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FROM:

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**SUBJECT:** PURPLE (D LINE) EXTENSION PROJECT SECTION 1

JUNE 2023 QUARTERLY PROJECT STATUS REPORT

Enclosed herewith is the Quarterly Project Status Report for the Purple (D Line) Extension Project Section 1. This report contains the Los Angeles County Metropolitan Transportation Authority's (LACMTA) representation of the Purple (D Line) Extension Project Section 1 status for the period ending June 30, 2023.

If you have any questions regarding this report or its supporting information, please contact Salvador Chavez, Deputy Executive Officer, Program Control at (323) 900-2188.

JC: ah Enclosure

# PURPLE (D LINE) EXTENSION PROJECT Section 1



# Purple (D Line) Extension Project Section 1

QUARTERLY 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).

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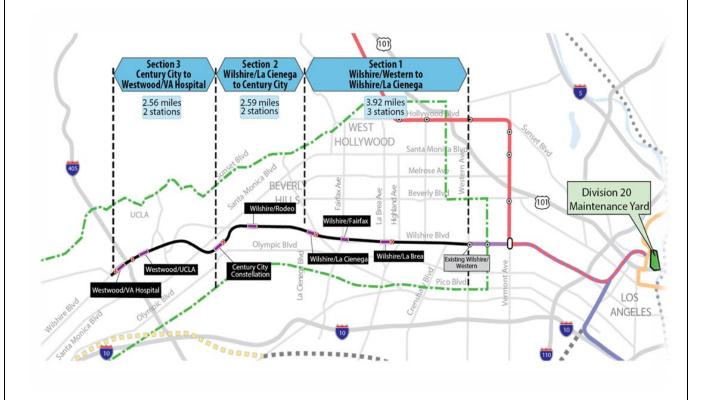
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#### **PROJECT OVERVIEW**

#### **Project Background**

Section 1 of the Purple (D 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 all three sections of the Project were environmentally cleared and adopted by LACMTA Board of Directors.

Section 1 will extend the existing Purple (D 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 inbetween 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 the 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 and La Cienega Boulevards. 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 C1034. 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 and 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.

#### <u>Contract C1056 – Wilshire/La Cienega Advanced Utility Relocations</u>

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

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.

Contract C1045 – Tunnels, Stations, Trackwork, Systems and Systems Integration Testing The procurement of this contract utilized 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 (D Line), testing and commissioning.

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

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 is due to the future turn-back facility site in the yard. The contract substantial completion date was extended from May 1, 2019 to August 31, 2019.

#### Metro Furnished Equipment

Metro has procured a contract to provide 34 Heavy Rail Vehicles (HRV) necessary to operate the extension to the Purple (D 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 systems testing.

#### **Program Management**

The Purple (D Line) Extension Project Section 1 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 Project Staffing section of this report. The on-site program management team is also supported by Metro Headquarters' resources including but not limited to engineering, risk management, environmental, quality management, operations and creative services departments.

<u>Project Schedule and Budget</u>: Based on a review of the project schedule, Metro has adjusted the Revenue Service Date (RSD) from Fall of 2023 to Fall of 2024.

The Original Budget of \$3.1 billion reflects the Life of Project Budget approved by the Board on July 24, 2014 plus Finance Charges of \$0.4 billion. Based on a review of the project budget, the Current Budget and Current Forecast have been adjusted to \$3.5 billion. A detailed Life of Project Budget forecast is included under the Project Cost 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's alignment.

The Project is also engaged in social media outreach and various marketing and advertising efforts designed to 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.

Start Up: 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 June 2023, the Project achieved 86.1% completion based on earned value measurements for design and construction.

As the main structural concrete work completed at the end of 2022, the Project has incorporated a newly revised schedule for the remaining work into the monthly schedule update process, which includes appendage construction, civil restoration, architectural and MEP (mechanical, electrical, plumbing) work, systems infrastructure installation, testing, etc. The critical path of the Project is communications installation and testing at Wilshire/La Cienega Station.

The target forecast substantial completion date for the Project is March 15, 2025. The target Revenue Service Date (RSD) for the Project is Spring 2025.

#### **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 engineering services to the C1045 Design/Build Contract during construction.

#### **Construction Status**

Reach 1 (Wilshire/Western to Wilshire/La Brea): third rail installation is underway, and systems installation continues.

Reach 2 (Wilshire/La Brea to Wilshire/Fairfax): electrical and systems installations are ongoing.

Reach 3 and Tail Track (Wilshire/Fairfax to Wilshire/La Cienega): track installation is ongoing. Cross-passage #24 (Reach 3) is being used for trackwork concrete access and will complete once all trackwork concrete is placed.

Reach 4 tunnel: the bulkhead stud frame wall installation separating Purple Line Extension Sections 1 and 2 is substantially complete.

Wilshire/La Brea Station: bus lane, curb/gutter and sidewalk restoration as well as appendage work on the south side of Wilshire Blvd. continues. *Entrance structure, crossover construction and MEP (Mechanical, Electrical, Plumbing) activities are all ongoing. Interior rooms build outs and elevator installation have started.* 

Wilshire/Fairfax Station: appendage work and civil restoration on the north side of the station continues. Entrance structure construction and architectural and MEP activities at the platform as well as concourse levels continue. *Permanent stairs, escalator and elevator work moves forward*.

Wilshire/La Cienega Station: above roof backfill operation continues. Station entrance structure and platform construction are ongoing. Masonry work continue at east and west

ends of the Station. Architectural and MEP work, southside appendage construction, as well as elevator and escalator work continue. Weekend decking removal and street restoration activities continue.

Substantial completion for the Division 20 Maintenance-of-Way and Non-Revenue Vehicle Building Location 64 Contract (C1078) was extended to August 31, 2019. The final retention amount has been paid. Contract closeout efforts continue.

The C1045 Design/Build Contractor has taken possession of the rail site at the Division 20 Rail Yard. The rail welding subcontractor commenced production welding on October 23, 2020. The welding of running rail at the Division 20 Rail Yard was completed on December 9, 2020. Rail deliveries from the rail yard to Wilshire/La Brea Station commenced on March 29, 2021. Rail delivery for the entire Reach 1 (Wilshire/Western to Wilshire/La Brea) tunnel was completed in December 2021. All running rail stored in the yard was moved to the project site by the end of July 2022. The WPLE Section 1 storage area in the Division 20 Yard has been turned over to the Portal Widening Project. A new area near 6th Street bridge is being used for project material delivery.

#### **Cost and Schedule Summary**

Metro has incorporated a newly revised schedule for the remaining work into the C1045 Design/Build Contract monthly schedule update process, which includes appendage construction, civil restoration, architectural and MEP (mechanical, electrical, plumbing) work, systems infrastructure installation, testing, etc. This schedule reports the substantial completion date 408 calendar days after the February 1, 2024 contractual date.

The target substantial completion date is March 15, 2025. The Project's target RSD is Spring 2025. The Project continues to negotiate time extensions with the C1045 Contractor.

The critical path of the Project is communications installation and testing at Wilshire/La Cienega Station followed by systems integrated testing and pre-revenue operations. A summary graphic of the critical path is found on Page 14.

#### C1045 Design-Build Contract Schedule Metrics

	Original Contract Date/Duration	Time Extension (CD)	Current Contract Schedule	Forecast (Metro PMS)	Variance CD (Trending)
NTP	01/12/2015				
Substantial Completion	06/09/23	237	02/01/24	3/15/25	-408 days

The Current Budget for the Project is \$3.5 billion. The Current Cost Forecast for the Project is \$3.7 billion. Detailed cost and budget information is provided on Page 17.

There are currently two (2) open claims that are being evaluated:

- Claim 002 Reach 2 Gas Differing Site Condition
- Claim 003 Tunnel Lighting

#### **Key Management Concerns**

<u>Item 1</u>: the critical path of the Project remains the plenum and masonry installation at east end of Wilshire/La Cienega Station. Currently, the C1045 forecast substantial completion date is trending over seven (7) months behind the target schedule.

<u>Status/Action</u>: Metro has incorporated a newly revised schedule for the remaining work into the C1045 Design/Build Contract monthly schedule update process. The target substantial completion date is March 15, 2025, and the Project's target RSD is Spring 2025. **Item 1 is closed**.

<u>Item 2 (New)</u>: LADWP is requiring that the permanent surface hatch for Wilshire/Fairfax Station be installed prior to station permanent power energization. There is a potential 10 to12 month delay to Wilshire/Fairfax Station energization if this position is maintained.

<u>Status/Action</u>: Metro executive management is discussing this issue with LADWP. The goal is to enact the same process as Wilshire/La Brea Station where the Station will energize under a temporary surface hatch condition.

<u>Item 3 (New)</u>: the decision to install all new fare gates in Purple Line stations is under consideration. Moving forward with this decision may impact the Project's revenue service date and budget.

<u>Status/Action</u>: the installation of new fare gates is under consideration.

## **Project Construction Photos**



Elevator Frame Installation at Wilshire/La Brea Station



Track Crossover Construction at Wilshire/La Brea Station



HVAC Ductwork Installation at Wilshire/Fairfax Station



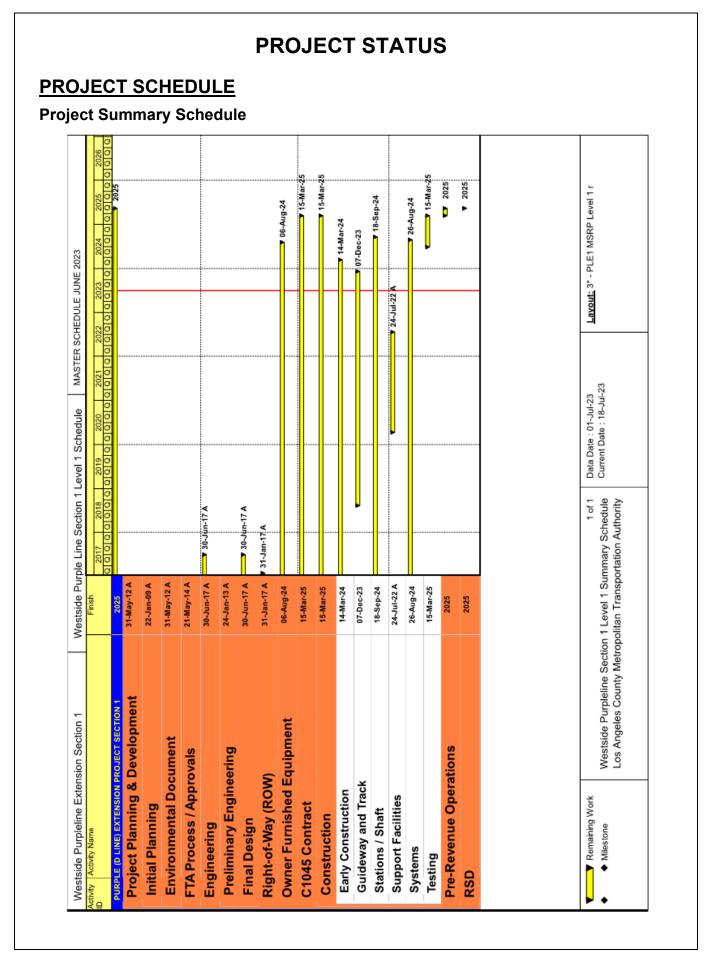
Escalator Installation at Wilshire/La Cienega Station



Reach 1 BL Tunnel Contact Rail



Reach 4 BR Tunnel Bulkhead Wall Installation

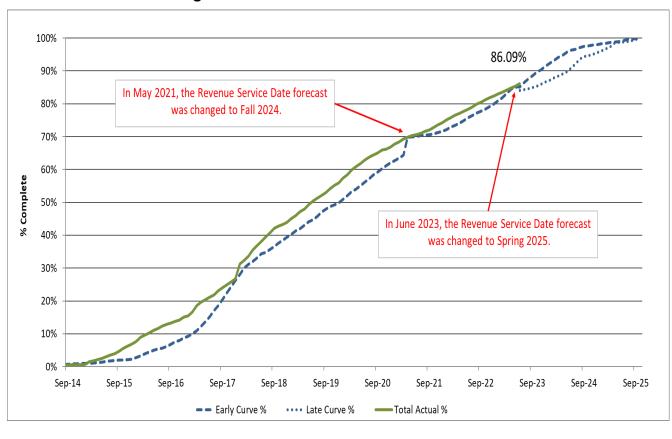


**Progress Summary** 

Progress Summary	Status	Change from Last Period	Comment
Forecast Revenue Service	Spring 2025	None	New Target Forecast RSD
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	85.2%	0.8%	
Contract C1055	100.0%	0.0%	Completed on Schedule
Contract C1056	100.0%	0.0%	Completed on Schedule
Contract C1078	100.0%	0.0%	Completed

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

#### Planned vs. Actual Progress



	Milestone Date	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23
Commenced Edge Light Installation at Wilshire/Fairfax Station	06/20/23 A						
Completed First Delivery of Contact Rail to the Project Site	06/23/23 A						
Wilshire/La Brea Station: Completed Installation of Smoke Enclosure Steel (Platform	06/30/23 A						
Level) Wilshire/Fairfax Station: Complete Installation of Smoke Enclosure Steel (Platform Level)	07/07/23						
Reach 1 Tunnel (La Brea to Western): Commence installation of Contact Rail	07/17/23						
Wilshire/La Cienega Station: Complete Installation of Elevator Steel (Platform Level)	07/27/23						
Wilshire/La Cienega Station: Complete Installation of Smoke Enclosure Steel Platform Level)	08/15/23						
Wilshire/La Brea Station: Complete Main Entrance Structure (Roof)	08/31/23						
Wilshire/Fairfax Station: Complete Installation of Metal Ceiling Panels	09/15/23						
Wilshire/La Brea Station: Complete Installation of Metal Ceiling Panels (West End)	09/19/23						
Wilshire/La Cienega Station: Complete Installation of Metal Ceiling Panels (West End)	10/09/23						
Wilshire/La Cienega Station: Commence Installation of Double Crossover	11/01/23						
Other Agencies Contractors		nistration) n Consulta	nt	<b>v</b>	Utility Con		

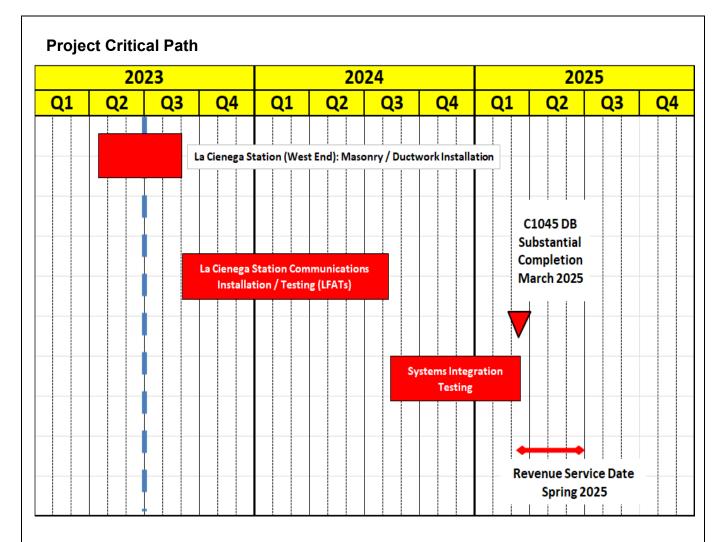
## **Major Equipment Delivery**

	Submittal	Procurement	Delivery	Installation
C1045 DESIGN/BUILD*				
Tunnel Boring Machine	1/29/16A	8/14/17A	12/15/17A	7/13/18A
Emergency Ventilation Fans	11/30/18A	4/1/19A	12/1/21A	12/21/21A
Station Elevators	4/27/18A	4/27/18A	04/10/23A	8/1/23
Station Escalators	4/27/18A	4/27/18A	7/21/21A	2/6/23A
Track - Running Rail	7/9/19A	8/9/19A	4/9/20A	10/18/21A
Traction Power Equipment	5/29/20A	11/5/21A	1/8/22A	4/28/23A
Automatic Train Control	4/1/16A	7/1/16A	12/20/16A	1/13/23A
SCADA RTU System	2/2/17A	1/16/18A	5/18/18A	3/14/24
Radio System	2/2/17A	2/3/20A	9/18/23	9/19/23
Heavy Rail Vehicles***	7/16/15A	5/1/19A	12/22/23	Fall 2024
Universal Fare System**	2/15/21A	9/30/21A	7/15/23	10/12/23

<sup>\*</sup> Dates derived from STS's June 2023 Revised Schedule (Interim Update).

<sup>\*\*</sup> Forecast release date by STS to UFS contractor access at stations.

<sup>\*\*\*</sup> Metro supplied equipment



Metro has incorporated a newly revised schedule for the remaining work into the C1045 Design/Build Contract monthly schedule update process, which includes appendage construction, civil restoration, architectural and MEP (mechanical, electrical, plumbing) work, systems infrastructure installation, testing, etc.

The critical path of the Project is communications installation and testing at Wilshire/La Cienega Station followed by systems integrated testing and pre-revenue operations.

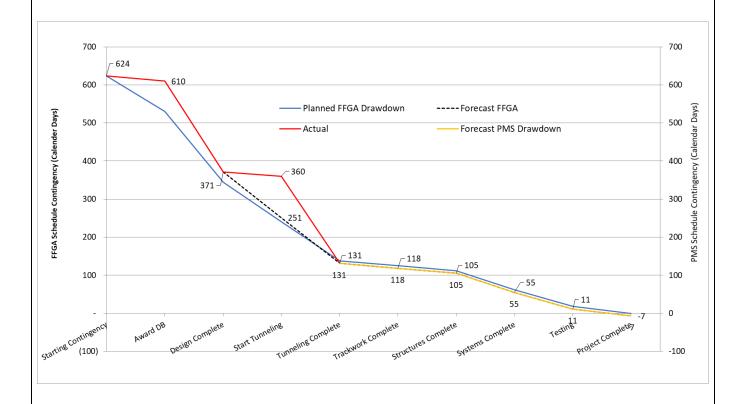
The target substantial completion date is March 15, 2025. The Project's target RSD is Spring 2025.

#### **Project Schedule Contingency Drawdown Analysis**

The project schedule contingency drawdown model is based upon the FFGA RSD of October 2024. Metro has adjusted the Project Master Schedule (PMS) forecast RSD to Spring 2025. The planned FFGA schedule contingency drawdown and the PMS forecast will remain the same until trackwork is completed.

At the start of TBM mining in October 2018, there was a noticeable buffer of available float between the PMS model and the FFGA model. This float buffer has been eroded due to the impacts associated with the Reach 3 anomaly, which has hindered TBM tunnel mining progress resulting in a later than planned actual completion of this milestone.

The next planned update for this model is after completion of trackwork installation. *The forecast completion timeframe for this milestone is the third quarter of 2023.* 



#### **Risk Management Narrative**

#### **Summary of Risks**

Two new potential risks were identified during the quarterly Risk Register meeting, and four risks were closed this period. A total of twenty-nine (29) risks remains to be managed in the next quarter.

Of the twenty-nine (29) risks, three (3) are scored as high, eight (8) as medium and eighteen (18) as low.

The next Purple (D Line) Extension Project Section 1 Risk Register quarterly update is scheduled for October 2023.

#### **Top Risks**

The table below shows the top Project risks:

Risk ID	Risk Description	Risk Score	Action Items
678.0	COVID-19 Pandemic Impact.	15	Evaluate state and local government guidelines.     Put contingency plans in place.
686.0	Installation of E2 Paddle gates on all Purple Line Stations (NEW).	10.5	Decision to move forward with new fare gates may impact the Project revenue service date and budget.
676.0	Subcontractor ability to get the required resources to perform work. Resource (Labor) shortage (Direct and Indirect).	10	Actively manage schedule and resource needs.
685.0	Permanent power at Fairfax Station energization may not occur until the permanent hatch is installed (DWP requirement) (NEW).	9	Metro executive management to mitigate (remove) the requirement between energizing Fairfax Station (Permanent Power Available) and the installation of the permanent hatch.
682.0	Procurement / Installation of Special Trackwork.	6	Delivery of La Cienega Station crossover track has moved from May-23 to Nov-23.     Schedule work-around includes the installation of temporary track (until crossover arrives) so follow-on work can move forward.
628.0	Systems integration with existing Purple Line at Wilshire/Western Station.	6	Wilshire/Western cutover completed on April 19, 2023.     Coordination of schedule with Metro Operations is ongoing.     Systems Integration Plan to be submitted in support of a June 2024 Systems Integration Testing start date.
680.0	Supply chain (material) delivery	6	Actively manage schedule for material need/delivery dates.

#### **PROJECT COST**

#### Project Cost Analysis – 865518

DOLLARS IN THOUSANDS

SCC DESCRIPTION		ORIGINAL CURRENT BUDGET BUDGET		COMMITMENTS		EXPENDITURES		CURRENT FORECAST		CURRENT BUDGET / FORECAST	
OODL	DE	DODOLI	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	PERIOD	TO DATE	VARIANCE
10	GUIDEWAY & TRACK ELEMENTS	388,294	1	494,309	5,634	473,678	12,334	451,338	1	623,394	129,085
20	STATIONS, STOPS, TERMINALS, INTERMODAL	440,621	1	606,997	ı	574,093	7,038	487,653	1	629,924	22,927
30	SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS	43,323	1	45,723	1	45,702	ı	45,702	1	45,723	-
40	SITEWORK & SPECIAL CONDITIONS	751,566	-	824,103	339	827,035	7,874	755,455	-	913,741	89,638
50	SYSTEMS	113,574	-	122,195	-	110,620	2,805	65,874	-	138,982	16,787
	CONSTRUCTION SUBTOTAL (10-50)	1,737,378	-	2,093,328	5,973	2,031,128	30,050	1,806,022	-	2,351,765	258,437
60	ROW, LAND, EXISTING IMPROVEMENTS	175,634	-	202,980	,	202,980	1	188,594	-	202,980	-
70	VEHICLES	160,196	-	108,302	1	99,230	855	31,740	1	108,302	-
80	PROFESSIONAL SERVICES	412,710	-	616,500	261	542,090	7,210	508,352	1	613,329	(3,171)
	SUBTOTAL (10-80)	2,485,918	٠	3,021,110	6,234	2,875,428	38,116	2,534,709	•	3,276,376	255,266
90	UNALLOCATED CONTINGENCY	248,592	-	68,400	1	1	-	-	1	38,134	(30,266)
100	FINANCE CHARGES	375,470	-	375,470	1	107,679	-	107,679	1	375,470	-
	TOTAL PROJECTS 465518 & 865518 (10-100)	3,109,980	•	3,464,980	6,234	2,983,107	38,116	2,642,387	•	3,689,980	225,000
	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		3,504,350	6,234	3,022,476	38,116	2,681,744		3,729,350	225,000

NOTE: FINANCE CHARGES ARE MANAGED UNDER DEBT SERVICE - MEASURE R PROJECT NO. 660301

#### **Original Budget**

The Original Budget of \$3.1 billion reflects the Board approved Life of Project Budget approved on July 24, 2014 plus Finance Charges of \$0.4 billion.

#### **Current Budget**

The Current Budget remains the same this period at \$3.5 billion.

#### **Current Forecast**

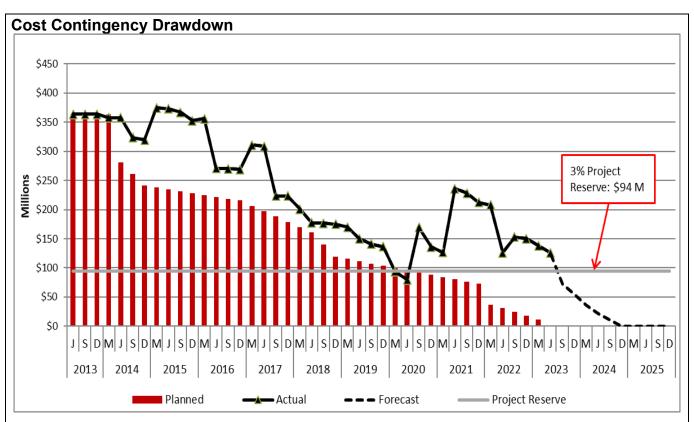
The Current Forecast remains the same this period at \$3.7 billion.

#### Commitments

Commitments increased by \$6.2 million this period primarily due executed Change Orders for the C1045 Design/Build Contract. The \$3.0 billion in Commitments to Date represents 86.2% of the Current Budget.

#### **Expenditures**

Expenditures increased by \$38.1 million primarily due to costs associated with the C1045 Design/Build Contract, Heavy Rail Vehicle Procurement, City of Los Angeles Master Cooperative Agreements, City of Beverly Hills Memorandum of Agreement, Engineering Management Support Services, Construction Management Support Services and Metro Project Administration. The \$2.7 billion in Expenditures to Date represent 76.5% of the Current Budget.



#### **Cost Contingency Drawdown Analysis**

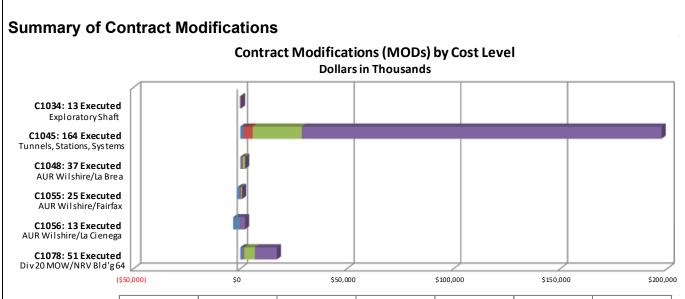
The Project's Original Budget of \$3.1 billion (plus Finance Charges of \$0.4 billion) included a project cost contingency of \$320.6 million or 10.2% of the total project budget. In June 2020, the remaining contingency balance was below the 3% project reserve threshold of \$83.4 million. To date, the Project has experienced higher than expected differing site conditions, an increase in third party and safety requirements, and changes in scope.

In February 2016, August 2020 and May 2021 the Board approved to amend the Life-of-Project (LOP) Budget to address cost contingency drawdowns and fund ongoing expenses. The LOP Budget was increased by \$5.0 million in 2016, \$200.0 million in 2020, and \$150.0 million in 2021. The 3% project reserve is currently \$93.9 million.

The Project Cost Contingency Drawdown curve has been adjusted to reflect the Fall 2024 Revenue Service Date forecast.

The Allocated Contingency decreased this period by \$6.2 million due to executed Change Orders for the C1045 Design/Build Contract.

PROJECT COST CONTINGENCY DOLLARS IN THOUSANDS								
Original Remaining Contingency Previous Period Current Period To-Date Contingency (Budget) (Forecast)								
Unallocated Contingency	248,592	(180,192)		(180,192)	68,400			
Allocated Contingency	71,963	(8,369)	(6,214)	(14,583)	57,380			
Total Contingency	320,555	(188,561)	(6,214)	(194,775)	125,780			



	C1034	C1045	C1048	C1055	C1056	C1078	Total
	13 Executed	164 Executed	37 Executed	25 Executed	13 Executed	51 Executed	Total
■ Under \$100K	(164)	1,341	574	(1,179)	(3,325)	1,217	(1,536)
■ \$100K to \$250K	321	4,437	617	436	245	578	6,634
■ \$250K to \$1M	-	22,978	1,051	391	-	5,034	29,454
Over \$1M	-	168,715	-	-	1,983	10,309	181,007
Total Contract MODs	157	197,471	2,242	(352)	(1,097)	17,138	215,559
Contract Award Amount	6,487	1,636,419	6,181	14,430	20,250	52,830	1,736,597
% of Contract MODs	2.4%	12.1%	36.3%	-2.4%	-5.4%	32.4%	12.4%

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.

One hundred and sixty-four Contract MODs with a total value of \$197.5 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.

Fifty-one Contract MODs with a total value of \$17.1 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)**

As of May 2023:

DBE Goal – Design The percentage of funds apportioned to Design Contracts					
Current DBE Commitment Design Total DBE Committed Dollars divided by Total Contract Value for Design	\$14.6 M 20.25%				
Current DBE Participation Total amount paid to date to DBEs divided by the amount paid to date to Prime	\$15.0 M 22.20%				

Seventeen (17) Design DBE sub-consultants have been identified to date.

DBE Goal – Construction The percentage of funds apportioned to Construction Contracts	17.00%
Current DBE Commitment Construction Actual commitment as Construction work is awarded	\$284.5 M 15.85%
Current DBE Participation  Total amount paid to date to DBEs divided by the amount paid to date to Prime	\$255.8 M 16.79%

One hundred seventy-one (171) Construction DBE subcontractors have been identified to date.

# PROJECT LABOR AGREEMENTS (PLA)

As of May 2023:

Targeted Worker Goal Construction work to be performed by residents from Economically Disadvantaged Areas in the United States	40.00%
Targeted Worker Current Attainment	62.95%
Apprentice Worker Goal	
Construction work to be performed by Apprentices	20.00%
Apprentice Worker Current Attainment	19.98%
Disadvantaged Worker Goal	
Construction work to be performed by disadvantaged workers	10.00%
Disadvantaged Worker Current Attainment	12.27%

#### FINANCIAL/GRANT

# Status of Funds by Source DOLLARS IN MILLIONS

SOURCE	(A) ORIGINAL BUDGET	(B) TOTAL FUNDS ANTICIPATED	(C) TOTAL FUNDS AVAILABLE	(D) COMMIT	(D/B) IMENTS %	(E) EXPE \$	(E/B) NDITURES %	(F) BILLED TO SOUR(	
FEDERAL - SECTION 5309 NEW STARTS	\$1,250.000	\$1,250.000	\$1,250.000	\$1,152.119	92%	\$910.265	73%	\$920.216	74%
FEDERAL - SECTION 5309 NEW STARTS (ARPA-CIG**)	\$0.000	\$66.429	\$66.429	\$66.429	100%	\$66.429	100%	\$66.429	100%
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	\$749.306	\$749.306	\$749.306	100%	\$749.306	100%	\$749.306	100%
MEASURE R 35%	\$869.178	\$1,342.159	\$1,342.159	\$1,002.149	75%	\$903.271	67%	\$762.718	57%
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	\$5.932	\$5.932	\$5.932	100%	\$5.932	100%	\$5.932	100%
CITY OF LOS ANGELES	\$75.273	\$75.273	\$31.290	\$31.290	42%	\$31.290	42%	\$31.290	42%
TOTAL	\$3,149.350	\$3,504.350	\$3,460.367	\$3,022.476	86.2%	\$2,681.744	76.5%	\$2,551.142	72.8%

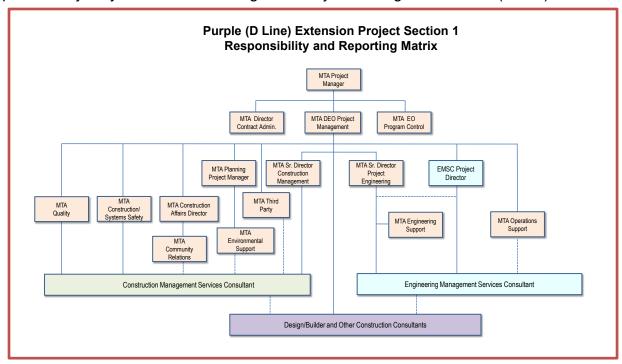
EXPENDITURES ARE CUMULATIVE THROUGH JUNE 30, 2023 ORIGINAL BUDGET BASED ON JULY 2014 BOARD APPROVED LOP BUDGET

<sup>\*</sup>OTHERS INCLUDE Prop A/C/TDA Admin (\$4.1M), General Fund (\$1.8M), and State Capital (\$0M)

<sup>\*\*</sup>AMERICAN RESCUE PLAN ACT - CAPITAL INVESTMENTS PROGRAM (ARPA-CIG)

#### PROJECT ORGANIZATION AND STAFFING

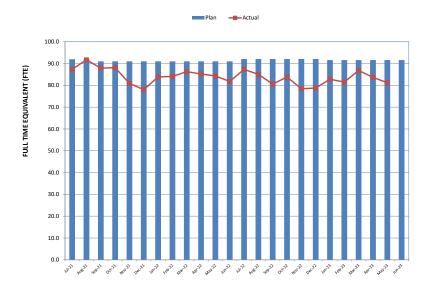
The Design/Build Contract is being managed by a joint team of Metro and consultant personnel jointly located at the Integrated Project Management Office (IPMO).



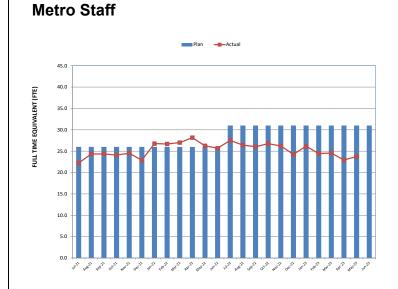
The overall FY23 Total Staffing Plan averages 91.9 FTEs per month.

For May 2023 there were a total of 23.7 FTEs for MTA's Project Administration Staff and 57.5 FTEs for Consulting Staff. The total Project staffing for May 2023 was 81.2\* FTEs.

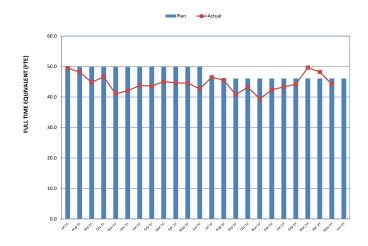
#### Total Project Staffing - Metro and Consultants



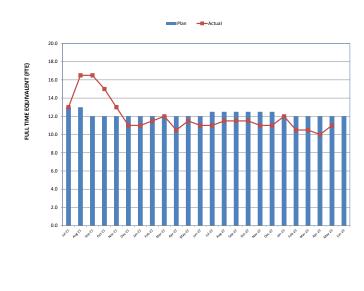
<sup>\*</sup>Actuals include 2.2 FTEs related to Project Management Support Services (PMSS).



#### **CM Support Services Staff (Consultant)**



#### **Engineering Services Staff (Consultant)**



All above data through May 2023

#### **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 Summary							,	
Description	Number		Appraisals	Offers	Agreements/ Settlements Signed	Reloc	Parcels	
	of Parcels	Certified	Completed	Made		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.

One parcel at the Wilshire/Fairfax Station location remains in the condemnation phase. The final settlement agreement is being closed out, and the closeout date has not been established. Metro is in the process of extending the lease agreements for the Temporary Construction Easements (TCEs).

#### **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 predominantly compliant.
- Reviewed and provided comments on quality related submittals, construction work plan, project specifications, product data and quality manuals.
- Station quality progress:
  - Wilshire/La Brea engaged in oversight activities for entrance structures, crossover structural members and platform slab member.
  - Wilshire/Fairfax engaged in oversight activities for entrance structure/ancillary level, maintenance walkways and street restoration backfill.
  - Wilshire/La Cienega engaged in oversight activities for construction of appendage structures and backfill activities.
- Processed 46 surveillances, 23 Quality Action Requests (QARs), 32 Nonconformance Reports (NCRs) and one (1) Corrective Action Request (CAR).

#### **ENVIRONMENTAL**

- Monitored performance of work during Wilshire/La Cienega Station decking removal for vibration near historical structures and during compaction.
- Coordinated for manifesting and disposal of petroleum contaminated soil from Wilshire/La Brea Station appendages as non-hazardous waste.
- Reviewed conditions applicable to removal of trees on Metro station property at the north La Brea station laydown yard.
- FTA released its final finding for MMRP's 40th Quarter report as compliant.
- Prepared CEQA review memo for City of Los Angeles discussing impacts during phase II of decking removal and street restoration activities at the Wilshire/La Brea Station.

#### CONSTRUCTION AND COMMUNITY RELATIONS

- Attended monthly/weekly meetings with City of Los Angeles Department of Transportation, virtual Neighborhood Council meetings, monthly environmental mitigation meetings and daily/weekly internal construction update meetings for work in the cities of Los Angeles and Beverly Hills as well as held meetings online and conducted monthly project update presentations to Beverly Hills residents and business stakeholders, elected officials' deputies, various stakeholders along the alignment and at construction community meetings.
- Corresponded with and presented to Los Angeles City Council district offices, the Board
  of Public Works, Greater Miracle Mile and Beverly Hills Chambers of Commerce, and
  City of Beverly Hills staff regarding construction effects on traffic and shared major
  stakeholder concerns.
- Continued with the "Eat, Shop, Play Spotlight" (ESP) campaign to advertise and promote businesses that participate in ESP Wilshire and Beverly Hills specific to eateries or other service-oriented businesses that remain open or have reopened for onsite pickup, dining-in and delivery.
- Continued additional construction mitigations including business signage, street signs and print ads at no cost to the businesses. Referred businesses to Metro's Business Interruption Fund (BIF) program.
- Updated website, Facebook, and Twitter regularly. Published monthly Purple Line Extension (PLE) newsletter to email list. Placed monthly ads in local papers.
- Conducted extensive one-on-one outreach to Beverly Hills business stakeholders and additional outreach to residents in advance of the Wilshire/La Cienega Station weekend closures of Wilshire Blvd. for decking removal activities.
- Produced and distributed sixty-four (64) construction work notices for construction activities; the La Cienega Monthly Look Ahead; weekly look-ahead for Division 20; weekly construction look-ahead emails to community stakeholders; and monthly lookahead emails as well as door-to-door distributions for the City of Beverly Hills.

#### **CREATIVE SERVICES**

- Reviewed and responded to Contractor submittals for art fabrication.
- Continued coordination with Contractor on design development for artwork lighting.
- Managed fabrication sample reviews with artist in coordination with the Contractor.
- Conducted initial inspection of porcelain enamel steel art panels for Wilshire/La Brea Station platform level artwork to advance fabrication.
- Ongoing development of wayfinding signage designs for impacted stations along the existing D Line.

#### **SAFETY & SECURITY**

- There were no recordable injuries, lost time or COVID cases in June 2023.
- Metro Safety staff conducted daily safety inspections, attended weekly Toolbox,
   Progress, readiness review and other Project meetings to evaluate Contractor's safety
   program compliance with contract requirements.
- Metro Safety staff worked regularly with Program Management and Construction
  Relations staff to monitor issues related to public concerns regarding noise, traffic and
  public/construction interfaces as well as public interactions with the construction crews.
- Metro and STS have extra safety staff assigned to monitor safety performance and program changes instituted after the March 23, 2022 fatality.
- May 2023 Contractor Work Hours (Design & Construction): 121,193
- Total Project to Date Work Hours (through May): 8,636,811
- Project to Date Recordable Injury Rate: 0.95 (41 Recordable Injuries) (each rate is per 200,000 work hours) (National Rate: 2.4)
- Project to Date Total Days Away (DART) Injury Rate: 0.07 (3 cases Days Away or Lost Time cases) (National Rate: 1.5)

# 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.

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	Completed decking operations for Wilshire/Fairfax Station.
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	Completed decking operations for Wilshire/La Cienega Station.
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	Completed concrete wall pours needed to support TBM assembly at Wilshire/La Brea Station.
July 2018	Began delivery of TBM components to the Wilshire/La Brea Station site.
October 2018	Commenced Reach One's (1) mining operation with the launch of TBM #1 from Wilshire/La Brea Station.
November 2018	Launched TBM #2 from Wilshire/La Brea Station.
December 2018	Reached the bottom of excavation at the Wilshire/Western TBM retrieval site.
January 2019	Placed the temporary concrete slab at the Wilshire/Western TBM retrieval site.
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	Achieved substantial completion for the C1078 Contract (Division 20 MOW/NRV Building Location 64) on May 1, 2019.
June 2019	Both TBM #1 (Soyeon) and TBM #2 (Elsie) completed Reach One (1) tunnel alignment mining.
i e	

July 2019	Began transport of both TBMs (#1 Soyeon and #2 Elsie) from the Wilshire/Western Shaft to Wilshire/La Brea Station.
August 2019	Completed invert concrete placement at Wilshire/Fairfax Station.
September 2019	Reached bottom of excavation at Wilshire/La Cienega Station.
October 2019	TBM #2 (Elsie) commenced Reach #2 tunnel drive.
November 2019	Completed 1 <sup>st</sup> lift exterior wall concrete placement at Wilshire/Fairfax Station.
December 2019	Commenced station invert concrete placement at Wilshire/La Cienega Station.
January 2020	Commenced Reach 1 cross passage excavation.
February 2020	Completed Wilshire/La Cienega Station invert concrete placement.
March 2020	Commenced Wilshire/La Brea Station roof concrete placement.
April 2020	Arrival of first rail delivery to the Division 20 Rail Yard.
May 2020	TBM #1 (Soyeon) completed Reach #2 tunnel drive. TBM #2 (Elsie) commenced Reach #3 tunnel drive.
June 2020	Completed 1st lift wall concrete placement (GL 3-15) at Wilshire/La Cienega Station. Completed Reach Two (2) tunnel mining.
July 2020	TBM #1 (Soyeon) commenced Reach #3 tunnel drive.
August 2020	Commenced concourse concrete placement at Wilshire/Fairfax Station.
September 2020	Completed first roof placement (Block 7) at Wilshire/La Cienega Station.
October 2020	Commenced welding running rail at the Division 20 Rail Yard.
November 2020	Placed protection slab at the Wilshire/La Cienega Station entrance.
December 2020	Completed welding of running rail at the Division 20 Rail Yard.
January 2021	The Purple TBM (Elsie) restarted Reach 3 tunnel drive and has reached the Wilshire/San Vicente anomaly site.
February 2021	The Purple TBM (Elsie) completed Reach 3 tunnel drive.

February 2021	Started Reach 1 tunnel invert concrete placement.
March 2021	The Red TBM (Soyeon) completed Reach 3 tunnel drive.
April 2021	The Purple TBM (Elsie) completed Tail Track tunnel drive.
May 2021	Completed TBM tunnel mining activities for the Project.
June 2021	Completed Reach 1 cross passage structures.
July 2021	Commenced TBM Gantry removal from Wilshire/La Cienega Station.
August 2021	Commenced Reach 2 cross passage excavation.
September 2021	Placed all concrete roof sections (11 out of 16) for this phase of construction at Wilshire/Fairfax Station.
October 2021	Commenced Reach 1 trackwork installation activities.
November 2021	Commenced cross passage 19 (Reach 2) excavation.
December 2021	Completed concourse concrete slab placement at the east end of Wilshire/Fairfax Station.
January 2022	Completed Reach 1 south tunnel walkway concrete placement.
February 2022	Completed concrete concourse deck placement at the west end of Wilshire/Fairfax Station.
March 2022	Completed Reach 2 cross passage excavation.
April 2022	Commenced the weekend deck beam removal/station backfill operation on Wilshire Boulevard.
May 2022	Completed concrete concourse deck placement at the west end of Wilshire/La Brea Station.
June 2022	Completed concrete concourse deck placement at the west end of Wilshire/La Cienega Station.
July 2022	Completed all arched concrete roof placements at Wilshire/Fairfax Station.
August 2022	Commenced remaining roof concrete placements at the west end of Wilshire/La Brea Station.
September 2022	Commenced remaining roof concrete placements at the west end of Wilshire/La Cienega Station.
October 2022	Commenced Reach 2 trackwork installation activities.

November 2022	Completed concrete roof placements at the Gale shaft section of Wilshire/La Cienega Station (Blocks 8 & 9)
December 2022	Completed all arched roof concrete placements at Wilshire/La Brea and Wilshire/La Cienega Stations.
January 2023	Completed first concrete placement of platform level walls at Wilshire/La Cienega Station.
February 2023	Completed all tunnel invert and walkway concrete placements for the entire Project.
March 2023	Completed concrete placement of Wilshire/Fairfax Station platform.
April 2023	Completed concrete placement of Wilshire/La Brea Station platform.
May 2023	Installed Traction Power AC Equipment at Wilshire/La Brea Station.
June 2023	Completed first delivery of contact rail to the Project site.