MARYLAND DEPARTMENT OF TRANSPORTATION

MARYLAND TRANSIT ADMINISTRATION

Patapsco Station Pedestrian Bridge

Project Description

2026 BUILD Grant

FEBRUARY 2026

Project Description

The Patapsco Station Pedestrian Bridge Project (the Project) will construct a new pedestrian/bicycle bridge, providing improved access for the Cherry Hill community to the Maryland Transit Administration (MTA) Patapsco Light Rail Station. The proposed new connection will originate at Denham Circle in Cherry Hill, with a pedestrian bridge crossing the CSX Transportation (CSXT) tracks and Patapsco Avenue. The pedestrian bridge will connect directly to the Light Rail platform, as well as the future planned Baltimore City Department of Transportation (BCDOT) Patapsco Avenue shared-use path. The pedestrian bridge will be accompanied by wayfinding signage. Additional signage locations near the Patapsco Light Rail Station may be added.

Scope of Work

The Scope of Work for this Project will cover Final Design, ROW and utility coordination, Construction, and Public Engagement. Conceptual design has been completed for all Project elements, including architectural finishes and signage. The design of the pedestrian infrastructure Project will be consistent with existing design guidelines, including Baltimore City's Complete Streets Manual[1] and the MTA's Transit Priority Toolkit[2], Transit Hub Toolkit, and Transit Oriented Development Guidelines.[3] Execution and planning of engineering activities and construction will be informed by successful MTA projects, both federally and locally funded. Recently, MTA successfully designed and constructed the Rogers Avenue Metro Subway Station Pedestrian Bridge (2024) and the Halethorpe MARC Station Redesign Project (2015) which included a pedestrian bridge. The SOW activities will be supported by robust public engagement informed by previous MTA efforts including on-site activities, community meetings, stakeholder discussions, and the availability of online resources.

Project Scope

In September 2025, MTA conducted a feasibility study and prepared an accompanying technical memorandum (see attachment: Feasibility Study) featuring conceptual plans for the Project. The selected design option will consist of three sections: Sections A, B, and C, are detailed below and are represented in **Figure 1**.

- **Section A:** Originating at Denham Circle in Cherry Hill, it will consist of a 225-foot long at-grade reinforced concrete path and a 95-foot long single-span prefabricated pedestrian steel truss bridge crossing over the CSXT railroad.

---

[1] https://cityservices.baltimorecity.gov/resources/Baltimore%20Complete%20Streets%20Manual%20Final%20March%202021.pdf

[2] https://s3.amazonaws.com/mta-website-staging/mta-website-staging/files/Transit%20Projects/Transit%20Priority%20Initiative/BaltimoreLink_Transit_Priority_Toolkit.pdf

[3] https://s3.amazonaws.com/mta-website-staging/mta-website-staging/files/Transit%20Projects/TOD/TOD_Design_Guidelines_Jan2020.pdf

- **Section B:** Accommodating the change in elevation, it will consist of a multilevel spiral structure ramp maintaining a maximum grade of five percent. Pedestrians will enter the spiral from Section A then travel one full rotation to reach Section C. A staircase will also be located within the spiral, providing a shorter path for pedestrians. Section B will also connect to the Patapsco Avenue shared-use path.
- **Section C:** Terminating at the Patapsco Light Rail Station, it will consist of a 120-foot long single-span prefabricated steel truss pedestrian bridge over Patapsco Avenue and an elevated reinforced concrete slab structure. Unlike the image in Figure 1, the updated concept design has a shortened connection with the Light Rail Platform.

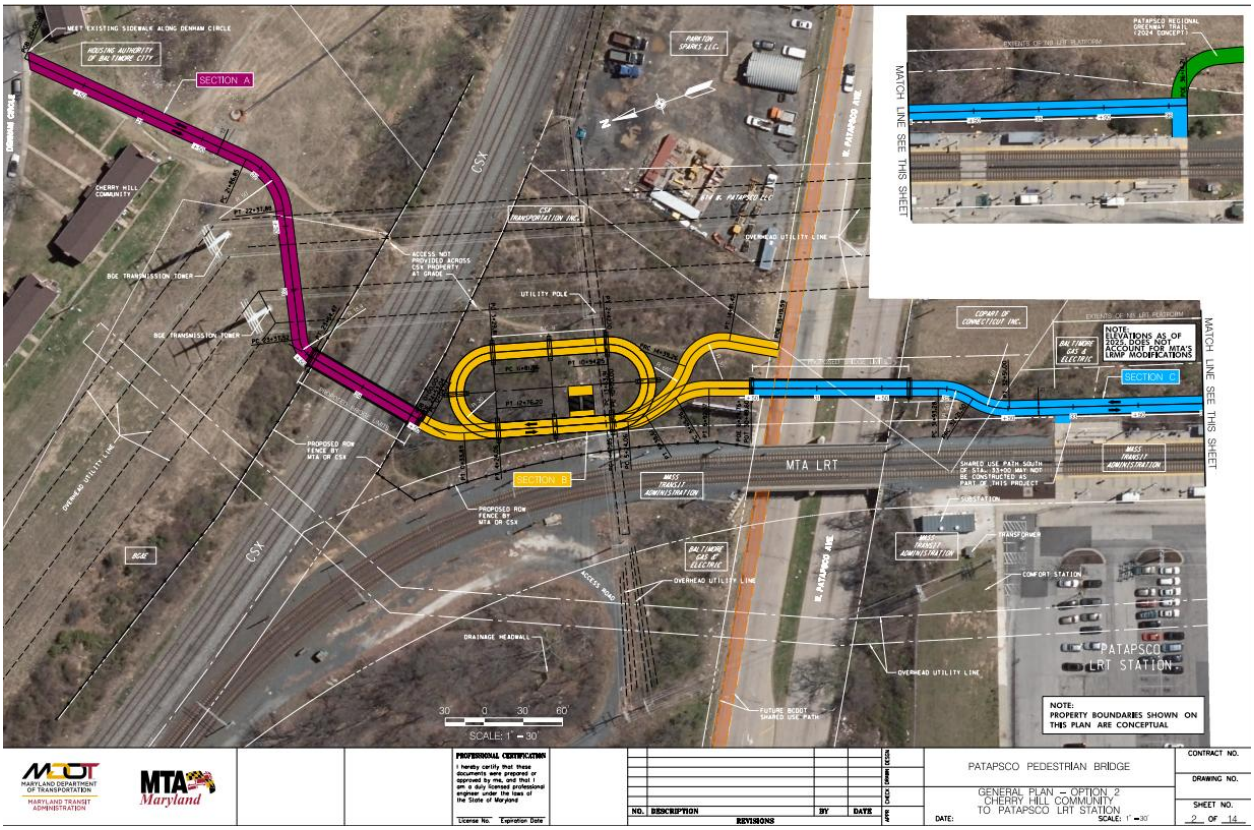

Figure 1: Patapsco Station Pedestrian Bridge General Plan

Project Location

The Patapsco Station Pedestrian Bridge will be located between South Baltimore's Cherry Hill community and the Patapsco Light Rail Station. Cherry Hill is considered an Area of Persistent Poverty according to the BUILD Grant Project Location Verification tool.[4] Those residing in and traveling through Cherry Hill will most directly benefit from the Project. The project is located in a diverse section of Baltimore City surrounding the

[4] https://experience.arcgis.com/experience/09642b69d90f4377856a6aef3e0bd2e9

Middle Branch of the Patapsco River, containing over a dozen neighborhoods, extensive waterfronts, industrial areas, and economic development potential.

The Cherry Hill neighborhood in South Baltimore was established in the 1940s as a housing development for African American World War II veterans and workers. Previous developments were discouraged due to the separation of Cherry Hill from the rest of Baltimore City, its stringent land boundaries, and its unfavorable conditions due to nearby industrial plants. The community was additionally separated by the Baltimore and Ohio Railroad tracks, which are operated by CSXT today. The existing homes were later used as low-income housing, and an urban renewal project encouraged further low-income housing development. Cherry Hill and its surrounding areas have been referred to as the first planned “Negro Suburb” in the U.S. The Cherry Hill area remains predominantly Black today. In 1992, Baltimore’s Light Rail opened, and in 1993, the Light Rail expanded south to Patapsco. The Cherry Hill and Patapsco Light Rail Stations are located within close proximity to the Cherry Hill community.

Just north of the Patapsco Light Rail Station, the right-of-way for the Light Rail line converges with the CSXT freight rail line, creating a significant barrier between the Cherry Hill neighborhood, which includes the Cherry Hill Homes public housing development, and the Patapsco Light Rail Station. Additionally, the Cherry Hill neighborhood is separated from the Patapsco Light Rail Station by a six-lane highway, West Patapsco Avenue. For many Cherry Hill residents who need to reach the Patapsco Light Rail Station for school, work, or other opportunities, the most natural path is to trespass across CSXT freight tracks and the Light Rail Bridge.

Map

Figure 2: Project Location Map

Transportation Challenges and Solutions

Challenges: For many Cherry Hill residents, the Patapsco Light Rail Station is closer than the Cherry Hill Light Rail Station. However, the Cherry Hill neighborhood currently lacks a pedestrian crossing to the Patapsco Light Rail Station. This longstanding physical barrier has encouraged pedestrians to take unsafe routes to reach the

Patapsco Light Rail Station, including the Light Rail Bridge. Over 300 pedestrians per day have been observed crossing the CSX freight rail tracks and walking across the Light Rail bridge – which is only intended for trains – to reach the Patapsco Light Rail Station, as captured in Figure 3.[5] The lack of suitable pedestrian facilities that enable access to the Light Rail station is a condition that encourages pedestrians to use the rail bridge, which increases safety risks, slows down system performance, and increases mental strain on already overtaxed transit operators. The current condition requires Light Rail operators to expect pedestrians on the rail, leading to delayed operations to ensure the bridge is clear of pedestrians and proceed with caution.

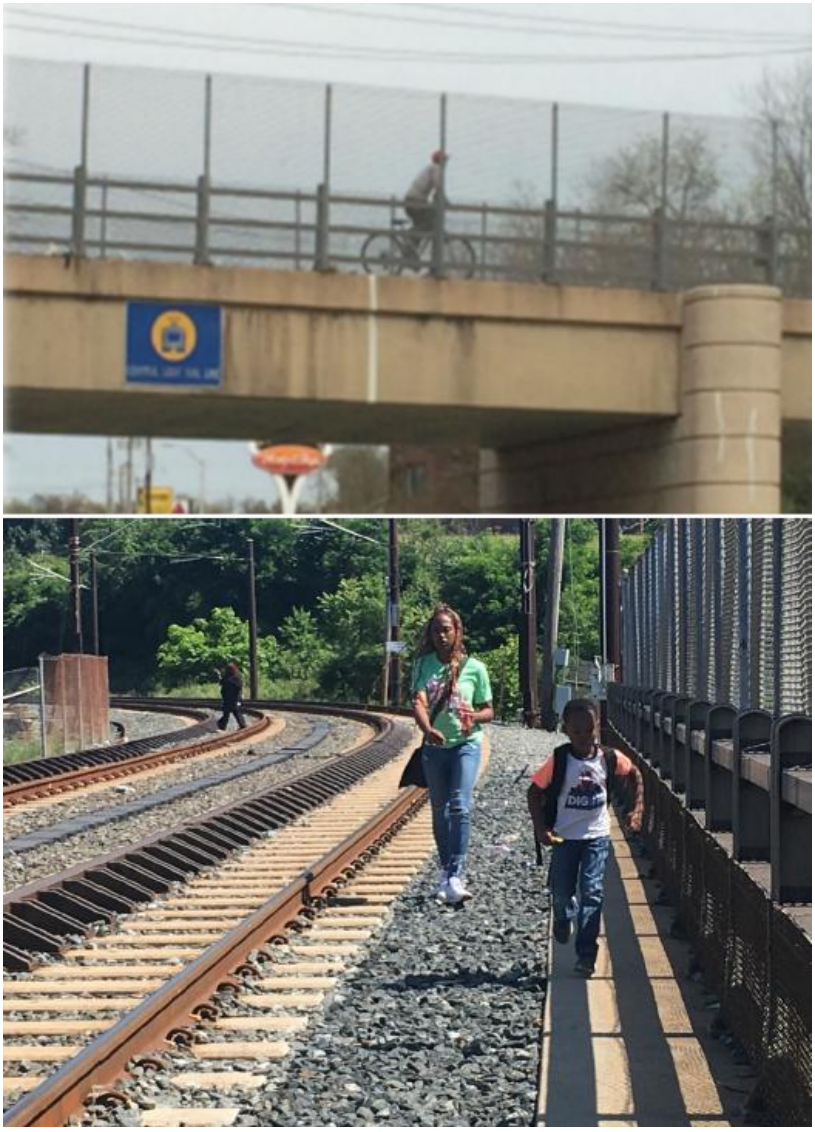

Figure 3: Examples of Trespassing on the CSX Freight Rail Tracks and Light Rail Bridge Over Patapsco Avenue

[5] Microsoft PowerPoint - 2023 0517_BPAG Update Presentation Patapsco Ped Bike Bridge Phase 1

Solutions: This Project will create a safe, direct, and practical path from the Cherry Hill neighborhood to the Patapsco Light Rail Station, preventing incidents, discouraging trespassing, and facilitating improved CSXT and MTA operations. It is estimated that nearly all of the 300 pedestrians observed trespassing daily would instead use the Project's proposed pedestrian/bicycle bridge. Regarding rail operations, Light Rail operators could reduce delays by five seconds per trip without needing to slow down at the Light Rail bridge, saving 81,320 hours of travel time over the analysis period, in addition to 630,138 other delay avoidance hours. CSXT would also be able to pursue expansions with a more reliable route, with delay avoidance of 252 hours.