

Sixth Bimonthly Purple Line Construction Status
Report of Fiscal Year 2024
(2023 JCR, p. 82)

A Report to the Maryland General Assembly
Senate Budget and Taxation Committee
and
House Appropriations Committee

May 2024

Maryland Department of Transportation
Maryland Transit Administration

Introduction

The Maryland Department of Transportation (MDOT) prepared this supplemental report in response to language contained in the 2023 Joint Chairmen’s Report (JCR). The language states:

“provided that \$100,000 of this appropriation made for the purpose of agency administration may not be expended until the Maryland Transit Administration submits five bimonthly construction status reports for the Purple Line Project to the budget committees. The status reports shall provide:

- 1) the completion percentages for the project as a whole and for each major category of work;*
- 2) the running total amount expended for construction; and*
- 3) an explanation of any material change to the total construction cost estimate or construction schedule as set forth in the revised public-private partnership agreement as amended to add Maryland Transit Solutions as the replacement design-build contractor for the project.*

The first status report shall be submitted by July 1, 2023, and subsequent reports shall be submitted every second month thereafter, and the budget committees shall have 45 days from the date of the receipt of the final report to review and comment. Funds restricted pending the receipt of a report may not be transferred by budget amendment or otherwise to any other purpose and shall be canceled if the report is not submitted to the budget committees.”

This sixth status report, not required in response to the 2023 JCR, is being submitted in the interest of continued transparency for the Committees.

The Purple Line is a critical investment in Maryland’s transportation system that will provide reliable east-west travel in Montgomery and Prince George’s counties, help reduce congestion, improve our environment, increase transit connectivity, create jobs, and drive economic growth.

The Purple Line will transform the region by:

- advancing the shared mission to improve the quality of life and economic vitality in our communities by creating and sustaining an integrated, convenient, and reliable transportation network;
- creating several new multimodal connections across the region, linking to three Washington Metropolitan Area Transit Authority (WMATA) Metro lines, three Maryland Area Regional Commuter (MARC) commuter rail lines, Amtrak, and a host of bus services;
- greatly expanding transit opportunities in Maryland’s two most populous and fastest-growing counties in the State;
- creating convenient, dependable east-west access to jobs, educational centers, shopping, recreation, and attractions;

- supporting more than 6,000 jobs, with 26% for design services going to small and minority-owned businesses and 22% for construction going to small and minority-owned businesses;
- relieving automobile congestion on major arteries and local roads in one of the most congested areas in the nation;
- providing significant environmental benefits through the operation of clean electric energy light rail vehicles and taking thousands of vehicles off the road daily, thereby reducing vehicle emissions caused by single occupancy vehicle drivers;
- spurring economic growth along the Purple Line alignment in and between Prince George's and Montgomery counties and having a positive impact on property values by improving access and mobility; and
- revitalizing communities and providing much-needed opportunities for transit-oriented developments, many of which are already under development in anticipation of completion of the Purple Line.

Information Requested

As requested in the 2023 Joint Chairmen's Report, MTA is providing the most recent information collected and summarized through the end of March 2024.

1. The percent completion for the overall project and for each major category of work.

With the execution of the Seventh Amendment to the Public-Private Partnership, the contract value has increased by approximately \$406 million, to a total of \$3.9 billion (Design and Construction). The percent completion for the overall project is based on earned value of the total project cost; therefore, the percent complete has changed from 65.4% prior to the Seventh Amendment, to 62.4% after the Seventh Amendment. However, as noted in the update below, construction continues to progress, setting up 2024 as an exciting year of momentum for project accomplishments.

At more than 62% complete, Purple Line progress continues to advance with five station canopies in place: Connecticut Avenue, Silver Spring, Riverdale Park North-UMD, Beacon Heights-East Pines and Glenridge. Track laid has reached 30,000 feet overall and recent accomplishments also include construction at 14 future Purple Line stations and the increase in visible track across the alignment. Critical construction work during the University of Maryland (UMD) spring break includes sidewalks, sand filter/planter boxes, paving, more tracks laid and other improvements. Preparation work continues at the Glenridge Operations and Maintenance Facility (OMF) in preparation of light rail vehicles arriving later this spring. Construction of storage tracks at the OMF is nearing completion. Ongoing work at the OMF includes installation of communications and power ductbanks, site lighting, and installation of the Overhead Contact System that powers the trains. Inside the facility, work has advanced to support delivery, reassembly, and testing of the vehicles upon their arrival.

As of March 31, 2024, the following completion percentages have been achieved:

Completion Category	% Complete (as of 3/31/24)	% Complete (as of 1/31/24)
Overall Project ⁽ⁱ⁾	62.4%	65.4%
Utility Relocations ⁽ⁱⁱ⁾	87.8%	86.8%
Civil Design ⁽ⁱⁱⁱ⁾	100%	100%
Systems Design ^(iv)	84.2%	79.0%
Construction Possession of Property Acquisitions ^(v)	100%	100%
Civil Construction ^(vi)	46.6%	45.2%
Rail Installation ^(vii)	13.4%	7.7%
Systems and Station Construction ^(viii)	16.5%	15.6%
Glenridge Operations and Maintenance Facility ^(ix)	95.0%	95.0%
Rail Vehicles Ready to Ship ^(x)	92.8%	92.8%
Capital Crescent Trail Construction ^(xi)	45.8%	45.5%

UPDATED CALCULATION FORMULAS:

- i. Overall Project completion is calculated by summing the earned value (EV) for the three P3 project phases (prior Design-Build Contractor, MTA interim, current Design- Build Contractor) and dividing by the sum of the estimates at completion (EAC) for the three P3 project phases.
$$(EV_{priorDB} + EV_{interim} + EV_{currentDB}) / (EAC_{priorDB} + EAC_{interim} + EAC_{currentDB})$$
- ii. Progress of Utility Relocations is now calculated using partial progress information for each individual utility relocation package. Of the 260 total utility relocations packages, the following progress is noted:
 - a. 211 packages at 100% Complete
 - b. 6 packages at $90\% \leq \text{Complete} < 100\%$
 - c. 14 packages at $50\% \leq \text{Complete} < 90\%$
 - d. 4 packages $0\% < \text{Complete} < 50\%$
 - e. 25 packages at 0% Complete
- iii. Civil Design progress is based on 199 of 199 civil design packages having a Released for Construction status.
- iv. Systems Design progress is based on 16 of 19 systems design packages having a Released for Construction status. Systems design packages are the last packages to complete, because equipment location and cable routing must fit into the completed civil design environment.
- v. Construction Possession of Property Acquisitions refers to available access for Purple Line Project construction. The category includes all original (P3A Exhibit 9) and additional (P3A Exhibit 9B) properties required for the project.
- vi. Civil Construction is calculated based on physical construction progress of major civil components (retaining walls, bridges, drainage, paving, and underground structures) across the project alignment.
- vii. Rail Installation is calculated based on measured rail installation as a percentage of all planned rail across the project alignment.
- viii. Systems and Station Construction is calculated based on physical construction progress of major systems components (overhead power, train & traffic signals, communications equipment, substations) and stations across the project alignment.
- ix. This category measures the progress of just the maintenance facility. Civil, rail, and systems construction within the Glenridge Yard is now tracked and reported under the Civil Construction, Rail Installation, and Systems and Station Construction status.
- x. All 26 of the original fleet of 26 light rail vehicles are ready to ship to Maryland from Elmira, New York when the Glenridge Operations and Maintenance Facility is ready. Two additional light rail vehicles were ordered and all ten carshells have been delivered to Elmira and entered into the final assembly process.

- xi. Capital Crescent Trail Construction is calculated based on physical construction progress of major civil components (retaining walls, bridges, drainage, paving, trail connections, and landscaping/fencing) along the Capital Crescent Trail. Portions of the Capital Crescent Trail will be constructed in conjunction with the Purple Line tracks, and therefore the Capital Crescent Trail will open when it is safe to do so in a later stage of the project.

2. *The running total amount expended for construction.*

Since the execution of the new design-build contract on April 15, 2022, through March 31, 2024, \$1.037 billion has been expended on the design-build contract. Reported expenditures are based on the latest monthly construction progress report prepared by the Concessionaire.

3. *An explanation of any material change to the total construction cost estimate or construction schedule as set forth in the revised P3 Agreement as amended to add Maryland Transit Solutions as the replacement design-build contractor for the project.*

The Board of Public Works approved the Seventh Amendment to the Public-Private Partnership Agreement on March 13, 2024, which added \$406 million to the design and construction cost of the project.

The MTA and the Concessionaire continue to work collaboratively to deliver the Purple Line. As with any mega project, the schedule will fluctuate monthly. The MTA and the Concessionaire will continue to identify and mitigate any potential delays. The MTA will continue to provide regular updates to the public and remains committed to delivering this critical transit project for the region.

Milestones

The below table highlights significant remaining milestones for the Project, including the estimated start date of revenue service:

Milestone	Date
Financial and Commercial Close	April 2022
Resumption of Full-Scale Construction	Summer 2022
Delivery of First Light Rail Vehicle	Spring/Summer 2024
Test Track Complete for Local Testing & Operator Training	Fall 2024
Capital Crescent Trail Opens	Spring 2026
Construction Complete, Commence Demonstration Testing & Commissioning Activities	Spring 2027
Revenue Service Availability Begins	Winter 2027

Construction Progress

Segment 1: Bethesda Metro South Entrance – Sprung arch installation work progress.
(03.18.24)



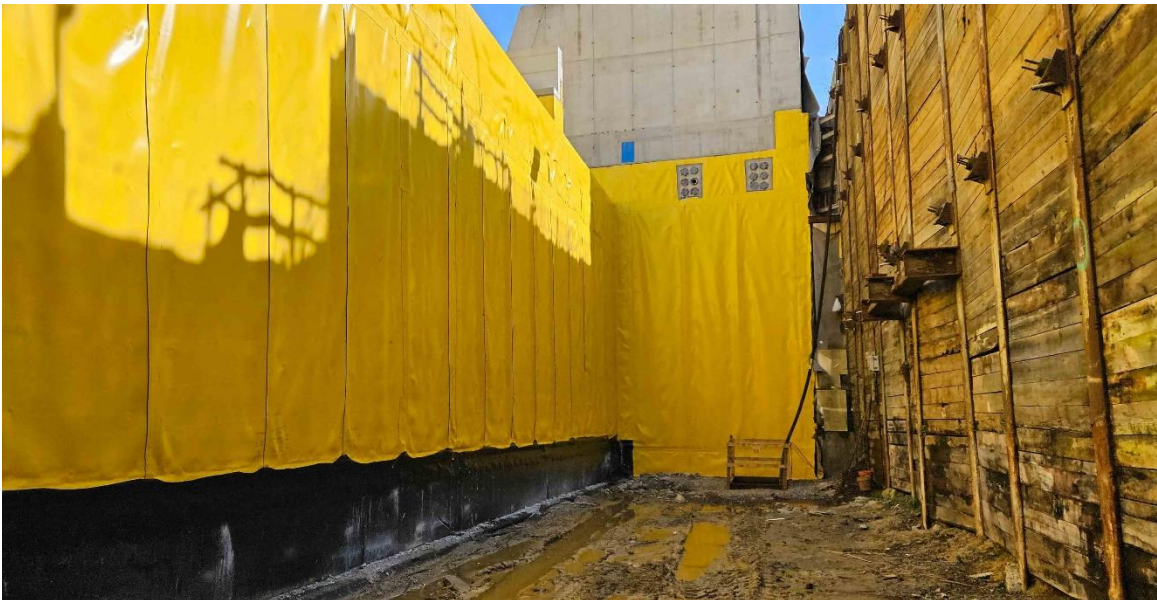
Segment 2: S18 Talbot Ave Bridge – Site view of the bridge approach pedestrian sidewalk and fencing work progress. (03.26.24)



Segment 3: S25 Wayne LRT Bridge over Sligo Creek Abutment A work progress. (03.25.24)



Segment 4: Manchester Place Station – Zone A site view of work progress for the cut & cover box entrance on Wayne Avenue. (03.14.24)



Segment 5: S27A/B NW Branch Bridge on University Blvd. – LRT bridge and traffic bridge site view of deck grooving work progress. (02.28.24)



Segment 6: Underground Stormwater Management System - Sand filter
F2-92-01 installation progress on Presidential Drive at the University of
Maryland. (02.16.24)



Segment 7: S29 Kenilworth Ave LRT Bridge over MD 410 East-West Highway girder installation progress along Kenilworth Avenue. (03.28.24)



Segment 8: Embedded track connection to ballast MOW tracks around the paint booth inside the Glenridge Yard Facility heading towards MD450. (03.29.24)

