

# **Metro**

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



## **Agenda - Final**

**Thursday, March 15, 2018**

**10:15 AM**

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

### **Construction Committee**

*James Butts, Chair*

*Jacquelyn Dupont-Walker, Vice Chair*

*Robert Garcia*

*Janice Hahn*

*Sheila Kuehl*

*Carrie Bowen, non-voting member*

*Phillip A. Washington, Chief Executive Officer*

**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.

**INFORMATION RELATING TO AGENDAS AND ACTIONS OF THE BOARD**

Agendas for the Regular MTA Board meetings are prepared by the Board Secretary and are available prior to the meeting in the MTA Records Management Department and on the Internet. Every meeting of the MTA Board of Directors is recorded on CD's and as MP3's and can be made available for a nominal charge.

## 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.

## ADA REQUIREMENTS

Upon request, sign language interpretation, materials in alternative formats and other accommodations are available to the public for MTA-sponsored meetings and events. All requests for reasonable accommodations must be made at least three working days (72 hours) in advance of the scheduled meeting date. Please telephone (213) 922-4600 between 8 a.m. and 5 p.m., Monday through Friday. Our TDD line is (800) 252-9040.

## LIMITED ENGLISH PROFICIENCY

A Spanish language interpreter is available at all Board Meetings. Interpreters for Committee meetings and all other languages must be requested 72 hours in advance of the meeting by calling (213) 922-4600 or (323) 466-3876.



**323.466.3876 x2**

*Español*

**323.466.3876 x3**

한국어

日本語

中文

русский

ភាសាខ្មែរ

ภาษาไทย

Tiếng Việt

ភាសាជប៉ុន

## HELPFUL PHONE NUMBERS

Copies of Agendas/Record of Board Action/Recordings of Meetings - (213) 922-4880 (Records Management Department)

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**

18. **SUBJECT: PROGRAM MANAGEMENT MAJOR PROJECT STATUS REPORT** [2018-0045](#)

**RECOMMENDATION**

RECEIVE oral report on the Major Project Status by the Chief Program Management Officer.

**Attachments:** [Attachment A - Program Management Major Project Status Report - March 2018](#)

19. **SUBJECT: FEMALE UTILIZATION ACTION PLAN UPDATE** [2018-0054](#)

**RECOMMENDATION**

RECEIVE AND FILE the Female Utilization Action Plan Update.

**Attachments:** [Presentation](#)

20. **SUBJECT: ENWAVE LOS ANGELES UTILITY COOPERATIVE AGREEMENT** [2018-0016](#)

**RECOMMENDATION**

AUTHORIZE the Chief Executive Officer to execute the Utility Cooperative Agreement (UCA) between Metro (Authority) and Enwave Los Angeles ("Enwave") for support services associated with Metro's construction projects.

**Attachments:** [Attachment A - Utility Cooperative Agreement](#)

21. **SUBJECT: METRO BLUE LINE TRACK AND SYSTEM REFURBISHMENT** [2018-0011](#)

**RECOMMENDATION**

ESTABLISH a Life-of-Project (LOP) Budget of \$90,779,817, utilizing \$44,581,402 available FY19 funds from existing capital projects, for the Metro Blue Line Track and System Refurbishment Project (205115).

**Attachments:** [Attachment A - Expenditure Plan](#)

33. **SUBJECT: 605 HOT SPOTS** [2018-0089](#)

**RECOMMENDATION**

RECEIVE oral update on 605 Hot Spots.

**Attachments:** [Presentation](#)



## Adjournment

### GENERAL PUBLIC COMMENT

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 #: 2018-0045, File Type: Oral Report / Presentation

Agenda Number: 18.

---

### CONSTRUCTION COMMITTEE MARCH 15, 2018

**SUBJECT: PROGRAM MANAGEMENT MAJOR PROJECT STATUS  
REPORT**

**ACTION: RECEIVE ORAL REPORT**

#### **RECOMMENDATION**

RECEIVE oral report on the Major Project Status by the Chief Program Management Officer.

#### **DISCUSSION**

- A. Update report covering the month of March 2018 by the Chief Program Management Officer; and
- B. At the January 2018 Board meeting, staff summarized the positive program results and impacts of the one-year pilot program, which the Board approved in January 2017, authorizing the CEO to negotiate and execute project-related agreements, including contract modification (s) up to the authorized Life of Project budget, to streamline project management of the four (4) major transit corridor projects (Crenshaw/LAX, Regional Connector, Westside Purple Line Extension Section 1 and 2 projects).

Also at the January 2018 meeting, the Board approved continuation and expansion of the authority delegation for LOP budget management on all transit and regional rail capital projects program-wide. Staff was further directed to provide quarterly reports and include details on change orders and modifications. The first quarterly update of these detailed changes and modifications report to the Board will be issued by April 2018. In the interim, staff will continue reporting on project cost contingency and contract change activity, as shown in Attachment A.

#### **ATTACHMENTS**

Attachment A - Program Management Major Project Status Report - March 2018

Prepared by:

- **Master Schedule** - Julie Owen, DEO, Project Mgmt., (213) 922-7313
- **Crenshaw/LAX** - Charles Beauvoir, EO Project Mgmt., (213) 903-4113
- **Regional Connector** - Gary Baker, EO Project Mgmt., (213) 893-7191
- **Westside Purple Line Ext 1** - James Cohen, EO Project Mgmt., (213) 922-7911
- **Westside Purple Line Ext 2** - Michael McKenna, EO Project Mgmt., (213) 312-3132
- **Westside Purple Line Ext 3** - Michael McKenna, EO Project Mgmt., (213) 312-3132
- **Patsaouras Plaza Busway Station** - Timothy Lindholm, EO Project Engr., (213) 922-7297
- **Willowbrook/Rosa Park Station** - Timothy Lindholm, EO Project Engr., (213) 922-7297
- **The New Blue** - Androush Danielians, EO Project Engr (Interim)., (213) 922-7598
- **Presentation** - Yohana Jonathan, Departmental System Analyst, (213) 922-7592

# Program Management Major Project Status Report

Presented By

**Richard Clarke**

Chief Program Management Officer

---





March 2018

Construction Committee

Los Angeles County Metropolitan Transportation Authority



# PROJECT BUDGET & SCHEDULE STATUS SUMMARY CHART

Project	Cost Performance	Schedule Performance	Comments
Crenshaw/LAX			The remaining cost contingency is below 2% of the total project budget (\$38 million in contingency remains). Contractor is 40 days behind schedule and is required to mitigate schedule to maintain planned revenue service in October 2019.
Regional Connector			Project is 46% complete and proceeding on schedule forecast and within Life of Project budget.
Westside Purple Line Extension-Section 1			Project is 31% complete with no significant issues.
Westside Purple Line Extension-Section 2			Project is 6% complete with no significant issues.
Westside Purple Line Extension-Section 3			Requested entry into the Engineering Phase from the FTA in April 2017. Sent request for Letter of No Prejudice (LONP) for the tunnel contract to FTA in September 2017. Awaiting FTA approvals. C1153 Advanced Utility Relocations (AUR) Contract – Notice to Proceed (NTP) was issued on January 2, 2018
Patsaouras Plaza			Project is 50% complete with approval of substantial completion date of December 2018.
Willowbrook/Rosa Parks Station			Design activities are complete. Early Start Phase (Package E) contract awarded, second contract (Package A and C) in procurement process.
Metro Blue Line Projects			Pedestrian Swing Gate project 93% complete. Experiencing delays from Union Pacific Rail Road. MBL Signal Rehab project design work is at 60% complete. City of Long Beach Fare Gates infrastructure design 100% complete for two stations.

March 2018



On target



Possible problem



Major issue



Metro 2

Construction Committee

Los Angeles County Metropolitan Transportation Authority

# TRANSIT MASTER SCHEDULE (Page 1 of 2)

TASK filters: Code Cleanup_1, Name contains, Show on Master Schedule, WBS Categories_WBS				* 00 Master Program (By Phase) no contin													16-Feb-18	
Activity Name	PMIS Project Manager	Start	Finish	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031
				2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
<b>Transit Projects</b>		01-Mar-07 A	26-Jun-57															
<b>Environmental</b>		01-Mar-07 A	26-Jun-57															
North San Fernando Valley BRT Improvements	Cencic	04-Jan-17 A	02-Jun-25	[Gantt bars for Planning, Design, Adv/Award, DB Construction, System Testing]														
North Hollywood to Pasadena BRT	Richmai	30-Jan-15 A	02-Sep-25	[Gantt bars for Planning, Design, Adv/Award, DB Construction, System Testing]														
Orange Line Grade Separations	Patel	23-May-16 A	30-Jun-25	[Gantt bars for Planning, Design, Adv/Award, DB Construction, System Testing]														
East San Fernando Valley Transit Corridor	Davis	11-Oct-10 A	06-Jul-29	[Gantt bars for Planning, Design, Adv/Award, DB Construction, System Testing]														
Vermont BRT Corridor	Cencic	30-Jan-15 A	07-Aug-29	[Gantt bars for Planning, Design, Adv/Award, DB Construction, System Testing]														
Crenshaw Northern Extension	Moosavi	09-Feb-18	17-Jun-47	[Gantt bars for Planning, Design, Adv/Award, DB Construction, System Testing]														
West Santa Ana Transit Corridor	Pan	01-Oct-09 A	09-Nov-28	[Gantt bars for Planning, Design, Adv/Award, DB Construction, System Testing]														
Sepulveda Phase 1 - Express Lanes	Wong	20-Feb-18	10-Nov-26	[Gantt bars for Planning, Design, Adv/Award, DB Construction, System Testing]														
Sepulveda Phase 2 - Transit Corridor	Zelmer	26-Apr-17 A	24-Apr-37	[Gantt bars for Planning, Design, Adv/Award, DB Construction, System Testing]														
Sepulveda Phase 3 - Westwood to LAX	Mieger	26-Apr-17 A	26-Jun-57	[Gantt bars for Planning, Design, Adv/Award, DB Construction, System Testing]														
South Bay Green Line Ext. Crenshaw Blvd in Tor	Khanna	23-Mar-17 A	15-May-30	[Gantt bars for Planning, Design, Adv/Award, DB Construction, System Testing]														
Eastside Transit Corridor Phase 2 (1 Align)	Liu	01-Mar-07 A	08-Nov-35	[Gantt bars for Planning, Design, Adv/Award, DB Construction, System Testing]														
<b>Design</b>	Zelmer	04-Oct-10 A	29-Dec-23															
Airport Metro Connector	Zelmer	04-Oct-10 A	29-Dec-23	[Gantt bars for Design, Engineering, Adv/Award, DB Construction, System Testing]														
<b>Procurement</b>		02-Oct-13 A	25-Mar-27															
Purple Line Extension Section 3	McKenna	29-Feb-16 A	04-Mar-26	[Gantt bars for Design, Engineering, Adv/Award, DB Construction, System Testing]														
Gold Line Foothill Extension Phase 2B	Meade	02-Oct-13 A	25-Mar-27	[Gantt bars for Design, Engineering, Adv/Award, DB Construction, System Testing]														
<b>Construction Contract</b>		01-Jun-07 A	30-Aug-25															
Crenshaw/LAX Transit Corridor	Beauvoir	01-Jul-09 A	06-Dec-19	[Gantt bars for Design, Engineering, Adv/Award, DB Construction, System Testing]														
Regional Connector Transit Corridor	Baker	26-Jan-09 A	27-Nov-21	[Gantt bars for Design, Engineering, Adv/Award, DB Construction, System Testing]														
Purple Line Extension Section 1	Cohen	01-Jun-07 A	29-Nov-23	[Gantt bars for Design, Engineering, Adv/Award, DB Construction, System Testing]														
Purple Line Extension Section 2	McKenna	02-Mar-15 A	30-Aug-25	[Gantt bars for Design, Engineering, Adv/Award, DB Construction, System Testing]														
<b>Transit Facilities</b>		07-May-15 A	16-Jun-23															
<b>Design</b>	Meade	16-May-16 A	16-Jun-23															
Div 20 Portal/Turnback	Meade	16-May-16 A	16-Jun-23	[Gantt bars for Design, Engineering, Adv/Award, DB Construction, System Testing]														
<b>Construction Contract</b>	Lindholm	07-May-15 A	30-Dec-20															

■ Planning / Environmental   
 ■ ROW / Utility Relocation   
 ■ DB Construction   
 ■ System Testing   
  Not Funded (Env/ROW/Test)

■ Design / Engineering   
 ■ Adv / Award   
 ■ DBB Construction   
  Not Funded (Eng/Bid/Con)

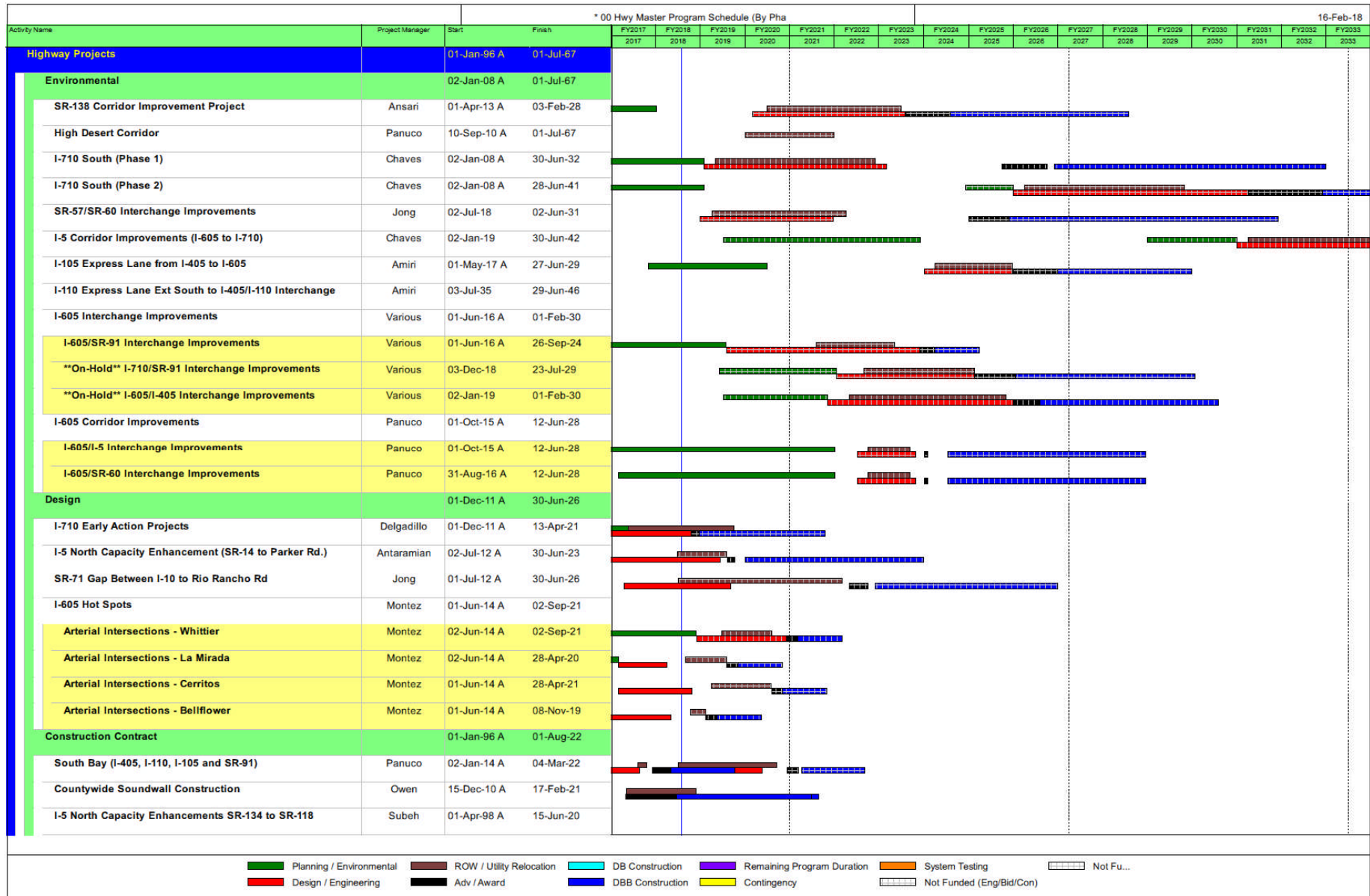
# TRANSIT MASTER SCHEDULE (Page 2 of 2)

TASK filters: Code Cleanup_1, Name contains, Show on Master Schedule, WBS Categories_WBS				* 00 Master Program (By Phase) no contin													16-Feb-18	
Activity Name	PMIS Project Manager	Start	Finish	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031
				2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
<b>Willowbrooks/Rosa Parks Station Improvement</b>	Lindholm	07-May-15 A	30-Dec-20															
<b>Regional Rail Projects</b>	Owens	02-Sep-13 A	24-Jun-27															
<b>Environmental</b>	Owens	01-Dec-14 A	24-Jun-27															
<b>Link Union Station</b>	Owens	01-Dec-14 A	24-Jun-27															
<b>Design</b>	Owens	01-Apr-15 A	02-May-22															
<b>Brighton to Roxford Double Track</b>	Owens	01-Sep-15 A	28-Jan-22															
<b>Lone Hill to CP White</b>	Owens	03-May-16 A	02-May-22															
<b>Rosecrans &amp; Marquardt Grade Separation</b>	Owens	01-Apr-15 A	14-Sep-21															
<b>Construction Contract</b>	Owens	02-Sep-13 A	01-Jun-18															
<b>Bob Hope Airport Station</b>	Owens	02-Sep-13 A	01-Jun-18															
<b>Bus Facilities Projects</b>	Gurrola	31-Mar-14 A	14-Feb-19															
<b>Construction Contract</b>	Gurrola	31-Mar-14 A	14-Feb-19															
<b>Patsouras Plaza</b>	Gurrola	31-Mar-14 A	14-Feb-19															
<b>State of Good Repair/Improvements</b>		01-Jul-13 A	30-Dec-19															
<b>Design</b>		21-Sep-15 A	30-Dec-19															
<b>210 Freeway Barrier Rail</b>	Danielans	13-Jun-16 A	28-Jun-19															
<b>MBL Resignaling</b>	Wei	21-Sep-15 A	30-Dec-19															
<b>Construction Contract</b>		01-Jul-13 A	30-Mar-18															
<b>Pershing Sq. Esc. Replace &amp; New Canopy Project</b>	Patel	11-May-15 A	31-Aug-17 A															
<b>MBL Ped Safety Enhancement At-Grade Crossing</b>	Chong	01-Jul-13 A	30-Mar-18															
<b>Small Capital</b>		01-Mar-16 A	07-Mar-22															
<b>Design</b>	Joshi	01-Mar-16 A	07-Mar-22															
<b>Eastside Access Improvement Project</b>	Joshi	01-Mar-16 A	07-Mar-22															
<b>Procurement</b>	Gurrola	16-Jan-18	28-Feb-20															
<b>Rail to Rail</b>	Gurrola	16-Jan-18	28-Feb-20															

■ Planning / Environmental   
 ■ ROW / Utility Relocation   
 ■ DB Construction   
 ■ System Testing   
  Not Funded (Env/ROW/Test)

■ Design / Engineering   
 ■ Adv / Award   
 ■ DBB Construction   
  Not Funded (Eng/Bid/Con)

# HIGHWAY MASTER SCHEDULE (Page 1 of 2)





# HIGHWAY MASTER SCHEDULE (Page 2 of 2)

				* 00 Hwy Master Program Schedule (By Pha)																	16-Feb-18
Activity Name	Project Manager	Start	Finish	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	FY2032	FY2033	
				2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	
SR-118 to SR-170 (Segment 1A)	Subeh	30-Jul-99 A	15-Jul-16 A																		
SR-170 to Buena Vista (Segments 2)	Subeh	01-Apr-98 A	16-Dec-15 A																		
Magnolia to SR-134 (Segment 4)	Subeh	01-Apr-98 A	18-Dec-19																		
Buena Vista to Magnolia (Segment 3)	Subeh	01-Apr-98 A	15-Jun-20																		
I-5 South Capacity Enhancements from I-605 to Orange Cou	Gau	01-Jan-96 A	01-Aug-22																		
I-5 Carmenita Road Interchange	Gau	01-Jan-01 A	20-Mar-18																		
Alondra (Segment 1)	Gau	01-Jan-01 A	19-May-16 A																		
Imperial Highway (Segment 4)	Gau	01-Jan-01 A	26-Jul-19																		
Shoemaker - Rosecrans (Segment 3)	Gau	01-Jan-96 A	28-Nov-18																		
Florence (Segment 5)	Gau	01-Jan-01 A	30-Jul-20																		
Valley View (Segment 2)	Gau	01-Jan-96 A	01-Aug-22																		

■ Planning / Environmental   
 ■ ROW / Utility Relocation   
 ■ DB Construction   
 ■ Remaining Program Duration   
 ■ System Testing   
  Not Fu...

■ Design / Engineering   
 ■ Adv / Award   
 ■ DBB Construction   
 ■ Contingency   
  Not Funded (Eng/Bid/Con)

# CRENSHAW/LAX TRANSIT PROJECT

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

◆ SCHEDULE		
	Current	Forecast
REVENUE OPERATION	Oct 2019	Oct 2019

- Overall Project Progress is 78% complete; contractor needs to mitigate 40 day schedule delay
- The Green Line tie-in to Crenshaw/LAX Line continues on schedule for completion by April 7, 2018
- Contractor continues critical track work installation along southern area of alignment
- Contractor continues concrete wall and roof placements for cut-and-cover tunnel and the three underground stations along Crenshaw Boulevard
- The Southwestern Yard Maintenance Facility is progressing ahead of schedule



Initial set-up in progress for Green Line tie-in (facing east)



Setting overhead catenary system poles – south end

March 2018



On target



Possible problem



Major issue


Construction Committee

Los Angeles County Metropolitan Transportation Authority




Metro 7

# REGIONAL CONNECTOR TRANSIT PROJECT

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

\* Includes Board approved LOP plus finance costs.

 SCHEDULE	Current	Forecast
REVENUE OPERATION	Dec 2021	Dec 2021

- Overall Project Progress is 46%
- Tunneling:** excavation of cross passages, and preparation for Mechanical, Electrical, and Plumbing, inverts and walkways underway
- Little Tokyo/Arts District Station:** Permanent station construction re-mobilizing
- Historic Broadway Station:** Underpinning of LA Times Building in progress; station box and ancillary area excavation continues under steady state
- Grand Av Arts/Bunker Hill Station:** Permanent structural concrete construction continues
- Flower Street:** Utility relocations, support of excavation, decking and excavation continue; decking complete from 4<sup>th</sup> to 6<sup>th</sup> Street



Tunneling completed January 16, 2018

March 2018



On target



Possible problem



Major issue

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Metro 8

# WESTSIDE PURPLE LINE EXTENSION – SECTION 1

**OK BUDGET**

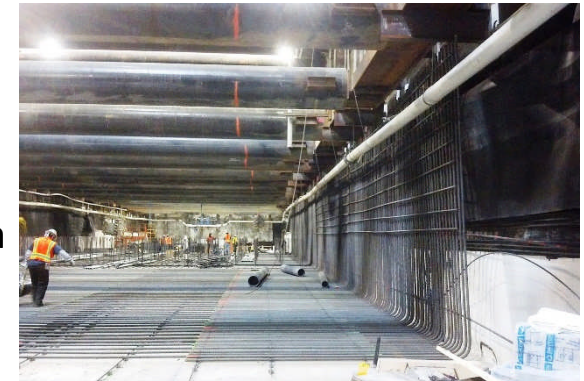
	Current	Forecast
<b>TOTAL COST*</b>	<b>\$3,154M</b>	<b>\$3,154M</b>

\* Includes Board approved LOP plus Finance costs.

**OK SCHEDULE**

	Current	Forecast
<b>REVENUE OPERATION</b>	<b>Oct 2024 (FFGA)</b>	<b>Nov 2023</b>

- Overall Project Progress is 31% complete.
- Support of Excavation (SOE) pile installation at the Wilshire/Western Retrieval Shaft completed on January 19, 2018. Decking in this area commenced in February 2018.
- Wilshire/La Brea Station dewatering activities, grounding grid installation and HDPE installation are ongoing. Rebar installation for the first invert concrete pour started in January 2018.
- At the Wilshire/Fairfax Station, station excavation and the installation of walers and struts are ongoing. Excavation, east of Gridline 11 (west side of the muck shaft), is now clear of the Paleo zone.
- Street decking at Wilshire/La Cienega was completed on January 8, 2018. Hanging of utilities below the deck continues. Work on the electrical vaults inside the La Cienega Station Yard is ongoing.
- Tunnel Boring Machines (TBMs) were delivered to Los Angeles in December 2017. TBM components are being shipped to the contractor's Riverside storage site. Tunneling is planned to start in August 2018.



Wilshire/La Brea Station



TBM/Conveyor Equipment at Wilshire/La Brea Station

March 2018



On target



Possible problem



Major issue

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Metro 9



# 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 Finance costs.

## SCHEDULE

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

- Overall project progress is 6% complete.
- Final design progress is 51% complete.
- Century City Constellation: AT&T and LADWP (Power) utility relocations are ongoing.
- Wilshire/Rodeo: Southern California Edison (SCE) cable pulling and splicing completed on January 30, 2018. Southern California Gas (SCG) and AT&T utility relocations began in February 2018.
- Negotiations with the City of Beverly Hills (COBH) for an Memorandum Of Agreement for the C1120 Contract began in August 2017 and are anticipated to complete by April 2018.



AT&T Conduit Installation in Century City

March 2018



On target



Possible problem



Major issue

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Metro 10

# WESTSIDE PURPLE LINE EXTENSION – SECTION 3

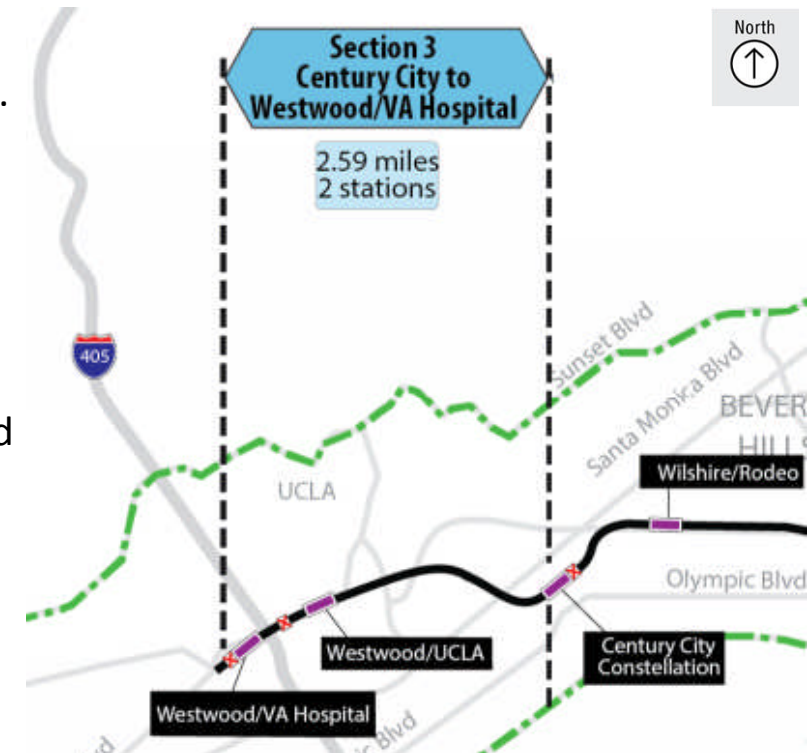
## OK BUDGET

	Current	Forecast
TOTAL COST	TBD	\$3,478M

## OK SCHEDULE

	Current	Forecast
REVENUE OPERATION	TBD	March 2026

- Request for Letter of No Prejudice (LONP) for the Tunnel Contract was submitted to the FTA on September 11, 2017.
- Construction Management Support Services (CMSS) Contract was executed on November 29, 2017. CMSS is staffing to support the Advanced Utility Relocations (AUR) construction.
- C1151 Tunnel Contract - Technical proposals were received on November 13, 2017, and price proposals are anticipated in early 2018.
- C1152 Stations, Trackwork and Systems Contract - Request for Qualifications (RFQ)/Request for Proposals (RFP) was issued on September 15, 2017. Qualifications from respondents were received on November 20, 2017.
- C1153 Advanced Utility Relocations (AUR) Contract – Notice to Proceed (NTP) was issued on January 2, 2018.



March 2018



On target



Possible problem



Major issue


Construction Committee


Los Angeles County Metropolitan Transportation Authority



Metro 11

# PATSAOURAS PLAZA BUSWAY STATION

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

 SCHEDULE	Current	Forecast
SUBSTANTIAL COMPLETION	Nov 2018	Dec 2018

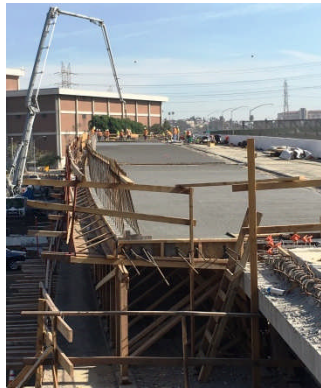
- Native American monitoring continues on construction activities
- Vignes Street on/off-ramp intermittent non-peak closures ongoing
- Pedestrian ramp micropiles and elevator foundation approvals near completion
- Concrete pour over Center Street completed
- Completed concrete deck pours, on 28-day curing period
- Remainder of concrete deck pours to be completed in February
- Working with contractor to expedite negotiated project schedule delays and request for changes



Aerial view of project site



Elevator Foundations



Bridge Deck Pour

March 2018



On target



Possible problem



Major issue



Metro 12

Construction Committee

Los Angeles County Metropolitan Transportation Authority



# WILLOWBROOK/ROSA PARKS STATION

<b>OK</b> BUDGET	Current	Forecast
TOTAL COST	N/A	\$92.4M

<b>OK</b> SCHEDULE	Current	Forecast
SUBSTANTIAL COMPLETION	Dec 2020	Dec 2020

- Early Start Phase (Package E) Construction mobilization has begun.
- Package A and C at 100% design completion. Procurement of this contract is underway. Package includes provisions for the closure of the Blue Line (the New Blue).
- Pedestrian grade crossing documents submitted to Union Pacific and Public Utilities Commission.
- Staff planning to bring Life of Project Budget request to Board in May 2018.



South Platform Improvements



Central Plaza & Bus Bays



Main Plaza

March 2018



On target



Possible problem



Major issue

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Metro 13



# THE NEW BLUE

<u>Project Name</u>	Budget	Percent Completed	Forecast Completion	Status
▪ <b>Pedestrian Gates</b>	\$31.4M	93%	June 2018	◆
▪ <b>City of Long Beach Fare Gates Design</b>	\$6M*	100%(Design)	Feb 2018	OK
▪ <b>Blue Line Signal Rehabilitation</b> (OCS, Signals, Div. 11)	\$119M	12%	April 2021	OK
<b>Total: \$156.4M</b>				

## Project Status

- **Pedestrian Gates**
  - Construction completed within Cities of Long Beach and Compton
  - Construction within County of LA 93% complete
  - Working with LADOT on temporary Street closures and traffic control plan approvals
  - Commissioning of some gates delays due to UPRR
- **City of Long Beach Fare Gates Design**
  - Design completed on 5<sup>th</sup> and Wardlow Stations
- **MBL Signal Rehab Design at 60%**



\*Budget Estimate

March 2018

OK On target

Possible problem



Major issue

Construction Committee

Los Angeles County Metropolitan Transportation Authority



Metro

# Crenshaw/LAX Transit Project

## Change Activity

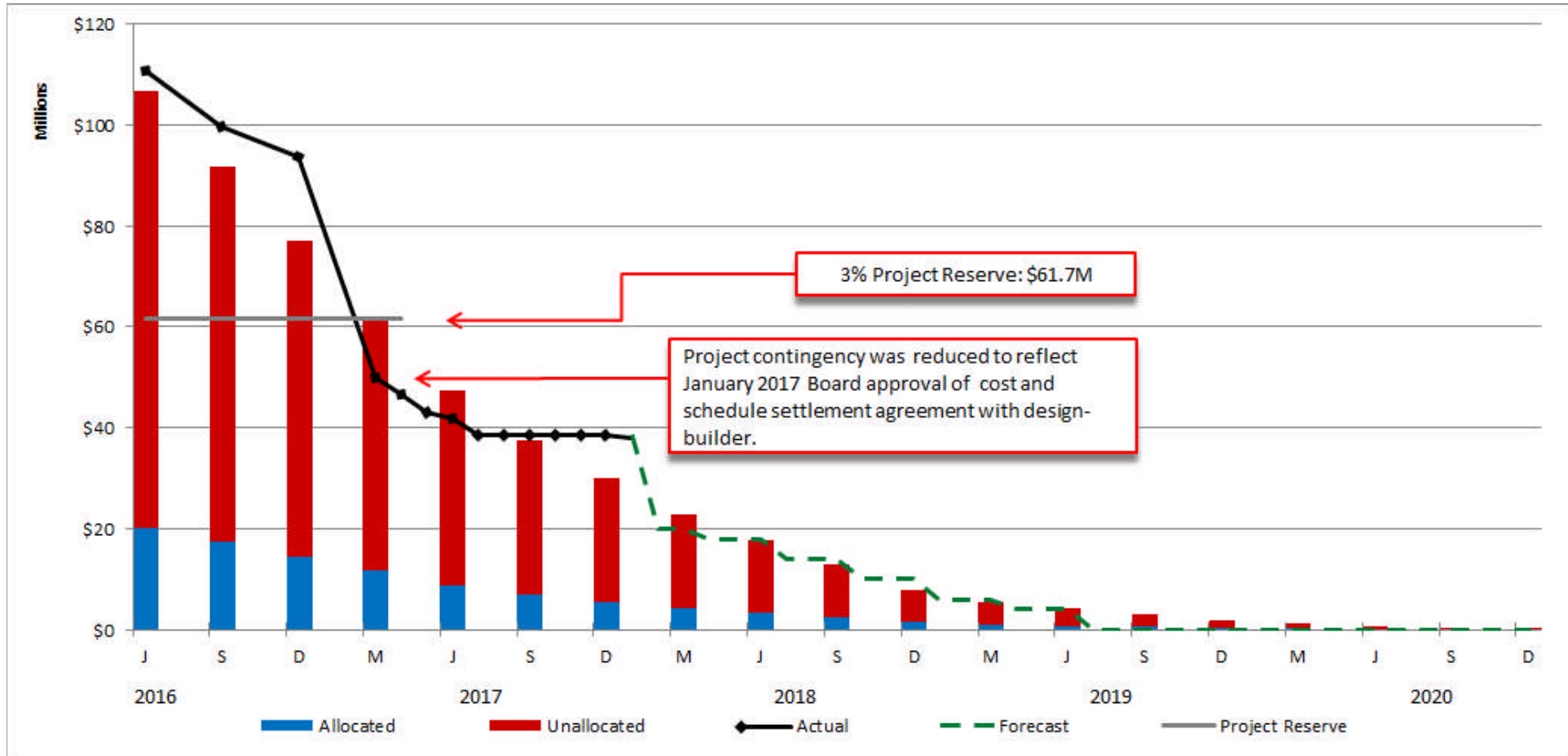
January 2018

Change Notice #	Description	Number of Mod/ Change Orders	Cost Value
<b>TOTAL VALUE OF EXECUTED CONTRACT MODIFICATIONS AND APPROVED CHANGE ORDERS</b>		<b>348</b>	<b>\$ 79,431,526</b>
<b>TOTAL PENDING MODIFICATIONS AND CHANGE ORDERS ROUGH ORDER OF MAGNITUDE COST</b>		<b>25</b>	<b>\$ 5,464,194</b>
<b>DESIGN BUILD - CONTRACT C0988</b>			
MOD 00290	Asbestos Cement Pipe 63rd & Tesoro		Less than \$1 million
MOD 00319	Claim 118 Resolution - Qwest Line		Less than \$1 million
MOD 00320	Clean Agent Systems in the 3 TC& C		Less than \$1 million
MOD 00321	Addl Dsgn MLK Paver Underlayment		Less than \$1 million
MOD 00323	ATC Wayside Signal Numbering Rev		Less than \$1 million
MOD 00332	Revised ROW Lines at HS-1001, Arbor		Less than \$1 million
MOD 00338	MRDC- Full Height End of Platform		Less than \$1 million
MOD 00340	Construction Hindry Widening & Reloc		Less than \$1 million
MOD 00345	Oil Water Separator at UG Stations		Between \$1 and \$5 million
MOD 00348	Dsng Cost to Repl Conc with Steel Po		Less than \$1 million
MOD 00304	BkChrg Metro pymnts to COLA TCO		Credit between \$1 and \$5 million
MOD 00327	Composite Utility Plan Revisions		Less than \$1 million
MOD 00346	Centinela Mill and Overlay-Design		Less than \$1 million
MOD 00347	UG1 Ctr Walkway Lghtd Handrail Design		Credit Less than \$1 million
CO 00046.5	Underground Conduit & Cable		Less than \$1 million
CO 00129	Elimination Crosver Sta 56+57.50		Credit Less than \$1 million
CO 00152.1	Radio System - Additional Tunnel Amp		Less than \$1 million
CO 00153.1	Radio System - Additional Head-End		Less than \$1 million
CO 00154.1	Radio System- UG1 Hot Standby Amplif		Less than \$1 million
CO 00176.1	Underground Station Emergency Vent		Less than \$1 million
CO 00180.1	Cable Transmission System - Construction		Less than \$1 million
CO 00197	MLK Station Plaza Concrete Pav-Construction		Less than \$1 million
CO 00202	Crenshaw Median Landscaping & Maintenance		Between \$1 and \$5 million
CO 00203	Storm Drain Relocation at MLK		Less than \$1 million
CO 00204	Radio Redundancy Radio Rooms		Less than \$1 million
<b>TOTAL MODIFICATIONS AND CHANGE ORDERS</b>		<b>373</b>	<b>\$ 84,895,720</b>
<b>PROFESSIONAL SERVICES CONTRACTS</b>			
<b>Design Support Services During Construction - CONTRACT E0117</b>			
<b>TOTAL VALUE OF EXECUTED CONTRACT MODIFICATIONS</b>		<b>42</b>	<b>\$ 59,217,720</b>
<b>TOTAL PENDING MODIFICATIONS</b>		<b>0</b>	<b>\$ -</b>
<b>TOTAL MODIFICATIONS</b>		<b>42</b>	<b>\$ 59,217,720</b>
<b>Construction Management Support Services - CONTRACT MC069</b>			
<b>TOTAL VALUE OF EXECUTED CONTRACT MODIFICATIONS</b>		<b>18</b>	<b>\$ 69,484,775</b>
<b>TOTAL PENDING MODIFICATIONS</b>		<b>0</b>	<b>\$-</b>
<b>TOTAL MODIFICATIONS</b>		<b>18</b>	<b>\$ 69,484,775</b>

# Crenshaw/LAX Transit Project

## Project Cost Contingency Drawdown

January 2018



# Regional Connector Change Activity

January 2018

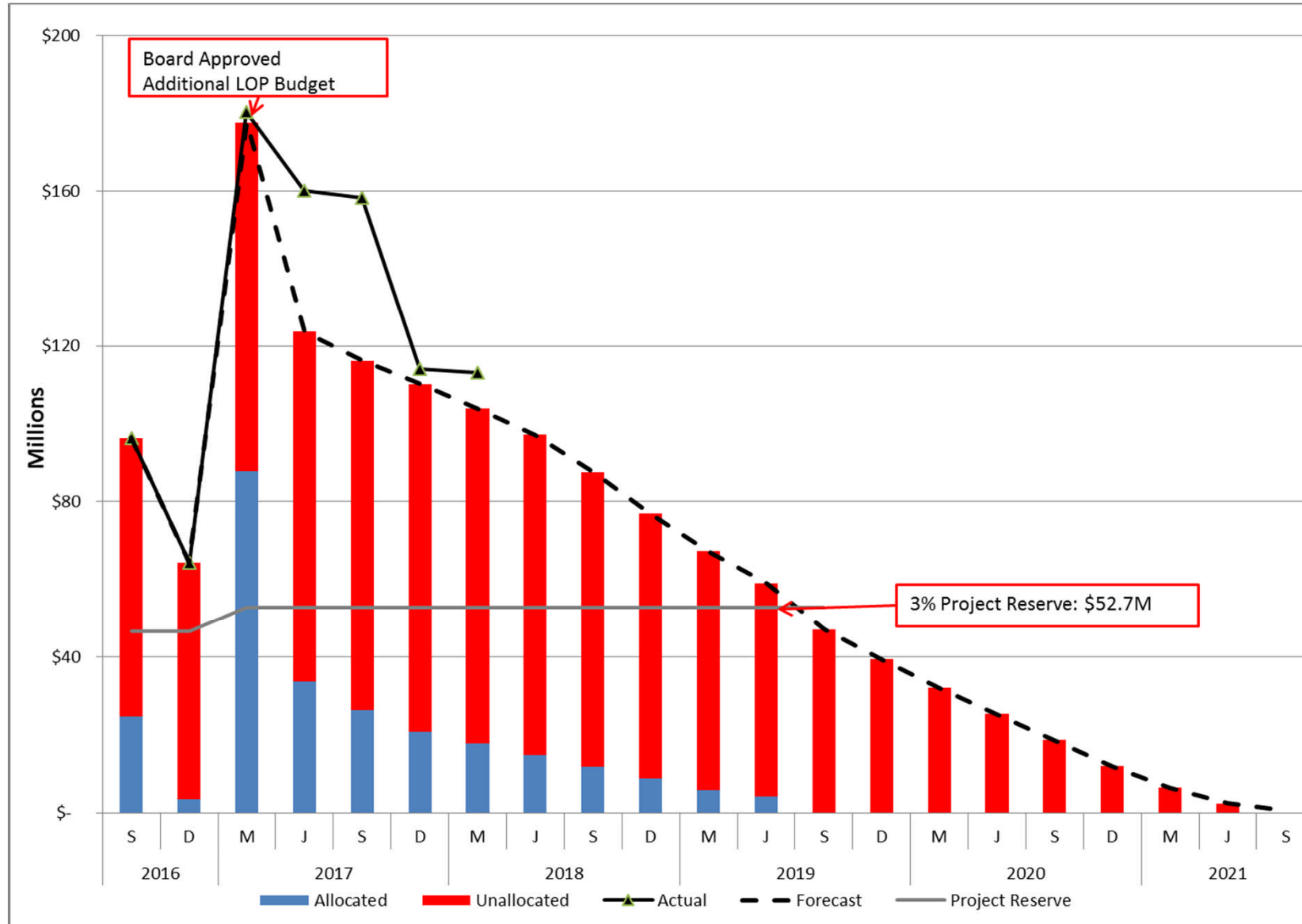


Change Notice #	Description	Number of Mod/ Change Orders	Cost Value
<b>DESIGN BUILD CONTRACT (C0980)</b>			
<b>TOTAL VALUE OF ALL EXECUTED CONTRACT MODIFICATIONS AND CHANGE ORDERS:</b>		<b>108</b>	<b>\$ 195,317,183</b>
<b>TOTAL PENDING MODIFICATIONS AND CHANGE ORDERS ROUGH ORDER OF MAGNITUDE COST:</b>		<b>32</b>	<b>\$ 28,611,806</b>
	1st/Alameda Bumpout (Construction)		Less Than \$1 Million
TBD	Flower Street Modification: future 2-way Traffic /Bumpout/Ped Lighting (Construction Only)		Between \$1 and \$5 Million
TBD	Revise Metro Rail Station Signage and Incorporate Metro Underground Station Signage (Construction)		Less Than \$1 Million
TBD	Add Wye Junction Fan Plant - Construction		Between \$10 and \$15 Million
68.0	Flower Street Zanja Additional Potholing		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
TBD	Add One Add'l VHF Radio Operational Channel - Construction		Less Than \$1 Million
106.0	Revisions to Metro Optical Network Switch		Less Than \$1 Million
TBD	Revise Communication Radio System SOW (Construction)		Less Than \$1 Million
TBD	Add Perforated Metal Dropped Ceiling at 2nd/Hope Station Plaza - Construction		Less Than \$1 Million
111.0	Spray-on Acoustical Finishes Additional Quantities		Between \$1 and \$5 Million
TBD	Revised Emergency Walkways at Curves (30" to 35") - Construction		Less Than \$1 Million
TBD	Insurance Claim - JVP Compensation Grout Line		Less Than \$1 Million
130.0	10" Sewer Bypass at 1st/Alameda		Less Than \$1 Million
131.0	Backfilling Broken Compensation Grouting Pipes at JVP		Less Than \$1 Million
133.0	Deleting OCS Work at 7th Metro (CREDIT)		Less Than \$1 Million
134.0	2nd/Broadway - LA Times Communication Line Realignment Due to Differing Site Conditions		Less Than \$1 Million
138.0	LADWP Switch Room Requirements for 1st and Central Station - Design Only		Less Than \$1 Million
146.0	Add 'l Gas Monitoring/Potential Gassy w/Special Conditions		Between \$1 and \$5 Million
148.0	Platform Stand-Alone Validators		Less Than \$1 Million
151.0	Differing Site Conditions - Time		Between \$1 and \$5 Million
TBD	Differing Site Conditions - Labor		Between \$1 and \$5 Million
TBD	DWP Vault Support (5) on Flower		Less Than \$1 Million
153.0	Additional UPS System for Regional Connector Radio Racks at 7th Metro -Design Only		Less Than \$1 Million
TBD	Additional UPS System for Regional Connector Radio Racks at 7th Metro -Construction		Less Than \$1 Million
158.0	2nd & Broadway Station Revised Overbuild Design Parameters		Between \$1 and \$5 Million
160.0	Support for Building LADWP Manholes on Flower St.		Less Than \$1 Million
161.0	Flower St. Traffic Control for LADWP Cable Pulling		Less Than \$1 Million
162.0	Extra Civil A & B Work to Resolve Outstanding COLA Comments (Design Only)		Less Than \$1 Million
165.0	Add'l Street Pavement Resurfacing Along 1st St. Spring St., and S. Broadway		Less Than \$1 Million
TBD	Cancelled CO#17 Three Shift TBM Mining Operation		Less Than \$1 Million
<b>TOTAL MODIFICATIONS AND CHANGE ORDERS</b>		<b>140</b>	<b>\$ 223,928,989</b>
<b>PROFESSIONAL SERVICES CONTRACT</b>			
<b>Design Support Services During Construction (E0119)</b>			
<b>TOTAL VALUE OF EXECUTED CONTRACT MODIFICATIONS</b>		<b>12</b>	<b>\$ 44,629,810</b>
<b>TOTAL PENDING MODIFICATIONS ROUGH ORDER OF MAGNITUDE COST</b>		<b>1</b>	<b>\$ 4,446,988</b>
29.1	FY2019 Funding for Design Support During Construction		Between \$1 and \$5 Million
<b>TOTAL MODIFICATIONS</b>		<b>13</b>	<b>\$ 49,076,798</b>
<b>Construction Management Support Services (MC070)</b>			
<b>TOTAL VALUE OF EXECUTED CONTRACT MODIFICATIONS</b>		<b>5</b>	<b>\$ 35,630,672</b>
<b>TOTAL PENDING MODIFICATIONS ROUGH ORDER OF MAGNITUDE COST</b>		<b>1</b>	<b>\$ 10,652,889</b>
15.0	Additional Funding for Construction Management Support Services Through FY 19		Between \$10 and \$15 Million
<b>TOTAL MODIFICATIONS</b>		<b>6</b>	<b>\$ 46,283,561</b>

# Regional Connector

January 2018

## Project Cost Contingency Drawdown



# Westside Purple Line Extension – Section 1

## Change Activity

January 2018

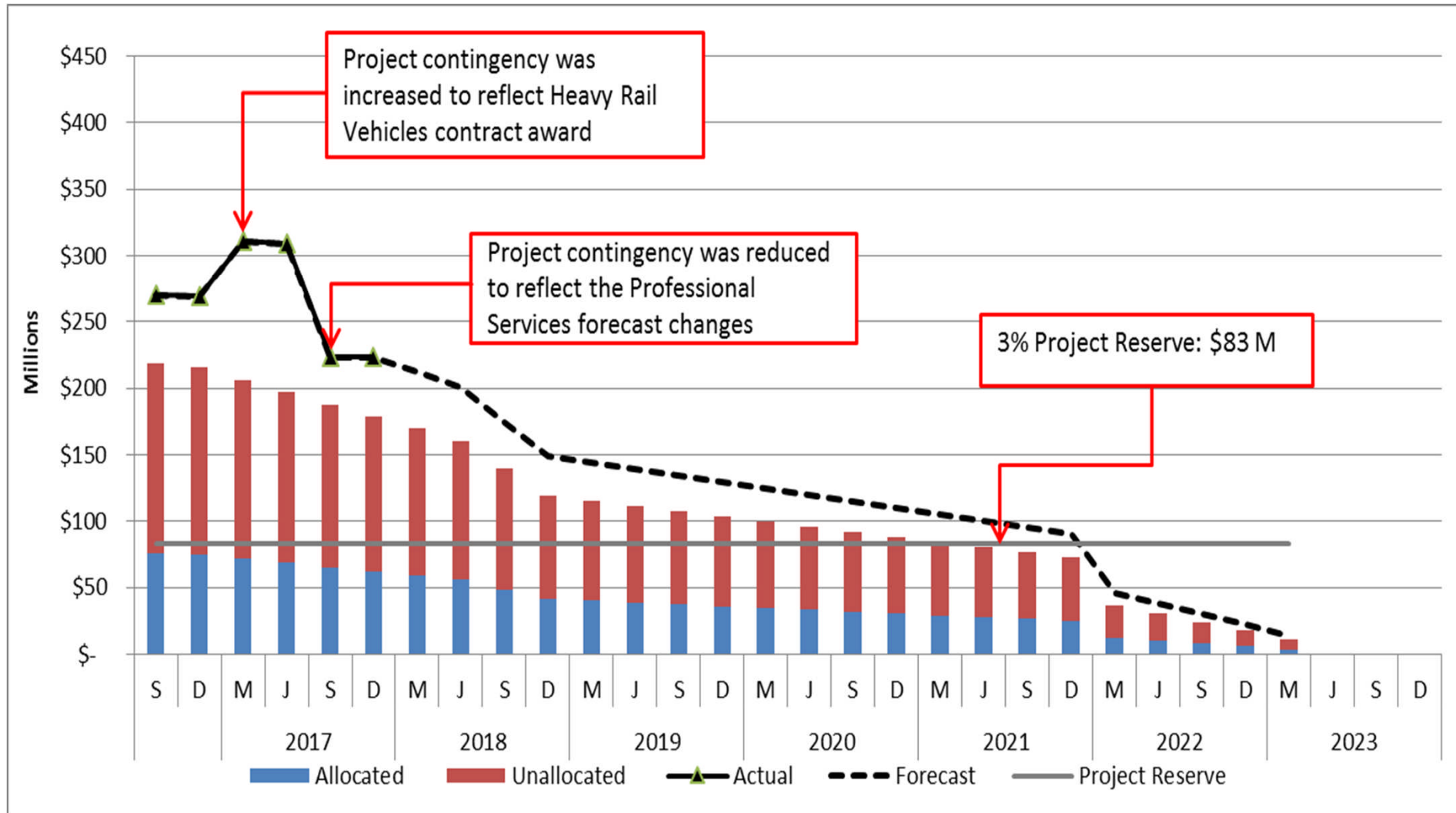


Change Notice #	Description	Number of Mod/Change Orders	Cost Value
<b>TOTAL VALUE OF ALL EXECUTED CONTRACT MODIFICATIONS AND CHANGE ORDERS:</b>		<b>150</b>	<b>\$ 30,042,654</b>
<b>TOTAL PENDING MODIFICATIONS AND CHANGE ORDERS ROUGH ORDER OF MAGNITUDE COST:</b>		<b>47</b>	<b>More than \$15M</b>
<b>DESIGN/BUILD CONTRACT C1045</b>			
		37	
CN-26	Betterment City of Beverly Hills - Median Reconstruction at San Vicente Blvd		Less Than \$1 Million
CN-32	Pin Station (Identifier) Changes		Less Than \$1 Million
CN-42.3	Radio Subsystem Redundancy		Between \$1M - \$5M
CN-43.4	Isolate Track Circuits at Wilshire/Western		Less Than \$1 Million
CN-47.2	Stainless Steel Enclosure for TVM and PTEL		Less Than \$1 Million
CN-56	Implement City of Beverly Hills Memorandum of Agreement (MOA)		Between \$10M - \$15M
CN-63	La Brea- Additional Instrumentation Requested by BOE		Less Than \$1 Million
CN-64.1	Additional SOE Design Work - La Brea Station		Less Than \$1 Million
CN-65.1	Additional SOE Design Work for Fairfax Station Due to Deviation Request for Building Settlement		Less Than \$1 Million
CN-66	Additional Dewatering Treatment & Discharge Costs at La Brea		Less Than \$1 Million
CN-67	Tactile Guidance (Construction and Plaza Material Change)		Less Than \$1 Million
CN-68	Increased Ventilation of Station Ancillary Rooms		Between \$1M - \$5M
CN-72.1	Stations - Art Related Changes		Less Than \$1 Million
CN-76	Additional SOE Design Work for La Cienega Station Due to Deviation Request for Building Settlement		Less Than \$1 Million
CN-77	Additional Interpretation for Building Settlement		Less Than \$1 Million
CN-78	Fairfax - DWP Ductbank Conflict with Deck Beams		Less Than \$1 Million
CN-79	Wilshire/Western - Permit Approval and Inspection for Access Shaft		Less Than \$1 Million
CN-80.1	Stand by Generator Enclosure Aesthetic Improvements at La Cienega		Less Than \$1 Million
CN-81	Additional Instrumentation (Project Wide) as Required by LABOE and STS EOR		Less Than \$1 Million
CN-82	Additional Geotechnical Instrumentation at Western		Less Than \$1 Million
CN-83	Additional Dewatering Treatment & Discharge Impacts at Western		Between \$1M - \$5M
CN-84	Additional SOE Design Work for the Western Shaft Due to Deviation Request for Building Settlement		Less Than \$1 Million
CN-85	La Brea Utility hanging Changes for Sewer and Storm Drains		Less Than \$1 Million
CN-87	Power Duct Bank Conflict at La Brea (ECI-4)		Less Than \$1 Million
CN-88	TCE Slab Demolition and Removal at the Western Shaft		Less Than \$1 Million
CN-89	La Cienega-Removal of AT&T Abandoned Cables		Less Than \$1 Million
CN-91	La Brea-DWP Conflict and Impacts to Cap Beam Walkers 28 & 29		Less Than \$1 Million
CN-92	La Cienega - Impacts from Delayed SCE Lines/MH Abandonment		Less Than \$1 Million
CN-93	Center Muck Shaft at La Brea (ECI-4)		Less Than \$1 Million
CN-94.1	Negative Rail-to-Ground Voltage Device at Fairfax Station		Less Than \$1 Million
CN-96	La Cienega - TPSS Room Changes for SCE (Design and Construction)		Less Than \$1 Million
CN-98	Implement Wireless - Stations and Tunnels		Less Than \$1 Million
CN-99	Oil Well Horizontal Investigation in Lieu of TBM Probe-Ahead		Between \$1M - \$5M
TBD	Fairfax - Piling Obstructions, Conflicts, Delays		Less Than \$1 Million
TBD	La Cienega Tail Track FLS Issues		Less Than \$1 Million
TBD	La Cienega - Additional Settlement markers at Saban Corners		Less Than \$1 Million
TBD	Crossover Exit Doors at Stations (La Brea, La Cienega)		Less Than \$1 Million
<b>DESIGN/BUILD CONTRACT C1078</b>			
		10	
CN-11	Schedule Impacts Due to Third Party		Between \$1M - \$5M
CN-12	Betterment - Motorized Sliding Gate for the City of LA		Less Than \$1 Million
CN-13	AST Leak Detection and Remote Lubrication Fill/Extract Station		Less Than \$1 Million
CN-16	Additional Street/Pedestrian Lights, Trees and Irrigation		Between \$1M - \$5M
CN-18	Storm Drain - Differing Site Conditions		Less Than \$1 Million
TBD	Support of Building Art Work		Less Than \$1 Million
TBD	On-Site LIDS		Less Than \$1 Million
TBD	Hazardous Materials - Chalmers Pan Handle		Less Than \$1 Million
TBD	Betterment: 6th Street Viaduct - Site Re-Grading, Ornamental Fenc, Etc.		Less Than \$1 Million
TBD	Updated IT Standards on Data Drops and Outlets		Less Than \$1 Million
TBD	<b>TOTAL MODIFICATIONS AND CHANGE ORDERS</b>	<b>197</b>	
<b>PROFESSIONAL SERVICES CONTRACTS</b>			
Design Support Services During Construction - CONTRACT PS43502000			
<b>TOTAL VALUE OF ALL EXECUTED CONTRACT MODIFICATIONS:</b>		<b>22</b>	<b>\$ 92,608,453</b>
<b>TOTAL PENDING MODIFICATIONS</b>		<b>0</b>	
<b>TOTAL MODIFICATIONS AND CHANGE ORDERS</b>		<b>22</b>	
Construction Management Support Services - CONTRACT MC071			
<b>TOTAL VALUE OF ALL EXECUTED CONTRACT MODIFICATIONS:</b>		<b>4</b>	<b>\$ 70,297,456</b>
<b>TOTAL PENDING MODIFICATIONS</b>		<b>0</b>	
<b>TOTAL MODIFICATIONS AND CHANGE ORDERS</b>		<b>4</b>	

# Westside Purple Line Extension – Section 1

## Project Cost Contingency Drawdown

January 2018





# Westside Purple Line Extension – Section 2 Change Activity

January 2018



January 2018
<b>Westside Purple Line Extension Section 2 Project Change Activity</b>

Change Notice #	Description	Number of Mod/Change Orders	Cost Value
<b>TOTAL VALUE OF EXECUTED CONTRACT MODIFICATIONS AND APPROVED CHANGE ORDERS</b>		<b>10</b>	<b>\$ (18,634,168)</b>
<b>TOTAL PENDING MODIFICATIONS AND CHANGE ORDERS ROUGH ORDER OF MAGNITUDE COST:</b>		<b>10</b>	<b>More than \$15 Million</b>
<b>DESIGN/BUILD CONTRACT C1120</b>			
CN-1.X	Century City Constellation Station West Ancillary & OPE Reconfiguration (Construction)		Less Than \$1 Million
CN-3.X	Century City Constellation Station: Main Entrance (Construction)		More than \$15 Million
CN-6.X	Third Party Relocation Furnish-DWP-Power Vault Cradles, Design & Fabricate AT&T Vault Cradle (partial)		Less Than \$1 Million
CN-7	Deletion of Cross Passage Geotechnical Borings		Less Than \$1 Million
CN-9	Century City Constellation Station Trackwork Extension		Less Than \$1 Million
CN-10	Worksite Traffic Control for SCG & AT&T Advanced Utility Relocation		Between \$1M - \$5M
CN-12	Geotechnical Investigation to Deepen Two Cross Passage Borings		Less Than \$1 Million
CN-13	Santa Monica Blvd. Bus Layover (Add Bus U-Turn Signal)		Less Than \$1 Million
CN-14	Field Office Tenant Improvements at AAA Building (1950 Century Park East)		Between \$1M - \$5M
TBD	AT&T Building Demolition		Between \$1M - \$5M
<b>TOTAL MODIFICATIONS AND CHANGE ORDERS</b>		<b>20</b>	<b>\$ -</b>

<b>PROFESSIONAL SERVICES CONTRACT</b>			
<b>Design Support Services During Construction</b>			
<b>TOTAL VALUE OF EXECUTED CONTRACT MODIFICATIONS</b>		<b>0</b>	<b>\$ -</b>
<b>TOTAL PENDING MODIFICATIONS</b>		<b>0</b>	<b>\$ -</b>
<b>TOTAL MODIFICATIONS</b>		<b>0</b>	<b>\$ -</b>
<b>Construction Management Support Services</b>			
<b>TOTAL VALUE OF EXECUTED CONTRACT MODIFICATIONS</b>		<b>0</b>	<b>\$ -</b>
<b>TOTAL PENDING MODIFICATIONS</b>		<b>0</b>	<b>\$ -</b>
<b>TOTAL MODIFICATIONS</b>		<b>0</b>	<b>\$ -</b>

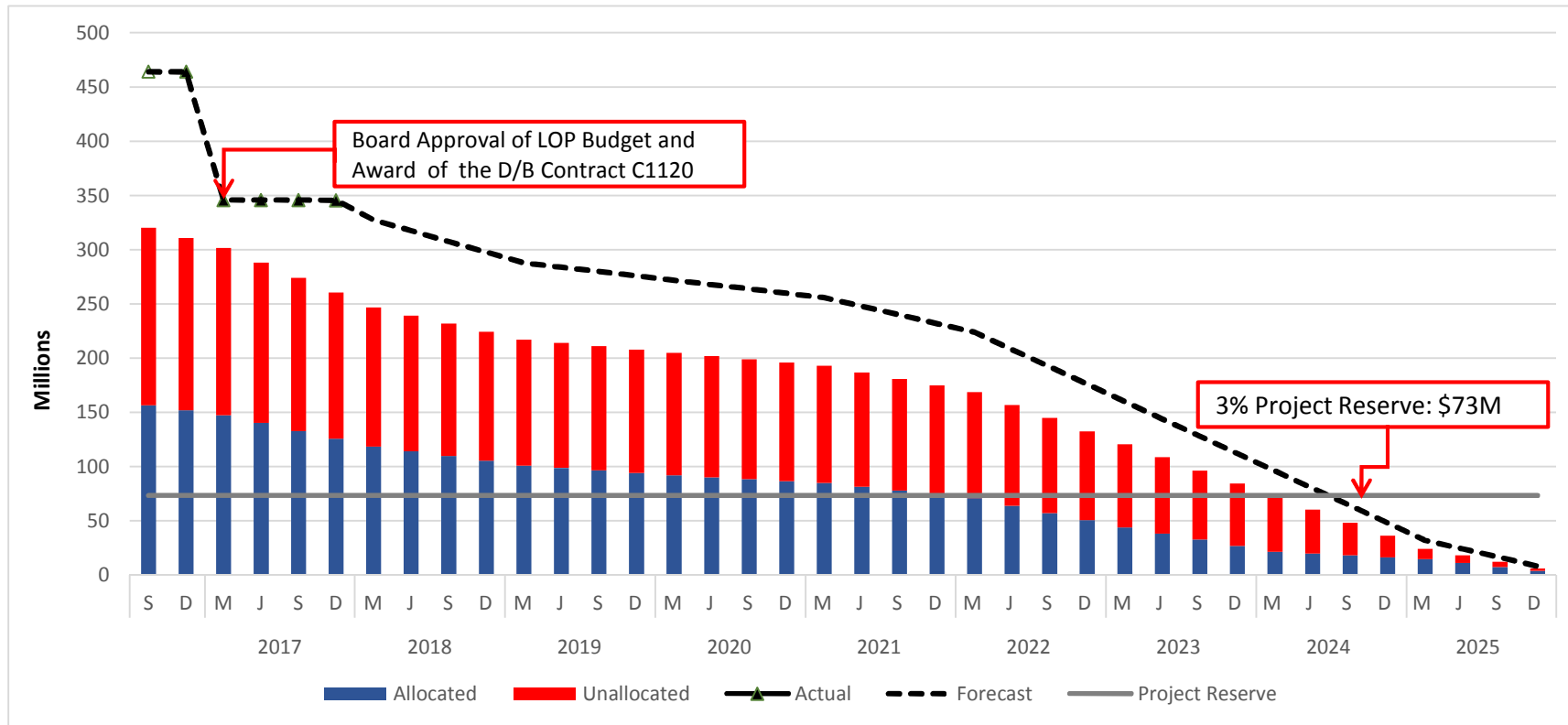
<b>OTHER - THIRD PARTY AGREEMENTS</b>			



# Westside Purple Line Extension – Section 2

## Project Cost Contingency Drawdown

January 2018



As of December 2017.



## Board Report

---

**File #:** 2018-0054, **File Type:** Informational Report

**Agenda Number:** 19.

---

**REVISED**  
**CONSTRUCTION COMMITTEE**  
**MARCH 15, 2018**

**SUBJECT: FEMALE UTILIZATION ACTION PLAN UPDATE**

**ACTION: RECEIVE AND FILE**

**RECOMMENDATION**

RECEIVE AND FILE the Female Utilization Action Plan Update.

**ISSUE**

In January 2012, the Board approved the Project Labor Agreement (PLA) with the Los Angeles/Orange Counties Building and Construction Trades Council and the Construction Careers Policy (CCP), with a subsequent renewal in January 2017. One benefit of the PLA is to encourage construction employment and training opportunities in economically disadvantaged areas throughout the United States. Another benefit of the PLA is that work stoppages are prohibited.

Consistent with the Board approved PLA and CCP (PLA/CCP), prime contractors are required to provide Metro with monthly reports detailing progress towards meeting the targeted worker hiring goals. Additionally, consistent with Metro's Labor Compliance policy and federal Executive Order 11246 (EO 11246), the prime contractors provide Metro with worker utilization data by ethnicity and gender.

In accordance with EO 11246, Metro's program-wide goal for female utilization on federally funded construction contracts is 6.9%. As of the reporting period, Metro's overall female utilization attainment is 3.44%, an increase from 3.40% from the previous reporting period. This increase is attributed to Metro's Board directives to encourage contractors to increase women's workforce participation on Metro construction projects, and staff's efforts to implement the female utilization action plan. Additionally, Metro's Board authorized staff to develop a score card to report female utilization on construction contracts to highlight and encourage increased female participation.

The attached report provides a status update of staff's efforts for the development and implementation of the Female Participation Score Card including other activities to highlight female participation. The Female Participation Score Card is designed to increase awareness of contractor's female workforce attainment to the goal; and to encourage contractors to increase female participation on construction projects that are covered by Metro's PLA/CCP.

## **DISCUSSION**

Diversity and Economic Opportunity (DEOD) staff has implemented several initiatives as part of a Female Participation Action Plan. Per the Board's authorization, staff has developed a score card for public display on Metro's PLA/CCP website. In addition, staff has implemented other activities to highlight female participation such as the redesign of Metro's PLA/CCP website and the redesign of the PLA/CCP quarterly report brochure with focus on the female utilization goal.

Recognizing the primary benefit of the PLA/CCP is that it encourages employment and training opportunities to prevailing wage construction jobs, Metro is committed to maximize efforts to increase female participation on its construction projects. A construction career on Metro's PLA/CCP projects not only provides access to prevailing wages but also an opportunity for career advancement and other health and wellness benefits. Additionally, the prevailing wage requirement minimizes the wage gap in the construction industry enabling female workers to earn more equitable salaries to male workers.

### **A. Female Participation Score Card**

Staff has developed a Female Participation Score Card to report contractors' attainment of the EO 11246's female utilization goal for Metro's PLA/CCP construction projects. The score card will be displayed on Metro's website and published in the quarterly report. The score card includes the following elements:

- Grading scale that highlights contractor's performance with attainment of the goal;
- Grading scale with performance based on:
  - A = 6.9% and above
  - B = 4.6% to 6.8%
  - C = 3.1% to 4.5%
  - D = 1.6% to 3.0%
  - F = 0% to 1.5%
- Interactive functionality that allows the user to view performance data by contractor and project.

The score card also includes a detail summary that provides additional information pertaining to the contractor's attainment of the female utilization goal as of the reporting period such as:

- Project name
- Project value

- Number of female workers
- Total number of worker hours
- Total number of female worker hours; and
- Project completion percent.

### **B. PLA/CCP Website:**

The redesigned PLA/CCP website provides increased focus on female participation in that it now includes the score card, sections dedicated to female participation and resources including information related to Women Build Metro LA. The webpage will also highlight contractors that receive recognition for achieving the goal.

### **C. Contractor Recognition**

In addition to the published score card, staff has established a performance based incentive program to encourage contractors to achieve the female utilization goal. Contractor's that achieve or exceed the 6.9% female utilization goal will be recognized within the PLA/CCP quarterly report and presentation to Metro's Board of Directors. Contractors will also be highlighted on Metro's PLA/CCP website and within the published PLA/CCP report.

In effort to promote a performance based incentive program that encourages and recognizes consistent achievement of the goal, contractors that meet or exceed the goal for four consecutive quarters of the PLA/CCP reporting will be invited to participate in a meeting with Metro's Chief Executive Officer.

For this reporting period, Access Pacific, Inc. is exceeding the Executive Order 11246 female utilization goal of 6.9% with an attainment of 9.74%. Access Pacific, Inc. is performing on the Non-Revenue Maintenance Building at Vernon Yard contract and is approximately at 58% completion. The contractor's Job Coordinator for this project is PV Jobs. The Job Coordinator and contractor have demonstrated coordinated activities to achieve the female utilization goal such as: targeted outreach and recruitment for female workers; established collaborative referral sources; and coordination with the building trades. These activities are demonstrated best practices.

## **NEXT STEPS**

Staff will continue to develop and implement the various initiatives outlined in the Female Utilization Action Plan. Additionally, staff will continue to work with contractors, job coordinators, community partners including the Building Trades to promote awareness of the Female Utilization Action Plan; and seek opportunities and areas for continued outreach, recruitment and employment of female workers on Metro's infrastructure projects.

## **ATTACHMENTS**

Attachment A - Active Contracts

Attachment B - Female Utilization Update

Prepared by:

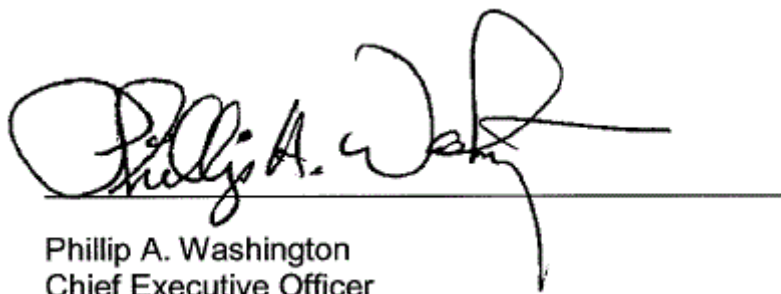
Michael Flores, Manager, Diversity and Economic Opportunity, PLA/CCP and WIN-LA  
(213) 922-6387

Keith Compton, Director, PLA/CCP Compliance and Administration (213) 922-2406

Shalonda Baldwin, Deputy Executive Officer Diversity and Economic  
Opportunity (213) 922-4488

Miguel Cabral, Executive Officer Diversity and Economic Opportunity (213) 922-2232

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



---

Phillip A. Washington  
Chief Executive Officer

## ATTACHMENT A

### Active Projects:

Project Name:	Prime Contractor:	Targeted Worker Goal (40%)	Apprentice Worker Goal (20%)	Disadvantaged Worker Goal (10%)	Female Utilization Goal (6.90%)	Percentage of Disadvantaged Worker Participation that are in the Criminal Justice System Category *
Crenshaw/LAX Transit Corridor	Walsh/Shea Corridor Constructors	59.71%	22.80%	12.41%	3.42%	36.65%
Regional Connector Transit Corridor	Regional Connector Constructors, JV	58.17%	16.54%	6.83%	2.59%	58.89%
Westside Subway Extension Project, Section 1 – D/B	Skanska-Traylor-Shea, JV	65.82%	16.73%	8.22%	4.30%	71.44%
Metro Blue Line Pedestrian and Swing Gates	Icon-West	63.62%	23.91%	12.59%	0.80%	100.00%
Division 16 Southwestern Yard	Hensel Phelps/Herzog, JV	51.97%	23.93%	9.47%	4.75%	48.70%
Patsaouras Plaza Busway Station	OHL-USA, Inc.	61.49%	8.26%	2.54%	1.61%	54.27%
Bob Hope Airport/Hollywood Way Station	C.A. Rasmussen, Inc.	39.86%	22.29%	15.10%	1.35%	43.66%
Non-Revenue Maintenance Bldg. at Vernon Yard	Access Pacific, Inc.	58.99%	14.59%	9.74%	9.74%	32.20%

Please refer to the attached PLA/CCP Data Report for additional information on each project.

## ATTACHMENT B

### Female Utilization Update:

Project Name:	Prime Contractor:	No. of Female Workers October 2017	No. of Female Workers November 2017	No. of Female Workers December 2017
Crenshaw/LAX Transit Corridor	Walsh/Shea Corridor Constructors	126	132	137
Regional Connector Transit Corridor	Regional Connector Constructors, JV	38	45	48
Westside Subway Extension Project, Section 1	Skanska-Traylor-Shea, JV	44	44	54
Metro Blue Line Pedestrian and Swing Gates	Icon-West	3	3	4
Division 16 – Southwestern Yard	Hensel Phelps/Herzog, JV	18	19	22
Patsaouras Plaza Busway Station	OHL, USA, Inc.	1	1	1
Bob Hope Airport/Hollywood Way Station	C.A. Rasmussen, Inc.	0	1	1
Non-Revenue Maintenance Bldg at Vernon Yard	Access Pacific, Inc.	0	2	2



# Female Participation Action Plan Initiatives and Score Card

REVISED

March 15, 2018



**Metro**



# Female Participation Action Plan Initiatives

- Redesigned PLA/CCP Website
  - Increase focus on female participation and initiatives
  - Displays new Female Participation Score Card
  - Dedicates section for female workforce information and resources
- Launched Female Participation Score Card
  - Promotes transparency based on quarterly performance reporting
  - Establishes a performance scale for contractors' attainment
- Updated PLA/CCP quarterly brochure
  - Incorporates Female Participation Score Card
  - Highlights female workers



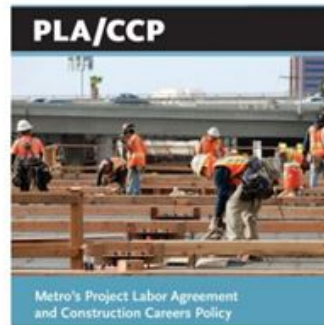
# PLA/CCP Website Redesign



## Project Labor Agreement & Construction Careers Policy



Steps to a Construction Career  
Learn about Construction Careers P...



PLA/CCP Quarterly Report  
Learn about Construction Careers P...



Female Participation Scorecard  
Contractors female utilization scores



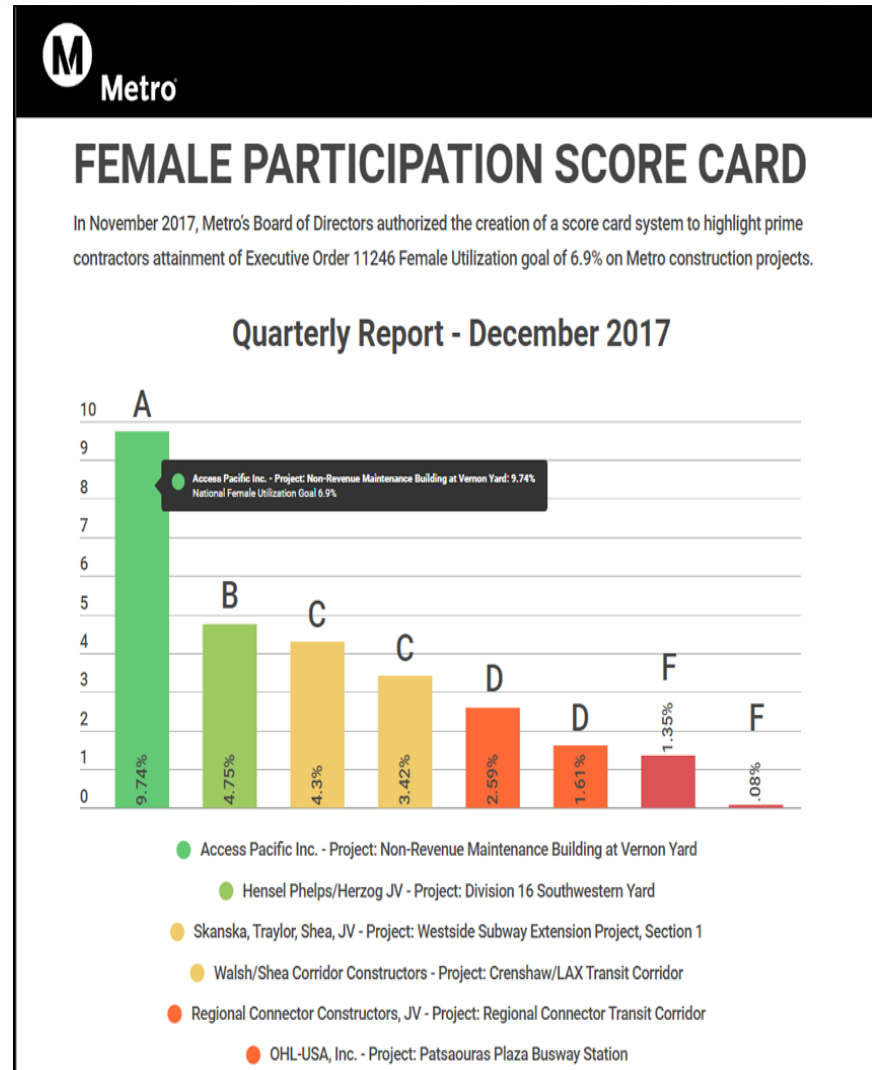
Project Labor Agreement and Co...  
Fact Sheet



**Metro**

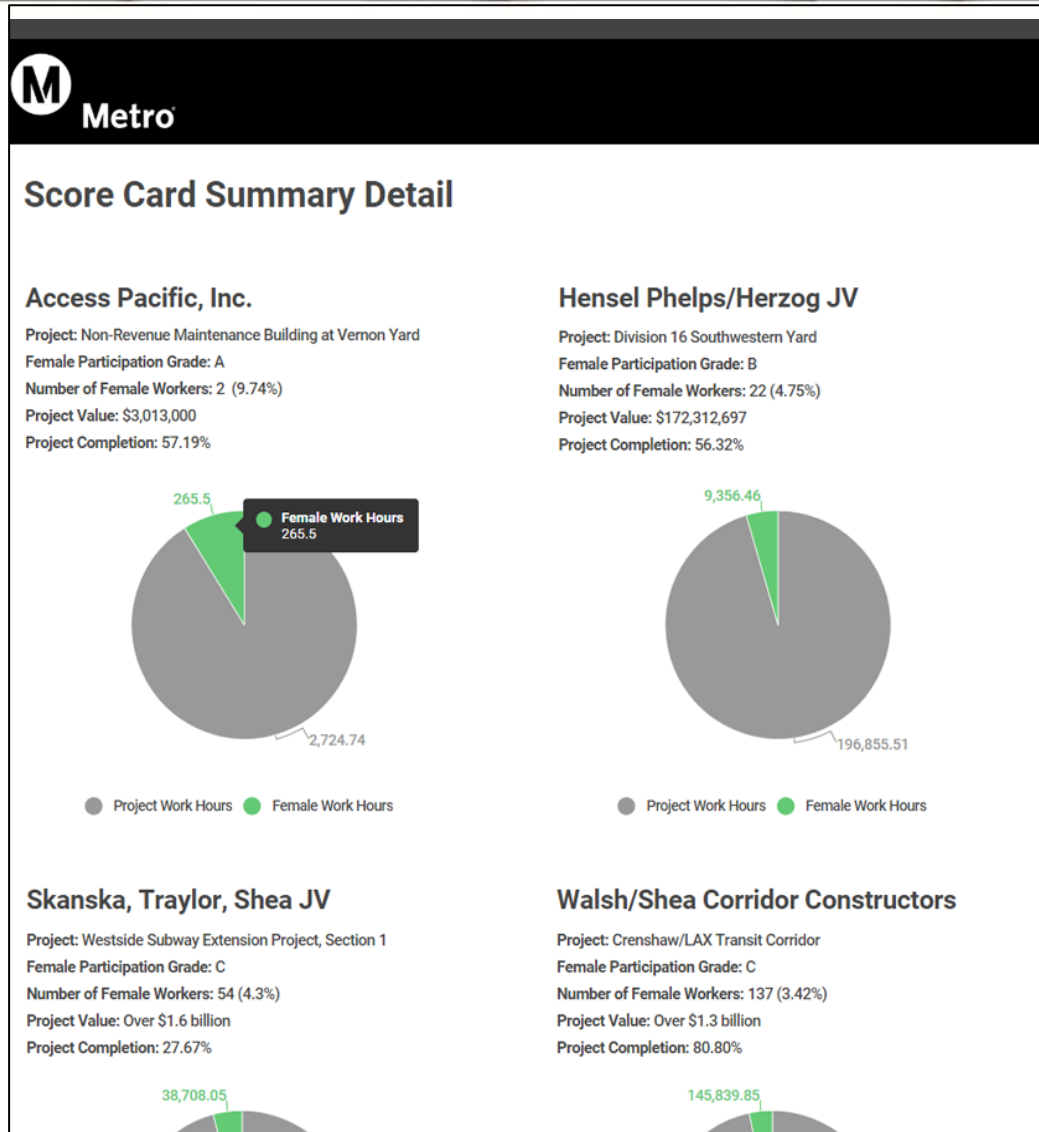
# Female Participation Score Card

Transparency  
Accountability  
Performance  
Recognition



# Female Participation Score Card

Transparency  
Accountability  
Performance  
Recognition



# **ACCESS PACIFIC, INC.**

President, Tomas Torres

Jobs Coordinator: PV Jobs

**Non-Revenue Maintenance Building  
at Vernon Yard**

**9.74% Female Participation**





Thank you



Metro®



## Board Report

---

File #: 2018-0016, File Type: Agreement

Agenda Number: 20.

---

**CONSTRUCTION COMMITTEE  
MARCH 15, 2018**

**SUBJECT: ENWAVE LOS ANGELES UTILITY COOPERATIVE  
AGREEMENT**

**ACTION: APPROVE RECOMMENDATION**

**RECOMMENDATION**

AUTHORIZE the Chief Executive Officer to execute the Utility Cooperative Agreement (UCA) between Metro (Authority) and Enwave Los Angeles (“Enwave”) for support services associated with Metro’s construction projects.

**ISSUE**

As the Purple Line Extension Section 2 Project (PLE) moves forward, the team has identified Enwave systems within the alignment that require general utility coordination and utility support scope. This is the Authority’s first interaction with Enwave. Therefore in order to move forward with the general scope, a Utility Cooperative Agreement (UCA) must be set in place between the Authority and Enwave in order to memorialize roles and responsibilities. This UCA shall also be prepared in a manner that would accommodate any future Metro Project that may require services from Enwave in order to support those future projects.

**DISCUSSION**

As technology advances, new utility providers are constantly installing new infrastructure within Metro proposed Project areas. Such as in the case of Enwave. Enwave is a relatively a new utility company that now services LA County as well as the unincorporated counties. Being that they are relatively new, and no other UCA has been executed between both parties, this would be the first UCA executed that would allow both parties to collectively work together to support general utility relocation and coordination efforts. The general intent of the UCA would be to cover the current ongoing Projects as well as future Metro Projects for many years to come.

This UCA describes the roles, responsibilities, and obligations of both parties and specifies the procedures which the Authority and Enwave will follow for elements associated with the support services associated with all of Metro’s projects. Such elements include general coordination,



---

providing as built, relocating utilities, preparation of designs, streamline processes, meeting accommodations, permitting, construction support services, reimbursements, invoicing, and other general tasks in support of Metro's construction of projects. The Authority and Enwave agree that each will cooperate with the other in all activities covered by the UCA. Work performed by Enwave under this UCA shall be per the work orders to be issued by the Authority on a yearly basis.

### **FINANCIAL IMPACT**

Work Orders will be issued to Enwave on an annual basis similar to contract task orders. Work orders for said Authority commitments created within the UCA parameters shall only be issued by funded projects and must be within each of the project's respective Fiscal Year or Life of Project (LOP) budgets. These projects will largely be comprised of the Measure R/M projects but can be utilized across all Metro capital projects.

### **ALTERNATIVES CONSIDERED**

The Board may choose not to execute this UCA, however not executing this UCA would not solidify each of the parties' roles and responsibilities and would require Metro to follow standard over the counter processes and therefore not benefit from streamlined processes, and other administration benefits identified within the UCA. All of which are essential elements from a successful project standpoint.

### **ATTACHMENTS**

Attachment A - Utility Cooperative Agreement; Enwave

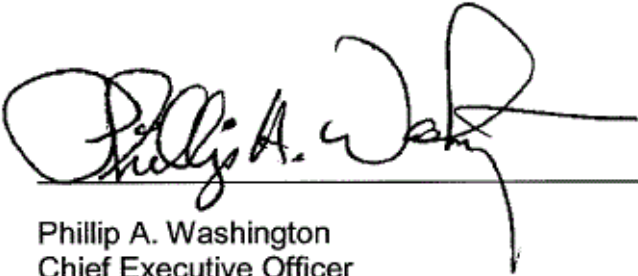
Prepared by:

Eduardo Cervantes, Senior Director; 213-922-7255

Androush Danielians, Deputy Executive Officer; 213-922-7598

Reviewed by:

Richard F. Clarke, Chief Program Management Officer; 213-922-7557



---

Phillip A. Washington  
Chief Executive Officer

UTILITY COOPERATIVE AGREEMENT  
FOR RAIL AND BUSWAY TRANSIT PROJECTS  
BETWEEN ENWAVE LOS ANGELES (“Enwave”)  
AND THE LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION  
AUTHORITY

THIS AGREEMENT, dated , 2018 ( The “Effective Date”) is made by and between the Los Angeles County Metropolitan Transportation Authority ("MTA") and Enwave ("Utility"). As used in this Agreement, terms identified by initial capital letters shall have the meanings set forth in Article 1, or as elsewhere provided in this Agreement. Parties are MTA and Utility collectively, and a "Party" is defined as each of MTA and Utility individually or Utility.

RECITALS

A. Whereas MTA is a public entity created by the California State Legislature for many purposes including, but not limited to, the design, construction, and operation of rail and bus transit systems and other transportation facilities in Los Angeles County.

B. Whereas Utility (Enwave, state of origin and any dba names) .

C. Whereas MTA proposes to design, construct and operate facilities necessary and convenient for various public rail, and busway transit systems within the County of Los Angeles, this Agreement will cover and apply to all of MTA' s proposed projects which currently include, without limitation, the following projects:

1. The Metro Westside Subway Extension Project (the "Westside Project"), which is an heavy rail line currently proposed to traverse portions

of the City of Los Angeles and City of Beverly Hills, under Wilshire Blvd, between Wilshire/Western Station and VA Hospital.

2. MTA shall from time to time initiate new Rail and Bus Transit Projects within Los Angeles County and the Parties do hereby agree that this Agreement will apply to any and all MTA initiated Rail and Bus Transit Projects.

D. Whereas MTA historically has used the "Design/Bid/Build" method of project delivery for its rail transit projects. However, MTA anticipates utilizing various alternative contracting methods (Design/Build) for project delivery of above referenced rail and busway transit projects.

E. Whereas from time to time the construction or improvement of MTA's rail and busway transit systems (including but not limited to those described in Recital B above) will require the Rearrangement of portions of certain Utility Facilities. The Parties desire to cooperate to the end that such Rearrangements be held to a minimum consistent with MTA's requirements and that Rearrangements, when required, be effected quickly and with as little interference with the operations of either Party.

NOW, THEREFORE, in consideration of the covenants contained herein and for other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, Utility and MTA agree as follows:

## Article 1

### General Provisions

#### 1.1 Scope of Agreement

1.1.1 This Agreement addresses the three Transit Projects described in Recital B above as well as any other subsequent MTA projects, which meet the definition of "Transit Project", set forth below. This Agreement describes

(a) the procedures MTA and Utility will follow in identifying, planning, designing and effecting all Rearrangements of Utility Facilities that are necessary in order for MTA to construct, operate and maintain its Transit Projects, and

(b) the manner in which Utility and MTA will be reimbursed for their respective costs of such activities. Both MTA and Utility agree that each will cooperate and coordinate with the other in all activities covered by this Agreement, amendments and any supplemental agreements hereto. The Parties hereby agree that upon execution of this agreement all existing agreements between the Parties (or affiliates of the Parties) related to the issues in this Agreement shall be automatically terminated and shall be of no further force or effect as of the Effective Date of this Agreement. However, any projects that are currently underway, shall continue until completed and approved under the same work order number, which will be transferred to a new Form 60 as required herein, and shall be constructed in accordance with the standards and plans originally approved by the Parties.

1.1.2 This Agreement shall not negate or modify the terms and conditions of

(a) any legally binding easements or other use and/or occupancy agreements between Utility and MTA with respect to the occupancy by Utility of, or any interest of Utility in real property owned by or under the operating jurisdiction of MTA,

(b) any such easements or other agreements between Utility and any former owner of real property now or hereafter owned by MTA, and to which MTA has become or hereafter becomes a successor either by assignment or by operation of law, or of

(c) any such easements or other agreements between Utility and any other governmental agency with respect to real property owned by or under the operating jurisdiction of such governmental agency, and in which MTA has a statutory or other right to install Transit Project Facilities.

## 1.2 Duration of Agreement

The initial term of this Agreement (the "Initial Term") shall commence on the Effective Date and shall terminate on June 30, 2028. This Agreement shall automatically be

renewed for consecutive one year terms commencing on the day following the last day of the Initial Term and on each subsequent anniversary of such day, unless either Party provides written notice of termination to the other no later than ninety (90) days prior to the end of any term (including the Initial Term).

### 1.3 Definitions

For the purpose of this Agreement, the following terms shall have the meanings set forth below:

1.3.1. Abandonment is the permanent termination of service of an existing Utility Facility (or portion thereof) as authorized by Utility, and, if the Facility or portion thereof is not being removed from its existing location, the work necessary to permit such Facility to remain in place in accordance with applicable law.

1.3.2. Betterment is a Replacement Facility, or component thereof, that will increase or upgrade the level of service, service life, capacity, capability efficiency or function of a Replacement Facility over that which is being provided by the corresponding Conflicting Facility ("upgrade"). However, the following shall not be considered Betterments:

- (a) An upgrade that is necessary to accommodate the Subject Transit Project.
- (b) An upgrade resulting from Design or Construction in accordance with the applicable Utility Standards as set forth in Section 2.6; provided, however, that any upgrade beyond the minimum level required by such applicable Utility Standards shall be considered to be a Betterment.
- (c) Upgrade beyond the minimal applicable requirements of the Transit Project's final environmental impact report shall be considered a Betterment .
- (d) Replacement of devices or materials no longer regularly manufactured with the next highest grade or size.

Certain revisions or additions to Utility Standards may also be a Betterment, as set forth in Section 2.5. Betterment shall also include any new or upgraded facilities or

portion thereof added to a Replacement Facility at Utility's request for the purpose of improving Utility Facilities or services, and which are not otherwise excluded from the definition of Betterment as set forth above. Betterments shall be entirely financed at the expense of Utility.

1.3.3. Busway Project is any busway system of MTA, which is constructed for the public transportation of passengers. A Busway Project may be located on an exclusive busway or may share the roadway with other vehicles. "Busway Project" may refer to any one of the busways, and any portion or section thereof, as the context may require.

1.3.4. Conflicting Facility is an existing Utility Facility, which MTA determines is so situated as to require Rearrangement in order to construct and operate the Subject Transit Project.

1.3.5. Construction or Construct is work of removal, demolition, replacement, relocation, restoration, alteration, realignment, building, fabrication, landscaping, or supporting those related tasks that are customarily reflected in a construction contract.

1.3.6. Contract is any MTA contract involving the Design and/or Construction of Transit Project Facilities and/or related Rearrangements.

1.3.7. Contractor is an entity engaged under Contract with the MTA.

1.3.8. Construction Costs are those types of costs that are customarily reflected in a Construction Contract.

1.3.9. Cost is defined as all authorized direct and indirect costs as further described in; Article 8 for costs incurred by Utility, in Article 9 for costs incurred by MTA and subject to the provisions of Article 11.

1.3.10. County is the County of Los Angeles, California.

1.3.10a Crenshaw/LAX Project has the meaning set forth in Recital B of this Agreement

1.3.11. Cutoff Date means the earliest date on which Utility received written notice (i) identifying a Utility Facility site as land proposed to be included in any Project, or (ii) of MTA's acquisition of title in respect to a Utility Facility site.

1.3.11a. Days means calendar days unless specifically stated differently in a set of contract documents

1.3.12. Design means that engineering, architectural and other design work along with the resulting maps, plans, drawings, computer software, estimates and specifications, which are necessary to affect Rearrangements.

1.3.13. Design Development is the phase of the Design process, that develops a clear indication of the final design solutions for requirements outlined in the Preliminary Engineering Design phase. At the completion of Design Development, major features of the architectural, structural and third party interfaces have advanced in conjunction with performance specifications, thereby providing the basis for Final Design.

1.3.14. Dispute has the meaning set forth in .Article 13.

1.3.15. Effective Date is the date on which this Agreement has been fully executed on behalf of both MTA and Utility.

1.3.16. Environmental Law means all local, state, and federal laws, rules, regulations, ordinances, orders and requirements pertaining to any Project environmental work, as well as Hazardous Materials.

1.3.18. Expired Service Life Value has the meaning set forth in Section 9.7.

1.3.20. Facility is defined as personal property identified within the route, such as structures and improvements located on real properties under the jurisdiction of the County, City, public or private Utility, or the MTA and shall include, but not be limited to, streets, highways, bridges, alleys, public or private rights of way, storm drains, sanitary sewers, landscaping, trees, traffic signals, street lights, parking meters, police and fire alarm systems, manholes, ducts, cables, and fibers.



1.3.21. Final Design is the phase of the Design process that provides the detailed design and technical specifications for all temporary and permanent project facilities. This phase addresses and resolves all Design review comments, construction issues, and third party comments and finalizes all engineering, architectural, and system designs necessary for complete construction documents. The term also includes the products of such phase of the Design process.

1.3.22. Hazardous Materials means "hazardous substances" as that term is defined in Division 20, Chapter 6.8 of the California Health & Safety Code. 1.3.23 MTA means the Los Angeles County Metropolitan Transportation Authority, and its officers, employees, agents, contractors, subcontractors, consultants and subconsultants

1.3.23 Deleted

1.3.24. MTA Representative is the person, or person holding a specified position, designated by the MTA pursuant to Section ~~4.41.4~~.

1.3.25. Preliminary Engineering ("PE") Design is the phase of the Design process which takes a project from a conceptual state to a level of project Design definition that describes the project's technical and architectural approach in order to determine environmental and community impacts, interfaces with utilities and existing infrastructure/facilities, operational characteristics, an estimate of project costs and a project execution schedule. The term also includes the products of such phase of the Design process. The PE Design phase for a Transit Project is initiated at the conclusion of the Draft Environmental Impact Statement and after the selection of the locally preferred -alignment.

1.3.26. Project Plans are MTA's drawings, plans and specifications for a Subject Transit Project, which MTA has identified as the plans on which Design of the affected Rearrangements should be based. Utility acknowledges that Project Plans may or may not be at a Final Design level.

1.3.27. Protected Materials are any pale ontological, archeological, cultural, or similar resources requiring protection pursuant to applicable law during Construction.

1.3.28. Rearrangement is all work on Utility's Facilities that is necessary to accommodate a Transit Project including without limitation, Design, removal, replacement, alteration, reconstruction, restoration, support, protection in place, Abandonment or relocation of a Conflicting Facility or portion thereof, whether permanent or temporary.

1.3.29. Regional Connector Project has the meaning set forth in Recital B of this Agreement

1.3.30. Replacement Facility is a Utility Facility that may be constructed or provided under the terms of this Agreement as a consequence of the Rearrangement of a Conflicting Facility or portion thereof and which meets applicable Utility Standards (Betterments which the Parties agree to incorporate therein). A Replacement Facility may be an entirely new Utility Facility, or an existing Utility Facility, as modified by the Rearrangement work.

1.3.31. Schedule means the schedule for Design and Construction of a particular Rearrangement, which shall be mutually agreed upon by MTA and Utility,

1.3.32. Service Life means life of a said utility facility.

1.3.33. Subject Transit Project, when referenced in connection with a particular Rearrangement, means the Transit Project which necessitates such Rearrangement; provided, however, that if MTA enters into more than one Contract for Construction of a particular Transit Project, then where the context so requires, the term "Subject Transit Project" shall refer to that portion of such Transit Project which is being Constructed by a particular Contractor and which necessitates such Rearrangement,

1.3.34 Substitute Facility means a Utility Facility equal, in terms of level of service, capacity, service life, capability, appearance, efficiency and function, to the corresponding Conflicting Facility that requires Rearrangement, but which also includes any upgrades to any of the foregoing that would not be considered Betterments pursuant to this Agreement, but may involve Service Life Credits

1.3.35 Temporary Facility is a Utility Facility constructed for the purpose of ensuring continued service during a Rearrangement and/or any work on a Utility Facility to accommodate the construction of a Transit Project, but which will be removed, relocated or restored to its original condition after such construction activities are completed.

1.3.36 Transit Project(s) are defined as light and heavy rail, including subways, bus, bike, and other transportation or transit related projects collectively, and a "Transit Project" is defined as an individual Transit Project, as the context may require. Where the context so requires, "Transit Project" refers to the Design and Construction undertaken by or at the direction of MTA in order to create a new-light rail, heavy rail, subways, bus and other transportation or transit related project, or in order to reconstruct, alter, extend or maintain an existing -light rail, heavy rail, subway, bus or other transportation related project. Freeway, toll road and highway projects shall be included as Transit Projects to the extent Caltrans' third party agreement does not cover the entire scope of the project.

1.3.37. Transit Project Facility means a Facility that is a component of or an appurtenance to a Transit Project.

1.3.38. Transit Project Right of Way means (a) real property owned (or intended for acquisition) by MTA and used (or proposed to be used) for Transit Project purposes, and (b) those portions of public streets or rights-of-way on which are located (or proposed to be located) any Transit Project Facilities or which are otherwise used (or proposed to be used) by MTA for Transit Project purposes.

1.3.39 Utility is defined for purpose of this Agreement, as Veolia), and, as the context may require, its officers, employees, agents, contractors and subcontractors.

1.3.40 Utility Facility is defined as any structure, improvement or other facility impacted by the construction of a Transit Project, that is used for the provision of the particular form of service(s) offered by Utility to the public and shall include, but not be limited to, wires, cables, poles, cross-arms, anchors, guys, fixtures, vaults, conduits, duct

banks, vents, fittings, pipelines and manholes together with any and all equipment, apparatus or structures appurtenant thereto or associated therewith. The term "Utility Facility" does not include any buildings of Utility or any facilities therein or any other property of Utility whether or not devoted to public use, which is not included within the definition of "Utility Facility" and/or impacted by the construction of a Transit Project as set forth above.

1.3.41 Utility Representative means the person, or the persons holding the specified position(s), designated by Utility pursuant to Section 1.4

1.3.42 Utility Standards means the latest edition of Utility's written design and safety standards that are in effect as of the Effective Date, as the same may be modified from time to time thereafter, but only to the extent that such modifications do not result in Betterments pursuant to Section 2.5.

1.3.43 Westside Subway Extension Project has the meaning set forth in Recital B of this Agreement.

1.3.44 Work Order is that document which MTA shall issue to Utility authorizing MTA's funding for Utility's performance of Design, Design review, inspection, Construction and/or supply of materials and equipment, under the terms and conditions of this Agreement. Utility's failure to execute a Work Order shall not excuse Utility's performance of any obligation under this Agreement.

#### 1.4 Utility Representative and MTA Representative

1.4.1 Utility Representative. For each Transit Project, Utility shall designate a person, or the holder of a specified office or position, to act as the Utility Representative for such Transit Project. A single individual may be the Utility Representative for more than one Transit Project, to the extent necessary depending on the requirements of the Transit Project(s) to which he or she is assigned. The Utility Representative(s) shall assist MTA in the delivery of such Transit Project(s) and each component thereof in a timely manner. The Utility Representative(s) will have the responsibility and authority (i) to manage and coordinate interaction of Utility with MTA and its contractors, (ii) to produce to

MTA the necessary billings, work documents and reports on production, Cost and Work Order status, (iii) to undertake reviews, provide comments and issue approvals as required by this Agreement, and (iv) to cause Utility to pay MTA's billings for its Costs that are reimbursable hereunder. Utility may change a designated Utility Representative by providing written notification to MTA fourteen (14) days prior to the change or as soon as reasonably practicable, if the change must be made sooner.

1.4.2 MTA Representative. For each Transit Project, the Chief Executive Officer of MTA shall designate a person, or the holder of a specified office or position, to act as the MTA Representative for such Transit Project. At MTA's option, a single individual may serve as the MTA Representative for any number of Transit Projects. The MTA Representative will have the responsibility to manage and coordinate MTA interaction with Utility, and to cause production of the necessary Design and Construction documents for Utility review and/or approvals as called for under this Agreement, to issue Work Orders, and to undertake reviews and issue approvals as required by this Agreement. The MTA may change its designated MTA Representative by providing written notification to Utility fourteen (14) days prior to the change, or as soon as reasonably practicable, if the change is to be made sooner.

## 1.5 Coordination and Cooperation

### 1.5.1 Coordination

It is acknowledged that the timely completion of each Transit Project will be influenced by the ability of MTA and Utility to coordinate their activities, communicate with each other, and respond promptly to reasonable requests. As information becomes available for each Transit Project, MTA agrees to provide information to Utility within 10 days of receipt of such plans for the Project as will enable Utility to determine which Utility Facilities may be impacted thereby. The Parties will agree on the plans and specifications for each arrangement in accordance with the procedures described herein, but prior to the MTA giving formal notice to Utility of a required Rearrangement.

### 1.5.2 Cooperation

Rearrangement of a Utility Facility may be necessary in order to accommodate a Transit Project for either or both of the following reasons:

- (a) a physical conflict between the Transit Project (including its construction, operation, maintenance or use) and the Utility Facility, and/or
- (b) an incompatibility between the Transit Project Facilities as designed and the Utility Facility based on the requirements of Utility Standards, MTA's applicable standards, or applicable law (even though there is no physical conflict).   MTA shall report to Utility about the physical conflict or incompatibility at least 100 calendar days prior to requiring such Rearrangement. In the case of an emergency, the solution shall be jointly handled on a case by case basis while both parties review and agree on a solution. Relocation of Utility Facilities will be avoided whenever it is possible to do so without causing increased costs for or delay in a Transit Project. When reasonably possible in accordance with the foregoing as determined by MTA, Utility Facilities will be left in place and protected.

When relocation or other Rearrangement of Utility Facilities cannot be avoided in accordance with the foregoing, Utility agrees to such Rearrangement as MTA determines is reasonably necessary and to cooperate with MTA's requirements for the Subject Transit Project, in accordance with the provisions of this Agreement subject to the following:

- (a) Where MTA does not possess superior rights over the utility; MTA is obligated to pay all reasonable costs incurred by Utility for Rearrangement of the Utility Facility per MTA's request and/or need;
- (b) MTA shall give Utility at least 100 days (unless prior rights are involved) written notice before requiring Rearrangement of the Utility Facilities; and
- (c) Utility's service will not be interrupted and Utility shall be allowed, if necessary, to place a temporary utility facility on the impacted property until such time as the Replacement Facility is operational.

Where there are joint users of any such Utility Facilities or any part thereof or space thereon or therein, Utility shall use its best efforts to cooperate with MTA in

identifying all joint users for the sole purpose of ensuring the joint users interests are addressed by the Project.

#### 1.6. MTA Contractor.

The parties acknowledge that MTA, at its sole discretion, may utilize various Design and Construction contracting methodologies to construct Transit Projects along with any necessary Rearrangements . The MTA's determination of a Contract's scope of work shall not impact the processes governed by this Agreement. Without limiting the generality of the foregoing, Utility acknowledges that development of a Transit Project will require strict compliance with the scheduling requirements of this Agreement, and that failure to meet the deadlines set forth in this Agreement or in the applicable Work Order could cause MTA and/or its Contractor to incur substantial costs as a result of such delay, or may result in utility needing to take measures to avoid delay to the Subject Transit Project. The consequences of Utility's failure to meet a deadline are addressed in agreement. .

#### 1.7 Interpretation and Application of Utility Standards

1.7.1 With respect to both Design and Construction, in interpreting applicable Utility Standards, and in exercising any discretion granted to Utility staff by applicable Utility Standards, Utility shall make such interpretations and exercise such discretion in a manner so as to impose the minimum requirements necessary to fulfill the reasonable goals of public health, safety and functionality. Any Design or Construction issues affecting Rearrangements which are not addressed by applicable Utility Standards shall be resolved in such a manner as to impose the minimum requirements necessary to make a Replacement Facility the equivalent (in terms of level of service, capacity, service life, capability, appearance, efficiency and function) to the Conflicting Facility it replaces and to otherwise minimize Rearrangement work..

1.7.2 If a disagreement arises between Utility and MTA (or its Contractors) with respect to a Design issue, then upon receiving notice of such disagreement, the MTA Representative shall promptly investigate and notify Utility of his or her determination as to the appropriate resolution of such disagreement in accordance with this Agreement. If, within fourteen (14) days



after, receiving the MTA Representative's written notice, Utility notifies MTA that it disagrees with the MTA Representative's determination, the dispute shall be resolved in accordance with Article 13. If Utility does not timely give such notice of disagreement, then the MTA Representative's determination shall prevail. Prior to resorting to the terms of Article 13 for resolution of the dispute, the Parties shall meet and confer in a joint working group consisting of appropriate MTA, Contractor and Utility staff members selected by each Party for the purpose of resolving the dispute.

1.7.3 If either Party issues a written non-conformance notice in accordance with Article 6, MTA's Representative shall investigate the matter within ten (10) days after receipt of a notice of nonconformance and will notify the issuing party of his/her determination within twenty (20) days about whether:

(a) correction of the completed work is necessary in order to meet MTA's or Utility's standards or to prevent public health and/or safety risks, and/or to achieve the agreed upon level of functionality for a Rearrangement required by the Design approved by the Parties, or

(b) correction is not necessary in order to achieve such purposes. If, within seven (7) days after receiving the MTA Representative's notice, Utility notifies MTA that it disagrees with MTA's determination, then the dispute shall be resolved in accordance with Article 13. If Utility does not timely give such notice, then the MTA Representative's determination shall prevail. Prior to resorting to the terms of Article 13 for resolution of the dispute, the Parties shall meet and confer in a joint working group consisting of appropriate members selected by each Party to attempt to resolve the dispute. If the MTA Representative, joint working group, or the Mediator(s) used pursuant to Article 13, as applicable, determine that correction is necessary, then the Party responsible for such work shall cause its contractors to correct or resolve the nonconformance. If the MTA Representative, joint working group, or such Mediator(s), as applicable, determines that correction is not necessary, then such nonconformance shall be deemed waived. Correction of any nonconformance waived pursuant to this Section 1.7.3 shall not be a condition to Utility's acceptance of a completed Rearrangement.

Article 2

Design

## 2.1 Design Coordination

The MTA Representative and the Utility Representative shall use their best efforts to agree upon written general guidelines, working relationships and administrative policies to implement the approval procedures with respect to Design review, and coordination of Construction, right-of-way acquisition and Rearrangement of Utility Facilities in order to permit the timely Construction of Transit Projects. All such guidelines, relationships, policies, procedures and coordination shall be consistent with this Agreement and, in the event of any conflict between the provisions thereof and this Agreement, the provisions of this Agreement shall prevail. MTA shall consult with the Utility Representative in establishing the schedule for Design of each Rearrangement to be consistent with MTA's schedule for each Transit Project.

## 2.2 Identification of Utility Facilities

2.2.1. Within sixty (60) calendar days after Utility's receipt of written request from MTA, Utility shall identify and disclose to MTA the nature and location of all Utility Facilities, which are located on, in, under or over the locations, which MTA indicates, may be affected by a Transit Project. Utility and MTA shall take reasonable actions to verify such information. Utility shall be responsible for all costs and expenses incurred by MTA (including, without limitation, costs of delay and other costs incurred by MTA or paid by MTA to its contractors to the extent resulting from or which arise out of Utility's failure to timely disclose all such Utility Facilities.

2.2.2 If Utility agrees it owes the amount due, Utility shall pay to MTA any amount due pursuant to this Section 2.2 within ninety (90) calendar days after receipt of demand therefore. If Utility disputes the amount due or disputes that it owes any amount, the dispute shall be resolved in accordance with Article 13. However, prior to resorting to the terms of Article 13, the Parties shall meet and confer in a joint working group consisting of appropriate members selected by each Party to attempt to resolve the dispute.

## 2.3 Design by Utility

Unless MTA and Utility agree that MTA or its contractor shall Design a particular Rearrangement, Utility shall Design each Rearrangement. Prior to commencing Design, Utility shall submit a Form 60 for Design hours and upon MTA approval of same, and Utility's receipt of a Work Order for Design from MTA along with the related Project Plans, Utility shall proceed with Design of such Rearrangement in accordance with the following:

2.3.1. Utility shall diligently perform its Design work in conformance with the Design schedule for the Rearrangement that is mutually agreed upon by MTA and Utility, subject to Section 2.3.4. Utility shall coordinate with MTA as is necessary to develop plans satisfactory to both MTA and Utility for each Rearrangement, with appropriate traffic control plans, subject to the requirements of this Agreement. The schedule for Utility's completion of Design, coordination requirements, review procedures, and related provisions shall be included as attachments to the Work Order, which shall also include the not-to-exceed cost of completing the Design of the specific Rearrangements based upon the Form 60. Betterments shall be addressed in accordance with Section 2.5. If a dispute over the Design Schedule occurs, the dispute shall be resolved in accordance with Article 13. Prior to resorting to the terms of Article 13, the Parties shall meet and confer in a joint working group consisting of appropriate members selected by each Party to attempt to resolve the dispute.

2.3.2 Utility shall prepare a complete set of Design plans, traffic control plans, and specifications for each Rearrangement, together with (a) Utility's itemized estimate of the total Cost of work, and (b) an estimate of the time needed to perform the required Rearrangement Construction. During Utility's Design process for each Rearrangement, MTA shall have the right to review and comment on the plans and specifications as well as on the Cost and time estimates. In order to facilitate such review, Utility shall submit to MTA its Design product for each Rearrangement at the completion of the Preliminary Engineering and Design Development phases; provided, however, that MTA shall provide any comments on such Design products to Utility within 30 days after receipt, and if MTA comments are not received by Utility within the thirty (30) day period, Utility's Design plans and specifications shall be deemed approved. All final

Designs, including time and cost estimates, shall be subject to MTA's written approval. Unless otherwise expressly provided for herein, Utility may not change the plans and specifications prior to or during the progress of Construction, except with prior written concurrence of MTA. MTA's review and approval of any Design furnished by Utility shall be solely for purposes of assessing compatibility of the Rearranged Utility Facilities with the Subject Transit Project, coordination with MTA's work on the Subject Transit Project, and Cost issues. MTA has and undertakes no duty to review such Designs for their quality, suitability for the intended purpose or for the adequacy of Rearranged Utility Facilities (as designed) for the purposes for which they are intended to be used.

2.3.3 Utility shall be responsible for errors in and omissions from any Designs prepared or provided by Utility, its consultants or contractors.

2.3.4 Utility shall apply and obtain all necessary permits and approvals from all local jurisdictions in order to perform work.

2.3.4 The following scheduling provisions shall apply:

(a) Utility shall deliver the Final Design for each Rearrangement to MTA for its review and approval in accordance with the schedule established in the applicable Work Order authorizing such Design work.

(b) As soon as reasonably practicable, Utility shall submit to MTA any modified Design necessitated by MTA's review and comments pursuant to Section 2.3.2, but not later than thirty (30) days, or such later date as the Parties may mutually agree, after Utility's receipt of MTA's comments.

B. Following any modification by MTA of Construction plans for the Subject Transit Project, Utility shall have a reasonable amount of time, as the Parties may mutually agree, in which to complete redesign of its Rearrangements. Each Party shall reasonably exercise its right to approve the timing for submittals of a revised Design, considering MTA's schedule for the Subject Transit Project, Utility's workload for carrying out its public utility duties, the type of Utility Facilities involved, the

extent of the modification of the Construction plans for the Subject Transit Project, and the extent of the resulting changes necessary to the Rearrangement Design.

#### 2.4 Design Performed by MTA

If MTA and Utility mutually agree that MTA shall Design a specific Rearrangement, MTA shall issue Work Orders for Utility to review plans and specifications as required, and the following procedures shall govern:

2.4.1. Coordination of Design and the development of the Design plans and specifications shall be accomplished through the MTA Representative who shall confer from time to time with the Utility Representative, except to the extent that responsibility for same has been delegated to MTA's Contractors in accordance with Section 2.8.

2.4.2. MTA or its Contractor shall submit to Utility plans and specifications for each Rearrangement: at the Preliminary Engineering, Design Development ~~and~~ and Final Design stages for Utility review/approval or comment consistent with the requirements of this Agreement; provided that the schedule for such submittals and responses shall conform to the following requirements:

(a) Within ten (10) business days after receipt of up to 3 Design submittals (the "Review for Completeness Period"),

(i) Utility shall inform MTA whether the submittal is sufficiently complete for Utility review purposes, and

(ii) if not sufficiently complete, Utility shall so notify MTA, or shall return the submittal to MTA together with a written identification of those portions that are not sufficiently complete and a description of the missing information listing the deficiencies.

(c) The provisions of this Section 2.4.2 also will apply to any re-submittal of a Design: by MTA, whether in response to a Utility notice or return of an incomplete submittal, or in response to substantive Utility comments.

2.4.3. Utility's approval of the Final Design for any Rearrangement will not be withheld if the submittal is consistent with (a) the most recent previous submittal, modified as appropriate to respond to Utility comments on such submittal and to reflect any subsequent changes agreed to by Utility and MTA, or (b) earlier submittals which have been approved by Utility. However, Utility shall have the right to make new comments on any material changes from previous submittals. Approval shall run parallel with the Review of Completeness Period.

## 2.5 Betterments

2.5.1. During the Preliminary Engineering Design phase but not later than the applicable Pre-Solicitation Comment Due Date for each Rearrangement, Utility shall inform MTA what Betterments, if any, Utility desires so that MTA can review the Betterments and determine whether they satisfy the requirements set forth in Section 2.5.2. Each Design furnished by Utility shall specifically identify any Betterments included in such Design. MTA may also identify Betterments included in Designs furnished by Utility or in comments provided by Utility on MTA-finished Designs, by giving written notice thereof to Utility during the Design review process.

2.5.2. It is understood and agreed that MTA shall have no obligation for the Cost of any Betterment (whether or not identified pursuant to Section 2.5.1), and that no Betterment may be performed in connection with any Rearrangement (whether Designed or Constructed by Utility or by MTA) that is incompatible with the Subject Transit Project or which cannot be performed within the constraints of applicable law, any applicable governmental approvals, the schedule for the Subject Transit Project and/or the Design. Utility shall bear the Cost of all Betterments included in each Rearrangement in accordance with Article 9.

2.5.3. For a Rearrangement to be Constructed by MTA, the price which Utility shall pay for each included Betterment shall equal the estimated incremental additional Cost for the Rearrangement resulting from such Betterment, calculated in accordance with Section 9.6.

## 2.6 General Design Criteria for Rearrangements

2.6.1. Utility shall notify MTA of any revisions or additions to the Utility Standards, identified in Exhibit 1 promptly after their formal issuance or adoption. The Design and Construction of each Rearrangement, whether undertaken by Utility or by MTA (or by their contractors), shall conform to the Utility Standards identified in Exhibit 1 and which exist as of the Effective Date, together with any revisions or additions thereto which are required to be incorporated into the Utility Standards pursuant to the following provisions (such standards, together with any such required revisions and additions, are sometimes referred to in this Agreement as "applicable Utility Standards"):

(a) The Design shall incorporate any revisions or additions to the Utility Standards of which Utility has notified MTA on or before the earlier of (i) thirty (30) calendar days after their formal issuance or adoption, or (ii) the applicable Pre-Solicitation Comment Due Date.

(b) The Design also shall incorporate any revisions or additions to the Utility Standards of which Utility notifies MTA after the deadline established pursuant to subparagraph (a) above but prior to the scheduled deadline for the non-Designing Party's final comments on the Final Design for the Rearrangement, provided that (i) such revisions or additions do not require Design changes necessitating re-submittal of the Design to the non- Designing Party and do not increase the cost of and/or time for Construction of either the Rearrangement or the Subject Transit Project as initially estimated, or (ii) such revisions or additions result from changes in federal or State laws, rules or regulations which mandate incorporation of the changes into the Design.

2.6.2. In all cases, Utility Standards shall be interpreted in accordance with Section 1.7.1. If Utility proposes an increase in requirements of, or variance from, the applicable Utility Standards (pursuant to this Section 2.6) for the Design or Construction of any Rearrangement, such increase or variance may be incorporated into such Rearrangement only if agreed to by MTA in its sole discretion; in such event, the increase or variance shall be considered a Betterment and shall be addressed in accordance with Section 2.5. MTA shall receive a credit or reimbursement for any additional Costs that it incurs due to such Betterment in accordance with Section 9.6.

2.6.3. Utility agrees that it shall not adopt any new Utility Standards, or otherwise amend or supplement any existing Utility Standards, for the sole or primary purpose of affecting any Transit Project. All Utility Standards shall be applied to the Rearrangements hereunder in the same manner as they are applied by Utility to projects that are (a) financed primarily by- Utility, (b) comparable to the Rearrangements of Utility Facilities hereunder, and (c) constructed for Utility by its own employees or by its contractors.

## 2.7 Changes

2.7.1 MTA or Utility may make changes to a previously approved Design prior to or during the progress of Construction only with written concurrence of the other Party. Except where changes are required to accommodate an unanticipated site condition or a change in a site condition, MTA shall have no obligation to consent to or approve any requested changes that will (a) necessitate re-submittal of Design to Utility, (b) delay Construction of the Subject Transit Project or any portion thereof, or (c) increase the cost of Construction of either the Rearrangement or the Subject Transit Project. The increased Cost, if any, attributable to changes in approved plans or specifications requested by Utility and approved by MTA shall be borne by Utility unless the change in approved plans or specifications was necessitated by an unanticipated site condition or a change in a site Construction Staging Plans site construction staging plans (as described below).

During Design of a Transit Project, MTA shall develop construction staging plans. Construction staging plans shall provide for, among other-things, the handling of vehicular and pedestrian traffic on streets adjacent to Transit Project construction and shall show construction phases, street closings, detours, warning devices and other pertinent information. To assist MTA in coordination and the development of construction staging plans, Utility shall furnish to MTA during Design the following information in writing, together with such other relevant information as MTA may reasonably request:

- (a) Utility Facilities in which service must be maintained without interruption.
- (b) Utility Facilities in which service may be permanently abandoned.



(c) Utility Facilities which may be temporarily abandoned and the maximum allowable duration of such temporary abandonment.

(d) Estimates of duration of street closures or restrictions necessary to construct Rearrangements of Utility Facilities.

(e) Rights-of-way, which must be acquired for Replacement Facilities and Rearrangements.

## 2.8 Delegation

Delegation of MTA Duties to MTA Contractors Proposed sequence of Construction of Utility Facility Rearrangements.

Without limiting MTA's right to delegate other tasks hereunder to its Contractors, MTA shall have the right to delegate to its Contractors the task of coordinating directly with Utility with respect to Design matters, including without limitation the submittal of Design for Utility review and discussion of Utility comments. Upon its entry into a Contract with a Contractor to which MTA intends to make such a delegation, MTA shall notify Utility in writing as to (a) the name of such Contractor (and relevant contact information), (b) the tasks hereunder that have been delegated to such Contractor, and (c) any modification to the notice requirements of Section 15.2. Utility agrees to coordinate its efforts and cooperate with such Contractor and with MTA as reasonably requested by MTA or such Contractor in accordance with such notification.

## Article 3

### Permits

#### 3.1 Permits

After approval of the Final Design of a Rearrangement as set forth in Article 2, the Party performing the Design or its contractor shall obtain all necessary licenses and permits required by municipal, county and state authorities for the Rearrangement of Utility Facilities within, under, over, or above any public street, highway, bridge, or other public way; provided, however, MTA shall be responsible for obtaining (or causing its

Contractor(s) to obtain) all such permits and licenses required for any Construction to be performed by its Contractor(s) in accordance with Article 5. Each Party shall use reasonable efforts (the cost of which shall be considered a Cost hereunder) to assist the other Party in securing Permits. Each Party shall comply with the terms of all applicable permits in carrying out its assigned work hereunder.

#### Article 4

#### Acquisition of Replacement -Right-of-Way

##### 4.1 Acquiring Right-of-Way

The need to acquire private rights-of-way for the relocation of Utility's Conflicting Facilities shall be determined during Design and, if needed, may be acquired by MTA or Utility following approval of location and type by both Parties prior to acquisition. MTA, or Utility, at no cost or expense to Utility, will acquire the required private rights-of-way to allow for the Rearrangements in an orderly manner so as not to impair MTA's schedule; provided, however, that if Utility cannot acquire said private right-of-way, they shall be acquired by MTA upon proper and timely notification. The location and type of said replacement rights-of-way shall be mutually agreed upon in accordance with this Agreement. However, to the extent the proposed Design will permit, Rearrangements shall be located in public ways. Utility shall convey to MTA, at no cost to MTA, all rights, title and interest Utility possesses in the existing Utility real property interests (except franchise rights and except where Utility owns the property in fee) (a) upon or within which Utility Facilities are located and which have been taken out of service by the Rearrangement, or have been abandoned in place and not removed or dismantled, and (b) that are required for the construction of the Subject Transit Project. Where replacement rights are to be needed by Utility within Transit Project Right-of-Way owned by MTA, MTA shall be responsible for providing such replacement rights, subject to the rights and needs of the MTA. Subject to the provisions of this Section 4.1, all real property interests obtained shall be in a legally binding form reasonably acceptable to Utility. The cost of any temporary construction easements or other real property rights (e.g., for installation of temporary Utility

Facilities) that are needed for any Rearrangement Construction Utility is performing shall be considered a "Cost" hereunder. MTA will be responsible for obtaining any temporary construction easements or other real property rights that are needed for Rearrangement Construction that MTA is performing and the cost of such easements or other rights shall be considered a "Cost" hereunder. The Parties shall use their best efforts in acquiring right-of-way so as not to impair MTA's schedule. Within sixty (60) calendar days after request by MTA, Utility shall furnish to MTA copies of any non-privileged, non-confidential agreements or other documents evidencing Utility's franchise, easements, or other existing rights in real property for its Utility Facilities that are located within a proposed Transit Project area. Utility's cost to provide such documentation shall be reimbursed by MTA.

#### 4.2 Reimbursement for Real Property Interest Costs

Real property interest Costs shall be invoiced separately from other Cost items, but shall be reimbursable to the extent provided in Articles 8 and 9.

#### 4.3 Right of Entry

Each Party shall permit the other immediate entry upon, and use of, all of such Party's right-of-way located within or near the route of a Transit Project whenever necessary for a purpose related to construction of the Transit Project or related to the maintenance, operation or inspection of Utility Facilities during Transit Project construction, and where not inconsistent in time or manner of exercise either with Utility's discharge of its duty as a public utility or with MTA's discharge of its duties with respect to the Transit Project; except that MTA shall not enter any Utility facility, such as a manhole or a cross-connect box, unless a Utility Representative is present and Utility's shall not enter any MTA active ROW or MTA contractor controlled area without prior written notice.

#### 4.4 Quitclaim by Utility

For any Utility Facilities located within the Transit Project Right-of-Way owned by MTA that are being Abandoned in place or dismantled, but are not being replaced by a Rearranged Facility, upon request by MTA, Utility shall quitclaim to MTA (or otherwise

terminate by appropriate documentation) all of Utility's right, title and interest in and to any such portion of such Transit Project Right-of-Way on which such Utility Facilities were located.

#### 4.5 Joint Use

If Utility Facilities located in Transit Project Right-of-Way are not required to be Rearranged hereunder and a quitclaim is not required to be provided to MTA pursuant to Section 4.4 (e.g., the Utility Facility is relocated within the original Facility area, the Utility Facility is merely protected in place, or there is no existing Utility easement in the easement area), then Utility shall execute an agreement in form and substance satisfactory to MTA and Utility whereby Utility agrees to the joint use of the subject property by both Utility and MTA.

### Article 5

#### Construction of Rearrangements

##### 5.1 Responsibility for Construction

Utility shall perform (through its contractors) all Construction for each Rearrangement, unless, during the process of Design Engineering, MTA and Utility mutually agree that MTA shall perform all or part of the Construction for a Rearrangement. The Party performing Construction may perform such Construction either prior to Construction of the Subject Transit Project, concurrently with such Construction, or through a combination of said alternatives, as mutually agreed by the Parties.

##### 5.2 MTA Construction of Rearrangements

5.2.1 If agreed by the Parties pursuant to Section 5.1 that MTA shall perform the Construction of a Rearrangement, MTA may advertise, award and administer the Construction of such Rearrangement. Utility agrees to coordinate its efforts and cooperate with MTA's Contractors performing Construction, as reasonably requested by MTA or such Contractor.

5.2.2. MTA shall be responsible for all claims and stop notices or mechanic's liens filed by MTA's contractor, sub-contractors, and material and labor providers for work performed on Utility Facilities.

5.2.3. MTA shall notify Utility at least ten (10) days prior to commencing the Construction for each Rearrangement so that Utility may make arrangements for such inspection and record keeping as Utility may desire or as may be required pursuant hereto.

### 5.3 Utility Construction of Rearrangements.

MTA shall issue a Work Order to Utility for the Construction of all or part of a Rearrangement that Utility shall perform, and Utility will advertise, award and administer a contract(s) for the Construction of the Rearrangement. In such event:

5.3.1. Utility shall commence and diligently prosecute the Construction of such Rearrangement to completion as authorized by Work Order, in conformance with the time schedule set forth in the Work Order. Such Construction shall coincide closely and be coordinated with MTA's Construction schedule for the Subject Transit Project, including the schedule for Construction of Rearrangements of utility, cable, pipeline, and other facilities in the same segment or portion of the Transit Project; provided, however, that the schedule for work by Utility shall allow Utility a reasonable period of time for performance of its responsibilities hereunder. MTA shall coordinate Utility's work with other facility owners and contractors performing work that may connect complement or interfere with Utility's work hereunder or with Utility Facilities.

5.3.2 In the event that Temporary Facilities are necessary to effect the arrangement being Constructed by Utility, Utility may use lands owned or controlled by MTA for the purpose of erecting such Temporary Facilities thereon, provided that MTA shall have approved in writing the location and duration of such Temporary Facilities.

5.3.3. Utility shall notify MTA at least seven (7) business days prior to commencing the Construction for each Rearrangement so that MTA may make arrangements for such inspection and record keeping as MTA may desire.

5.3.4. For all work by Utility's forces or its contractors pursuant to Section 5.1, MTA shall include-a copy of the environmental requirements of the Project as an attachment to the applicable Work Order). All such work shall comply with such Work Order requirements as well as with the environmental controls established in the Construction Contract or Contract, as applicable, for the Subject Transit Project, including without limitation construction noise and vibration control, pollution controls, archeological and paleontological coordination and requirements with respect to biological resources, historic properties, and parklands. In case of inconsistency, the more stringent requirements shall prevail.

5.3.5 A separate Work Order will be issued for Construction of each Rearrangement.

#### 5.4 Maintenance

Utility shall schedule, in concurrence with MTA, any routine maintenance of Utility Facilities that may be necessary after the completion of the Rearrangement so as not to interfere with the Transit Project Construction or its operation once completed.

#### 5.5 "As-Built" Drawings

MTA and Utility shall each maintain a set of "as-built" plans of Rearrangements performed by MTA and Utility, respectively, during the progress of construction. Within sixty (60) days following the completion and acceptance of each Rearrangement, the Party that performed the work shall furnish the other Party with reproducible "as-built" drawings showing such re-arrangement as installed by the performing Party and all contract records pertaining to such as-builts. All "as-built" plans (whether provided by MTA or by Utility) shall be in a format, which conforms to MTA's requirements for the Subject Transit Project, as specified in the applicable Contract. If the drawings submitted by either Party are incomplete or non-conforming to such required format, they will be returned to that Party for correction at its sole expense.

#### 5.6 Underground Service Alert

Prior to any commencement of underground work by either Party, the Party performing such work, or its Contractor, shall notify Underground Service Alert in accordance with California

law—. In addition, MTA shall cause its Contractors to ascertain from Utility and plainly mark before any excavations are made and during all time that work is being performed by MTA's Contractors in such area, the exact location of all Utility Facilities which may be below the surface of the ground or otherwise not plainly visible, as identified by Utility. Except as provided in the Design for the Rearrangement of Utility Facilities or as otherwise approved by Utility, MTA and its contractors shall not interfere with the operation of Utility Facilities. If any other Utility Facilities are damaged by MTA's Contractors in the course of construction work, except to the extent such damage arises from the negligence or willful misconduct of Utility or Utility's Contractor Utility shall immediately repair the damage as required to maintain service to its customers and, except as otherwise set forth in Section 2.2, MTA shall reimburse, or shall cause its Contractor to reimburse, Utility for its actual and reasonable costs incurred to repair the damaged Utility Facilities (or, if approved by both MTA and Utility, MTA's Contractor shall repair the damage at no cost to Utility (except as otherwise set forth in Section 2.2)). If any of MTA's property is damaged by Utility or its contractors in the course of its construction work, except to the extent such damage arises from the negligence or willful misconduct of MTA or its Contractor, Utility shall immediately report such damage to MTA and shall repair, in parallel with the repairs as required to maintain services to its customers, the damage at its sole cost to the reasonable satisfaction of MTA or, at MTA's election, MTA shall cause such damage to be repaired and Utility promptly, upon receipt of written documentation verifying such costs, shall reimburse MTA for MTA's actual and reasonable costs incurred in connection with such repair.

### 5.7 Utility Activities

If Utility plans to undertake any activities (including without limitation construction of new facilities, repairs or modifications to existing Utility Facilities, and similar activities) in the immediately adjacent to a Transit Project or Rearrangement Construction, Utility will coordinate such activity with MTA so that such activity will not delay or otherwise interfere with such Construction, and MTA shall reasonably cooperate with Utility with regard to same. However, if MTA determines that such activity will delay or otherwise conflict with such Construction, MTA shall have the right to condition the implementation of such activity on scheduling

adjustments and/or other modifications as MTA deems appropriate to ensure its Project Schedule will not be directly delayed by this proposed work, and if the proposed adjustments or modifications do not resolve the delay or conflict, or Utility refuses to make such adjustments or modifications to its construction schedule, Utility shall not implement such activity. The provisions of this Section 5.7 shall not apply in emergency situations; however, in such situations Utility will coordinate with MTA to the extent feasible in light of the circumstances, subject to all related safety requirements described herein.

## Article 6

### Inspection

#### 6.1 Inspection During Construction

6.1.1. All work performed by either Party on Rearrangements pursuant to this Agreement that affects Construction of a Transit Project shall be subject to MTA and Utility inspection and final approval. MTA and Utility also may inspect the Construction of Rearrangements to ensure that the work has been performed in conformance with the Design approved by the Parties.

6.1.2. All Rearrangement Construction of Utility Facilities by MTA shall be inspected by Utility. Utility shall provide inspectors to observe and inspect the Rearrangement of Utility Facilities so that upon completion of Construction, Utility will have a basis for acceptance of the work. All such inspection services shall be authorized by MTA under the appropriate Work Order. Utility's inspectors shall make a good faith effort to be available, upon MTA's request and at MTA's expense, as needed throughout Construction to support MTA's schedule for the Subject Transit Project. Utility's inspectors shall cooperate and coordinate with the MTA Representative and MTA's Contractors and shall coordinate with the MTA Representative so as to provide safe access to Project sites by Utility inspectors.

At the inspections provided in accordance with Sections 6.1.1 and 6.1.2, above, each Party shall inform the other of any deficiencies or discrepancies in any work discovered in the course of such inspection. Utility will provide immediate verbal notice of



nonconformance to MTA's Representative as well as to MTA staff or Contractors (as designated by the MTA Representative), followed by a written nonconformance notice not later than five (5) business days after discovery. Likewise, MTA will provide immediate verbal notice of nonconformance to the Utility Representative (or to such other Utility staff as may be designated by the Utility Representative), followed by a written nonconformance notice not later than five (5) business days after discovery. Each nonconformance notice shall include an explanation of the notifying Party's desired resolution. Work shall not be stopped as a result of any such nonconformance unless (i) proceeding with the work will prevent resolution of the deficiency or discrepancy; (ii) the additional work cannot be properly performed without resolution of the deficiency or discrepancy, or (iii) otherwise determined and agreed upon by Utility and MTA. All notices of nonconformance provided by either Party shall be addressed in accordance with Section 7.3.

## 6.2 Final Inspection

As soon as the work of any specific Rearrangement has been completed, the Party which performed the Construction work shall notify the other Party in writing that the Rearrangement is ready for final inspection. All final inspections by Utility will be completed within seven (7) days following Utility's receipt of written request for same from MTA's Contractor. All final inspections by MTA shall be completed within seven (7) days following MTA's receipt of written request for same by Utility or Utility's Contractor. The final inspection of any Rearrangement or Transit Project Facility shall be attended by the MTA Representative and the Utility Representative. Each Party will provide to the other Party's Representative immediate verbal notice of any deficiencies or discrepancies in any Construction work discovered in the course of the final inspection, followed by a written nonconformance notice within one (1) business day thereafter. Each nonconformance notice shall include an explanation of the notifying Party's desired resolution. Work shall not be stopped as a result of any such nonconformance unless otherwise determined and agreed upon by Utility and MTA. All notices of nonconformance provided by either Party shall be addressed in accordance with Section 1.7.3. Both Parties' inspectors shall be available to observe and inspect any corrective work performed. Promptly upon completion of the Rearrangement of a Utility Facility, by MTA's Contractors (including if applicable, completion, of any corrective work performed), MTA shall

furnish in writing to Utility its notice of completion. Promptly thereafter, Utility shall furnish to MTA in writing its notice of acceptance of the Rearrangement. Upon such acceptance, title to such Utility Facility shall automatically vest in Utility (if not already so vested), and Utility shall assume full responsibility for such Utility Facility. Notwithstanding the foregoing, and except as further limited by this Agreement, MTA shall have responsibility and liability for correction of any latent defects in any Rearrangement work performed by MTA's contractors and not discovered by Utility prior to acceptance.

### 6.3 Materials Testing

Utility shall have the right to test materials used in Construction of Utility Facilities by MTA's Contractors, upon 24 hours prior written notice to MTA and the Contractor. MTA shall have the right to have its witnesses attend all such tests. Utility shall provide copies of the testing reports within 24 hours after each test, as well as providing to MTA access to the samples used and to the testing laboratory for inspection of its equipment. Testing shall be authorized by MTA under an appropriate Work Order, and the costs thereof, including any travel expenses incurred for off-site inspection and testing, shall be considered Costs of Rearrangement.

## Article 7

### Disposition of Salvaged Materials

#### 7.1 Salvage by MTA

MTA may not salvage materials from the Conflicting Facility belonging to Utility during the course of its work on a Rearrangement, unless agreed to in writing by Utility. If MTA desires to use salvaged materials, subject to the consent of Utility, materials removed shall be stored by MTA until such time as the progress of work allows the reinstallation of such materials. Materials that are not to be reused and that Utility desires to retain shall be returned by MTA to a mutually suitable location. If the materials removed by MTA are not reusable by MTA and are not desired by Utility, such materials shall become the property of MTA unless the approved Design provides otherwise.

#### 7.2 Salvage by Utility

Salvaged materials which are removed by Utility and not reused in a Rearrangement shall be retained by Utility.

### 7.3 Salvage Credits

MTA shall receive a credit or payment, as provided in Article 9 of this Agreement, for salvage, storage and transporting of such materials described herein which are retained by Utility.

## Article 8

### Reimbursements to Utility

#### 8.1 Reimbursements to Utility

The issuance of a Work Order (following MTA receipt of a Utility estimate using Exhibit A( Form 60) or other form required by MTA as described in Article 11) shall obligate MTA to reimburse Utility, subject to the terms of this Agreement, for the "Costs," as hereinafter defined, of all activities or work performed or materials acquired by Utility, its consultants or contractors pursuant to such Work Order, to the extent only that such activities, work or materials are within the scope of this Agreement as established pursuant to Section 1.1, and except to the extent that such Costs are not MTA's responsibility pursuant to this Agreement or, pursuant to the agreements referred in Section 1.1.2. For purposes of determining the amounts due from MTA to Utility pursuant to this Article 8, the term "Cost" shall mean all actual, allowable, allocable and reasonable direct and indirect costs necessarily incurred by Utility and attributable to such activities, work or materials, less credits to MTA as provided in Article 9 of this Agreement. Subject to the foregoing, direct costs shall include allowable direct labor, equipment and materials costs spent specifically for work performed under this Agreement. MTA's obligation to reimburse Utility for Costs shall be subject to the limitations established in Article 11.

#### 8.2 Reimbursement for Abandoned Conflicting Facility

In those cases wherein MTA and Utility agree that the construction of a Transit Project will eliminate the service need for a specific Conflicting Facility, such Conflicting Facility may be Abandoned by Utility, and MTA shall not be required to replace or compensate Utility for such Conflicting Facility, except for reasonable and necessary Costs incurred in severing and demolishing such Conflicting Facility and in restoring the sub-ground and ground surfaces as appropriate; provided, however, that under no circumstances shall MTA be responsible for any Abandonment, remediation or other Costs relating to the presence or existence of any environmental hazard on, in, under or about a Conflicting Facility or other Utility Facility, including but not limited to the presence of any Hazardous Materials, except to the extent the presence or existing of such environmental hazard arises from the act or omission of MTA, employees, agents or contractors. Subject to the consent of Utility, MTA may elect to undertake the activities described in this Section 8.2, the Costs of which shall be reimbursable to MTA as provided in Article 9.

## Article 9

### Reimbursements and Credits to MTA

#### 9.1 Credits to MTA Where Utility Performs Work

MTA shall receive a credit against work performed by Utility under this Agreement at MTA's expense, for salvage, Betterments and Expired Service Life Value of Utility Facilities. The amount of credits shall be determined as provided below in this Article 9. All credits pertaining to a particular Rearrangement or other item of work hereunder shall be reflected on the applicable invoice(s) submitted by Utility.

#### 9.2 Payments to MTA Where MTA Performs Work

Where MTA performs work hereunder, MTA shall receive compensation from Utility (by credit or payments as provided below) for salvage and Expired Service Life Value of Utility Facilities as applicable, as well as for Costs incurred by MTA for Betterments, and for any other Costs incurred by MTA that are Utility's responsibility pursuant to this Agreement. The amount of compensation shall be determined as provided below in this Article 9. To the extent possible, MTA may take such compensation in the form of credits

against amounts owed by MTA to Utility in connection with the Rearrangement for which the compensation is owed. MTA shall invoice Utility for any remaining amounts due in accordance with Section 11.6, and Utility shall make payments to MTA in accordance with Section 11.7.

### 9.3 MTA's Costs

For purposes of determining the amounts due from Utility to MTA pursuant to this Article 9, the term "Cost" shall mean all actual, allowable and reasonable direct and indirect costs incurred by MTA and attributable to activity or work performed or materials acquired in performing a task pursuant to this Agreement. Subject to the foregoing, direct costs shall include allowable direct labor, equipment and materials costs spent specifically for work performed under this Agreement, and shall include but not be limited to those associated with Design, project review, construction management, permit fees, inspection, processing, remediation plan development and implementation, real property acquisition and contract administration. Indirect costs shall include administrative and overhead costs at the rate therefore established by MTA from time to time. MTA shall maintain its standard forms of records showing actual time expended and costs incurred under each Work Order.

### 9.4 Survey; Review of Records

The amount of credits or payments, as applicable, due MTA for salvage and Expired Service Life Value shall be determined by mutual agreement based upon Utility's applicable books, records, documents and other data of Utility. To assist in the determination of credits or payment due MTA under this Agreement, if any, MTA and Utility may conduct an inspection survey and/or inventory of each Conflicting Facility during Design Engineering. Pursuant to a Work Order, Utility shall provide MTA, to the extent such exist and are known and available, with drawings, plans or other records necessary to conduct such survey or inventory. The survey shall describe the physical attributes of the Conflicting Facility such as number, length, diameter, dimensions, and type of material. The survey shall further describe, for each Conflicting Facility, the date of construction or installation; the present condition; the expected service life of each Conflicting Facility as derived from Utility's

records; and whether materials contained therein are salvageable. The results of such survey shall also be applied in the determination of Betterments, as necessary.

#### 9.5 Salvage

As applicable, credit shall be allowed or Utility shall pay for salvage for items of materials and equipment recovered from the Conflicting Facility in the performance of Rearrangement work which are subsequently retained by Utility in accordance with Section 7.2. The amount of a salvage credit or payment, if any, shall equal the estimated cost to Utility to acquire like or similar used materials (as depreciated), as determined by mutual agreement, plus storage and transportation Costs.

#### 9.6 Betterments

As applicable, credit shall be allowed or Utility shall pay for Betterments in accordance with the following: The amount of a Betterment credit, if any, shall be the estimated cost of the Replacement Facility, minus the estimated cost of a Substitute Facility. The amount of Betterment credit, if any, shall be a fixed amount determined by the Parties during Design engineering based upon estimates provided by Utility and its contractors and agreed to by the MTA.

#### 9.7 Expired Service Life

9.7.1 MTA shall receive a credit for the Expired Service Life Value of each Conflicting Facility being replaced if the Replacement Facility will have an expected period of useful service greater than the period which the existing Conflicting Facility would have had, had it remained in service and the Rearrangement not been made. For purposes of this Agreement, "Expired Service Life Value" shall mean the depreciated value of the Conflicting Facility as determined by Utility utilizing its standard depreciation calculation. The amount of credit or payment for Expired Service Life Value shall be set forth by Utility on a Form 60. If MTA disputes the Expired Service Life Value of any Conflicting Facility, the dispute shall be resolved in accordance with Article 13. Prior to resorting to Article 13 for resolution of the dispute, the Parties shall meet and

confer in a joint working group consisting of appropriate members selected by each Party to attempt to resolve the dispute.

## Article 10

### Indemnity and Insurance

#### Indemnity

10.1 Indemnification by Utility. Subject to the limitations of applicable laws, Utility shall indemnify, protect, defend and hold harmless LACMTA, its respective governing board members, officers, employees, authorized agents, engineers, contractors and subcontractors from and against any and all claims, damages, losses, liabilities, costs and expenses (including reasonable attorneys' and expert witness fees and costs) (collectively, "Claims and Expenses") that arise out of or as a result of any negligent act, omission or willful misconduct of Utility or its officers, agents, employees, engineers, contractors or subcontractors in carrying out the obligations of the Utility under this Agreement or any Work Order executed pursuant hereto. ,

#### 10.2 Indemnification by MTA

Subject to the limitations of applicable laws, LACMTA shall indemnify, protect, defend and hold harmless the Utility, its successors and assigns and its shareholders, officers, directors, employees, authorized agents, engineers, contractors, and subcontractors from and against any and all Claims and Expenses that arise out of or as a result of intentional negligent acts, omission or willful misconduct of LACMTA, its officers, agents, employees, engineers, contractors or subcontractors in carrying out the obligations of the LACMTA under this Agreement or under any Work Order executed pursuant hereto.

10.3. Any Design Contract, Construction Contract or other Contract entered into by LACMTA or Utility in connection with a Rearrangement shall contain a provision that requires the contractor, as part of the liability insurance requirements, to provide endorsement CG 20 10 (1985 or equivalent forms) to each policy of commercial general liability insurance that names as additional insureds to such policy (not subject to any

premiums or assessments) Utility and LACMTA and their respective officers and employees etc. as additional insureds (not subject to any premiums or assessments). Unless otherwise mutually agreed by the Parties, the following shall be the minimum insurance coverage and limits for both LACMTA and Utility:

a.) The Commercial General Liability insurance coverage shall have a minimum limit of \$2 million combined single limit of liability for bodily injury, property damage and personal injury per occurrence, \$4 million general annual aggregate and \$4 million products/completed operations aggregate.

b.) Commercial Automobile Liability insurance covering the ownership, maintenance or use of all owned, leased, non-owned and hired vehicles used in the performance of the Work; including loading and unloading, with limits of \$2 million combined single limit for bodily injury and property damage liability.

c.) Workers' Compensation statutory limits policy in conformance with the laws of the State, and employer's liability insurance (for bodily injury or disease) with minimum limits of \$1 million per accident for bodily injury by accident, \$1 million per employee for bodily injury by disease, and \$1 million policy limit for bodily injury by disease.

d.) Contractor's Pollution Liability (CPL) insurance with a total combined limit of liability of no less than \$1 million per occurrence and \$2 million in the aggregate. The CPL policy shall include coverage for cleanup costs, third-party bodily injury and property damage resulting from pollution conditions caused by contracting operations. The CPL shall also provide Non-Owned Disposal Site (NODS) coverage for transportation and off-site disposal of materials.

10.4 The companies affording insurance coverage must have a rating of A- or better and a Financial Size Category rating of VII or better, as rated in the A.M. Best Key Rating Guide for Property and Casualty Insurance Companies. Each contractor shall also require all



subcontractors performing work for a Rearrangement or who may enter upon the work site to maintain the same insurance requirements listed above.

10.5. Prior to commencement of work, a Certificate evidencing the required coverage shall be provided directly by the insurers to Utility and LACMTA, providing that said coverage shall not be reduced in scope or cancelled without thirty (30) days prior written notice to LACMTA and Utility. Utility recognizes and agrees that all or part of such insurance can be provided by LACMTA through a program of self-insurance.

10.6. If Utility is itself performing work for a Rearrangement, Utility may self-insure and agrees to protect MTA, its officers and employees at the same level with respect to types of coverage and minimum limits of liability as MTA would have required of third party insurance, and Utility agrees that such self-insurance shall include all duties, obligations and responsibilities of an insurance company with respect to any claim made under such self-insurance program. At least 30 days prior to the implementation of any self-insurance program, Utility shall provide to MTA certification that Utility meets the requirements of this Article.

10.7 If Utility does not self-insure in accordance with this Article 11, Utility shall itself obtain insurance complying with the requirements of Sections 11.1 and 11.2 above.

## Article 11

### Work Orders and Billings

#### 11.1 Work Performed by Utility

11.1.1. All work performed by Utility under this Agreement shall be initiated by Work Orders as provided herein. Utility's obligation to perform work, hereunder, which is fully reimbursable by MTA, shall arise upon the issuance by MTA of an authorized Work Order Utility's review of Project documents, and drawings, furnished by MTA may not be subjected to complete re-engineering or technical study by Utility. However, where

MTA has prior existing rights, Utility may be obligated to perform work necessary to support MTA's Project without the issuance of a Work Order and Construction schedule for each Transit Project.

### 11.2 Work Orders

MTA shall issue Work Orders to Utility, following Utility's submittal of estimates in the form then required by MTA (currently Form 60 as set forth in Exhibit A, as the same may be amended or replaced from time to time by notice from MTA to Utility), to authorize Utility's performance of all work and the purchase of all materials and equipment required under the terms and conditions of this Agreement. Utility shall complete (either through its own, forces or through its consultants, contractors or subcontractors) all work authorized by any Work Order. Except as otherwise provided in Section 11.3.4., Contractors engaged by Utility to perform work covered by this Agreement shall comply with all applicable labor and other laws. Utility shall cooperate with MTA and take such actions as the MTA may reasonably request, to ensure such compliance. Each Work Order issued under the terms of this Agreement shall specify the work to be performed and any materials or equipment to be acquired, the maximum amount of money which Utility may expend therefore, and a schedule, including the estimated starting and finishing dates for work so authorized. Work Orders shall set forth schedules that are consistent with and supportive of MTA's Design and Construction schedule and that are agreed to by Utility. Utility shall not be authorized to do any work, and shall not be paid, credited or reimbursed for Costs or expenses associated with any work that is not authorized by a Work Order, unless otherwise mutually agreed in writing. Under no circumstances shall Utility receive payment for, or reimbursement of, any Costs associated with or related to Betterments, and the issuance of a Work Order authorizing Utility work or other activity respecting a Betterment shall not constitute the agreement of MTA to make any payments to Utility in respect thereto.

### 11.3 Work Order Changes

11.3.1. Utility shall not order or direct work that would cause Construction Costs to exceed the maximum amount allowable therefore in any Work Order, without the prior approval of MTA as set forth in a Work Order revision in accordance with Section 11.3.4. Utility agrees to use its best efforts to perform such work within the maximum amount specified therefore in each Work

Order. Utility agrees to notify MTA if at any time Utility has reason to believe that the Construction Costs that it expects to incur under any Work Order in the next 60 days, when added to all Construction Costs previously incurred under such Work Order, will exceed 75% of the maximum Construction Costs specified in the Work Order, or if at any time Utility has reason to believe that the total Construction Costs under said Work Order will be in excess of ten percent (10%) greater or less than previously estimated. Utility may request revision of Work Orders to increase the maximum allowable Construction Costs thereunder, in the event of anticipated Construction Cost overruns. MTA will consider, and may not unreasonably withhold its approval of, any increase in the maximum allowable amount of construction Costs that is, caused by (i) a necessary change in the scope of the subject Construction, or (ii) a delay or increase in Utility's Costs that are not caused by Utility (or its contractors, suppliers or agents), provided that Utility notifies MTA within five (5) days of the Utility Representative becoming aware of the event or situation causing such anticipated change. MTA may withhold its approval of any other increase in Construction Costs above the maximum allowable amount authorized in the applicable Work Order. Without MTA's prior approval, Utility will not be reimbursed for Construction Costs expended in excess of maximum amounts allowable therefore and authorized in a Work Order.

11.3.2. Utility shall not order or direct work that would cause Non-Construction Costs to exceed the maximum amount allowable therefore in any Work Order, without the prior written approval of MTA as set forth in a Work Order revision in accordance with

Section 11.3.4. Utility agrees to use its best efforts to perform such work within the maximum amount specified therefore in each Work Order. Utility agrees to notify MTA if at any time Utility has reason to believe that the Non-Construction Costs that it expects to incur under any Work Order in the next 60 days, when added to all Non-Construction Costs previously incurred under such Work Order, will exceed 75% of the maximum Non-Construction Costs specified in the Work Order, or if at any time Utility has reason to believe that the total Non-Construction Costs under said Work Order will be in excess of ten percent (10%) greater or less than previously estimated. Utility may request written revisions of Work Orders to increase the maximum allowable Non-Construction Costs thereunder, in the event of anticipated Non-Construction Cost overruns. MTA will consider, and may not unreasonably

withhold its approval of, any increase in the maximum allowable amount of Non-Construction Costs that is caused by (i) a necessary change in the scope of the subject Construction, or (ii) a delay or increase in Utility's Costs that is not caused by Utility (or its contractors, suppliers or agents), provided that Utility notifies MTA within five (35) days of the Utility Representative becoming aware of the event or situation causing such anticipated change. MTA may withhold its approval of any other increase in Non-Construction Costs above the maximum allowable amount authorized in the applicable Work Order. Without MTA's prior approval, Utility will not be reimbursed for Non-Construction Costs expended in excess of maximum amounts allowable therefore and authorized in a Work Order.

11.3.3. Utility agrees to notify MTA if at any time Utility has reason to believe that the estimated finishing date of any work under a Work Order will be later than the date authorized in the Work Order. Utility will request written revision of the Work Order in the event of anticipated completion delays and MTA will consider, and may not unreasonably withhold, its approval of the revision to the Work Order to reflect the change in the finishing date, unless the delay is caused solely as a result of actions by the Utility or its contractor(s).

11.3.4. Any revision to a Work Order requested by Utility shall be submitted in writing to MTA for its prior approval and MTA shall act promptly on any such request. If MTA fails to respond in writing to a requested revision within fourteen (14) days after receipt thereof, the revision shall be deemed accepted, unless the revision is requested because of a delay or action by the Utility or its contractor(s) that causes a need to revise the Work Order; provided, however, that the Parties may mutually agree to extend such period before its expiration. Notwithstanding the foregoing, any proposed revision occasioned by emergency field construction difficulties may be submitted to MTA orally, by telephone, and confirmed in writing by Utility within three (3) business days; in such event, MTA agrees to immediately act and the MTA Representative shall convey MTA's decision orally, to be confirmed in writing within three (3) business days. All Work Order revision requests shall include an estimate for the Work Order revision in the form then required MTA (currently Form 60, as the same may be amended or replaced from time to time by prior written notice from MTA to Utility). Without MTA's prior approval, Utility will not be reimbursed for costs to correct defective performance by Utility, its consultants or contractors.

11.3.5. MTA may terminate, in writing upon thirty (30) days' notice with written reasons for such termination any Work Order at any time in its sole discretion, but MTA shall reimburse Utility in accordance with this Agreement for Costs, if any, already incurred by Utility there under, and those costs, necessary to restore Utility's Facilities in the process of Rearrangement to a permanent condition suitable for the provision of service to the public. If restoration is found to be necessary, MTA will authorize the Costs therefore in its written termination of the Work Order.

#### 11.4 Deadlines and Delays

11.4.1. Utility shall perform its work under this Agreement in accordance with the deadlines and schedules established in the applicable Work Order. Subject to Sections 11.3.3, 11.3.4, 11.4.2, and 15.12, if Utility fails to meet a deadline established in this Agreement or in the applicable Work Order for Construction or any other activity, then Utility shall be responsible for all actual documented costs and expenses incurred by MTA (including, without limitation, costs of delay and other reasonable and documented costs incurred by MTA or paid by MTA to its Contractors) and arising out of such delay, unless such delay was not caused by Utility. Utility shall pay to MTA any amount it agrees is due pursuant to this Section 11.4.1 within 90 days after receipt of demand therefore. If Utility disputes the amount MTA contends is due or disputes that any amount is due, the dispute shall be resolved in accordance with Article 13 and the time period for payment of such disputed amount shall be tolled until the final resolution of such dispute. Prior to resorting to Article 13 for resolution of the dispute, the Parties shall meet and confer in a joint working group consisting of appropriate members selected by each Party to attempt to resolve the dispute.

11.4.2. If MTA or its Contractor fails to complete any work hereunder by the applicable deadlines established in this Agreement or in the respective Work Orders, then any affected deadlines and Costs for Utility's Construction or other activities under this Agreement or any Work Order shall be revised accordingly.

#### 11.5 Procedures for Utility Billings to MTA

11.5.1 The Parties agree that the following procedures will be observed for submission of monthly billings by Utility to MTA on a progress basis for work performed by

Utility under a specific Work Order. Utility shall maintain separate accounting records for each Work Order authorized by MTA.

a) Utility shall submit to MTA, within thirty (30) days after the end of each month, a "Project Labor Report" identifying by task both Utility staff (and applicable consultant) hours charged for administrative, design, inspection and management services and Utility direct field labor.

b) Following the commencement of a specific Rearrangement or other work under a given Work Order, Utility's billings (in an electronic format where possible) shall be submitted to MTA's Representative within 60 days of the monthly period when the work was performed. This billing shall specify all Costs incurred for that billing period including copies of invoices and other Cost data. Signed individual labor time sheets including clear identification of MTA's Work Order number and Project title shall be maintained for audit on file in Utility's accounting center. Utility shall provide a full description of any labor charges during the billing period that were not identified in the Project Labor Report, if requested by MTA, in order to resolve any questionable Utility charges. Each billing shall show all applicable credits, shall be noted as either in-progress or as final, and shall include a certification that the charges were appropriate and necessary to performance of the referenced Work Order and have not previously been billed or paid. The final billing, with a recapitulation of prior progress billings and a notation that all work covered by a given Work Order has been performed and billed for, shall be submitted to MTA within one hundred twenty (120) days after completion and acceptance of the work covered by the Work Order.

11.5.2. Utility agrees to retain, or cause to be retained, for inspection and audit by MTA or other governmental auditors for the period required pursuant to Section 11.8, all records and accounts relating to the work performed by Utility under this Agreement; provided, however, that if any actions brought under the dispute resolution provisions of this Agreement have not been finally resolved by the foregoing deadline, then any records that pertain to any such actions shall be maintained until such actions have been finally resolved.

#### 11.6 Procedures for MTA Billings to Utility

11.6.1. In those cases in which MTA performs work payable by Utility under the terms of this Agreement, MTA shall submit regular progress billings to Utility, which shall (a) specify Costs incurred for that billing period, (b) bear the MTA work order number, (c) be supported by copies of data that support the Costs incurred, (d) be addressed to the Utility Representative, and (e) be maintained by MTA for inspection and audit, as required pursuant to Section 11.8. Each billing shall be noted as either progress or final, and shall include a certification that the charges identified in such billing were appropriate and necessary to performance of the reference contract and have not previously been billed or paid. The progress billing shall indicate actual work performed during the billing period, the direct and indirect Costs thereof, Utility's share of such Costs, and any amount thereof being paid through the application of credits against amounts owed by MTA to Utility. The final billing, with a notation that all work covered by a given work order has been performed and billed for, shall be submitted to Utility as soon as practicable (but no later than six months one hundred twenty (120) days) following the completion of the work, shall recapitulate prior progress billings, and shall show inclusive dates upon which work billed therein was performed.

11.6.2. MTA agrees to retain, or cause to be retained, for inspection and audit by Utility or other governmental auditors for the period required pursuant to Section 11.8, all records and accounts relating to all work performed by MTA for Utility under this Agreement; provided, however, that if any actions brought under the dispute resolution provisions of this Agreement have not been finally resolved by the foregoing deadline, then any records that pertain to any such actions shall be maintained until such actions have been finally resolved.

11.7 Payment of Billings Payment of each bill properly submitted pursuant to Section 11.5 or 11.6 shall be due within sixty (60) days of receipt thereof; provided, however, that (a) all such payments shall be conditional, subject to post-audit adjustments, (b) final payment for each Rearrangement shall be contingent upon final inspection (and acceptance, where applicable) of the work by the Party billed for such work, which inspection (and acceptance, where applicable) will not be unreasonably withheld or delayed, and (c) MTA may withhold credit amounts due Utility under the Work Order for which the bill was submitted if Utility has not posted such credits on the bill within sixty (60) days after submittal of requests for same by MTA.

11.8 Inspection and Audit

Upon reasonable notice, each Party (and its authorized representatives) shall have reasonable rights to inspect and audit during normal business hours, the other's relevant non-privileged records relating to its performance hereunder (and all Costs incurred with respect thereto) for each Transit Project and related Rearrangements, from the date hereof through and until expiration of four (4) years after the later of (a) the accepted completion of all Rearrangements for such Transit Project and (b) payment of all final billings owed to such Party related to such Transit Project and related Rearrangements, or such later date as is required under other provisions of this Agreement or by law. Each Party shall bear its own costs and expenses in connection with undertaking any inspection and audit, and in responding thereto. Examination of a document or record on one occasion shall not preclude further review or reexamination of such document or record on subsequent occasions. By providing any of its records to the other Party for examination, the Party providing such records represents and warrants that such records are accurate and complete. The Parties shall mutually agree upon any financial adjustment found necessary by any audit. If the Parties are unable to agree on such adjustment, then the matter shall be resolved pursuant to Article 13. The rights granted pursuant to this Section 11.8 shall not obligate either Party to inspect or audit the other Party's records nor shall either Party be entitled to utilize or rely on the other Party's audit results, absent such other Party's consent.

## Article 12

### Hazardous Materials and Protected Materials

#### 12.1 Investigation of Sites and Preparation of Environmental Impact Reports

12.1.1 As between Utility and MTA, MTA shall be responsible, at MTA expense, for the investigation of potential Hazardous Materials sites and Protected Materials sites within the area that would directly impact Construction of a Transit Project or a Rearrangement of Utility Facilities hereunder.

12.1.2 MTA shall prepare, at its sole cost and expense, all environmental impact reports/statements required by local, state or federal law for the Construction of a Transit Project or a Rearrangement of Utility Facilities hereunder.



## 12.2 Indemnity by Utility

Utility shall indemnify, defend at MTA's request with counsel selected by MTA subject to MTA's reasonable approval, and hold harmless MTA, its respective governing boards, officers, directors, employees, authorized agents, engineers, contractors, and subcontractors, and their respective successors and assigns, from and against any claims, judgments, damages, penalties, fines, costs, liabilities (including sums paid in settlement of claims) and losses, including attorney's fees, consultant's fees, and expert fees that arise during or after work or actions to the extent arising out of (i) the release of Hazardous Materials within any site for a Rearrangement of Utility Facilities, to the extent such release is directly caused by activities or omissions of Utility, its employees, representatives, agents, shippers, contractors, or invitees, and (ii) Utility's breach of Utility's representations and warranties in this Subsection 12.2

## 12.3 Responsibility For Remedial or Protective Action

12.3.1 At least seven (7) days before Utility commences its Rearrangement, MTA shall provide to Utility a copy of all environmental impact reports and soil tests prepared in connection with the Transit Project and shall disclose to Utility all information of which it is aware concerning the existence of any Hazardous Material and/or Protected Materials within any site for a Rearrangement of Utility Facilities. If the ~~info~~ information provided reveals the existence of a Hazardous Materials and/or Protected Materials in an area in which Utility will be working and MTA is required by an Environmental Law or otherwise to take some action with respect to the Hazardous Materials such as containment, cleanup, removal, restoration or other remedial work ("Remedial Work"), Utility shall not commence its Construction until the required Remedial Work has been completed by MTA at its sole cost and expense. However, if the presence of Hazardous Materials that are in violation of applicable Environmental Laws is directly caused by the Utility or its facilities, Utility will take immediate action at its sole cost and expense to complete the Remedial Work necessary under Environmental Law.

12.3.2 If, after it commences work, Utility discovers the existence of a Hazardous Substance in the site on which it is working on a Rearrangement, Utility shall immediately suspend its

work and notify MTA of its discovery. MTA shall immediately determine if any Remedial Work is reasonably necessary or required by any Environmental Law. If any Remedial Work is reasonably necessary or required by any Environmental Law, MTA shall immediately commence, or cause to be commenced, and thereafter diligently prosecute to completion, all such Remedial Work at its sole cost and expense. Utility shall not continue its work until MTA has completed the Remedial Work in accordance with the law(s) that required it. However, if the presence of Hazardous Materials that are in violation of applicable Environmental Laws is directly caused by the Utility or its facilities, Utility will take immediate action at its sole cost and expense to complete the Remedial Work necessary under Environmental Laws. The Party discovering Hazardous Materials and/or Protected Materials shall make any required notifications to federal, state, and/or local agency(ies) in accordance with applicable law.

#### 12.4 Indemnity by MTA

MTA shall indemnify, defend at Utility's request with counsel selected by Utility subject to MTA's reasonable approval, and hold harmless Utility and its affiliated companies and their officers, employees, agents and contractors from any and all claims, judgments, damages, penalties, fines, costs, liabilities (including sums paid in settlements of claims) and losses, including attorneys' fees, consultant fees, and expert fees that arise during or after Utility's work on the Transit Project from or in connection with the presence or suspected presence of Hazardous Materials on a site on which Utility performed work for a Rearrangement, unless (i) the presence of Hazardous Materials that are in violation of applicable Environmental Laws is directly caused by activities or omissions of Utility, its employees, representatives, agents or Contractors or (ii) any soil contamination or Hazardous Material existing prior to the Rearrangement work, including any such contamination or Hazardous Materials discovered during Construction work performed for the relocation and (iii) MTA's breach of MTA's representations and warranties in this Subsection 12. 4.

### Article 13

#### Resolution of Disputes

In the event of a claim or dispute arising out of or relating to this Agreement, both parties shall make good faith efforts to resolve the claim or dispute through negotiation, including mediation. All disputes shall be subject to the provisions of this Article. Utility and MTA shall act promptly and diligently to mutually resolve any disputes which may arise with respect to this Contract.

### 13.1 Continuation of Performance

13.1.a. MTA Discretion – The existence and details of a dispute notwithstanding, both parties shall continue, without delay, their performance hereunder, except for any performance which MTA, in its sole and absolute discretion, determines should be delayed as a result of such dispute. MTA shall continue to pay sums not in dispute, during any such period of continued performance.

13.1.b. Failure to Continue Performance – If Utility fails to continue its performance hereunder, which MTA in its sole and absolute discretion, determines should not be delayed as a result of such dispute, then any additional costs which may be incurred by MTA as a result of Utility's failure to continue to so perform shall be borne by Utility, and Utility shall make no claim whatsoever against MTA for such costs. Utility shall promptly reimburse MTA for such MTA costs, as determined by MTA or MTA may deduct all such additional costs from any amounts due to Utility from MTA.

13.2 Resolution Processing the event of any dispute between the Parties with respect to this Agreement:

1. Utility and MTA shall submit the matter to their respective Project Managers and Contract Administrators to resolve the dispute.
2. If the Project managers and Contract Administrators are unable to resolve the dispute within a reasonable time not to exceed five (5) days from the date of submission of the dispute to them, then the matter shall immediately be submitted to Utility's Chief Executive Officer and to MTA's Chief Executive Officer, or their designees, to resolve the dispute.
3. In the event that contractor's CEO and MTA's CEO are unable to resolve the dispute within a reasonable time, not to exceed twenty (20) days, from the date of submission of the dispute to them, then each party may assert its other rights and remedies provided under this Agreement and /or any rights and remedies as provided by Law.

### 13.3 Documentation of Disputes

All disputes utilizing this dispute resolution procedure shall be documented in writing by each party and shall state the specifics of each alleged dispute and all actions taken. The parties shall act in good faith to resolve all disputes. At all levels described in this Article, the efforts to resolve a dispute shall be undertaken by conference between the

parties' respective representatives, either orally, by face-to-face meeting or by telephone, or in writing by exchange of correspondence.

## Article 14

### Federal and Other Requirements

#### 14.1 Inspection and Audit

This Agreement, as to certain Transit Projects, may be subject to a financial assistance agreement with the U.S. Department of Transportation, Federal Transit Administration, and as such is subject to the following terms and conditions as to such Transit Projects only:

Utility agrees to comply with all financial record keeping, reporting and such other requirements that are imposed by law as a condition to or requirement of funding obtained by MTA from third parties (provided that MTA gives reasonable notice of such requirements to Utility in writing at least thirty (30) days before requiring compliance with the same). Utility shall permit the authorized representatives of MTA, the U.S. Department of Transportation, the Comptroller General of the United States, and any other government agency providing funding or oversight on a Transit Project, to inspect and audit (and if required by law to copy) during normal business hours and upon reasonable notice, all non-privileged relevant records maintained by Utility relating to performance by Utility, its contractors and subcontractors (as appropriate) under any Work Order issued to Utility for such Transit Project or Rearrangements of Utility Facilities related thereto, from the date of this Agreement through and until expiration of three (3) years after the later of (a) the accepted completion of all Rearrangements for such Transit Project and payment of all final billings owed to Utility related to such Transit Project and related Rearrangements, or (b) such later date as is required by the rules and regulations of any such government agency (provided that MTA gives reasonable prior written notice of such later date to Utility). Each Party shall bear its own costs and expenses in connection with undertaking any audit, and in responding thereto. Examination of a document or record on one occasion shall not preclude further examination of such document or record on subsequent occasions.

Utility shall agree to comply with Buy America regulations as identified in Title 49 USC § 5323(j)(1) and the applicable regulations in 49 CFR Part 660 and 661. Utility's material list shall be provided to MTA upon Utility completing its 85% design level plans. Material list shall identify each material to be used on the relocation and whether the material is compliant with Buy America or not. Should material not be compliant, an action plan by Utility shall be generated and submitted to MTA within 30 calendar days. Action plan shall include a summary of options to obtain compliant material in order to meet MTA schedule.

#### 14.2 Prohibited Interests

No member, officer or employee of MTA, or of a local public body, during his or her tenure or for one (1) year thereafter shall have any interest, direct or indirect, in this Agreement or the proceeds thereof. To MTA's knowledge, no board member, officer or employee of MTA has any interest; whether contractual; non contractual, financial or otherwise in this transaction, or in the business of Utility.

#### 14.3 Equal Employment Opportunity

In connection with the performance of this Agreement, Utility and MTA shall not discriminate against any employee or applicant for employment because of age, race, religion, color, sex, national origin or disability. The Utility and MTA shall act in compliance with applicable laws to ensure that applicants are employed, and that employees are treated during their employment, without regard to their age, race, religion, color, sex or national origin. Such action shall include, but not be limited to the following: Employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship.

#### 14.4 Disadvantaged Business Enterprise

In connection with the performance of this Agreement, Utility will cooperate with MTA in meeting all applicable federal regulations with regard to the maximum utilization of disadvantaged business enterprises, and both Parties will use their best efforts to ensure

that disadvantaged business enterprises shall have the maximum practicable opportunity to compete for subcontract work under this Agreement.

#### 14.5 Prior Approval

This Agreement and all amendments thereto are subject to U.S. Department of Transportation, Federal Transit Administration review and approval.

#### 14.6 Non-Discrimination

Without limiting any other provision of this Article 14, Utility and MTA agree to comply, and to cause all of their contractors to comply, with all applicable state and federal non-discrimination laws, rules and regulations.

#### 14.7 Buy America

This contract shall be construed in accordance with the Federal, State and Local law of California. Including Title 49.661.13 of which, the Utility shall adhere to the Buy America clause set forth therein.

#### 14.8 Debarment and Suspension

Utility shall comply with all FTA EPLS requirements as it relates to Debarment and Suspension. Requirements are stated by following the link below.

<http://www.epls.gov>

### Article 15

#### Miscellaneous Provisions

#### 15.1 Approvals, Further Documents, and Actions

15.1.1. Any acceptance, approval, consent, permission, satisfaction, agreement, authorization or any other like action (collectively, "Approval") required or permitted to, be given by any Party hereto pursuant to this Agreement or any Work Order:

(a) must be in writing to be effective (except as otherwise specifically allowed by this Agreement); and

(b) shall not be unreasonably withheld, conditioned or delayed; and if Approval is withheld, such withholding shall be in writing and shall state with specificity the reasons for withholding such Approval, and every effort shall be made to identify with as much detail as possible what changes are required for Approval.

15.1.2 The Parties agree to execute such further documents, agreements, instruments, and notices, and to take such further actions, as may be necessary or appropriate to effectuate the transactions contemplated by this Agreement.

15.1.3 Except as otherwise provided in this Agreement, all notices or communications pursuant to this Agreement shall be in writing and shall be sent or delivered to the following:

15.1.4

To Utility:

Adam Weyer

Enwave Energy Corporation

2052 Century Park East

Los Angeles, CA 90067

To MTA:

Chief Executive Officer

Los Angeles County Metropolitan Transportation Authority

One Gateway Plaza

Los Angeles, California. 90012

Any notice or demand required shall be, given (a) personally, (b) by certified or registered mail, postage prepaid, return receipt requested or (c) by reliable messenger or overnight courier to the address of the respective Parties set forth above.

Any notice served personally shall be deemed delivered upon receipt, and served by certified or registered mail or by reliable messenger or overnight courier shall be deemed delivered on the date of receipt as shown on the addressee's registry or certification of receipt or on the date receipt is refused as shown on the records or manifest of the U.S. Postal Service or such courier. Utility or MTA may from time to time designate any other address or addressee or additional addressees for this purpose by written notice given to the other Party in accordance with this Section 15.1.4.

15.2. Alternate Notice. The Parties may also designate other procedures for the giving of notice as required or permitted under the terms of this Agreement, but each such alternate procedure shall be described, in writing and signed by the MTA Representative and by the Utility Representative.

#### 15.3 Assignment; Binding Effect

Neither Party shall assign its interest in this Agreement without prior consent of the other Party. Any permitted assignment shall bind and inure to the benefit of the respective successors and permitted assigns of the Parties.

#### 15.4 Waiver

The failure of any Party at any time or times to require performance of any provision hereof shall in no manner affect the right at a later time to enforce the same. No waiver by any party of any condition, or of any breach of any term, covenant, representation, or warranty contained herein, in any one or more instances, shall be deemed to be or construed as a further or continuing waiver of any such condition or breach or waiver of any other condition or of any breach of any other term, covenant, representation or warranty.

#### 15.5 Entire Agreement; Modification

No alteration or variation of the terms of this Agreement shall be valid unless made in writing and signed by the Parties hereto and no oral understanding or agreement not incorporated herein shall be binding on either of the Parties hereto.

#### 15.6 Time



15.6.1. In accomplishing all work and performing all other acts required under this Agreement, time is of the essence.

15.6.2. All references to "days" herein shall be deemed to refer to calendar days, unless otherwise specified.

### 15.7 Legal Rights

This Agreement shall be governed by and construed and enforced in accordance with the laws of the State of California. The rights and remedies of MTA and Utility for default in performance under this Agreement or any Work Order are in addition to any other rights or remedies provided by law. As used in this Agreement, the masculine, feminine and neuter, genders, and the singular and plural numbers shall each be deemed to include the other or others whenever the context so indicates.

### 15.8 Headings

The headings that appear at the commencement of each Article and Section are descriptive only and for convenience in reference to this Agreement. Should there be any conflict between any heading and the Article or Section itself, the Article or Section itself and not the heading shall control as to construction.--

### 15.9 Incorporation of Exhibits and Addenda

Every Exhibit and Addendum to which reference is made in this Agreement is hereby incorporated in this Agreement by this reference.

### 15.10 Counterpart Originals

This Agreement may be executed in any number of counterparts, each of which shall be deemed to be the original, and all of which together shall constitute one and the same instrument.

### 15.11 Force Majeure

Neither Party shall be held liable for any loss or damage due to delay or failure in performance of any part of this Agreement from any cause beyond its control and without its

fault or negligence; such causes may include acts of God, acts of civil or military authority, government regulations (except those promulgated by the Party seeking the benefit of this section), embargoes, epidemics, war, terrorist acts, riots, insurrections, fires, explosions, earthquakes, nuclear accidents, floods, strikes, power blackouts, other major environmental disturbances or unusually severe weather conditions; provided, however, that lack of funds or funding from the Respective Party shall not be considered to be a cause beyond a Party's control and without its fault or negligence. The foregoing events do not constitute force majeure events where they are reasonably foreseeable consequences of Construction. If any of the foregoing events occur, Utility agrees, if requested by MTA, to accelerate its efforts hereunder if reasonably feasible in order to regain lost time, so long as MTA agrees to reimburse Utility for the incremental actual costs of such efforts.

#### 15.12 Construction

The language in all parts of this Agreement shall be in all cases construed simply according to its fair meaning and not strictly for or against either of the Parties.

#### 15.13 Survival

The representations, warranties, indemnities, waivers and dispute resolution provisions set forth in this Agreement, all payment obligations hereunder incurred prior to termination of this Agreement, and all other provisions that by their inherent nature should survive termination of this Agreement, shall survive the termination of this Agreement for any reason whatsoever, and shall remain in effect unless and until terminated or modified in writing by mutual agreement.

#### 15.14 Benefit

Nothing in the provisions of this Agreement is intended (a) to create duties for, obligations to, or rights in third parties not parties to this Agreement, except to the extent that, specific provisions (such as the indemnity provisions) identify third parties and provide that they are entitled to benefits hereunder, or (b) to affect the legal liability of either Party to the Agreement by imposing any standard of care with respect to the development, design, construction, operation or maintenance of highways, Transit Projects and other public facilities that is different from the standard of care imposed by law.

15.15 Severability

If any part of this Agreement is found to be invalid or unenforceable by a ruling or decision reached in accordance with Article 13, or otherwise by a court having proper jurisdiction, such finding shall not invalidate the remaining portions hereof, but such provisions shall remain in full force and effect to the fullest extent permitted by law; provided, however, that the Parties shall immediately renegotiate, reasonably and, in good faith, the terms or provisions found to be invalid, as well as any other terms and provisions as necessary to achieve as nearly as possible the Parties' original contractual intent.

15.16 Governing Law

This  
Agree

ment shall be governed by and construed and enforced in accordance with the laws of the State of California.

[SIGNATURES APPEAR ON FOLLOWING PAGES]

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed as of the date first written above.

Name: \_\_\_\_\_

APPROVED AS TO FORM:

\_\_\_\_\_

“UTILITY”

Enwave,

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

"MTA"

LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY

**By:** \_\_\_\_\_

**Name:** Phillip A. Washington

**Title:** Chief Executive Officer

**Date:** \_\_\_\_\_

APPROVED AS TO FORM:

\_\_\_\_\_

**Exhibit 1**

**FORM 60**

**(See Attached)**



## Board Report

File #: 2018-0011, File Type: Project

Agenda Number: 21.

### CONSTRUCTION COMMITTEE MARCH 15, 2018

**SUBJECT: METRO BLUE LINE TRACK AND SYSTEM  
REFURBISHMENT**

**ACTION: ESTABLISH A LIFE OF PROJECT BUDGET**

#### **RECOMMENDATION**

ESTABLISH a Life-of-Project (LOP) Budget of \$90,779,817, utilizing \$44,581,402 available FY19 funds from existing capital projects, for the Metro Blue Line Track and System Refurbishment Project (205115).

#### **ISSUE**

The Metro Blue Line (MBL) opened in 1990 and is Metro's oldest operating rail line. Major railway infrastructure components on the MBL are nearing the end of their useful life and require constant replacement, rehabilitation, and upgrade enhancements to continue to meet safety and service reliability standards.

#### **DISCUSSION**

The MBL has been in continuous operation for over 27 years and rail infrastructure components have reached the end of useful life and require replacement, upgrades and modernizations. Many of the MBL's existing infrastructure equipment are no longer supported by the Original Equipment Manufacturers and will result in longer repair times if not replaced or upgraded with new equipment. Delay in addressing this in a timely manner will result in customer impacts that include major service delays and may compromise passenger safety.

As a State of Good Repair project, the scope of the MBL Track and System Refurbishment Project will:

- 1) Upgrade and rehabilitate the Expo/Blue Line junction located at the corner of Washington and Flower streets
- 2) Upgrade and rehabilitate two double crossovers at 7th & Metro Station
- 3) Upgrade the Overhead Catenary System (OCS) to Overhead Catenary Rail (OCR) under the I-10 Bridge in the Central LA business district
- 4) Rehabilitate the OCS from Washington Station to Willow Station and portions of the OCS

- feeding the Blue Line yard near Del Amo Station
- 5) Replace direct fixation rail fasteners and installation of fall protection at elevated sections of the MBL
  - 6) Repair and replace cable duct bank along the right-of-way from LA River Bridge to Wardlow Station
  - 7) Replace rail, reconstruct crossing panels, and install anti-corrosive booting south of Willow Station through the Long Beach Loop
  - 8) Replace ten track turnouts at main yard interlocking and Imperial crossover
  - 9) Convert signals along the Expo Line and Blue Line to the new standard aspect lighting configuration
  - 10) Install station and wayside infrastructure improvements at MBL stations to support the Wrong Side Door Opening project
  - 11) Install station and wayside infrastructure improvements at Wardlow and 5th Street Stations to support the future Fare Gate project

The project will be completed when the MBL is shut down in segments for an eight month period. This service approach supports the MBL Signal System Rehabilitation (Contract RFP No. C1081) and Willowbrook/Rosa Park Station Improvements (Contract RFP No. C1161) projects. Performing this work during the scheduled shutdown will result in overall time and cost savings. Attachment A outlines the work breakdown for the MBL Track and System Refurbishment Project. Rail service will be replaced with an alternative service plan that will provide express and local service for Metro patrons during the duration of the shutdown. Staff will return to the board in late 2018 to provide comprehensive operations service plan/mitigation details along with complete communications/outreach planning information in preparation for the MBL shutdown which will take place in segments.

This project is part of Metro's commitment to deliver a robust State of Good Repair program that invests in modernization and enhancements to renew asset life and reduce asset breakdowns that impact daily service and customer experience.

### **DETERMINATION OF SAFETY IMPACT**

Approval of the recommendation will have a positive impact on safety and reliability as the project work scope will move forward to ensure compliance with the replacement cycle specifications for the MBL. Further, maintaining the rail system in a State of Good Repair is essential to providing safe and reliable service to patrons who ride the Metro Rail system daily.

### **FINANCIAL IMPACT**

This action will establish an LOP budget of \$90,799,817 for the replacement of the MBL rail track and system infrastructure upgrades. The LOP will encompass available funds from existing MBL capital projects, including the MBL Replacement and Booting (205093), Long Beach Duct Bank Upgrade Phase 2 (205088), MBL Turnout (205101), and Correct Door Enable on LRT (214002). Contingent upon Board approval of the FY19 budget, funds in the amount of \$44,581,402 will be budgeted. Since this is a multi-year project, the Project Manager will ensure that the balance of funds is budgeted in FY 20. The expenditure plan reflecting sources and usage of funds is shown in



Attachment A.

The costs for the alternative service plan and customer service support will be incurred under Operating projects 306001 (Operations Transportation) and 300022 (Rail Operations - Blue Line), respectively.

Impact to Budget

The source of funds for the Capital component of this project will come from State (TDA4) and local funding sources (PA35%) that are eligible for Rail Capital Projects. Alternative service planning and support will come from Enterprise funds. Use of these funding sources will maximize allowable funding allocation given funding provisions.

**ALTERNATIVES CONSIDERED**

The Board may choose not to authorize the life-of-project budget for 205115. This alternative is not recommended by Metro staff because without proceeding to replace track and infrastructure components, any failure(s) may cause extended delays in MBL service. Furthermore, not performing or deferring these replacements and upgrades is not recommended as rail infrastructure components are safety sensitive; and if not properly maintained, will impact service passenger safety and reliability. Additionally, unscheduled maintenance repair costs on a per component basis will result in higher operating costs versus reduced costs when consolidating and the performing work during a shutdown where efficiencies can be leveraged.

**NEXT STEPS**

Upon Board approval, Metro Transit Project Delivery and Maintenance of Way (MOW) Engineering will proceed forward with preparation of engineering specifications, contract solicitation, evaluation, and contract award in late FY18.

**ATTACHMENTS**

Attachment A -205115 Work Breakdown and Expenditure Plan

Prepared by: Marshall Epler, DEO, Systems Engineering, (213) 617-6232  
Geyner Paz, Senior Administrative Analyst, (213) 617-6251  
Errol Taylor, Senior Executive Officer, Rail Maintenance and Engineering, (213) 922-3227

Reviewed by: James T. Gallagher, Chief Operations Officer, (213) 418-3108



Phillip A. Washington  
Chief Executive Officer

**CP 205115 - Work Breakdown and Expenditure Plan**  
**Metro Blue Line Track and System Refurbishment Project**

<b>Use of Funds</b>		<b>FY 19</b>	<b>FY 20</b>	<b>Total</b>
<b>Construction Phase</b>				
1	Construction Elements	\$ 41,624,402	\$ 33,093,565	\$ 74,717,967
2	Rehabilitation of Expo/Blue Line Junction			
3	Crossover(s) at 7th/Metro Station			
4	Conversion of OCS to Overhead Catenary Rail			
5	Rehabilitate Mid Corridor OCS			
6	Installation of Track Fasteners & Fall Protection			
7	Replacement of Del Amo Duct Bank			
8	Rail Replacement and Booting			
9	Replacement of track turnouts			
10	Standardization of Signal Aspect			
11	Station Improvements for Door Enable system			
12	Infrastructure for Fare Gates at Wardlow & 5 <sup>th</sup> Street			
13	Design Support During Construction (DSDC)	\$ 100,000	\$ 40,000	\$ 140,000
14	Construction Management Consultants (CMC)	\$ 2,154,000	\$ 898,000	\$ 3,052,000
15	Special Conditions (3rd Party Agreements)	\$ 250,000	\$ 500,000	\$ 750,000
16	Agency Costs: Project Management, Project Control, Procurement, Corporate Safety Support, etc.	\$ 453,000	\$ 188,000	\$ 641,000
17	Project Contingency 15%	\$ -	\$ 11,498,850	\$ 11,498,850
Total Project Fund Use		\$ 44,581,402	\$ 46,218,415	\$ 90,799,817
<b>Sources of Funds</b>				
17	Local (PA35%) State (TDA4)	\$ 44,581,402	\$ 46,218,415	\$ 90,799,817



**Board Report**

---

**File #:** 2018-0089, **File Type:** Oral Report / Presentation

**Agenda Number:** 33.

---

**CONSTRUCTION COMMITTEE  
MARCH 15, 2018**

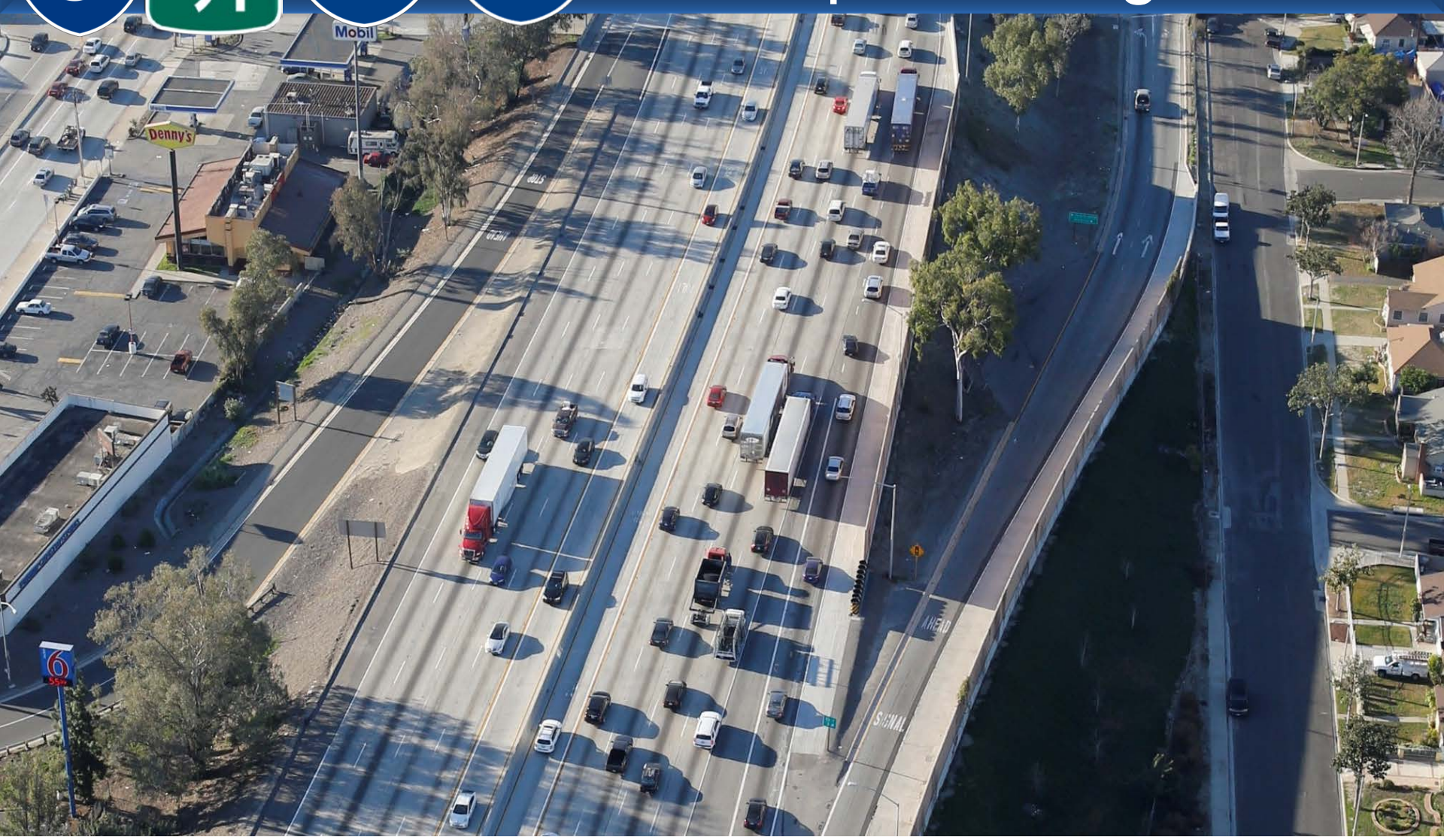
**SUBJECT: 605 HOT SPOTS**

**ACTION: RECEIVE ORAL UPDATE**

**RECOMMENDATION**

RECEIVE oral update on 605 Hot Spots.

# “Hot Spots” Program





# “Hot Spots” Program

## Program Summary

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





# "Hot Spots" Program

I-605/Valley Blvd.

SR-60/7th Ave.

I-605/Beverly Blvd.

SR-91/I-605

SR-91/Central Ave.

SR-91/Wilmington

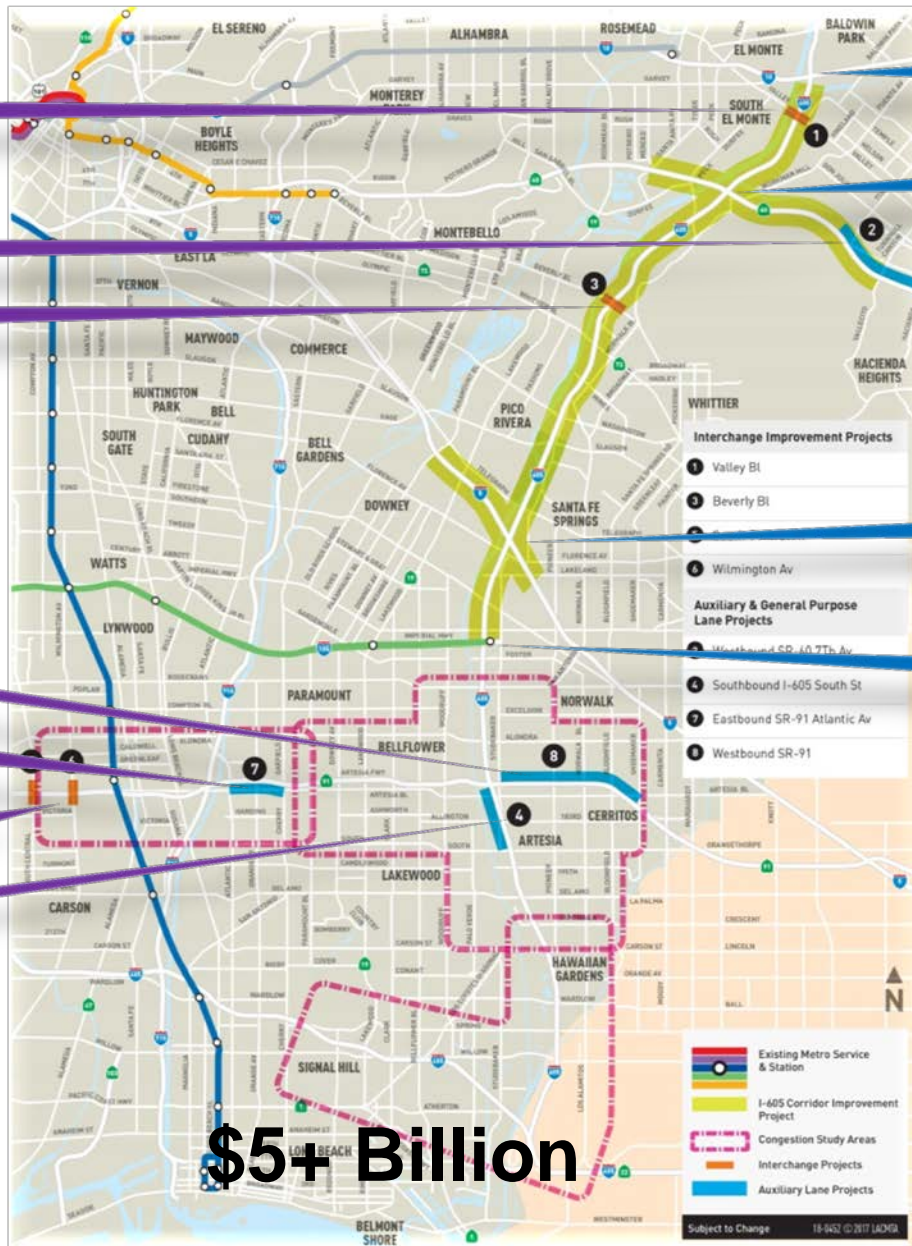
I-605/South St.

I-605/I-10

I-605/SR-60

I-605/I-5

I-605/I-105



+ Over 30 Arterial Intersection Improvements

## \$5+ Billion



### Metro



# “Hot Spots” Program

## Early Action Projects

### Freeways

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

### Arterials

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





# Valley Blvd.



New Intersection

Reconfigure Valley Blvd.

Widen Temple St./Rt. Turn Lane

New On-Ramp

2018: PAED/PS&E  
2020: Construction

Valley Inn

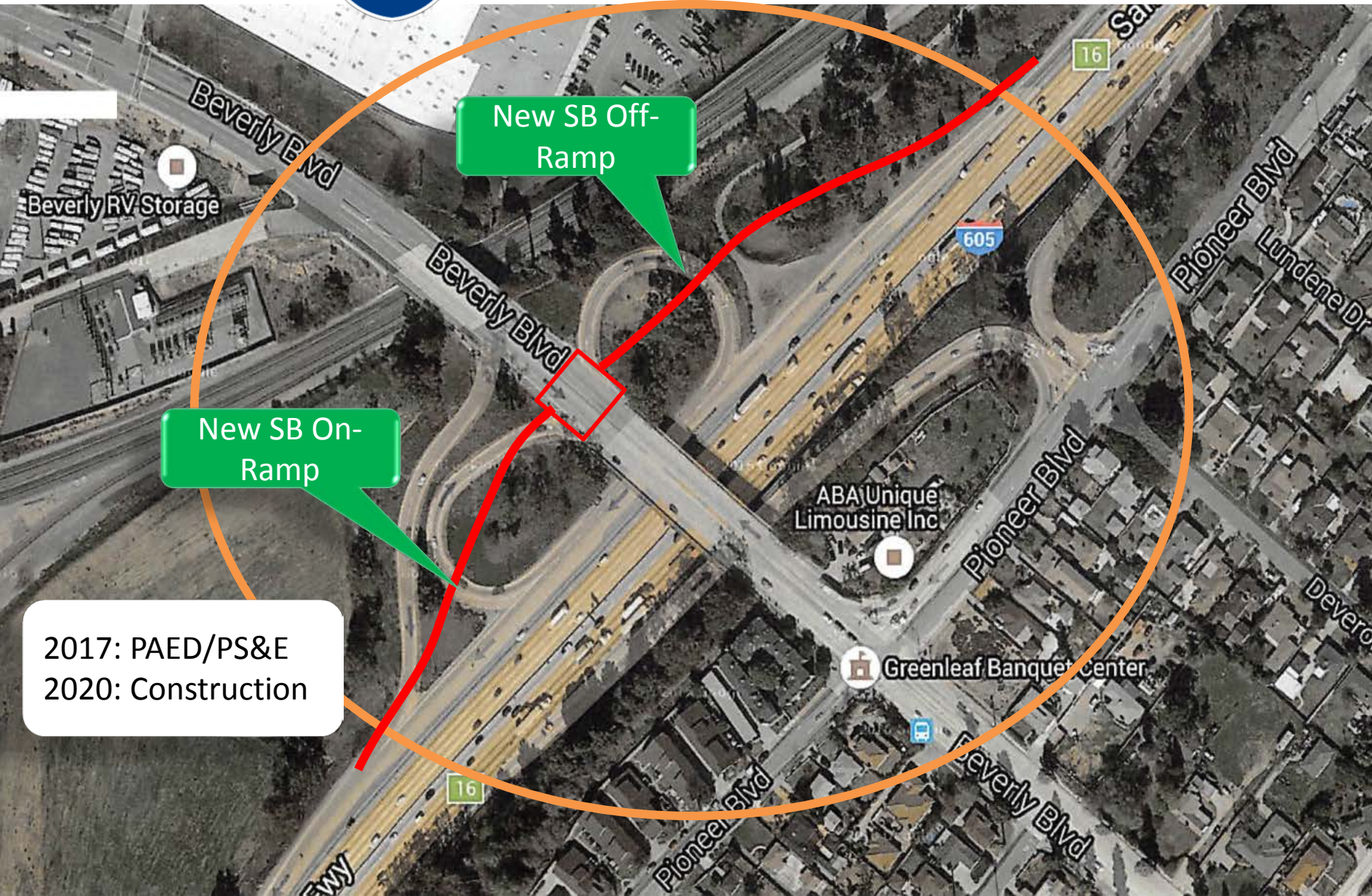
El Taco-Nazo  
Counter-serve,  
Baja-style Mexican food

Frimand's Public School





# Beverly Blvd.



New SB Off-Ramp

New SB On-Ramp

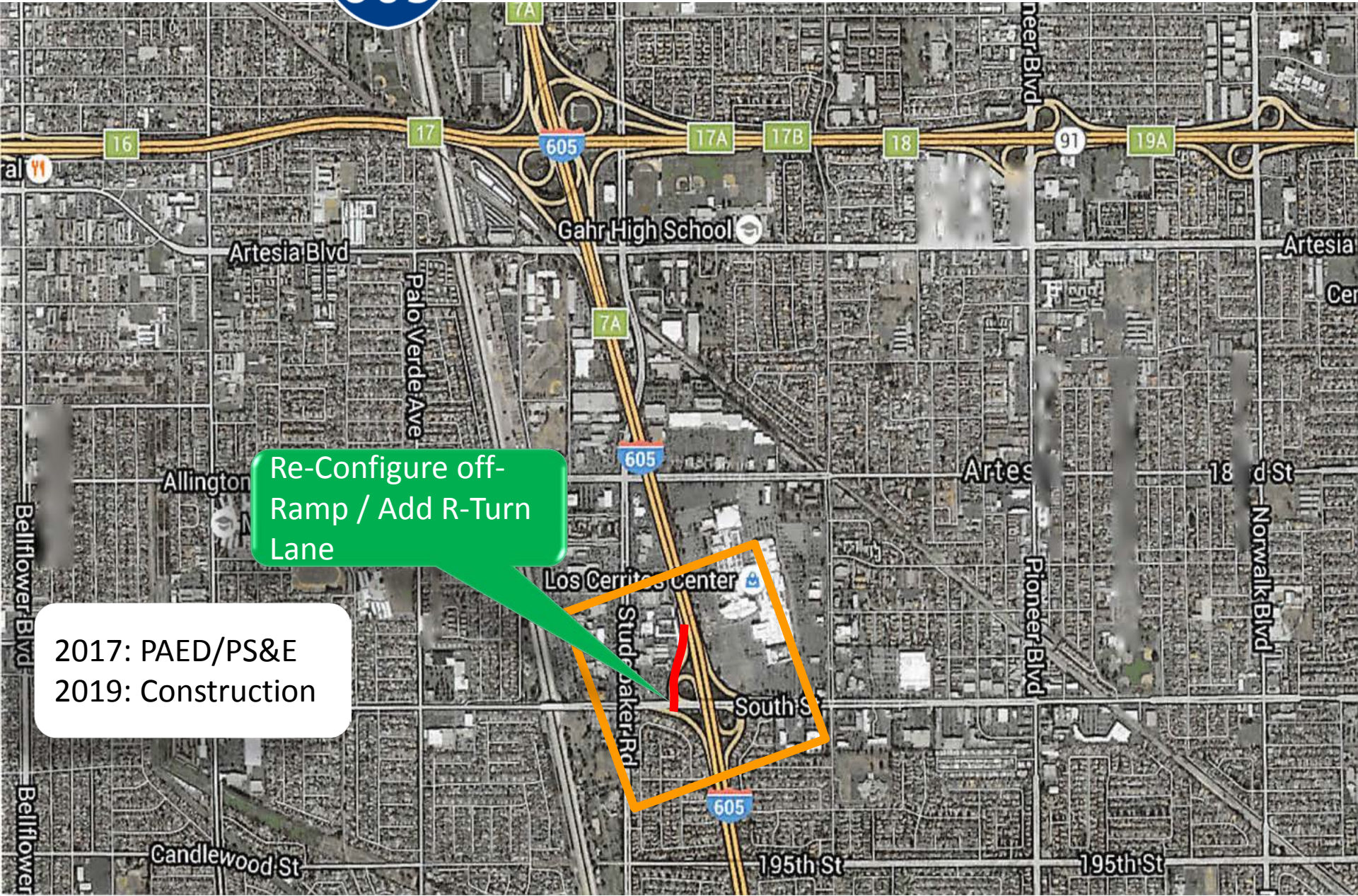
2017: PAED/PS&E  
2020: Construction







# South Street

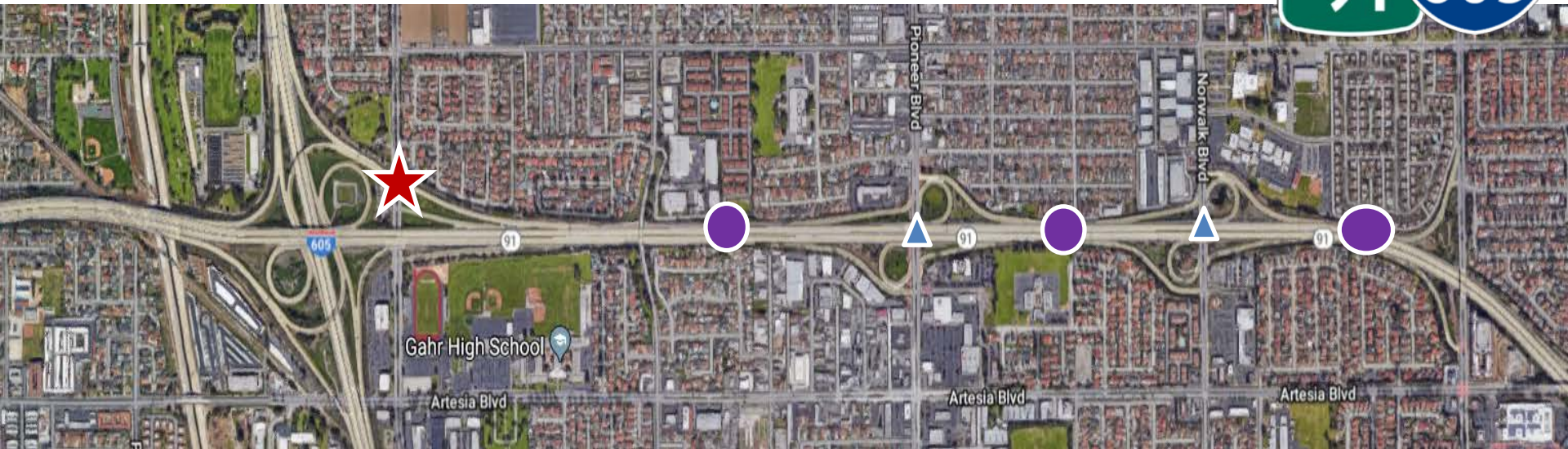


Re-Configure off-Ramp / Add R-Turn Lane

2017: PAED/PS&E  
2019: Construction



# WB SR-91 Improv. Project



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

# WB SR-91 Improvements Project



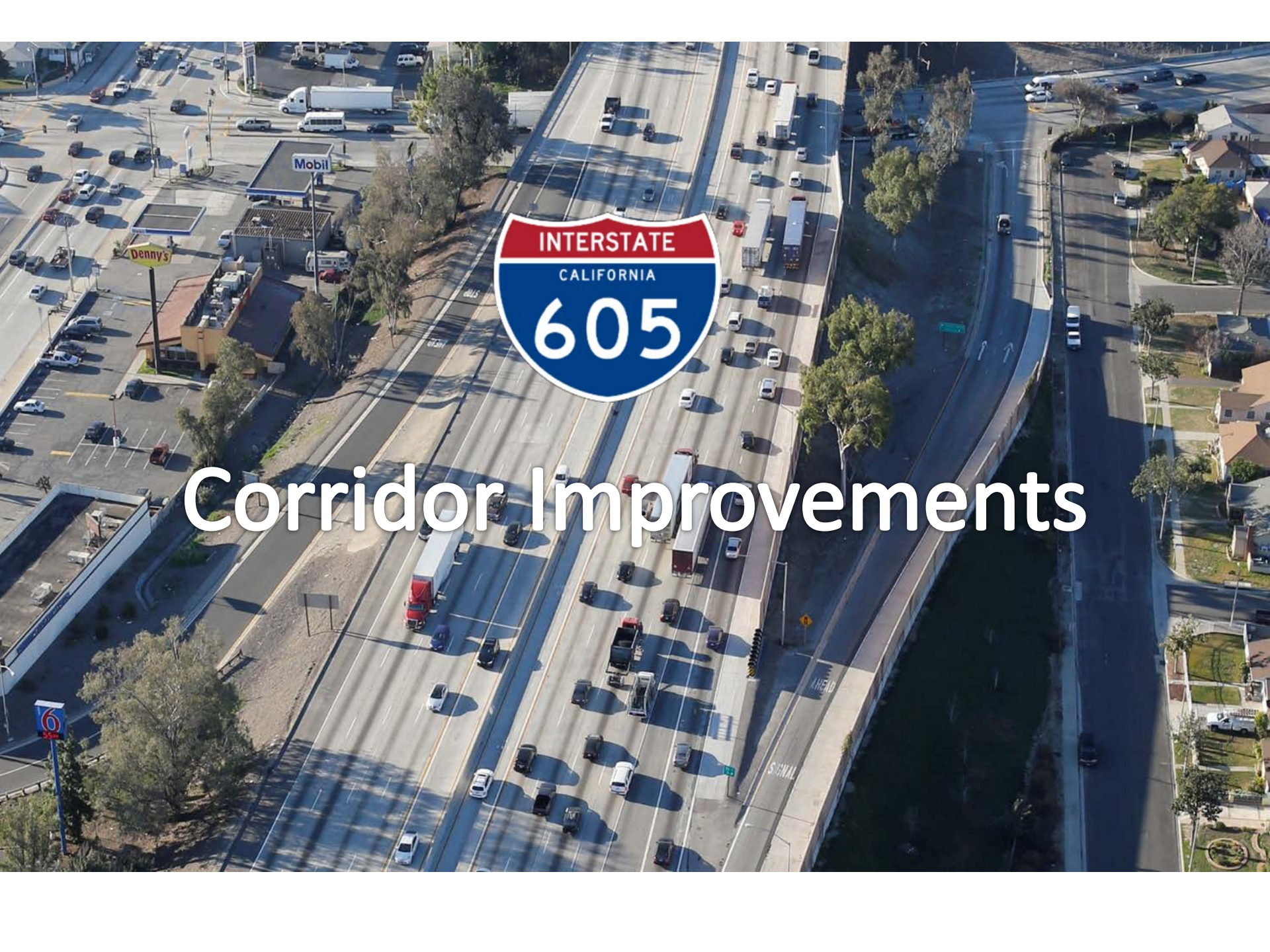
2015: PAED  
2019: PS&E  
2021: Construction

- Approximately 3 miles long
- Widen freeway and connector
- Improvements on Pioneer Blvd., Norwalk Blvd., Bloomfield Ave., and Artesia Blvd.





# Corridor Improvements



# I-605 Corridor Improvements



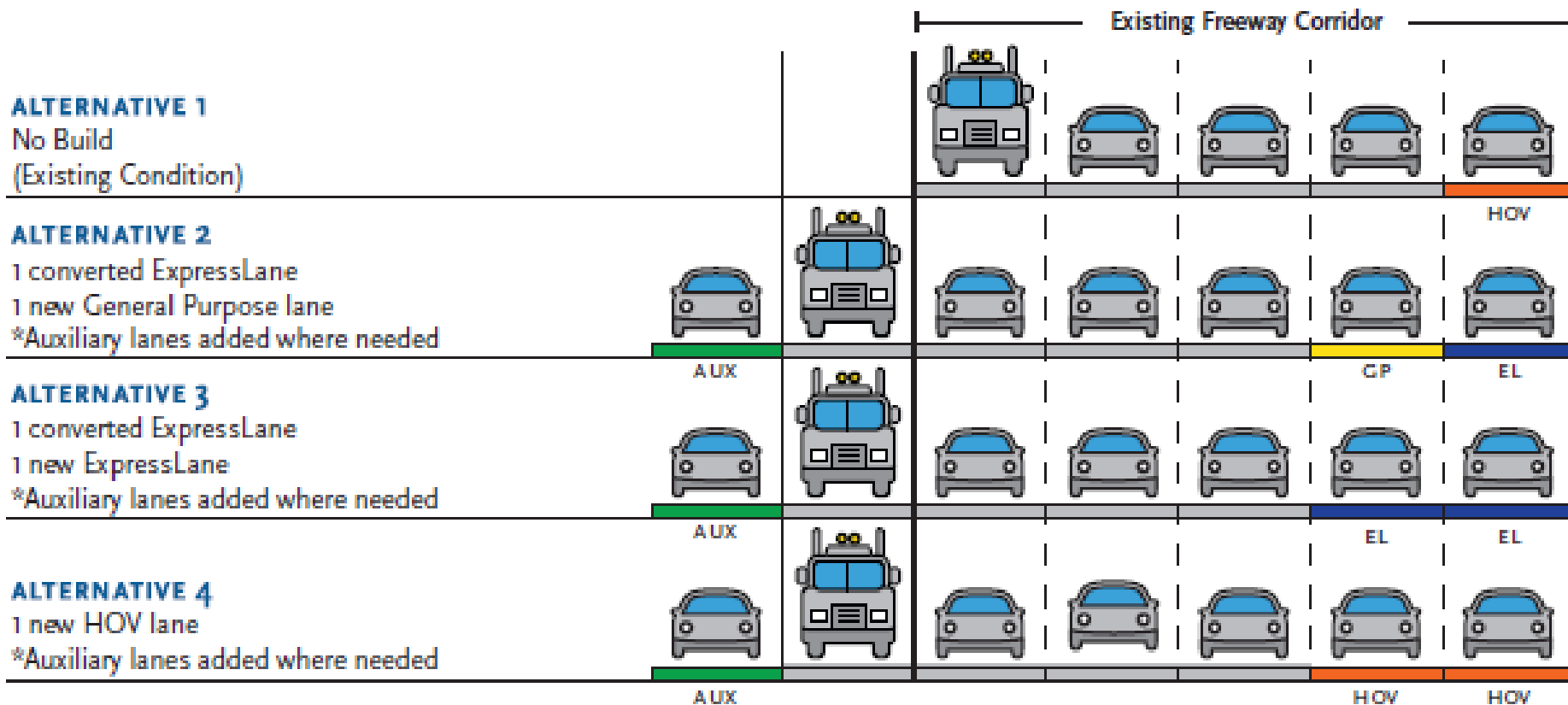
## Project Goals

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

## Timeline

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

# I-605 Corridor Improvements





# I-605 Corridor Improvements



## **I-605 Improvements:**

- Add one NB and one SB lane (GP, HOV, or ExpressLane)
- Add auxiliary lanes between on- and off-ramps
- Improvements to interchanges

## **SR-60 Improvements:**

- Westbound:
  - Add one GP lane from I-605/SR-60 Interchange to Hacienda Blvd.
  - Add auxiliary lanes ahead of the I-605/SR-60 interchange
- Eastbound:
  - Add one GP lane from I-605/SR-60 Interchange to 7<sup>th</sup> Ave.

## **I-5 Improvements:**

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

## HOV/EL Direct Connectors Being Considered

### I-605/I-10 Direct Connectors:

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



### I-605/I-105 Direct Connectors:

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



# I-605 Corridor Improvements



## Key Milestones: Environmental Process



## Outreach

- October and November 2016:
  - 6 public Scoping Meetings
  - 2 Agency Scoping Meetings
- Project briefings:
  - Corridor Cities
  - State and Federal elected officials in the Gateway Cities region
  - Agencies
- Community Update Meetings on February 6-8 in Pico Rivera, Norwalk, and Whittier



## Gateway Cities Highway Program Manager

### **Ernesto Chaves**

Sr. Director

213.418.3142

[chavese@metro.net](mailto:chavese@metro.net)

## I-605 Capital Improvements

### **Isidro Pánuco**

Project Manager

213.922.4091

[i605corridor@metro.net](mailto:i605corridor@metro.net)

[metro.net/605hotspots](http://metro.net/605hotspots)

## SR 91 & Arterial Programs

### **Carlos Montez**

Project Manager

213.922.4782

[wbsr91@metro.net](mailto:wbsr91@metro.net)

[metro.net/605hotspots](http://metro.net/605hotspots)



# Thank You!

