I. INTRODUCTION

A. Summary

The Baltimore Region Transportation Improvement Program (TIP) documents the anticipated timing, cost, and rationale for federally-funded transportation improvements to be made in the Baltimore region¹ over the next four years. It is a program of specific projects, not a plan. In accordance with federal guidelines, the TIP is a translation of recommendations from the long-range transportation plan (LRTP), *Resilience 2050*, for the Baltimore region into a short-term program of improvements. This includes specific capacity improvements that have been identified in the LRTP, as well as system preservation projects and operational initiatives that are supported in the LRTP but have not been previously detailed. As such, the TIP ensures consistency between LRTP

recommendations and project implementation in the region. The TIP also serves as a multi-modal listing of transportation projects in the region for which federal funding requests are anticipated between fiscal years 2026-2029.²

Chapter II provides a summary of the key federal requirements for the TIP, followed by several sections detailing the requirements in key areas. Chapter III describes the relationship between the TIP and other transportation plans and programs in the region, its fulfillment of federal requirements, and its regional review function. Chapter IV explains the terms and symbols used in the project listings. Chapter V presents the financial plan supporting the projects in the four year program. It also details the amount and source of federal funds to be requested for the coming fiscal year, FY 2026.

Chapter VI includes environmental justice maps and detailed project listings. The detailed project listings include all federally funded and regionally significant projects. The projects are grouped first according to the local jurisdiction or state agency

¹ As shown in Exhibit I-1, the Baltimore region is composed of Baltimore City and the City of Annapolis and Anne Arundel, Baltimore, Carroll, Harford, Howard and Queen Anne's counties. As a result of the 2020 Census, there are two federally recognized urban areas with populations of 50,000 or more in the region. The Baltimore urban area includes the City of Baltimore and portions of Anne Arundel, Baltimore, and Howard counties. The Bel Air--Aberdeen urban area includes Bel Air, Aberdeen, Havre de Grace and small portions of Baltimore and Cecil counties.

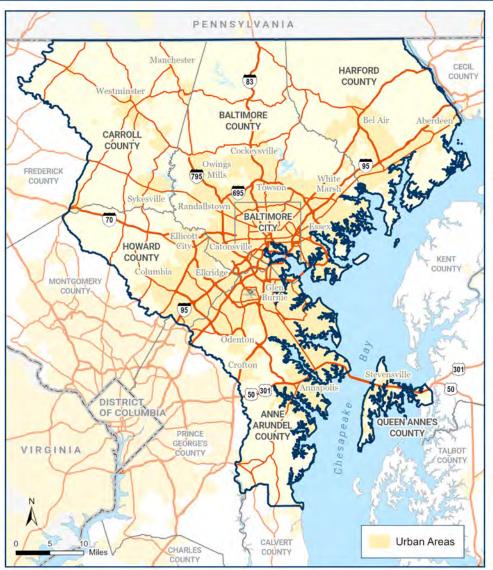
 $^{^2}$ The Baltimore Region TIP follows the Maryland state fiscal year: July 1 to June 30

responsible for their implementation. Within those sections they are then grouped by category in the following order: commuter rail capacity, commuter rail preservation, enhancement program, environmental/safety, emission reduction strategy, highway capacity, highway preservation, transit capacity, transit preservation, ports, and miscellaneous. A timetable for anticipated federal funding requests is presented for each project.

The 2026-2029 TIP programs a total of \$6.18 billion. Federal funds account for \$3.21 billion of this total, matching funds account for \$1.07 billion, toll revenues account for \$1.89 billion, and the remaining \$0.82 million come from private funding. In almost all cases, matching funds are provided by the local or state agency sponsoring the project. Rare circumstances where matching funds are provided by a private source or another local or state agency are noted in the project description in Chapter VI.

Exhibit I-1: The Baltimore Region

Baltimore Metropolitan Region







Sources: BMC, ©HERE 2023, TIGER/Line®, MDOT SHA. April 2025.

Exhibit I-2: The Baltimore Region Federal Highway Functional Classification

Federal Highway Functional Classification

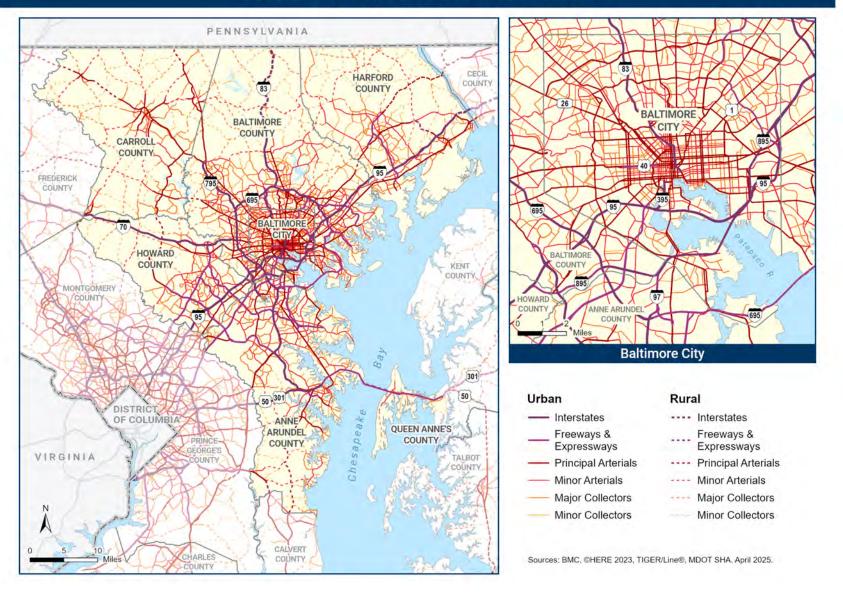
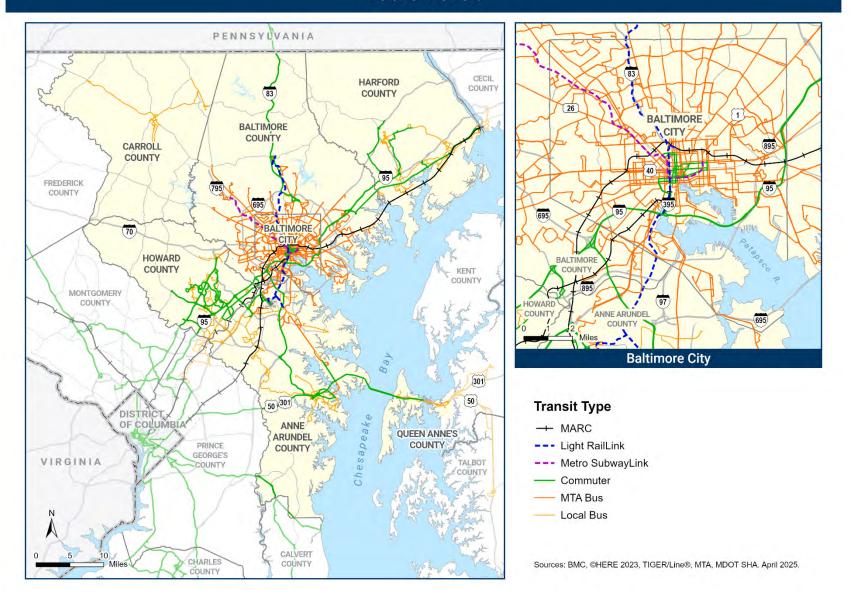


Exhibit I-3: The Baltimore Region – Transit

Public Transit



B. Metropolitan Planning Organization Self-Certification

At the time the metropolitan TIP, and the projects requesting funds in the coming fiscal year, are endorsed for funding out of the U. S. Department of Transportation (DOT), a Metropolitan Planning Organization (MPO) is required to certify that projects selected through the transportation planning process conform with all applicable federal laws and regulations. The Baltimore Regional Transportation Board (BRTB), in its capacity as the MPO for the Baltimore region, will certify concurrent with the approval of the 2026-2029 TIP that the transportation planning process is conducted in a manner that complies with the requirements of 23 USC 134, 49 USC 5303, 23 CFR Part 450 and 49 CFR Part 613, and Sections 174 and 176(c) and (d) of the Clean Air Act. The certification requirement directs members of the BRTB to review the planning process that has been under way and ascertain that the requirements are being met. The review serves to maintain focus on essential activities. Members of the BRTB are listed in Appendix A of this document.

The BRTB's commitment to comply with applicable federal transportation planning requirements is evidenced by the following: • the BRTB has a continuing, cooperative and comprehensive (3-C) transportation planning process that

results in plans and programs consistent with the general land use and master plans of the local jurisdictions in the urbanized area; • the BRTB has adopted a public participation process that fulfills the requirements and intent of public participation and outreach as defined in the Metropolitan Planning Regulations; 3 the BRTB adopted a financially constrained long-range transportation plan, Resilience 2050, for the Baltimore region consistent with the metropolitan planning factors in the Fixing America's Surface Transportation (FAST) Act and subsequent Infrastructure Investment and Jobs Act (IIJA); 4 the BRTB maintains a Congestion Management Process (CMP); 6 the BRTB has determined that conformity (8-hour ozone) of Resilience 2050 and the 2026-2029 TIP for the Baltimore region has been conducted under the U.S. Environmental Protection Agency's (EPA's) final rule as amended; and 6 the BRTB adheres to the federal Disadvantaged Business Enterprises (DBE) requirements set forth in 49 CFR Part 26.

C. Consistency with Resilience 2050

In an effort to plan for future regional transportation needs and to comply with the intention of the FAST Act and the Clean Air Act Amendments of 1990 (CAAA), the BRTB endorsed Resilience 2050: Adapting to the Challenges of Tomorrow, the long-range transportation plan, in July 2023. The factors that guided development of Resilience 2050 are listed in the Metropolitan Planning Regulations effective May 27, 2016. These regulations continue and strengthen the emphasis on performance-based planning and programming.

Resilience 2050 includes a set of overarching regional goals, specific implementation strategies that support these goals, and a series of performance measures and targets. These measures and targets are consistent with the performance-based approach to planning and programming set forth in MAP-21, the FAST Act, and corresponding regulations. These measures and targets help the BRTB and operating agencies gauge progress relative to regional goals and strategies.

The BRTB has developed and adopted performance measures for transit asset management, transit safety, roadway safety, roadway and bridge conditions, and system performance. Target selection was coordinated with the State and public transportation providers to ensure consistency. All required measures and targets were adopted in compliance with federal due dates. The measures and targets will guide the Maryland Department of Transportation and metropolitan planning organizations in carrying out the requirements of the applicable FHWA and FTA laws and regulations.

Section II.G summarizes the performance measures and targets as well as the anticipated impact of investments in the TIP on these performance measures and targets. Appendix B includes a table connecting TIP projects to *Resilience 2050* goals and performance measures.

In addition to performance measures and targets, *Resilience* 2050 reports on forecasted regional growth in population, households and employment to the year 2050 and the projected travel demand resulting from this forecasted growth. It demonstrates how the existing and committed transportation network may struggle to accommodate future travel demand based on projected increases in congested VMT and vehicle hours of delay. The region may need to apply additional transportation demand management strategies to meet future performance targets related to regional mobility.

To address the projected demands on the transportation system, Resilience 2050 includes a range of projects through the year 2050. It outlines a multimodal array of transportation improvements along with the requisite funding scenario needed support the program. Non-motorized transportation alternatives are included, as well as intermodal and transportation demand management strategies. The transportation demand management strategies are particularly important to complement the infrastructure improvements and ensure the region meets the conformity requirements for transportation plans and programs by way of national air quality goals and objectives.

Resilience 2050 also discusses the impacts of workers that work from home. From 2010 to 2019 the share of the population working from home showed modest increases (3.9% in 2010 and 5.6% in 2019). However, in 2020 the pandemic resulted in a large increase of the population working from home at nearly 20%. There are variances based on demographic characteristics of workers and the industries in which they work. While the long-term impacts of remote workers is uncertain, consideration for future land use and transportation planning efforts are warranted.

The capacity projects in the 2026-2029 TIP "flow" from *Resilience 2050*, resulting in a prioritized subset of projects for implementation. In this way, long-range policy recommendations are translated into short-range transportation improvements.

II. FEDERAL REQUIREMENTS AND REGIONAL REVIEW FUNCTION

A. Requirements of the Infrastructure Investment and Jobs Act (IIJA)

The Infrastructure Investment and Jobs Act (IIJA) was signed into law on November 15, 2021. The requirements of the IIJA are consistent with the requirements of the FAST Act. Below is a discussion of key federal requirements that are in place regarding development of the TIP. Requirements of the IIJA include:

• Prioritized list of financially constrained improvements: The BRTB, in cooperation with state and local agencies and transit operators, have developed a prioritized and fiscally constrained TIP. Fiscal constraint means that the funds programmed in the 2026-2029 TIP are reasonably expected to be available over the timeframe covered by the TIP. Projects included in the FY 2026-2029 TIP have been cooperatively determined by members of the BRTB. The project selection process considered air quality implications and regional mobility enhancement prior to inclusion in the final TIP document.

Priority is reflected by the year in which a project is shown. Priorities and financial analysis are provided for all four years of ● MDOT ensures that federal funding requests during the TIP planning process are reasonable for our region; ● MDOT provides documentation of the state's capacity to meet the match requirements associated with state-sponsored projects in the TIP; and ⑤ Local governments also provide documentation

of the same financial reasonableness requirements to match the

federal funds requested for locally sponsored projects.

the TIP. Financial reasonableness is evaluated on three fronts:

- Flexing Funds: The TIP is required to take full advantage of the increased flexibility of Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) capital funds. MDOT provides a "statement of concurrence" that consideration of this provision (flexing funds) has been utilized in the development of all state initiatives. Documentation of project prioritization, financial reasonableness and flexible funding is included in Appendix B.
- Financial Plan: IIJA requires that the TIP include a financial plan that demonstrates that the fiscal resources required to construct projects proposed in the TIP are reasonably expected to be available within the timeframe specified. The financial plan in Chapter V demonstrates that the region, through public and

private funding, is reasonably able to generate the projected resources needed to carry out the projects in the TIP.

- Illustrative Projects: Federal regulations for metropolitan transportation planning identify the concept of "illustrative projects" as an element of the planning process. These are projects included in a metropolitan transportation plan for illustrative purposes only. These projects could be included in the adopted transportation plan if additional funds beyond the reasonably anticipated financial resources identified in the plan become available. There is no requirement to select any project from an illustrative list of projects shown in a metropolitan plan at a future date when funding might become available. However, illustrative projects can be helpful in guiding transportation and land use planning efforts at both the regional and local levels. These illustrative projects can provide a resource from which the BRTB can select regional priorities should additional funding become available. A list of illustrative projects is included in Appendix J.
- Congestion Management Process: IIJA states that for "transportation management areas classified as nonattainment for ozone or carbon monoxide. . . , Federal funds may not be advanced in such area for any highway project that will result in
- a significant increase in the carrying capacity for singleoccupant vehicles unless the project is addressed through a congestion management process (CMP)". CMP guidelines were adopted by the BRTB in October, 1997. As potential capacity projects enter the state planning process, the BRTB is invited to participate in interagency discussions. This process allows the BRTB to offer recommendations during the process to address congestion prior to building additional lane capacity. At three stages in this interagency process, the BRTB adopts a resolution approving the analysis to date. The BRTB also conducts ongoing data collection and monitoring to assess conditions. Both the TIP and Plan project submittal forms include a question about which CMP strategies are included in proposed projects. To support regional CMP work, the BRTB CMP Committee meets three times per year to identify and track locations and causes of congestion in the region and to discuss potential approaches to address congestion.
- **Public Involvement**: The public must have an opportunity to review and comment on the. A 30-day comment period was promoted and was accompanied by multiple outreach events. The BRTB updated formal public participation procedures governing metropolitan transportation planning activities in

December 2022. These guidelines reaffirmed a framework for public participation and information dissemination.

The BRTB offered members of the public, affected public agencies, private providers of transportation and other interested parties reasonable opportunities to comment on a draft list of projects.

The draft TIP is made available on the Baltimore Metropolitan Council (BMC) website. A recording to share information on the TIP and Conformity Determination was posted on the BMC website. Opportunities to comment on the draft TIP will be advertised on the BMC website and on BMC social media accounts, with outreach work undertaken by public involvement staff. In addition, the public will be able to address the BRTB at its June and July 2025 meetings. Written comments by mail, email, or social media will be accepted during the public review period. In addition, members of the public will be able to submit comments directly via an interactive TIP project map. A summary of all comments received, both verbal and written, BRTB responses, and the

public participation notices are included in Appendix G of the final TIP document.

The public participation process for the TIP also meets the FTA public participation requirements for the MDOT Maryland Transit Administration's (MDOT MTA) program of projects. MDOT MTA, in lieu of a separate mandated public comment period for federal funding assistance under 49 USC Sections 5307, 5310, and 5311 has exercised its option to use the procedures of the BRTB's public involvement process for the 2026-2029 TIP to satisfy the public participation requirements associated with development of the MDOT MTA Program of Projects (POP).

 Listing of Obligated Projects: MPO's must publish an annual listing of projects for which federal funds have been obligated in the preceding year. The list must be consistent with projects identified in the TIP, with the intent of improving the transparency of transportation spending decisions.

The FY 2024 obligated listing will include all federal funds obligated in the Baltimore region from July 1, 2023 – June 30, 2024.³

³ The FY 2024 obligated listing will be made available on the BMC website.

- Performance-Based Planning and Programming (PBPP): The U.S. DOT published updated Metropolitan Planning Regulations on May 27, 2016 following the enactment of the FAST Act. These updated regulations continue and strengthen the emphasis on PBPP. The intent of PBPP is to aid MPOs in gauging progress relative to regionally established goals, strategies, and performance measures and targets. Federal rulemaking required MPOs to adopt a series of 25 performance measures and targets and to link investment priorities in the TIP and LRTP to the achievement of these performance measures and targets. Section II.G provides further details on PBPP.
 - TIP Changes: The project schedules and funding breakdowns for projects in the TIP represent the best estimates by project sponsors at the time the TIP is developed. However, project schedules and funding can change. As a result, the TIP is frequently updated throughout the year through the TIP change process. There are two types of TIP changes. TIP amendments involve major changes to a project such as the addition or deletion of a project or a major change in project cost, timeline, or scope. Administrative modifications

involve minor revisions to project costs, fund sources or project timelines.

The BRTB Public Participation Plan⁴ details procedures for TIP amendments and administrative modifications. All amendments are presented to the BRTB Technical Committee and the BRTB for consideration and approval. In addition, any project that requires a new regional emissions analysis, such as roadway or transit capacity expansions, automatically triggers a 30-day public review and public meeting. Administrative modifications are reviewed and approved by the BRTB Executive Committee.

Appendix F lists all amendments and administrative modifications to the 2025-2028 TIP.

⁴ The BRTB Public Participation Plan is available here: https://baltometro.org/sites/default/files/bmc_documents/general/transport ation/advisory/2022PPP.pdf

B. Alleviating Poverty

In 2025, the U.S. Department of Transportation (DOT) issued Order 2100.7 titled "Ensuring Reliance Upon Sound Economic Analysis in Department of Transportation Policies, Programs, and Activities". The DOT Order directs consideration of programs that avoid or reduce adverse effects on families and communities, including noise, water and soil pollution; denial or reduction in transportation services; increased difficulty raising children in a safe and stable environment; and safety and economic vitality.

BMC and the BRTB have worked to consider economic success for the region in its planning and programming of regional transportation projects. Through the TIP and the LRTP, staff have worked to ensure the benefits and burdens of transportation investments are shared among all affected communities.

FHWA and FTA allow recipients to establish their own definitions of low-income that are appropriate for the region, as long as they are at least as inclusive as the poverty guidelines set by the U.S. Department of Health and Human Services (HHS). The BRTB previously used the poverty level as its definition of low-income. Several years ago BMC staff reviewed

alternative definitions of low-income for use in mapping and analysis, the Vulnerable Populations Index, and project scoring for the upcoming LRTP. Staff conducted a review of low-income definitions used by other Metropolitan Planning Organizations (MPO) as well as an analysis of the Census Bureau's American Community Survey (ACS) data. In addition to the population living below the national poverty level, the ACS also identifies the population that lives at or below higher percentages of the poverty level to account for the higher costs of living in some areas of the country. Many of the MPOs reviewed used a higher percentage of the poverty level as their definition of low-income.

After reviewing alternatives and practices used by other MPOs, BMC staff recommended 200% of the poverty level as the new definition for low-income populations. This increases the definition of low-income to approximately \$31,000 for a one-adult family and to about \$64,300 for a four-person family. This definition has several advantages. It captures a larger portion of economically insecure persons in the Baltimore region, as the poverty level is not a living wage for the Baltimore region. It is also a close approximation to 50% of Baltimore area median income (AMI), an income level that is utilized for some HUD programs. Another advantage is that it is readily available from

the ACS for incorporation into BMC products. Finally, it is also a good approximation of a family-supporting wage. This wage is derived from the Massachusetts Institute of Technology (MIT) living wage calculator and has been utilized in a number of BMC workforce development reports and analyses.

In December 2021, the Technical Committee agreed to move forward with 200% of the poverty level as the definition of lowincome populations for use in future analyses.

The DOT Order applies to all policies, programs and other activities undertaken, funded or approved by the DOT, including metropolitan planning. The BMC follows three existing DOT principles in programming transportation projects:

- To avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects
- To ensure the full and fair participation by all potentially affected communities in the transportation decision-making process.
- To prevent the denial of, reduction in, or significant delay in the receipt of benefits by families and communities.

MPOs are responsible for assessing the benefits and burdens of transportation system investments for different economic groups. This includes both a data collection effort and engagement of low-income populations in public involvement activities.

Low-Income Populations in the Baltimore Region

The Census Bureau uses a set of income thresholds that vary by size of family and number of children to determine poverty (and 200% of the poverty level). If a family's total income is less than the threshold for 200% of the poverty level, then that family and every individual in it is considered to have an income less than 200% of the poverty level. For example, the 2025 poverty threshold for a four-person family with two children is \$32,150. This means that the 200% poverty threshold for a four-person family with two children is \$64,300.

Table II-1 summarizes low-income population by jurisdiction. Population at or below 200% of the poverty line are not evenly distributed throughout the region, ranging from 12.1% of the population in Howard County to 37.8% of the population in Baltimore City. In total, 21.3% of the population in the Baltimore region have incomes at or below 200% of the poverty line.

Table II-1. Low-Income Population by Jurisdiction

Jurisdiction	*Total	At or Below 200% of Poverty Line				
Jurisaiction	Population	Low Income Population	Share			
Anne Arundel	580,311	80,725	13.9%			
Baltimore City	557,089	210,485	37.8%			
Baltimore Co	829,887	189,971	22.9%			
Carroll	170,501	21,428	12.6%			
Harford	260,965	42,016	16.1%			
Howard	330,837	40,031	12.1%			
Queen Anne's	26,198	3,233	12.3%			
BRTB Region Total	2,755,788	587,889	21.3%			

Source: U.S. Census Bureau, 2019-2023 American Community Survey 5-year Estimates (Tables B03002 and C17002)

Mapping Low-Income Populations in the Baltimore Region

The BRTB uses Transportation Analysis Zones (TAZ) as a basis for identifying low-income areas. TAZs are a basic unit of geography used to predict travel behavior in the BRTB's travel demand model. They are constructed using census block information and are smaller than census tracts. A TAZ is identified as an low-income area if it has a concentration of low-income population (below 200% of poverty level).

The percentage of low-income population (income below 200% of the poverty level) in the Baltimore region is 21.3%. Thus, TAZs with a concentration of low-income population greater than 21.3% are considered low-income TAZs. Exhibit II-1

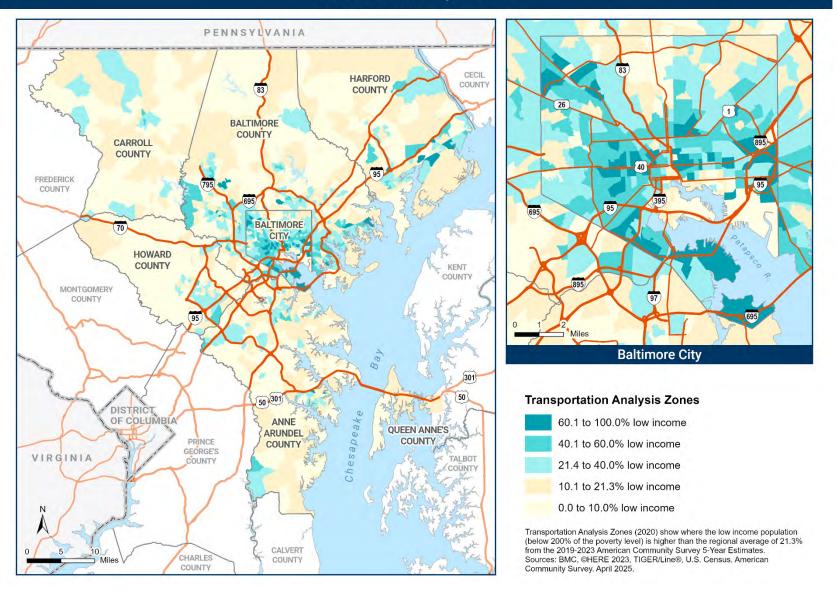
shows the low-income population by TAZ. When these and other transportation projects enter project planning, consideration of low-income areas is undertaken. These studies are conducted by the appropriate state agency (e.g. MDOT SHA, etc.) or a local jurisdiction during the project planning phase. Opportunities for public participation are central to these efforts.

The LRTP, Resilience 2050, includes an extensive demographic analysis. BMC staff utilized several measures to compare the effects of projects to low-income families and communities in the preferred alternative of Resilience 2050, including all nonexempt projects in the TIP. These measures include accessibility to jobs and shopping, travel times for commuting and for other purposes, and proximity to key destinations such as supermarkets and hospitals. The BRTB continues to evaluate methods used by other MPOs as well as guidance issued by FHWA.

^{*}Total Population for which poverty level is counted

Exhibit II-1: Low Income Population by TAZ

Low Income Population



C. Coordinating Human Service Transportation

The FAST Act supported transportation initiatives for elderly and disabled populations through the FTA Section 5310 Capital Grant Program, or Enhanced Mobility of Seniors and People with Disabilities. Low-income populations are served through job access and reverse commute projects under FTA's Urbanized Area Formula Grants (Section 5307) and Formula Grants for Rural Areas (Section 5311) programs. While the FAST Act expired and was replaced by the Infrastructure Investment and Jobs Act in November 2021, some of the FAST Act funding is still in use within the current program cycles. The MDOT Maryland Transit Administration (MDOT MTA) is the administrator for all three programs, and consults with the BRTB on program implementation.

Grant recipients must certify that projects funded through these programs "are included in a locally developed, coordinated public transit-human services transportation plan". The coordinated plan identifies the transportation needs of individuals with disabilities, older adults, and people with low incomes; provides strategies for meeting those local needs; and prioritizes transportation services for funding and implementation. The BRTB is responsible for working with

MDOT MTA to facilitate the Coordinated Public Transit-Human Services Transportation Plan for the Baltimore Region. This regional plan includes the Cities of Baltimore and Annapolis, and Anne Arundel, Baltimore, Carroll, Harford, and Howard Counties. The BRTB works with MTA to review applications and make recommendations for the Section 5310 program. The Coordinated Public Transit-Human Services Transportation Plan was last updated in December 2019. Queen Anne's County is included in Coordinated Public Transit-Human Services Transportation Plan for the Upper Shore Region.

D. Additional Programs for Seniors and Persons with Disabilities

In addition to administering the FTA Section 5310 and MD-JARC Programs, MDOT MTA provides paratransit service for the elderly and persons with disabilities. MDOT MTA also operates a fleet of buses that is fully accessible to the elderly and persons with disabilities. All new bus purchases are liftequipped.

As part of their training program, bus drivers receive disability awareness/passenger assistance technique training for passengers with special needs. The needs of the elderly and disabled customers, those with hidden disabilities and blind, deaf and mentally disabled travelers are discussed. The training emphasizes Americans with Disabilities Act (ADA) service requirements and techniques for communicating with the elderly and people who are disabled. Drivers also learn how to operate lift equipment and assist riders who are disabled.

MDOT MTA operates Mobility and a Reduced Fare Program for the elderly and persons with disabilities. Mobility provides comparable ADA service for those who cannot use fixed-route bus service. The Reduced Fare Program provides a 50% discount for the elderly and persons with disabilities in accordance with requirements for recipients of federal operating assistance from FTA (49 CFR 609.23).

In addition to these programs, MDOT MTA initiated two programs: MDOT MTA Call-a-Ride Service and the Senior Rides Program.

MDOT MTA Call-a-Ride

The MDOT MTA Call-a-Ride Service is open to eligible MDOT MTA Mobility customers. This program offers program participants same day transportation options through a network of taxi and sedan providers. Participants in the program can use the service for any purpose and take it to anywhere within the service area of Mobility. There is a fee of \$3.00 for each one way ride with a meter reading of \$40 or less. MDOT MTA will pay the fare up to \$40, and the participant is responsible for paying the balance of the fare that exceeds the \$40 limit in cash. Participants may be accompanied by up to 3 people per trip if all passengers start and end the ride at the same location. A limited number of wheelchair accessible taxis and sedans are available to individuals with mobility impairments who use motorized or nonfolding wheelchairs. A list of participating companies is available to users.

Senior Rides Program

Since FY 2006, MDOT MTA has awarded grants to qualified applicants statewide to encourage and facilitate the development of volunteer transportation services for low-income and moderate-income seniors. MDOT MTA offered approximately \$237,091 in State funds in FY25, which must be matched by 25% local contributions. The projects must provide door-to-door transportation service, use primarily volunteer drivers, and have a dispatching system.

FY 2025 awards went to the following organizations in the Baltimore Region:

- Action in Maturity (AIM) \$22,500
- Caring Carroll, Inc. \$20,000
- Comprehensive Housing Assistance, Inc. \$9,500
- Lifestyles of Maryland Foundation \$23,191
- Neighbor Ride \$50,000
- Partners in Care \$65,500
- St. Mary's Department of Aging \$14,000
- Wilson Ministry Center The Vestry of Deer Creek
 Parish \$21,000
- Worcester Commission on Aging \$11,400

E. Status of Projects from the 2025-2028 TIP and New Projects in the 2026-2029 TIP

As mandated by the federal regulations for metropolitan planning, major projects from the previous TIP, the 2025-2028 TIP, must be tracked and any significant delays in the planned implementation of these major projects must be explained. In order to meet this guideline, Table II-3 lists all projects from the 2025-2028 TIP by jurisdiction including the TIP ID, year of operation in the 2025-2028 TIP, year of operation in the 2026-2029 TIP (if any), and status of the project.

Table II-3 sometimes lists the year of operation in the 2026-2029 TIP as XX. This means the project is not in the new TIP either because funds have been received, the project is complete, the project is between funding stages, the project is on hold, or the project is not being pursued. The reason is noted in the project status. Ongoing means that this project continues year after year. NA means not applicable, usually used for a study where the year of operation has yet to be determined.

Table II-4 lists projects that are new to the 2026-2029 TIP. Additional details on these projects are available in Chapter VI.

Table II-2: Status of Projects from the 2025-2028 TIP								
Year of Operation								
Project	TIP ID	25-28 TIP	26-29 TIP	Project Status				
ANNE ARUNDEL COUNTY								
Hanover Road Corridor Improvement	11-1801-42	2030	2030	Working on ROW acquisition. Design remains at 90%.				
Furnace Avenue Bridge over Deep Run	11-1103-13	2029	2030	In Design with Advertisement in 2027, Notice to Proceed in 2028 and construction complete in 2030.				
Magothy Bridge Road Bridge over Magothy River	11-1402-13	2025	2025	Currently under Construction. Conditional Acceptance anticipated in Fall 2025 (FY 2026).				
O'Connor Road Bridge over Deep Run	11-1403-13	2027	2028	In Design development. Current schedule shows NEPA approval in 2024, advertisement in 2027, Notice to Proceed in 2027 and construction completion in 2028.				
McKendree Road Culvert over Lyons Creek	11-1601-19	2026	2026	Advertisement expected in 2025, Notice to Proceed in 2026 and Acceptance in 2026.				
Polling House Road Bridge over Rock Branch	11-1602-13	2028	2028	In Final Design. Current Schedule for advertisement in 2027, Notice to Proceed 2027, construction complete in 2028.				
Parole Transportation Center	11-2101-66	2026	2027	In Design. Advertisement in 2026, Notice to Proceed 2026, construction complete 2027.				
Hanover Road Bridge over Deep Run	11-2105-13	2027	2030	NEPA approval underway. Scheduled for Advertisement & Notice to Proceed 2028, construction completion 2030.				
Conway Rd. Bridge over Little Patuxent River	11-2106-13	2028	2030	In Schematic Design. Current schedule shows NEPA approval in 2026, Advertisement in 2028, Notice to Proceed in 2028 and construction completion in 2030.				
Jacobs Road Bridge over Severn Run	11-2107-13	2027	2027	In Final Design, Advertisement and Notice to Proceed anticipated in 2026, construction completion in 2027.				
Culvert Invert Paving	11-2401-13	2025	NA	Awaiting preliminary documents approval by SHA, federal aid, and FHWA. Design has not started for this project.				
Town Center Boulevard over Tributary to Severn Run	11-2402-13	2030	XX	County completed invert maintenance and the rating has been improved sufficiently to extend the life and no longer necessitate a full replacement. Project is complete.				
Patuxent Road over Little Patuxent River	11-2403-13	2030	2030	Awaiting preliminary documents and manhours estimate approval by SHA, federal aid, and FHWA. Design has not started for this project.				
Governor's Bridge Road Bridge over Patuxent River	11-2404-13	2028	2028	Currently in design. Anticipated construction to begin in FY 2027				
EV Charging Stations and Other Green Technology	11-2501-05	2026	2027	Resilience Authority working on MOU with SHA.				
Odenton MARC TOD	11-2502-55	2026	2028	In Design, Construction to start in 2026, Completion 2028.				

Vision Zero Pedestrian and Bicycle Count Program	11-2503-39	2025	2025	Awaiting MOU from State to begin procurement.
ANNAPOLIS				
Annapolis Electric Passenger Ferry Pilot Program	18-2401-99	2025	XX	Project complete. Ferry service began in FY 2025.
BALTIMORE CITY				
Citywide Traffic Signals, Intelligent Transportation System and Safety Improvements	12-1218-07	Ongoing	Ongoing	Traffic Signal Upgrades at 8 locations. SWM & Sediment Erosion review underway. Anticipated Advertisement in FY 2026; Traffic Signal Reconstruction at 20 Locations – Design Phase Review submittals, and anticipated advertisement in FY 2026.
Northern Parkway at Falls Road Traffic Safety and Bike Facility Improvements	12-2301-39	2027	2029	Community engagement issues have contributed to delays. Anticipating engineering and NEPA completion in FY25.
Russell Street Pavement Rehabilitation from Russell Street Viaduct to City Line	12-2302-11	2027	2028	95% design package submitted to SHA for review. Estimated total cost revised to reflect increased construction costs. Year of operation has been extended to 2028.
Frederick Avenue ADA Upgrades (Brunswick to S. Pulaski)	12-2303-25	2030	2031	Working with design consultant for proposal to initiate design using local funds.
Communication Upgrades - Wireless	12-2304-07	2028	XX	This project was combined with the Transportation Management Center Upgrade project (TIP ID 12-1701-04).
Baltimore City Greenway Trail Network – Eastern Segment	12-2406-03	2026	2029	The City of Baltimore has secured an appraisal for the identified real estate, and is following the procedure for right-of-way certification. The City is in the process of raising capital to begin negotiations and the due diligence period.
Wilkens Avenue Bridge over Gwynns Falls	12-1403-13	2028	2030	The project is in the final design stage. The consultant needs additional funding in order to complete the design and submit the project for authorization to advertise. Upon approval of the funding, additional design will take 6-9 months.
Transportation Management Center Upgrade	12-1701-04	2027	2027	BCDOT Traffic Engineering Division has developed a draft design with consultant support, and is working with SHA to review and approve project scope and design to move this project to the next phase.
Greenway Middle Branch Phase 2	12-2102-03	2025	2029	BCDOT has selected a design/engineering firm to complete 100% design. Design is anticipated to complete in 2027, after which construction can begin.
Perring Parkway Ramp over Herring Run	12-1215-13	2025	2029	Project is in the final design stage. Consultant needs additional funding in order to complete the design and submit the project for authorization to advertise.

Sisson Street Bridge over CSX Railroad	12-1216-13	2028	2033	Project is in the final design stage. Consultant needs additional funding in order to complete the design and update/approval of the City/CSX contract documents for submission for authorization to advertise.
Belair Road Complete Streets	12-1404-11	2028	2029	Addressing 65% Design comments.
Orleans Street Bridge over I-83 and City Streets	12-1601-13	2030	2037	Project is in the initial design stage. The project manager is working with the consultant on the 2nd phase of the selection process. Upon acceptance, the design proposal will be submitted to the City/SHA for processing.
Remington Avenue Bridge over Stony Run	12-1602-13	2028	2030	Project is in the final design stage. Consultant needs additional funding in order to complete the design and submit the project for authorization to advertise.
Moores Run Bridge Replacements	12-1603-13	2032	2036	Project is in the initial design stage. The project manager has submitted the design proposal to the City/SHA for processing.
I-83 Concrete Deck Mill and Resurface	12-1604-13	2032	2032	Project is in the initial design stage, with project manager not yet assigned.
Moravia Road Ramp Bridge over Pulaski Highway	12-1605-13	2032	2032	Project is in the initial design stage, with project manager not yet assigned.
SE Baltimore Freight Corridor: Colgate Creek Bridge Replacement	12-1609-13	2026	2026	Project is in the final stages of construction, anticipated to complete the project in late 2025.
Monroe Street Ramp over CSX and Russell Street over CSX	12-1801-13	2031	2031	Project is in the final design stage. Consultant needs additional funding in order to complete the design and update the contract documents for submission for authorization to advertise. Awaiting ratification of a construction agreement between the City and CSX.
25 th Street Rehabilitation from Greenmount Avenue to Kirk Avenue	12-2001-11	2027	2028	95% Design Stage. Working with DOT ROW Division to obtain the ROW Certification from SHA, required prior to submitting PS&E and advertisement for construction.
41st Street over I-83, MTA Light Rail Tracks, and Jones Falls	12-2002-13	2032	2034	Project is in the initial design stage. The project manager has submitted the design proposal to the City/SHA for processing.
Citywide Asset Management	12-2003-19	Ongoing	Ongoing	BCDOT is finalizing its citywide GIS asset inventory. Programmed funds will be used for a pavement management system including the collection of pavement condition data and the creation of an optimized six-year maintenance and Capital Improvement Plan. BCDOT will utilize federal aid funding for eligible roads and local funding for the remaining roads of the network. Project will begin in FY 2026.
Brehms Lane over Herring Run	12-2005-13	2033	2033	Project is in the initial design stage. The project manager is working with the consultant on the 2nd phase of the selection process.

Fremont Avenue Rehabilitation from Lafayette Avenue to Presstman Street	12-2007-11	2028	2028	95% design stage. Scope changes and latest construction estimate increased estimated total cost.
Hanover Street over CSX	12-2008-13	2032	2036	Project is in the initial design stage. The project manager is working with the consultant on the 2nd phase of the selection process.
Howard Street over I-83, CSX, Amtrak, and Jones Falls	12-2009-13	2035	2040	Project is in the initial design stage. The project has not been assigned to a project manager yet. Project Manager will determine if the project should utilize the services of an on-call or a stand-alone engineering consultant contract.
Madison Street Rehabilitation from North Milton Avenue to Edison Highway	12-2010-11	2028	2028	65% design stage.
Park Heights Avenue from West Rogers Avenue to Strathmore Avenue	12-2011-11	2028	2029	65% design stage, advancing towards 95% design. The 95% design has been slightly delayed due to additional parking analysis required based on a request. DOT TEC Division is working with DOT ROW Division to obtain the ROW Certification from SHA. No funds will be requested for engineering as Final Engineering proposal is already approved by SHA.
West Patapsco Avenue from Magnolia Avenue to Potee Street	12-2012-11	2029	2029	95% design stage. Funding being requested for construction in FY 2026.
Pennington Avenue Rehabilitation from Birch Street to East Ordnance Road	12-2013-11	2027	2028	100% Design Stage. Coordination going on with CSX for work within their ROW. Based on anticipated design completion, year of operation has been extended.
Waterview Avenue over Ramp to MD 295	12-2015-13	2032	2032	Project is in the initial design stage. Project manager is working with the consultant on the 2nd phase of the selection process.
RAISE Transit Priority Project	12-2201-64	2025	XX	This project will enter construction phase in FY 2026.
W. North Avenue Pedestrian Safety Improvements	12-2401-03	2030	2032	Project is at the proposal stage and preliminary package is under SHA review. Design has not yet started.
Pennsylvania Avenue Rehabilitation from North Avenue to MLK Boulevard	12-2402-11	2030	2032	Project is at the proposal stage and preliminary package is under SHA review. Design has not yet started.
25 th Street/Huntingdon Avenue Rehabilitation from Greenmount Avenue to 29 th Street	12-2403-11	2030	2033	Project is currently at design contract advertisement stage. DOT TEC has prepared the "Certification of Publication" document for advertisement of a standalone site-specific A&E Services contract. The advertisement is currently with SHA for review and approval to advertise.
Johnston Square Improvements	12-2404-11	2030	2032	Project is currently at design proposal stage. DOT TEC currently negotiating the planning/design proposal with the selected consultant. Project description update to correct project limits. Design funds being requested in FY 2026.

12-2405-11	2031	2031	Working with design consultant to finalize the proposal to initiate design.
12-2501-11	2030	2032	PE design proposal submitted to SHA for approval. Based on anticipated design start year of operation moved to 2032.
12-2502-11	2031	2031	Working to initiate the design, design consultant assigned.
12-2503-13	2034	2036	Project is in the initial design stage. The project manager is working with SHA to advertise the project for engineering design services.
12-2505-39	2025	2026	Moved funds to FY 2026.
12-2506-39	2025	2026	Moved funds to FY 2026.
12-2504-13	2032	2035	Project is in the initial design stage. The project manager is working with the consultant on the 2nd phase of the selection process.
12-9903-13	2030	2031	Project is in the final design stage. The consultant needs additional funding in order to complete the design and update the contract documents for submission for authorization to advertise. Awaiting construction agreement between the City and CSX.
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13-0001-13	2025	2026	Increased costs due to inflation of construction materials and labor. Delays in permitting/agency coordination and real estate acquisition.
13-0803-13	2026	2026	Delays in final design approvals requiring redesigns, utility coordination, and ROW acquisitions. The increase accounts for inflation of construction costs and accounting for construction phase engineering services.
13-1012-13	2026	2028	Project has been delayed due to administrative processes. Currently, design is on hold pending federal aid approval.
13-1105-13	2028	2028	Delaying start of design due to project management limitations.
13-1107-13	2029	2029	Delays in preliminary design due to CSX coordination and funding approval.
13-1108-13	2026	2028	Project delay in reviews and advertising due to inflation impacts on design costs.
13-1208-13	2027	2027	Delays due to contract expiration and funding authorizations. Increased costs due to contract changes, scope changes determined during preliminary design, inflation of construction costs.
	12-2501-11 12-2502-11 12-2503-13 12-2506-39 12-2504-13 12-9903-13 13-0001-13 13-0803-13 13-1105-13 13-1105-13 13-1107-13 13-1108-13	12-2501-11 2030 12-2502-11 2031 12-2503-13 2034 12-2505-39 2025 12-2506-39 2025 12-2504-13 2032 12-9903-13 2030 13-0001-13 2025 13-0803-13 2026 13-1105-13 2028 13-1107-13 2029 13-1108-13 2026	12-2501-11 2030 2032 12-2502-11 2031 2031 12-2503-13 2034 2036 12-2505-39 2025 2026 12-2506-39 2025 2026 12-2504-13 2032 2035 12-9903-13 2030 2031 13-0803-13 2025 2026 13-1012-13 2026 2028 13-1105-13 2028 2028 13-1107-13 2029 2029 13-1108-13 2026 2028

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Aberdeen Transit Oriented Development Station Square Project	15-2405-55	2030	2030	Design/engineering funds programmed in FY 2026.
Madonna Road Bridge #113 over Deer Creek	15-2101-13	2029	2030	Construction funding is delayed and moved to the out years.
St. Clair Bridge Road Bridge #100 over Deer Creek	15-2102-13	2030	2030	Engineering scheduled in FY 2027 and construction scheduled in FY 2029 and FY 2030.
Stafford Road Bridge #162 over Buck Branch	15-2103-13	2030	2029	Construction funds programmed in FY 2027.
Trappe Church Road Bridge #161 over Hollands Branch	15-2104-13	2029	2029	Funded for construction in FY 2028 and FY 2029.
Moores Road Bridge #78 over a tributary of Gunpowder Falls	15-2201-13	2029	2029	Right-of-way funds programmed in FY 2027. Construction scheduled for FY 2028 and FY 2029.
Hess Road Bridge #81 over Yellow Branch	15-2202-13	2029	2029	Engineering funds programmed in FY 2028 and FY 2029.
Woodley Road Extension	15-2403-14	2027	2027	Engineering currently at 30% completion. Delayed due to funding. Funded for construction in FY 2026.
Cullum Road Bridge #12 over Tributary of James Run	15-2401-13	2031	2031	In the current TIP with design funds programmed in FY 2026 and FY 2027.
Chestnut Hill Road Bridge #41	15-2402-13	2031	2031	Design funds programmed in FY 2027 and FY 2028.
Stafford Road Bridge #19 over Herring Run	15-2501-13	2031	2031	Design funds programmed in FY 2029 and FY 2030.
Perryman Access - Mitchell Lane	15-2502-42	2031	XX	Design delayed to FY 2030 and FY 2031.
Bridge Inspection Program	15-9411-14	Ongoing	Ongoing	Ongoing
Bridge Painting	15-2404-14	Ongoing	Ongoing	Ongoing
HOWARD COUNTY				
Snowden River Parkway: Broken Land Parkway to Oakland Mills Road	16-1410-41	2030	2030	A traffic study is currently underway to aid in design decisions and update the project scope. Change to scope reflects need for additional study and analysis to reflect County's Complete Streets policy, design manual, and local and regional growth.
Bridge Repairs and Deck Replacement	16-0436-13	Ongoing	Ongoing	There were delays in initiating the design or obtaining necessary approvals for some of the bridges to start construction. Several projects received 100% federal funding approval for construction.
Replacement of Bridge No. HO-040 on Union Chapel Road over Cattail Creek	16-2201-13	2026	2026	Project experienced delays due to design changes impacting the project schedule. Project is anticipated to go in construction in FY 2027.
Patapsco Regional Greenway: Elkridge to Guinness Open Gate Brewery	16-2301-03	2026	2026	60% design has been completed. Project has been temporarily put on hold due to developer concerns along the trail alignment. 100% plans anticipated by Winter 2025/2026.
Traffic Signal and Crosswalk Improvements	16-2501-04	2025	2025	Design is complete for 4 of the 5 project locations. The last location (Long Gate Parkway at Wheatfield) is at 90%

				milestone and review is underway. YOP is Fall of CY 2025 (FY 2026).
MARYLAND PORT ADMINISTRATION				
Dundalk Marine Terminal Resiliency and Flood Mitigation Improvements	30-2101-82	2026	2027	NEPA has been completed. Construction started in FY 2025 and will continue into FY 2027.
Port of Baltimore Rail Capacity Modernization Project	30-2301-83	2026	2026	CRISI grant was awarded in June 2022. Project is currently in the engineering and environmental approval phase.
Howard Street Tunnel	32-2101-83	2027	2027	Construction is ongoing with a target completion of the tunnel in FY 2026. Additional work on the three bridges (North Ave, Guilford Rd, and Harford Rd) that are part of the project may not be finished until FY 2027.
Fairfield Masonville Stormwater Management Phase 1	32-2501-81	2027	2027	Engineering has been completed. Construction scheduled to begin in FY 2026.
MARYLAND TRANSPORTATION AUTHORITY				
I-695 Francis Scott Key Bridge – Key Bridge Rebuild	20-2401-44	2029	2028	Project is a design-build project that is currently in design. Demolition of remaining structure will begin in summer 2025.
I-895/Baltimore Harbor Tunnel Toll Plaza and Interchange Improvements	22-2201-19	2028	2029	This project is now split into three implementation phases. Construction is anticipated to begin in the FY 2025 timeframe. Phase 1 complete in Summer 2025, Phase 2 complete in Winter 2028, Phase 3 complete in 2031. The project was awarded a MEGA grant, and additional future funding will be identified.
I-95 Express Toll Lane Northbound Extension	25-1801-41	2027	2027	Construction is ongoing and will be completed through more than two dozen individual construction contracts. To date, several construction contracts have been completed, several are underway, and more construction contracts are scheduled to begin this year. The entire Program is anticipated to be completed in 2028.
I-95 John F. Kennedy Memorial Highway – I- 95 Southbound Hard Shoulder Running (FKA Southbound Part-Time Shoulder Use)	25-2101-41	2027	2028	Project originally anticipated to Advertise in early FY 2023 but is now anticipated to be Advertised in early FY 2026 due to delays outside of the project's control.
I-95 John F. Kennedy Memorial Highway – I- 695 Ramp	23-2501-45	2027	2027	This project is a breakout of the I-95 Express Toll Lanes project (TIP ID 25-1801-41). Currently in design.
MTA - TRANSIT				
Urban Transit Systems – Capital Assistance	40-1602-05	Ongoing	Ongoing	Projects are ongoing and on schedule
Bus and Paratransit Vehicle Overhaul and Replacement	40-1802-05	Ongoing	Ongoing	Project is ongoing for clean diesel bus purchases as well as mobility vehicle purchases of various sizes.
Small Urban Transit Systems – Capital Assistance	40-9502-05	Ongoing	Ongoing	Projects are ongoing and on schedule

Ridesharing - Baltimore Region	40-9901-01	Ongoing	Ongoing	Projects are ongoing and on schedule
Small Urban Transit Systems – Operating Assistance	40-0104-61	Ongoing	Ongoing	Projects are ongoing and on schedule
Bus and Rail Preventive Maintenance	40-1204-64	Ongoing	Ongoing	Preservation projects ongoing
Seniors and Individuals with Disabilities	40-1502-69	Ongoing	Ongoing	Projects are ongoing and on schedule
Urban Transit Systems – Operating Assistance	40-1603-61	Ongoing	Ongoing	Projects are ongoing and on schedule
Agencywide System Preservation and Improvement	40-1801-64	Ongoing	Ongoing	Various projects ongoing. Particularly large project will consist of the replacement and modernization of 40 elevators.
Bus System Preservation and Improvement	40-1803-64	Ongoing	Ongoing	Project is ongoing. Commissioning/testing and operation of electric vehicle service equipment (EVSE) to enable battery electric buses (BEBs) to be placed into revenue service.
Metro and Light Rail Rolling Stock Overhauls and Replacement	40-1804-63	Ongoing	Ongoing	Projects are ongoing. First new Metro vehicles to start service in 2025. Full Metro Train replacement project anticipated to be complete in 2027.
Metro and Light Rail System Preservation and Improvement	40-1805-64	Ongoing	Ongoing	Various projects are ongoing
Rural Transit Systems - Operating Assistance	40-9204-61	Ongoing	Ongoing	Project is ongoing and on schedule
Eastern Bus Facility	40-2301-65	2028	2032	Project Design development will go on-hold pending additional funding to advance construction.
Zero Emission Infrastructure and Rolling Stock	40-2302-63	2029	2029	Various ongoing projects. Battery Electric and Hybrid bus buys for CY 2025 and CY 2026 are progressing.
Baltimore City Ferry Service Improvements	42-2401-99	2026	2026	Project is on schedule.
Baltimore Penn Station Multimodal Investments	42-2402-64	2029	2029	Preliminary design underway.
Penn-Camden Connector	42-2403-64	2033	2033	Design underway.
MTA - Commuter Rail				
MARC Rolling Stock Overhauls and Replacement	70-1501-53	Ongoing	Ongoing	Various projects are ongoing and on-schedule.
MARC Improvements	70-1502-54	Ongoing	Ongoing	Various projects ongoing and on-schedule. This project includes annual agreed upon funds as a part of Amtrak/CSX Operating Agreements.
MARC Facilities	70-1503-55	Ongoing	Ongoing	Various projects ongoing and on schedule.
Martin Airport – All Stations Accessibility Program	72-2401-64	2029	XX	All Stations Accessibility Program grant will fully obligate in FY 2025.
MDOT – OFFICE OF THE SECRETARY				
State Safety Oversight	90-1401-39	Ongoing	Ongoing	Ongoing project
STATE HIGHWAY ADMINISTRATION				

Areawide Transportation Alternatives Projects	60-9903-29	Ongoing	Ongoing	Ongoing
Areawide Environmental Projects	60-9506-38	Ongoing	Ongoing	Ongoing
Areawide Congestion Management	60-9504-04	Ongoing	Ongoing	Ongoing
Areawide Bridge Replacement And Rehabilitation	60-9310-13	Ongoing	Ongoing	Ongoing
Areawide Resurfacing And Rehabilitation	60-9501-11	Ongoing	Ongoing	Ongoing
Areawide Safety And Spot Improvements	60-9508-19	Ongoing	Ongoing	Ongoing
Areawide Urban Reconstruction	60-9511-19	Ongoing	Ongoing	Ongoing
National Electric Vehicle Infrastructure (NEVI)	60-2401-09	2030	2031	Phase 2 design beginning in Winter/early Spring 2025, construction beginning in Fall 2025, and being completed in Fall 2031.
Morgan State University Transportation Research Program	60-0702-99	Ongoing	Ongoing	Ongoing
I-70: MD 32 to I-695 (Formerly TSMO System 1)	60-2301-41	2032	2032	Design is anticipated to start in FY 2027 and is partially funded, which is anticipated to extend through FY 2030. A specific design schedule is still being developed; NEPA is anticipated to be completed in FY 2029. Unfunded costs include: design, ROW, utilities, and Construction.
MD 175: Sellner Road/Race Road to McCarron Court	61-1701-41	2025	2026	Construction ongoing with anticipated completion in Spring 2026.
MD 2: US 50 to Arnold Road	61-2301-41	2026	2031	Design at the semi-final milestone and anticipated to be complete in Fall 2026. Construction is unfunded. NEPA approval anticipated in March 2025.
MD 3: Waugh Chapel Road/Riedel Road to MD 32/I-97	61-2302-41	2026	2030	Design is partially funded, extending through FY 2027. Unfunded costs include design, ROW, utilities, and construction.
MD 170: Norcross Lane to Wieker Road	61-2303-41	2025	2026	Design and ROW are fully funded, anticipated to extend through FY 2028 and FY 2029 respectively. Utilities and construction are unfunded.
I-97: US 50 to MD 32 TSMO	61-2305-41	2030	2031	Design is approximately 30% complete. This project previously included TSMO improvements (i.e. hard shoulder running) within the project limits. The scope has changed to now include lane widening from 4-6 lanes within the project limits.
MD 173: Bridge Replacement over Rock Creek	61-2101-13	TBD	TBD	Design ongoing and anticipated to be complete in Fall 2026. Construction is currently unfunded.
I-795: Dolfield Boulevard Interchange	63-0803-46	2032	2032	Design is fully funded and is approaching the semi final milestone in March 2025, anticipated to be complete Winter 2027/2028. ROW is partially funded. NEPA reevaluation is anticipated to be sent to FHWA for approval

				in Spring 2025. Unfunded costs include partial ROW, Utilities, CO.
I-695: US 40 to MD 144	63-1601-41	2021	2021	Construction of the noise barrier was completed in December 2024. The Contractor is currently installing a cellular confinement system for slope repair as additional work added to the contract. Construction is anticipated to be fully completed in April 2025.
I-695: I-70 to MD 43	63-1802-41	2026	2028	Construction is ongoing and anticipated to be complete by Spring 2028.
I-695: Bridge Replacement on Putty Hill Avenue	63-2002-13	2027	2028	Bridge work will not start until utility relocations underway or completed, anticipated to begin in Spring 2025. Bridge construction anticipated to begin Spring/Summer 2026.
I-695 at I-70 Bridge Replacements (Formerly Reconstruction of Interchange at I-70)	63-2201-12	2029	2030	Scope has changed to focus on state of good repair needs for the bridges within the I-695/I-70 interchange. Bridge painting will begin in 2025.
I-95/I-695 Interchange Bridge Deck Replacement	63-2202-13	2026	2025	Construction is ongoing and anticipated to be completed in May 2025.
MD 32: 2 nd Street to Main Street	64-2301-12	2026	2027	Design is ongoing and anticipated to be completed in Fall 2025. Project not funded for construction.
MD 97: MD 140 to MD 496 Corridor Study	64-2302-41	TBD	TBD	Planning ongoing with anticipated completion in Summer 2025.
MD 91: Bridge Replacements over North Branch of Patapsco River and MD Midland Railroad	64-2201-13	2025	2025	Bridge open to service in December 2024; construction anticipated to be complete in Summer 2025.
MD 22: MD 462 to Mount Royal Avenue Noise Abatement	65-2301-31	2026	2026	Design is ongoing and anticipated to be completed in Spring 2026. NEPA anticipated to be approved in Spring 2025. ROW acquisition ongoing and anticipated to be complete in Winter 2028/2029.
MD 24: 900 ft south of Sharon Road to 1,700 north of Ferncliff Lane, Section G	65-1601-12	2026	2025	Construction ongoing with anticipated completion in Spring 2025.
US 1: Bridge Replacements at Tollgate Road and Winters Run	65-2101-13	2026	2028	Design is ongoing and anticipated to be completed in Fall 2025. NEPA approval anticipated in March 2025. Construction is anticipated to begin in Spring 2026.
MD 32: Linden Church Road to I-70, Capacity & Safety Improvements	66-1703-41	2022	2025	Roadway improvements opened to traffic in Summer 2022. Design is ongoing through FY 2029.
MD 18B: Castle Marina Road to the Kent Narrows Corridor Study	67-2301-41	TBD	TBD	Planning ongoing with anticipated completion in Summer 2025.

Table II-3: New Projects in the 2026-2029 TIP				
Agency	Project	TIP ID	Project Category	Year of Operation
Baltimore City	RAISE Transit Priority Project**	12-2201-64	Transit Preservation	2025
Baltimore City	Frederick Avenue Streetscape (Yale to Monastery)	12-2601-03	Emission Reduction Strategy	2031
Baltimore City	Vision Zero Action Plan & Pilot	12-2602-39	Environment/Safety	2028
Baltimore City	Restoring Connections to Druid Hill Park	12-2603-03	Emission Reduction Strategy	2030
Baltimore City	West Baltimore United: A Plan to Reconnect Communities	12-2604-99	Miscellaneous	2040
Baltimore City	Baltimore Greenway Trails Network - Northern Segments	12-2605-03	Emission Reduction Strategy	2029
Baltimore City	Wolfe or Washington Street Bike Facility	12-2606-03	Emission Reduction Strategy	2026
Carroll County	Upper Beckleysville Road Bridge over Murphy Run* **	12-2202-13	Highway Preservation	2026
MDOT MDTA	I-95 JFK Memorial Highway – I-695 Ramp**	23-2501-45	Highway Capacity	2027
MDOT MDTA	Curtis Creek Drawbridge Deck Rehabilitation and Resiliency**	20-2502-13	Highway Preservation	2027
MDOT MPA	Dundalk Marine Terminal (DMT) Berth 11-13 Reconstruction	30-2601-82	Commuter Rail Preservation	2030
MDOT MPA	Masonville Cove Connector: Shared Use Path Design and Construction*	32-2301-03	Emission Reduction Strategy	2027
MDOT MPA	Zero Emission Electric Locomotives for CSX Curtis Bay Facility	32-2602-89	Emission Reduction Strategy	2027
MDOT MTA	Rural Transit Systems – Capital Assistance*	40-9501-05	Emission Reduction Strategy	Ongoing
MDOT MTA	Kirk Bus Facility Replacement - Phase 1 & 2**	40-1203-65	Transit Preservation	2021
MDOT MTA	Reisterstown Plaza Metro Station Multi-Modal Access**	43-2501-64	Transit Preservation	2027
MDOT MTA	Patapsco Avenue Pedestrian/Bicycle Bridge**	40-2502-03	Emission Reduction Strategy	2030
MDOT MTA	Cloud-Based Signal Priority**	40-2503-63	Transit Preservation	2026
MDOT MTA	Low Floor Light Rail Fleet Transition**	40-2504-63	Transit Preservation	2035
MDOT SHA	Areawide Carbon Reduction Program**	60-2501-09	Emission Reduction Strategy	Ongoing
MDOT SHA	MD 26 over Liberty Reservoir	64-2601-13	Highway Preservation	2029

^{*}Projects appeared in previous TIPs but were not included in the 2025-2028 TIP due to lack of funding and are now requesting funds in the 2026-2029 TIP.

^{**}Projects added to the 2025-2028 TIP by amendment that did not appear in the original production.

F. Conformity with Air Quality Planning

The Clean Air Act Amendments require careful evaluation of the conformity between transportation plans and programs against the applicable State Implementation Plan (SIP) for attaining air quality standards. The procedures for performing this evaluation have been documented and issued by the U.S. Environmental Protection Agency (EPA) in the final rule, "Criteria and Procedures for Determining Conformity to State or Federal Implementation Plans of Transportation Plans, Programs and Projects Funded or Approved under Title 23 USC or the Federal Transit Act", hereafter termed Final Rule.

The Baltimore region is designated as a serious nonattainment area with regard to the 8-hour ozone National Ambient Air Quality Standard (NAAQS), as of August 1, 2024. The BRTB has conducted a comprehensive analysis of conformity for the 2026-2029 TIP with air quality goals as a pre-condition of its acceptance by federal funding agencies. The results of this work, as summarized below and in an accompanying report entitled *Conformity Determination of the 2026-2029 Transportation Improvement Program and Resilience 2050*,

concluded that the region's transportation plan and program are in conformity with air quality goals.

The conformity determination referred to above is founded upon technical analyses of the impact on areawide emissions of air pollutants associated with building, or not building, projects contained in the TIP. These air quality analyses will be based upon Round 10 cooperative socioeconomic forecasts, which will go before the BRTB on July 22, 2025. All projects that serve as emission reduction strategies (ERS) in the TIP are identified as such by the (ER) under Project Type on the project sheet. ERS-related projects are documented in the conformity determination report.

Many of the projects contained in the TIP involve non-capacity improvements bridge such as replacement, bridge rehabilitation, streetscapes, road reconstruction. road resurfacing, road rehabilitation, traffic engineering, safetv projects, and bicycle and pedestrian facilities. These improvements do not alter the functional traffic capacity of the facilities being improved and are "exempt" from the requirement to determine conformity according to the Final Rule. Therefore they were not included in the travel demand model-based technical analysis.

G. Performance Based Planning and Programming

The U.S. DOT published updated Metropolitan Planning Regulations on May 27, 2016 following the enactment of the FAST Act. These updated regulations continue and strengthen the emphasis on performance-based planning and programming. The intent of performance-based planning and programming is to aid MPOs in gauging progress relative to regionally established goals, strategies, performance measures, and performance targets.

- **Goals** are broad aspirations or guiding principles for the region (e.g. "Improve system safety")
- **Strategies** are specific approaches or policies aiding the implementation of goals (e.g. "Eliminate hazardous or substandard conditions in high-crash locations and corridors")
- **Performance Measures** are specific metrics the region can use to assess progress towards achieving a goal (e.g. "Decrease number of highway fatalities")
- **Performance Targets** are specific levels to be reached within a certain time frame (e.g. "Decrease the number of highway fatalities to 121 by 2030")

Federal rulemaking requires MPOs to adopt a series of 25 performance measures and targets and to link investment priorities in the TIP and LRTP to the achievement of these performance measures and targets. The BRTB coordinated target selection with the State and public transportation providers in the region to ensure consistency. All 25 of the federally mandated performance targets have been adopted by the BRTB.

Performance measures and targets cover several broad categories including transit asset management, transit safety, highway safety, traffic congestion, on-road mobile source emissions, pavement and bridge condition, and travel time reliability.

The following paragraphs summarize each of these performance measures and targets as well as the anticipated impact of investments in the TIP towards their achievement. The BRTB will continue to work to improve the methods utilized to analyze the linkage between TIP investments and regional progress towards performance measures and targets.

Transit Asset Management: Performance Measures and Targets

The Federal Transit Administration (FTA) defines two categories of public transit providers. Tier 1 providers include providers with 101 or more vehicles in revenue service during peak regular service or operators of rail fixed-guideway public transportation systems. Tier II providers include providers that do not operate rail fixed-guideway public transportation systems and have 100 or fewer vehicles in service during peak regular service.

MDOT MTA is a Tier 1 agency and Maryland's direct recipient of federal funds, while all Locally Operated Transit Systems (LOTS) in the Baltimore region are Tier II agencies. As subrecipients of federal funds, MDOT MTA oversees the LOTS annual asset management requirements.

Tier I providers must develop and carry out an annual Transit Asset Management (TAM) plan, while Tier II providers may participate in a group TAM plan. The plan includes an asset management performance review and sets new targets to monitor and manage public transportation assets to improve safety and increase reliability and performance.

As the regional MPO, BRTB must adopt new baselines and targets on a four-year cycle when updating the Long Range Transportation Plan, the new cycle occurred in 2023. While the group Tier II TAM plan in Maryland is statewide, BRTB elects to adopt regional targets rather than statewide. Asset management FY 2023 baselines and FY 2024 targets adopted by BRTB are as follows.

1) Percentage of revenue vehicles within an asset class that have either met or exceeded their Useful Life Benchmarks (ULBs). Tables II-5 and II-6 summarize these targets.

Table II-4. MDOT MTA Revenue Vehicle Performance & Targets

% of vehicles at or past their ULB			
Equipment Asset Class	2024 Performance	2025 Targets	
AB - Articulated Bus	9.3%	27.8%	
AO – Automobile	0%	0%	
BR – Over-the-road Bus	0%	0%	
BU – Bus	16%	14.2%	
CU – Cutaway	82.3%	46.8%	
HR – Heavy Rail Passenger	100%	100%	
Car			
LR – Light Rail Vehicle	66%	64.2%	
MV – Minivan	100%	100%	
RL – Commuter Rail	0%	0%	
Locomotive			
RP – Commuter Rail	14.7%	14.7%	
Passenger Coach			

Table II-5. Baltimore Region Tier II Revenue Vehicle Performance & Targets

% of vehicles at or past their ULB			
Equipment Asset Class	2022 Performance 2023 Targ		
AB - Articulated Bus	0.0%	0.0%	
AO – Automobile	57.1%	57.1%	
BU – Bus	12.3%	23.0%	
CU – Cutaway	36.5%	40.8%	
FB – Ferryboat	75.0%	100%	
MV – Minivan	28.6%	25.0%	
SUV - Sports Utility Vehicle	0.0%	0%	
TB - Trolleybus	0.0%	100.0%	
VN – Van	11.1%	11.1%	

2) Percentage of non-revenue vehicles that have either met or exceeded their ULBs. Tables II-7 and II-8 summarize these targets.

Table II-7. Tier I MDOT MTA Non-Revenue Vehicle Performance & Targets

% of vehicles at or past their ULB			
Equipment Asset Class	2024 Performance	2025 Targets	
Automobiles	40.0%	36.0%	
Trucks and other Rubber Tire Vehicles	17.9%	20.2%	
Steel Wheel Vehicles	70.0%	70.0%	

Table II-8. Baltimore Region Tier II Non-Revenue Vehicle Performance & Targets

% of vehicles at or past their ULB			
Equipment Asset Class	2022 Performance	2023 Targets	
Automobiles	23.1%	23.1%	
Trucks and other Rubber Tire Vehicles	23.1%	30.8%	

3) Infrastructure (rail fixed-guideway, track, signals, systems): percentage of track segments with performance restrictions. Table II-9 summarizes these targets; note that infrastructure does not apply to the Tier II LOTS.

Table II-9. Tier I MDOT MTA Infrastructure Performance & Targets

% of vehicles at or past their ULB			
Equipment Asset Class	2024 Performance	2025 Targets	
CR - Commuter Rail	0.0%	0.0%	
HR - Heavy Rail	1.2%	0%	
LR - Light Rail	1.7%	3.9%	

4) Facilities: Percentage within an asset class rated below condition 3 on a scale of 1-5 on the FTA Transit Economic Requirements Model (TERM) scale. Tables II-10 and II-11 summarize the facilities targets.

Table II-10. Tier I MDOT MTA Facilities Performance & Targets

% of facilities at or past their ULB			
Equipment Asset Class	2024 Performance	2025 Targets	
Passenger / Parking	10.7%	9.9%	
Facilities			
Administrative /	11.3%	9.9%	
Maintenance Facilities			

Table II-11. Baltimore Region Tier II Facilities Performance & Targets

% of facilities at or past their ULB					
Equipment Asset Class	2022 Performance	2023 Targets			
Passenger / Parking	0%	0.0%			
Facilities					
Administrative /	0%	0.0%			
Maintenance Facilities					

The 2026-2029 TIP includes seventeen projects related to the purchase, maintenance and rehabilitation of transit assets. MDOT MTA is the project sponsor for all TAM related projects except for the two Anne Arundel County sponsored projects; the Parole Transportation Center and Odenton MARC TOD, and The Aberdeen TOD Station Square Project in Harford County. Table II-12 summarizes these projects. The 2026-2029 TIP includes a total of over \$1.4 billion in TAM related investments. Federal sources such as CMAQ and FTA sections 5307, 5337, and 5339 account for \$1.1 billion of this total. Matching funds account for the remaining \$328.9 million. This investment represents 23.0% of the \$6.2 billion programmed in the 2026-2029 TIP.

Table II-12. 2025-2028 TIP Projects Related to Transit Asset Management

Project	TAM Target	Federal	Matching	Total TIP Funds
MARC Rolling Stock Overhauls and Replacement	Vehicles	\$175,543	\$43,885	\$219,429
Bus and Paratransit Vehicle Overhaul and Replacement	Vehicles	\$60,035	\$10,900	\$70,935
Metro and Light Rail Rolling Stock Overhauls and Replacement	Vehicles	\$139,492	\$34,873	\$174,365
Bus and Rail Preventive Maintenance	Vehicles and Infrastructure	\$216,874	\$54,218	\$271,092
MARC Improvements	Infrastructure	\$138,251	\$34,562	\$172,814
MARC Facilities	Facilities	\$51,876	\$12,969	\$64,846
Agencywide System Preservation and Improvement	Facilities and Infrastructure	\$48,500	\$12,150	\$60,650
Metro and Light Rail System Preservation and Improvement	Facilities and Infrastructure	\$73,764	\$18,441	\$92,205
Parole Transportation Center (Anne Arundel County)	Tier II Facilities	\$3,000	\$11,000	\$14,000
Small Urban Transit Systems - Capital Assistance	Tier II Facilities and Vehicles	\$19,800	\$2,595	\$24,990
Urban Transit Systems - Capital Assistance	Tier II Facilities and Vehicles	\$3,732	\$536	\$4,668
Eastern Bus Facility	Tier II Facilities and Vehicles	\$21,031	\$5,257	\$26,289
Zero Emission Infrastructure and Rolling Stock	Tier II Facilities and Vehicles	\$111,735	\$19,718	\$131,453
Baltimore Penn Station Multimodal Investments	Facilities and Infrastructure	\$11,000	\$3,950	\$14,950
Mondawmin Transit Hub	Facilities and Infrastructure	\$20,000	\$13,500	\$33,500
Odenton MARC TOD (Anne Arundel County)	Facilities	\$4,000	\$49,990	\$53,990
Aberdeen TOD Station Square Project (Harford County)	Facilities and Infrastructure	\$1,600	\$400	\$2,000
Funding Total (in \$1,000s)		\$1,100,233	\$328,944	\$1,432,176

Transit Safety: Performance Measures and Targets

FTA requires every transit operator that is a direct recipient or sub-recipient of FTA grant funds to implement a Public Transportation Agency Safety Plan (PTASP). Issued in 2019, FTA's final rule to establish and implement Safety Management Systems includes four performance measures for state departments of transportation, metropolitan planning organizations, and locally operated transit systems to use under the PTASP and National Public Transportation Safety Plan, including: 1) fatalities, 2) injuries, 3) safety events, and 4) system reliability.

The thresholds for reportable fatalities, injuries, and safety events are defined in the National Transit Database (NTD) Safety and Security Reporting Manual. Reportable major mechanical failures are defined in the NTD Glossary as "a failure of some mechanical element of the revenue vehicle that prevents the vehicle from completing a scheduled revenue trip or from starting the next scheduled revenue trip because actual movement is limited or because of safety concerns."

Each operator is required to review their plans annually, and update as needed. An agency is required to submit updates to

their MPO; the MPO then has 180 days to adopt the new targets. All statewide LOTS updated their plans and communicated those measures to BRTB in January 2023. MDOT MTA updated its plan and communicated those measures to BRTB in February 2023, and the BRTB adopted the targets in March 2023. Tables II-13 and II-14 summarize the FY 2023 updated targets.

Table II-13. Transit Safety Performance Measures & Targets – MDOT MTA

Mode of Transit Service	Number of Fatalities	Rate of Fatalities per 1M VRM	Number of Injuries	Rate of Injury per 1M VRM	Number of Safety Events	Rate of Safety Events per 1M VRM	Miles between Major Mechanical Failures
Local Bus	2	0.1	141	7.1	57	2.9	6,000
Light Rail	1	0.3	16	5.5	19	6.6	900
Metro Subway	1	0.2	42	9.3	8	1.9	6,000
Mobility	0	0.0	77	4.3	33	1.9	15,000
Commuter Bus	0	0.0	0	0.0	0	0.0	25,000

Table II-14. Transit Safety Performance Measures & Targets – Baltimore Region LOTS

Operator	Number of Fatalities	Rate of Fatalities per 100K VRM	Number of Injuries	Rate of Injury per 100K VRM	Number of Safety Events	Rate of Safety Events per 100K VRM	Miles between Major Mechanical Failures
Annapolis Transit							
Fixed Route	0	0	0	0	3	0.17	Not Available
Demand Response	0	0	0	0	0	0	Not Available
Anne Arundel OOT							
Fixed Route	0	0	1	0	2	0	25,000
Demand Response	0	0	1	0	1	0	75,000
Baltimore County							
Fixed Route	0	0	0	0	0	0	1st year of service
Demand Response	0	0	0	0	0	0	39,614
Carroll Transit							
Fixed Route	0	0	0	0.10	3	1.34	> 170,000
Demand Response	0	0	0	0.20	5	1.30	> 330,000
Charm City Circulator							
Fixed Route	0	0	< 3	< 0.5	< 1	< 0.22	> 5,000
Harford Link							
Fixed Route	0	0	< 5	< 0.55	< 15	< 1.67	> 43,142
Demand Response	0	0	< 3	< 0.85	< 10	< 3.33	> 26,404
Queen Anne's County							
Fixed Route	0	0	0	0	0	0	0
Demand Response	0	0	0	0	0	0	0
RTA							
Fixed Route	0	0	20	1.5	20	1.5	6,000
Demand Response	0	0	3	0.25	5	0.40	6,000

The 2026-2029 TIP includes eight projects related to the transit safety performance measures and targets. MDOT MTA is the project sponsor for all of these projects aside from the Safety Oversight project (MDOT Office of the Secretary). Table II-15 summarizes these projects. The 2026-2029 TIP includes a total of \$940.6 million in transit safety related investments. Federal sources account for \$755.3 million of this total. Matching funds account for the remaining \$185 million. This investment represents 15.1% of the \$6.2 billion programmed in the 2026-2029 TIP.

Table II-15. 2026-2029 TIP Projects Related to Transit Safety

Project	Federal	Matching	Total TIP Funds
MARC Improvements	\$138,251	\$34,562	\$172,814
MARC Rolling Stock Overhauls and Replacement	\$175,543	\$43,885	\$219,429
Bus and Paratransit Vehicle Overhaul and Replacement	\$60,035	\$10,900	\$70,935
Bus and Rail Preventive Maintenance	\$216,874	\$54,218	\$271,092
Metro and Light Rail Rolling Stock Overhauls and Replacement	\$139,492	\$34,562	\$174,365
Small Urban Transit Systems - Capital Assistance	\$19,800	\$5,190	\$24,990
Urban Transit Systems - Capital Assistance	\$3,732	\$936	\$4,668
State Safety Oversight (MDOT TSO)	\$1,600	\$800	\$2,400
Funding Total (in \$1,000s)	\$755,327	\$185,053	\$940,693

Highway Safety: Performance Measures and Targets

The FHWA's final rule established five performance measures for state DOTs and MPOs to use to carry out the Highway Safety Improvement Program (HSIP). MDOT and the BRTB coordinated on a methodology using crash data to develop regional targets. The source for all fatality data is the most recently available NHTSA Fatality Analysis Reporting System (FARS) data. Serious injury data were obtained through the state's crash data system. Compliant with the final rule, the methodology uses 5-year rolling averages for each of the measures.

Table II-16 summarizes the five required highway safety performance measures and targets. The table reflects targets adopted by the BRTB in January 2023. The rightmost column in Table II-16 shows 2040 VZ/ZD goals. This refers to the state's and the region's continued commitment to the concept of "Vision Zero/Zero Deaths." While MDOT and the BRTB have adopted short-term yearly highway safety targets in accordance with regulatory guidance and advice from the FHWA, both organizations nonetheless maintain their long-term commitment to achieving zero deaths on the state's and the region's highways. Consistent with the state's Highway Safety

Improvement Plan and Strategic Highway Safety Plan, the 2030 goals are set using an exponential trend from the 2005-2009 baseline figure.

Table II-16. Highway Safety Performance Measures & Targets

Measures related	to fundi				Safety
Improvement Progr		· ·		,	•
Measure	2005- 2009 Baseline	2022 Actual	2023 Actual	2021- 2025 Target	2030 VZ/ZD Goal
Number of fatalities	244	223	252	220	219
Number of serious injuries	2,094	1,544	1,515	1,339	1,231
Fatality rate per 100 million VMT	0.94	0.85	0.95	0.82	0.80
Serious injury rate per 100 million VMT	8.06	5.90	5.74	4.99	4.52
Number of non- motorized (ped/bike) fatalities and serious injuries	290	313	410	339	294

Table II-17 summarizes the four MDOT State Highway Administration (MDOT SHA) projects programming HSIP funds. HSIP funds are programmed in four MDOT SHA areawide projects focusing on environmental improvements, resurfacing and rehabilitation, safety and spot improvements, and urban reconstruction projects. Areawide projects group together many smaller projects throughout the region that do not affect air quality, otherwise known as exempt projects. The complete project list is not available from MDOT SHA, but Appendix D lists

known projects that MDOT SHA will pursue as a part of these areawide projects in FY 2026. The 2026-2029 TIP includes \$102.3 million in federal HSIP funds along with \$24 million in matching funds for a total of \$126.3 million. This investment represents 2.0% of the \$6.2 billion programmed in the 2026-2029 TIP.

Table II-17. 2026-2029 TIP Projects Programming HSIP Funds

Agency	Project	HSIP Federal	HSIP Matching	Total TIP Funds
Anne Arundel County	Vision Zero Pedestrian and Bicycle Count Program	\$67	\$7	\$75
Baltimore City	2022 Pedestrian & Roadway Safety Improvements	\$2,790	\$310	\$3,100
Baltimore City	2023 Pedestrian & Roadway Safety Improvements	\$2,540	\$260	\$2,800
MDOT SHA	Areawide Environmental Projects	\$2,240	\$560	\$2,800
MDOT SHA	Areawide Resurfacing And Rehabilitation	\$15,920	\$3,810	\$19,730
MDOT SHA	Areawide Safety And Spot Improvements	\$74,400	\$18,600	\$93,000
MDOT SHA	Areawide Urban Reconstruction	\$4,365	\$485	\$4,850
Fu	inding Total (in \$1,000s)	\$102,322	\$24,032	\$126,355

While the FHWA-required highway safety performance measures and targets are focused specifically on implementation of the HSIP, the 2026-2029 TIP includes many other projects identified by project sponsors as supporting the

BRTB's highway safety goals. Examples include the provision of bicycle and pedestrian facilities along roadways as well as other cost effective safety countermeasures (e.g. rumble strips, signal phasing, etc.). These projects program a variety of funds including other federal sources, state funds, and local funds. Appendix B includes a complete table relating 2026-2029 TIP projects to LRTP goals and performance measures.

In addition to TIP investments, the BRTB has lead or participated in the development and completion of several major projects related to safety throughout the Baltimore region in recent years. Most notably among these are the development and implementation of local Strategic Highway Safety Plans (SHSP), the adoption of Complete Streets policies, and the staffing of pedestrian/bicycle coordinators in local Departments of Transportation or Public Works.

In addition, the BRTB Traffic Incident Management for the Baltimore Region (TIMBR) Committee focuses on safety of responders and all road users through more efficient and coordinated incident response as well as promoting TIM training for all responders. Safety is also a priority of the work of the Congestion Management Process Committee, which aims to improve the mobility of people and goods while enhancing

safety and efficiency. BMC is also supporting non-motorist safety projects including the Look Alive regional pedestrian and bicycle safety campaign and the promotion of Bike to Work Week which helps to raise awareness of the rules of the road for drivers, pedestrians, and cyclists, and also highlights the need for continued expansion of safe sidewalks, bike lanes and safe crossings.

Traffic Congestion and Emissions: Performance Measures and Targets

The Baltimore region is classified as a nonattainment area for the 8-hour ozone standard. As such, the region must work to ensure it maintains conformity with the state's air quality plan. The Congestion Mitigation and Air Quality Improvement (CMAQ) program provides funding for transportation programs and projects that reduce air pollution and mitigate congestion in the transportation system in nonattainment areas.

The FHWA's final rule established three performance measures for state DOTs and MPOs to use to report on traffic congestion to carry out the CMAQ program. This final rule requires state DOTs and MPOs to coordinate and report on a single unified set of performance targets for each of the measures for the urbanized area. These measures are:

- 1) Annual hours of peak-hour excessive delay (PHED): This measure presents the annual hours of PHED that occur within an urbanized area on the National Highway System (NHS). The threshold for excessive delay is either 20 miles per hour or 60% of the posted speed limit travel time, whichever is greater, and is measured in 15-minute intervals. Peak travel hours are defined as 6-10 a.m. local time on weekday mornings and either 3-7 p.m. or 4-8 p.m. local time on weekday afternoons. For PHED, the targets were developed by using the existing PHED, calculated through the RITIS tool, and then projecting future delay. The year 2020 was omitted from these calculations to account for the atypical transportation patterns due to the COVID-19 pandemic.
- 2) Percent of Non-SOV (Single Occupancy Vehicle) measure. The Percent of Non-SOV travel measure is the percentage of non-SOV vehicles traveling within an applicable urbanized area. U.S. Census/American Community Survey (ACS) 5-year data was used to calculate percent non-SOV travel and targets. Performance data for 2020 was omitted to account for the atypical transportation patterns due to the COVID-19 pandemic.
- 3) On-road mobile source emission reductions: This measure tracks the total emission reductions attributed to projects funded

through the CMAQ program. Total emissions reductions are calculated by summing 2- and 4-year totals of emissions reductions of an applicable criteria pollutant and precursor, in kilograms per day, for all projects funded with CMAQ funds. The applicable pollutants for 8-hour ozone are Volatile Organic Compounds (VOCs) and nitrogen oxides (NOx).

Table II-18 summarizes the current traffic congestion and emissions performance measures and targets for the second performance period. The BRTB adopted initial traffic congestion targets in May 2018 and the emissions target in June 2018 for the first performance period. The baseline performance plan and targets for the second performance period, 2022-2025, were approved in August 2022. The mid-performance plan was approved in August 2024. BRTB coordinates with MDOT to review targets for the performance periods.

Table II-18. Traffic Congestion and Emissions Performance Targets for the Second Performance Period, 2022-2025

Measures related to funding under the Congestion Mitigation and Air Quality Improvement (CMAQ) Program						
Measure	Baseline (Year)	2-year Targets	4-Year Targets			
Annual per capita hours of peak-hour excessive delay (PHED)	20.6 hours (2019)	<14.8 hours	<16.9 hours			
Percentage of non-SOV travel	25.4% (2019)	25.3%	25.3%			
Reduction of VOC (kg/day)	154.74 (2022-2025)	0.87	13.63			
Reduction of NOx (kg/day)	412.91 (2022-2025)	6.64	43.27			

Table II-19 summarizes the TIP projects programming CMAQ funds. The 2026-2029 TIP includes \$158.5 million in federal CMAQ funds along with \$29.2 million in matching funds for a total of \$187.7 million. This investment represents 3.0% of the \$6.2 billion programmed in the 2026-2029 TIP.

MDOT MTA accounts for over 87% of CMAQ funds programmed in the TIP, with MDOT SHA accounting for the remainder. MDOT MTA sponsored projects include two projects focused on the overhaul and replacement of bus, metro, and light rail vehicles as well as funding for ridesharing in the Baltimore region. MDOT SHA sponsored projects include two areawide projects focused on congestion management and safety and spot improvements. As mentioned previously,

Appendix D lists known projects that MDOT SHA will pursue as a part of these areawide projects in FY 2025.

Table II-19. 2026-2029 TIP Projects Programming CMAQ Funds

Agency	Project	CMAQ Federal	CMAQ Matching	Total TIP Funds
MDOT MTA	Bus and Paratransit Vehicle Overhaul and Replacement	\$24,776	\$4,678	\$29,454
MDOT MTA	Ridesharing - Baltimore Region	\$2,672	\$0	\$2,672
MDOT MTA	Zero Emission Infrastructure and Rolling Stock	\$111,735	\$19,715	\$131,450
MDOT SHA	Areawide Congestion Management	\$10,400	\$2,600	\$13,000
MDOT SHA	Areawide Safety And Spot Improvements	\$8,960	\$2,240	\$11,200
Fu	inding Total (in \$1,000s)	\$158,543	\$29,233	\$187,776

Pavement and Bridge Condition: Performance Measures and Targets

The FHWA's final rule established six performance measures for state DOTs and MPOs to use to assess the performance of the NHS under the National Highway Performance Program (NHPP). These include four measures of pavement condition and two measures of bridge condition.

Pavement condition is based on a calculation using measures of international roughness index (IRI), cracking, and rutting or faulting. Bridge condition is based on National Bridge Inventory (NBI) condition ratings for the bridge deck, superstructure, substructure, and culvert. Pavement sections and bridges are assigned a rating of good, fair, or poor based on the worst score among the rated elements. For example, if the bridge deck is rated poor while the other elements are rated fair, the bridge condition will be rated poor.

The pavement and bridge condition targets adopted by the BRTB are based on projecting current conditions out to the target years, considering planned and programmed maintenance. However, the targets do not necessarily represent what the BRTB would like to accomplish with respect to pavement and bridge conditions. The results of this target setting may be considered as a factor in redirecting funds if deemed appropriate.

Table II-20 summarizes the six required performance measures and targets for pavement and bridge condition. The BRTB adopted these measures and targets in October 2018.

Table II-20. Pavement and Bridge Condition Performance Measures & Targets

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Measure	2-Year Targets	4-Year Targets
% of NHS interstate pavement in good condition (2024,2026)	48.0%	45.0%
% of NHS interstate pavement in poor condition (2024,2026)	1.0%	1.0%
% of NHS non-interstate pavement in good condition (2024,2026)	29.0%	28.0%
% of NHS non-interstate pavement in poor condition (2024,2026)	8.0%	9.0%
% of NHS bridges in good condition (2024,2026)	24.5%	24.8%
% of NHS bridges in poor condition (2024,2026)	2.5%	2.4%

Tables II-21 and II-22 summarizes funds programmed in the 2026-2029 TIP for projects related to pavement condition. Projects are categorized as interstate or non-interstate NHS for consistency with the required performance measures and targets. Project scopes vary and include many elements that do not affect pavement condition. As a result, only a small portion of the funds listed may be utilized to improve pavement condition. The year of operation for each project is listed in parenthesis after the project name.

In addition to the projects listed in Tables II-21 and II-22, MDOT SHA's areawide projects for resurfacing and rehabilitation, safety and spot improvements, and urban reconstruction include

funds applicable to pavement condition, though not all of the funds will contribute to improved pavement condition and those that do may not be used on the NHS. Known projects that will be pursued under these areawide projects in FY 2026 are listed in Appendix D. These areawide TIP projects program \$964.7 million in federal funds along with \$241.1 million in matching funds for a total of \$1.205 billion. \$388.8 million of the funds in these projects are programmed under the National Highway Performance Program, which is used on NHS facilities.

Table II-21. 2025-2028 TIP Projects Related to Pavement Condition

Agency	Project Name (Year of Operation)	Federal	Matching	Total TIP Funds
NHS Interstate Projects				
Baltimore City	Orleans Street Rehabilitation from Washington Street to Ellwood Avenue (2031)	\$14,800	\$3,700	\$18,500
Baltimore City	I-83 Concrete Deck Mill and Resurface (2032)	\$1,800	\$450	\$2,250
MDOT SHA	I-695: I-70 to MD 43 (2028)	\$79,092	\$801	\$79,894
	NHS Interstate Subtotal (In \$1,000s)	\$95,692	\$4,951	\$100,644

Table II-23 summarizes the funds programmed in the 2026-2029 TIP for bridge projects on the NHS. The programmed funds listed are for various project phases including engineering, right-of-way, and construction. The year of operation for each project is listed in parenthesis after the project name. The 2026-2029 TIP includes a total of \$73.36 million in federal funds for

these projects along with \$1.48 billion in matching funds for a total of \$1.558 billion. The vast majority of these funds are dedicated to the reconstruction of the Francis Scott Key Bridge. As federal funds are provided, the share of state funds will be adjusted accordingly.

Table II-22. 2025-2028 TIP Projects Related to Pavement Condition

Agency	Project Name (Year of Operation)	Federal	Matching	Total TIP Funds
Non-Inters	tate NHS Projects			i unuo
Baltimore City	Johnston Square Improvements (2032)	\$2,400	\$600	\$3,000
Baltimore City	Belair Road Complete Streets (2029)	\$5,680	\$1,420	\$7,600
Baltimore City	25th Street Rehabilitation from Greenmount Avenue to Kirk Avenue (2028)	\$8,800	\$2,200	\$11,000
Baltimore City	Fremont Avenue Rehabilitation from Lafayette Avenue to Presstman Street (2028)	\$6,900	\$1,800	\$8,700
Baltimore City	Madison Street Rehabilitation from North Milton Avenue to Edison Highway (2028)	\$7,200	\$1,800	\$9,000
Baltimore City	Park Heights Avenue from West Rogers Avenue to Strathmore Avenue (2029)	\$10,560	\$2,640	\$13,200
Baltimore City	West Patapsco Ave. from Magnolia Avenue to Potee Street (2029)	\$16,800	\$4,200	\$21,000
Baltimore City	Pennington Ave. Rehabilitation from Birch St. to East Ordnance Rd (2028)	\$5,720	\$1,430	\$7,150
Baltimore City	Russell Street Pavement Rehabilitation from Russell Street Viaduct to City Line (2028)	\$8,520	\$2,130	\$10,650
Baltimore City	Pennsylvania Avenue Rehabilitation from North Avenue to MLK Boulevard (2032)	\$800	\$200	\$1,000
Baltimore City	25th Street/Huntingdon Avenue Rehabilitation from Greenmount Avenue to 29th Street (2033)	\$1,920	\$480	\$2,400
MDOT SHA	MD 24: 900 ft S. of Sharon Rd to 1,700 ft north of Ferncliff Lane, Section G (2025)	\$96	\$28	\$124
MDOT SHA	MD 32: Linden Church Road to I-70, Capacity & Safety Improvements (2022)	\$1,979	\$728	\$2,707
	rstate NHS Subtotal (In \$1,000s)	\$77,375	\$16,656	\$97,531
In	terstate and Non-Interstate NHS Funding Total (In \$1,000s)	\$150,737	\$1,504,998	\$1,656,225

Table II-23. 2025-2028 TIP Bridge Projects on the NHS

Agency	Project Name (Year of Operation)	Federal	Matching	Total TIP Funds
Baltimore City	Moores Run Bridge Replacement (2036)	\$7,800	\$1,950	\$9,750
Baltimore City	I-83 Concrete Deck Mill and Resurface (2032)	\$1,800	\$450	\$2,250
Baltimore City	Monroe Street Ramp over CSX and Russell Street over CSX (2031)	\$400	\$100	\$500
Baltimore City	SE Baltimore Freight Corridor: Colgate Creek Bridge Replacement (2026)	\$800	\$200	\$1,000
Baltimore City	Moravia Road Ramp Bridge over Pulaski Highway (2032)	\$3,400	\$850	\$4,250
Baltimore City	Wilkens Avenue Bridge over Gwynns Falls (2030)	\$200	\$50	\$250
Baltimore City	Perring Parkway Ramp and Hillen Road Bridge (2029)	\$140	\$35	\$175
Baltimore City	Hanover Street over CSX (2036)	\$10,704	\$2,676	\$13,380
Baltimore City	Hawkins Point Bridge over CSX Railroad (2031)	\$400	\$100	\$500
MDOT MDTA	Francis Scott Key Bridge Reconstruction (2028)	\$0	\$1,474,028	\$1,474,028
MDOT SHA	MD 173: Bridge Replacement over Rock Creek (2029)	\$217	\$55	\$272
MDOT SHA	I-695 at I-70 Bridge Repair (2030)	\$11,213	\$2,287	\$13,500
MDOT SHA	I-695: Bridge Replacement on Putty Hill Avenue (2028)	\$13,680	\$1,520	\$15,200
MDOT SHA	US 1: Bridge Replacements at Tollgate Road and Winters Run (2028)	\$19,270	\$1,000	\$20,270
MDOT SHA	I-95/I-695 Interchange Bridge Deck Replacement (2025)	\$3,338	\$31	\$3,369
	Funding Totals (in \$1,000s)	\$73,362	\$1,485,332	\$1,558,694

In addition to the projects listed in Tables II-21 and II-22, the TIP also includes a number of additional investments in bridges including:

- I-95 Express Toll Lanes Northbound Extension: This Maryland Transportation Authority project will add two express toll lanes on I-95 northbound from north of MD 43 to north of MD 24. The project includes the reconstruction of five overpasses over I-95 and the widening of several bridges along I-95 northbound. The project is anticipated to be complete in 2027.
- Areawide Bridge Replacement and Rehabilitation: This MDOT SHA TIP project programs funds for major upgrades and maintenance of structures on state highways. The project programs \$173.1 million in federal funds along with \$43.2 million in matching funds for a total of \$216.4 million. These funds include both NHS and non-NHS structures. \$93.44 million of the funds in this project are programmed under the National Highway Performance Program, which is used on NHS facilities.
- Local and state bridge projects not on the NHS: The TIP also includes 48 additional local and state sponsored non-NHS bridge rehabilitation and replacement projects. The 2026-2029 TIP includes \$166.6 million in federal funds for these projects along with \$40.2 million in matching funds for a total of \$206.9 million.

Travel Time Reliability: Performance Measures and Targets

The FHWA's final rule established three performance measures for state DOTs and MPOs to use to assess the performance of the NHS under the National Highway Performance Program (NHPP). These include two measures related to Level of Travel Time Reliability (LOTTR) as well as a Truck Travel Time Reliability (TTTR) Index. The specific performance measures are:

- 1) Percentage of person-miles traveled on the Interstate System that are reliable
- 2) Percentage of person-miles traveled on the non-interstate NHS that are reliable
- 3) Ratio of Interstate System mileage indicating reliable truck travel times

Level of Travel Time Reliability (LOTTR) is defined as the ratio of travel times in the 80th percentile to a "normal" travel time (50th percentile), using data from FHWA's National Performance Management Research Data Set (NPMRDS) or equivalent. Data are collected in 15-minute segments during all time periods between 6 a.m. and 8 p.m. local time. The measures are the percent of person-miles traveled on the relevant portion of the

NHS that are reliable. Segments are considered reliable if the 80th percentile travel time divided by the 50th percentile travel time is less than 1.5. Person-miles take into account the users of the NHS, including bus, auto, and truck occupancy levels.

The TTTR index is a measure comparing the time it takes trucks to travel segments of the NHS in congested conditions (as shown by the 95th percentile time) relative to the time it takes to make a trip in "normal" conditions (as shown by the 50th percentile time). For example, say the 95th percentile truck travel time is 56 minutes for a segment of the NHS that normally takes 30 minutes. This translates into a ratio of 56 minutes / 30 minutes, or 1.87.

Table II-24, shown above, summarizes the travel time reliability performance measures and targets. The BRTB adopted these targets in October 2018.

Table II-24. Travel Time Reliability Performance Measures & Targets

	u to traver ti	me reliabilit	y		
Dawfawaaaaa	2017	2-year	4-Year	2-year	4-Year
Performance Measure	Baseline	Targets*	Targets*	Targets**	Targets**
		(2019)	(2021)	(2023)	(2025)
LOTTR	71.5%	72.1%	72.1%	72.9%	72.9%
(Interstate)					
Observed -					
Region	74.1%	71.6%	88.4%	74.1%	
LOTTR (non-	82.0%	N/A	81.7%	79.4%	79.4%
,					
Observed -					
Region	79.8%	78.9%	91.3%	79.8%	
TTTR Index:	1.87	1.87	1.88	2.06	2.06
Ratio of					
	2.08	2.03	1.64	2.08	
measure: % of person-miles traveled on the Interstate System that are reliable. Observed - Region LOTTR (non-Interstate) measure: % of person-miles traveled on the non-Interstate NHS that are reliable. Observed - Region TTTR Index:	79.8% 1.87	N/A 78.9%	91.3%	79.4%	

^{*} Set in 2018 using 2017 as baseline year – Region adopted statewide targets

^{**} Regional targets are average of 2017 and 2019 observed values

There are no federal funding sources tied directly to travel time reliability on Interstate and non-Interstate NHS facilities. However, a number of projects in the TIP have the potential to improve travel time reliability. Example projects include:

- Traffic Signals and Intelligent Transportation System project (TIP ID 12-1218-07)
- MDOT SHA's implementation of hard shoulder running on I-695 during peak travel periods between I-70 and MD 43 (TIP ID 63-1802-41)
- MDOT SHA's Areawide Congestion Management project (TIP ID 60-9504-04)
- MDTA's I-95 Southbound Part-Time Shoulder Usage project (TIP ID 25-2101-41)
- MDTA's I-95 Express Toll Lanes Northbound Extension (TIP ID 25-1801-41)

In addition to investments in the TIP, BMC staff are working on the development of an analysis tool for congestion in the Baltimore region. This tool overlays project data from the TIP and *Resilience 2050*, the Baltimore region's top 25 bottlenecks, traffic speed data, and a travel time index. This tool will be useful in analyzing the effectiveness of transportation investments in mitigating congestion in the Baltimore region.⁵

Future Performance Monitoring

In cooperation with MDOT and its modal agencies, as well as its other state agency partners, the BRTB will continue to monitor how investments in the TIP are influencing the performance of the region's transportation systems. This includes improving the methods utilized to analyze the anticipated effect of TIP investments towards achieving the performance targets discussed in this section. In addition, the BRTB will use the established targets to help in identifying strategies and in making investment decisions about programs and projects. For more information on performance measures and targets, please see the System Performance Report in Chapter 5 of *Resilience* 2050.6

⁵ More information on the BRTB Congestion Management Process, including the Congestion Management Process Analysis Tool, is available here: https://www.baltometro.org/transportation/planning-areas/congestion-management-process

⁶ More information on *Resilience 2050*, including the system performance report, is available here: https://www.baltometro.org/transportation/plans/long-range-transportation-plan/Resilience 2050

III. PROGRAM DEVELOPMENT

A. Integration with Federal, State and Local Programs

The projects contained in the 2026-2029 TIP flow from *Resilience 2050* with detailed information extracted from the capital programs of state and local agencies responsible for implementing transportation projects in the region. Project information was provided by these agencies from the 2026-2029 portions of their respective multi-year improvement programs.⁷ For a surface transportation project to be eligible for inclusion in the State TIP (STIP), and thus to receive federal aid, it must first be listed in the TIP.

Because the TIP must reflect regional priorities and be consistent with recommendations contained in the LRTP, it is important that a "regional voice" be expressed in the preparation of individual agencies' capital programs. Meetings that take place as part of the effort to produce a short-range element begin to accomplish this. The meetings foster a more fully coordinated project selection process for the TIP, providing for sound technical analysis early in the programming

process, full discussion among local and state agencies and avoidance of unrealistic over-programming.

⁷ A list of contributing agencies can be found in Appendix A.

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process, full discussion among local and state agencies and avoidance of unrealistic over-programming.

⁷ A list of contributing agencies can be found in Appendix A.

B. Federal Fund Sources for Surface Transportation Projects

Federal regulations require that certain highway and transit projects inside or serving the urbanized area be included in the TIP to gain federal approval. Projects proposed to be funded through the following programs in the current or following fiscal years must be included in the TIP:

- All Stations Accessibility Program (ASAP)
- Better Utilizing Investments to Leverage Development (BUILD) grants
- Charging and Fueling Infrastructure (CFI) grants
- Congestion Mitigation and Air Quality Improvement Program (CMAQ)
- Community Project Funds (CPF)
- Consolidated Rail Infrastructure and Safety Improvement Program (CRISI)
- Federal Lands Access Program (FLAP)
- Federal Lands Transportation Program (FLTP)
- FTA Capital and Operating Sections 5307C, 5307H, 5307 flexed from STBG, 5310, 5311, 5329, 5337, and 5339
- Highway Bridge Rehabilitation and Reconstruction Program (HBRRP) funds
- Highway Safety Improvement Program (HSIP)
- Infrastructure for Rebuilding America (INFRA) grants
- Neighborhood Access and Equity (NAE) Program

- National Electric Vehicle Infrastructure (NEVI)
- National Highway Performance Program (NHPP)
- Promoting Resilient Operations for Transformative, Efficient, Cost-saving, Transportation (PROTECT)
- Rebuilding American Infrastructure with Sustainability and Equity (RAISE)
- Reconnecting Communities and Neighborhoods (RCN)
- Safe Streets For All (SS4A)
- Surface Transportation Block Grant Program (STBG)
- Transportation Alternatives Program (TAP)

The BRTB endorsement of the TIP is a DOT requirement and is an opportunity for the BRTB to support or oppose proposed projects in the above program categories.⁸ Inclusion of these projects in the TIP indicates endorsement by the BRTB for federal funding of the proposed project phase(s).

⁸ Endorsement of projects for planning or engineering does not imply any commitment of funds for later phases (right-of-way acquisition, construction).

IV. EXPLANATION OF TERMS AND SYMBOLS

The TIP covers a four year period. It includes projects for which federal funds are expected to be requested in Fiscal Years 2026, 2027, 2028 and 2029. The full project listing is contained in Chapter VI. A project index is included at the end of the document.

Projects in Chapter VI are listed first by sponsoring agency – The City of Annapolis, Baltimore City and the six counties in alphabetical order, the MDOT Office of the Secretary, and the MDOT modal administrations, included as the Maryland Transportation Authority (MDTA), the Maryland Port Administration (MPA), Maryland Transit Administration (MTA) MTA – Transit, MTA – Commuter Rail, and the State Highway Administration (MDOT SHA). Projects implemented by MDOT SHA are broken down further by county in alphabetical order. While a portion of Queen Anne's County is part of the Baltimore urbanized area, there are no local projects for the City of Annapolis or Queen Anne's County in the 2026-2029 TIP.

Within these groups, projects are listed by category in the following order: commuter rail capacity, commuter rail preservation, enhancement program, environmental/safety,

emission reduction strategy, highway capacity, highway preservation, transit capacity, transit preservation, ports and miscellaneous.

The project numbers (TIP ID) printed below each project name show the project's location and type according to the following codes: **AB-CCC-DD**, where:

- A Implementing Agency
 - 0 Other State Agencies
 - 1 Local Project
 - 2 Maryland Transportation Authority
 - 3 Maryland Port Administration
 - 4 Maryland Transit Administration (Transit)
 - 5 Maryland Aviation Administration
 - 6 State Highway Administration
 - 7 Maryland Transit Administration (Commuter Rail)
 - 8 Baltimore Metropolitan Council
 - 9 Office of the Secretary
- **B** Location / Jurisdiction selected
 - 0 Regional
 - 1 Anne Arundel County
 - 2 Baltimore City
 - 3 Baltimore County
 - 4 Carroll County
 - 5 Harford County
 - 6 Howard County
 - 7 Queen Anne's County
 - 8 City of Annapolis

CCCC The first two digits display the fiscal year the project first appeared in the TIP; the last two digits are a unique count of the number of projects for that agency, jurisdiction, and fiscal year.

DD Project Type by Category:

EMISSION REDUCTION STRATEGY (ERS)

- 01 Ridesharing
- 02 Park-and-ride lots
- 03 Bicycle/pedestrian facilities
- 04 Traffic engineering
- 05 Fleet improvement
- 06 System expansion
- 07 ITS
- 09 Other (ERS)

HIGHWAY PRESERVATION

- 11 Road resurfacing/rehabilitation
- 12 Road reconstruction
- 13 Bridge repair/deck replacement
- 14 Bridge inspections
- 19 Other

ENHANCEMENT PROGRAM

- 21 Archaeology
- 22 Acquisition/preservation of easements or sites
- 23 Rehabilitation/operation of historic transportation structures/facilities
- 24 Landscaping
- 25 Bicycle/pedestrian facility
- 29 Other

ENVIRONMENTAL/SAFETY

- 31 Noise barriers
- 32 Lighting, signs
- 33 Wetland mitigation
- 34 Scenic beautification, reforestation
- 38 Environmental other
- 39 Safety other

HIGHWAY CAPACITY

- 41 Roadway widening
- 42 New or extended roadways
- 43 Bridge widening
- 44 New bridge/elimination of at-grade crossing
- 45 Interchange ramp added or widened
- 46 New interchange

COMMUTER RAIL CAPACITY

57 - Commuter rail capacity expansion

COMMUTER RAIL PRESERVATION

- 51 Operating assistance
- 52 Operations support equipment
- 53 Fleet improvement
- 54 Preservation and improvements
- 55 Rehabilitation of facilities
- 56 New rail facilities
- 59 Other

TRANSIT CAPACITY

67 - Transit capacity expansion

TRANSIT PRESERVATION

- 61 Operating assistance
- 62 Operations support equipment
- 63 Fleet improvement
- 64 Preservation and improvements
- 65 Rehabilitation
- 66 New bus facilities
- 69 Other

AIRPORTS

- 71 Facility maintenance
- 72 Facility rehabilitation
- 73 Facility expansion
- 79 Other

PORTS

- 81 Facility maintenance
- 82 Facility rehabilitation
- 83 Facility expansion
- 89 Other

MISCELLANEOUS

99 - Miscellaneous

Conformity Status reflects one of two classifications: Exempt (for projects which are exempt from the requirement to determine conformity) or Not Exempt (for capacity type projects evaluated using the travel demand model or evaluated off-model) in accordance with meeting the Clean Air Act Amendments. Wherever possible, local Capital Improvement

Program (CIP) or state Consolidated Transportation Program (CTP) page numbers are provided to assist in finding projects in their respective capital improvement or development programs.

Year of Operation indicates the calendar year the facility or service will be open to traffic or for public use. For road and bridge projects, the **Functional Class** of the existing facility as specified by the FHWA functional classification system is given. Functional classes are:

- Interstate
- Freeway
- Principal arterial
- Minor arterial
- Collectors, major or minor
- Local

The **Physical Data** line, which pertains to road and bridge projects, indicates the project length in **Miles** and the present/future number of **Lanes**. The **Estimated Total Cost** lists the entire cost of the project. This is useful as projects in the TIP are often long-term phased projects that began before or extend beyond the four fiscal years covered by the TIP.

Also included for road projects is an indication if the project is part of the **National Highway System**. The National Highway System Designation (NHS) was signed into law on November 28, 1995. The NHS designates key road segments that provide improved access to work and markets; to ports, airports, and rail stations; to our national parks; and to bordering countries. Principal contributions of the NHS are to facilitate sustainable economic growth by enhancing intermodal and highway system connections, improving productivity and efficiency of commercial vehicle operations, facilitating the movement of agricultural produce, advancing safety, alleviating congestion, supporting national defense, and improving system performance. Nationally, the total mileage is about 161,000 miles and includes the Interstate Highway System, as well as other roads important to the nation's economy, defense and mobility.

The Moving Ahead for Progress in the 21st Century Act (MAP-21), Section 1104 expanded the NHS to include urban and rural principal arterials that were not included in the NHS before October 1, 2012.

The project **Description** and **Justification** provide a detailed project scope and reason(s) that the project should be funded over others. The **Connection to Long-Range**

Transportation Planning Goals connects TIP projects to the long-range plans regional goals and strategies.

Funding Source indicates the source of federal aid. Project funding source(s) are designated in the funding table on the second page of the project summary. Federal funding sources are abbreviated as follows:

Federal Highway Administration Funds:

•	BUILD	Better Utilizing Investment to Leverage
		Development Grants
•	CFI	Charging and Fueling Infrastructure
•	CPF	Community Project Funding
•	CMAQ	Congestion Mitigation and Air Quality
•	FLAP	Federal Lands Access Program
•	FLTP	Federal Lands Transportation Program
•	HBRRP	Highway Bridge Rehabilitation and
		Reconstruction Program
•	HSIP	Highway Safety Improvement Program
•	INFRA	Infrastructure for Rebuilding America Grants
•	NAE	Neighborhood Access and Equity Program
•	NEVI	National Electric Vehicle Infrastructure Program
•	NHFP	National Highway Freight Program
•	NHPP	National Highway Performance Program
		(National Highway System, Interstate
		Maintenance, Bridge (on-system))
•	PROTECT	Promoting Resilient Operation for

Transformative, Efficient, Cost-saving

Rebuilding American Infrastructure with

Transportation

Sustainability and Equity

RAISE

•	RCN	Reconnecting Communities & Neighborhoods
•	SS4A	Safe Streets for All
•	STBG	Surface Transportation Block Grant Program
•	TAC	Transportation Alternatives (including Safe
		Routes to School)

Federal Transit Administration Funds:

•	5307C	Section 5307 Urbanized Area Formula Program (Funding for capital projects)
•	5307H	Passenger Ferry Grant Discretionary Program
•	53070	Section 5307 Urbanized Area Formula Program (Funding for operating projects)
•	5310	Section 5310 Enhanced Mobility of Seniors and Individuals with Disabilities Program
•	53110	Section 5311 Non-urbanized Area Formula Program (funding for operating assistance in non-urbanized areas)
•	5329	Section 5329 (State Safety Oversight)
•	5337	Section 5337 (State of Good Repair Formula Program)
•	5339F	Section 5339 (Bus and Bus Facilities Formula Program)
•	ASAP	All Stations Accessibility Program
•	CMAQ	Congestion Mitigation and Air Quality (flexed to transit becomes 5307)
•	CRISI	Consolidated Rail Infrastructure and Safety Improvement

Project costs in the funding tables represent anticipated funding requests during a particular year by project phase. **All figures are in thousands of dollars.** The abbreviations in the **Phase** column stand for the following:

PL – Planning: Initial phase of project development where the need and feasibility of a project is documented and scoping is broad and involves the public.

ENG – Engineering: Engineering projects include preliminary and final design. Engineering funds involving detailed environmental studies and engineering to obtain NEPA are under preliminary design. Design activities following preliminary design involve the preparation of final construction plans and are under final design.

ROW – Right-of-Way: Funding to provide the necessary land for the project, or to protect corridors for future projects.

CON – Construction: Funding to build the designed facility.

OTH – Other⁹: This funding may include permits, inspections, utility costs, and other non-infrastructure costs or in the case of transit, the purchase of capital equipment.

⁹ The 2026-2029 TIP includes \$157.1 million for the Other phase including:

MDOT MTA projects including bus and rail preventive maintenance, section 5310 grants, ridesharing, funding for LOTS agencies, and state safety oversight of light rail and metro (\$82.4 million or 52.5% of total)

MDOT SHA Areawide Congestion Management funds not involving construction such as CHART vehicle purchases (\$39.0 million or 24.8% of total)

Permits, inspection fees, and local bridge inspection programs (\$13.8 million or 8.8% of total)
 Non-infrastructure funds for project delivery services and research (\$0.51 million or 0.35% of total)

The **Matching Funds** column indicates the state and/or local funds programmed to match the federal funding requested for that fiscal year. In all but a few cases, matching funds are provided by the agency or jurisdiction under which the project is listed.