



2021-2024 TIP Amendment: Helping Obtain Prosperity for Everyone (HOPE) Discretionary Grant

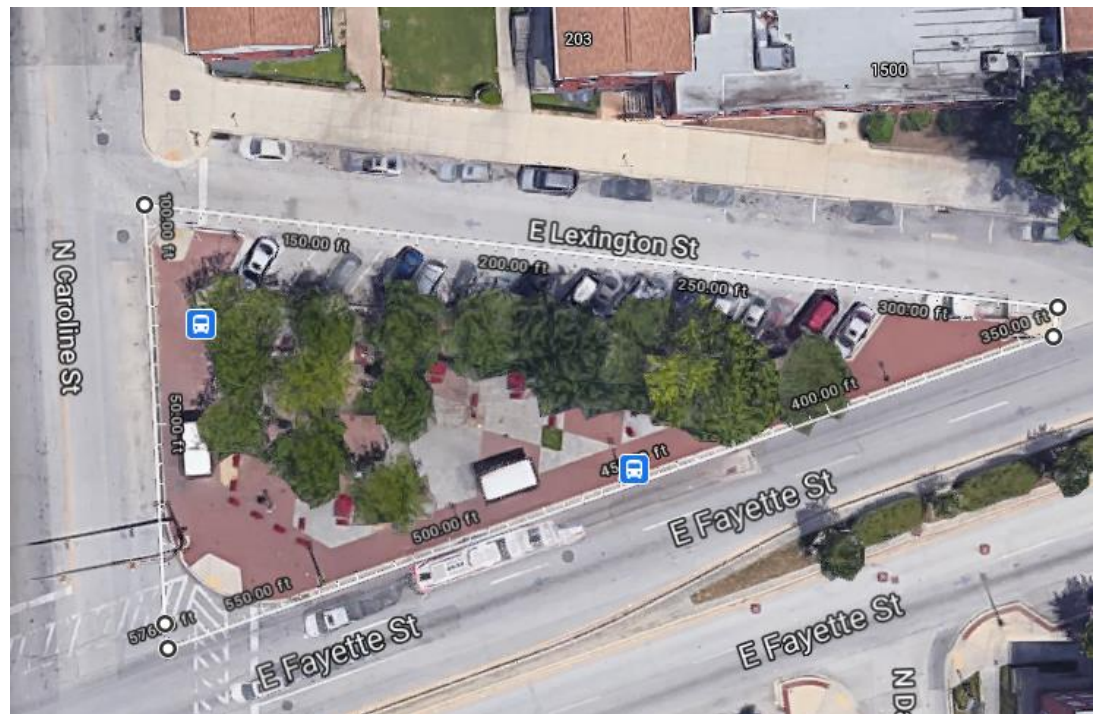
March 2021



Contents



- Background
- Apportionment
- Schedule
- Benefit



Background



- **MDOT MTA was awarded funds from the discretionary Helping Obtain Prosperity for Everyone (HOPE) Program**
 - HOPE is a brand-new FTA grant introduced in 2020
 - HOPE fund planning projects that will improve transit service and facilities in areas of persistent poverty

Background



- The project is called **“Building Blocks: Inclusive Transportation Planning”**
 - Building Blocks = setting the foundation for future work
 - Building Blocks = also speaks to improving the built environment
- MDOT MTA will use a human-centered design approach that relies on stakeholders’ perspectives for project direction: stakeholders’ day-to-day experience will help determine where the agency should focus its attention.

Apportionment



- This amendment adds \$225K in a Federal Transit Administration (FTA) Helping Obtain Prosperity for Everyone (HOPE) discretionary funds to the 2021-2024 TIP.
- The federal grant will be matched with \$25K from MDOT MTA for a total investment of \$250K.

Anticipated Schedule



Concept Design driven by community input	6/15/2021
30% Design Milestone	10/1/2021
85% Design Milestone	4/1/2022
100% Design Milestone	10/1/2022
Grant Close out	4/1/2023

Benefit



- Engagement will be conducted throughout the project directly with community members at bus stops, substance abuse facilities, and subsidized housing facilities.
 - Open-ended discussions, including what types of stop amenities the community wants developed in the designs, will inform actionable next steps.
- Refinement of proposed plans will occur in concert with these same stakeholders.
- MDOT MTA staff will create design plans that identify actionable stop enhancements at the locations within the community.

For More Information

Lara Bachman | Capital Analyst

443-487-7485 | lbachman@mdot.maryland.gov





2021-2024 TIP Amendment: Light Rail LiDAR Track Survey Discretionary Grant

March 2021

Contents



- Background
- Apportionment
- Schedule
- Benefit



Background



- MDOT MTA will use this FTA Section 5312 Public Transportation Innovation Program discretionary grant to survey the MDOT Light Rail transit system.
- MDOT MTA will receive funding to initiate an electronic inventory of its light-rail system to monitor, detect and identify track deficiencies.

Apportionment



- This amendment adds \$150K in a Federal Transit Administration (FTA) Section 5312 Public Transportation Innovation Program discretionary grant to the 2021-2024 TIP.
- The federal grant will be matched with \$150K from MDOT MTA for a total investment of \$300K.

Anticipated Schedule



Project Task/Milestone	Date Range
FTA Project Award	December 2020
Task 1: Project Management	February- April 2021
Task 2: Mobile LiDAR Survey	April – September 2021
Task 3: Update MDOT MTA Data	September - October 2021
Task 4: Optram Integration	September – November 2021
Task 5: Final Report	December 2021

Benefit



- MDOT MTA will utilize real-time condition data to improve system safety
- MTA will establish the data needed to effectively use Optram to manage linear assets
- Improved SGR by combining innovative technologies of LiDAR and Optram.

Page 10 of 10

443-487-7485 | lbachman@mdot.maryland.gov





2021-2024 TIP Amendment: Metro Subway Track Intrusion Detection and Alert System

March 2021

Contents



- Background
- Apportionment
- Schedule
- Benefit

Background



- **MDOT MTA will use FTA Safety and Research Development grant funding to expand the track warning and detection pilot program to five additional stations in the Metro SubwayLink system.**
- **The technology will instantly alert train operators when someone is on the tracks.**

Apportionment



- This amendment adds \$675K in a Federal Transit Administration (FTA) Section 5312 Public Transportation Innovation Program discretionary grant to the 2021-2024 TIP.
- The federal grant will be matched with \$540,000 from MDOT MTA and \$135,000 from the vendor providing the pilot program system for a total project investment of \$1.35 million.

Schedule



Timeline Item Description	Timeline Item Date
Date of Anticipated Funding Award from FTA	01/15/2021
MDOT MTA contract Notice to Proceed (NTP) with Protran Technology	02/15/2021
Research Phase - Preliminary System Design Review	05/01/2021
Research Phase - Detailed System Design Review	05/08/2021
Research Phase - Finalize System Design; Develop Data Collection Plan	05/15/2021
Research Phase - Determine Additional Work Needed on Existing Upton Station Pilot	05/15/2021
Development Phase - Software / Firmware Development	05/15/2021
Development Phase - PCB Assemblies; Hardware / Software Integration; Hardware: Form Fit Function	05/29/2021
Development Phase - Sensor Component and Control Box: Visual/Audible Communication Alarm Assembly	06/12/2021
Development Phase - In-House Testing	06/26/2021
Development Phase - System Installation(s)	08/21/2021
Development Phase - Operational Testing for MDOT MTA Train Operators & Station Attendants	09/04/2021
Development Phase - On-Site Field Testing	09/04/2021
Development Phase - Prelim Eval of Performance and Data Collection; Integration of Software Changes	10/02/2021
Demonstration Phase - System Demonstration, Evaluation, and Data Collection	10/22/2022
Final Report to FTA on Track Intrusion Detection and Alert System Project	04/02/2023

Benefit



- This real-time notification will help mitigate injuries and fatalities to individuals who are on the tracks or in the right-of-way when a train is approaching.
- Aide in reducing the response time to get someone medical/ police attention.
- These multiple alerting methods will eliminate single point of failure that relies only on the operator's observation.

Page 10 of 10

443-487-7485 | lbachman@mdot.maryland.gov





2021-2024 TIP Amendment: MDOT MTA Transportation Alternatives Program Grants

March 2021



Contents



- Background
- Apportionment
- Schedule
- Benefit

Background



- These projects will provide elements from MDOT MTA's Transit Priority Toolkit including bus-bulb curb extensions at high ridership bus stops along the corridor.
- This will also complete the final design for the Patapsco Pedestrian and Bicycle Connection project phase 1 for a bicycle and pedestrian connection across Patapsco Avenue.

Apportionment



- These projects include funds to complete final design for two Transit Priority Initiative corridors (\$1.76 million federal/\$440,000 matching). The third award will complete final design for a bicycle and pedestrian connection (\$624,000 federal/\$156,000 matching).
- A total of \$2.98 million is added to the 2021-2024 TIP.

Schedule



TAP TPI Belair Road	Grant Submission Date	MOU Updated Date
0-30% Design		11/1/2021
30-85% Design		5/15/2022
85-100% Design		11/1/2022
Completion of Design	1/3/2022	11/1/2022

TAP TPI Garrison Blvd	Grant Submission Date	MOU Updated Date
0-30% Design		11/1/2021
30-85% Design		5/15/2022
85-100% Design		11/1/2022
Completion of Design	1/3/2022	11/1/2022

Schedule (continued)

AGY Patapsco Bike/Ped Bridge
Design: July 2021 – November 2022
Advertisement Date for Construction: December 2022
Project Closeout: July 2024

Benefit



- The Transit Priority Initiative projects aim to improve bus reliability, reduce travel times, and support enhanced pedestrian safety.
- The pedestrian bridge will create a safe crossing over Patapsco Avenue from the Light Rail station platform and connect to a planned bicycle and pedestrian facility.

Page 10 of 10

443-487-7485 | lbachman@mdot.maryland.gov

