

Purple Line Construction Status Report
(2024 JCR, p. 89)

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

March 2025

Maryland Department of Transportation
Maryland Transit Administration

Introduction:

The Maryland Department of Transportation (MDOT) prepared this report in response to language contained in the 2024 Joint Chairmen’s Report (JCR). The language states:

“Given continued challenges and cost overruns associated with completing construction on the Purple Line Light Rail project, the committees request that the Maryland Transit Administration (MTA) submit six bimonthly construction status reports for the Purple Line project to the 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 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 2024 Joint Chairmen’s Report, MTA is providing the most recent information collected and summarized through the end of January 2025.

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

Purple Line progress continues to advance with 20 stations under construction. More than 67,500 of 193,100 feet of track has been laid overall. Track and systems work continues at the Glenridge Operations and Maintenance Facility (OMF) including the installation of Overhead Catenary System (OCS) poles, track switches, and other systems elements. Delivery of light rail vehicles (LRV) to the OMF is ongoing. Eight of the 28 LRVs are now on site, and the remaining 20 LRVs are ready to come to Maryland. Structural work continues at the secondary OMF, located in Lyttonsville, in Montgomery County, including installation of walls and utilities. Major efforts are underway to complete grade crossings across the alignment and advance systems construction, including communications and train control equipment. Traffic has been shifted to the final phase of construction along the full length of University Boulevard, allowing track construction to progress in the middle of the roadway. In January, Sligo Creek Parkway reopened between Wayne Avenue and Schuyler Road following the completion of the new Wayne Avenue bridge over Sligo Creek. Major construction also continues at key locations, including shaft excavation and concrete work at Bethesda, mezzanine work at the Silver Spring Transit Center, track installation along Wayne Avenue, Campus Drive, and Riverdale Park, station work at New Carrollton, and continuation of work at the Capital Crescent Trail.

As of January 31, 2025, the following completion percentages have been achieved:

Completion Category	% Complete (as of 1/31/25)	% Complete (as of 11/30/24)
Overall Project ⁽ⁱ⁾	76.1%	74.2%
Utility Relocations ⁽ⁱⁱ⁾	94.7%	94.1%
Civil Design ⁽ⁱⁱⁱ⁾	100%	100%
Systems Design ^(iv)	84.2%	84.2%
Construction Possession of Property Acquisitions ^(v)	100%	100%
Civil Construction ^(vi)	72.4%	66.5%
Rail Installation ^(vii)	35.0%	29.2%
Systems Construction ^(viii)	53.7%	44.7%
Station Construction ^(ix)	54.8%	48.0%
Glenridge Operations and Maintenance Facility ^(x)	95.0%	95.0%
Rail Vehicles Ready to Ship ^(xi)	100%	92.9%
Capital Crescent Trail Construction ^(xii)	53.9%	51.5%

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. 240 packages at 100% Complete
 - b. 1 package at $90\% \leq \text{Complete} < 100\%$
 - c. 9 packages at $50\% \leq \text{Complete} < 90\%$
 - d. 3 packages at $0\% < \text{Complete} < 50\%$
 - e. 7 packages at 0% Complete
- iii. Civil Design progress is based on 199 of 199 civil design packages having a Released for Construction (RFC) status.
- iv. Systems Design progress is based on 16 of 19 systems design packages having an RFC 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.

Starting with the March 2025 report, Systems and Station progress tracking has been separated to provide a better representation of these discrete elements. Additionally, a thorough analysis of construction progress during 2024 identified additional progress that had not been previously reported for these two categories.
- viii. Systems Construction is calculated based on physical construction progress of major systems components (overhead power, train & traffic signals, communications equipment, substations) across the project alignment. This figure does not include testing and commissioning of project systems prior to achievement of revenue service and start of operations.
- ix. Station Construction is calculated based on physical construction progress of stations (platforms and structures, elevators and escalators, glazing, lighting, signs, fare collection, and other components) across the project alignment.
- x. 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.

- xi. Of the original fleet of 26 light rail vehicles (LRVs), eight (8) have been shipped and delivered to the Glenridge Operations & Maintenance Facility (OMF) as of the end of January 2025, and the remaining 18 are ready to ship. Two additional LRVs were ordered; factory testing for both of these vehicles has recently been completed and both are now ready to ship. All remaining LRVs are planned to be delivered by the end of 2025.
- xii. 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 January 31, 2025, \$1.626 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.*

As of January 31, 2025, there are no material changes to the cost or schedule of the project.

Milestones:

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

Milestone	Date
Test Track Complete for Local Testing & Operator Training	Spring 2025
Capital Crescent Trail Construction Complete	Spring 2026
Construction Complete, Commence Demonstration Testing & Commissioning Activities	Spring 2027
Revenue Service Availability Begins	Winter 2027

Due to a water main break, which caused fouled track ballast and required both ballast replacement and the realignment of a yard track, the "Test Track Complete" milestone for local testing and operator training has been postponed to Spring 2025. Nevertheless, this change does not impact the overall project schedule.

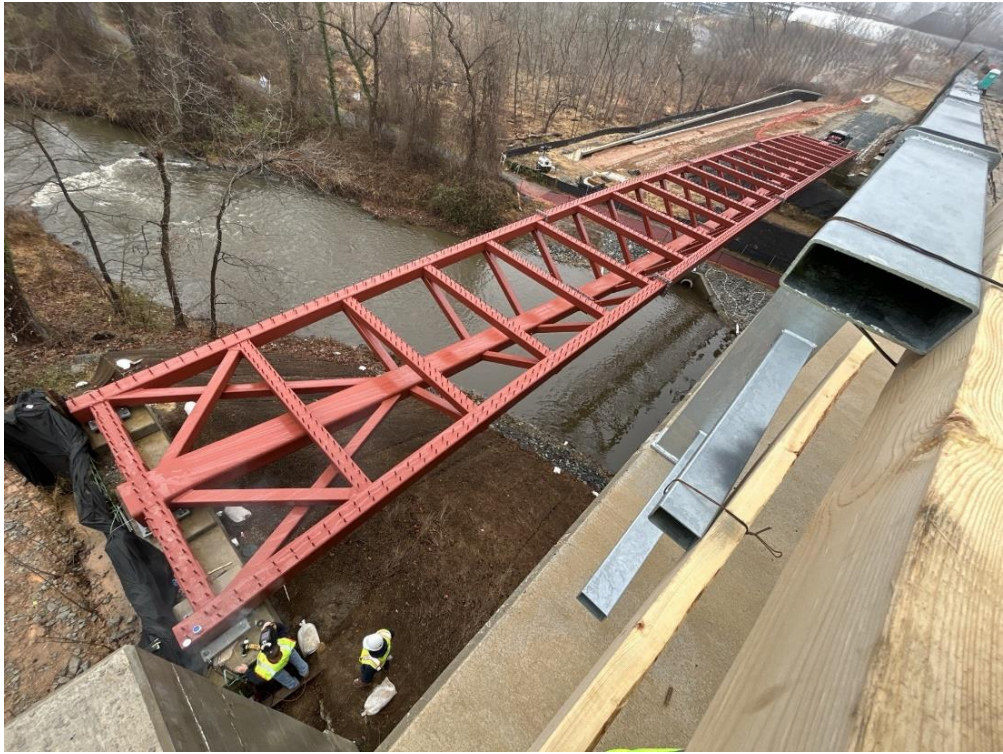
Construction Progress:

Segment 1 (Bethesda - Spring Street):

Bethesda Enclosed Trainway - Site view of the jet fan and fiber reinforced epoxy (FRE) conduits work. (01.16.25)



Rock Creek Capital Crescent Trail (CCT) Bridge - Site view of the S14 CCT pedestrian bridge structure set in place over Rock Creek. (12.16.24)



Segment 2 (Lyttonsville Yard area):
Lyttonsville Station – Site view of the Station canopy and elevator work progress. (12.10.24)



Lyttonsville OMF - Site view of the concrete masonry unit work for the walls. (01.28.25)



Segment 3 (Spring Street to Manchester Road):

Wayne Ave. Bridge - Site view of Phase 2 demolition of the existing Wayne Ave. Bridge over Sligo Creek (01.21.25)



Dale Drive Station - Site view of the canopy and windscreen frame work progress along Wayne Ave. (01.09.25)



Segment 4 (Manchester Road to Arliss Street / Plymouth Tunnel):
Plymouth Tunnel – Site view of jet fan installation work progress. (01.24.25)



Long Branch Station – Site view of platform canopy and windscreen frame work progress.
(01.15.25)



Segment 5 (Arless Street to Adelphi Road):

Piney Branch Road Station - Site Views of the canopy installed with Art in Transit glass along University Blvd. (12.03.24)



Riggs Road Station - Site Views of platform canopy work progress along University Blvd. (12.26.24)



Segment 6 (Adelphi Road to College Park):
Site Views of OCS installation work progress on UMD Campus. (01.09.25)



Embedded track #2 concrete placement on Campus Drive. (01.17.25)



Segment 7 (College Park to Ellin Road):
Glenridge Station - Site View of the Platform handrail and CCTV work along Veterans Parkway and Annapolis Road. (01.30.25)



New Carrollton Station - Site View of the installed canopy and column work progress along Ellin Road. (01.31.25)



Segment 8 (Glenridge Maintenance Facility):

Site View of Glenridge Yard looking East at the ballast track and OCS work. (01.31.25)



Site View of Glenridge Yard looking East at the ballast track and OCS work. (01.31.25)

