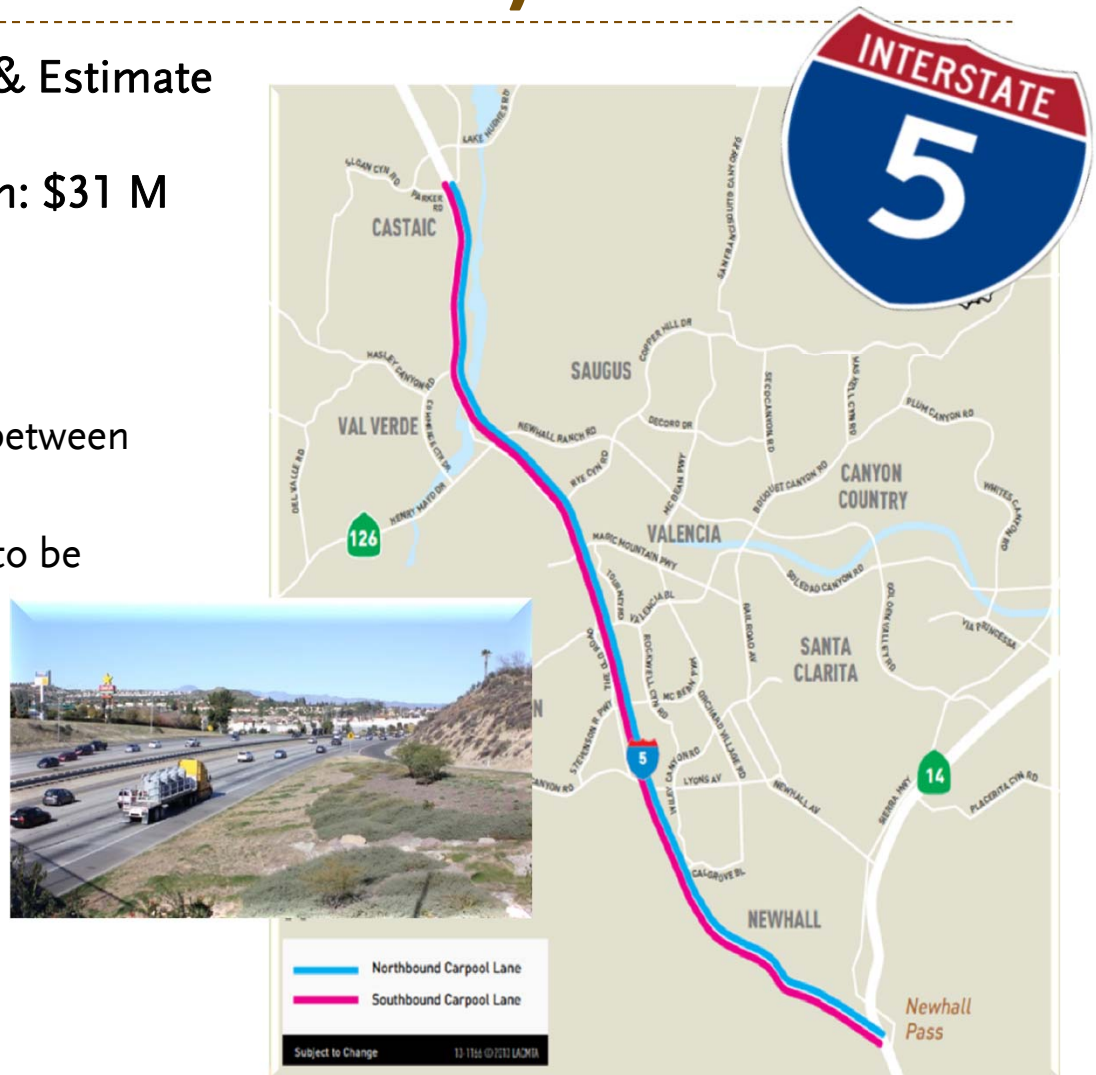
Estimated Cost to Complete Design: \$31 M

## Accomplishments:

- Five (5) community meetings held between October 2016 and January 2017
- Project on schedule for 35% PS&E to be completed by April 2017

## Challenges/Risks:

- Coordination with Caltrans pavement rehabilitation project



# I – 5 Corridor Construction



**I-5 Corridor  
Construction Projects  
Managed by Caltrans  
and Oversight by Metro**





# I-5 North: SR 118 to SR 134



Project Phase: Construction

Project Managed by Caltrans:

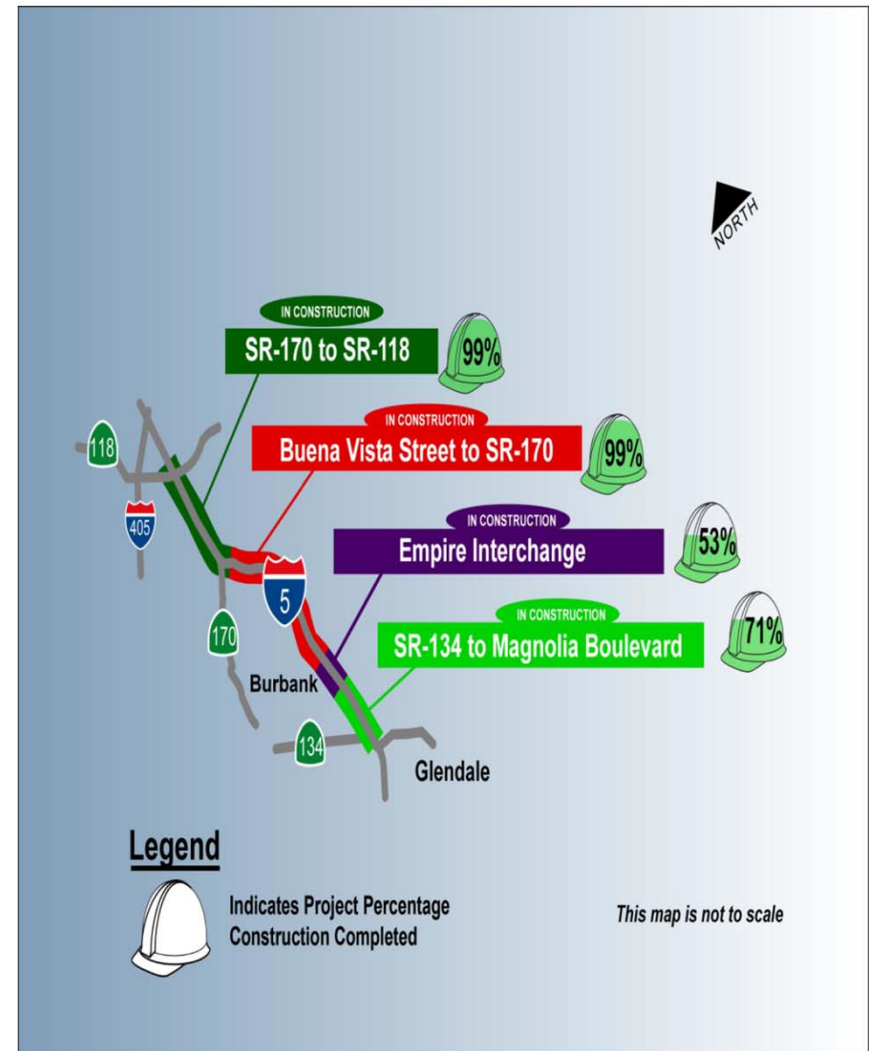
- Approved Budget: \$853.96 M
- Estimated Cost to Complete Construction: TBD

Accomplishments:

- SR170 to SR118 – Open to traffic, plant establishment in progress
- North of Buena Vista to SR170 – Open to traffic, plant establishment in progress
- North of Buena Vista to Magnolia Blvd including Empire Blvd Interchange – Construction in progress
- SR 134 to Magnolia Blvd – Construction in progress

Challenges/Risks:

- Adverse field conditions
- Utility relocation/ Railroad work changes
- Survey work related to roadway and structures
- LA River Bridge construction requires significant changes to avoid working on the River bed
- Potential schedule and budget impacts





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



Project Phase: Construction

Project Managed by Caltrans:

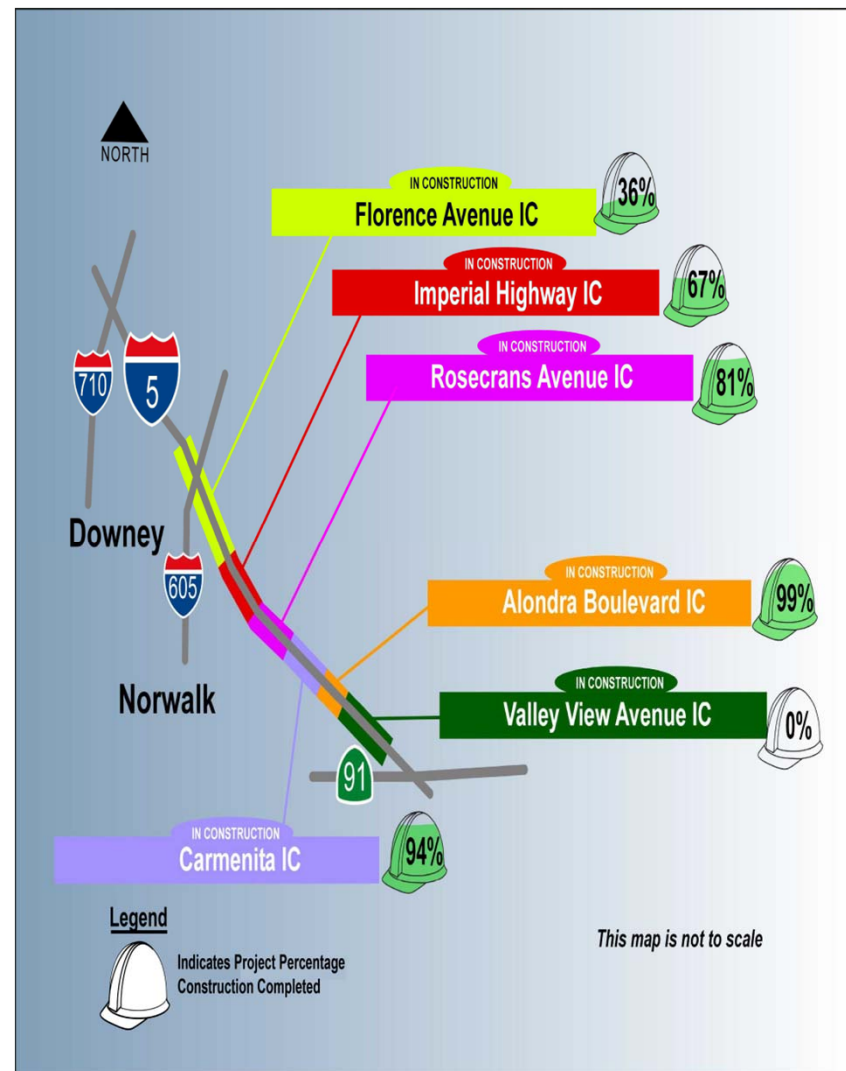
- Approved budget: \$1,888.25 M
- Estimated Cost to Complete Construction: TBD

Accomplishments:

- Alondra Blvd – Open to traffic, plant establishment in progress
- Valley View Avenue – Construction began fall 2016
- Rosecrans Avenue – Construction 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
- Potential schedule and budget impacts
- Timely resolution of valid contractors' claims





# I-605 “Hot Spots”



Project Phase: Various

Approved Budget: \$61.24 M

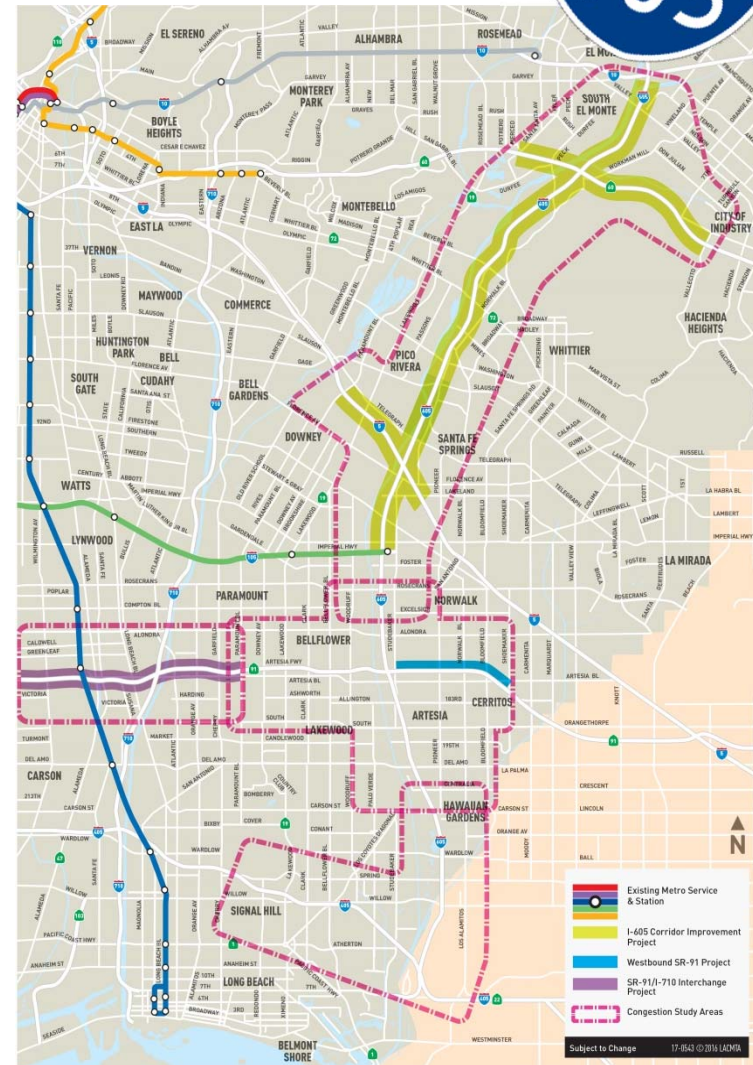
Estimated Cost to Complete Phase: \$61.24 M

## Accomplishments:

- Aggressive contract starts:
  - 605/5 PAED awarded December 2015
  - 710/91 PSR-PDS awarded December 2015
  - 605/91 PAED awarded May 2016
  - 605/60 PAED awarded June 2016
- Effective coordination of all contracts

## Challenges/Risks:

- Availability of funding to advance projects to design and construction
- Strategy to resolve: Consider un-bundling the mega projects to smaller fundable projects with independent utility and sustainability



# I-710 South



Project Phase: Preliminary Engineering & Environmental

Approved Budget: \$91 M

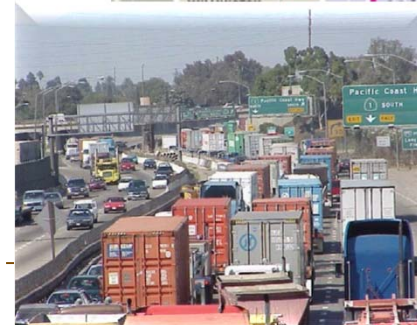
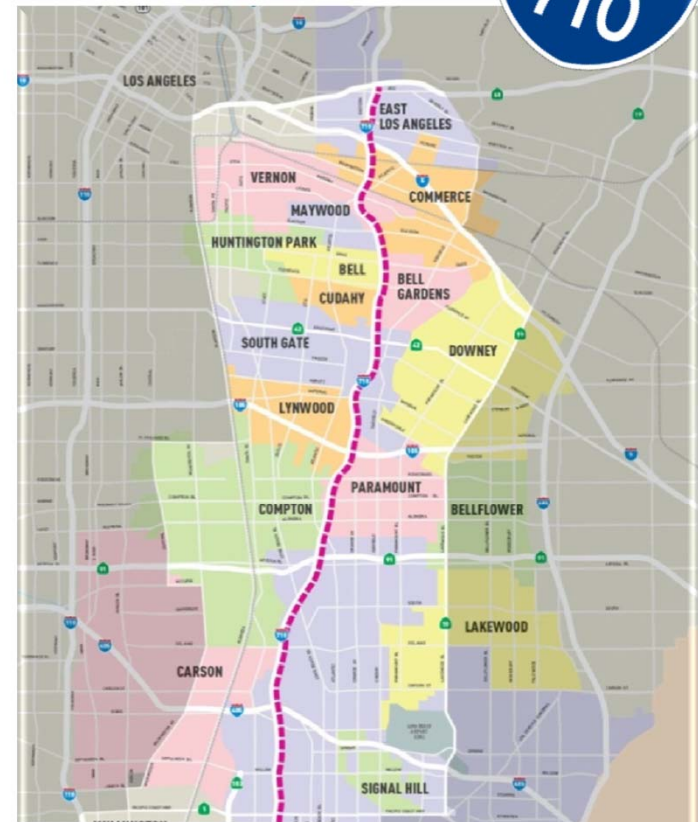
Estimated Cost to Complete Phase: \$91 M

## Accomplishments:

- On schedule
- Conducting additional studies as directed by the Board
- Strong collaborative work with the local agencies, communities, and Metro Board members in addressing community concerns
- Pursuing early action projects during the development of the corridor environmental documents

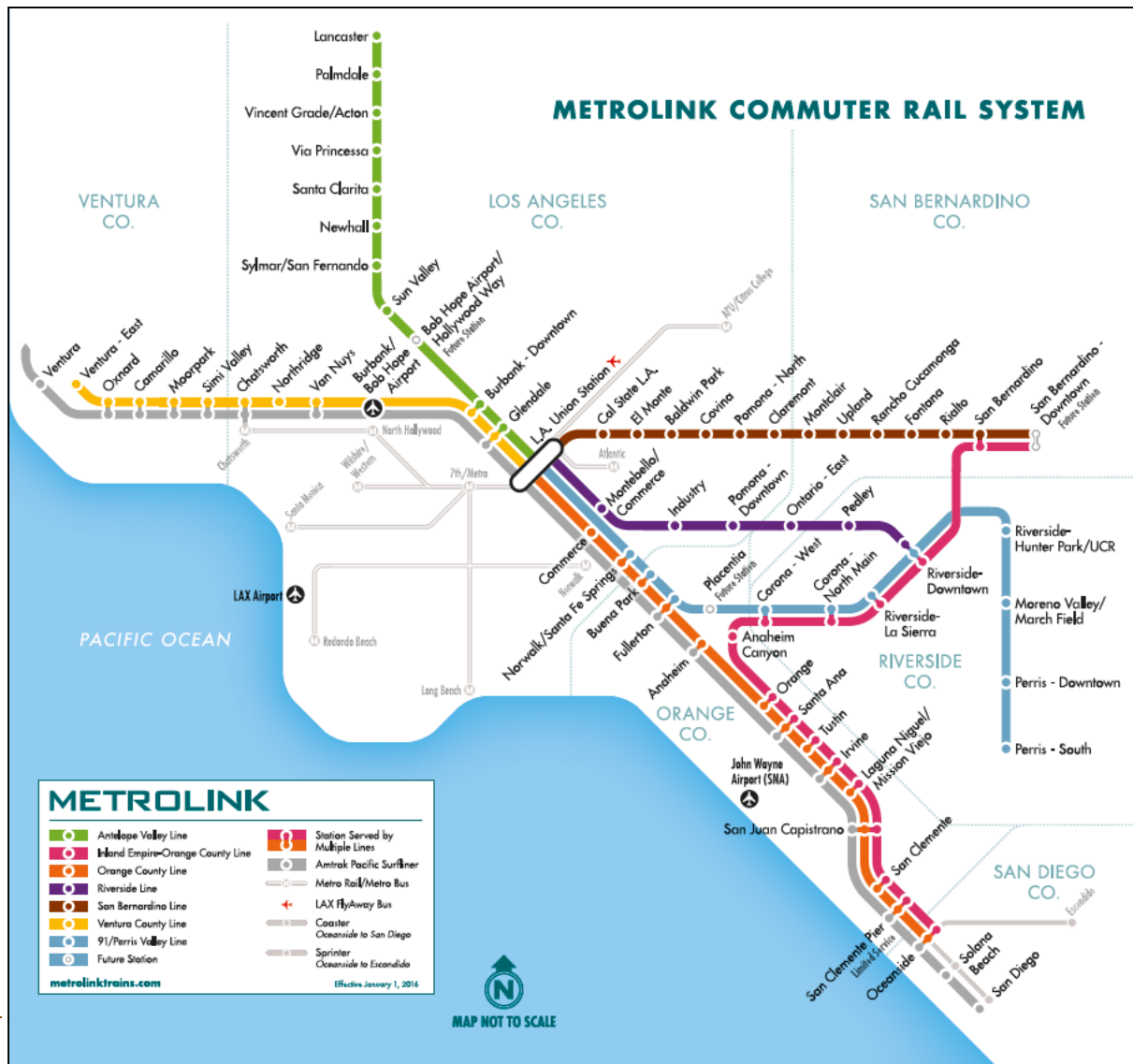
## Challenges/Risks:

- Availability of funding to pursue design and construction of the proposed improvements
- Strategy to resolve: Pursue implementation of early action projects with independent utility and sustainability



FY2018 APE

# Regional Rail Program



# Regional Rail Program Summary

#	Project	Current Phase	Estimated Cost of Current Phase (\$mil.)	Phase Completion
1	LINK Union Station	Environmental & PE	\$71	June 2019
2	Bob Hope Airport Metrolink Station Pedestrian Bridge Project	Environmental & 90% Design	\$4	To Be Determined
3	Bob Hope Airport/Hollywood Way Metrolink Station Project	Construction	\$15	April 2018
4	Doran Street and Broadway/Brazil Safety and Access Project	Environmental/100% Design	\$10	June 2018
5	Brighton to Roxford Double Track Project	Environmental; Plan, Specification & Estimate 100%Design	\$15	October 2018
6	Rosecrans/Marquardt Grade Separation Project	Environmental; Plan, Specification & Estimate 100% Design, Real Estate Acq.	\$155.3 (including construction)	June 2022
7	Lone Hill to CP White Double Track Project	Environmental & 30% PE	\$5	June 2017
<b>Total Regional Rail Program</b>			<b>\$275.3</b>	



# Burbank Airport – North Station

Project Budget: \$15M

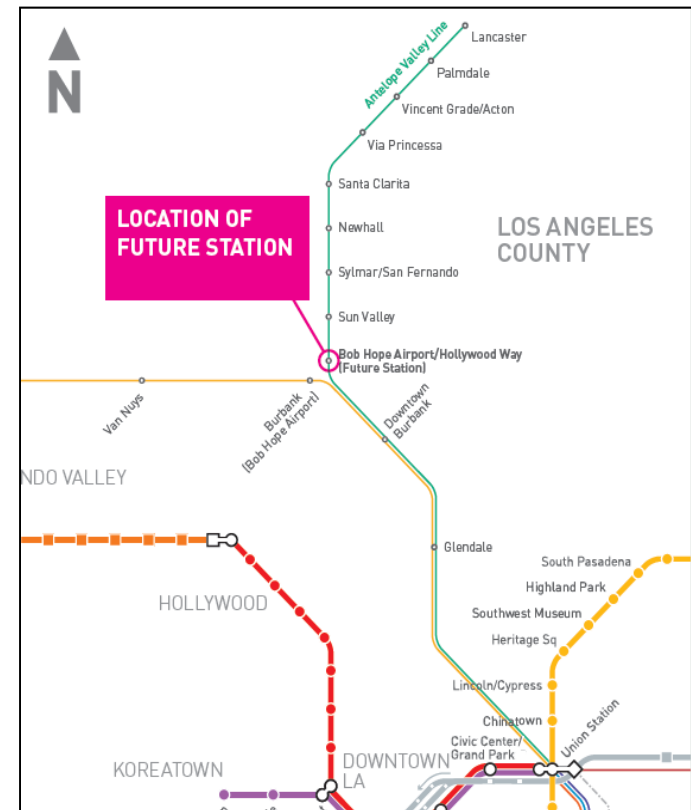
Construction Completion: April 2018

## Accomplishments:

- 100% design complete, including City of Burbank's requested revisions for cost-effective Operating & Maintenance (O&M)
- Airport committed to providing courtesy shuttle service between Station and Airport
- Established O&M Plan with the Burbank Airport, City of Burbank, and City of Los Angeles
- Notice of Award for Construction issued January 2017

## Challenges/Risks:

- To arrange short term, long term parking solution with the City of Burbank
- Potential closure of Sun Valley Station (within 2 miles of Bob Hope Station) to be determined



# Rosecrans/Marquardt Grade Separation Project

Working Project Estimate: \$155.3 M

Phase Completion: June 2022

## Accomplishments:

- Alternative #2 Offset overpass with connector roads was approved by Santa Fe Springs City Council and the Metro Board
- Environmental documentation obtained  
CEQA clearance
- Completed 65% Design

## Challenges/Risks:

- Multi-agencies cooperation and approval process
- Minimize traffic impacts during construction
- Constraints at Coyote Creek
- Diagonal rail crossing at a busy intersection may be a potential risk
- Securing multi-agency funding for construction



# Link Union Station (US)

Estimated Cost to Complete Environmental/PE: \$71M  
Environmental/PE Completion Date: June 2019

## Accomplishments:

- Commitment of \$15M and \$3.76 M California High Speed Rail funding
- Environmental Design accommodated High Speed Rail and integrated passenger concourse
- 4 Concepts advanced to 10% design level with 1 preferred concept recommended for Environmental Clearance/PE design

## Challenges/Risks:

- Obtain funding for design, right-of-way, and construction
- Secure full funding agreement with California High Speed Rail by June 2017



# FY18 APE Summary

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- New Projects with Planned Adoption of Life-of-Project Budget (separate Board action):
  - Rosecrans/Marquardt Grade Separation Project
  - Airport Metro Connector Project
  - Willowbrook/Rosa Parks Station Improvements Project
- Existing Projects with Potential Adjustments to LOP Budget
  - MBL Signal Rehabilitation Project (separate board action)
  - I-5 South: Orange County Line to I-605
  - I-5 North: SR 118 to SR 134





# 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
- Secure 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



# Appendix: Project Listing by Type

	TRANSIT CAPITAL PROJECTS WITH TOTAL PROJECT COSTS > \$5 M	TYPE	LOP BUDGET (\$ MIL.)
1	BRT 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
6	Bus Facility Maintenance Improvements & Enhancements Phase II	Bus Facilities Improvements	\$20.9
7	Bus Facility Maintenance Improvements & Enhancements Phase I	Bus Facilities Improvements	\$21.2
8	Bus Facilities Maintenance & Improvement - Phase III	Bus Facilities Improvements	\$21.7
9	Patsaouras Plaza Bus Station Construction	Bus Facilities Improvements	\$39.8
10	El Monte Busway & Transit Center Expansion	Bus Facilities Improvements	\$60.1
		<b>Bus Facilities Improvements Total</b>	<b>\$225</b>
11	Crenshaw/LAX Light Rail Transit: Construction	Major Construction	\$2,058.0
12	Regional Connector: Construction	Major Construction	\$1,755.8
13	Westside Purple Line Extension Section 1 Project	Major Construction	\$2,778.9
14	Westside Purple Line Extension Section 2 Project	Major Construction	\$2,440.9
15	Westside Purple Line Extension Section 3 Project	Major Construction	\$291.2 (a)
		<b>Major Transit Construction Total</b>	<b>\$9,325</b>
16	Patsaouras Bus Plaza Paver Retrofit	Misc. Capital Projects	\$9.1
17	Division 20 Portal Widening Turnback Facility	Misc. Capital Projects	\$17.2 (b)
18	Division 22 Paint And Body Shop	Misc. Capital Projects	\$11.0
		<b>Misc. Capital Projects Total</b>	<b>\$37</b>
19	Southwestern Maintenance Yard	Rail Facilities Improvements	\$157.0
20	Systemwide Elevator Installations (Vertical Systems)	Rail Facilities Improvements	\$8.0
21	LRT Freeway Stations Sound Enclosures	Rail Facilities Improvements	\$8.6
22	Metro Red Line Civic Center Station Escalator/Elevator Modernization	Rail Facilities Improvements	\$12.0
23	Metro Red Line Escalator Replacement/Modernization	Rail Facilities Improvements	\$20.8
24	Metro Red Line to Orange Line Underpass at North Hollywood Station	Rail Facilities Improvements	\$23.1
		<b>Rail Facilities Improvements Total</b>	<b>\$229</b>
25	Metro Gold Line I-210 Barrier Replacement Phase I	Security/Safety	\$11.1 (c)
26	Metro Emergency Security Operations Center	Security/Safety	\$112.7
		<b>Security/Safety Total</b>	<b>\$124</b>
27	Metro Blue Line Pedestrian Safety Enhancement at Grade Crossings	Wayside Systems	\$30.2
28	Metro Blue Line Signal System Rehabilitation	Wayside Systems	\$93.6
		<b>Wayside Systems Total</b>	<b>\$124</b>
		<b>TRANSIT CAPITAL TOTAL</b>	<b>\$10,064</b>

(a) Based on projected budget through FY18.

(b) This is the approved budget to complete preliminary engineering.

(c) 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	Measure R Highway Capital Project	\$31.0
12	Interstate 605 Corridor Hot Spots – I-605/I-5 Interchange Improvement	Measure R Highway Capital Project	\$20.8
13	Interstate 605 Corridor Hot Spots – I-605/SR 60 Interchange Improvement	Measure R Highway Capital Project	\$30.0
14	Interstate 605 Corridor Hot Spots – I-605/SR 91 Interchange Improvement	Measure R Highway Capital Project	\$7.8
15	Interstate 605 Corridor Hot Spots – I-710/SR 91 Interchange Improvement	Measure R Highway Capital Project	\$2.6
16	Interstate 405 Crenshaw Blvd On and Off Ramp Improvements	Measure R Highway Capital Project	\$10.3
17	Interstate 405 and I-110 Aux Lane from SR 91 to Torrance Blvd	Measure R Highway Capital Project	\$9.0
18	SR 138 I-5 to SR 14	Measure R Highway Capital Project	\$25.0
19	I-710 South	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
		<b>Measure R Highway Total</b>	<b>\$2,982.5</b>
21	I-10 HOV from Citrus Avenue to SR 57	Other Highway Projects	\$264.4
22	I-10 HOV from Puente Avenue to Citrus Avenue	Other Highway Projects	\$195.6
23	SR 57 and SR 60 Mixed Flow Interchange	Other Highway Projects	\$13.0
24	SR 71: Interstate 10 to Mission Blvd	Other Highway Projects	\$16.0
25	SR 71: Mission Blvd to Rio Rancho Road	Other Highway Projects	\$40.0
		<b>Other Highway Total</b>	<b>\$529.0</b>
		<b>HIGHWAY PROGRAM TOTAL</b>	<b>\$3,511</b>
REGIONAL RAIL		TYPE	CURRENT ESTIMATE (\$ MIL.)
1	LINK Union Station	Regional Rail	\$71
2	Bob Hope Airport Metrolink Station Pedestrian Bridge Project	Regional Rail	\$4
3	Bob Hope Airport/Hollywood Way Metrolink Station Project	Regional Rail	\$15
4	Doran Street and Broadway/Brazil Safety and Access Project	Regional Rail	\$10
5	Brighton to Roxford Double Track Project	Regional Rail	\$15
6	Rosecrans/Marquardt Grade Separation Project	Regional Rail	\$155.3
7	Lone Hill to CP White Double Track Project	Regional Rail	\$5
		<b>REGIONAL RAIL PROGRAM TOTAL</b>	<b>\$275</b>



**Board Report**

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**File #:** 2017-0023, **File Type:** Project**Agenda Number:** 13.

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**CONSTRUCTION COMMITTEE  
EXECUTIVE MANAGEMENT COMMITTEE  
MARCH 16, 2017****SUBJECT: HOPE/2<sup>ND</sup> STREET PEDESTRIAN BRIDGE EASEMENT AGREEMENT****ACTION: AUTHORIZE CEO TO EXECUTE EASEMENT AGREEMENTS FOR PEDESTRIAN  
BRIDGE AT REGIONAL CONNECTOR STATION AT HOPE AND 2ND STREETS****RECOMMENDATION**

AUTHORIZE the Chief Executive Officer to execute two Easement Agreements allowing construction of a portion of the **Hope/2<sup>nd</sup> Street Pedestrian Bridge to be built on, and Metro patron access across, private property owned by the Broad Museum.**

**ISSUE**

In July 2014, with Motion 77 (Attachment A), the Board of Directors directed staff to exercise a construction contract option to build a second station level and pedestrian bridge (“the Bridge”) at the Regional Connector Station at Hope and 2nd Streets (“the Station”) and secure a legally binding agreement between Metro and all relevant parties for access and maintenance of the Bridge onto private property.

Staff has negotiated with the Broad Museum, the Successor Agency to the Los Angeles Community Redevelopment Agency, The Related Company, and the Grand Avenue Joint Powers Authority, two Easement Agreements (“Agreements”) that will ensure that the Bridge can be constructed and connected into private property currently owned by the Broad to ensure Metro patrons access through private property onto Grand Avenue. The terms of those Agreements are explained herein.

**DISCUSSION**

The Station design has been modified to include a second level and a pedestrian bridge across Hope Street, as pictured in the Conceptual Design, Attachment B. The Site Plan, Attachment C, shows the Bridge and surrounds. Upper Grand Avenue is approximately 20 feet higher than Hope Street. The Station and Bridge were therefore designed so that patrons could exit the Station at Hope Street or at the second level, using the six high speed elevators that will connect patrons into the mezzanine level of the Station, several levels below grade. Patrons will be able to exit either at street level onto Hope Street, or one level higher onto the Bridge. The Bridge will then take them across Hope Street and onto the roof deck of the Broad garage.

The Easement Agreements will secure rights for Metro to build the Bridge with a connection to the Garage deck on the Broad property. The Bridge will be structurally independent from the Garage and will be joined with a seismic joint. The Easement Agreements will provide for Metro to build and maintain the seismic joint, a security gate, and Metro signage on the Broad Garage deck. The Agreements will secure the rights for Metro patrons to travel through the "Easement Area," depicted in Attachment D, securing an envelope with a height of 20 feet to be clear of any permanent obstructions as long as a structure stands or is rebuilt in the footprint of the garage. The Agreements will secure the right for Metro patrons to travel through the Broad Plaza ("Plaza") out onto Grand Avenue. Metro will be able to have signage on the Garage deck and the Plaza to guide patrons from Grand Avenue to the Bridge and Station. All signage will be in accordance with the Conceptual Signage Plan, Attachment E.

The Broad has agreed to enter into a maintenance agreement that would obligate the Broad to maintain the landscaping on the Bridge. Metro Facilities Maintenance would be responsible for all other maintenance of the Bridge.

The principal terms of the Agreements are as follows:

#### Pedestrian Easement Agreement

- The specific areas where Metro will retain rights are pictured in the Easement Plat Diagram, Attachment D.
- Requires Broad to build improvements on the Garage deck that are compatible with the Bridge by the end of 2018, in time for the Bridge to be constructed.
- Allows Metro the right to construct the Bridge including the support column and seismic joint.
- Allows Metro to build and maintain a security gate to secure the Bridge during non-operating hours.
- Secures access for Metro patrons over the garage deck to the Broad Plaza as long as any structure is there (i.e. if the Garage is torn down and something else is built in its place, Metro will retain an easement).
- Allows for Metro to have signage in the Easement Area.
- While the Garage itself is owned by the Broad, the air rights above it are owned by the Grand Avenue Joint Powers Authority. If they should choose to develop the space above the garage, they would be able to build over Metro's Easement Area, leaving an envelope with a clear height of 20 feet for Metro patrons to continue to travel.
- Allows the Broad to close access to the Bridge for no more than 7 times per year, under certain conditions.

#### Plaza Reciprocal Easement Agreement

- Secures Metro patrons the right to travel through the Broad Plaza and onto Grand Avenue.
- There is an underlying Reciprocal Easement Agreement (REA) in place for the Plaza which allows the privately-owned Plaza to be used by the public and outlines the maintenance responsibilities of the private parties that surround it.
- Forbids the Plaza REA from being amended to disallow Metro patrons across it.

- Outlines Metro's contribution to the maintenance of the Plaza of \$50,000 per year (since the Plaza will receive more wear and tear as a result of Metro patrons walking through it daily).
- Secures the right for Metro to design and manufacture signage, which the Broad would install on the Plaza, in accordance with the Conceptual Signage Plan.

Neither Easement requires compensation to Broad for the value of the easement itself.

### **DETERMINATION OF SAFETY IMPACT**

This Board action will have no impact on Safety.

### **FINANCIAL IMPACT**

There will be an annual payment of \$50,000 (plus escalations) associated with the maintenance of the Plaza starting in Fiscal Year 2022, when the Regional Connector is expected to open. Funds will then be budgeted annually in the non-departmental Cost Center 0651, the operating project for the new Regional Connector. Source of funds will be various operating funding. The budget will impact the bus and rail operating budget.

#### Impact to Budget

There will be no impact to the Fiscal Year 2017 Budget.

### **ALTERNATIVES CONSIDERED**

The Board could choose not to authorize the CEO to execute the Agreements. This alternative is not recommended because it is not consistent with previous Board direction and it would not allow the Bridge to be constructed.

### **NEXT STEPS**

Upon approval of this board action, CEO will finalize negotiations and execute both Agreements and both will be recorded against the impacted properties. The Regional Connector Project team will include the provisions of the Agreements in any applicable contracts. The Bridge and Station will proceed with design and construction to be completed in time for the Station opening.

### **ATTACHMENTS**

Attachment A - July 2014 Board Motion 77

Attachment B - Conceptual Design

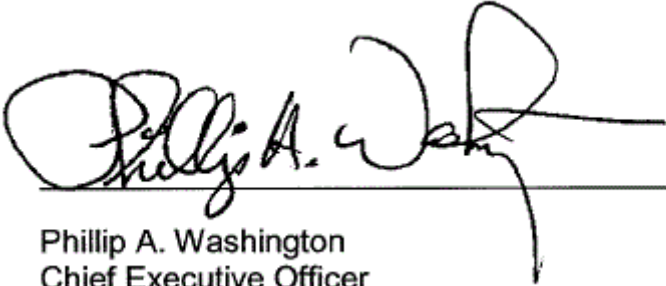
Attachment C - Site Plan

Attachment D - Easement Plat Diagram

Attachment E - Conceptual Signage Plan

Prepared by: Marie Sullivan, Principal Transportation Planner, (213) 922-5667  
Cal Hollis, SEO, Countywide Planning & Development, (213) 922-7319

Reviewed by:       Therese W. McMillan, Chief Planning Officer, (213) 922-7077



Phillip A. Washington  
Chief Executive Officer

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**MOTION BY:**

**MAYOR ERIC GARCETTI, SUPERVISOR DON KNABE,  
SUPERVISOR GLORIA MOLINA &  
DIRECTOR JACQUELINE DUPONT-WALKER**

July 17, 2014

**Regional Connector****2nd & Hope Station**

The Regional Connector Project consists of a 1.9-mile double track light rail transit subway in downtown Los Angeles with three new stations.

Once completed, the project will provide regional transit benefits connecting the existing Blue Line, Gold Line, and Exposition Line through the downtown Los Angeles area.

In April 2014, the MTA Board approved the selection of a Design-Build contractor for the Regional Connector Transit Corridor Project.

Not only will the project eliminate forced transfers through downtown, but will also connect regional transit riders to cultural, educational, civic and entertainment centers in downtown such as the Music Center, Grand Park, the Walt Disney Concert Hall, the Museum of Contemporary Art, etc.

As currently planned, the 2nd and Hope station is nearly one block away from these downtown landmarks.

The design and proposed configuration of the station create significant access challenges from the station to the core business area due to the vertical grade difference.

The station layout can also create pedestrian safety issues along Hope Street and the surrounding area.

To help mitigate the access challenges, the 2nd and Hope Station should include a direct link to Grand Avenue via a pedestrian bridge structure from the current station location to the plaza vicinity at The Broad museum.



The Regional Connector Transit Design Build contractor included and estimated the bridge as a construction option (not a betterment) during the bidding process.

WE, THEREFORE, MOVE that the MTA Board direct the CEO to:

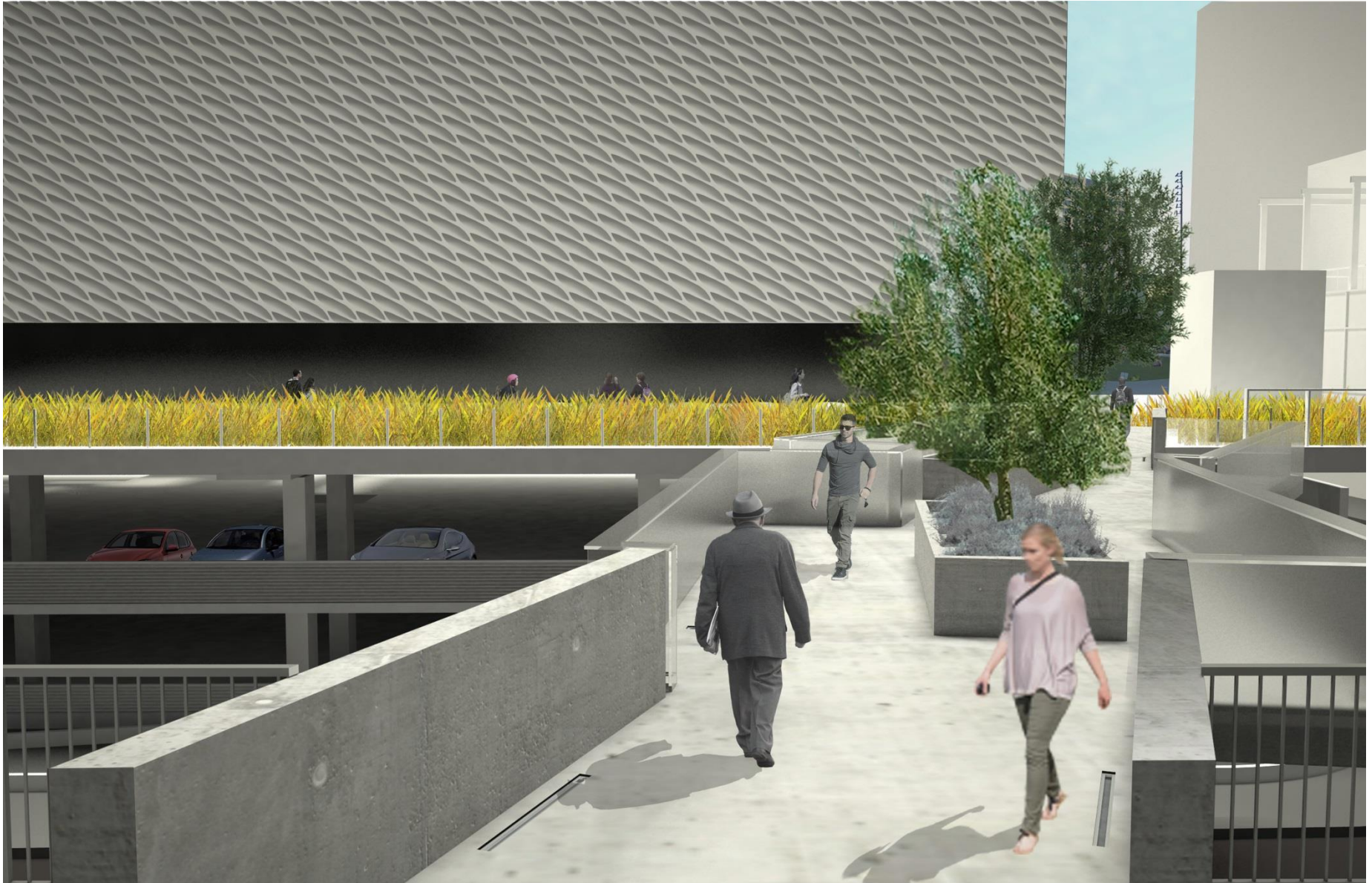
- A. Allocate up to \$4.0 million – and not increase the Life of Project Budget – to negotiate and reach an agreement with the Design-Build contractor to build the 2nd and Hope pedestrian bridge structure to the Broad museum.
- B. Secure a legally binding agreement between the MTA and all relevant parties for the access and maintenance of the bridge onto private property.
- C. Report back to the October 2014 MTA Board meeting the implementation plan and schedule to build the pedestrian bridge structure.

###

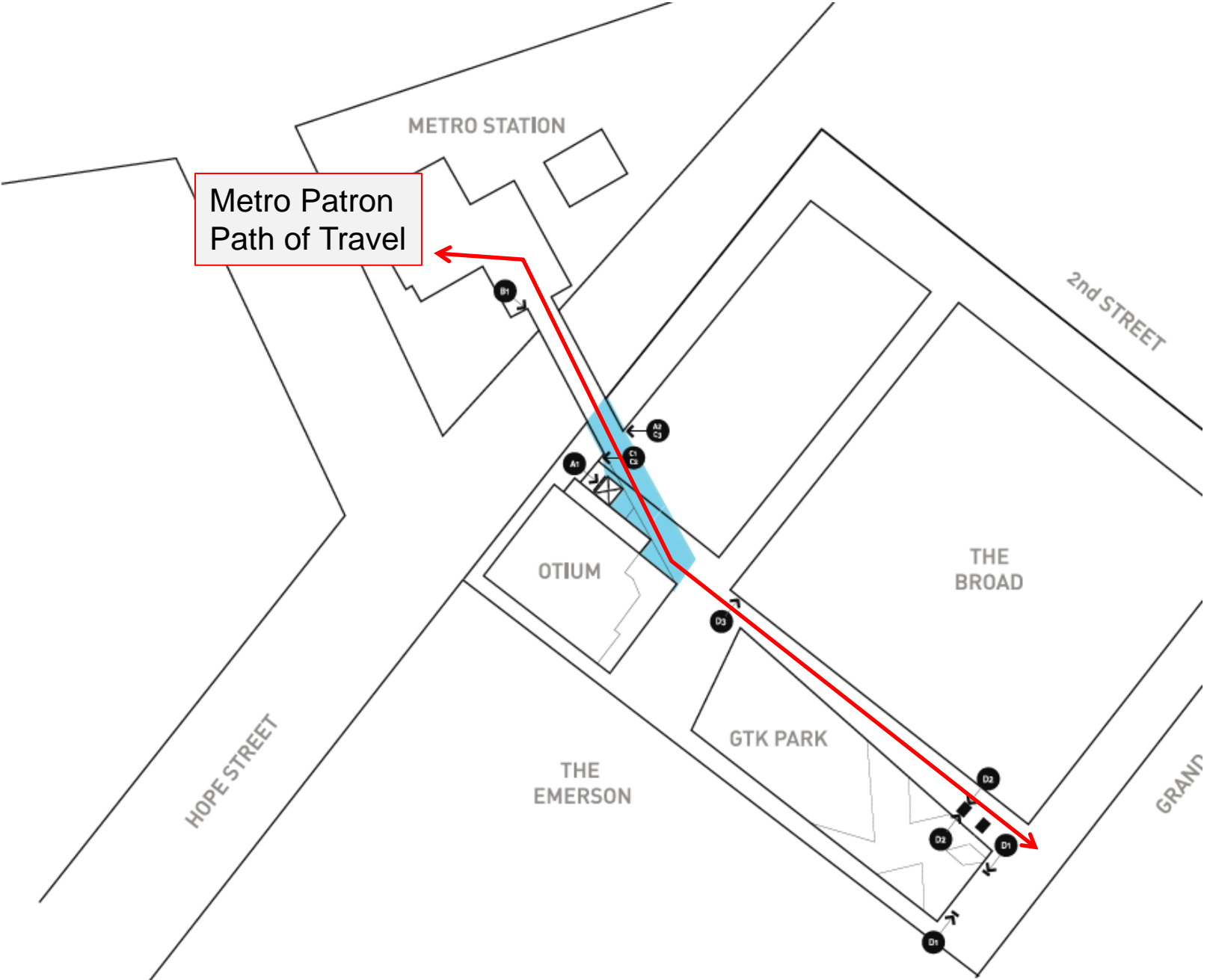
**ATTACHMENT B**

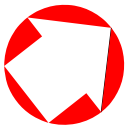


# ATTACHMENT B



**ATTACHMENT C**

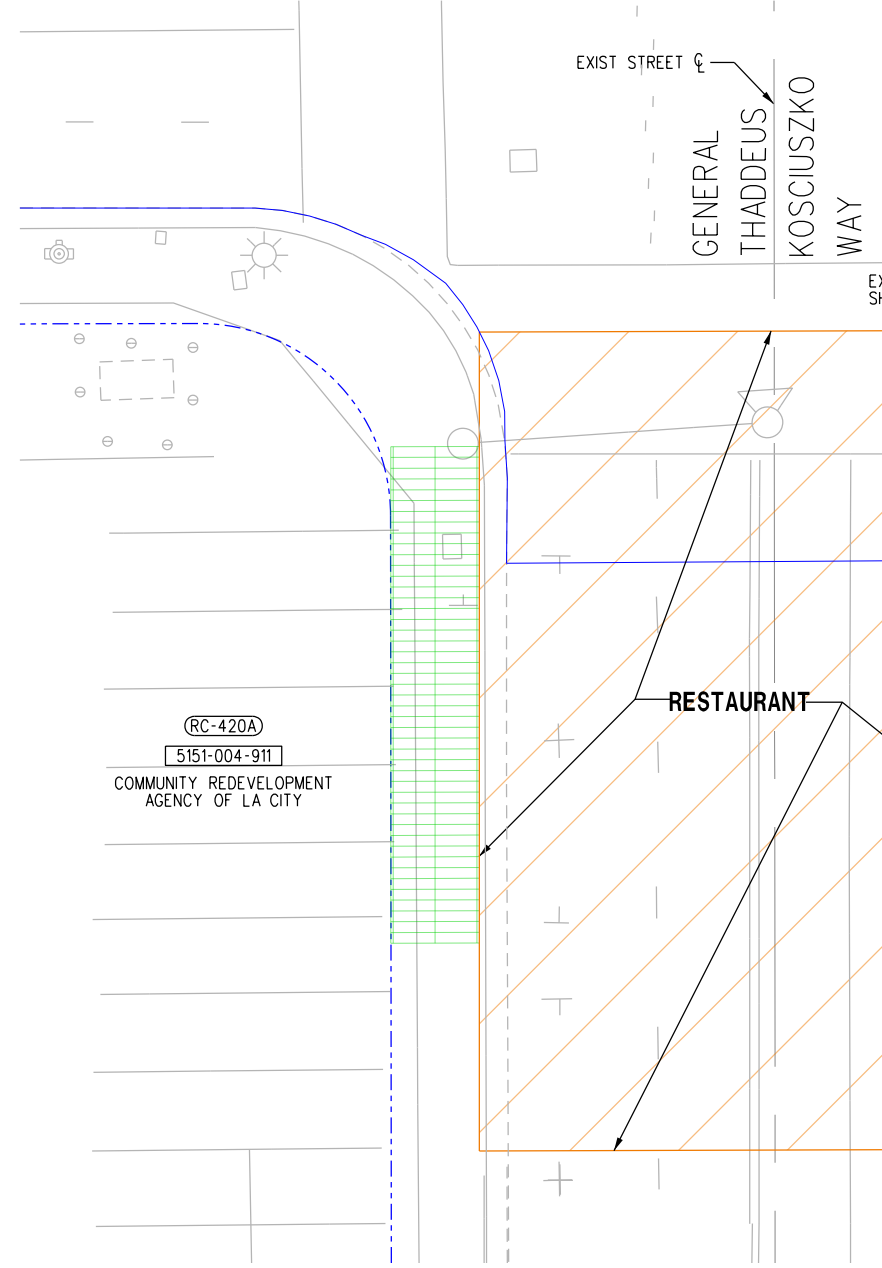
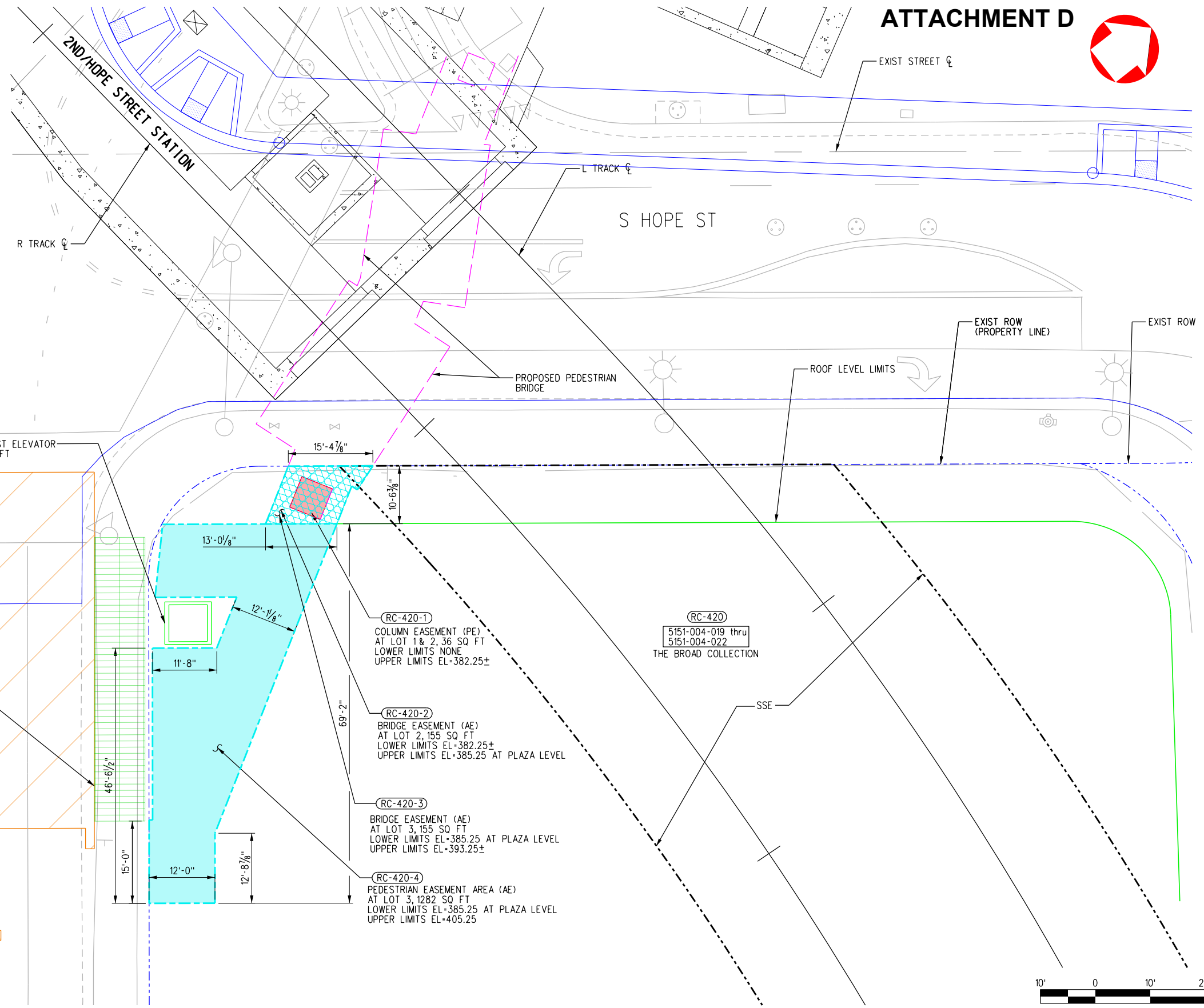




LEGEND

- BRIDGE EASEMENT (AERIAL EASEMENT)
- PEDESTRIAN EASEMENT AREA (AERIAL EASEMENT)
- COLUMN EASEMENT (PERMANENT EASEMENT)

PARCEL NO.	GRANTOR	NET AREA (SQ. FT.)		RECORDING DATA		ESTATE	NATURE OF IMPACTS
		TOTAL	ACQ.	INST. NO.	DATE		
RC-420-1	THE BROAD COLLECTION	58,258	36			PE	PERMANENT EASEMENT
RC-420-2	THE BROAD COLLECTION	58,258	155			AE	AERIAL EASEMENT
RC-420-3	CRA LA	19,575	155			AE	AERIAL EASEMENT
RC-420-4	CRA LA	19,575	1282			AE	AERIAL EASEMENT



RC-420A  
5151-004-911  
COMMUNITY REDEVELOPMENT  
AGENCY OF LA CITY

RC-420-1  
COLUMN EASEMENT (PE)  
AT LOT 1 & 2, 36 SQ FT  
LOWER LIMITS NONE  
UPPER LIMITS EL+382.25±

RC-420  
5151-004-019 thru  
5151-004-022  
THE BROAD COLLECTION

RC-420-2  
BRIDGE EASEMENT (AE)  
AT LOT 2, 155 SQ FT  
LOWER LIMITS EL+382.25±  
UPPER LIMITS EL+385.25 AT PLAZA LEVEL

RC-420-3  
BRIDGE EASEMENT (AE)  
AT LOT 3, 155 SQ FT  
LOWER LIMITS EL+385.25 AT PLAZA LEVEL  
UPPER LIMITS EL+393.25±

RC-420-4  
PEDESTRIAN EASEMENT AREA (AE)  
AT LOT 3, 1282 SQ FT  
LOWER LIMITS EL+385.25 AT PLAZA LEVEL  
UPPER LIMITS EL+405.25



REV	DATE	BY	APP	REG NO	EXPIRES	SEAL HOLDER	DESCRIPTION

DESIGNED BY	
DRAWN BY	
CHECKED BY	
IN CHARGE	
DATE	1/11/2017

**LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY**

The Connector Partnership

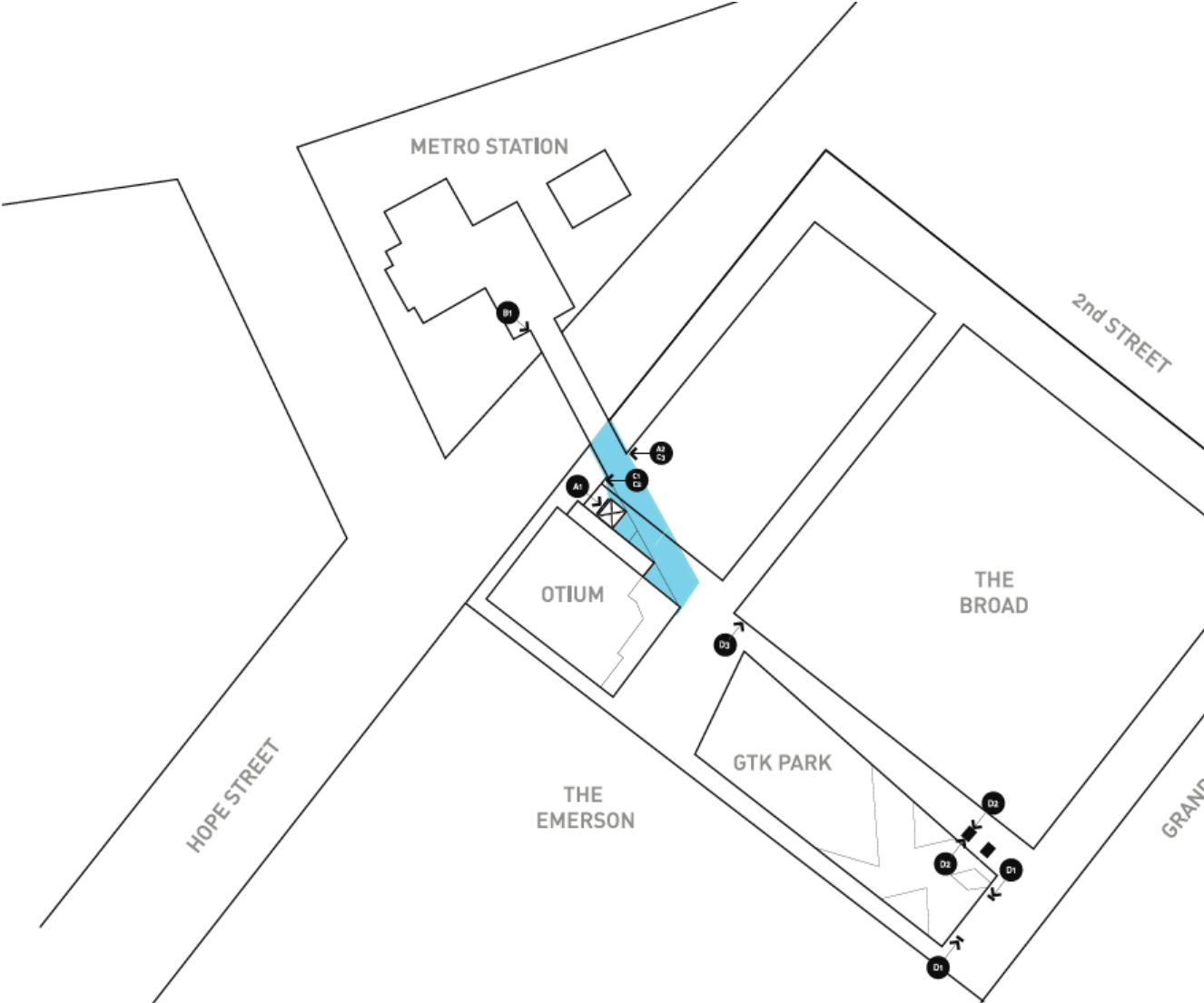
515 S. FLOWER STREET  
8TH FLOOR  
LOS ANGELES, CA 90071  
T 213-593-8100

REGIONAL CONNECTOR TRANSIT CORRIDOR  
PROJECT DEFINITION DRAWINGS  
RIGHT OF WAY NEED  
PEDESTRIAN BRIDGE

CONTRACT NO	C0980
DRAWING NO	EXB-R103A
SCALE	1"=10'
SHEET NO	

Plot Driver: DB-HALF\_Color-PDF-plt.ctb  
 1/11/2017 4:27:39 PM  
 USER: dmshahm

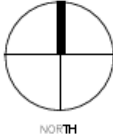
# ATTACHMENT E



**Metro-Related Signage**

- A1 Illuminated Mapcase with Station ID header (2)
- A2/C3 ADA Station ID/Hours of Operation
- B1 ADA Exit Station
- C1/C2 Code of Conduct/Message Cabinet
- D1 Illuminated Metro ID with arrow
- D2 Metro ID with arrow (vinyl on info kiosk)
- D3 Metro ID with arrow (vinyl on architectural glass)

Note: Exact sign locations predicated on approved final landscape/hardscape design for bridge and adjacent areas



# **Hope / 2<sup>nd</sup> Street Bridge Pedestrian Easement Agreements**

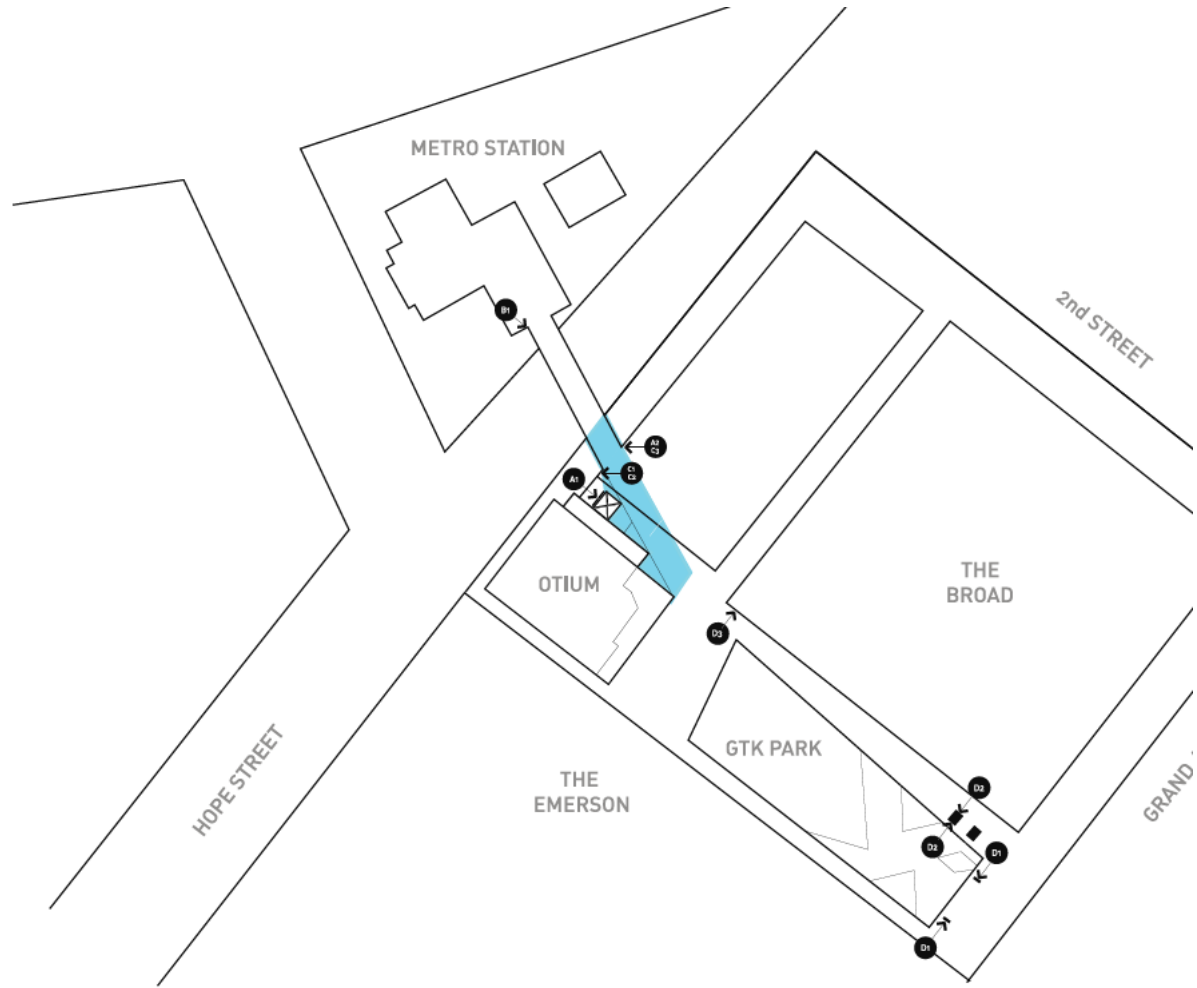
Metro Board of Directors

Executive Management Committee

March 2017



# Site Plan





# Major Agreement Terms

## Easement

- Easement to construct the bridge including support column and seismic joint
- Access for Metro Patrons over limited portion of garage roof to the Plaza
- Development could be built over the easement (20 ft vertical envelope) or the easement could be incorporated into future development
- Easement for installation and maintenance of minimal signage and security gate

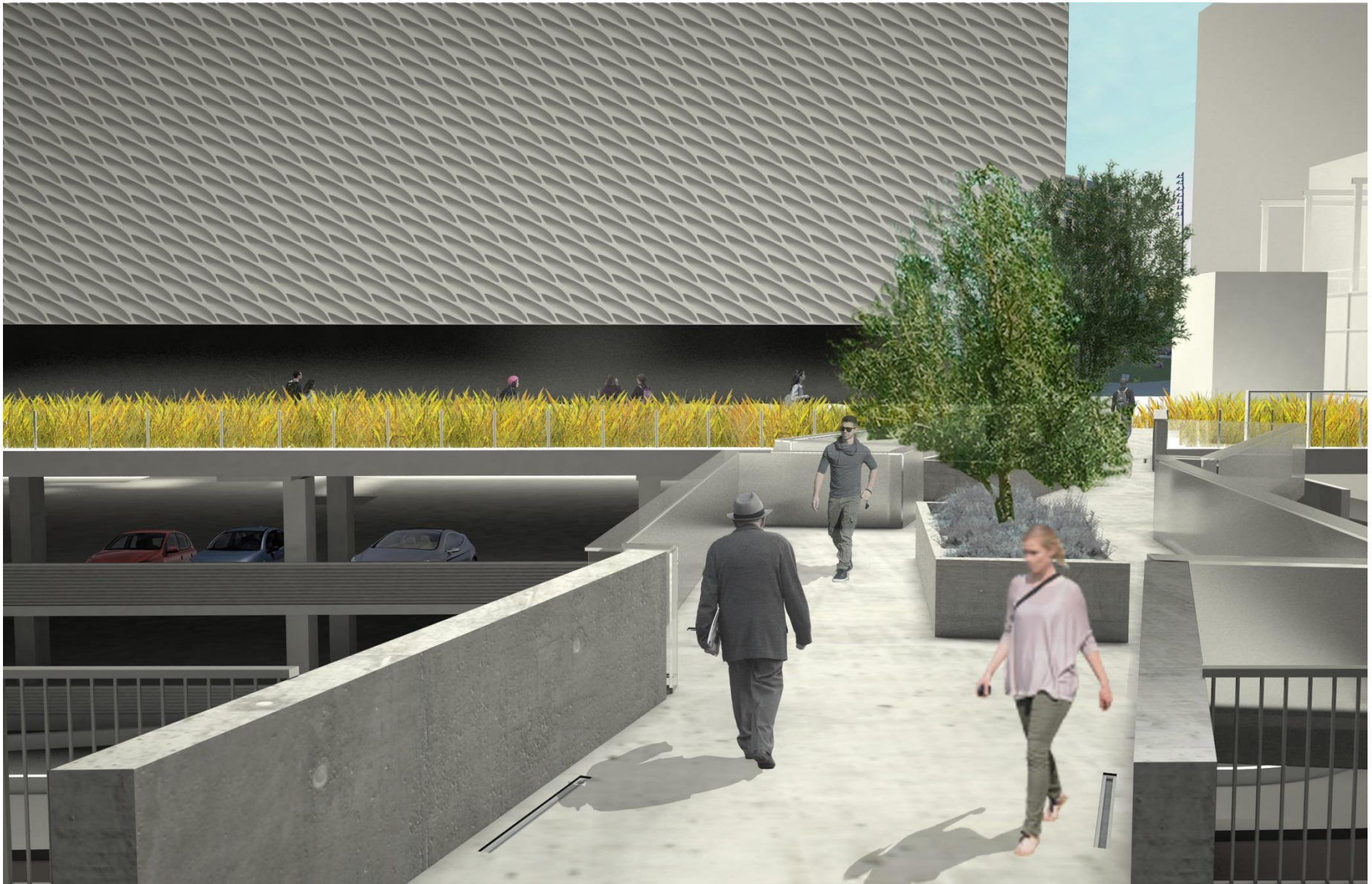
## Plaza

- Plaza REA cannot be amended to disallow Metro patrons access
- Minor Metro signage easement
- Metro contribution to maintenance - \$50,000 annual with escalation

# Conceptual Bridge Design

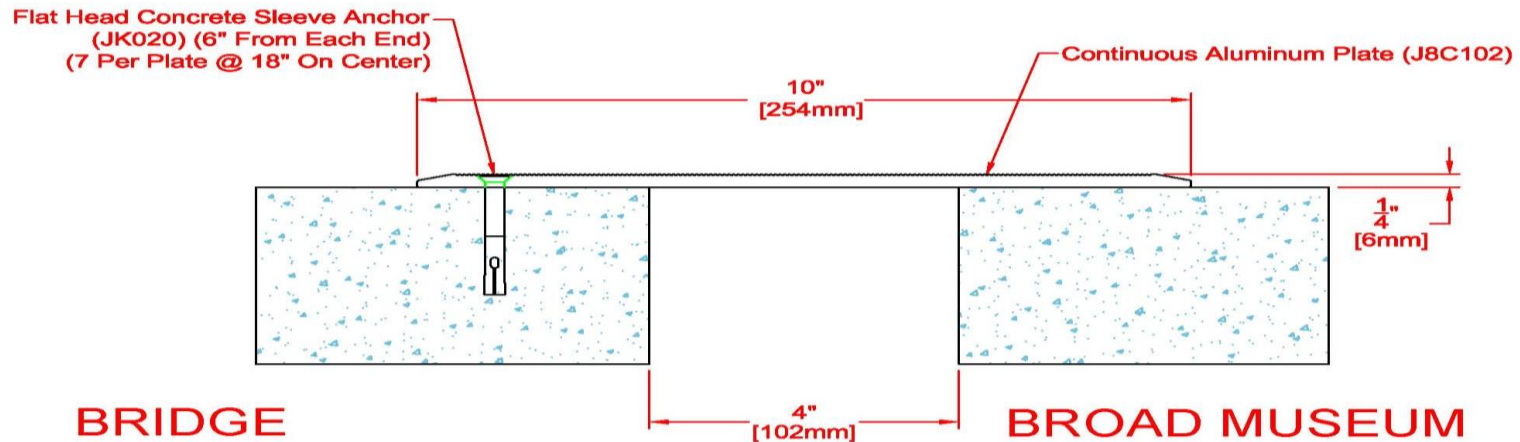


# Conceptual Bridge Design






# Bridge Connection to Garage

- Supported independently from garage with its own support column
- Seismic joint connects the garage and bridge
- Sliding security gate: 60" high, manually operated, designed to match Board guardrail

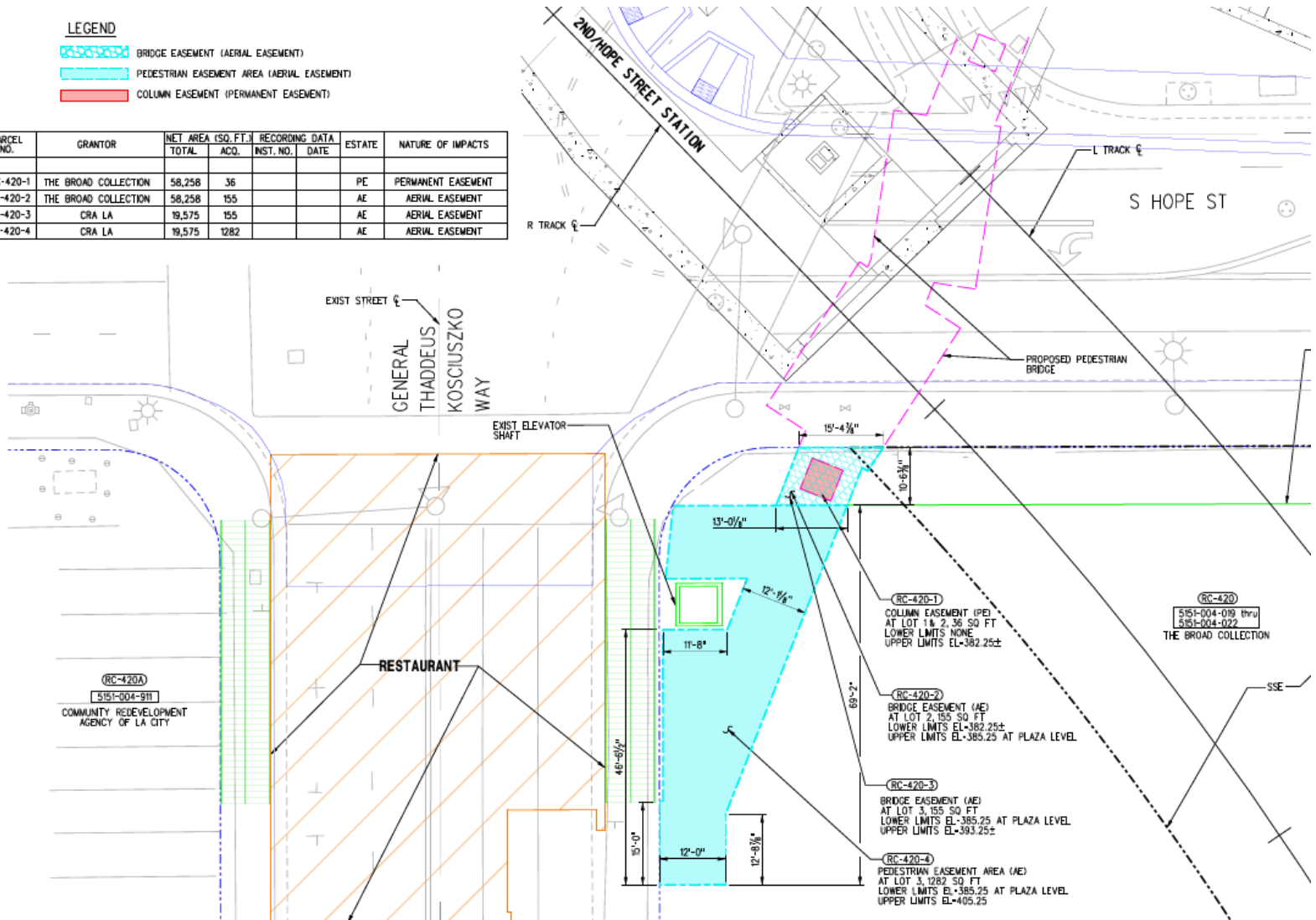


# Easement Area

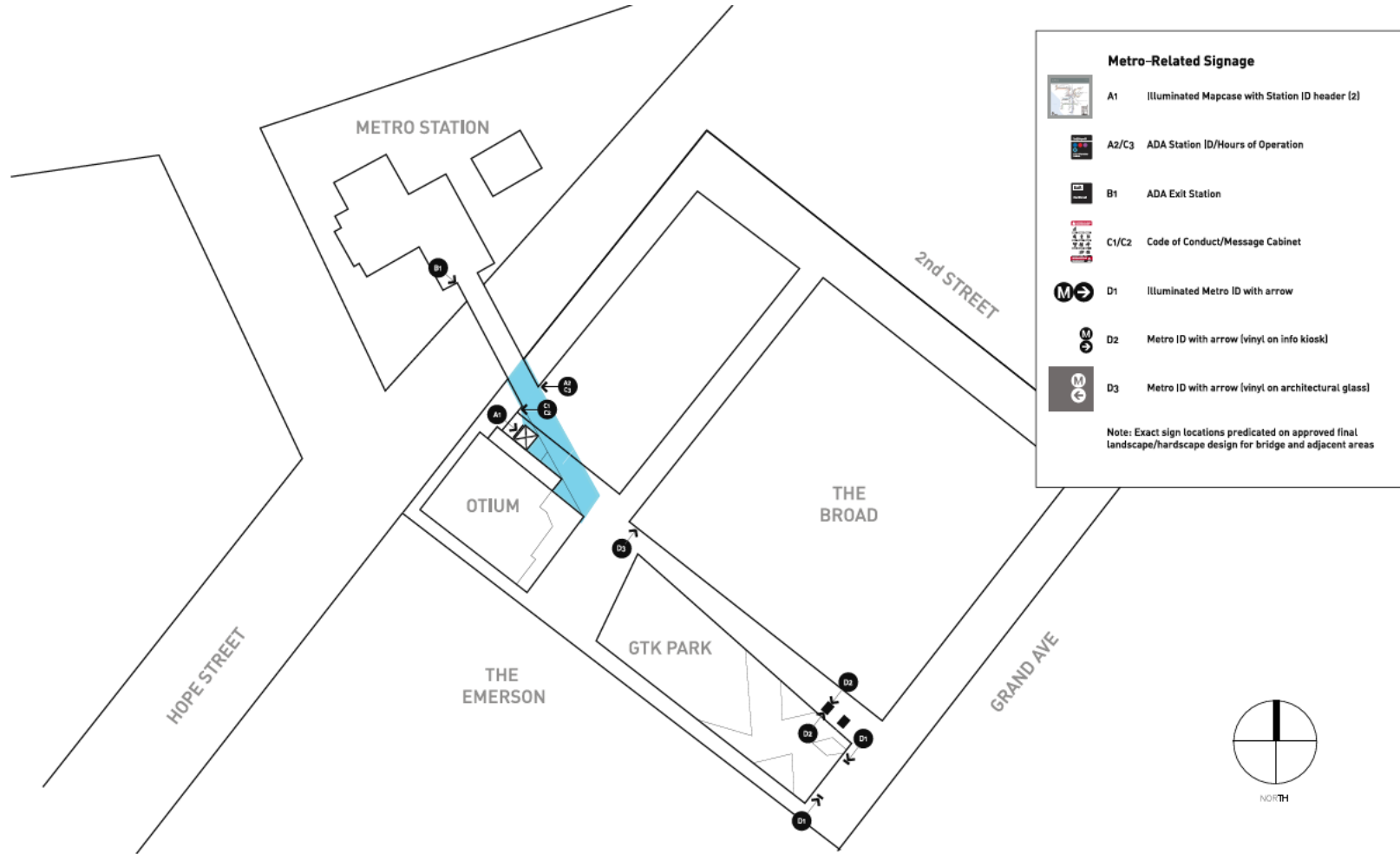
## LEGEND

-  BRIDGE EASEMENT (AERIAL EASEMENT)
-  PEDESTRIAN EASEMENT AREA (AERIAL EASEMENT)
-  COLUMN EASEMENT (PERMANENT EASEMENT)

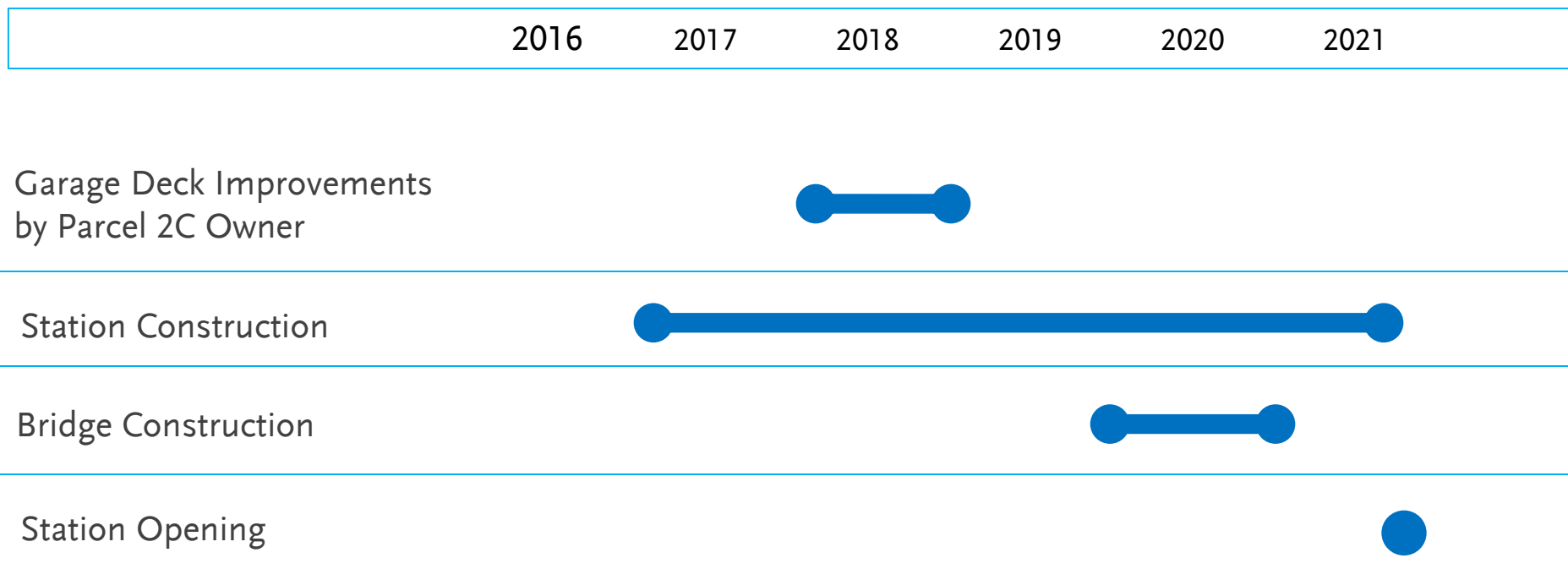
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RC-420-3	CRA LA	19,575	155			AE	AERIAL EASEMENT
RC-420-4	CRA LA	19,575	1282			AE	AERIAL EASEMENT



# Conceptual Signage Plan



# Estimated Construction Schedule





**Board Report**

**File #:** 2017-0146, **File Type:** Contract

**Agenda Number:** 26.

**CONSTRUCTION COMMITTEE  
MARCH 16, 2017**

**SUBJECT: CORE CAPACITY ENHANCEMENTS AT DIVISION 20 -PORTAL WIDENING AND TURNBACK FACILITY**

**ACTION: AWARD PROFESSIONAL SERVICES CONTRACT**

**RECOMMENDATION**

CONSIDER:

- A. APPROVING the award of and authorize the Chief Executive Officer to execute a cost-plus fixed fee Contract No. AE66758000 to perform preliminary engineering and complete final design for the **Core Capacity Enhancements at Division 20 for a Portal Widening and Turnback Facility** to T.Y. Lin International, Inc., in an amount not-to-exceed \$10,265,661, subject to resolution of any protests;
- B. AUTHORIZING Contract Modification Authority in the amount of \$2,053,132 (20% of the not-to-exceed contract award value) and authorize the CEO to execute individual Contract Modifications within the Board approved Contract Modification Authority;
- C. INCREASING anticipated expenditures and authorization from \$3.5M to \$17.2M to include contract amounts and modification authority requested in A and B, and Metro staff support costs through Final Design;
- D. ENTERING into Letters of No Prejudice (LONP) with the State of California as needed to ensure the eligibility of reimbursement of State funds for design work required to begin before State funds are available;
- E. FINDING the Division 20 Portal Widening and Turnback Facility is exempt from the California Environmental Quality Act (CEQA) pursuant to Public Resources Code Section 21080, subdivision (b)(10);
- F. ADOPTING the Final Initial Study/Mitigated Negative Declaration (IS/MND) for the Division 20 Portal Widening and Turnback Facility, and the recommended Mitigation Monitoring and



Reporting Program (MMRP) of the Final IS/MND; and

- G. ASSURING that the final design in this action preserves the ability to construct a potential future station in the vicinity of 6<sup>th</sup> Street in the Arts District.

### **ISSUE**

Division 20 is located at 300 S. Santa Fe Ave near 4th St in downtown LA. Metro committed to the Federal Transit Administration (FTA), as part of the Full Funding Grant Agreement for the Westside Purple Line Extension (WPLE) Section 1, to make appropriate infrastructure modifications to allow the Purple and Red Line systems to operate at reduced headways. The Full Funding Grant Agreement indicates reduced headway capability must be achieved by late 2024.

To achieve the required headway for the Red and Purple Lines, the portal must be widened and tracks must be modified where Purple and Red Line trains transition from the existing twin bored tunnels to daylight into the current yard facilities at One Santa Fe. In addition to the portal widening, a turnback facility must be constructed to maximize capability of trains to change directions to and from Union Station.

The design for the portal widening and turnback facility must be capable of preserving the potential for future expansion plans including a station in the vicinity of 6<sup>th</sup> Street. The Metro Board passed a motion regarding future expansion plans for Metro track and facilities in the Arts District on January 26, 2017 (attached). This action is consistent with that motion.

### **BACKGROUND**

In April 2016, the Board approved a budget of \$3.5M to initiate design of the project based on a phased design and construction approach to meet the following constraints:

- The Project shall be environmentally cleared in accordance with the Final IS/MND.
- Purchase real estate if necessary in order to construct the Portal widening and Turnback facility.
- Construction of the Portal Widening and Turnback Facility must be performed while the Red and Purple lines are under operation. Protection of existing track, train control and communication systems will be required during the construction process. Limited work windows will also be required to allow for safe operations.
- A track welding area identified in the WPLE Section 1 contract must be accommodated to prevent delays to the WPLE Section 1 contract.

Three phases of the project included:

Phase 1 - Design of the Portal

Phase 2 - Construction of the Portal and Design of the Turnback

Phase 3 - Construction of the Turnback

### **DEVELOPMENT OF REQUEST FOR PROPOSAL**

During development of the Request for Proposal (RFP) for Phase 1, staff determined that combining Phases 1 and 2 for design of both the Portal Widening and Turnback Facility under one contract would provide a seamless design and be more efficient from a cost and schedule perspective. Economies of scale would also be achieved given the interdependencies between design of the Portal Widening, the Turnback Facility and layout of tracks for access to the mainline. In addition, combining design for Phases 1 and 2 would avoid the extra time and expense of procuring separate designers for the Portal and the Turnback. Phase 3 would incorporate construction of both the Portal and Turnback.

This Board Action requests authorization for Final Design of the Portal Widening and Turnback Facility combined in the amount of \$17,200,000 including \$10,265,661 for the consultant contract, \$2,053,132 in contract modification authority, and \$4,881,207 for Metro staff support through final design. The Disadvantaged Business Enterprise goal for this Professional Services contract is 27%.

### **TASKS FOR COMBINED PORTAL WIDENING AND TURNBACK DESIGN**

Staff expects the project to remain within the \$3.5M budget authorization through FY17 in accordance with the cash flow presented in the April 2016 Board Report and the FY17 Annual Program Evaluation (APE). The Contract will be distributed in line with the following tasks as part of the FY2018 budget process. Each task will commence upon written authorization from the Metro Project Manager:

- Task 1) Preliminary Engineering Portal and Turnback
- Task 2) Final Design
- Task 3) Bid Support Services
- Task 4) Design Services during Construction

### **CEQA COMPLIANCE**

Under Section 21080, subdivision (b)(10), of the California Public Resources Code, the Project is

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exempt from the California Environmental Quality Act (CEQA). This CEQA exemption applies to projects, such as the Portal Widening and Turnback Facility, which institute or increase passenger or commuter service on rail already in use. Although the Portal Widening and Turnback Facility is exempt from CEQA compliance, Metro, as lead agency, voluntarily prepared an Initial Study/Mitigated Negative Declaration (IS/MND) document to consider and publically disclose the Project's potentially significant environmental effects, identify mitigation measures, and solicit public comment. All public comments have been received and addressed and have been incorporated in the Final (IS/MND) document (<https://www.metro.net/projects/capital-projects/>, under "Reports and Info"). The Final IS/MND document includes information on impacts that will not exceed the threshold of significance with the adoption of mitigation measures. Metro will commit to ensuring that the mitigation measures identified in the Final IS/MND document are implemented during the design and construction process. The Mitigation Monitoring and Reporting Program (MMRP) attached to the Final IS/MND documents the committed mitigation measures. Metro staff will keep track of the environmental commitments per the Final IS/MND and MMRP during project implementation.

### **COMMUNITY OUTREACH**

To inform the public about this project, a community meeting was held on December 21, 2016 in coordination with the Historic Cultural Neighborhood Council Urban Design/Land Use Committee (HCNC UD/LUC). In addition, briefings were held with the Los Angeles Rivers Artists and Business Association on January 9, 2017, Regional Connector Community Leadership Council 1st/Central Station Committee on January 11, 2017, Central City Association Transportation, Infrastructure and Environment Committee on January 12, 2017, Arts District Los Angeles Business Improvement District on January 13, 2017, and HCNC UD/LUC on January 18, 2017. Briefings were also held with representatives from the offices of Metro Board Directors Eric Garcetti and Hilda Solis and City of Los Angeles Council member José Huizar. Staff emphasized that the currently proposed rail yard improvements do not include a station but will be designed in a manner that would not preclude future stations and/or other improvements along the mainline and in the rail yard between the 101 Freeway and 6<sup>th</sup> Street. Community outreach is planned to continue throughout the design phase which is scheduled to begin in spring 2017.

### **DETERMINATION OF SAFETY IMPACT**

Approval of this item will have no impact on safety.

### **FINANCIAL IMPACT**

There is no impact to the FY17 budget for the proposed recommendations. If Recommendation C is approved, this action will be funded as part of the FY18 capital budget under Project 865119 Division 20 Portal Widening and Turn back Facility, cost center 8510, account number 50316 Professional and Technical Services. This is a multi-year project requiring expenditure authorizations in fiscal year increments until a Board Authorized Life of Project Budget is adopted. It is the responsibility of the Project Manager and Chief Program Management Officer to budget for this project in the future fiscal years.

Metro recently received a \$69.2M grant from the Cap & Trade Transit and Intercity Rail Capital

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Program (TIRCP) to be applied towards this Project. Staff seeks to apply a portion of this grant for funding of the Design phase beginning with preliminary engineering. Confirmation of the availability of TIRCP funds will take place at the individual California Transportation Committee (CTC) meetings beginning in January 2017 with the request for a portion of the TIRCP funding to be applied for Design. Staff expects authorization of a total of \$5M from TIRCP funds for the Design phase with the balance to be applied to the Construction phase. However, Metro must be prepared to enter into LONPs with the State in the event availability of TIRCP funding does not match the project timeline. Upon CTC approval, staff will apply the TIRCP funds in accordance with CTC authorization instructions.

At this time the anticipated expenditures and authorizations required thru FY18 is \$17.2M. FY17 is authorized up to \$3.5M using Planning and Admin funds, with \$5M CTC TIRCP authorization for use in the FY18 period. The remaining \$8.7M balance required for this project will be funded using Measure R 35% funds.

#### Impact to Budget

There is no change to the FY17 approved budget. The request for increase authorization to \$17.2M includes contingency for the design contract and Metro staff labor to manage the design. The funds required for this action includes \$3.5M in Planning/Admin Funds, \$5.0M in future CTC approved TIRCP funds and \$8.7M in FY18 Measure R 35% funds. Due to the underground nature of the project work scope, Proposition A or Proposition C funds were not considered and are not included in this authorization request. There is no impact to Operations eligible funding. No other funds were considered.

#### **ALTERNATIVES CONSIDERED**

The Board could hold design and construction of the Portal Widening and Turnback Facility until completion of Section 2 of the Purple Line when reduced headways are required. This approach is not recommended as it has the potential for increased conflicts between operations and construction as more Red and Purple Line trains are introduced into the tunnel by the more frequent headways.

#### **NEXT STEPS**

Upon Board approval, the Contract for design including bid support services and design support during construction will be executed. Staff anticipates real estate activities to be initiated in early 2017 and returning to the Board in FY2018 for additional funding for real estate acquisition. Staff will file a Notice of Exemption to the State of California and Los Angeles County immediately after the Board approval. In addition, because Metro has voluntarily prepared an IS/MND and MMRP, staff will file a Notice of Determination to the State of California and Los Angeles County immediately after Board adoption of this project's IS/MND and MMRP.

#### **ATTACHMENTS**

Attachment A - Procurement Summary  
Attachment B - DEOD Summary

Attachment C - Division 20 Portal Widening Turnback Draft Project Schedule  
Attachment D - Motion: Downtown Los Angeles Arts District Connectivity

Prepared by:

Rick Meade, Executive Officer (213) 922-7917

Reviewed by:

Richard Clarke, Chief Program Management Officer (213) 922-7557

Debra Avila, Chief Vendor/Contract Management Officer (213) 418-3051

## PROCUREMENT SUMMARY

CORE CAPACITY ENHANCEMENTS AT DIVISION 20 PORTAL  
WIDENING AND TURNBACK FACILITY / AE66758000

1.	<b>Contract Number:</b> AE66758000	
2.	<b>Recommended Vendor:</b> T.Y. Lin International	
3.	<b>Type of Procurement (check one):</b> <input type="checkbox"/> IFB <input type="checkbox"/> RFP <input checked="" type="checkbox"/> RFP-A&E <input type="checkbox"/> Non-Competitive <input type="checkbox"/> Modification <input type="checkbox"/> Task Order	
4.	<b>Procurement Dates:</b>	
	<b>A. Issued:</b> July 20, 2016	
	<b>B. Advertised/Publicized:</b> July 20, 2016	
	<b>C. Pre-proposal/Pre-Bid Conference:</b> August 9, 2016	
	<b>D. Proposals/Bids Due:</b> September 9, 2016	
	<b>E. Pre-Qualification Completed:</b> December 13, 2016	
	<b>F. Conflict of Interest Form Submitted to Ethics:</b> December 5, 2016	
	<b>G. Protest Period End Date:</b> 2/17/2017	
5.	<b>Solicitations Picked up/Downloaded:</b> 32	<b>Bids/Proposals Received:</b> 5
6.	<b>Contract Administrator:</b> Dianne Sirisut	<b>Telephone Number:</b> 213-922-2737
7.	<b>Project Manager:</b> June Susilo	<b>Telephone Number:</b> 213-922-5232

**A. Procurement Background**

This Board Action is to approve the award of Contract No. AE66758000, issued in support of the widening of the existing Division 20 portal structure and proposed turnback facility in preparation for the opening of the Westside Purple Line Extension Section 1. The scope of services will include four tasks: 1) Preliminary Engineering, 2) Final Design, 3) Bid Support Services, and 4) Design Services during Construction. Board approval of contract awards are subject to resolution of all properly submitted protests.

The RFP was issued in accordance with Metro's Acquisition Policy and the contract type is a cost plus fixed fee. Two amendments were issued during the solicitation phase of the RFP:

- Amendment No. 1, issued on August 22, 2016, extended the proposal due date to September 9, 2016, and revised the technical specifications.
- Amendment No. 2, issued on August 31, 2016, revised the technical specifications and submittal requirements.

On August 9, 2016, Metro held a pre-proposal conference in the Gateway conference room on the third floor of the Gateway Building. There were 50 representatives from 31 firms that signed in at the pre-proposal conference. There were 32 registered plan holders that obtained the RFP package. A total of five proposals were received on

September 9, 2016. The procurement was designated as a Race Conscious Diverse Business Enterprise (RC-DBE) solicitation with a 27% DBE participation goal.

## **B. Evaluation of Proposals/Bids**

A Proposal Evaluation Team (PET) consisting of staff members from Metro Program Management, Maintenance, and Engineering departments was convened and conducted a comprehensive technical evaluation of the proposals received.

The proposals were evaluated based on the following evaluation criteria and weights:

- Experience and Capabilities of the Firms on the Consultant Project Team 20%
- Key Personnel's Skills and Experience 40%
- Project Management Plan 20%
- Understanding Design Approach 20%

The evaluation criteria were appropriate and consistent with criteria developed for other, similar Architect and Engineers (A&E) solicitations. Several factors were considered when developing these weights, giving the greatest importance to the key personnel skills and experience.

This is an A&E, qualifications based procurement. Price cannot be used as an evaluation factor pursuant to state and federal law.

Metro received five proposals on October 3, 2016, from the following firms:

1. HDR Engineering, Inc. (HDR)
2. HNTB Corporation (HNTB)
3. Mott MacDonald, LLC (MM)
4. RailPros, Inc. (RP)
5. T.Y. Lin International (TYLI)

The PET invited the five proposers to oral presentations on August 29, 2016. Each of the firms' Principal-in-Charge, Project Manager, and five other key personnel had an opportunity to present each team's qualifications and respond to the evaluation committee's questions. Each team was asked questions relative to each firm's proposed alternatives and previous experience.

### **Qualifications Summary of Recommended Firm:**

The evaluation performed by the PET, in accordance with evaluation criteria set forth in the RFP, determined T.Y. Lin International (TYLI) as the most qualified firm to provide the required services.

TYLI is an internationally recognized, multi-disciplined full-service infrastructure engineering firm providing innovative, cost-effective, and constructible designs for

over 60 years. TYLI has more than 2,800 employees throughout the Americas and Asia, with nine offices in California and over 200 California employees. TYLI has provided services in architecture, environmental, planning, surveying, design, mechanical and electrical engineering, construction management, construction engineering, and program management.

TYLI has been the lead structural engineer providing services to support the MUNI Metro Turnback project, provided project management oversight to California High-Speed Rail project, and was the prime consultant for the San Ysidro Freight Rail Yard Improvement project where TYLI managed the civil, track and electrical design. In addition, TYLI has been the prime designer on a design-build team where they provided engineering design services for Phase 1 of the Bay Area Rapid Transit extension.

The PET ranked the proposals and assessed strengths, weaknesses and associated risks of each of the Proposers to determine the most qualified firm.

	<b>Firm</b>	<b>Average Score</b>	<b>Factor Weight</b>	<b>Weighted Average Score</b>	<b>Rank</b>
1	<b>TYLI</b>				
2	Experience and Capabilities of the Firms on the Consultant Project Team	89.00	20%	17.80	
3	Key Personnel's Skills and Experience	87.67	40%	35.07	
4	Project Management Plan	91.00	20%	18.20	
5	Understanding Design Approach	93.67	20%	18.73	
6	<b>Total</b>		<b>100%</b>	<b>89.80</b>	<b>1</b>
7	<b>HNTB</b>				
8	Experience and Capabilities of the Firms on the Consultant Project Team	88.33	20%	17.67	
9	Key Personnel's Skills and Experience	86.33	40%	34.53	
10	Project Management Plan	85.00	20%	17.00	
11	Understanding Design Approach	83.00	20%	16.60	
12	<b>Total</b>		<b>100%</b>	<b>85.80</b>	<b>2</b>
13	<b>HDR</b>				
14	Experience and Capabilities of the Firms on the Consultant Project Team	85.00	20%	17.00	
15	Key Personnel's Skills and Experience	81.67	40%	32.67	
16	Project Management Plan	86.00	20%	17.20	
17		84.00	20%	16.80	



	Understanding Design Approach				
18	<b>Total</b>		<b>100%</b>	<b>83.67</b>	<b>3</b>
19	<b>RP</b>				
20	Experience and Capabilities of the Firms on the Consultant Project Team	81.67	20%	16.33	
21	Key Personnel's Skills and Experience	81.33	40%	32.53	
22	Project Management Plan	78.33	20%	15.67	
23	Understanding Design Approach	80.00	20%	16.00	
24	<b>Total</b>		<b>100%</b>	<b>80.53</b>	<b>4</b>
25	<b>MM</b>				
26	Experience and Capabilities of the Firms on the Consultant Project Team	80.67	20%	16.13	
27	Key Personnel's Skills and Experience	71.67	40%	28.67	
28	Project Management Plan	75.00	20%	15.00	
29	Understanding Design Approach	70.00	20%	14.00	
30	<b>Total</b>		<b>100%</b>	<b>73.80</b>	<b>5</b>

### **C. Cost/Price Analysis**

The cost analysis included the following: (1) a comparison with historical cost data of other firms offering similar services; (2) an analysis of prior audited and overhead rates, and factors for labor and other direct costs, and (3) compliance with Federal Acquisition Regulation (FAR) Part 31 guidelines. Metro has negotiated fixed rates for direct labor, provisional overhead rates, and a negotiated fixed fee for the Contract. The negotiated amount has been determined to be fair and reasonable.

An audit request has been submitted to the Metro Management Audit Services Department (MASD). In order to prevent any unnecessary delay in contract award, provisional overhead rates have been established subject to adjustment based on any audit findings. In accordance with FTA Circular 4220.1.f, if an audit has been performed by any other cognizant audit agency within the last twelve month period, Metro will receive and accept that audit report rather than perform another audit.

<b>Proposer Name</b>	<b>Proposal Amount</b>	<b>Metro ICE</b>	<b>Negotiated or NTE amount</b>
T.Y. Lin International	\$13,971,565	\$8,781,151	\$10,265,661

### **D. Background on Recommended Contractor**

TYLI, located in Los Angeles, California, has been in business for over 60 years and is the leader in engineering, design, and construction management. TYLI has provided transit and rail services in planning design, and construction for high-speed rail, light rail, freight railways, multi-modal facilities, and maintenance yards. TYLI's most recent experience includes structural engineering services to support the MUNI Metro Turnback, design services in trackwork and third rail for Bay Area Rapid Transit Extension in San Jose, and project management oversight for many projects including the California High-Speed Rail.

DEOD SUMMARY

**CORE CAPACITY ENHANCEMENTS AT DIVISION 20 PORTAL  
WIDENING AND TURNBACK FACILITY / AE66758000**

**A. Small Business Participation**

The Diversity and Economic Opportunity Department (DEOD) established a 27% Disadvantaged Business Enterprise (DBE) goal for this solicitation. T.Y. Lin International met the goal by making a 27.01% DBE commitment.

<b>Small Business Goal</b>	<b>27% DBE</b>	<b>Small Business Commitment</b>	<b>27.01% DBE</b>
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	<b>DBE Subcontractors</b>	<b>Ethnicity</b>	<b>% Commitment</b>
1.	Anil Verma Associates	Subcontinent-Asian American	7.69%
2.	Kal Krishnan Consulting Services	Subcontinent-Asian American	2.80%
3.	Wagner Engineering & Survey	Non-Minority Female	1.64%
4.	LIN Consulting, Inc.	Asian Pacific American	12.30%
5.	Earth Mechanics, Inc.	Asian Pacific American	2.18%
6.	SafeProbe, Inc.	Asian Pacific American	0.40%
	<b>Total Commitment</b>		<b>27.01%</b>

**B. Living Wage and Service Contract Worker Retention Policy Applicability**

The Living Wage and Service Contract Worker Retention Policy is not applicable to this Contract.

**C. Prevailing Wage Applicability**

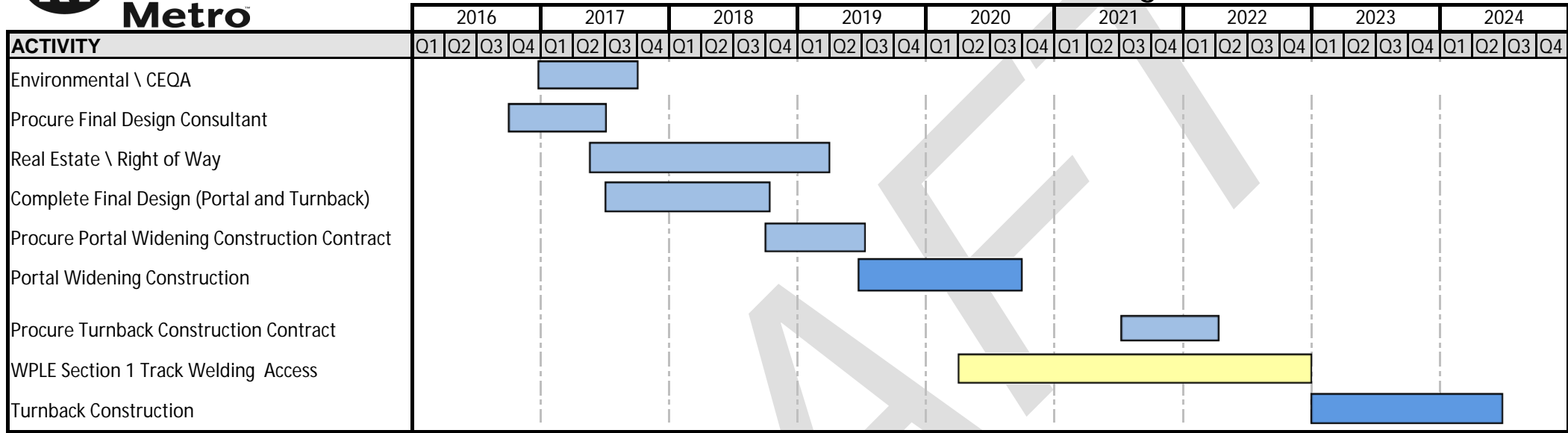
Prevailing Wage requirements are applicable to this project. DEOD will monitor contractors' compliance with the State of California Department of Industrial Relations (DIR), California Labor Code, and, if federally funded, the U S Department of Labor (DOL) Davis Bacon and Related Acts (DBRA). Trades that may be covered include: surveying, potholing, field, soils and materials testing, building construction inspection, construction management and other support trades.

**D. Project Labor Agreement/Construction Careers Policy**

Project Labor Agreement/Construction Careers Policy is not applicable to this Contract.



# Division 20 Portal Widening Turnback



Schedule calendar is fiscal year based

*Preliminary Draft - schedule subject to change*

1/11/2017



Metro

Los Angeles County  
Metropolitan Transportation  
Authority  
One Gateway Plaza  
3rd Floor Board Room  
Los Angeles, CA

**Board Report**

**File #:**2017-0020, **File Type:**Motion / Motion  
Response

Agenda Number:41

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**SYSTEM SAFETY, SECURITY AND OPERATIONS COMMITTEE  
JANUARY 19, 2017**

**Motion by:**

**Directors Garcetti, Solis and Bonin**

January 19, 2017

**Downtown Los Angeles Arts District Connectivity**

Metro Rail service is intended to serve high-density areas and major trip generators throughout Los Angeles County. Transit service to these types of locations, such as the Wilshire Corridor, the Historic Core, North Hollywood, Santa Monica, Pasadena, Long Beach, and other thriving locations is important to meet the mobility needs of Los Angeles County.

There are several outstanding priorities in and around MTA's Division 20 rail maintenance facility in the Arts District. MTA must improve Division 20 to service the Purple Line Extension project. Additionally, there is an opportunity to extend rail service to the Arts District.

Combined, the Purple Line Extension Section 1 and Section 2 projects include over \$3.6 billion in federal funding and financing. These federal funds are predicated on specific service standards, namely, train service every four minutes.

The federal funding requirements compel MTA to improve the subway turn-back capabilities by constructing a facility at the Division 20 maintenance facility. These improvements must be completed to meet federal service requirements, maintain federal funding agreements, and to start service on the Purple Line Extension. Failure to do so could put over \$3.6 billion in federal funding at risk.

In addition, with the passage of Measure M, MTA's current plans for Division 20 must be revised to accommodate the acceleration of the Purple Line Extension Section 3 to 2024. This will require an expansion of subway vehicle storage, maintenance, and testing infrastructure.

At the same time, MTA has since 2010 studied extending the Red and Purple Lines from Union Station to the Arts District, with possible stations and 1st Street, 3rd Street, and/or 6th Street.

An Arts District Extension is a great opportunity to support the continued development of a transit-oriented community with a rapidly expanding population and a strong desire for transit service. The Arts District has become a widely popular arts, culture, and shopping destination with rapid

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residential growth. There are over twenty development projects in the Arts District under construction, entitled or in the entitlement process, including 670 Mesquit, 6AM, Row DTLA, 520 Mateo Street, the Ford Motor Factory Building, 950 E. 3rd Street, At Mateo, and others. Additionally, the Arts District is the location of several major infrastructure projects that will improve the public realm, such as the 6th Street Viaduct Replacement project and MTA's LA River Waterway & System Bikepath project.

MTA's first priority for Division 20 must be to support the Purple Line Extension. However, MTA should do everything possible to extend rail service to the Arts District.

**CONSIDER Motion by Garcetti, Solis and Bonin** that the Board direct the CEO to:

- A. Immediately initiate a holistic assessment of MTA's long-term needs at Division 20 and accommodation of future Arts District station access, including:
  - 1. Turn-back facility improvements,
  - 2. Rail car storage, maintenance facility, and vehicle test track needs required to start service on the Purple Line Extension Section 3 in 2024 per the Measure M ordinance,
  - 3. Rail service expansion to the Arts District with station options at 1st Street, 3rd Street, and/or 6th Street, with connections into the Arts District, to MTA's LA River Waterway & System Bikepath project, and to the 6th Street Viaduct Replacement project,
  - 4. Consideration of additional property required to meet all the above needs;

**FURTHER MOVE** that the MTA Board direct the CEO to:

- A. Design Division 20 so as to not preclude new stations and necessary track(s) in the future if funding is identified for an Arts District station(s) on the Red/Purple Line.
- B. Work with the City of Los Angeles to develop creative strategies to establish innovative funding mechanisms dedicated to off-set the costs of new stations in the Arts District.
- C. Provide an initial report back on all the above during the April 2017 Board cycle.