BALTIMORE METROPOLITAN PLANNING ORGANIZATION

BALTIMORE REGIONAL TRANSPORTATION BOARD RESOLUTION #21-21

AMENDMENT TO THE 2021 – 2024 BALTIMORE REGION TRANSPORTATION IMPROVEMENT PROGRAM

WHEREAS, the Baltimore Regional Transportation Board is the designated Metropolitan Planning Organization for the Baltimore region, encompassing the Baltimore Urbanized Area, and includes official representatives of the cities of Annapolis and Baltimore, the counties of Anne Arundel, Baltimore, Carroll, Harford, Howard, and Queen Anne's as well as representatives of the Maryland Department of Transportation, the Maryland Department of the Environment, the Maryland Department of Planning, the Maryland Transit Administration, and Annapolis Transit; and

WHEREAS, the Baltimore Regional Transportation Board, as the Metropolitan Planning Organization for the Baltimore region, approved the 2021-2024 Transportation Improvement Program for the Baltimore region at its August 25, 2020 meeting, with federal approval on October 19, 2020; and

WHEREAS, federal regulations require that all transportation-related projects must be listed in the approved Transportation Improvement Program with accurate funding schedules in order to be eligible for federal funding; and

WHEREAS, the Transportation Improvement Program consists of projects included in, and in support of, the region's long-range transportation plan and ongoing short-range planning efforts; and

WHEREAS, the Maryland Department of Transportation on behalf of the Maryland Transit Administration (MDOT MTA) has requested approval of an amendment to the 2021-2024 Transportation Improvement Program through the approved Transportation Improvement Program amendment process; and

WHEREAS, MDOT MTA is requesting to add a project to the 2021-2024 TIP utilizing a Section 5312 Public Transportation Innovation discretionary grant. Grant funding will use LiDAR technology to identify the most critical areas along the Light Rail transit system (see attachment); and

WHEREAS, the Transportation Improvement Program, as amended, continues to display financial reasonableness and re-affirms the appropriate project selection criteria whereby all requirements for a Transportation Improvement Program in the Fixing America's Surface Transportation Act are met; and

WHEREAS, this project is consistent with the federal emphasis on performancebased planning and programming, specifically the federal requirements pertaining to transit safety and maintaining transit assets in a state of good repair; and WHEREAS, the Interagency Consultation Group has determined that this project is exempt according to the Conformity Rule (40 CFR Parts 51 and 93); and

WHEREAS, the proposed Transportation Improvement Program amendment was presented to the Technical Committee on March 2, 2021.

NOW, THEREFORE, BE IT RESOLVED that the Baltimore Regional Transportation Board, as the Metropolitan Planning Organization for the Baltimore region, approves the attached amendment to the 2021-2024 Transportation Improvement Program for the Baltimore region and finds it to conform to the applicable Maryland State Implementation Plan and requirements of the 1990 Clean Air Act Amendments.

I HEREBY CERTIFY that the Baltimore Regional Transportation Board as the Metropolitan Planning Organization for the Baltimore region approved the aforementioned resolution on March 23, 2021.

3-23-2021	Lynde Esonbers
Date	Lynda Eisenberg, Chair Baltimore Regional Transportation Board

2021 - 2024 Transportation Improvement Program

Transit Preservation

Light Rail LiDAR Track Survey Discretionary Grant

TIP ID 40-2102-64 **Year of Operation** 2022

Agency MTA - Transit Project Type Preservation and improvements

Project Category Transit Preservation Functional Class NA

Conformity Status Exempt Physical Data N/A

CIP or CTP ID(s) 1771 **Est. Total Cost** \$300,000

Description:

MDOT MTA will use this FTA Section 5312 Public Transportation Innovation Program discretionary grant to survey the MDOT Light Rail transit system. LiDAR remote sensing technology will allow MDOT MTA to identify the most critical areas along the guideway and to analyze historical trends at precise locations to determine the root cause of track-related problems. The project will provide MDOT MTA with GIS and CAD mapping products that are more accurate, timely, and cost-effective. This improved data will significantly reduce track geometry defects moving forward.

Justification:

This project will help MDOT MTA to improve lifecycle management and preventive maintenance across the agency. MDOT MTA is currently using Optram software as a linear asset decision support tool, enabling the agency to use real-time condition data to improve system safety and maintain assets in a state of good repair. The LiDAR track survey will provide the data needed to manage assets more effectively with Optram.

Amendment: This amendment adds a new project to the 2021-2024 TIP. MDOT MTA was awarded a Section 5312 Public Transportation Innovation Program discretionary grant from the Federal Transit Administration totaling \$150K. This funding will be used to identify the most critical and vulnerable areas along the Light Rail transit system using LiDAR technology. A total investment of \$300K is added to the 2021-2024 TIP (\$150K federal/\$150K matching).

Connection to Long-Range Transportation Planning Goals:

- 1.C Improve System Safety -- Eliminate hazardous or substandard conditions.
- 2.E Improve and Maintain the Existing Infrastructure -- Improve the condition of transit infrastructure and stations/stops.



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MTA - Transit

2021 - 2024 Transportation Improvement Program

Transit Preservation

LTR LiDAR Track Survey Discretionary Grant

(Funding in Thousands)

Section 5312 Public Transportation Innovation Discretionary Grant Program - New

Phase	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	FY 2024 Federal Funds	FY 2024 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$150	\$150	\$0	\$0	\$0	\$0	\$0	\$0	\$300
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$150	\$150	\$0	\$0	\$0	\$0	\$0	\$0	\$300
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Total	\$150	\$150	\$0	\$0	\$0	\$0	\$0	\$0	\$300

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Larry Hogan Governor Boyd K. Rutherford Lt. Governor Pete K. Rahn Secretary Kevin B. Quinn, Jr. Administrator

TO: MS. HEATHER MURPHY, DIRECTOR

MDOT OFFICE OF PLANNING AND CAPITAL PROGRAMMING

ATTN: MR. TYSON BYRNE, MANAGER

MDOT OFFICE OF PLANNING AND CAPITAL PROGRAMMING

FROM: MS. KATE SYLVESTER, DIRECTOR

MDOT MTA OFFICE OF PLANNING AND CAPITAL PROGRAMMING

DATE: February 8, 2021

SUBJECT: Amendment to the FY 2021-2024 BMC/BRTB TIP

MDOT MTA is requesting an Amendment to the FY 2021-2024 BMC/BRTB TIP. MDOT MTA was awarded a Section 5312 Public Transportation Innovation Program discretionary grant from the Federal Transit Administration totaling \$150K. This funding will be used to identify the most critical and vulnerable areas along the Light Rail transit system using LiDAR technology.

The proposed action will not impact scheduling or funding availability for other projects in the current TIP, which continues to be fiscally constrained.

After your review, please process the requested Amendment for inclusion in the FY 2021-2024 BMC/BRTB TIP. If you have any questions, please do not hesitate to contact Ms. Lara Bachman, MDOT MTA Office of Planning and Capital Programming, at 410-767-3135 or via email at lbachman@mdot.maryland.gov.

cc: Mr. Ian Beam, Regional Planner, Office of Planning & Capital Programming, MDOT Mr. Dan Janousek, Regional Planner, Office of Planning & Capital Programming, MDOT

LTR LiDAR Track Survey Discretionary

TIP ID #	Pending	Year of Operation	Ongoing
Agency	MTA - Transit	Project Type	Enhancement
Project Category	Transit	Functional Class	NA
Conformity Status	Exempt	Physical Data	NA
CIP / CTP Page #	1771	Est. Total Cost	\$ 300,000

Description									
Using LiDAR technology, MDOT MTA will have the ability to identify the most									
critical and vulnerable areas along the Light Rail transit system. This will allow									
for an opportunity to analyze historical trends at precise locations along the									
guideway and determine the root cause of track-related problems. The									
utilization of this data will significantly reduce track geometry defects and will									
provide MDOT MTA with track charts, which will provide accurate data moving									
forward. This process will yield GIS and CAD mapping products which are more									
accurate, timely and cost-effective.									

MDOT MTA is striving to improve lifecycle management and preventive maintenance across the agency. Through utilizing Optram as its linear asset decision support tool, MDOT MTA will be in a position to utilize real-time condition data to improve system safety through maintaining assets in a state of good repair. As a result of this effort, MDOT MTA will establish the data needed to effectively use Optram to manage linear assets and apply available resources to best address asset needs resulting in improved SGR by combining innovative technologies of LiDAR and Optram.

Section 5312 (Public Transportation Innovation Program)

	Pre	Previous Requests				Annual Element					Federal Funding Requests (\$000)											
	Previou	Previous		Previous		FY2021		FY2021		FY2022		FY2022		FY2023		23	FY2024		FY2024			
	Federal Funds				Federal Funds				Federal Funds		1		Federal Funds		Matching Funds		Federal Funds		Matching Funds		Estimated Project Total	
Phase																						
CON	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
ОТН	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
PE	\$	-	\$	-	\$	150	\$	150	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	300
PP	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
ROW	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Totals	\$	-	\$	-	\$	150	\$	150	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	300

Funding Source(s) Total

	Previous Requests					Annual Element				Federal Funding Requests (\$000)												Project Totals	
Totals	\$	-	\$	-	\$	150	\$	150	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	300	