# Westside Purple Line Extension Section 1 Project



# Westside Purple Line Extension Section 1 Project

MONTHLY PROJECT STATUS REPORT

THE PREPARATION OF THIS DOCUMENT HAS BEEN FINANCED IN PART THROUGH A GRANT FROM THE U. S. DEPARTMENT OF TRANSPORTATION, FEDERAL TRANSIT ADMINISTRATION (FTA).

July 2019

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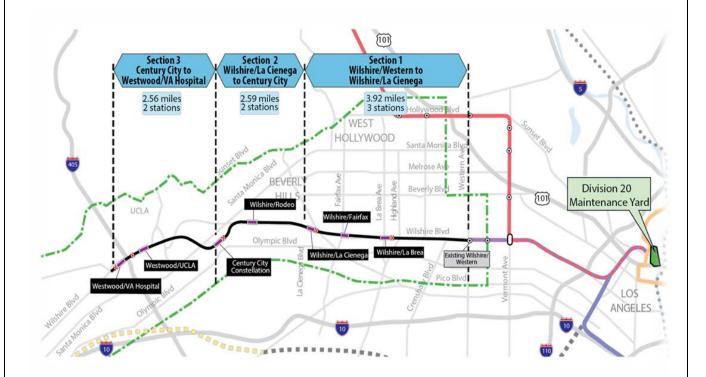
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# **PROJECT OVERVIEW**

## Project Background

Section 1 of the Westside Purple Line Extension Project is the first of three sections to be designed and constructed as part of the Los Angeles County Metropolitan Transportation Authority (LACMTA) Measure R Program. The program was approved by Los Angeles County voters in November 2008 and provides a half-cent sales tax to finance new transportation projects. In April 2012, the three sections of the Project were environmentally cleared and adopted by LACMTA Board of Directors.

Section 1 will extend the existing Purple Line by 3.92 miles beginning at the Wilshire/Western Station. From this station, the twin tunnel alignment will travel westerly within the existing Wilshire Boulevard right-of-way. Stations will be located at the intersections of Wilshire/La Brea, Wilshire/Fairfax, and Wilshire/La Cienega. All three of the station boxes will be located within the Wilshire Boulevard right-of-way with station portals extending to off-street entrances. Two of the stations, Wilshire/La Brea and Wilshire/Fairfax are within the jurisdiction of the City of Los Angeles. The Wilshire/La Cienega Station is within the City of Beverly Hills jurisdiction.



The Wilshire/La Brea Station box will be located under the center of Wilshire Boulevard in between Detroit Street and Orange Drive. A double crossover will be located east of the station box. The station entrance will be on the northwest corner of Wilshire Boulevard and La Brea Avenue.

The Wilshire/Fairfax Station box will be located under the center of Wilshire Boulevard west of Fairfax Avenue to west of Ogden Drive. The station entrance will be on the southeast corner of Wilshire Boulevard and Orange Grove Avenue.

The Wilshire/La Cienega Station box will be located under the center of Wilshire Boulevard immediately east of La Cienega Boulevard. A double crossover will be located east of the station box. The station entrance will be on the northeast corner of Wilshire Boulevard and La Cienega Boulevard. Since the station will be the terminus station for Section 1, tail tracks will be located west of the station box.

## Major Procurements

## Contract C1034 – Wilshire/Fairfax Exploratory Shaft

Metro constructed an exploratory shaft to observe ground conditions prior to the award of Contract C1045. The location of the exploratory shaft was adjacent to the future Wilshire/Fairfax Station. The construction of the shaft included furnishing and installing monitoring instruments, ventilation, and record and report instrumentation data during the excavation of the shaft. After construction of the shaft, the shaft was maintained for an observation period. Afterwards, the shaft was dismantled, and the site backfilled in a condition acceptable to the property owner. The contract was substantially completed on October 31, 2014.

## Contract C1048 – Wilshire/La Brea Advanced Utility Relocations

The work scope of this contract included the relocation of existing LADWP power, water utilities and a sewer line within the construction limits of the Wilshire/La Brea Station. The contractor was responsible for working in streets, procuring materials, and coordinating with the utility owner. The contractor constructed the new facilities in accordance with the utility plans and specifications, provided traffic control, restored streets, and supported utility crews installing cabling and during cut-over of the existing utilities. The contract was substantially completed on October 27, 2014.

## Contract C1055 – Wilshire/Fairfax Advanced Utility Relocations

The work scope of this contract included the relocation of existing LADWP power and water utilities within the construction limits of the Wilshire/Fairfax Station. The contractor was responsible for working in streets, procuring materials, and coordinating with the utility owner. The contractor constructed the new facilities in accordance with utility plans and specifications, provided traffic control, restored streets, and supported utility crews installing cabling and during cut-over of the existing utilities. The contract was substantially completed on October 7, 2015.

## Contract C1056 – Wilshire/La Cienega Advanced Utility Relocations

The work scope of this contract included the relocation of existing City of Beverly Hills water, storm drain and sewer utilities within the construction limits of the Wilshire/La

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Cienega Station. The contractor was responsible for working in streets, procuring materials, and coordinating with the utility owner. The contractor constructed the new facilities in accordance with utility plans and specifications, provided traffic control, restored streets, and supported utility crews during cut-over of the existing utilities. The contract was substantially completed on August 5, 2016.

# <u>Contract C1045 – Tunnels, Stations, Trackwork, Systems and Systems Integration</u> <u>Testing</u>

The procurement of this contract utilizes a two-step approach with the submittal of qualification statements through a Request for Qualification (RFQ) process, prequalification of qualified proposers followed by the release of a Request for Proposals (RFP) soliciting technical and price proposals with an option at Metro's discretion for Best and Final Offers (BAFO).

The Design/Build contract provides for final design and construction of the infrastructure along the 3.92-mile alignment. Contract scope includes demolition and removal of structures and clearing sites to facilitate construction operations. The structures to be constructed include twin bored tunnels, complete with cross-passages and walkways, including all mechanical, electrical and finish work. A retrieval shaft will be constructed to the west of the existing Wilshire/Western Station for extraction of the tunnel boring machines. Three underground stations are to be constructed, two with double-crossovers, and the terminus station to include tail tracks. Each station has a single entrance plaza with stairs, escalators and elevators which meet ADA requirements. The scope of work includes all architectural finishes, mechanical, electrical, systems and equipment including train control, traction power, communications, trackwork and the system tie-in to the existing Metro Purple Line, testing and commissioning.

# <u>Contract C1078 – Division 20 Maintenance-of-Way and Non-Revenue Vehicle Building</u> <u>Location 64</u>

The Design/Build contract provided for the final design and construction of a new Maintenance-Of-Way (MOW) stores and Non-Revenue Vehicle (NRV) building at the south end of the existing Division 20 Yard (Location 64). The displacement of the former MOW stores building and NRV facility are due to the future turn-back facility site in the yard. The contract was substantially completed on May 1, 2019.

## Metro Furnished Equipment

Metro has procured a contract to provide 34 Heavy Rail Vehicles (HRV) necessary to operate the extension to the Purple Line. An additional contract will be procured for the Universal Fare System (UFS). The scope of the HRV contract includes design, manufacturing, testing and delivery of the vehicles. The scope of the UFS contract will include design, fabrication and installation of equipment at the three stations and system testing.

## **Program Management**

The Westside Purple Line Extension Section 1 Project is being managed under the direction of an Integrated Project Management Office (IPMO). WSP provides engineering and design support services, while the Westside Extension Support Team (WEST) provides construction management support services. An overview of staffing is provided under the Staffing section of this report. The on-site program management team is also supported by Metro Headquarters resources to include, but not limited to, engineering, risk management, environmental, quality management, operations and creative services departments.

Project Schedule and Budget: The Revenue Service Date (RSD) is planned for 2023.

The Original Budget of \$3.2 billion reflects the Board approved Life of Project Budget, July 24, 2014, plus Finance Charges of \$0.4 billion. The Current Budget and Current Forecast remains the same this period at \$3.2 billion. A detailed Life of Project Budget forecast is included under the Budget and Cost Forecast Section of this report.

Funding has been secured from a variety of sources to include:

- Federal Section 5309 New Starts
- Federal Section 5339 Alternative Analysis
- Measure R TIFIA Loan (Transportation Infrastructure Finance & Innovation Act)
- Measure R 35%
- State STIP RIP
- CMAQ (Congestion Mitigation & Air Quality)
- State Capital Project Loans
- City of Los Angeles

<u>Construction and Community Relations:</u> The Construction and Community Relations team is tasked with promoting the Project and performing public outreach within the community to keep stakeholders informed of construction activities occurring along the Project alignment. To facilitate the communication, community leadership councils have been formed which represent geographic-based constituent groups along the Project.

The Project is also engaged in social media outreach and various marketing and advertising efforts designed keep the public informed and excited about the Project. These efforts are aimed at promoting businesses that are affected by construction. An overview of monthly activities is presented in the Construction and Community Relations section of this report.

<u>Start Up:</u> The commencement of pre-revenue operations will be determined by Metro. Generally, all systems integration testing will have been completed and passed. All testing will be required to include and pass a "stress test" of maximum operational service levels to be acceptable. Pre-Revenue Operations include train runs, especially those involving multiple trains, on the integrated and fully operational extension; rehearsal of expected revenue operations scenarios; as well as abnormal and emergency scenarios in which random combinations of system interactions are tested; equipment "burned-in"; and training of Metro personnel who will eventually operate and maintain the extension and for emergency services personnel. Activities occurring during Pre-Revenue Operations are carried out by a designated Metro Project Rail Activation Group.

# **EXECUTIVE SUMMARY**

In July, the Project achieved 51.3% completion based on earned value measurements for design and construction. The critical path of the project remains with Wilshire/La Cienega Station excavation and structural concrete activities. Excavation at the Wilshire/La Cienega Station is anticipated to complete in August 2019. The C1045 Design/Build Contract is on schedule to complete by the June 15, 2023, contract completion date, and the forecast Revenue Service Date (RSD) for the Project remains targeted for 2023.

### Design Status

The C1045 Contractor, Skanska, Traylor and Shea (STS), and their final design team, Parsons Transportation Group (PTG), completed final design in June 2017.

The Engineering Management Services (EMS) team continues to provide design support services during construction to the C1045 design/build contract.

### **Construction Status**

Both TBMs (#1 Soyeon and #2 Elsie) have broken through at the Wilshire/Western Retrieval Shaft in June 2019 and are in the process of being transported from the Western Shaft to the Wilshire/La Brea Station yard. Preparations for Reach One (1) cross passage work are scheduled to begin in October 2019. The Reach Two (2) tunnel drive, which runs from Wilshire/La Brea Station to Wilshire/Fairfax Station, is also scheduled to start in October 2019.

At Wilshire/La Brea Station, HDPE and rebar installation for exterior walls above the concourse slab continues. Placement of exterior wall concrete is scheduled for August 2019. Work on the concourse level high bay area is scheduled to begin in December 2019. TBM assembly for the Reach Two (2) tunnel drive is underway.

Invert rebar, MEP and concrete placement at Wilshire/Fairfax Station continues and is scheduled to complete in early September 2019. HDPE installation for the first lift walls is scheduled to commence in August 2019.

Level D strut installation and daily maintenance of dewatering wells continues at Wilshire/La Cienega Station. Excavation to invert elevation continues and is scheduled to complete in August 2019. Maintenance of surface aesthetics per the COBH MOA is ongoing.

The design/build contractor for the Division 20 Maintenance-of-Way and Non-Revenue Vehicle Building Location 64 Contract (C1078) achieved substantial completion on May 1, 2019. Final punch list items continue to be worked on by the contractor. *The process of moving Metro staff into the new building is anticipated to complete in August 2019. An environmental abatement assessment of the existing Division 20 Building is also scheduled to be performed in August 2019.* 

### Cost and Schedule Summary

For the C1045 Design/Build contract, Metro has received the July 2019 schedule update, which reports the substantial completion date finishing 21 calendar days after the June 15, 2023 contractual date. With the current mitigation efforts that have been implemented for excavation at the Wilshire/La Cienega Station, it is anticipated that the contractual completion date will be achieved.

The critical path of the project remains Wilshire/La Cienega Station excavation and structural concrete activities, followed by traction power installation at Wilshire/La Cienega Station, testing and pre-revenue operations. A summary graphic of the critical path is found on Page 13.

Long range schedule planning for the second half of the project through substantial completion of the C1045 continues. The immediate goal is to incorporate the current construction approach into the monthly schedule update for the following remaining components of work:

- Phasing between TBM mining, cross passages, tunnel concrete, tunnel/cross passage MEP and track (rail); and follow-on milestones for systems (wayside) access.
- Scope of work/sequence associated with station concrete.
- Detail MEP schedule for all three stations, including permanent power and systems integrated testing.
- Detail appendage schedule for all three stations.
- Early systems/tie-in at Wilshire/Western Station.

Potential schedule impacts are being identified and assessed as this long-range plan continues to be refined.

	Original Contract Date/Duration	Time Extension (CD)	Current Contract Schedule	Forecast (Metro PMS)	Variance CD (Trending)
NTP	01/12/2015				
Substantial Completion	06/9/23	6	07/06/23	06/15/23	-21 days

### C1045 Design-Build Contract Schedule Metrics

Project costs continue to track within budget and projected contingency limits. To date, the Current Budget and Current Forecast remains the same this period at \$3.2 billion. There are no claims on the Project. Detailed cost and budget information is provided on Page 16.

### Key Management Concerns

No concerns to report at this time.

# **Project Construction Photos**



Loading TBM Gantry at Wilshire/Western



Wilshire/La Brea Station Exterior Wall Rebar



Invert Concrete Placement at Wilshire/Fairfax Station



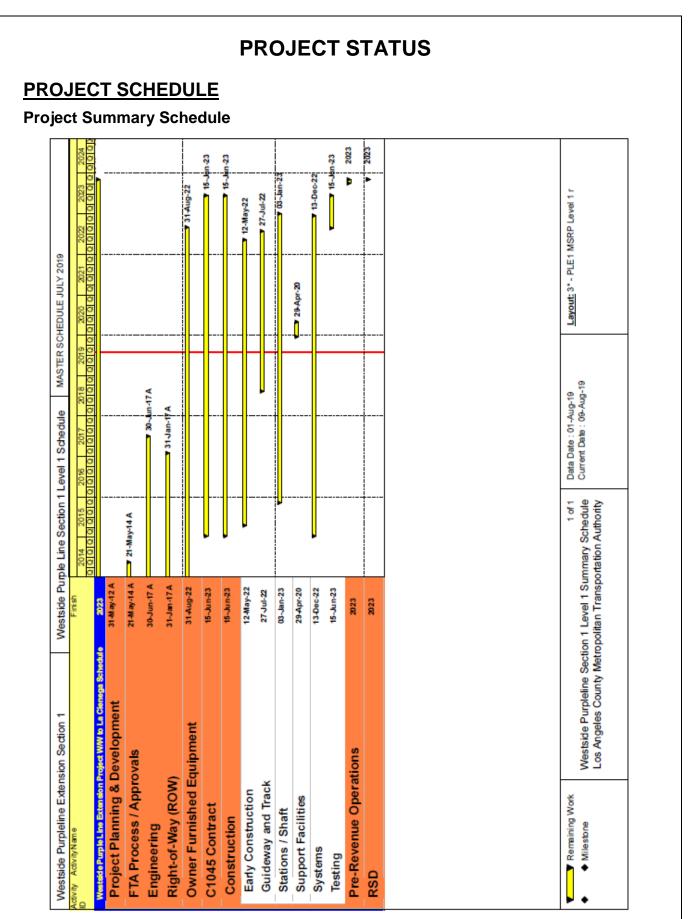
TBM Shield at Wilshire/Western



Wilshire/La Cienega Station Facing East



Transporting TBM Screw to Wilshire/La Brea Station

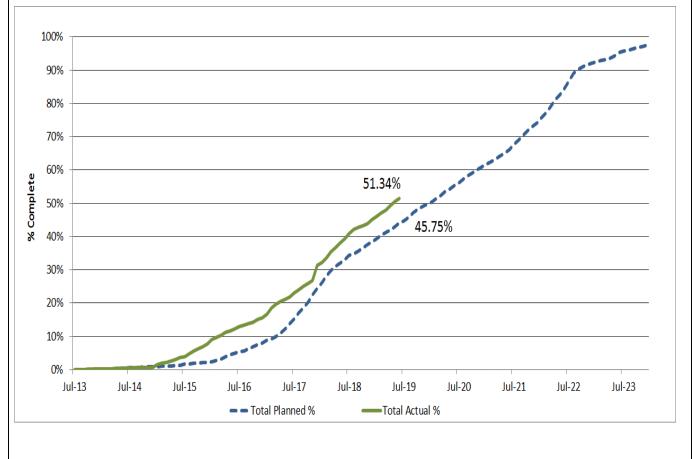


# Westside Purple Line Extension Section 1 Project Monthly Project Status Report

	Progress S	ummary	
	Status	Change from Last Period	Comment
Forecast Revenue Service	2023		
TIFIA Revenue Service	10/31/2024	None	
FFGA Revenue Service	10/31/2024	None	
Final Design Progress:			
Contract C1045	100.0%	0.0%	
Contract C1078	100.0%	0.0%	
<b>Construction Contracts Progress:</b>			
Contract C1048	100.0%	0.0%	Completed on Schedule
Contract C1045	47.8%	1.0%	
Contract C1055	100.0%	0.0%	Completed on Schedule
Contract C1056	100.0%	0.0%	Completed on Schedule
Contract C1078	97.0%	0.0%	Punchlist/Close-out Remain

**Note:** Physical completion assessment reflects work completed and work in progress.





# Westside Purple Line Extension Section 1 Project Monthly Project Status Report

Key Milestone Six-Month Look Ahead							
	Milestone Date	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19
Transport of TBM #1 (Soyeon) to Wilshire/La Brea Station Commenced	7/8/19 A	$\bigcirc$					
Transport of TBM #2 (Elsie) to Wilshire/La Brea Station Commenced	7/29/19 A	$\bigcirc$					
Commence 1st Lift Wall HDPE Placement at Wilshire/Fairfax Station	08/12/19		$\bigcirc$				
Reach Bottom of Excavation at Wilshire/La Cienega Station	08/16/19		$\bigcirc$				
Commence Concrete Placement at Wilshire/La Brea Concourse Walls	08/21/19		$\bigcirc$				
Complete Invert Concrete Placement at Wilshire/Fairfax Station	09/09/19			$\bigcirc$			
Begin Work on Roof Concrete Activities at Wilshire/La Brea Station	09/16/19			$\bigcirc$			
TBM #2 (Elsie) Begins Reach #2 Tunnel Drive	10/01/19				$\bigcirc$		
TBM #1 (Soyeon) Begins Reach #2 Tunnel Drive	10/17/19				$\bigcirc$		
Commence Reach 1 Cross Passage Work	11/01/19					$\bigcirc$	
Commence Platform Level Interior Walls at Wilshire/La Brea Station	12/04/19						$\bigcirc$
STS Access to Division 20 Rail Yard	12/17/19						$\bigcirc$
<ul> <li>♦ MTA Staff</li> <li>♦ MTA Board Action</li> <li>△ Other Agencies</li> <li>□ Contractors</li> </ul>	🔺 Adm	(Federal T inistration) n Consulta	)	~	Utility Cor D/B Contr		
"A" following date is actual and completed	* New						

## Major Equipment Delivery

	Submittal	Procurement	Delivery	Installation
C1045 DESIGN/BUILD*				
Tunnel Boring Machine	1/29/16A	8/14/2017A	12/15/17A	7/13/18A
Emergency Ventilation Fans	11/30/18A	4/1/19A	8/18/20	8/19/20
Station Elevators	4/27/18A	4/27/18A	10/6/20	10/29/21
Station Escalators	4/27/18A	10/27/19	12/5/20	10/29/21
Track - Running Rail	10/27/19	12/6/19	8/2/20	3/10/21
Traction Power Equipment	10/25/19	1/10/20	4/30/20	5/13/21
Automatic Train Control	4/1/16A	7/1/16A	12/20/16A	10/27/21
SCADA RTU System	2/2/17A	1/16/18A	5/18/18A	7/23/21
Radio System	2/2/17A	1/10/20	3/5/20	9/15/21
Heavy Rail Vehicles***	7/16/15A	5/1/19A	8/31/22	1/9/23
Universal Fare System***	TBD	TBD	TBD	1/14/22

# MAJOR EQUIPMENT DELIVERY

\* Dates derived from STS's July 2019 Updated Schedule.

\*\* Forecast release date by STS to UFS contractor access at stations.

\*\*\* Metro supplied equipment

	19			20	20			20	21			20	22			20	23		20	24
Q2	Q3	<b>Q</b> 4	Q1	Q2	Q3	<b>Q4</b>	Q1	Q2	Q3	<b>Q</b> 4	Q1	Q2	Q3	<b>Q</b> 4	Q1	Q2	Q3	<b>Q</b> 4	Q1	Q2
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For the month of July 2019, the critical path of the project remains with the activities associated with the Wilshire/La Cienega Station excavation and structural concrete placement.

Excavation at the Wilshire/La Cienega Station is anticipated to complete in August 2019.

The Revenue Service Date remains in 2023.

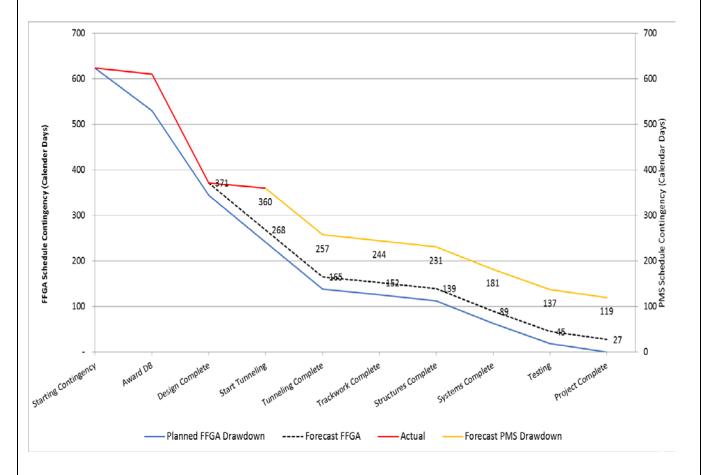
July 2019

# Project Schedule Contingency Drawdown Analysis

The project schedule contingency drawdown model provides a dual-axis perspective based upon the FFGA RSD of October 2024 and Metro's Project Master Schedule (PMS) forecast of fall 2023.

The introduction of the PMS model axis reflects a proportional distribution of available float relative to the FFGA model. Based on an October 15, 2018 actual start of TBM mining, schedule contingency appears to maintain a noticeable buffer from the FFGA model.

With regards to the FFGA RSD, schedule float of twelve (12) months has been maintained.



#### **Risk Management Narrative**

### Summary of Risks

The WPLE Section 1 Project Risk Register has been updated through July 2019. Within this quarterly reporting period there were no new risks identified and three (3) risks were closed, leaving a total of thirty-seven (37) risks to be managed in the next reporting period.

Of the thirty-seven (37) risks, four (4) are scored as high, nine (9) as medium and twentyfour (24) as low.

The next WPLE Section 1 Project Risk Register quarterly update is scheduled for October 2019.

## Top Four (4) Risks

The table below shows the top four (4) project risks.

Risk ID	Risk Description	<b>Risk Score</b>	Action Items
633.0	Cost of ROW acquisition exceeds the FFGA SCC Line Item.	15	<ol> <li>Metro's Life of Project Budget includes contingency that covers the increase. The Risk Score will remain as "high" until the \$3.15 billion Life of Project Budget is reconciled with the \$2.82 billion FFGA Budget.</li> <li>FTA has approved the property sale. Escrow on the Gale property has closed. Proceeds from the sale have been reflected in FIS (Financial Information System).</li> <li>Project cost reconciliation with Real Estate is on-going. One parcel at Wilshire/Fairfax remains in the condemnation phase.</li> </ol>
675.0	DBE Participation Goal for Construction. Currently targeted at 17%.	13	1. DB Contractor making good faith efforts to meet DBE goals.
676.0	Subcontractor ability to get the required resources to perform work.	13	1. Actively manage schedule and resource needs.
677.0	Resource (Labor) shortage (Direct and Indirect).	13	1. Actively manage schedule and resource needs.

# Top Risks

# PROJECT COST

# Project Cost Analysis - 865518

DOLLARS IN THOUSANDS

SCC CODE	DESCRIPTION	original Budget	CURREN	T BUDGET	СОММІ	TMENTS	EXPEN	DITURES	CURRENT	FORECAST	CURRENT BUDGET / FORECAST
CODE		DODGET	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	VARIANCE
10	GUIDEWAY & TRACK ELEMENTS	388,294	-	388,294	-	386,598	-	207,592	-	390,478	2,184
20	STATIONS, STOPS, TERMINALS, INTERMODAL	440,621	-	440,621	4,159	489,523	-	195,486	-	522,582	81,961
30	SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS	43,323	-	43,323	530	43,108	928	43,108	-	43,352	29
40	SITEWORK & SPECIAL CONDITIONS	751,566	-	754,491	605	786,542	440	574,110	-	815,089	60,599
50	SYSTEMS	113,574	-	113,574	-	101,033	-	28,846	-	118,561	4,986
	CONSTRUCTION SUBTOTAL (10-50)	1,737,378	-	1,740,303	5,294	1,806,804	1,368	1,049,143	-	1,890,062	149,759
60	ROW, LAND, EXISTING IMPROVEMENTS	175,634	-	175,634	-	202,980	-	183,108	-	202,980	27,346
70	VEHICLES	160,196	-	160,196	-	98,118	-	16,061	-	108,302	(51,893)
80	PROFESSIONAL SERVICES	412,710	-	414,785	7,636	387,080	3,320	346,073	-	511,117	96,332
	SUBTOTAL (10-80)	2,485,918	-	2,490,918	12,930	2,494,983	4,688	1,594,385	-	2,712,461	221,543
90	UNALLOCATED CONTINGENCY	248,592	-	248,592	-	-	-	-	-	71,454	(177,138)
100	FINANCE CHARGES	375,470	-	375,470	-	-	-	-	-	331,065	(44,405)
	TOTAL PROJECTS 465518 & 865518 (10-100)	3,109,980	-	3,114,980	12,930	2,494,983	4,688	1,594,385	-	3,114,980	-
	ENVIRONMENTAL/PLANNING - 405518	8,505	-	8,505	-	8,505	-	8,505	-	8,505	-
	ENVIRONMENTAL/PLANNING - 465518	30,865	-	30,865	-	30,865	-	30,852	-	30,865	-
	TOTAL PROJECTS 405518 & 465518 (ENV / PLAN'G)	39,370	-	39,370	-	39,370	-	39,357	-	39,370	-
	TOTAL PROJECTS 405518, 465518 & 865518	3,149,350	-	3,154,350	12,930	2,534,352	4,688	1,633,742	-	3,154,350	-

### **Original Budget**

The Original Budget of \$3.2 billion reflects the Board approved Life of Project Budget, July 24, 2014, plus Finance Charges of \$0.4 billion.

## Current Budget and Current Forecast:

The Current Budget and Current Forecast remains the same this period at \$3.2 billion.

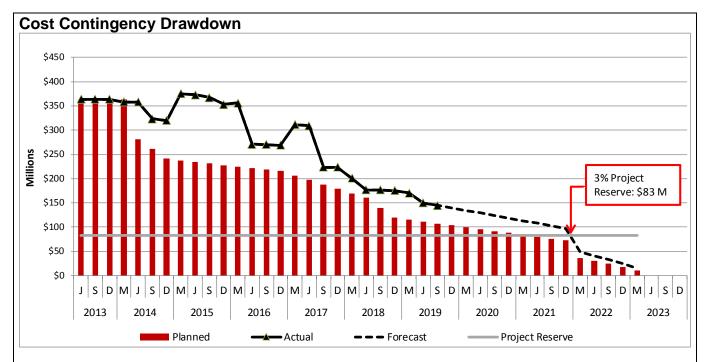
### Commitments

The Commitments increased by \$12.9 million primarily due to executed Contract Modifications for the Design/Build Contracts C1045 & C1078, and Metro Project Administration. The \$2.5 billion in Commitments to date represent 80.3% of the Current Budget.

### **Expenditures**

The Expenditures increased by \$4.7 million primarily for costs associated with the Design/Build Contract C1078, Legal Services, Vehicle Consultants, City of Beverly Hills (Memorandum of Agreement), Construction Management Support Services, and Metro Project Administration. The \$1.6 billion in Expenditures to date represent 51.8% of the Current Budget.

# Westside Purple Line Extension Section 1 Project Monthly Project Status Report



# **Cost Contingency Drawdown Analysis**

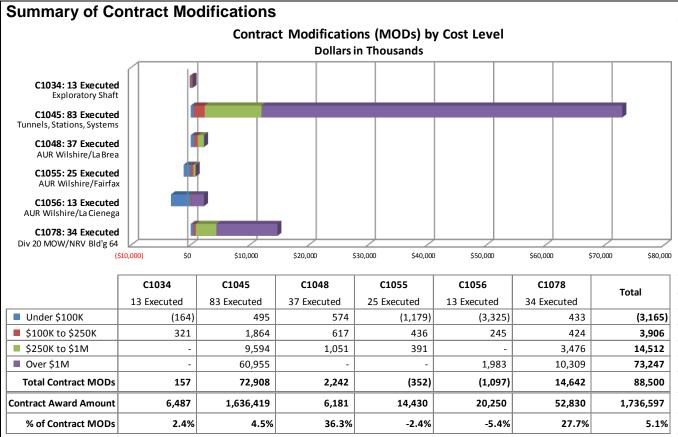
The Original Budget of \$3.2 billion (plus Finance Charges of \$0.4 billion) includes a project cost contingency of \$320.6 million or 10.2% of the total project. The project cost contingency of \$320.6 million is based upon the Life of Project (LOP) Budget that was approved by the Board in July 2014. The LOP Budget also included an allocated contingency amount of \$72.0 million. The allocated contingency is an amount to cover anticipated but unknown contract modifications issued by Metro where applicable to specific contracts within each Standard Cost Category (SCC).

Included in the project cost contingency drawdown is a 3% project reserve threshold. Metro's Board is to be notified when it becomes necessary to drawdown contingency below the project reserve threshold to cover project costs. This was adopted by the Metro Board of Directors in September 2012.

The project cost contingency drawdown curve is based on a 2023 Revenue Service date.

The allocated contingency decreased this period by \$5.3 million due to executed Contract Modifications for the Design/Build Contracts C1045 & C1078.

PROJECT COST CONTINGENCY DOLLARS IN THOUSANDS									
	Original Contingency (Budget)	Previous Period	Current Period	To-Date	Remaining Contingency (Forecast)				
Unallocated Contingency	248,592	(177,138)	-	(177,138)	71,454				
Allocated Contingency	71,963	6,705	(5,274)	1,431	73,395				
Total Contingency	320,555	(170,432)	(5,274)	(175,707)	144,849				



Percent of Contract MODs equals the Total Contract MODs divided by the Contract Award Amount.

Thirteen Contract MODs with a total value of \$0.2 million have been executed since the award of Contract C1034 – Exploratory Shaft Construction by Innovative Construction Solutions (ICS). The contract has been completed and is closed out.

Eighty-three Contract MODs with a total value of \$72.9 million have been executed since the award of Contract C1045 – Tunnels, Stations, Trackwork, Systems and Systems Integration Testing by Skanska - Traylor - Shea, a Joint Venture.

Thirty-seven Contract MODs with a total value of \$2.2 million have been executed since the award of Contract C1048 – Advanced Utility Relocations at Wilshire/La Brea by Metro Builders & Engineering Group, LTD. The contract has been completed and is closed out.

Twenty-five Contract MODs with a total value of (\$0.4) million have been executed since the award of Contract C1055 – Advanced Utility Relocations at Wilshire/Fairfax by W. A. Rasic Construction Company, Inc. The contract has been completed and is closed out.

Thirteen Contract MODs with a total value of (\$1.1) million have been executed since the award of Contract C1056 – Advanced Utility Relocations at Wilshire/La Cienega by Steve Bubalo Construction Co. The contract has been completed and is closed out.

Thirty-four Contract MODs with a total value of \$14.6 million have been executed since the award of Contract C1078 – Division 20 Maintenance-of-Way and Non-Revenue Vehicle Building Location 64.

# **DISADVANTAGED BUSINESS ENTERPRISE (DBE)**

(Reported Data as of June 2019)

<b>DBE Goal – Design</b> The percentage of funds apportioned to Design Contracts	20.25%
Current DBE Commitment Design	\$13.4 M
Total DBE Committed Dollars divided by Total Contract Value for Design	20.25%
<b>Current DBE Participation</b>	\$12.5 M
Total amount paid to date to DBEs divided by the amount paid to date to Prime:	20.26%

Sixteen (16) Design DBE sub-consultants have been identified to date.

<b>DBE Goal – Construction</b> The percentage of funds apportioned to Construction Contracts	17.00%
Current DBE Commitment Construction	\$108.1M
Contract commitment divided by current contract value for Construction	6.86%
Current DBE Participation	\$116.0M
Total amount paid to date to DBEs divided by the amount paid to date to Prime:	14.19%

One hundred-nineteen (119) Construction DBE sub-contractors have been identified to date.

# PROJECT LABOR AGREEMENTS (PLA)

As of June 2019:

Targeted Worker GoalConstruction work to be performed by residents from EconomicallyDisadvantaged Areas in the United States	40.00%
Targeted Worker Current Attainment	63.32%
Apprentice Worker Goal	
Construction work to be performed by Apprentices	20.00%
Apprentice Worker Current Attainment	17.97%
Disadvantaged Worker Goal	
Construction work to be performed by disadvantaged workers	10.00%
Disadvantaged Worker Current Attainment	12.01%

# **FINANCIAL/GRANT**

# Status of Funds by Source

SOURCE	(A) ORIGINAL BUDGET	(B) TOTAL FUNDS ANTICIPATED	(C) TOTAL FUNDS AVAILABLE	(D) COMMI <sup>-</sup> \$	(D/B) IMENTS %	(E) EXPE \$	(E/B) NDITURES %	(F) BILLED TO SOURO \$	
FEDERAL - SECTION 5309 NEW STARTS	\$1,250.000	\$1,250.000	\$465.000	\$1,250.000	100%	\$465.000	37%	\$462.994	37%
FEDERAL CMAQ	\$12.171	\$12.171	\$12.171	\$12.171	100%	\$12.171	100%	\$12.171	100%
FEDERAL SECTION 5339 - ALTERNATIVES ANALYSIS	\$0.512	\$0.512	\$0.512	\$0.512	100%	\$0.512	100%	\$0.512	100%
MEASURE R - TIFIA LOAN	\$856.000	\$856.000	\$490.766	\$490.766	57%	\$490.766	57%	\$454.330	53%
MEASURE R 35%	\$869.178	\$874.178	\$700.000	\$680.487	78%	\$577.787	66%	\$502.863	58%
STATE STIP RIP	\$2.568	\$2.568	\$2.568	\$2.568	100%	\$2.568	100%	\$2.568	100%
STATE CAPITAL PROJECT LOANS - OTHERS *	\$83.648	\$83.648	\$83.648	\$83.648	100%	\$83.648	100%	\$52.686	63%
CITY OF LOS ANGELES	\$75.273	\$75.273	\$1.290	\$1.290	2%	\$1.290	2%	\$1.290	2%
TOTAL	\$3,149.350	\$3,154.350	\$1,755.955	\$2,521.442	79.9%	\$1,633.742	51.8%	\$1,489.414	47.2%

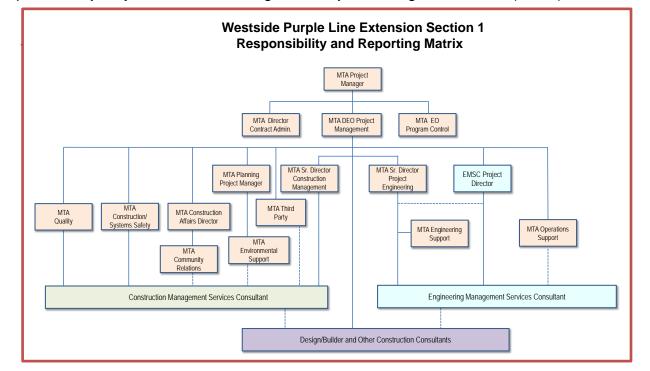
EXPENDITURES ARE CUMULATIVE THROUGH JULY 31, 2019

ORIGINAL BUDGET BASED ON JULY 2014 BOARD APPROVED LOP BUDGET

\* OTHERS INCLUDE TDA ADMINISTRATION (\$4.1M), LTF GENERAL REVENUES (\$1.8M), AND LEASE REVENUES (\$37.8M)

# **PROJECT ORGANIZATION AND STAFFING**

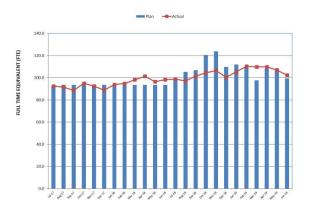
The design-build contract is being managed by a joint team of Metro and consultant personnel jointly located at the Integrated Project Management Office (IPMO).



The overall FY19 Total Staffing Plan averages 108.3 FTEs per month.

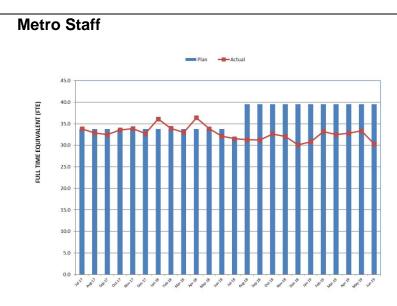
For June 2019, there were a total of 30.3 FTEs for MTA's Project Administration Staff and 72.1 FTEs for Consulting Staff. The total project staffing for June 2019 was 102.4\* FTEs.

# **Total Project Staffing – Metro and Consultants**

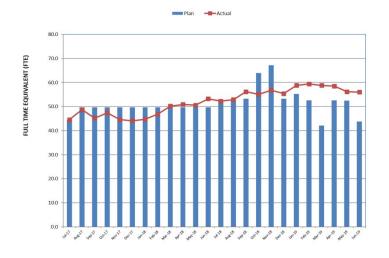


\*Actuals include 4.1 FTEs related to Project Management Support Services (PMSS). Please note, not all PMSS related FTEs are included in the June 2019 total – not all invoices were received.

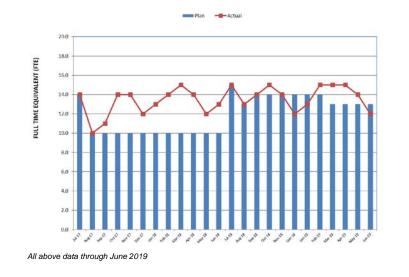
# Westside Purple Line Extension Section 1 Project Monthly Project Status Report



# CM Support Services Staff (Consultant)



# **Engineering Services Staff (Consultant)**



# Staffing by Group

The opposing graphs represent planned vs. actual staffing levels by group.

Metro staffing includes full time staff located in the IPMO as well as part-time support located at Gateway Headquarters.

Staffing plans are developed for each fiscal year based on project needs.

REAL ESTATE								
Purple Line Extension Section 1 - Real Estate Status Summa						Summary		
	Number of Parcels	Certified	Appraisals Completed	Offers Made	Agreements/	Reloo	Parcels	
Description					Settlements Signed	Required	Completed	Available
					•			
Full Takes	9	9	9	9	9	109	109	9
Part Takes	6	6	6	6	6	0	0	6
TCE	4	4	4	4	3	0	0	4
Total Parcels	19	19	19	19	18	109	109	19

Metro has possession of all the parcels by either acquisition, possession and use agreements or stipulations. The C1045 contractor has possession of all properties along the alignment needed to construct the Project.

There remains one parcel at the Wilshire/Fairfax Station location in the condemnation phase. Settlement discussions are on-going with the owner.

# QUALITY ASSURANCE

# C1045 – Tunnels, Stations, Trackwork, Systems and Systems Integration Testing

- Reviewed daily inspection reports from the Contractor/Field Technician and CMSSC oversight inspection personnel. Inspections show that the work is predominately compliant.
- Reviewed and provided comments on quality related submittals construction work plan, project specifications, product data and quality manuals.
- Engaged in oversight for the excavation and installation of structural steel members for the Wilshire/La Cienega Station SOE.
- Engaged in Wilshire/Fairfax Station oversight for HDPE and invert base slab.
- Engaged in Wilshire/La Brea in reshoring of previously cast concourse deck second lift structural walls.
- Processed 32 surveillances, 19 Quality Action Requests and 22 Nonconformance Reports and 1 Corrective Action Request.

# C1078 – Division 20 MOW and NRV Building Location 64

- Contractor in the process of submitting remaining project deliverables such as rebar mill certifications, concrete test data and daily inspection reports.
- Closeout and completion of punch list items in progress.
- Processed 2 surveillances, 11 Quality Action Requests (all closed), 17 Nonconformance Reports and 1 Corrective Action Request.

# ENVIRONMENTAL

- Ongoing review of noise and vibration levels, including groundborne impacts attributed to TBM operations and additional targeted mitigation measures at Wilshire/La Cienega Station yards.
- Conducted field environmental monitoring and spot inspections for construction noise, vibration, stormwater BMPs, dust and cultural resources for C1045 and third party work activities.
- Cogstone is continuing laboratory preparation of the backlog of recovered fossil specimens.
- Continuing to evaluate noise impacts during late night ventilation, excavation, invert pour and early morning export activities.
- Conducted evaluation of mitigation enhancements at Wilshire/La Cienega and Wilshire/Fairfax yards.
- Evaluated modifications to dewatering treatment system operations at Wilshire/Western Shaft related to increased suspended solids from new French Drain system.

# **CONSTRUCTION AND COMMUNITY RELATIONS**

- Produced and distributed five construction work notices for construction activities.
- Produced and distributed weekly construction lookahead emails to construction stakeholders and monthly look ahead for the City of Beverly Hills.
- Held meetings and made Project Presentations at the following: Mid-City West Community Council, Wilshire Center Koreatown Neighborhood Council, Wilshire Center Koreatown Business Improvement District, Beverly Hills City Hall, Elected Officials Deputies, Construction Community Meetings and various stakeholders.
- Continued community outreach for the naming of Section 1 stations.
- Continued additional business mitigations including: alternative parking options, business signage, street signs and print ads at no cost to the businesses.
- Updated website, Facebook, Twitter as needed. Published monthly PLE (Purple Line Extension) newsletter to email list.
- Continued with the "Eat, Shop, Play Spotlight" campaign to advertise and promote businesses that participate in ESP Wilshire and Beverly Hills.

# **CREATIVE SERVICES**

- Continued design development for Wilshire Customer Center artwork relocation to Wilshire/Western Station.
- Continued eight artists' design development and coordination for eight locations within the stations.
- Artwork fabrication for Division 20 Maintenance-of-Way and Non-Revenue Vehicle Building Location 64 Contract (C1078) is 100% complete and 70% installed.
- Artist community event was held on July 14, 2019 at KP Projects Gallery in the Miracle Mile neighborhood in conjunction with artist designs for the stations.
- Planning underway for a community event in August 2019 in conjunction with artist designs for the stations.

# SAFETY & SECURITY

- There was one recordable injury during the month of July 2019.
- Metro Construction Safety hosted Monthly All Hands Safety Meeting for all Westside-Purple Line Extension Contractors on July 25, 2019.
- Conducted Project Safety Orientation for Metro, Consultants and IPMO staff including Safety Orientation, Underground Safety and Self Rescuer Training.
- July 2019 Contractor Work Hours (Design & Construction): 74,183
- Contractor Project to Date Work Hours (Design & Construction) (through 7/31/2019): 3,168,057
- Total Project to Date Work Hours (Contractor & the IPO Staff) (through 7/31/2019): 3,767,967
- Project to Date Recordable Injury Rate: 1.2 (Twenty-two Recordable Injuries) (each rate is per 200,000 work hours) (National Rate: 2.5)
- Project to Date Total Days Away (DART) Injury Rate: 0.8 (130 Days Away From Work Injuries) (National Rate: 1.5) (through 6/30/2019)
- Project to Date Total Days Away (DART) Injury Rate: 33.9 (723 Days Away From Work) (No National Rate Published) (through 6/30/2019)
- National Rates for Heavy and Civil Construction (NAICS Code 237) are for Calendar Year 2017, published by USBLS in November 2018.

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# APPENDIX CHRONOLOGY OF EVENTS

June 2007	Began Alternatives Analysis study
January 2009	Board approval of Alternatives Analysis study and next phase
February 2009	Began Draft Environmental Impact Statement / Report (EIS / EIR)
October 2010	Board approval of Draft EIS / EIR and selection of locally preferred alternative
January 2011	FTA approval to enter Preliminary Engineering
May 2011	Began Preliminary Engineering
April 2012	Board certification of Final EIS / EIR and adoption of project
July 2012	Completion of Exploratory Shaft final design
August 2012	FTA Record of Decision
September 2012	Began Real Estate Acquisition
November 2012	Began Final Design - C1048 - Advanced Utility Relocations contract – Wilshire/La Brea
November 2012	Began Final Design - C1055 - Advanced Utility Relocations contract – Wilshire/Fairfax
November 2012	Issued RFQ for C1045 Design / Build contract
December 2012	Began Final Design - C1056 - Advanced Utility Relocations contract – Wilshire/La Cienega
January 2013	Began C1034 Exploratory Shaft construction
February 2013	Received RFQ responses for C1045 Design / Build contract
June 2013	Issued RFP for C1045 Tunnels, Stations, Trackwork, Systems and Systems Integration Testing
June 2013	Beginning of C1055 AUR Wilshire/Fairfax Bid Period
July 2013	Submitted draft FFGA application
July 2013	Completed Final Design - C1048 - Advanced Utility Relocations contract Wilshire/La Brea

# Westside Purple Line Extension Section 1 Project Monthly Project Status Report

Montiny Project 3	
July 2013	Submitted TIFIA loan application
August 2013	Began C1048 Advanced Utility Relocations contract – Wilshire/La Brea
August 2013	NTP for Construction Management Support Services Contract
January 2014	Submitted application to FTA requesting an FFGA
January 2014	Received RFP Proposals for Contract C1045
February 2014	Beginning of C1056 AUR Wilshire/La Cienega Bid Period
May 2014	FTA awarded FFGA
May 2014	Received TIFIA Loan
June 2014	Began C1055 Advanced Utility Relocations at Wilshire/Fairfax
July 2014	Metro Board approved staff recommendation to award Contract C1045 and approved Life-of-Project Budget
September 2014	Issued Invitation to Bid for Contract C1078
October 2014	Issued C1056 Contract Award
November 2014	Issued C1045 Contract Award
January 2015	Issued C1045 Contract Notice to Proceed
January 2015	Issued C1056 Contract Notice to Proceed
February 2015	Received Contract C1078 Bids
August 2015	Issued C1078 Contract Award
September 2015	Issued C1078 Contract Notice to Proceed
October 2015	Contract C1055 achieved Substantial Completion
December 2015	Began piling operations for Wilshire/La Brea Station
June 2016	Began deck beam and decking operations for Wilshire/La Brea Station
August 2016	Began piling operations for Wilshire/Fairfax Station
August 2016	Contract C1056 achieved Substantial Completion
February 2017	Began deck beam and decking operations for Wilshire/Fairfax Station

March 2017	Began piling operations for Wilshire/La Cienega Station
June 2017	Decking operations for Wilshire/Fairfax Station are complete
September 2017	Began utility relocation work at the Wilshire/Western site
October 2017	Began street decking for Wilshire/La Cienega Station
November 2017	Began concreting activities for Wilshire/La Brea Station
December 2017	Structural steel erection commenced at the Division 20 Maintenance-of- Way and Non-Revenue Vehicle Building Location 64
January 2018	Decking operations for Wilshire/La Cienega Station are complete
February 2018	Began invert slab concrete placement at the Wilshire/La Brea Station
April 2018	Wilshire/Fairfax Station excavation cleared the Paleo Zone (Elevation 105')
June 2018	Concrete wall pours needed to support TBM assembly at Wilshire/La Brea Station have been completed
July 2018	Began delivery of TBM components to the Wilshire/La Brea Station site
October 2018	The Reach One (1) mining operation commenced with the launch of TBM #1 from Wilshire/La Brea Station.
November 2018	TBM #2 was launched from Wilshire/La Brea Station.
December 2018	The bottom of excavation was reached at the Wilshire/Western TBM Retrieval site.
January 2019	The temporary concrete slab at the Wilshire/Western TBM Retrieval site was placed.
February 2019	Reached the bottom of excavation at Wilshire/Fairfax Station.
March 2019	Completed mud mad placement at Wilshire/Fairfax Station.
April 2019	HDPE protection slab placement commenced at Wilshire/Fairfax Station.
May 2019	Substantial Completion for the C1078 Contract (Division 20 MOW/NRV Building Location 64) was achieved on May 1, 2019.
June 2019	Both TBM #1 (Soyeon) and TBM #2 (Elsie) completed the Reach One (1) tunnel alignment mining.

July 2019 Began transport of both TBMs (#1 Soyeon and #2 Elsie) from the Wilshire/Western Shaft to Wilshire/La Brea Station.