



BALTIMORE REGION TRANSPORTATION IMPROVEMENT PROGRAM 2020-2023



DEVELOPED BY THE BALTIMORE METROPOLITAN PLANNING ORGANIZATION

CITY OF ANNAPOLIS • ANNE ARUNDEL COUNTY • BALTIMORE CITY • BALTIMORE COUNTY

CARROLL COUNTY • HARFORD COUNTY • HOWARD COUNTY • QUEEN ANNE'S COUNTY • HARFORD TRANSIT

MD DEPARTMENT OF TRANSPORTATION • MD DEPARTMENT OF THE ENVIRONMENT • MD DEPARTMENT OF PLANNING • MD TRANSIT ADMINISTRATION

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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), *Maximize2045*, for the Baltimore region into a short-term program of improvements. This includes specific capacity improvements that have been identified in the long-range plan, as well as system preservation projects and operational initiatives that are supported in the plan but have not been previously detailed. As such, the TIP ensures consistency between plan recommendations and project implementation in the region.

¹. As shown in Exhibit I-1, the Baltimore region is composed of Baltimore City, Annapolis and Anne Arundel, Baltimore, Carroll, Harford, Howard and Queen Anne's counties. As a result of Census 2010, there are three federally recognized urbanized areas in the region. One includes the City of Baltimore and portions of Anne Arundel, Baltimore, Carroll, Howard and Queen Anne's County. The second includes Westminster in Carroll County. The third is Aberdeen – Havre de Grace – Bel Air in Harford County and portions of Cecil County.

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 2020-2023.²

A summary of the key federal requirements is provided in Chapter II. The summary is followed by several sections that provide information for the requirements in key areas. The relationship between the TIP and other transportation plans and programs in the region, its fulfillment of federal requirements, and its regional review function are described in Chapter III. 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 2020.

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 responsible for their implementation. Within those sections they are then grouped by category in the following order:

². The Baltimore Region TIP follows the Maryland state fiscal year which is July 1 to June 30.

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 total amount programmed in the 2020-2023 TIP is approximately \$3.66 billion. Of that amount, \$2.28 billion will be provided by federal funding authorities, while the local and state matching funds are \$1.38 billion.

Exhibit I-1: The Baltimore Region



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

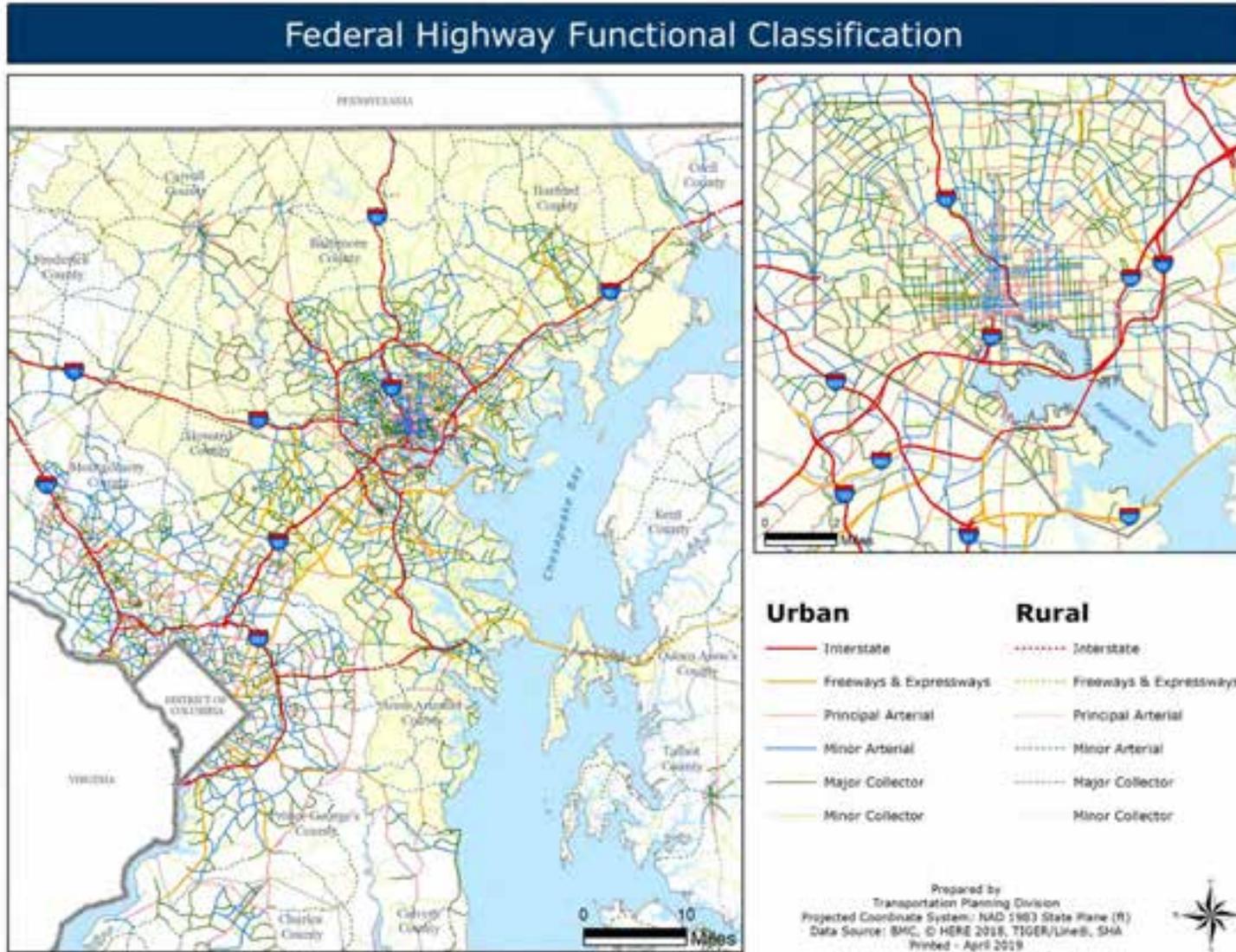
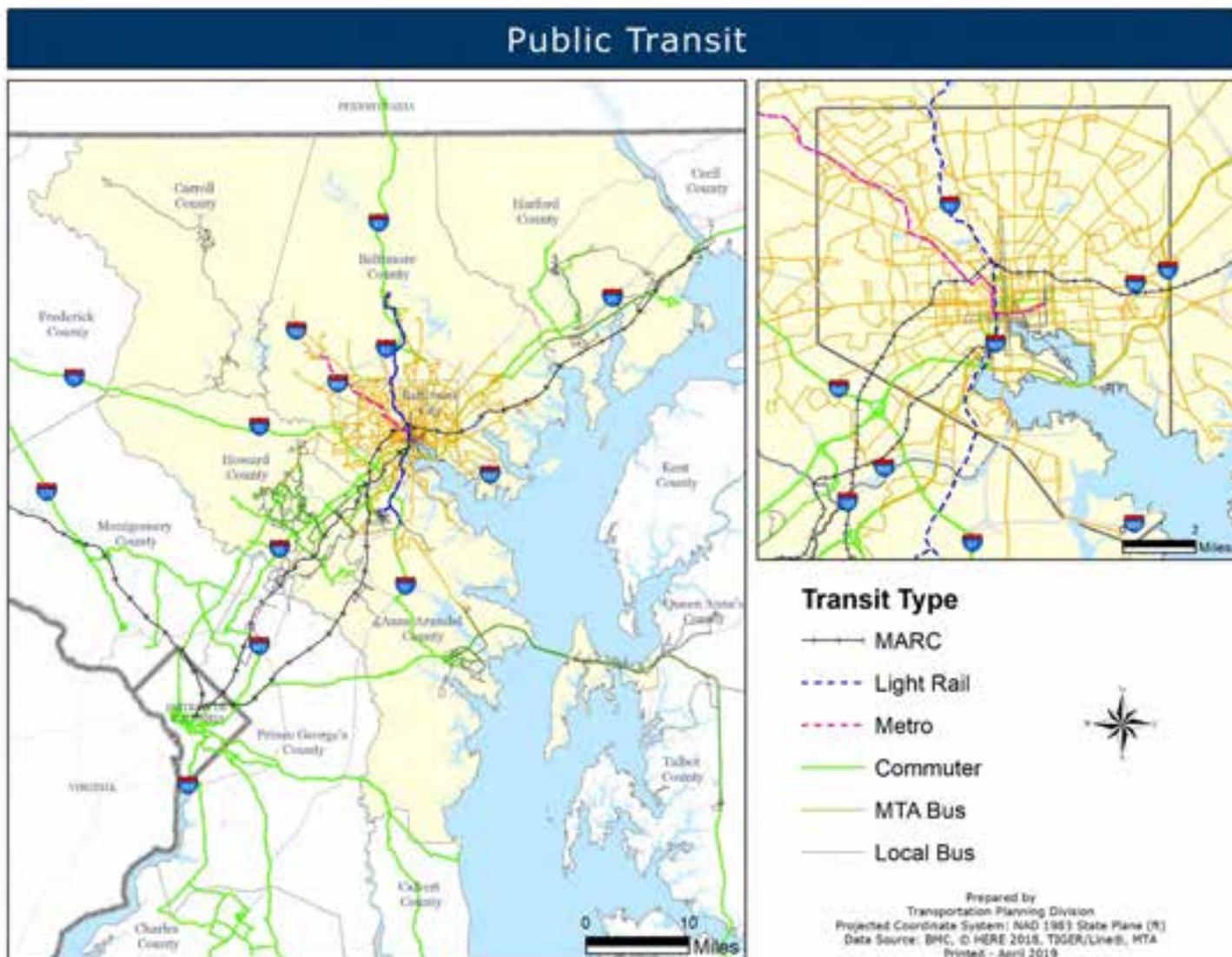


Exhibit I-3: The Baltimore Region – Transit



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, certifies via Resolution #20-4 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: ❶ 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; ❷ 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; ❸ the BRTB adopted a financially constrained long-range transportation plan, *Maximize2045*, for the Baltimore region consistent with the metropolitan planning factors in the Fixing America's Surface Transportation (FAST) Act; ❹ the BRTB maintains a Congestion Management Process (CMP); ❺ the BRTB has determined that conformity (8-hour ozone) of *Maximize2045* and the 2020-2023 TIP for the Baltimore region has been conducted under the U.S. Environmental Protection Agency's (EPA's) final rule as amended; and ❻ the BRTB adheres to the federal Disadvantaged Business Enterprises (DBE) requirements set forth in 49 CFR Part 26.

C. Consistency with Maximize2045

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 *Maximize2045: A Performance-Based Transportation Plan*, the long-range transportation plan, in July 2019. The factors that guided development of *Maximize2045* are listed in the Metropolitan Planning Regulations effective May 27, 2016. These regulations continue and strengthen the emphasis on performance-based planning and programming.

Maximize2045 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.

Performance measures have been developed for transit asset management, 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 by the November 2018 deadline with the exception of those for transit safety. The BRTB has not yet adopted these targets but will do so once MDOT has set its transit safety targets. All of the measures and targets will be used to 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 long-range plan goals and performance measures.

In addition to performance measures and targets, *Maximize2045* reports on forecasted regional growth in population, households and employment to the year 2045 and the projected travel demand generated as a result of this forecasted growth. It demonstrates how the existing and committed transportation network likely will 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, *Maximize2045* includes a range of projects through the year 2045. It outlines a multimodal array of transportation improvements along with the requisite funding scenario needed to 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.

The capacity projects in the 2020-2023 TIP "flow" from the conforming Plan, 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 Fixing America's Surface Transportation (FAST) Act

The Fixing America's Surface Transportation (FAST) Act was signed into law on December 4, 2015. Below is a discussion of key federal requirements that are in place regarding development of the TIP. Requirements of the FAST Act include:

- Prioritized list of financially constrained improvements: The BRTB, in cooperation with state and local agencies and transit operators, have developed a prioritized and financially reasonable TIP. Projects included in the 2020-2023 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 the TIP. Financial reasonableness is evaluated on three fronts: ❶ MDOT ensures that federal funding requests during the TIP planning process are reasonable for our region; ❷

MDOT provides documentation of the state's capacity to meet the match requirements associated with state-sponsored projects in the TIP; while ❸ Local governments also provide documentation of the same financial reasonableness requirements to match the federal funds requested for locally sponsored projects.

Federal law requires that projects proposed for inclusion in plans and programs be analyzed to ensure that the fiscal resources required to construct them are reasonably expected to be available within the timeframe specified. With the additional revenue projected as a result of passage of the Transportation Infrastructure Investment Act of 2013, the funding will be available to advance some projects. Within this context, the proposed projects have been assessed and found to meet the fiscal constraint requirement.

- 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: FAST requires that the TIP include a financial plan that demonstrates that the projects proposed in the TIP can be funded. 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.

- Congestion Management Process: FAST 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 single-occupant 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 and ascertain the effectiveness of a range of strategies to relieve congestion.

- Public Involvement: The public must have an opportunity to review and comment on the TIP in the early stages of preparation with at least one public meeting. The BRTB updated formal public participation procedures governing metropolitan transportation planning activities in June 2018. 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. A schedule of key dates in the development of the TIP was provided to the members of the Public Advisory Committee (PAC) along with a description of the information available in the TIP. Opportunities to comment on the draft list were publicized primarily through electronic means and PAC meetings, with outreach work undertaken by public involvement staff.

The draft TIP was made available online. Seven public meetings were held for the public to comment on the draft

TIP (one in each jurisdiction) along with a webinar. Flyers announcing public meetings were advertised in local papers, on the Baltimore Metropolitan Council (BMC) website, and on BMC social media accounts. PAC members were also asked to distribute the flyer to their constituencies. In addition, the public was able to address the BRTB at its July 2019 meeting. Written comments by mail, email or social media are accepted during the public review period. A summary of all comments received, both verbal and written, BRTB responses, and the public participation notices are included in Appendix G.

The public participation process for the TIP also meets the FTA public participation requirements for the MTA's Program of Projects. The Maryland Transit Administration (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 2020-2023 TIP to satisfy the public participation requirements associated with development of the 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 2018 obligated listing lists all federal funds obligated in the Baltimore region from July 1, 2017 – June 30, 2018.³

- 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 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. PBPP is detailed further in section II.G.

³ The full obligated listing is available here: https://www.baltometro.org/sites/default/files/bmc_documents/general/transportation/tip/18-21/2018_FederalAidObligations.pdf

B. Environmental Justice

Environmental Justice (EJ) seeks to ensure that the benefits and burdens of transportation investments are shared as equitably as possible among all affected communities. Specifically, EJ considers whether low-income and minority populations bear disproportionate impacts resulting from governmental decisions. Historically, EJ was borne out of civil rights and environmental complaints from low-income and minority communities. Concerns were raised, showing that these communities may suffer disproportionately from exposure to toxic chemicals and the siting of industrial plants and waste facilities.

In February 1994, President Clinton signed Executive Order 12898 entitled *Federal Action to Address Environmental Justice in Minority and Low-Income Populations*. In 1997, the U.S. Department of Transportation (DOT) issued an “Order to Address Environmental Justice in Minority Populations and Low-income Populations.”

The DOT Order directs consideration of two groups: low-income persons and minorities. Low-income is defined as a person whose household income is at or below the U.S. Department of Health and Human Services poverty

guidelines. Minorities are defined as a person belonging to any of the following groups:

- Person of origin in any of the black racial groups of Africa;
- Person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin;
- Person having origins in any of the original peoples of the Far East, Southeast Asia, Indian subcontinent, or Pacific Islands; or
- Person having origins in any of the original people of North America (American Indian, Alaskan Native) and who maintains cultural identification through tribal affiliation or community recognition.

The DOT Order applies to all policies, programs and other activities undertaken, funded or approved by the DOT, including metropolitan planning. There are three fundamental DOT environmental justice principles:

- To avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations.

- 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 minority and low-income populations.

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

EJ Populations in the Baltimore Region

Low-income Populations

As stated previously, low-income is defined as persons whose household income is at or below the U.S. Department of Health and Human Services (HHS) poverty guidelines. The primary source of data on low-income persons is the Census Bureau's American Community Survey (ACS). The Census Bureau uses a set of income thresholds that vary by household size and composition to determine poverty. If a

household's total income is less than the threshold, then that household and every individual in it is considered to be in poverty. For example, the 2018 threshold for a four-person household with two dependents is \$25,465. The HHS poverty guidelines are a simplified version of the poverty thresholds utilized by the Census Bureau.

While low-income is defined as persons living at or below the poverty line, the BRTB utilizes households in poverty to identify low-income populations due to data constraints. EJ analysis for the long-range plan relies on BMC's travel demand model to predict travel times and distances for persons living in the Baltimore region. The ACS does not provide poverty data for individuals at the level of granularity required by the travel demand model, but does for households in poverty. Households in poverty proves to be a suitable proxy for individuals living in poverty as the data yields similar results for the region as a whole. According to the ACS, 10.2% of households in the Baltimore region fall below the poverty line compared to 10.5% of individuals.

Table 1 summarizes low-income households by jurisdiction. Households at or below the poverty line are not evenly distributed throughout the region, ranging from 4.8% of

households in Howard County to 20.8% of households in Baltimore City. In total, 106,144 out of the 1,040,704 households in the Baltimore region, or 10.2%, have incomes at or below the poverty line.

Table 1. Low-Income Households by Jurisdiction

Jurisdiction	Total Households	At or Below 100% of Poverty Line	
		Households	Share
Anne Arundel	205,395	11,818	5.8%
Baltimore City	239,791	49,940	20.8%
Baltimore Co	312,859	27,209	8.7%
Carroll	60,432	3,174	5.3%
Harford	92,895	7,539	8.1%
Howard	111,337	5,385	4.8%
Queen Anne's	17,995	1,079	6.0%
BRTB Region Total	1,040,704	106,144	10.2%

Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates (Table B17017)

Minority Populations

The ACS also serves as the primary data source for identifying minority populations. Minorities include individuals who are members of several population groups including Hispanic persons and non-Hispanic persons who are Black, American Indian or Alaskan Native, and Asian or Pacific

Islander. Non-minorities are defined as those that are both white and non-Hispanic.

Table 2 summarizes minority individuals by jurisdiction. As with low-income populations, minorities are not evenly distributed throughout the region. According to the latest 5-year estimates from the ACS, the share of minorities in BRTB jurisdictions ranges from 10.2% in Carroll County to 72.4% in Baltimore City. In total, minorities make up 42.5% of the Baltimore region population while white, non-Hispanics make up the remaining 57.5%. Exhibit II-1 at the end of this section summarizes minority individuals by Hispanic/Latino origin and race.

Table 2. Minorities by Jurisdiction

Jurisdiction	Minority Population	White, non Hispanic Population	Minority Share	White, non Hispanic Share
Anne Arundel	171,461	393,139	30.4%	69.6%
Baltimore City	448,880	170,916	72.4%	27.6%
Baltimore Co	341,945	486,692	41.3%	58.7%
Carroll	17,022	150,297	10.2%	89.8%
Harford	57,623	192,509	23.0%	77.0%
Howard	143,426	169,069	45.9%	54.1%
Queen Anne's	6,582	42,489	13.4%	86.6%
BRTB Region Total	1,186,939	1,605,111	42.5%	57.5%

Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates (Table B03002)

Mapping EJ Populations in the Baltimore Region

The BRTB uses Transportation Analysis Zones (TAZ) as a basis for identifying EJ 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. Having established that TAZs will be the geographic unit of analysis, we need a way to identify EJ and non-EJ TAZs. This is done through the use of a regional threshold. A TAZ is identified as an EJ area if it has a concentration of households living in poverty or minorities greater than their respective regional averages.

The percentage of households with incomes at or below the poverty line in the Baltimore region is 10.2%. Thus, TAZs with a concentration of households in poverty greater than 10.2% are considered low-income TAZs for EJ purposes. Similarly, TAZs with a concentration of minorities greater than the regional average of 42.5% are considered minority TAZs for EJ purposes. Exhibits II-2 and II-3 show household poverty and minority populations, respectively, by TAZ. Exhibit II-4 shows all EJ TAZs, breaking EJ TAZs into those exceeding the regional average for households in poverty, those

exceeding the regional average for minority concentration, and those exceeding both regional averages.

Additional EJ maps are available in Section VI.A: Project and Environmental Justice Maps by Jurisdiction. These maps show the locations (by jurisdiction) of specific TIP projects in relation to EJ TAZs. When these and other transportation projects enter project planning, consideration of EJ 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 long-range transportation plan, *Maximize2045*, includes an extensive environmental justice analysis. BMC staff utilized several measures to compare the effects on EJ and non-EJ TAZs of projects in the preferred alternative of *Maximize2045*. 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 will continue to evaluate methods used by other MPOs as well as guidance issued by FHWA to identify similarly robust methods for environmental justice analysis of the TIP.

Exhibit II-1: BRTB Region Minority Populations by Race and Hispanic or Latino Origin

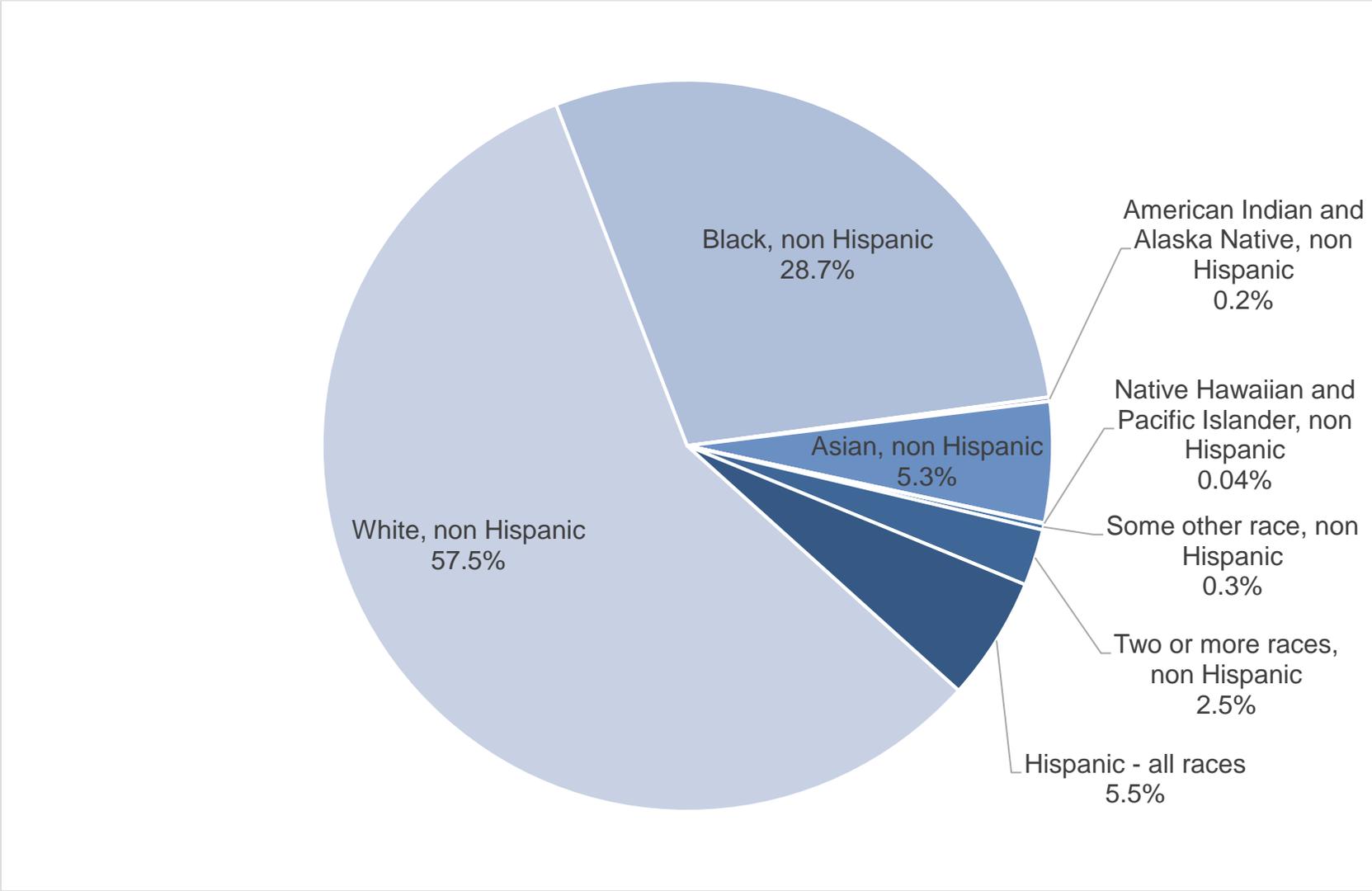


Exhibit II-2: Household Poverty by TAZ

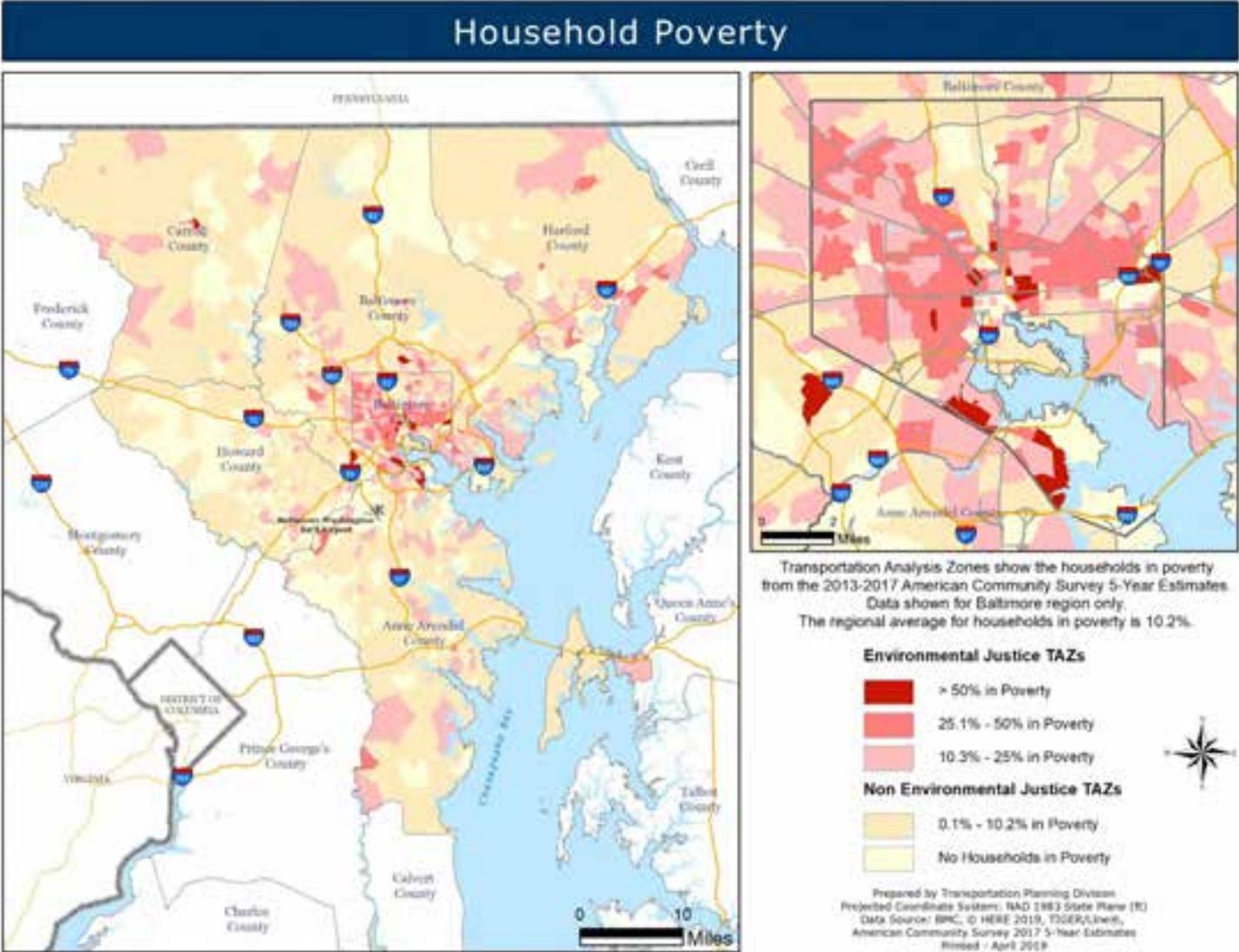


Exhibit II-3: Minority Population by TAZ

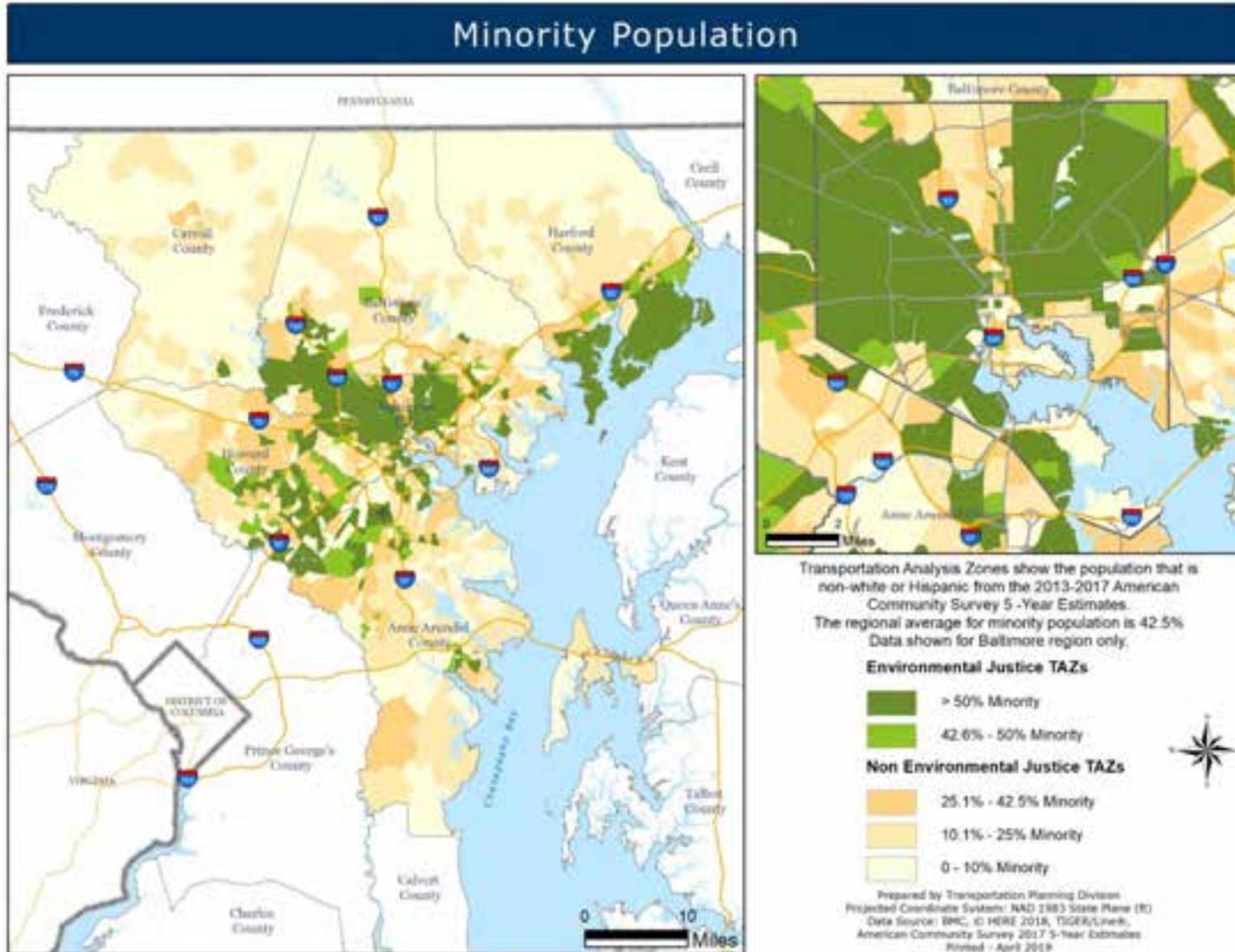
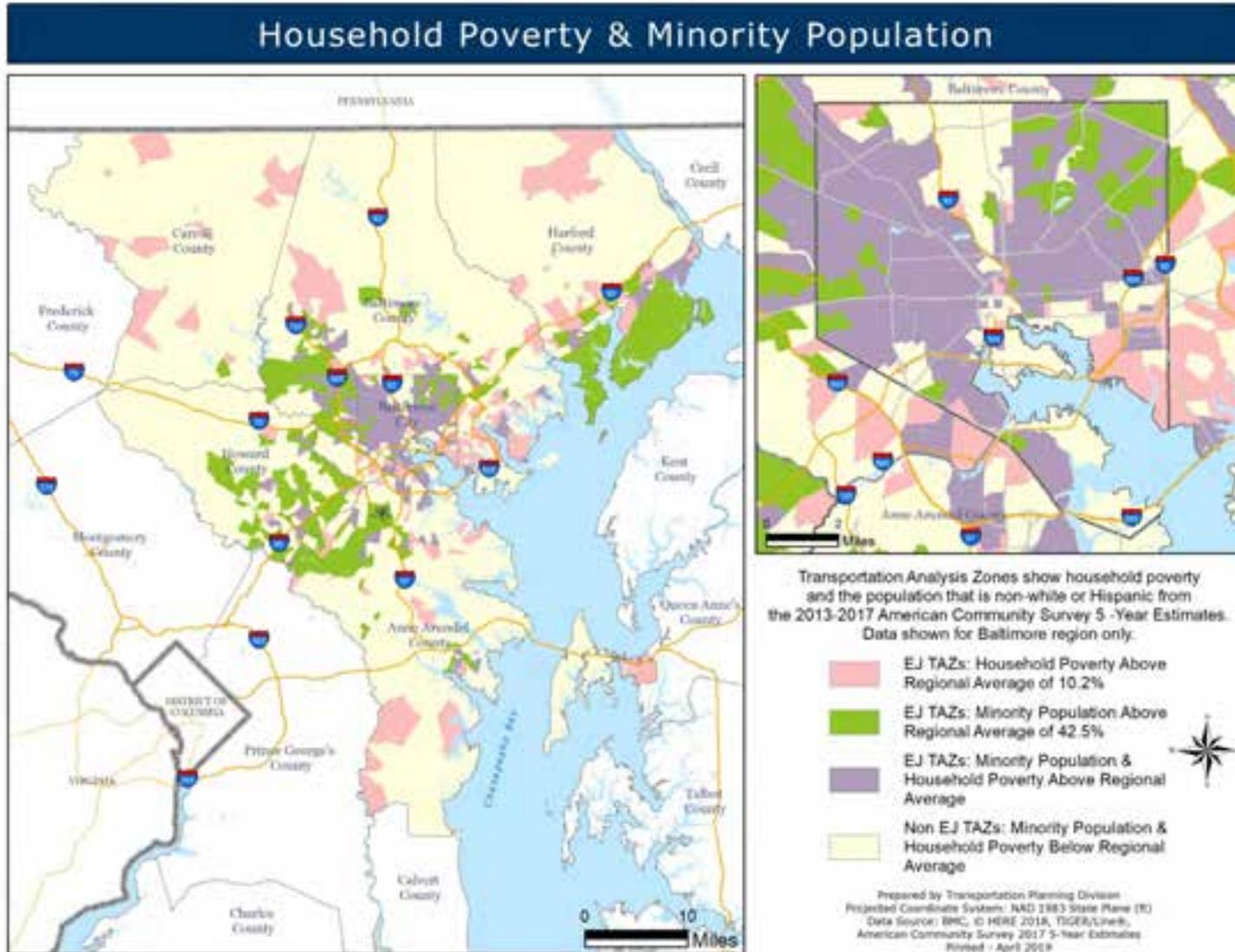


Exhibit II-4: Environmental Justice TAZs by Type



C. Coordinating Human Service Transportation

The FAST Act continues to support transportation initiatives for elderly and disabled populations through the FTA Section 5310 Capital Grant Program and low-income populations through the eligibility of job access and reverse commute projects under FTA's Urbanized Area Formula Grants (Section 5307) and Formula Grants for Rural Areas (Section 5311) programs. The Maryland Transit Administration (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 takes the lead, with assistance from MTA, for development of the Baltimore Region Coordinated Public Transit-Human Services Transportation Plan. MTA and the BRTB last updated the Baltimore Region Coordinated Transportation Plan in October 2015.

The Maryland Job Access Reverse Commute Program (MD-JARC) was passed by the General Assembly in 2018:

MD-JARC

Modeled after the former FTA grant program of the same name, MD-JARC is designed to connect target populations with employment areas that have experienced significant growth in employment opportunities, by funding transportation services. Target populations reside in low-income areas, have limited or no access to a personal vehicle, and have limited access to fixed route transit service. Up to \$400,000 each year will be available for grants, with 70 percent of the funds for use in urbanized areas and 30 percent for rural areas. The minimum request is \$10,000 and must be matched by a 25% local contribution.

Sample projects include 1) Extension of service hours on local fixed route systems, 2) Vanpool services, 3) Employer-provided transportation services, and 4) Demand Response / Deviated Fixed Route service. Baltimore Region projects must be endorsed by the BRTB to be considered.

D. Additional Programs for Seniors and Persons with Disabilities

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

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.

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, MTA initiated two programs: MTA Taxi Access II Service and the Senior Ride Program.

MTA Taxi Access II Service

The MTA Taxi Access II Service is open to eligible 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 ride. MTA will pay the fare up to \$20, and the participant is responsible for the balance of the fare that exceeds the \$20 limit. 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 non-folding wheelchairs. A list of participating companies is available to users.

Senior Ride Program

Since FY 2006, 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. MTA has offered approximately \$180,000 in State funds each year to be matched by 25% local contributions. The projects must provide door-to-door transportation service, use primarily volunteer drivers, and have a dispatching system.

E. Status of Projects from the 2019-2022 TIP and New Projects in the 2020-2023 TIP

As mandated by the federal regulations for metropolitan planning, major projects from the previous TIP, the 2019-2022 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-1 lists all projects from the 2019-2022 TIP by jurisdiction including the TIP ID, year of operation in the 2019-2022 TIP, year of operation in the 2020-2023 TIP (if any), and status of the project.

In Table II-1, the 2020-2023 TIP year of operation is sometimes listed 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-2 lists projects that are new to the 2020-2023 TIP. Additional details on these projects are available in Chapter VI.

Table II-1: Status of Projects from the 2019-2022 TIP

Project	TIP ID	Year of Operation		Project Status
		19-22 TIP	20-23 TIP	
<u>Anne Arundel County</u>				
Hanover Road Corridor Improvement	11-1801-42	2021	2022	60% design plans anticipated summer 2019. Land acquisition underway.
Furnace Avenue Bridge over Deep Run	11-1103-13	2020	2022	30% design plans anticipated summer 2019. Bids expected summer 2020.
Harwood Road Bridge over Stocketts Run	11-1208-13	2021	2022	60% design plans anticipated spring 2019. Land acquisition being finalized. Bids expected winter 2020.
Magothy Bridge Road Bridge over Magothy River	11-1402-13	2020	2022	90% design plans anticipated winter 2019. Project is expected to advertise summer 2020.
O'Connor Road Bridge over Deep Run	11-1403-13	2020	2021	60% design plans anticipated summer 2020. Project is expected to advertise summer 2021.
McKendree Road Culvert over Lyons Creek	11-1601-19	2023	2022	60% design plans anticipated fall 2019. Project is expected to advertise winter 2020.
Polling House Road Bridge over Rock Branch	11-1602-13	2022	2023	Design is expected to begin summer 2019. Project is expected to advertise winter 2022.
Mountain Road Corridor Revitalization – Phase I	11-1802-19	2022	XX	LOA executed with SHA 3/2018. Awaiting 30% design plans (anticipated winter 2019). No further funds are programmed at this point.
<u>Baltimore City</u>				
Citywide Bicycle and Pedestrian Improvements	12-1217-25	Ongoing	Ongoing	Various projects ongoing
Citywide Traffic Signals, Intelligent Transportation System and Safety Improvements	12-1218-07	Ongoing	Ongoing	Ongoing. Carryover funding from previous years extended through FY 2022.
Transportation Management Center Upgrade	12-1701-04	2021	2021	Project anticipated to be advertised in FY 2020
Citywide Road Resurfacing - Federal Aid Program	12-0207-11	Ongoing	XX	On hold. Projects are on hold due to lack of funding.
Perring Parkway Ramp and Hillen Road Bridge	12-1215-13	2022	2022	95% design stage. Project anticipated to advertise for construction in FY 2022.
Sisson Street Bridge over CSX Railroad	12-1216-13	2022	2022	95% Design stage. Project anticipated to advertise for construction in FY 2020.
Citywide Guide Sign Replacement	12-1222-19	Ongoing	XX	Project is on hold due to lack of funding.
Wilkins Avenue Bridge over Gwynns Falls	12-1403-13	2021	2023	95% Design Stage. Project anticipated to advertise for construction in the 2nd quarter of FY 2020. The year of operation has been delayed to 2023 due to unforeseen issues related to utilities and right-of-way since the project passes through a park.

Table II-1: Status of Projects from the 2019-2022 TIP

Project	TIP ID	Year of Operation		Project Status
		19-22 TIP	20-23 TIP	
Baltimore City (continued)				
Belair Road Complete Streets	12-1404-11	2022	2024	Phase 1 advertised for construction in April 2019. Phase 2 is at the pre-proposal stage. The year of operation has shifted to 2024 due to funding delays.
Greenmount Avenue Reconstruction: 43rd Street to 29th Street	12-1408-12	2020	XX	Project advertised for construction in FY 2019, with completion anticipated by 2022.
Citywide System Preservation	12-1414-11	Ongoing	Ongoing	Projects ongoing. Clinton Street project anticipated to advertise for construction in FY 2020.
Citywide Concrete Roadway Slab Repairs	12-1416-11	Ongoing	XX	Project is not requesting funds. Patapsco Avenue is now a standalone project with TIP ID 12-2012-11. Coldspring Lane is not funded.
Orleans Street Bridge over I-83 and City Streets	12-1601-13	2023	2028	Proposal Stage. Construction advertisement anticipated in FY 2026. The year of operation has shifted to 2028 to allow adequate time to complete the study, design, advertisement, and construction of the project.
Remington Avenue Bridge over Stony Run	12-1602-13	2022	2024	60% Design Stage. Project anticipated to advertise for construction in FY 2022. The year of operation has shifted to 2024 due to funding delays.
Radecke Avenue over Moores Run	12-1603-13	2022	2026	The year of operation has shifted to 2026 due to funding delays and to allow sufficient time to obtain permits. Project anticipated to advertise for construction in FY 2023.
I-83 Concrete Deck Mill and Resurface	12-1604-13	2023	2025	Design anticipated to be initiated in FY 2020, with construction advertisement in FY 2024. The year of operation has shifted to 2025 due to funding delays.
Moravia Road Ramp Bridge over Pulaski Highway	12-1605-13	2023	2026	Design anticipated to be initiated in FY 2022, with construction advertisement in FY 2024. The year of operation has shifted to 2026 due to funding delays.
Citywide Road Reconstruction	12-1607-12	Ongoing	XX	Projects with funding now have their own TIP sheets. These include: 25th Street from Greenmount Avenue to Kirk Avenue (12-2001-11); Park Heights Avenue from West Rogers Avenue to Strathmore Avenue (12-2011-11); Fremont Avenue from Lafayette Avenue to Presstman Street (12-2007-11); and Madison Street from North Milton Avenue to Edison Highway (12-2010-11).
Hanover Street Bridge Deck Repair over Middle Branch	12-1705-13	2022	XX	Design stage for bridge deck repairs. Project is between funding stages as it is not currently funded for construction, but repairs are anticipated to be completed by 2025.

Table II-1: Status of Projects from the 2019-2022 TIP

Project	TIP ID	Year of Operation		Project Status
		19-22 TIP	20-23 TIP	
Baltimore City (continued)				
MLK Blvd. and Howard St. Intersection Improvements	12-1706-11	2021	2024	Design anticipated to be initiated in FY 2020, with construction advertisement in FY 2022. The project requires rescoping as it was originally tied to the State Center project that was cancelled by the State. As a result, completion of the project has been delayed to 2024.
Monroe Street Ramp over CSX and Russell Street over CSX	12-1801-13	2022	XX	65% Design Stage. Project anticipated to advertise for construction in FY 2024, beyond the timeframe covered by this TIP. The year of operation has shifted to 2027 due to funding delays.
Baltimore City Locked Gate Interstate Access Point Approval (IAPA)	12-1201-99	2021	2021	Design is nearly complete. Final permitting ongoing. Amtrak is currently working with the city and state to accurately model any potential flooding impacts in the Jones Falls area. Impacts are anticipated to be minimal. Project is anticipated to be complete in 2021.
Pavement Management System	12-1206-99	2020	XX	Project is on hold due to lack of funds
Capital Project Delivery Services	12-1901-99	Ongoing	Ongoing	Ongoing. Carryover funding from FY19 was added to FY20.
Baltimore County				
Dogwood Road Bridge No. B-0072 Over Dogwood Run	13-0001-13	2021	2022	Engineering is nearly complete. The project has been extensively delayed by right of way acquisition which includes a land swap with the State of Maryland. Once a right of way clearance date is established, some re-engineering will be required due to changes in the stream alignment. The current design is based on field surveys that are roughly 20 years old. The year of operation has been set assuming construction in 2021.
Mohrs Lane Bridge No. B-0143 over CSX Railroad	13-0803-13	2022	2022	Engineering is nearly complete. Construction advertisement currently anticipated for 11/2019. This project has been delayed due to right of way acquisition and the 11/2019 advertisement date is contingent on clearing right of way.
Gunpowder Road Bridge No. B-0409	13-1005-13	2025	2025	Future project, no work has been undertaken
Hammonds Ferry Road Bridge No. B-0100 over CSX Railroad	13-1012-13	2021	2022	Engineering is currently underway. However, the production schedule for this project has been pushed due to other County bridge priorities. Construction currently anticipated in FY 2021.

Table II-1: Status of Projects from the 2019-2022 TIP

Project	TIP ID	Year of Operation		Project Status
		19-22 TIP	20-23 TIP	
<u>Baltimore County (continued)</u>				
Lansdowne Boulevard Bridge No. B-0113 over CSX Railroad	13-1105-13	2026	2026	Future project, no work has been undertaken
Piney Grove Road Bridge No. B-0140 over CSX railroad	13-1107-13	2025	2025	Future project, no work has been undertaken
Peninsula Expressway Bridge No. B-0119 over CSX Railroad	13-1108-13	2024	2027	Future project, no work has been undertaken. Project schedule has been pushed due to other County bridge projects having higher priority and need.
Old Ingleside Avenue Bridge No. B-0096 over Dead Run	13-1202-13	2023	2025	Future project, no work has been started. Project schedule has been pushed due to other County bridge projects having higher priority and need.
Old Court Road Bridge No. B-0237 over Bens Run	13-1204-13	2020	2020	Engineering is nearing completion with an anticipated construction advertisement of 6/2019
Sparks Road Bridge No. B-0018 over Gunpowder Falls	13-1206-13	2021	2022	Future federal aid bridge painting project. No work has been undertaken. Project schedule has been pushed due to other County bridge projects having higher priority and need.
Golden Ring Road Bridge No. B-0110 over Stemmers Run	13-1208-13	2025	2026	Future project, no work has been undertaken. Project schedule has been pushed due to other County bridge projects having higher priority and need.
Rolling Road Bridge No. B-0358 over Branch of Dead Run	13-1209-13	2023	2027	Future project, no work has been undertaken. Project schedule has been pushed due to other County bridge projects having higher priority and need.
Forest Park Avenue N. Bridge No. B-0097 over Dead Run and Dogwood Road	13-1210-13	2024	2024	Future project, no work has been undertaken
Rossville Blvd. Bridge No. B-0132 over Amtrak & Orems Rd.	13-1701-13	2024	2025	Future project, no work has been undertaken. Project schedule been pushed due to other County bridge projects having higher priority and need.
Bridge Inspection Program	13-8901-14	Ongoing	Ongoing	Ongoing
Mid-Atlantic Multimodal Transportation Hub	13-1901-83	2022	XX	NEPA completed and approved on 11/13/18. Grant and sub-grant approval is imminent. Project dredging has begun using matching funds. Project closeout currently scheduled for 9/2022.
<u>Carroll County</u>				
Bixler Church Road Bridge over Big Pipe Creek	14-1101-13	2019	2020	Final PE stages. Advertisement planned for May 2019.
Shepherds Mill Road Bridge over Little Pipe Creek	14-1102-13	2020	2020	Structural Design phase. Advertisement planned for May 2020.

Table II-1: Status of Projects from the 2019-2022 TIP

Project	TIP ID	Year of Operation		Project Status
		19-22 TIP	20-23 TIP	
<u>Carroll County (continued)</u>				
Stone Chapel Road Bridge over Little Pipe Creek	14-1103-13	2021	2022	Administrative preliminary design paperwork sent in May 2018. Engineering has not started.
Babylon Road Bridge over Silver Run	14-1601-13	2022	2023	Preliminary Type, Size, and Location submission due early CY19.
Gaither Road Bridge over South Branch Patapsco River	14-1602-13	2022	2023	Engineering planned to begin in FY20
McKinstry's Mill Road Bridge over Sam's Creek	14-1603-13	2021	2022	Administrative preliminary design paperwork sent in May 2018. Engineering has not started.
Bear Run Road Bridge over Bear Branch	14-1801-13	2024	XX	The project has been removed from the TIP. Major structural rehabilitation in lieu of replacement was completed with local funds.
Hughes Shop Road Bridge over Bear Branch	14-1802-13	2022	2022	Administrative preliminary design paperwork sent in May 2018. Engineering has not started.
Bridge Inspection Program	14-9401-14	Ongoing	Ongoing	Biennial cycle began in April 2019
<u>Harford County</u>				
Abingdon Road Bridge #169 over CSX Railroad	15-1001-13	2021	2021	In the current TIP and expected to be in operation in FY21
Chestnut Hill Bridge #40	15-1101-13	2019	2020	In the current TIP. Project was delayed by design contract requirement. Harford County is in the process of acquiring r/w for the project and anticipates advertising by July 2019.
Phillips Mill Road Bridge #70 over East Branch tributary	15-1102-13	2020	2020	In the current TIP. Land acquisition complete. Submittal of plans, specifications, and estimates to SHA 4/19 with anticipated advertisement in July 2019. Project is expected to be in operation in FY20.
Robinson Mill Road Bridge #154 over Broad Creek	15-1401-13	2019	XX	Project is not requesting further funds. Design and R/W acquisitions are complete. Project advertised for construction winter 2018/spring 2019.
Stafford Road Bridge #24 over Deer Creek	15-1501-13	2021	2021	In the current TIP and expected to be in operation in FY21
Glenville Road Bridge #30	15-1601-13	2023	2023	Harford County is proceeding with the project and will be initiating design in Spring 2019
Bridge Inspection Program	15-9411-14	Ongoing	Ongoing	Ongoing
<u>Howard County</u>				
Dorsey Run Road: MD 175 to CSX Railroad Spur	16-1403-41	2021	2023	Project is currently in design, with completion expected in spring 2023. The year of operation has shifted to 2023 due to funding delays.

Table II-1: Status of Projects from the 2019-2022 TIP

Project	TIP ID	Year of Operation		Project Status
		19-22 TIP	20-23 TIP	
<u>Howard County (continued)</u>				
Guilford Road: US 1 to Dorsey Run Road	16-1405-41	2021	2023	The project is currently in design and is expected to be completed in 2023
MD 175 at Oakland Mills Road Interchange	16-1407-46	2020	2022	Phase I involved improvements in Blandair Park and was completed in 2018. Phase II is the grade-separated bridge and ramps. Phase II is currently in design and is expected to be completed in spring 2022.
Snowden River Parkway: Broken Land Parkway to Oakland Mills Road	16-1410-41	2023	2023	The project is currently being phased due to the right of way limitations along the corridor
US 29/Broken Land Parkway Interchange and North South Connector Road	16-1901-42	2022	2022	The project is in conceptual design moving towards preliminary design. The Howard Hughes Corporation is managing the project, with an estimated completion date of 2022. This project is funded through the TIF process.
Bridge Repairs and Deck Replacement	16-0436-13	Ongoing	Ongoing	All of the projects are in design except for the Pfefferkorn Road Bridge. The following bridges are scheduled to be completed in fall 2020: River Road, Henryton Road, Pindell School Road, & Daisy Road. The Pefferkorn Road Bridge is expected to be completed in fall 2023. The Carroll Mill Road bridge is expected to be completed in fall 2022.
<u>MDOT – Office of the Secretary</u>				
State Safety Oversight	90-1401-39	Ongoing	Ongoing	Ongoing project
Baltimore-Washington Superconducting Maglev (SCMAGLEV) Project	90-1901-99	NA	NA	As of June 2019, the NEPA study is in the mid-stage of the draft Environmental Statement development. The FRA's preferred alignment and station locations will be shared with contributing and participating agencies in mid-summer 2019, with a goal of sharing with the public in fall 2019.
Port of Baltimore Enhancements	92-1401-83	2018	2018	Contracts for dredging, storm drain relocation, and rail are complete. The Fairfield basin filling contract is also complete. The contract for developing the Fairfield basin was awarded in the summer of 2018.
<u>Maryland Transportation Authority</u>				
I-95 Fort McHenry Tunnel: Moravia Road to Tunnel Improvements	22-1601-41	2018	2018	Project opened to traffic for beneficial use in 2018

Table II-1: Status of Projects from the 2019-2022 TIP

Project	TIP ID	Year of Operation		Project Status
		19-22 TIP	20-23 TIP	
Maryland Transportation Authority (continued)				
I-95 Fort McHenry Tunnel: Port Covington Access	22-1901-45	2029	2029	MDTA and Baltimore City DOT continue to work closely with FHWA to advance work, to the extent possible, to achieve environmental clearance for the project. A revised draft of the Interstate Access Point Approval (IAPA) is currently under review by FHWA. Section 106 coordination and consultation continues with Maryland Historical Trust.
I-95 Express Toll Lane Northbound Extension	25-1801-41	2026	2026	The I-95 ETL Northbound Extension (part of Section 200) is being developed in two phases. Phase I includes new ETL facilities from MD 43 to south of MD 152 and safety improvements between MD 152 and MD 24. Phase I improvements have been developed into 10 construction contracts. Construction started in January 2019 and is anticipated to be completed in fall 2023. Phase II includes new ETL facilities from south of MD 152 to north of MD 24 and reconstruction of the interchanges at MD 152 and MD 24. Phase II improvements are being developed into approximately 12 construction contracts. Construction is anticipated to begin in Spring 2021 and is anticipated to be completed in Summer 2026.
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
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	Project is ongoing and on schedule
Small Urban Transit Systems – Operating Assistance	40-0104-61	Ongoing	Ongoing	Project is ongoing and on schedule
Kirk Bus Facility Replacement - Phase 1 & 2	40-1203-65	2021	2021	Building and site demolition completed. Utility work ongoing. Community outreach continues. Project completion anticipated in 2021.
Bus and Rail Preventive Maintenance	40-1204-64	Ongoing	Ongoing	Preservation project 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

Table II-1: Status of Projects from the 2019-2022 TIP

Project	TIP ID	Year of Operation		Project Status
		19-22 TIP	20-23 TIP	
<u>MTA - Transit (continued)</u>				
Agencywide System Preservation and Improvement	40-1801-64	Ongoing	Ongoing	Preservation project ongoing
Bus System Preservation and Improvement	40-1803-64	Ongoing	Ongoing	Completion of Phase II of Transit Signal Priority vehicle installation anticipated in September 2019. Other projects are ongoing.
Metro and Light Rail Rolling Stock Overhauls and Replacement	40-1804-63	Ongoing	Ongoing	Delivery of last Light Rail vehicle anticipated in June 2022. Factory acceptance testing of the Metro fleet scheduled for early CY19 with anticipated delivery of first car in August 2020. Completion of Metro fleet anticipated in May 2024.
Metro and Light Rail System Preservation and Improvement	40-1805-64	Ongoing	Ongoing	Preservation projects ongoing
Beyond the Bus Stop	40-1901-69	2021	XX	MTA is currently working on developing task estimates. Preliminary engineering is on schedule to start during in summer 2019, with completion anticipated in 2021. No further funds requested.
Rural Transit Systems - Operating Assistance	40-9204-61	Ongoing	Ongoing	Project is ongoing and on schedule
<u>MTA - Commuter Rail</u>				
MARC Rolling Stock Overhauls and Replacement	70-1501-53	Ongoing	Ongoing	Delivery of four overhauled MARC coaches anticipated in early CY19, with delivery of final car anticipated by the end of FY21. Delivery of first overhauled MARC locomotives anticipated in early FY20, with delivery of final locomotive anticipated by the end of FY22. Spec development is underway for some future locomotive overhaul projects.
MARC Improvements	70-1502-54	Ongoing	Ongoing	Preservation projects ongoing
MARC Facilities	70-1503-55	Ongoing	Ongoing	BWI station renovations completed in May 2019. The project has no federal funding in FY20, so it has been removed from this TIP sheet. Target acquisition of the Riverside maintenance facility is early CY20. Earliest completion of MARC Martin State Airport is the end of FY20.
<u>State Highway Administration</u>				
Areawide Transportation Alternatives Projects	60-9903-29	Ongoing	Ongoing	Ongoing
Areawide Environmental Projects	60-9506-38	Ongoing	Ongoing	Ongoing

Table II-1: Status of Projects from the 2019-2022 TIP

Project	TIP ID	Year of Operation		Project Status
		19-22 TIP	20-23 TIP	
State Highway Administration (continued)				
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
Morgan State University Transportation Research Program	60-0702-99	Ongoing	Ongoing	Ongoing
MD 175: MD 295 to MD 170	61-0605-41	2025	XX	The planning project is complete and will be engineered and constructed in phases through breakout projects. Engineering work on the remaining phases will cease in FY 19.
MD 198: MD 295 to MD 32	61-1403-41	2030	2034	The first breakout project from the planning study, Phase 1 (MD 198 at BW Parkway), is currently on hold. There is continued coordination with NPS over potential solutions to the bridge over the BW Parkway.
US 50: MD 70 to MD 2	61-1404-41	2019	2018	Construction complete with remaining State funding for right-of-way acquisition. The improvements opened to traffic in May 2018.
MD 175: Disney Road to Reece Road	61-1601-41	2019	2020	Construction continues with updated open to service date of 2020. Open to service date postponed due to additional utility work.
MD 175: National Business Parkway to McCarron Court	61-1701-41	2021	2021	Construction underway
I-695 at Cromwell Bridge Road – Drainage Improvement	63-1801-38	2020	2020	Construction ongoing
MD 140: Painters Mill Road to Owings Mills Boulevard – Phase 2	63-0802-41	2025	2025	Engineering ongoing
I-795: Dolfield Boulevard Interchange	63-0803-46	2026	2040	Engineering ongoing. The year of operation has changed due to shifting priorities and to be consistent with the updated long-range plan, <i>Maximize2045</i> .
MD 140: Garrison View Road to Painters Mill Road – Phase 1	63-1203-41	2019	2019	Construction underway. Completion anticipated in October 2019.
I-695: US 40 to MD 144	63-1601-41	2021	2021	Construction ongoing
I-695 Bridge Replacements at Benson Ave and US 1	63-1602-43	2018	2018	Project is open to service with remaining State funding for right-of-way acquisition

Table II-1: Status of Projects from the 2019-2022 TIP

Project	TIP ID	Year of Operation		Project Status
		19-22 TIP	20-23 TIP	
State Highway Administration (continued)				
I-695: Bridge Replacement on Crosby Road	63-1702-43	2019	XX	No additional funding programmed. Project will be complete in June 2019.
I-695: I-70 to MD 43	63-1802-41	2023	2024	Engineering ongoing
I-83: Bridge Replacement over Padonia Road	63-1701-13	2021	2021	Construction underway
MD 137: Bridge Replacement over I-83	63-1703-13	2018	2018	Construction complete with remaining State funding for right-of-way acquisition
US 1: Bridge Replacement over CSX	63-1704-13	2021	2021	Construction ongoing
US 40: Bridge Replacements over Little & Big Gunpowder Falls	63-1706-13	2020	2021	Construction underway. Project was delayed due to an environmental permitting issue.
MD 45: Padonia Road to Wight Avenue	63-1707-11	2019	2021	Project delayed due to an environmental permitting issue. Utility relocation work underway.
MD 30 Business: North Woods Trail to CSX Railroad (Hampstead Community Safety & Enhancement)	64-1401-19	2020	2020	Construction ongoing
MD 86: Bridge Replacement over Gunpowder Falls	64-1701-13	2019	2021	Construction delayed to accommodate utility relocation.
MD 496: Bridge Replacement over Big Pipe Creek	64-1702-13	2018	2018	Open to service with continued funding for utility work
US 40: MD 7 & MD 159 Intersection Reconstruction - Phase 2	65-1402-41	2019	2019	Construction ongoing. Completion anticipated October 2019
MD 24: South of Stirrup Run Culvert to Deer Creek Bridge, Section G	65-1601-12	TBD	TBD	Engineering ongoing
US 29: Middle Patuxent River to Seneca Drive – Phase 2	66-1406-41	2030	2030	Engineering ongoing
MD 32: MD 108 to Linden Church Road	66-1602-41	2020	2019	Project will open to service in fall 2019
MD 32: Linden Church Road to I-70, Capacity & Safety Improvements	66-1703-41	2021	2022	Design Build notice to proceed issued in January 2019
I-95: Active Traffic Management	66-1801-41	TBD	TBD	Engineering ongoing

Table II-2: New Projects in the 2020-2023 TIP

Agency	Project	TIP ID	Project Category	Year of Operation
Baltimore City	25 th Street Rehabilitation from Greenmount Avenue to Kirk Avenue	12-2001-11	Highway Preservation	2025
Baltimore City	41 st Street over I-83, MTA, and Jones Falls	12-2002-13	Highway Preservation	2030
Baltimore City	Citywide Asset Management	12-2003-19	Highway Preservation	Ongoing
Baltimore City	Baltimore Street from Howard Street to President Street	12-2004-11	Highway Preservation	2026
Baltimore City	Brehms Lane over Herring Run	12-2005-13	Highway Preservation	2027
Baltimore City	Fremont Avenue Rehabilitation from Lafayette Avenue to Presstman Street	12-2007-11	Highway Preservation	2025
Baltimore City	Hanover Street over CSX	12-2008-13	Highway Preservation	2027
Baltimore City	Howard Street over I-83, CSX, Amtrak, and Jones Falls	12-2009-13	Highway Preservation	2030
Baltimore City	Madison Street Rehabilitation from North Milton Avenue to Edison Highway	12-2010-11	Highway Preservation	2026
Baltimore City	Park Heights Avenue from West Rogers Avenue to Strathmore Avenue	12-2011-11	Highway Preservation	2025
Baltimore City	Patapsco Avenue from Magnolia Avenue to Patapsco River Bridge	12-2012-11	Highway Preservation	2026
Baltimore City	Pennington Avenue Rehabilitation from Birch Street to East Ordnance Road	12-2013-11	Highway Preservation	2024
Baltimore City	Waterview Avenue over Ramp to 295	12-2015-13	Highway Preservation	2027
Baltimore City	Citywide Transportation Plan	12-2006-99	Miscellaneous	2021
Baltimore City	Citywide Transportation Studies	12-2014-99	Miscellaneous	Ongoing
Baltimore County	Phoenix Road Bridge No. BC6507 over Gunpowder Falls & NCR Trail	13-2001-13	Highway Preservation	2022
Harford County	Grier Nursery Road Bridge #43	15-2001-13	Highway Preservation	2023
Harford County	Hookers Mill Road Bridge #13	15-2002-13	Highway Preservation	2022
Howard County	Bus Rapid Transit	16-2001-67	Transit Capacity	NA
Maryland Port Administration	Seagirt Marine Terminal Modernization: Berth Improvements	32-2001-83	Ports	2021
State Highway Administration	MD 151/MD 151B: Bridge Replacements	63-2001-13	Highway Preservation	2023

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 nonattainment area with regard to the 8-hour ozone National Ambient Air Quality Standard (NAAQS). The BRTB has conducted a comprehensive analysis of conformity for the 2020-2023 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 2020-2023 Transportation Improvement Program and Maximize 2045*, 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 are based upon Round 9 cooperative socio-economic forecasts, which were endorsed by the BRTB on June 26, 2018. All projects that serve as emission reduction strategies (ERS) in the TIP are identified as such by the ERS heading on the top right corner of the page. ERS-related projects are documented in the conformity determination report.

It should be noted that many of the projects contained in the TIP involve non-capacity improvements such as bridge replacement, bridge rehabilitation, streetscaping, road reconstruction, road resurfacing, road rehabilitation, traffic engineering, safety 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.

Projects in the TIP that are not identified as exempt in the Final Rule are identified in the conformity document as “non-exempt.” They are not exempt from the requirement to determine conformity. These projects in the TIP typically involve capacity improvements. Non-exempt projects which are regionally significant were included in the travel demand model. Non-exempt, non-regionally significant projects were evaluated to determine whether they were suitable to be included in the travel demand model. Non-exempt, non-regionally significant projects which were not able to be evaluated in the travel demand model were reviewed through a manual quantitative analysis.

Upon completion of the travel demand forecasting task, the results were analyzed by the Maryland Department of Environment (MDE) to estimate the emission effects of the highway based transportation system. The results are portrayed in tons per day of NO_x and VOC for future horizon years.

Conformity determinations by the BRTB were made with input from the local jurisdictions and modal administrations. All projects were assessed by the Interagency Consultation Group (ICG) to determine conformity status for testing. Through

coordination with the submitting agencies, the BRTB made a determination of conformity by testing projects in the model or performing quantitative analyses.

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 to ensure consistency. Out of the series of 25 federally mandated performance targets, the BRTB has adopted 21 to date.

Performance measures and targets cover several broad categories including transit asset management, 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. This is the first TIP reflecting the requirements surrounding Performance-Based Planning and Programming. 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

FTA’s final rule on transit asset management (TAM) requires transit agencies receiving FTA funding to develop asset management plans and monitor performance for public transportation assets, including: vehicles, facilities, equipment, and other infrastructure. The BRTB adopted the four required transit asset management targets in June 2017, with an update adopted in February 2019:

1) % of revenue vehicles within an asset class that have either met or exceeded their Useful Life Benchmarks (ULBs). Table 1 summarizes these targets.

Table 1. MDOT MTA Revenue Vehicle Performance Targets

% of vehicles at or past their ULB				
Mode	Asset Class	2017 Target	2018 Target	2019 Target
Bus	bus (40-ft)	4.7%	4.7%	0.0%
Bus	bus (60-ft)	0.0%	0.0%	0.0%
Light Rail	light rail vehicle	0.0%	0.0%	0.0%
Metro	heavy rail vehicle	88.9%	88.9%	88.9%
MARC	locomotive	0.0%	0.0%	0.0%
MARC	passenger coach	0.0%	0.0%	0.0%
Mobility	cutaway bus	0.0%	0.0%	0.0%
Mobility	vans	0.0%	0.0%	0.0%
Mobility	automobile	4.4%	4.4%	4.4%

2) % of non-revenue vehicles that have either met or exceeded their ULBs. Table 2 summarizes these targets.

Table 2. MDOT MTA Non-Revenue Vehicle Performance Targets

% of vehicles at or past their ULB			
Asset Class	2017 Target	2018 Target	2019 Target
Steel wheel vehicles	61.1%	61.1%	61.1%
Other rubber tire vehicles	54.4%	54.4%	54.4%

3) Infrastructure (rail fixed-guideway, track, signals, systems): percentage of track segments with performance restrictions. Table 3 summarizes these targets.

Table 3. MDOT MTA Guideway Performance Targets

% of guideway under performance restriction			
Mode	2017 Target	2018 Target	2019 Target
MARC	3.5%	3.5%	3.5%
Metro	3.5%	3.5%	3.5%
Light Rail	5.8%	5.8%	5.8%

4) Facilities: % within an asset class rated below condition 3 on the FTA Transit Economic Requirements Model (TERM) scale. Table 4 summarizes the TERM scale and Table 5 summarizes the facilities targets.

Table 4. FTA Transit Economic Requirements Model (TERM) Scale

General Condition Assessment Rating Scale		
Rating	Condition	Description
5	Excellent	No visible defects, new or near new condition, may still be under warranty
4	Good	Good condition, but no longer new, may have some slightly defective or deteriorated component(s), but is overall functional
3	Adequate	Moderately deteriorated or defective components but has not exceeded useful life
2	Marginal	Defective or deteriorated component(s) in need of replacement; exceeded useful life
1	Poor	Critically damaged component(s) or in need of immediate repair; well past useful life

Table 5. MDOT MTA Facilities Performance Targets

% of facilities rated below condition 3 on the TERM scale *			
Asset Class	2017 Target	2018 Target	2019 Target
administrative facility	21%	21%	21%
maintenance facility	65%	65%	50%
passenger facility	17%	17%	17%
parking lot	58%	58%	50%

In addition to the TAM targets for MDOT MTA listed above, there are separate performance targets for Tier II agencies. MDOT MTA is a Tier 1 agency and Maryland’s direct recipient of federal funds. Tier 1 providers are those transit operators with 101 or more vehicles in revenue service during peak regular service or operators of rail fixed-guideway public transportation systems. MDOT MTA is also overseeing asset management for 22 sub-recipients (two Tier I agencies and 20

Tier II agencies). Tier II providers are those transit operators that do not operate rail fixed-guideway public transportation systems and have 100 or fewer vehicles service during peak regular service. Tier II targets are summarized in Table 6.

Table 6. Tier II Performance Targets

% of vehicles at or past their ULB		
Asset Class	Current Performance	2019 Target
bus	40.7%	40.7%
cutaway bus	52.3%	52.3%
automobile	66.7%	66.7%
van	85.4%	85.4%
trucks and other rubber tire vehicles	50.0%	50.0%
administrative facility	40.9%	40.9%
combined administrative/maintenance facility	11.1%	11.1%
maintenance facility	21.1%	21.1%
passenger/parking	25.0%	25.0%

The 2020-2023 TIP includes twelve MDOT MTA projects related to the maintenance and rehabilitation of transit assets. Table 7 summarizes these projects. The 2020-2023 TIP includes a total of \$938.405 million dollars in TAM related investments. Federal sources such as CMAQ and FTA sections 5307, 5337, and 5339 account for \$750.721 million of this total. State funding accounts for the remaining \$187.684 million. This investment represents 25.6% of the \$3.66 billion programmed in the 2020-2023 TIP.

Table 7. 2020-2023 TIP Projects Related to Transit Asset Management

Project	TAM Target	Federal	Matching	Total TIP Funds
MARC Rolling Stock Overhauls and Replacement	Vehicles	\$18,876	\$4,719	\$23,595
Bus and Paratransit Vehicle Overhaul and Replacement	Vehicles	\$174,141	\$43,537	\$217,678
Metro and Light Rail Rolling Stock Overhauls and Replacement	Vehicles	\$196,532	\$49,135	\$245,667
Bus and Rail Preventive Maintenance	Vehicles and Infrastructure	\$156,416	\$39,104	\$195,520
MARC Facilities	Facilities	\$64,735	\$16,184	\$80,919
Bus System Preservation and Improvement	Facilities	\$2,400	\$600	\$3,000
Kirk Bus Facility Replacement - Phase 1 & 2	Facilities	\$26,313	\$6,578	\$32,891
MARC Improvements	Facilities and Infrastructure	\$41,682	\$10,422	\$52,104
Agencywide System Preservation and Improvement	Facilities and Infrastructure	\$28,227	\$7,057	\$35,284
Metro and Light Rail System Preservation and Improvement	Facilities and Infrastructure	\$37,455	\$9,364	\$46,819
Small Urban Transit Systems - Capital Assistance	Tier II Facilities and Vehicles	\$1,280	\$320	\$1,600
Urban Transit Systems - Capital Assistance	Tier II Facilities and Vehicles	\$2,664	\$664	\$3,328
Funding Total (in \$1,000s)		\$750,721	\$187,684	\$938,405

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 8 summarizes the five required highway safety performance measures and targets. The BRTB adopted these measures and targets in January 2018, with an update in January 2019. The rightmost column in Table 8 shows 2030 "TZD" targets. This refers to the state's and the region's continued commitment to the concept of "Toward 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, the 2030 TZD targets are half the 2008 baseline targets.

Table 8. Highway Safety Performance Measures and Targets

Measures related to funding under the Highway Safety Improvement Program (HSIP)					
Measure	2008 Baseline	2016 Actual	2017 Actual	2015- 2019 Target	2030 TZD Target
Number of fatalities	242	228	230	184	121
Number of serious injuries	1,868	1,432	1,678	1,211	934
Fatality rate per 100 million VMT	0.93	0.83	0.83	0.70	0.47
Serious injury rate per 100 million VMT	7.21	5.23	6.05	4.62	3.60
Number of non-motorized (ped/bike) fatalities and serious injuries	286	342	366	222	143

Table 9 summarizes the three State Highway Administration (SHA) projects programming Highway Safety Improvement Program funds. HSIP funds are concentrated in three SHA areawide projects focusing on environmental improvements, resurfacing and rehabilitation, and safety and spot improvements. Areawide projects are broad projects that group together many smaller projects that do not affect air quality, otherwise known as exempt projects. The specific project list is not available from SHA, but Appendix D lists known projects that SHA will pursue as a part of these areawides in FY 2020. The 2020-2023 TIP includes \$59.2 million in federal HSIP

funds along with \$14.8 million in matching funds for a total of \$74 million. This investment represents 2% of the \$3.66 billion programmed in the 2020-2023 TIP.

Table 9. 2020-2023 TIP Projects Programming HSIP Funds

Agency	Project	HSIP Federal	HSIP Matching	Total TIP Funds
SHA	Areawide Environmental Projects	\$3,520	\$880	\$4,400
SHA	Areawide Resurfacing And Rehabilitation	\$25,600	\$6,400	\$32,000
SHA	Areawide Safety And Spot Improvements	\$30,080	\$7,520	\$37,600
Funding Total (in \$1,000s)		\$59,200	\$14,800	\$74,000

While the FHWA-required highway safety performance measures and targets are focused specifically on implementation of the Highway Safety Improvement Program, the 2020-2023 TIP includes many other projects identified by project sponsors as supporting the BRTB's highway safety goals. These projects program a variety of funds including other federal sources, state funds, and local funds. Appendix B includes a complete table relating 2020-2023 TIP projects to long-range plan goals and performance measures.

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.

2) % of non-single-occupancy vehicle (SOV) travel: This measure is the percentage of non-SOV vehicles traveling within an urbanized area, calculated using American Community Survey (ACS) commuting (journey to work) data from the U.S. Census Bureau.

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 10 summarizes the traffic congestion and emissions performance measures and targets. The BRTB adopted the traffic congestion targets in May 2018 and the emissions target in June 2018.

Table 10. Traffic Congestion and Emissions Performance Targets

Measures related to funding under the Congestion Mitigation and Air Quality Improvement (CMAQ) Program			
Measure	2017 Baseline	2-year Targets (2018-2019)	4-Year Targets (2018-2021)
Annual per capita hours of peak-hour excessive delay (PHED)	20.2 hours	<21.8 hours	<22.6 hours
Percentage of non-SOV (single-occupancy vehicle) travel	24.85%	24.85%	24.85%
Reduction of VOC (kg/day)	6.19	6.59	7.87
Reduction of NOx (kb/day)	83.23	88.57	123.39

Table 11 summarizes the projects programming CMAQ funds. The 2020-2023 TIP includes \$197.548 million in federal CMAQ funds along with \$47.896 million in matching funds for a total of \$245.444 million. This investment represents 6.7% of the \$3.66 billion programmed in the 2020-2023 TIP.

MTA accounts for more than 90 percent of CMAQ funds programmed in the TIP, with SHA accounting for the remainder. MTA sponsored projects include two projects focused on the overhaul and replacement of transit and rail vehicles as well as funding for ridesharing in the Baltimore region. 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 SHA will pursue as a part of these areawides in FY 2020.

Table 11. 2020-2023 TIP Projects Programming CMAQ Funds

Agency	Project	CMAQ Federal	CMAQ Matching	Total TIP Funds
MTA	Bus and Paratransit Vehicle Overhaul and Replacement	\$158,154	\$39,540	\$197,694
MTA	Metro and Light Rail Rolling Stock Overhauls and Replacement	\$15,182	\$3,796	\$18,978
MTA	Ridesharing - Baltimore Region	\$5,972	\$0	\$5,972
SHA	Areawide Congestion Management	\$7,360	\$1,840	\$9,200
SHA	Areawide Safety And Spot Improvements	\$10,880	\$2,720	\$13,600
Funding Total (in \$1,000s)		\$197,548	\$47,896	\$245,444

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

Table 12. Pavement and Bridge Condition Performance Measures and Targets

Measure	Baseline	2-Year Targets (2018-2019)	4-Year Targets (2018-2021)
% of NHS interstate pavement in good condition (2016 baseline)	63.8%	60.0%	60.0%
% of NHS interstate pavement in poor condition (2016 baseline)	0.4%	2.0%	2.0%
% of NHS non-interstate pavement in good condition (2016 baseline)	29.7%	30.0%	30.0%
% of NHS non-interstate pavement in poor condition (2016 baseline)	8.6%	7.0%	8.0%
% of NHS bridges by deck area in good condition (2017 baseline)	29.7%	20.0%	20.0%
% of NHS bridges by deck area in poor condition (2017 baseline)	5.0%	3.0%	5.0%

Table 13 summarizes funds programmed in the 2020-2023 TIP for projects effecting 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 Table 13, SHA’s areawide projects for resurfacing and rehabilitation, safety and spot improvements, and urban reconstruction program 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 FY 2020 areawide projects are listed in Appendix D. These areawide TIP projects program \$544.864 million in federal funds along with \$136.216 million in matching funds for a total of \$681.080 million. \$243.104 million of the federal funds in these projects are programmed under the National Highway Performance Program.

Table 13. 2020-2023 TIP Projects Related to Pavement Condition

Agency	Project Name (Year of Operation)	Federal	Matching	Total TIP Funds
NHS Interstate Projects				
SHA	I-695: I-70 to MD 43 (2024)	\$163,915	\$80,330	\$244,245
SHA	I-695: US 40 to MD 144 (2021)	\$12,124	\$17,608	\$29,732
SHA	I-795: Dolfield Blvd Interchange (2040)	\$2,572	\$286	\$2,858
NHS Interstate Subtotal (In \$1,000s)		\$178,611	\$98,224	\$276,835
Non-Interstate NHS Projects				
Baltimore City	Belair Road Complete Streets (2024)	\$7,360	\$1,840	\$9,200

Baltimore City	Citywide System Preservation: Russell Street Rehabilitation	\$2,400	\$600	\$3,000
Baltimore City	Madison St. Rehabilitation from North Milton Ave. to Edison Highway (2026)	\$6,400	\$1,600	\$8,000
Baltimore City	MLK Blvd. and Howard St. Intersection Improvements (2024)	\$4,800	\$1,200	\$6,000
Baltimore City	Patapsco Ave. from Magnolia Ave. to Patapsco River Bridge (2026)	\$12,080	\$3,020	\$15,100
Baltimore City	Pennington Ave. Rehabilitation from Birch St. to East Ordnance Rd (2024)	\$8,320	\$2,080	\$10,400
Howard County	Dorsey Run Road: MD 175 to CSX Railroad Spur (2023)	\$0	\$10,500	\$10,500
SHA	MD 140: Garrison View Road to Painters Mill Road - Phase 1 (2019)	\$0	\$90	\$90
SHA	MD 140: Painters Mill Road to Owings Mills Boulevard - Phase 2 (2025)	\$0	\$530	\$530
SHA	MD 198: MD 295 to MD 32 (2034)	\$0	\$462	\$462
SHA	MD 30 Business: North Woods Trail to CSX Railroad (Hampstead Community Safety & Enhancement) (2020)	\$16	\$8,502	\$8,518
SHA	MD 32: Linden Church Road to I-70, Capacity & Safety Improvements (2022)	\$80,924	\$20,055	\$100,979
SHA	MD 32: MD 108 to Linden Church Road (2019)	\$0	\$2,689	\$2,689
SHA	MD 45: Padonia Rd to Wight Ave (2021)	\$1,860	\$10,092	\$11,952
SHA	US 29: Middle Patuxent River to Seneca Drive - Phase 2 (2030)	\$0	\$1,285	\$1,285
SHA	US 40: MD 7 & MD 159 Intersection Reconstruction - Phase 2 (2019)	\$3,376	\$577	\$3,953
Non-Interstate NHS Subtotal (In \$1,000s)		\$127,536	\$65,122	\$192,658
Funding Total (In \$1,000s)		\$306,147	\$163,346	\$469,493

Table 14 summarizes the funds programmed in the 2020-2023 TIP that affect the condition of bridges 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.

In addition to the projects listed in Table 14, the TIP also includes a Maryland Transportation Authority project that will add two express toll lanes on I-95 from north of MD 43 to north of MD 24. This project will improve the condition of several bridges as a part of the project scope. Finally, SHA's Areawide Bridge Replacement and Rehabilitation project programs funds for major upgrades and maintenance of structures on state highways. This TIP project programs \$118.72 million in federal funds along with \$29.68 million in matching funds for a total of \$148.4 million. These funds include both NHS and non-NHS structures. \$62.4 million of the federal funds in this project are programmed under the National Highway Performance Program.

Table 14. 2020-2023 TIP Bridge Projects on the NHS

Agency	Project Name (Year of Operation)	Federal	Matching	Total TIP Funds
Baltimore City	I-83 Concrete Deck Mill and Resurface (2025)	\$800	\$200	\$1,000
Baltimore City	Moravia Road Ramp Bridge over Pulaski Highway (2026)	\$960	\$240	\$1,200
Baltimore City	Orleans Street Bridge over I-83 and City Streets (2028)	\$512	\$128	\$640
Baltimore City	Wilkens Avenue Bridge Over Gwynns Falls (2023)	\$11,040	\$2,760	\$13,800
Baltimore County	Rolling Road Bridge No. B-0358 over Branch of Dead Run (2027)	\$400	\$100	\$500
SHA	I-695: Bridge Replacements at Benson Ave and US 1 (2018)	\$0	\$84	\$84
SHA	I-83: Bridge Replacement over Padonia Road (2021)	\$13,649	\$1,816	\$15,465
SHA	US 1: Bridge Replacement over CSX (2021)	\$17,277	\$4,928	\$22,205

SHA	US 40: Bridge Replacements over Little & Big Gunpowder Falls (2021)	\$16,203	\$5,113	\$21,316
Funding Totals (in \$1,000s)		\$60,841	\$15,369	\$76,210

The TIP also includes a number of local and state sponsored non-NHS bridge rehabilitation and replacement projects. These projects represent a significant investment in the 2020-2023 TIP. The 2020-2023 TIP includes \$103.84 million in federal funds for these projects along with \$45.293 million in matching funds for a total of \$149.133 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) % of person-miles traveled on the Interstate System that are reliable
- 2) % 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 15 summarizes the travel time reliability performance measures and targets. The BRTB adopted these targets in October 2018.

Table 15. Travel Time Reliability Performance Measures and Targets

Measures related to travel time reliability			
Measure	2017 Baseline	2-year Targets (2018-2019)	4-Year Targets (2018-2021)
LOTTR (Interstate) measure: Percentage of person-miles traveled on the Interstate System that are reliable	71.5%	72.1%	72.1%
LOTTR (non-Interstate) measure: Percentage of person-miles traveled on the non-Interstate NHS that are reliable	82.0%	not applicable *	81.7%
TTTR Index: Ratio of Interstate System mileage indicating reliable truck travel times	1.87	1.87	1.88

* For the first performance period only, FHWA does not require state DOTs and MPOs to set a 2-year target for the LOTTR non-interstate measure

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 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), SHA’s Areawide Congestion Management project (TIP ID 60-9504-04), and Baltimore City’s Traffic Signals and Intelligent

Transportation System project (TIP ID 12-1218-07). As Performance Based Planning and Programming efforts continue, the BRTB will explore improved methods for evaluating the effect of TIP projects on travel time reliability.

Future Performance Monitoring

In cooperation with the Maryland Department of Transportation 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 *Maximize2045*.⁴

⁴ More information about *Maximize2045*, including the system performance report, is available here: <https://www.baltometro.org/transportation/plans/long-range-transportation-plan/maximize2045>

III. PROGRAM DEVELOPMENT

A. Integration with Federal, State and Local Programs

The projects contained in the 2020-2023 TIP flow from *Maximize2045* 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 2020-2023 portions of their respective multi-year improvement programs.⁵ 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 long-range transportation plan, 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.

⁵. 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:

- Congestion Mitigation and Air Quality Improvement Program
- FTA Capital and Operating – Sections 5307, 5307 flexed from STBG, 5310, 5311, 5329, 5337, and 5339
- Better Utilizing Investments to Leverage Development (BUILD) grants
- Highway Safety Improvement Program
- National Highway Performance Program
- Recreational Trails Program
- Surface Transportation Block Grant Program
- Transportation Alternatives Program
- Transportation Investment Generating Economic Recovery (TIGER) grants

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.⁶ Inclusion of these projects in the TIP indicates endorsement by the BRTB for federal funding of the proposed project phase(s).

⁶. 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 2020, 2021, 2022, and 2023. 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 implementing agency - 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), MTA – Transit, MTA – Commuter Rail, and the State Highway Administration (SHA). Projects to be implemented by SHA are broken down further by county in alphabetical order. While a portion of Queen Anne’s County is now a part of the Baltimore urbanized area, there are no local or state projects for Queen Anne’s County in the 2020-2023 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-CCCC-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 CAAA. 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 when 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 since projects in the TIP are often long-term phased projects that extend beyond the four fiscal years covered by the TIP.

Also included for road projects is an indication if the project is a **Highway Capacity Improvement** or if it 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 164,000 miles and includes the Interstate Highway System, as well as other roads important to the nation's economy, defense and mobility.

As called for in 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.

New maps are based on the 2011 Highway Performance Monitoring System (HPMS) for purposes of identifying the non-NHS principal arterials for inclusion in the NHS. The maps

include the non-NHS principal arterial coding from the State-submitted HPMS GIS Shape files. The updated NHS maps incorporate these additional principal arterials as well as any principal arterial functional reclassification adjustments that were reported by September 20, 2012.

The project **Description** and **Justification** are intended to provide a detailed project scope and reason(s) that the project deserves funding over others. The **Connection to Long-Range Transportation Planning Goals** connects TIP projects to the long-range plan goals and strategies that the project helps the region to achieve.

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. Funding sources are abbreviated as follows:

Federal Highway Administration Funds:

- BUILD Better Utilizing Investment to Leverage Development (BUILD) grants
- CMAQ Congestion Mitigation and Air Quality
- HSIP Highway Safety Improvement Program
- NHPP National Highway Performance Program (National Highway System, Interstate Maintenance, Bridge (on-System))
- RTP Recreational Trails Program

- STBG Surface Transportation Block Grant Program
- TAC Transportation Alternatives (including Safe Routes to School)
- TIGER Transportation Investment Generating Economic Recovery (TIGER) grants

Federal Transit Administration Funds:

- 5307C Section 5307 Urbanized Area Formula Program (funding for capital projects)
- 5307F Section 5307 Flex (STBG funds flexed to Section 5307)
- 5307O Section 5307 Urbanized Area Formula Program (funding for operating projects)
- 5310 Section 5310 Enhanced Mobility of Seniors and Individuals with Disabilities Program
- 5311O Section 5311 Nonurbanized 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)
- CMAQ Congestion Mitigation and Air Quality (flexed to transit becomes 5307)

Project costs in the funding tables represent funds expected to be requested 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 for a project is documented and scoping is broad and involves the public.
- ENG – Engineering: Engineering funds involve detailed environmental studies as well as preliminary and 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 – Other⁷: This funding may include permits, inspections, utility costs, or in the case of transit, the purchase of capital equipment.

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.

⁷ Other phase funds include (a) permits, inspection fees, and local bridge inspection programs; (b) non-infrastructure funds for studies, project delivery services, and research; (c) SHA Areawide Congestion Management funds not involving construction such as CHART vehicle purchases; and (d) funds for MTA projects including bus and rail preventive maintenance, section 5310 grants, ridesharing, and funding for LOTS agencies. The 2020-2023 TIP includes \$292.04 million for this phase. Of this, SHA Areawide Congestion Management accounts for 16.4% and MTA accounts for 79.9%.

V. THE FINANCIAL PLAN

The Metropolitan Planning Regulation (23 CFR 450) requires that the Transportation Improvement Program (TIP) be financially constrained, meaning that the amount of funding programmed must not exceed the amount of funding estimated to be reasonably available. In developing the TIP, the BRTB has taken into consideration the transportation funding revenues expected to be available during the four years of the TIP (FY 2020 through FY 2023).

Further, the 2020-2023 TIP is financially constrained by program and by year. The framework of both *Maximize2045*, the regional long-range transportation plan, and the 2020-2023 TIP meet this requirement. This section of the TIP includes the documentation of reasonably available finances that demonstrates how this TIP, once approved, can be implemented. In developing the TIP, the MPO members, MDOT, and state (MTA) and local transit operator(s) have cooperatively developed estimates of funds that are reasonably expected to be available to support TIP implementation. The revenue and cost estimates for the TIP

reflect year of expenditure dollars, based on reasonable financial principles and information as described here.

The Maryland Department of Transportation (MDOT)'s 2019 - 2024 Consolidated Transportation Program (CTP) provides investment in the transportation system for all modes of transportation across the State. The CTP development process is instrumental to the development of the TIP. The transportation priorities guiding the CTP originate from the local jurisdictions that share their transportation priorities with the Transportation Secretary and at the Secretary's Annual Capital Program Tour each fall. The Tour process is stipulated by State law and requires the Transportation Secretary to visit with and present the Draft CTP to elected officials from each county and the City of Baltimore. Meetings are held with local jurisdiction staff before the Tour meeting. These meetings give local staff an opportunity to coordinate priorities and to hear firsthand from MDOT staff the current status of the CTP and the revenue and investments that have changed since the previous year.

The draft CTP becomes the basis for development of the metropolitan TIP. The state and federal financial forecast that supports the TIP is based on a six-year Financial Plan

developed by MDOT that is updated semi-annually. The forecasted revenues and expenditures use the latest available economic estimates.

The TIP is based on conservative assumptions formulated from historical trends for projected funding. The TIP serves several purposes. It is the documentation of the intent to implement specific facilities and projects from the long-range transportation plan. It provides a medium for local elected officials, agency staffs, and interested members of the public to review and comment on the priorities assigned to the selected projects. The TIP also establishes eligibility for federal funding for those projects selected for implementation during the first program year, known as the Annual Element of the program.

Sections V.A through V.D discuss state and federal revenue sources and projections as well as general uses for those funds. Section V.E fulfills the FTA requirement to assess the financial capacity of applicants for certain FTA fund sources. Section V.F summarizes TIP funding in FY 2020 and for FY 2020-2023. It includes:

- A summary of FY 2020 federal fund requests by sponsoring agency and federal funds available by fund source.
- A listing of FY 2020 federal funding requests and the source of matching funds by project.
- An overall summary of funding in the 2020-2023 TIP by fiscal year, sponsoring agency, project category, phase, and fund source.

Further funding information can be found in Chapter VI and Appendix B. Chapter VI includes information on each project, including tables detailing programmed funds by source, year, and project phase. Appendix B includes letters that document availability of matching funds from project sponsors.

A. Revenue Projections

The State's Transportation Trust Fund supports MDOT investments through a dedicated account. The Transportation Trust Fund utilizes a variety of revenue sources which provide funding that enable MDOT to address important capital and operating needs, including congestion relief, safety improvements, transit availability, and maintaining the competitiveness of the Port of Baltimore and the BWI Marshall Airport.

Total projected revenues amount to \$30.9 billion for the six-year period from 2019 to 2024. This estimate is based on the revenue sources used by MDOT and includes bond proceeds and federal funds that will be used for operating, capital and debt payment expenses. The projection does not assume any future State tax or fee increases beyond those changes enacted to date. Pertinent details are as follows:

- **Opening Balance:** MDOT's goal is to transition to a \$175 million fund balance over the program period to accommodate working cash flow requirements throughout the year.

- **Motor Vehicle Fuel Tax:** This revenue is projected to be \$7.1 billion over the six-year period. As of July 1, 2018, the motor fuel tax rates were 35.3 cents per gallon gasoline and 36.05 cents per gallon diesel fuel. These rates include the revenue components provided by the Transportation Act. The Consumer Price Index (CPI) effect is estimated to average 3.6 cents per gallon over the program period. The 5 percent sales and use tax equivalent rate effective July 1, 2018 is 9.7 cents per gallon. The rate is estimated to average 10.6 cents per gallon over the program period.

- **Motor Vehicle Titling Tax:** This source is projected to yield \$5.6 billion. The titling tax of 6 percent of the fair market value of motor vehicles, less an allowance for trade-in vehicles, is applied to new and used vehicles sold and to vehicles of new residents. This revenue source follows the cycle of auto sales with periods of decline and growth. It is projected that this six-year planning period will follow a normal business cycle around an underlying upward trend.

- **Motor Vehicle Registration, Miscellaneous, and Other Fees:** These fees are projected to generate \$4.0 billion. This forecast assumes revenues will increase an average of 1.5 percent every two-year cycle.

- **Corporate Income Tax:** The transportation share of corporate income tax revenues is estimated to be \$1.2 billion. MDOT receives 14.6 percent of the revenues from the State's 8.25 percent corporate income tax.
- **Federal Aid:** This source is projected to contribute \$6.5 billion for operating and capital programs. This amount does not include \$599 million received directly by the WMATA. The majority of federal aid is capital; only \$626 million is for operating assistance.
- **Operating Revenues:** These revenues are projected to provide a six-year total of \$3.0 billion, with \$1.1 billion from MDOT MTA, \$337 million from MDOT MPA, and \$1.6 billion from MDOT MAA. MDOT MTA revenues primarily include rail and bus fares, which became indexed to inflation beginning in fiscal year 2015, as provided by the Transportation Act. MDOT MPA revenues include terminal operations, the World Trade Center, and other Port related revenues. MDOT MAA revenues include flight activities, rent and user fees, parking, airport concessions, and other aviation-related fees.
- **Bond Proceeds:** It is projected that \$2.9 billion of bonds will be sold in the six-year period. The level of bonds that could be issued is dependent on the net revenues of MDOT. This

level of bonds is affordable within the financial parameters used by MDOT.

- **Other Sources:** The remaining sources are projected to provide \$641 million. These sources include earned interest from trust funds, reimbursements, and miscellaneous revenues.

B. Federal Aid Assumptions

Enacted in December 2015, the Fixing America's Surface Transportation (FAST) Act re-authorized federal funding for highway, transit, and other multimodal projects through September 30, 2020. The bill focuses on establishing a new formula program for freight, increases some flexibility in spending by converting certain funds into block grants, and streamlines certain functions by eliminating duplications and creating some pilot programs.

While Congress authorized a five-year transportation bill, each year, Congress must then appropriate the funds through the federal budget process, which can be at lower amounts than authorized. For Federal Fiscal Year (FFY) 2019, MDOT assumes that Congress will appropriate the FAST Act authorized amounts in the transportation bills for FFY 2019 through FFY 2020 and continue this inflated funding through FFY 2024.

Federal Highway and Transit

Most of the federal funds received by MDOT come from the Federal Highway Trust Fund (FHTF), which provides transportation investment for projects in the following areas:

highways and transit, multimodal freight, safety and security, system preservation, bike and pedestrian, and congestion mitigation.

MDOT allocates these federal funds to projects in the program based on reasonable assumptions of authorization given in the FAST Act. MDOT expects to have approximately \$648 million in highway formula funding and \$162 million in transit formula funding in FFY 2019 for MDOT projects.

Federal highway program funds authorized and apportioned to the states are subject to annual ceilings which determine how much of the authorized money can be obligated in any given year. This ceiling is referred to as Obligation Authority (OA) and is imposed by Congress annually in response to prevailing economic policy.

Since FFY 2004, OA has ranged from 84 percent to 95 percent. The OA level received in FFY 2018 was 91.7 percent. Given that Congress has passed a long-term bill with inflation built in, MDOT assumes an OA level of 94.0 percent for FFY 2019 through FFY 2024.

C. Where The Money Comes From

Maryland's transportation system is funded through several dedicated taxes and fees, federal aid, operating revenues, and bond sales, which are assigned to the Transportation Trust Fund. This fund is separate from the State's General Fund, which pays for most other State government operations and programs. MDOT's customers pay user fees for transportation infrastructure and services through motor fuel taxes, vehicle titling taxes, registration fees, operating revenues, and corporate income taxes. The motor fuel tax and vehicle titling tax are two of the largest sources of MDOT revenue. Operating revenues include transit fares and usage fees generated at the Port of Baltimore and the Baltimore-Washington International (BWI) Thurgood Marshall Airport. In addition to collecting revenue within the State, Maryland also receives federal aid for its transportation program. These funds must be authorized by a congressional act. Congress enacted long-term federal surface transportation authorizing legislation, the FAST Act, in December 2015, which provides investment in transportation infrastructure through FFY 2020.

Total projected Trust Fund revenues amount to \$30.9 billion for the six-year period from 2019 through 2024. These

amounts are based on the assumption that the economy will continue along a moderate growth scenario for the next six years.

D. Where The Money Goes

The MDOT program is fiscally constrained, meaning that the list of projects is tied to estimates of future revenue. The Trust Fund supports operation and maintenance of State transportation systems, administration, debt service, and capital projects. A portion of these funds is directed to the General Fund and a share is also dispersed among Maryland's counties and Baltimore City for local transportation needs. After operating costs, debt service, and local distributions, the remaining money goes towards funding capital projects.

E. Documentation of Financial Capacity for Transit Activities

On January 30, 2002, the FTA issued circular C7008.1A. This circular states that FTA will assess the financial capacity of applicants for Sections 5307 and 5309 funding on the basis of overall current financial condition and future financial capability. In response to FTA's requirement, the TIP provides evidence of satisfactory financial capacity from agencies and local jurisdictions seeking Sections 5307 and 5309 funding. All transit projects are reflected under the MTA headings in Chapter VI. Documentation of local match for transit projects is provided in Appendix B.

The Maryland Transit Administration

The MTA, as a modal administration under the MDOT, derives financial capacity through Maryland's Transportation Trust Fund. The fund is credited with transportation-related receipts, including proceeds of motor vehicle titling and fuel taxes, a portion of the State's corporate income tax, registration fees for motor vehicles, bus and rail fares, port fees and airport revenues, together with bond and note proceeds, federal funds and other receipts. Capital expenditures are financed from net

revenues of the Department, federal grants and the proceeds of sales of Consolidated Transportation Bonds.

City of Annapolis

Matching funds for the City's transit projects are provided by the City and the State of Maryland. The City's portion of the local match is provided through the Off-Street Parking Fund. Documentation and approval of the local funds are contained in the City of Annapolis operating Budget and Capital Improvement Program (CIP). The State portion of the match is provided through the Transportation Trust Fund.

Harford County

State and local matching funds have been committed for Harford County transit services. State funds are provided through the Transportation Trust Fund. Local funds are dedicated in the County Office of Economic Development budget.

Howard County

State and local matching funds have also been committed for Howard County transit services. Adequate matching funds in the form of bonds and local revenues are available to match TIP projects.

F. FY 2020 Federal-Aid Annual Element Listing and TIP Funding Summary

In accordance with federal regulations, a separate listing of all projects in the TIP for which federal funds will be sought in FY 2020 is provided in Table 2. This list brings together information found in Chapter VI, the chapter containing individual project listings for each sponsoring agency. Projects in the Annual Element can also be identified in the individual project listings as those with dollar amounts in the FY 2020 columns.

Table 1 summarizes, by sponsoring agency, the level of federal funds requested in the FY 2020 Annual Element and federal funds available by fund source. Table 2 shows the projects in the FY 2020 Annual Element, the source of funds, the federal funds requested and the matching funds to be provided. Table 3 shows total funds, both federal and matching, programmed for FY 2020 through FY 2023 by sponsoring agency.

Exhibits 1 through 7 graphically summarize the 2020-2023 TIP. Exhibit 1 compares the total amount programmed in the 2017-2020, 2018-2021, 2019-2022, and 2020-2023 TIP documents. Exhibit 2 displays 2020-2023 TIP funding by fiscal year. Exhibit

3 summarizes federal and matching funds in the 2020-2023 TIP by sponsoring agency. Exhibits 4 and 5 summarize the number of projects and share of funding in the 2020-2023 TIP by project category. Exhibit 6 displays the share of FY 2020 funds by project phase while Exhibit 7 shows FY 2020 Annual Element federal fund requests by funding source.

**Table 1: Annual Element
(Funding in Thousands)**

Summary of the FY 2020 Federal-Aid Annual Element (continued on next page)

Sponsoring Agency	5307C	5307F	5307O	5310	5311O	5329	5337	5339F	BUILD
Anne Arundel County									
Baltimore City									
Baltimore County									
Carroll County									
Harford County									
Howard County									
MTA - Commuter Rail	\$86						\$18,624		
MTA - Transit	\$71,292	\$16,847	\$1,952		\$238		\$26,314	\$5,749	
Maryland Port Administration									\$6,555
Office of the Secretary						\$400			
SHA - Anne Arundel County									
SHA - Baltimore County									
SHA - Carroll County									
SHA - Harford County									
SHA - Howard County									
SHA - Regional									
Total Programmed	\$71,378	\$16,847	\$1,952	\$0	\$238	\$400	\$44,938	\$5,749	\$6,555
FY 2020 Appropriation*	\$64,557		\$1,952	\$6,268	\$238	\$650	\$52,738	\$5,456	\$6,555
Previous Funds Still Available*	\$6,821	\$16,847		\$4,186				\$293	
MDOTs Total Federal Apportionment for the Baltimore Region*	\$71,378	\$16,847	\$1,952	\$10,454	\$238	\$650	\$52,738	\$5,749	\$6,555

- 5307C Section 5307 Urbanized Area Formula Program (funding for capital projects)
- 5307F Section 5307 Flex (STBG funds flexed to Section 5307)
- 5307O Section 5307 Urbanized Area Formula Program (funding for operating projects)
- 5310 Section 5310 Enhanced Mobility of Seniors and Individuals with Disabilities Program
- 5311O Section 5311 Nonurbanized 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
- BUILD Better Utilizing Investments to Leverage Development grants

*Figures provided by MDOT

Summary of the FY 2020 Federal-Aid Annual Element (continued)

Sponsoring Agency	CMAQ	HSIP	NHPPC	Other	RTP	STBG	TAC	TIGER	Total
Anne Arundel County						\$4,093			\$4,093
Baltimore City			\$2,400			\$50,344			\$52,744
Baltimore County						\$20,640			\$20,640
Carroll County						\$4,776			\$4,776
Harford County						\$4,622			\$4,622
Howard County									\$0
MTA - Commuter Rail									\$18,710
MTA - Transit	\$44,800								\$167,192
Maryland Port Administration									\$6,555
Office of the Secretary								\$1,074	\$1,474
SHA - Anne Arundel County						\$11,898			\$11,898
SHA - Baltimore County			\$53,771			\$1,067			\$54,838
SHA - Carroll County						\$9			\$9
SHA - Harford County			\$3,062			\$482			\$3,544
SHA - Howard County			\$26,117						\$26,117
SHA - Regional	\$4,560	\$14,800	\$90,416	\$45	\$480	\$129,040	\$7,440		\$246,781
Total Programmed	\$49,360	\$14,800	\$175,766	\$45	\$480	\$226,971	\$7,440	\$1,074	\$623,993
FY 2020 Appropriation*	\$29,203	\$17,864	\$144,584			\$87,491		\$1,074	\$418,630
Previous Funds Still Available*	\$28,192		\$137,684	\$45	\$562	\$145,184	\$10,861		\$350,675
MDOTs Total Federal Apportionment for the Baltimore Region*	\$57,395	\$17,864	\$282,268	\$45	\$562	\$232,675	\$10,861	\$1,074	\$769,305

CMAQ Congestion Mitigation and Air Quality (flexed to transit becomes 5307)

HSIP Highway Safety Improvement Program

NHPPC National Highway Performance Program (National Highway System, Interstate Maintenance, Bridge (on-System))

Other Other (includes National Summer Transportation Institute Program)

RTP Recreational Trails Program

STBG Surface Transportation Block Grant Program

TAC Transportation Alternatives (Transportation Enhancement, Safe Routes to School) – subset of STBG

TIGER Transportation Investment Generating Economic Recovery grants

*Figures provided by MDOT

Summary of the FY 2021 Federal-Aid Annual Element (Funding in Thousands - continued below)

Sponsoring Agency	5307C	5307F	5307O	5310	5311O	5329	5337	5339F
Anne Arundel County								
Baltimore City								
Baltimore County								
Carroll County								
Harford County								
Howard County								
MTA - Commuter Rail	\$3,418						\$34,597	
MTA - Transit	\$71,282	\$13,730	\$1,952	\$3,370	\$238		\$26,840	\$5,858
Office of the Secretary						\$400		
SHA - Anne Arundel County								
SHA - Baltimore County								
SHA - Carroll County								
SHA - Harford County								
SHA - Howard County								
SHA - Regional								
Total Programmed	\$74,700	\$13,730	\$1,952	\$3,370	\$238	\$400	\$61,437	\$5,858

Summary of the FY 2021 Federal-Aid Annual Element (continued)

Sponsoring Agency	CMAQ	HSIP	NHPPC	Other	RTP	STBG	TAC	Total
Anne Arundel County						\$2,738		\$2,738
Baltimore City						\$5,847		\$5,847
Baltimore County						\$9,204		\$9,204
Carroll County								\$0
Harford County						\$5,620		\$5,620
Howard County								\$0
MTA - Commuter Rail								\$38,015
MTA - Transit	\$44,908							\$168,178
Office of the Secretary								\$400
SHA - Anne Arundel County						\$9,441		\$9,441
SHA - Baltimore County			\$60,219			\$5,341		\$65,560
SHA - Carroll County						\$7		\$7
SHA - Harford County			\$314			\$427		\$741
SHA - Howard County			\$28,783					\$28,783
SHA - Regional	\$4,560	\$14,800	\$90,416	\$45	\$480	\$127,440	\$7,440	\$245,181
Total Programmed	\$49,468	\$14,800	\$179,732	\$45	\$480	\$166,065	\$7,440	\$579,715

Summary of the FY 2022 Federal-Aid Annual Element (Funding in Thousands - continued below)

Sponsoring Agency	5307C	5307O	5311O	5329	5337	5339F	CMAQ
Anne Arundel County							
Baltimore City							
Baltimore County							
Carroll County							
Harford County							
Howard County							
MTA - Commuter Rail	\$1,242				\$36,618		
MTA - Transit	\$72,693	\$1,952	\$238		\$27,377	\$5,969	\$44,800
Office of the Secretary				\$400			
SHA - Anne Arundel County							
SHA - Baltimore County							
SHA - Carroll County							
SHA - Harford County							
SHA - Howard County							
SHA - Regional							\$4,560
Total Programmed	\$73,935	\$1,952	\$238	\$400	\$63,995	\$5,969	\$49,360

Summary of the FY 2022 Federal-Aid Annual Element (continued)

Sponsoring Agency	HSIP	NHPPC	RTP	STBG	TAC	Total
Anne Arundel County				\$833		\$833
Baltimore City				\$33,212		\$33,212
Baltimore County				\$4,000		\$4,000
Carroll County				\$2,848		\$2,848
Harford County				\$2,120		\$2,120
Howard County						\$0
MTA - Commuter Rail						\$37,860
MTA - Transit						\$153,029
Office of the Secretary						\$400
SHA - Anne Arundel County				\$9,479		\$9,479
SHA - Baltimore County		\$61,131		\$5,547		\$66,678
SHA - Carroll County						\$0
SHA - Harford County						\$0
SHA - Howard County		\$25,492				\$25,492
SHA - Regional	\$14,800	\$75,856	\$480	\$103,440	\$7,280	\$206,416
Total Programmed	\$14,800	\$162,479	\$480	\$161,479	\$7,280	\$542,367

Summary of the FY 2023 Federal-Aid Annual Element (Funding in Thousands - continued below)

Sponsoring Agency	5307C	5307O	5310	5311O	5329	5337	5339F
Anne Arundel County							
Baltimore City							
Baltimore County							
Carroll County							
Harford County							
Howard County							
MTA - Commuter Rail	\$624					\$30,084	
MTA - Transit	\$74,134	\$1,952	\$3,370	\$238		\$27,924	\$6,083
Office of the Secretary					\$400		
SHA - Anne Arundel County							
SHA - Baltimore County							
SHA - Carroll County							
SHA - Harford County							
SHA - Howard County							
SHA - Regional							
Total Programmed	\$74,758	\$1,952	\$3,370	\$238	\$400	\$58,008	\$6,083

Summary of the FY 2023 Federal-Aid Annual Element (continued)

Sponsoring Agency	CMAQ	HSIP	NHPPC	RTP	STBG	TAC	Total
Anne Arundel County							\$0
Baltimore City					\$48,635		\$48,635
Baltimore County					\$5,900		\$5,900
Carroll County					\$2,058		\$2,058
Harford County					\$3,810		\$3,810
Howard County							\$0
MTA - Commuter Rail							\$30,708
MTA - Transit	\$44,800						\$158,501
Office of the Secretary							\$400
SHA - Anne Arundel County					\$7,707		\$7,707
SHA - Baltimore County			\$56,418		\$3,644		\$60,062
SHA - Carroll County							\$0
SHA - Harford County							\$0
SHA - Howard County			\$532				\$532
SHA - Regional	\$4,560	\$14,800	\$75,856	\$480	\$103,440	\$7,280	\$206,416
Total Programmed	\$49,360	\$14,800	\$132,806	\$480	\$175,194	\$7,280	\$524,729



Transportation Improvement Program - FY 2020-2023

Table 2: FY 2020 Annual Element (Funding in Thousands)

Project Name	Project ID	Project Type	Funding Source	Federal Funds	Matching Funds
Anne Arundel County - Anne Arundel County					
Furnace Avenue Bridge over Deep Run	11-1103-13	Bridge repair/deck replacement	STBG	225	45
Harwood Road Bridge over Stocketts Run	11-1208-13	Bridge repair/deck replacement	STBG	1,274	446
Magothy Bridge Road Bridge over Magothy River	11-1402-13	Bridge repair/deck replacement	STBG	2,379	595
O'Connor Road Bridge over Deep Run	11-1403-13	Bridge repair/deck replacement	STBG	0	97
Polling House Road Bridge over Rock Branch	11-1602-13	Bridge repair/deck replacement	STBG	215	46
Subtotal				4,093	1,229
Baltimore City - Baltimore City					
Baltimore City Locked Gate Interstate Access Point Approval (IAPA)	12-1201-99	Miscellaneous	Other	0	1,000
Sisson Street Bridge over CSX Railroad	12-1216-13	Bridge repair/deck replacement	STBG	1,500	6,000
Citywide Bicycle and Pedestrian Improvements	12-1217-25	Bicycle/pedestrian facility	STBG	1,784	446
Citywide Traffic Signals, Intelligent Transportation System and Safety Improvements	12-1218-07	ITS	STBG	14,720	4,565
Wilkens Avenue Bridge Over Gwynns Falls	12-1403-13	Bridge repair/deck replacement	STBG	11,040	2,760
Belair Road Complete Streets	12-1404-11	Road resurfacing/rehabilitation	STBG	800	200
Citywide System Preservation	12-1414-11	Road resurfacing/rehabilitation	NHPPC	2,400	600
			STBG	400	100
Hanover Street Bridge Multimodal Corridor	12-1419-13	Bridge repair/deck replacement	STBG	2,400	600
I-83 Concrete Deck Mill and Resurface	12-1604-13	Bridge repair/deck replacement	STBG	800	200
Transportation Management Center Upgrade	12-1701-04	Traffic engineering	STBG	4,800	1,200



Transportation Improvement Program - FY 2020-2023

Table 2: FY 2020 Annual Element (Funding in Thousands)

Project Name	Project ID	Project Type	Funding Source	Federal Funds	Matching Funds
MLK Blvd. and Howard St. Intersection Improvements	12-1706-11	Road resurfacing/rehabilitation	STBG	400	100
Capital Project Delivery Services	12-1901-99	Miscellaneous	STBG	500	1,500
25th Street Rehabilitation from Greenmount Avenue to Kirk Avenue	12-2001-11	Road resurfacing/rehabilitation	STBG	1,200	300
Citywide Asset Management	12-2003-19	Other	STBG	800	200
Baltimore Street from Howard Street to President Street	12-2004-11	Road resurfacing/rehabilitation	STBG	1,200	300
Citywide Transportation Plan	12-2006-99	Miscellaneous	STBG	1,200	500
Fremont Avenue Rehabilitation from Lafayette Avenue to Presstman Street	12-2007-11	Road resurfacing/rehabilitation	STBG	1,200	300
Madison Street Rehabilitation from North Milton Avenue to Edison Highway	12-2010-11	Road resurfacing/rehabilitation	STBG	1,200	300
Park Heights Avenue from West Rogers Avenue to Strathmore Avenue	12-2011-11	Road resurfacing/rehabilitation	STBG	1,200	300
Patapsco Avenue from Magnolia Avenue to Patapsco River Bridge	12-2012-11	Road resurfacing/rehabilitation	STBG	1,200	300
Pennington Avenue Rehabilitation from Birch Street to East Ordnance Road	12-2013-11	Road resurfacing/rehabilitation	STBG	800	200
Citywide Transportation Studies	12-2014-99	Miscellaneous	STBG	1,200	200
Subtotal				52,744	22,171
Baltimore County - Baltimore County					
Mohrs Lane Bridge No. B-0143 over CSX Railroad	13-0803-13	Bridge repair/deck replacement	STBG	9,600	2,400
Old Court Road Bridge No. B-0237 over Bens Run	13-1204-13	Bridge repair/deck replacement	STBG	1,440	460
Phoenix Road Bridge No. BC6507 over Gunpowder Falls & NCR Trail	13-2001-13	Bridge repair/deck replacement	STBG	9,600	2,400
Subtotal				20,640	5,260
Carroll County - Carroll County					
Bixler Church Road Bridge over Big Pipe Creek	14-1101-13	Bridge repair/deck replacement	STBG	429	107



Transportation Improvement Program - FY 2020-2023

Table 2: FY 2020 Annual Element (Funding in Thousands)

Project Name	Project ID	Project Type	Funding Source	Federal Funds	Matching Funds
Shepherds Mill Road Bridge over Little Pipe Creek	14-1102-13	Bridge repair/deck replacement	STBG	2,993	748
Stone Chapel Road Bridge over Little Pipe Creek	14-1103-13	Bridge repair/deck replacement	STBG	216	54
Babylon Road Bridge over Silver Run	14-1601-13	Bridge repair/deck replacement	STBG	0	0
Gaither Road Bridge over South Branch Patapsco River	14-1602-13	Bridge repair/deck replacement	STBG	220	55
McKinstry's Mill Road Bridge over Sam's Creek	14-1603-13	Bridge repair/deck replacement	STBG	184	46
Hughes Shop Road Bridge over Bear Branch	14-1802-13	Bridge repair/deck replacement	STBG	224	56
Bridge Inspection Program	14-9401-14	Bridge inspections	STBG	510	0
Subtotal				4,776	1,066
Harford County - Harford County					
Abingdon Road Bridge #169 over CSX Railroad	15-1001-13	Bridge repair/deck replacement	STBG	200	50
Chestnut Hill Bridge #40	15-1101-13	Bridge repair/deck replacement	STBG	1,072	308
Phillips Mill Road Bridge #70 over East Branch Tributary	15-1102-13	Bridge repair/deck replacement	STBG	2,300	650
Bata Boulevard Access Road	15-1402-42	New or extended roadways	Other	0	100
Stafford Road Bridge #24 over Deer Creek	15-1501-13	Bridge repair/deck replacement	STBG	100	100
Grier Nursery Road Bridge #43	15-2001-13	Bridge repair/deck replacement	STBG	400	100
Hookers Mill Road Bridge #13	15-2002-13	Bridge repair/deck replacement	STBG	400	100
Bridge Inspection Program	15-9411-14	Bridge inspections	STBG	150	0
Subtotal				4,622	1,408
Howard County - Howard County					
Bridge Repairs and Deck Replacement	16-0436-13	Bridge repair/deck replacement	Other	0	7,470



Transportation Improvement Program - FY 2020-2023

Table 2: FY 2020 Annual Element (Funding in Thousands)

Project Name	Project ID	Project Type	Funding Source	Federal Funds	Matching Funds
Dorsey Run Road: MD 175 to CSX Railroad Spur	16-1403-41	Roadway widening	Other	0	800
Guilford Road: US 1 to Dorsey Run Road	16-1405-41	Roadway widening	Other	0	720
MD 175 at Oakland Mills Rd Interchange	16-1407-46	New interchange	Other	0	10,500
Snowden River Parkway: Broken Land Parkway to Oakland Mills Road	16-1410-41	Roadway widening	Other	0	850
US 29/Broken Land Parkway Interchange and North South Connector Road	16-1901-42	New or extended roadways	Other	0	18,250
Bus Rapid Transit	16-2001-67	Transit capacity expansion	Other	0	2,000
Subtotal				0	40,590
Maryland Port Administration - Baltimore City					
Seagirt Marine Terminal Modernization: Berth Improvements	32-2001-83	Facility expansion	BUILD	6,555	23,093
Subtotal				6,555	23,093
Maryland Transportation Authority - Baltimore City					
I-95 Fort McHenry Tunnel: Moravia Road to Tunnel Improvements	22-1601-41	Roadway widening	Other	0	977
Subtotal				0	977
Maryland Transportation Authority - Harford County					
I-95 Express Toll Lanes Northbound Extension	25-1801-41	Roadway widening	Other	0	37,478
Subtotal				0	37,478
MTA - Commuter Rail - Regional					
MARC Rolling Stock Overhauls and Replacement	70-1501-53	Fleet improvement	5337	7,291	1,823



Transportation Improvement Program - FY 2020-2023

Table 2: FY 2020 Annual Element (Funding in Thousands)

Project Name	Project ID	Project Type	Funding Source	Federal Funds	Matching Funds
MARC Improvements	70-1502-54	Preservation and improvements	5307C	86	22
			5337	11,333	2,833
Subtotal				18,710	4,678
MTA - Transit - Regional					
Small Urban Transit Systems - Operating Assistance	40-0104-61	Operating assistance	5307O	326	326
Kirk Bus Facility Replacement - Phase 1 & 2	40-1203-65	Rehabilitation of facilities	5307C	4,069	1,017
			5339F	5,456	1,364
Bus and Rail Preventive Maintenance	40-1204-64	Preservation and improvements	5307C	12,790	3,198
			5337	26,314	6,578
Urban Transit Systems - Capital Assistance	40-1602-05	Fleet improvement	5307C	533	133
			5339F	133	33
Urban Transit Systems - Operating Assistance	40-1603-61	Operating assistance	5307O	1,626	1,626
Agencywide System Preservation and Improvement	40-1801-64	Preservation and improvements	5307C	1,571	393
Bus and Paratransit Vehicle Overhaul and Replacement	40-1802-05	Fleet improvement	5307C	2,400	600
			CMAQ	43,250	10,813
Metro and Light Rail Rolling Stock Overhauls and Replacement	40-1804-63	Fleet improvement	5307C	37,530	9,383
			5307F	16,847	4,212
Metro and Light Rail System Preservation and Improvement	40-1805-64	Preservation and improvements	5307C	12,239	3,060
Rural Transit Systems - Operating Assistance	40-9204-61	Operating assistance	5311O	238	238



Transportation Improvement Program - FY 2020-2023

Table 2: FY 2020 Annual Element (Funding in Thousands)

Project Name	Project ID	Project Type	Funding Source	Federal Funds	Matching Funds
Small Urban Transit Systems - Capital Assistance	40-9502-05	Fleet improvement	5307C	160	40
			5339F	160	40
Ridesharing - Baltimore Region	40-9901-01	Ridesharing	CMAQ	1,550	0
Subtotal				167,192	43,054
Office of the Secretary - Baltimore City					
Port of Baltimore Enhancements	92-1401-83	Facility expansion	TIGER	1,074	2,000
Subtotal				1,074	2,000
Office of the Secretary - Regional					
State Safety Oversight	90-1401-39	Other	5329	400	200
Baltimore-Washington Superconducting Maglev (SCMAGLEV) Project	90-1901-99	Miscellaneous	FRA	13,900	3,480
Subtotal				14,300	3,680
SHA - Anne Arundel County					
MD 198: MD 295 to MD 32	61-1403-41	Roadway widening	Other	0	170
US 50: MD 70 to MD 2	61-1404-41	Roadway widening	Other	0	39
MD 175: Disney Road to Reece Road	61-1601-41	Roadway widening	STBG	4,083	3,530
MD 175: National Business Parkway to McCarron Court	61-1701-41	Roadway widening	Other	0	1,493
			STBG	7,815	2,181
Subtotal				11,898	7,413



Transportation Improvement Program - FY 2020-2023

Table 2: FY 2020 Annual Element (Funding in Thousands)

Project Name	Project ID	Project Type	Funding Source	Federal Funds	Matching Funds
SHA - Baltimore County					
MD 140: Painters Mill Road to Owings Mills Boulevard - Phase 2	63-0802-41	Roadway widening	Other	0	530
I-795: Dolfield Boulevard Interchange	63-0803-46	New interchange	NHPPC	990	110
MD 140: Garrison View Road to Painters Mill Road - Phase 1	63-1203-41	Roadway widening	Other	0	74
I-695: US 40 to MD 144	63-1601-41	Roadway widening	NHPPC	12,124	260
			Other	0	348
I-695: Bridge Replacements at Benson Ave and US 1	63-1602-43	Bridge widening	Other	0	50
I-83: Bridge Replacement over Padonia Road	63-1701-13	Bridge repair/deck replacement	NHPPC	6,564	278
			Other	0	611
MD 137: Bridge Replacement over I-83	63-1703-13	Bridge repair/deck replacement	Other	0	56
US 1: Bridge Replacement over CSX	63-1704-13	Bridge repair/deck replacement	NHPPC	7,495	2,084
			Other	0	42
US 40: Bridge Replacements over Little & Big Gunpowder Falls	63-1706-13	Bridge repair/deck replacement	NHPPC	5,653	1,786
			Other	0	3
MD 45: Padonia Rd to Wight Ave	63-1707-11	Road resurfacing/rehabilitation	NHPPC	900	4,879
I-695 at Cromwell Bridge Road - Drainage Improvement	63-1801-38	Environmental other	NHPPC	2,846	920
			Other	0	85
I-695: I-70 to MD 43	63-1802-41	Roadway widening	NHPPC	17,199	14,351
MD 151/MD 151B: Bridge Replacements	63-2001-13	Bridge repair/deck replacement	Other	0	322



Transportation Improvement Program - FY 2020-2023

Table 2: FY 2020 Annual Element (Funding in Thousands)

Project Name	Project ID	Project Type	Funding Source	Federal Funds	Matching Funds
MD 151/MD 151B: Bridge Replacements	63-2001-13	Bridge repair/deck replacement	STBG	1,067	301
Subtotal				54,838	27,090
SHA - Carroll County					
MD 30 Business: North Woods Trail to CSX Railroad (Hampstead Community Safety & Enhancement)	64-1401-19	Other	Other	0	8,466
			STBG	9	2
MD 86: Bridge Replacement over Gunpowder Falls	64-1701-13	Bridge repair/deck replacement	Other	0	1,973
MD 496: Bridge Replacement over Big Pipe Creek	64-1702-13	Bridge repair/deck replacement	Other	0	71
Subtotal				9	10,512
SHA - Harford County					
US 40: MD 7 & MD 159 Intersection Reconstruction - Phase 2	65-1402-41	Roadway widening	NHPPC	3,062	489
			Other	0	50
MD 24: South of Stirrup Run Culvert to Deer Creek Bridge, Section G	65-1601-12	Road reconstruction	Other	0	67
			STBG	482	168
Subtotal				3,544	774
SHA - Howard County					
US 29: Middle Patuxent River to Seneca Drive - Phase 2	66-1406-41	Roadway widening	Other	0	664
MD 32: MD 108 to Linden Church Road	66-1602-41	Roadway widening	Other	0	2,612
MD 32: Linden Church Road to I-70, Capacity & Safety Improvements	66-1703-41	Roadway widening	NHPPC	26,117	6,470



Transportation Improvement Program - FY 2020-2023

Table 2: FY 2020 Annual Element (Funding in Thousands)

Project Name	Project ID	Project Type	Funding Source	Federal Funds	Matching Funds
I-95: Active Traffic Management	66-1801-41	Roadway widening	Other	0	342
Subtotal				26,117	10,088
SHA - Regional					
Morgan State University Transportation Research Program	60-0702-99	Miscellaneous	Other	45	0
Areawide Bridge Replacement And Rehabilitation	60-9310-13	Bridge repair/deck replacement	NHPPC	17,600	4,400
			STBG	14,080	3,520
Areawide Resurfacing And Rehabilitation	60-9501-11	Road resurfacing/rehabilitation	HSIP	6,400	1,600
			NHPPC	48,240	12,060
			STBG	38,000	9,500
Areawide Congestion Management	60-9504-04	Traffic engineering	CMAQ	1,840	460
			NHPPC	3,320	830
			STBG	13,680	3,420
Areawide Environmental Projects	60-9506-38	Environmental other	HSIP	880	220
			NHPPC	3,520	880
			RTP	480	120
			STBG	37,280	9,320
Areawide Safety And Spot Improvements	60-9508-19	Other	CMAQ	2,720	680
			HSIP	7,520	1,880
			NHPPC	17,680	4,420



Transportation Improvement Program - FY 2020-2023

Table 2: FY 2020 Annual Element (Funding in Thousands)

Project Name	Project ID	Project Type	Funding Source	Federal Funds	Matching Funds
Areawide Safety And Spot Improvements	60-9508-19	Other	STBG	21,200	5,300
Areawide Urban Reconstruction	60-9511-19	Other	NHPPC	56	14
			STBG	4,800	1,200
Areawide Transportation Alternatives Projects	60-9903-29	Other	TAC	7,440	1,860
Subtotal				246,781	61,684



Transportation Improvement Program - FY 2020-2023

Table 3. Summary of FY 2020-2023 TIP Funding by Sponsoring Agency and Fiscal Year (Funding in Thousands)

Sponsoring Agency	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	FY 2020-2023 Federal Funds Total	FY 2020-2023 Matching Funds Total	Grand Total
Anne Arundel County	\$4,093	\$1,229	\$2,738	\$14,399	\$833	\$280	\$0	\$0	\$7,664	\$15,908	\$23,572
Baltimore City	\$52,744	\$22,171	\$5,847	\$1,879	\$33,212	\$7,886	\$48,635	\$12,115	\$140,438	\$44,051	\$184,489
Baltimore County	\$20,640	\$5,260	\$9,204	\$1,576	\$4,000	\$1,000	\$5,900	\$700	\$39,744	\$8,536	\$48,280
Carroll County	\$4,776	\$1,066	\$0	\$0	\$2,848	\$584	\$2,058	\$514	\$9,682	\$2,164	\$11,846
Harford County	\$4,622	\$1,408	\$5,620	\$1,256	\$2,120	\$540	\$3,810	\$1,065	\$16,172	\$4,269	\$20,441
Howard County	\$0	\$40,590	\$0	\$14,300	\$0	\$900	\$0	\$25,050	\$0	\$80,840	\$80,840
Maryland Port Administration	\$6,555	\$23,093	\$0	\$10,353	\$0	\$0	\$0	\$0	\$6,555	\$33,446	\$40,001
Maryland Transportation Authority	\$0	\$38,455	\$0	\$93,813	\$0	\$201,193	\$0	\$239,887	\$0	\$573,348	\$573,348
MTA - Commuter Rail	\$18,710	\$4,678	\$38,015	\$9,504	\$37,860	\$9,466	\$30,708	\$7,677	\$125,293	\$31,325	\$156,618
MTA - Transit	\$167,192	\$43,054	\$168,178	\$43,740	\$153,029	\$39,597	\$158,501	\$41,348	\$646,900	\$167,739	\$814,639
Office of the Secretary	\$15,374	\$5,680	\$400	\$200	\$400	\$200	\$400	\$200	\$16,574	\$6,280	\$22,854
SHA - Anne Arundel County	\$11,898	\$7,413	\$9,441	\$3,998	\$9,479	\$3,228	\$7,707	\$2,151	\$38,525	\$16,790	\$55,315
SHA - Baltimore County	\$54,838	\$27,090	\$65,560	\$42,192	\$66,678	\$33,628	\$60,062	\$24,256	\$247,138	\$127,166	\$374,304
SHA - Carroll County	\$9	\$10,512	\$7	\$190	\$0	\$92	\$0	\$26	\$16	\$10,820	\$10,836
SHA - Harford County	\$3,544	\$774	\$741	\$186	\$0	\$0	\$0	\$0	\$4,285	\$960	\$5,245
SHA - Howard County	\$26,117	\$10,088	\$28,783	\$7,788	\$25,492	\$6,344	\$532	\$151	\$80,924	\$24,371	\$105,295
SHA - Regional	\$246,781	\$61,684	\$245,181	\$61,284	\$206,416	\$51,604	\$206,416	\$51,604	\$904,794	\$226,176	\$1,130,970
Grand Total	\$637,893	\$304,245	\$579,715	\$306,658	\$542,367	\$356,542	\$524,729	\$406,744	\$2,284,704	\$1,374,189	\$3,658,893

Exhibit 1. Comparison of the Total Amount Programmed in the 2017, 2018, 2019, and 2020 TIPs

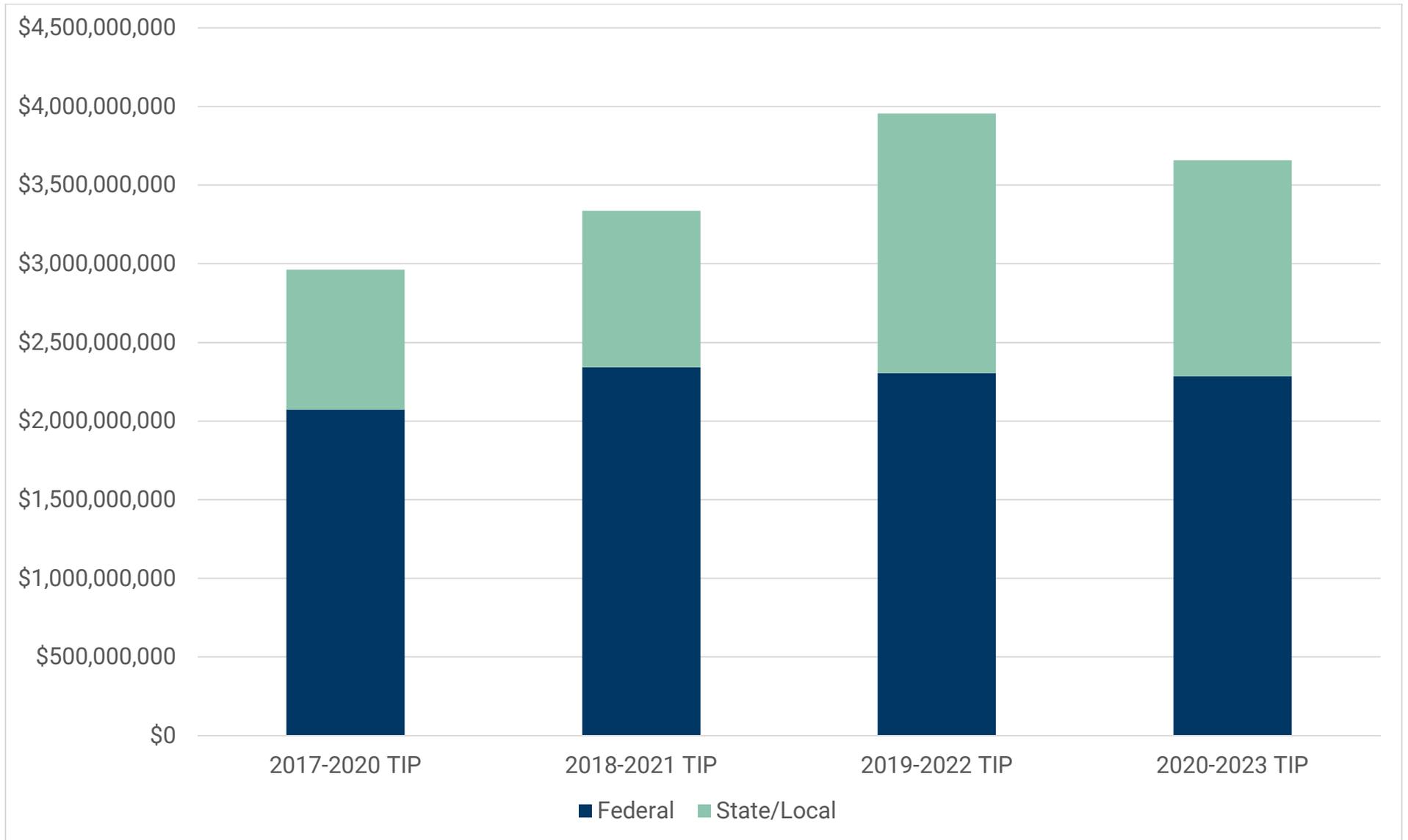
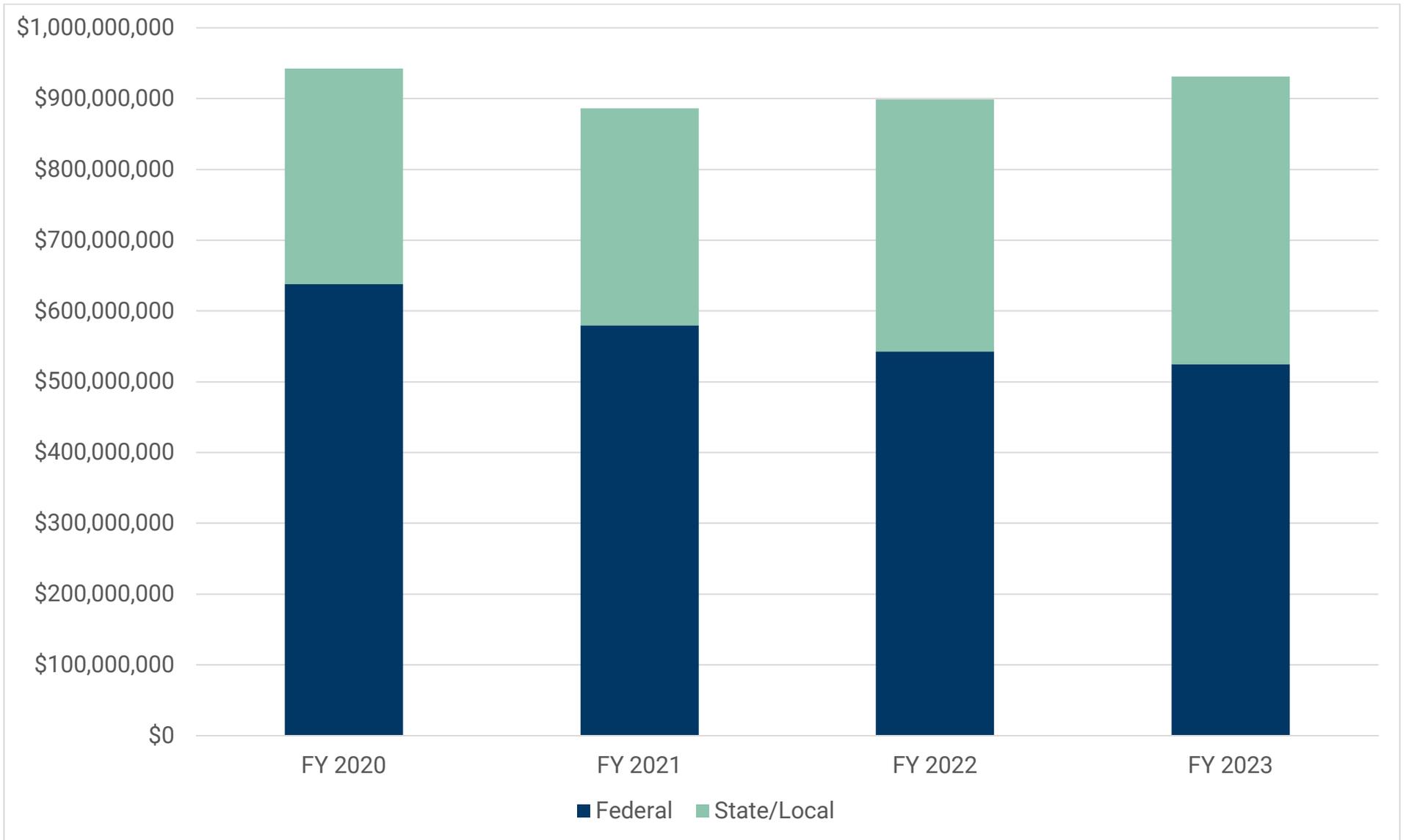


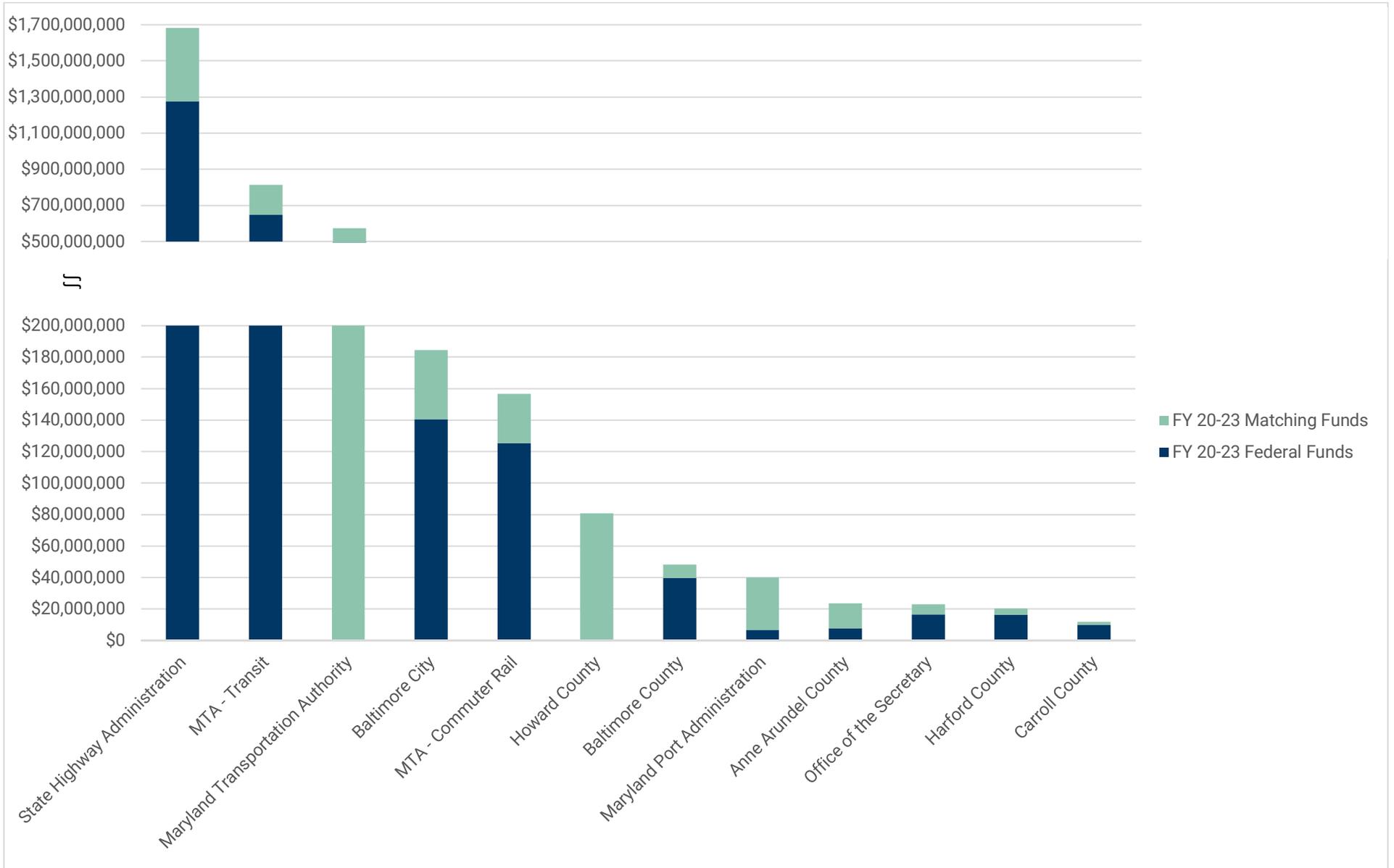
Exhibit 2. FY 2020-2023 TIP Funding by Fiscal Year





Transportation Improvement Program - FY 2020-2023

Exhibit 3. FY 2020-2023 TIP Funding by Sponsoring Agency





Project Category	Number of Projects
Highway Preservation	78
Highway Capacity	25
Transit Preservation	10
Emission Reduction Strategy	7
Miscellaneous	6
Environmental/Safety	3
Commuter Rail Preservation	3
Enhancement Program	2
Ports	2
Transit Capacity	1
Commuter Rail Capacity	0
Total	137

Exhibit 5. Share of FY 2020-2023 TIP Funding by Project Category

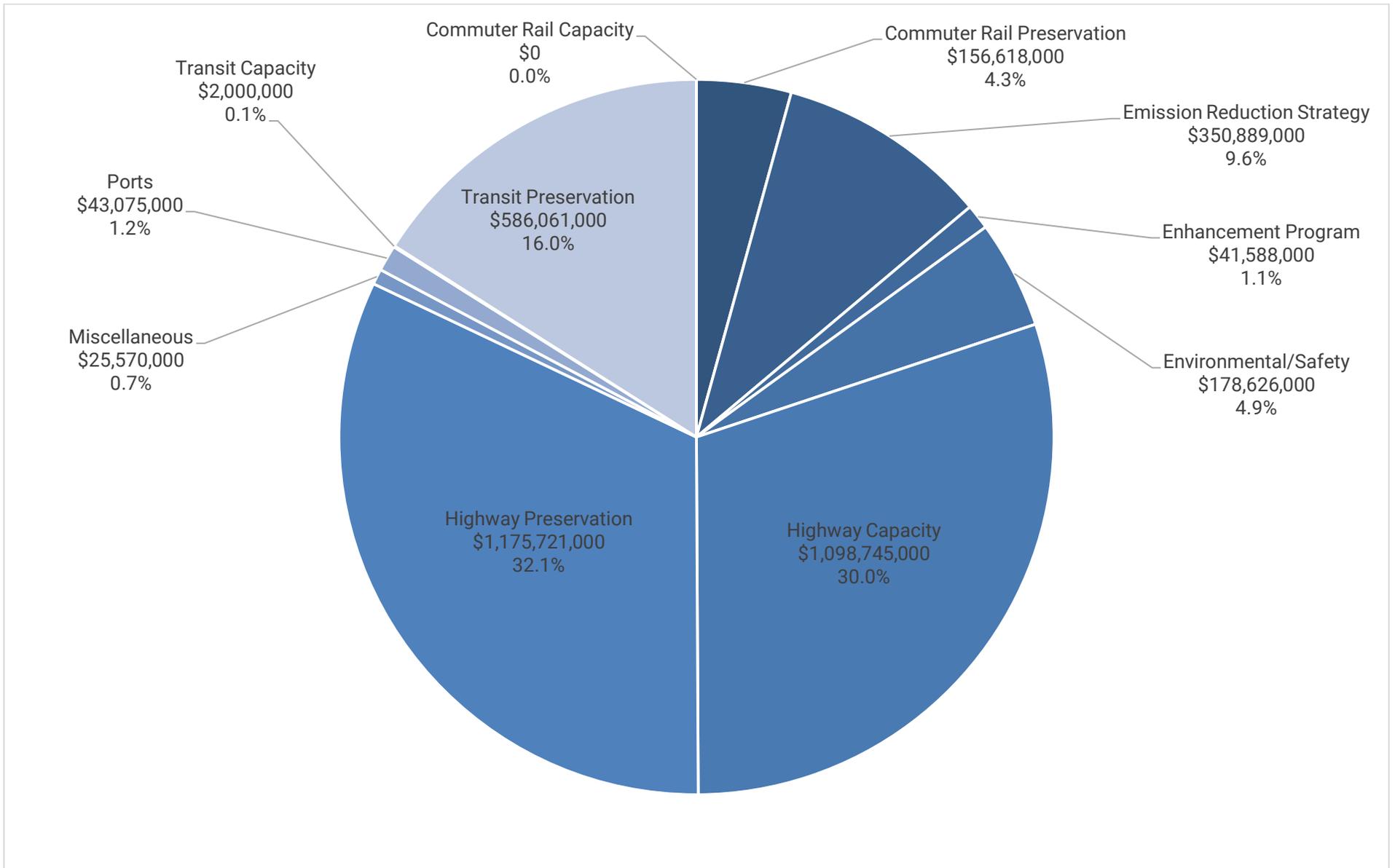
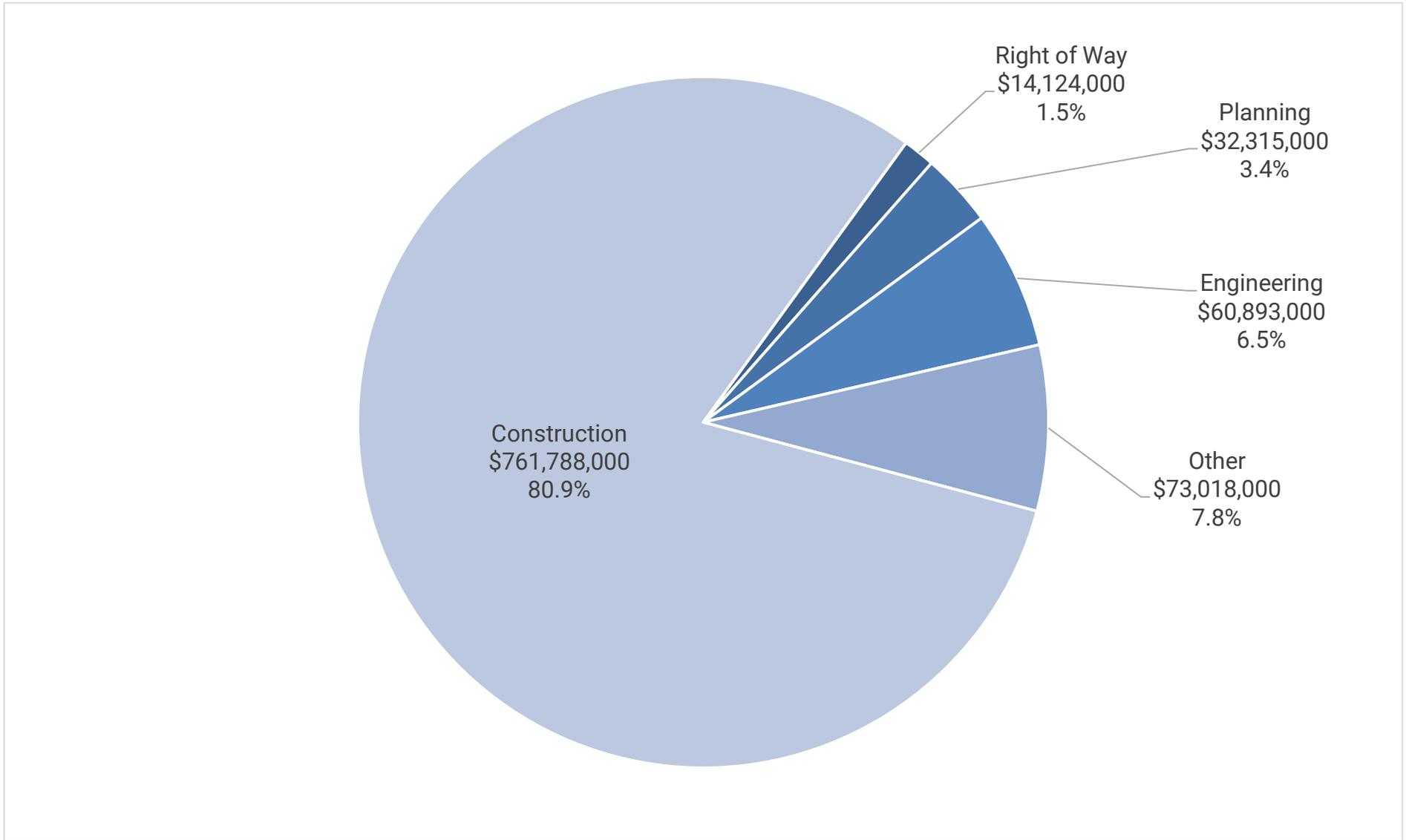


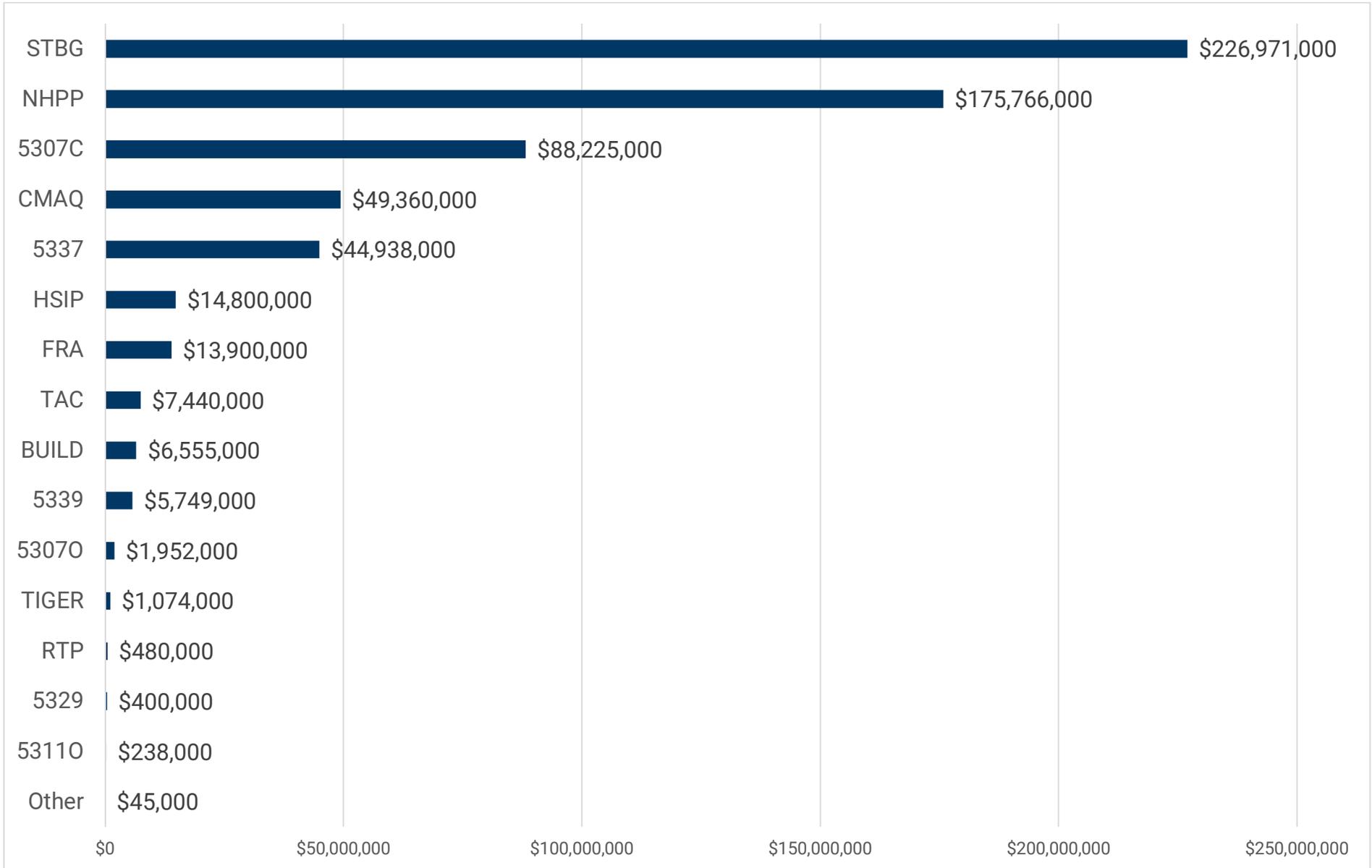
Exhibit 6. Share of FY 2020 TIP Funding by Project Phase





Transportation Improvement Program - FY 2020-2023

Exhibit 7. FY 2020 Federal Fund Requests by Fund Source



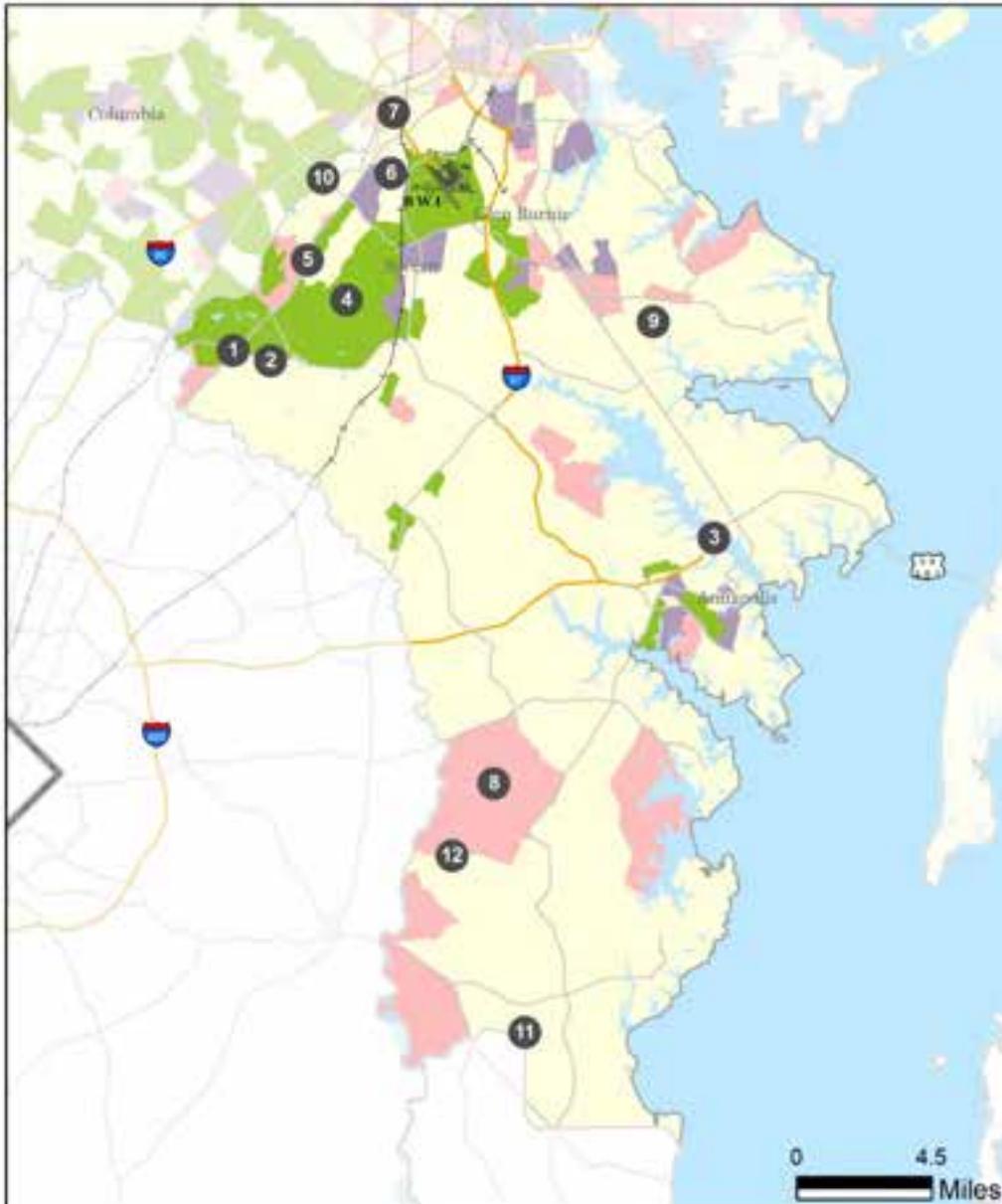
VI. TIP PROJECT INFORMATION

A. Project and Environmental Justice Maps by Jurisdiction

The following maps show the locations of specific TIP projects in relation to Environmental Justice (EJ) TAZs. Each map shows all EJ TAZs, breaking EJ TAZs into those exceeding the regional average for households in poverty (10.2%), those exceeding the regional average for minority concentration (42.5%), and those exceeding both regional averages. Section II.B includes further discussion on EJ and the identification of EJ TAZs.

The project listings accompanying each map represent the projects that could be shown through mapping techniques. There are numerous projects that cannot be mapped such as bus purchases and operating assistance. For more detailed information on federally funded projects, please refer to the annual element in section V.F or the full project listing following these maps in section VI.B. A project index is included at the end of the document.

Anne Arundel County Projects in Relation to Minority & Poverty Concentrations



Project Sponsor: Office of the Secretary

1 Baltimore-Washington Superconducting Maglev (BOMAGLEV) Project 90-1901-09

Project Sponsor: State Highway Administration

2 MD 198: MD 295 to MD 32 61-1403-41

3 US 50: MD 70 to MD 2 61-1404-41

4 MD 175: Disney Road to Reece Road 61-1601-41

5 MD 175: National Business Parkway to McCarron Court 61-1701-41

Project Sponsor: Anne Arundel County

6 Hanover Road Corridor Improvement 11-1801-42

7 Furnace Avenue Bridge over Deep Run 11-1103-13

8 Hanwood Road Bridge over Stocketts Run 11-1206-13

9 Magothy Bridge Road Bridge over Magothy River 11-1402-13

10 O'Connor Road Bridge over Deep Run 11-1403-13

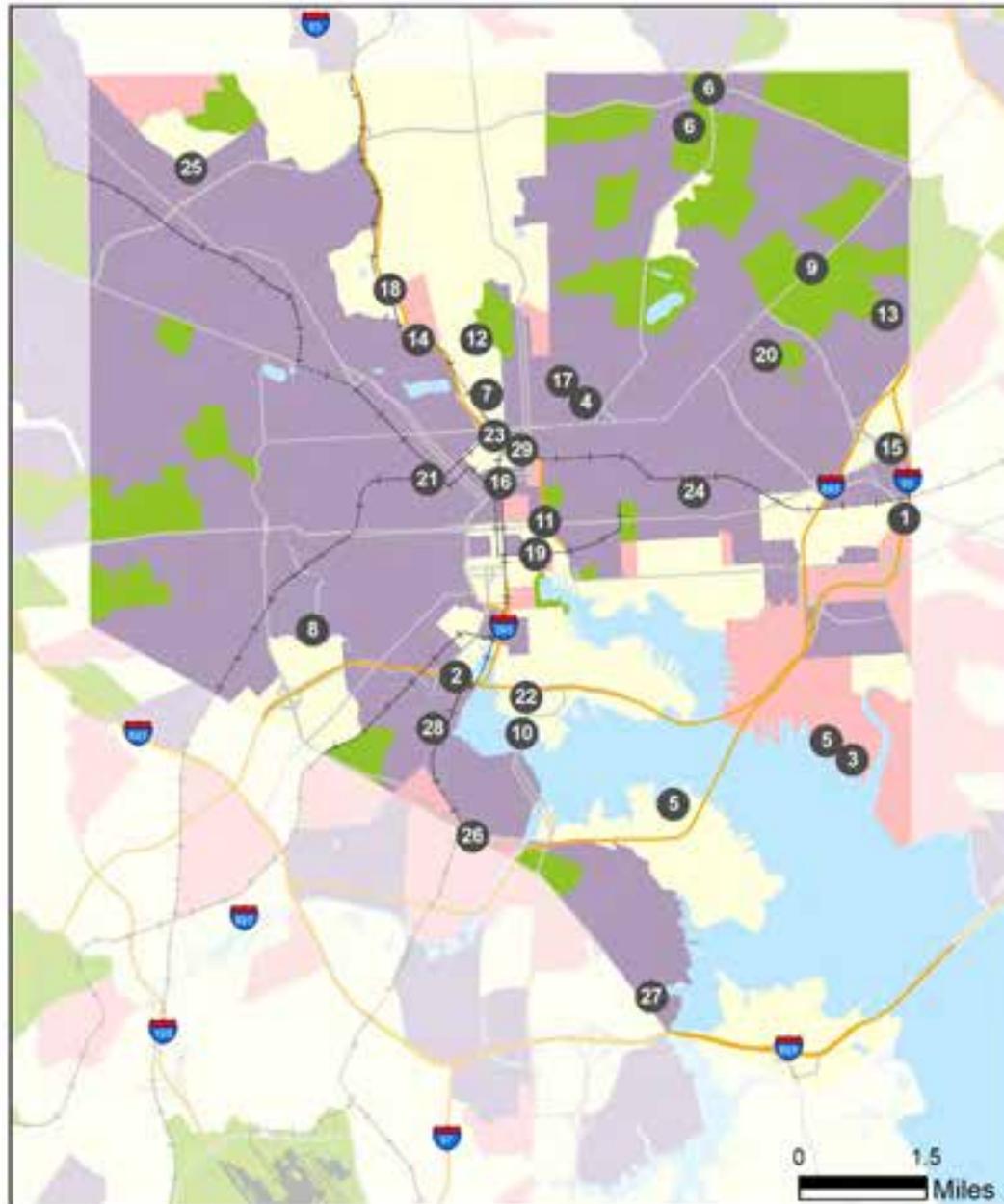
11 McKandree Road Culvert over Lyons Creek 11-1601-19

12 Polling House Road Bridge over Rock Branch 11-1602-13

- EJ TAZs: Minority Population Above Regional Average of 42.5%
- EJ TAZs: Household Poverty Above Regional Average of 10.2%
- EJ TAZs: Minority Population & Household Poverty Above Regional Average
- Non EJ TAZs: Minority Population & Household Poverty Below Regional Average

Transportation Analysis Zones (2010) show where the population that is non-white or Hispanic is higher than the regional average of 42.5% and where household poverty is higher than the regional average of 10.2% from the 2013-2017 American Community Survey 5-Year Estimates. Data shown for the Baltimore region only. Data Source: BMC, © HERE 2018, TIGERLine®, MTA, U.S. Census, American Community Survey.

Baltimore City Projects in Relation to Minority & Poverty Concentrations

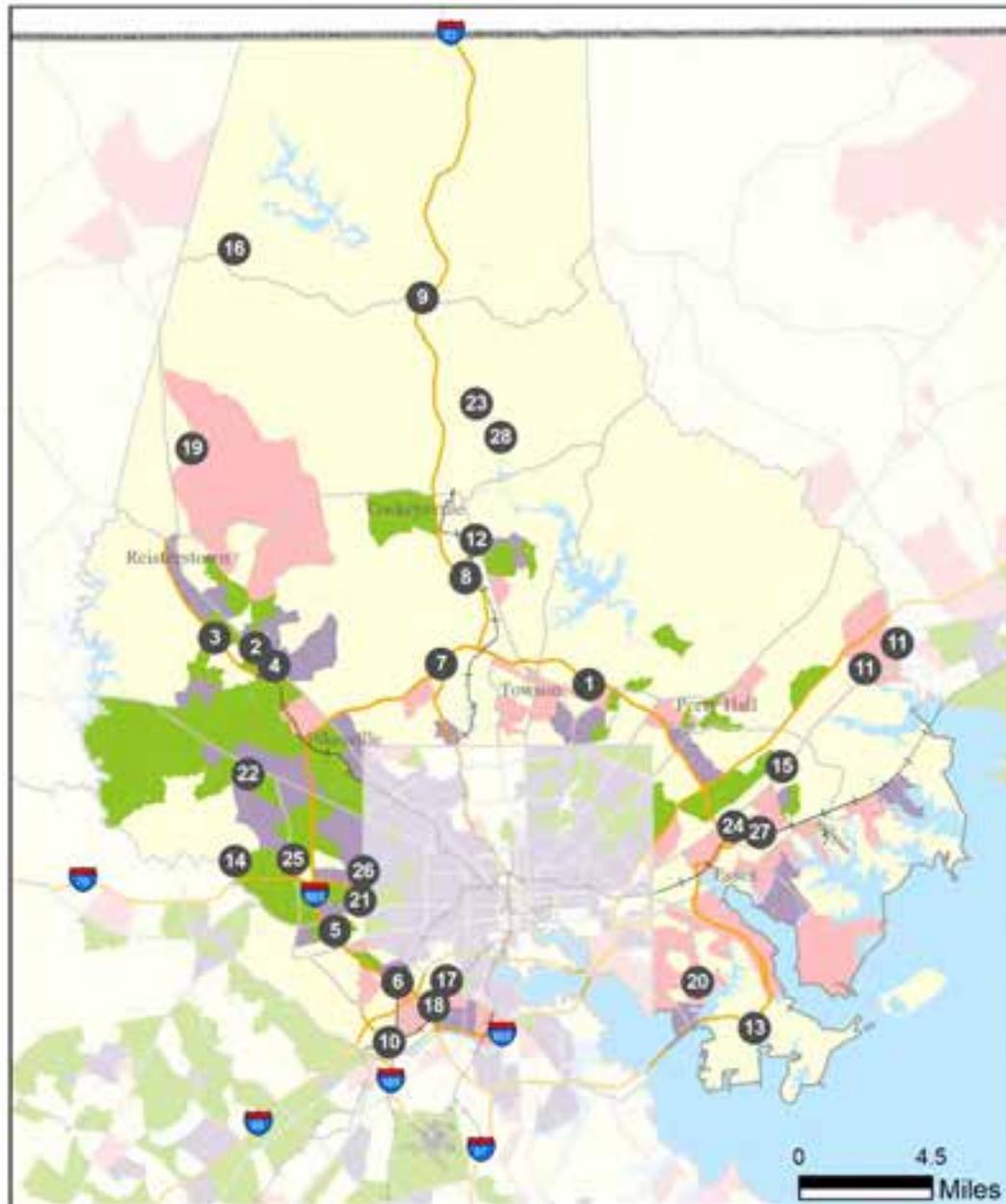


Project Sponsor: Maryland Transportation Authority		
1	I-95 Fort McHenry Tunnel - Moravia Road to Tunnel Improvements	22-1601-41
2	I-95 Fort McHenry Tunnel - Port Covington Access	22-1901-45
Project Sponsor: Maryland Port Administration		
3	Seagriff Marine Terminal Modernization: Berth Improvements	32-2001-83
Project Sponsor: Maryland Transit Administration		
4	Kirk Bus Facility Replacement - Phase 1 & 2	40-1203-65
Project Sponsor: Office of the Secretary		
5	Port of Baltimore Enhancements	92-1401-83
Project Sponsor: Baltimore City		
6	Perring Parkway Ramp and Hillen Road Bridge	12-1215-13
7	Sisson Street Bridge over CSX Railroad	12-1216-13
8	Wilkins Avenue Bridge Over Gwynns Falls	12-1403-13
9	Belair Road Complete Streets	12-1404-11
10	Hanover Street Bridge Multimodal Corridor	12-1419-13
11	Orleans Street Bridge over I-83 and City Streets	12-1601-13
12	Remington Avenue Bridge over Stony Run	12-1602-13
13	Radecke Avenue over Moores Run	12-1603-13
14	I-83 Concrete Deck Mill and Resurface	12-1604-13
15	Moravia Road Ramp Bridge over Puteski Highway	12-1605-13
16	MLK Blvd. and Howard St. Intersection Improvements	12-1706-11
17	25th Street Rehabilitation from Greenmount Avenue to Kirk Avenue	12-2001-11
18	41st Street over I-83, MTA Light Rail Tracks, and Jones Falls	12-2002-13
19	Baltimore Street from Howard Street to President Street	12-2004-11
20	Brehms Lane over Herring Run	12-2005-13
21	Fremont Avenue Rehabilitation from Lafayette Avenue to Pressman Street	12-2007-11
22	Hanover Street Over CSX	12-2008-13
23	Howard Street over I-83, CSX, Antrak, and Jones Falls	12-2009-13
24	Madison Street Rehabilitation from North Milton Avenue to Edison Highway	12-2010-11
25	Park Heights Avenue from West Rogers Avenue to Stratmore Avenue	12-2011-11
26	Patapsco Avenue from Magnolia Avenue to Patapsco River Bridge	12-2012-11
27	Perrington Avenue Rehabilitation from Birch Street to East Ordnance Road	12-2013-11
28	Walview Avenue over Ramp to 205	12-2015-13
29	Baltimore City Locked Gate Interstate Access Point Approval (IAPA)	12-1201-99

- EJ TAZs: Minority Population Above Regional Average of 42.5%
- EJ TAZs: Household Poverty Above Regional Average of 10.2%
- EJ TAZs: Minority Population & Household Poverty Above Regional Average
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Baltimore County Projects in Relation to Minority & Poverty Concentrations



Project Sponsor: State Highway Administration

1	I-695 at Cromwell Bridge Road - Drainage Improvement	63-1801-36
2	MD 140: Painters Mill Road to Owings Mills Boulevard - Phase 2	63-0803-41
3	I-705: Doffield Boulevard Interchange	63-0803-46
4	MD 140: Garrison View Road to Painters Mill Road - Phase 1	63-1203-41
5	I-695: US 40 to MD 144	63-1801-41
6	I-695: Bridge Replacements at Benson Ave and US 1	63-1803-43
7	I-695: I-70 to MD 43	63-1803-41
8	I-83: Bridge Replacement over Padova Road	63-1701-13
9	MD 137: Bridge Replacement over I-83	63-1703-13
10	US 1: Bridge Replacement over CSX	63-1704-13
11	US 40: Bridge Replacements over Little & Big Gunpowder Falls	63-1706-13
12	MD 45: Padova Rd to Wight Ave	63-1707-11
13	MD 151/MD 151B: Bridge Replacements	63-2001-13

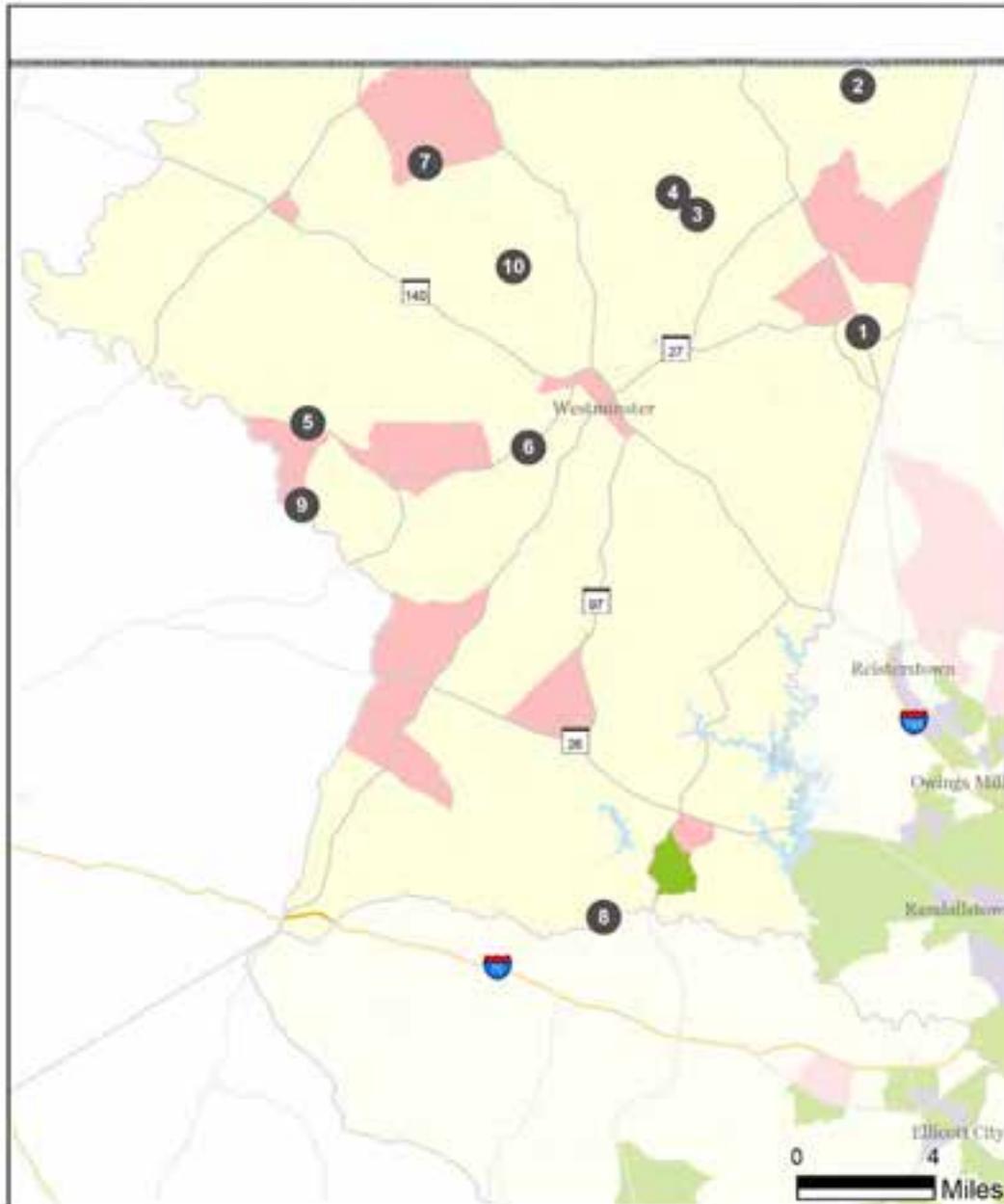
Project Sponsor: Baltimore County

14	Dogwood Road Bridge No. B-0072 Over Dogwood Run	13-0001-13
15	Mohrs Lane Bridge No. B-0143 over CSX Railroad	13-0803-13
16	Gunpowder Road Bridge No. B-0408	13-1005-13
17	Hammonds Ferry Road Bridge No. B-0100 over CSX Railroad	13-1012-13
18	Lansdowne Boulevard Bridge No. B-0113 over CSX Railroad	13-1105-13
19	Piney Grove Road Bridge No. B-0140 over CSX railroad	13-1107-13
20	Peninsula Expressway Bridge No. B-0119 over CSX Railroad	13-1108-13
21	Old Ingleade Avenue Bridge No. B-0096 over Dead Run	13-1202-13
22	Old Court Road Bridge No. B-0237 over Boris Run	13-1204-13
23	Sparks Road Bridge No. B-0018 over Gunpowder Falls	13-1206-13
24	Golden Ring Road Bridge No. B-0110 over Stemmers Run	13-1208-13
25	Rolling Road Bridge No. B-0058 over Branch of Dead Run	13-1209-13
26	Forest Park Avenue N. Bridge No. B-0097 over Dead Run and Dogwood Road	13-1210-13
27	Rossville Blvd. Bridge No. B-0132 over Amtrak & Crems Rd.	13-1701-13
28	Phoenix Road Bridge No. B08507 over Gunpowder Falls & NCR Trail	13-2001-13

- EJ TAZs: Minority Population Above Regional Average of 42.5%
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Carroll County Projects in Relation to Minority & Poverty Concentrations



Project Sponsor: State Highway Administration

1	MD 30 Business: North Woods Trail to CSX Railroad (Hampstead Community Safety & Enhancement)	64-1401-19
2	MD 86: Bridge Replacement over Gunpowder Falls	64-1701-13
3	MD 496: Bridge Replacement over Big Pipe Creek	64-1702-13

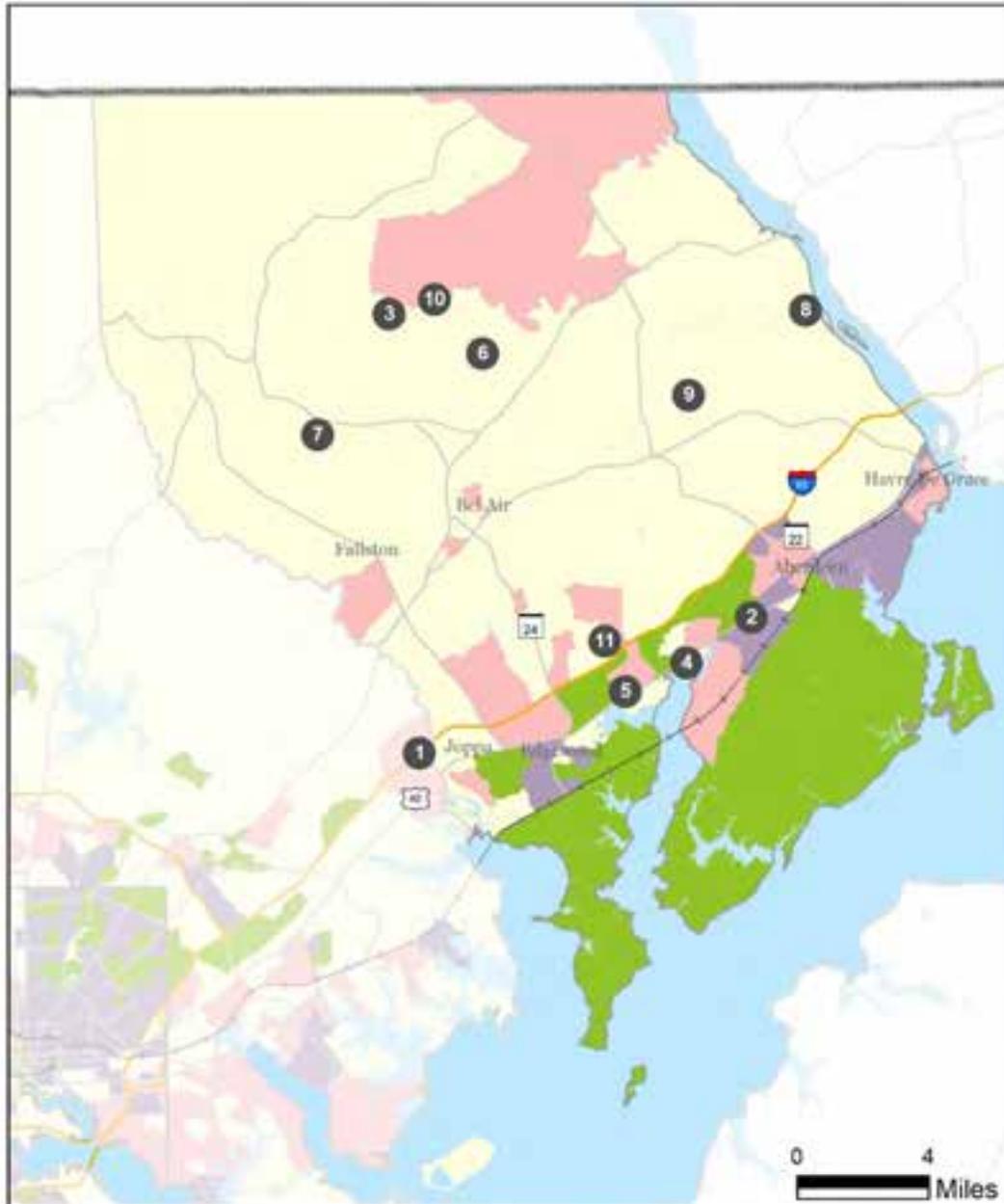
Project Sponsor: Carroll County

4	Bixler Church Road Bridge over Big Pipe Creek	14-1101-13
5	Shepherds Mill Road Bridge over Little Pipe Creek	14-1102-13
6	Stone Chapel Road Bridge over Little Pipe Creek	14-1103-13
7	Babylon Road Bridge over Silver Run	14-1601-13
8	Galther Road Bridge over South Branch Patapsco River	14-1602-13
9	McKinstry's Mill Road Bridge over Sam's Creek	14-1603-13
10	Hughes Shop Road Bridge over Bear Branch	14-1802-13

- EJ TAZs: Minority Population Above Regional Average of 42.5%
- EJ TAZs: Household Poverty Above Regional Average of 10.2%
- EJ TAZs: Minority Population & Household Poverty Above Regional Average
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Harford County Projects in Relation to Minority & Poverty Concentrations



Project Sponsor: Maryland Transportation Authority

1 I-95 Express Toll Lanes Northbound Extension 25-1801-41

Project Sponsor: State Highway Administration

2 US 40: MD 7 & MD 159 Intersection Reconstruction - Phase 2 65-1402-41

3 MD 24: South of Stimup Run Culvert to Deer Creek Bridge, Section G 65-1601-12

Project Sponsor: Harford County

4 Bata Boulevard Access Road 15-1402-42

5 Abingdon Road Bridge #169 over CSX Railroad 15-1001-13

6 Chestnut Hill Bridge #40 15-1101-13

7 Phillips Mill Road Bridge #70 over East Branch Tributary 15-1102-13

8 Stafford Road Bridge #24 over Deer Creek 15-1501-13

9 Glenville Road Bridge #30 15-1601-13

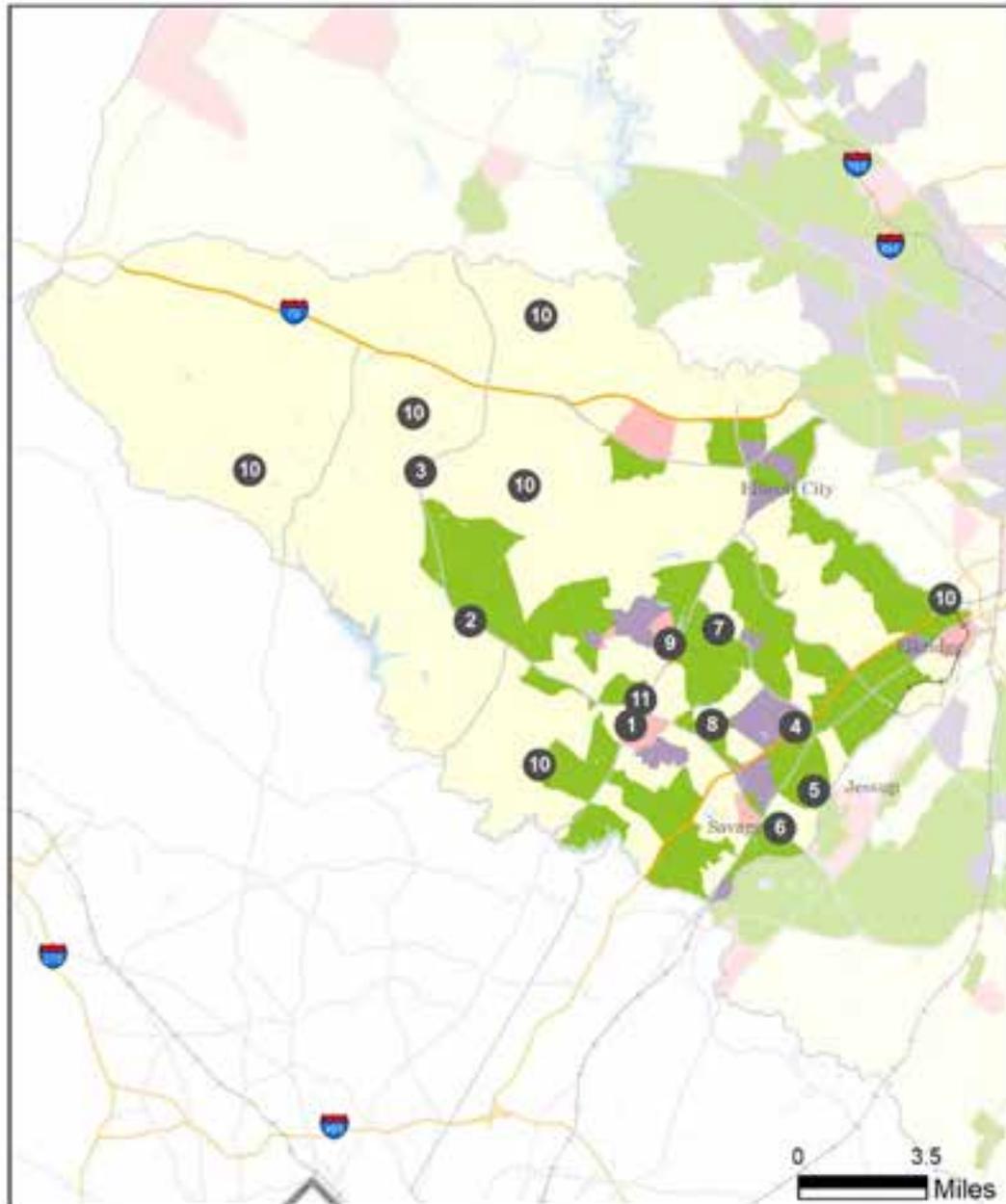
10 Grier Nursery Road Bridge #43 15-2001-13

11 Hookers Mill Road Bridge #13 15-2002-13

- EJ TAZs: Minority Population Above Regional Average of 42.5%
- EJ TAZs: Household Poverty Above Regional Average of 10.2%
- EJ TAZs: Minority Population & Household Poverty Above Regional Average
- Non EJ TAZs: Minority Population & Household Poverty Below Regional Average

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Howard County Projects in Relation to Minority & Poverty Concentrations



Project Sponsor: State Highway Administration

- | | |
|---|------------|
| 1 US 29: Middle Patuxent River to Seneca Drive - Phase 2 | 66-1406-41 |
| 2 MD 32: MD 106 to Linden Church Road | 66-1602-41 |
| 3 MD 32: Linden Church Road to I-70, Capacity & Safety Improvements | 66-1703-41 |
| 4 I-95: Active Traffic Management | 66-1801-41 |

Project Sponsor: Howard County

- | | |
|--|------------|
| 5 Donsey Run Road: MD 175 to CSX Railroad Spur | 16-1403-41 |
| 6 Guilford Road: US 1 to Donsey Run Road | 16-1405-41 |
| 7 MD 175 at Oakland Mills Rd Interchange | 16-1407-46 |
| 8 Snowden River Parkway: Broken Land Parkway to Oakland Mills Road | 16-1410-41 |
| 9 US 29/Broken Land Parkway Interchange and North South Connector Road | 16-1901-42 |
| 10 Bridge Repairs and Deck Replacement | 16-0436-13 |
| 11 Bus Rapid Transit | 16-2001-67 |

- EJ TAZs: Minority Population Above Regional Average of 42.5%
- EJ TAZs: Household Poverty Above Regional Average of 10.2%
- EJ TAZs: Minority Population & Household Poverty Above Regional Average
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B. Detailed Project Listing

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Hanover Road Corridor Improvement

TIP ID	11-1801-42	Year of Operation	2022
Agency	Anne Arundel County	Project Type	New or extended roadways
Project Category	Highway Capacity	Functional Class	Other Principal Arterial
Conformity Status	Exempt	Physical Data	0.4 miles
CIP or CTP ID(s)	H566700 (CIP) & AA372-11 (CTP)	Est. Total Cost	\$14,342,000

Description:

This project is to provide design, right-of-way acquisition and construction of a section of Hanover Road on a new alignment between Ridge Road and New Ridge Road in Hanover.

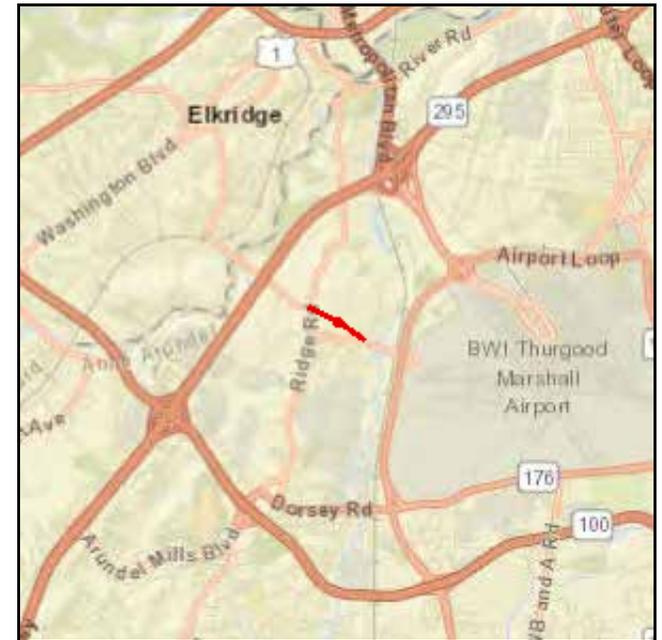
Engineering funds were programmed in FY 2017.

Justification:

This project is a breakout project from the MD 295 Project Planning Study that has a signed FONSI.

Connection to Long-Range Transportation Planning Goals:

- 4. Increase Mobility
- 7.E Promote Prosperity and Economic Opportunity -- Improve access to existing communities and regional generators of economic activity.





Hanover Road Corridor Improvement

(Funding in Thousands)

Other

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$12,657	\$0	\$0	\$0	\$0	\$12,657
OTH	\$0	\$0	\$0	\$633	\$0	\$0	\$0	\$0	\$633
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$0	\$0	\$0	\$13,290	\$0	\$0	\$0	\$0	\$13,290
Total	\$0	\$0	\$0	\$13,290	\$0	\$0	\$0	\$0	\$13,290

Furnace Avenue Bridge over Deep Run

TIP ID	11-1103-13	Year of Operation	2022
Agency	Anne Arundel County	Project Type	Bridge repair/deck replacement
Project Category	Highway Preservation	Functional Class	Minor Collector
Conformity Status	Exempt	Physical Data	2 to 2 lanes
CIP or CTP ID(s)	H535200	Est. Total Cost	\$1,740,000

Description:

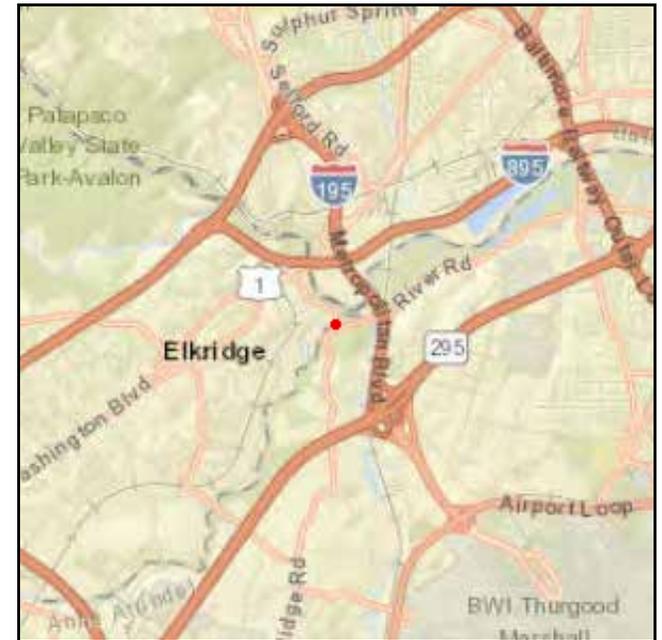
Reconstruct existing bridge to correct existing deficiencies, substandard approach road and bridge deck geometry. Five foot shoulders planned on both sides of the road.

Justification:

Correct bridge deficiencies.

Connection to Long-Range Transportation Planning Goals:

2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).





Furnace Avenue Bridge over Deep Run

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$1,068	\$267	\$0	\$0	\$0	\$0	\$1,335
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$225	\$45	\$0	\$0	\$0	\$0	\$0	\$0	\$270
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$225	\$45	\$1,068	\$267	\$0	\$0	\$0	\$0	\$1,605
Total	\$225	\$45	\$1,068	\$267	\$0	\$0	\$0	\$0	\$1,605

Harwood Road Bridge over Stocketts Run

TIP ID	11-1208-13	Year of Operation	2022
Agency	Anne Arundel County	Project Type	Bridge repair/deck replacement
Project Category	Highway Preservation	Functional Class	Minor Collector
Conformity Status	Exempt	Physical Data	2 to 2 lanes
CIP or CTP ID(s)	H535100	Est. Total Cost	\$2,532,000

Description:

This project will replace the existing bridge over Stocketts Run. Three foot shoulders planned on both sides of the road.

Engineering funds were included in the FY 2014-2017 TIP.

Justification:

Correct bridge deficiencies, geometry and substandard approach. The bridge is functionally obsolete and load restricted.

Connection to Long-Range Transportation Planning Goals:

2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).





Harwood Road Bridge over Stocketts Run

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$1,274	\$399	\$0	\$0	\$0	\$0	\$0	\$0	\$1,673
OTH	\$0	\$17	\$0	\$0	\$0	\$0	\$0	\$0	\$17
ENG	\$0	\$30	\$0	\$0	\$0	\$0	\$0	\$0	\$30
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$1,274	\$446	\$0	\$0	\$0	\$0	\$0	\$0	\$1,720
Total	\$1,274	\$446	\$0	\$0	\$0	\$0	\$0	\$0	\$1,720

Magothy Bridge Road Bridge over Magothy River

TIP ID	11-1402-13	Year of Operation	2022
Agency	Anne Arundel County	Project Type	Bridge repair/deck replacement
Project Category	Highway Preservation	Functional Class	Minor Arterial
Conformity Status	Exempt	Physical Data	2 to 2 lanes
CIP or CTP ID(s)	H534900	Est. Total Cost	\$4,711,000

Description:

Replace bridge deck and add shoulders to the bridge over the Magothy River. Five foot sidewalks and seven foot shoulders planned on both sides of the road.

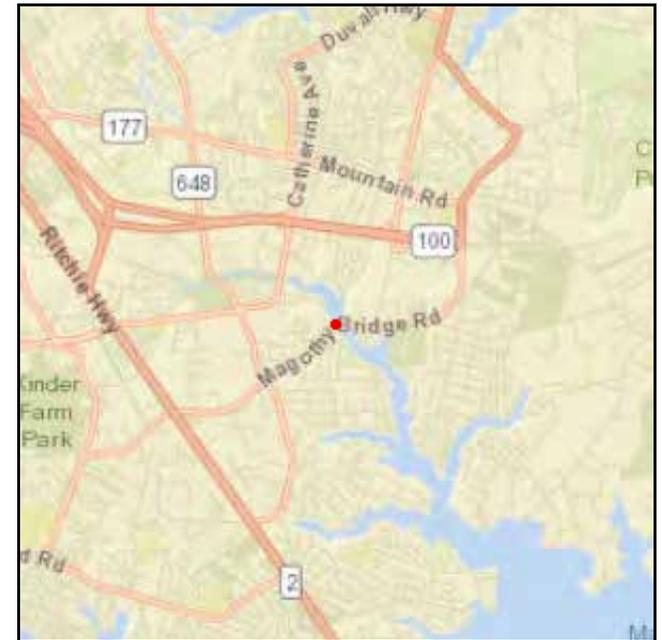
Engineering funds were included in a previous TIP.

Justification:

This bridge is functionally obsolete.

Connection to Long-Range Transportation Planning Goals:

2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).





Magothy Bridge Road Bridge over Magothy River

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$2,379	\$595	\$0	\$0	\$0	\$0	\$0	\$0	\$2,974
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$2,379	\$595	\$0	\$0	\$0	\$0	\$0	\$0	\$2,974
Total	\$2,379	\$595	\$0	\$0	\$0	\$0	\$0	\$0	\$2,974

O'Connor Road Bridge over Deep Run

TIP ID	11-1403-13	Year of Operation	2021
Agency	Anne Arundel County	Project Type	Bridge repair/deck replacement
Project Category	Highway Preservation	Functional Class	Local
Conformity Status	Exempt	Physical Data	2 to 2 lanes
CIP or CTP ID(s)	H561000	Est. Total Cost	\$1,379,000

Description:

Replace bridge over Deep Run at O'Connor Road. Three foot shoulders planned on both sides of the road.

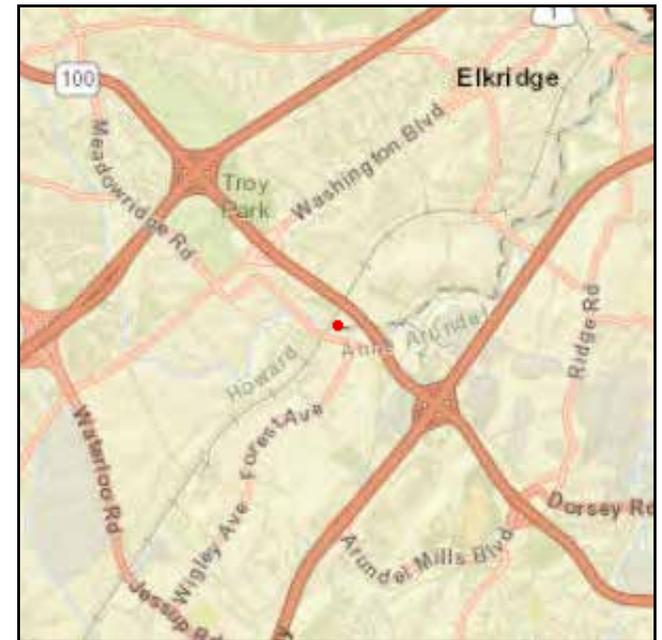
Engineering funds were included in the FY 2014-2017 TIP.

Justification:

The existing bridge is structurally deficient.

Connection to Long-Range Transportation Planning Goals:

2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).





O'Connor Road Bridge over Deep Run

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$661	\$376	\$0	\$0	\$0	\$0	\$1,037
OTH	\$0	\$1	\$0	\$73	\$0	\$0	\$0	\$0	\$74
ENG	\$0	\$96	\$0	\$0	\$0	\$0	\$0	\$0	\$96
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$0	\$97	\$661	\$449	\$0	\$0	\$0	\$0	\$1,207
Total	\$0	\$97	\$661	\$449	\$0	\$0	\$0	\$0	\$1,207

McKendree Road Culvert over Lyons Creek

TIP ID	11-1601-19	Year of Operation	2022
Agency	Anne Arundel County	Project Type	Other
Project Category	Highway Preservation	Functional Class	Minor Collector
Conformity Status	Exempt	Physical Data	2 to 2 lanes
CIP or CTP ID(s)	H566801	Est. Total Cost	\$1,609,000

Description:

This project is to remove and replace the culvert on McKendree Road over Lyons Creek to correct the structurally deficient condition of the existing multicell culvert. Three foot shoulders planned on both sides of the road.

Engineering funds were included in FY 2017.

Justification:

The existing culvert is structurally deficient.

Connection to Long-Range Transportation Planning Goals:

2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).





McKendree Road Culvert over Lyons Creek

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$709	\$329	\$0	\$0	\$0	\$0	\$1,038
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$0	\$0	\$709	\$329	\$0	\$0	\$0	\$0	\$1,038
Total	\$0	\$0	\$709	\$329	\$0	\$0	\$0	\$0	\$1,038

Polling House Road Bridge over Rock Branch

TIP ID	11-1602-13	Year of Operation	2023
Agency	Anne Arundel County	Project Type	Bridge repair/deck replacement
Project Category	Highway Preservation	Functional Class	Minor Collector
Conformity Status	Exempt	Physical Data	2 to 2 lanes
CIP or CTP ID(s)	H561100	Est. Total Cost	\$1,738,000

Description:

This project will replace the existing bridge along Polling House Road over Rock Branch to correct the deteriorated structure and obsolete deck geometry. Three foot shoulders planned on both sides of the road.

Justification:

Correct deteriorated structure and obsolete deck geometry.

Connection to Long-Range Transportation Planning Goals:

2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).





Polling House Road Bridge over Rock Branch

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$300	\$60	\$833	\$207	\$0	\$0	\$1,400
OTH	\$0	\$3	\$0	\$4	\$0	\$73	\$0	\$0	\$80
ENG	\$215	\$43	\$0	\$0	\$0	\$0	\$0	\$0	\$258
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$215	\$46	\$300	\$64	\$833	\$280	\$0	\$0	\$1,738
Total	\$215	\$46	\$300	\$64	\$833	\$280	\$0	\$0	\$1,738

Citywide Bicycle and Pedestrian Improvements

TIP ID	12-1217-25	Year of Operation	Ongoing
Agency	Baltimore City	Project Type	Bicycle/pedestrian facility
Project Category	Enhancement Program	Functional Class	NA
Conformity Status	Exempt	Physical Data	NA
CIP or CTP ID(s)	509-019	Est. Total Cost	\$4,788,000

Description:

The Citywide Bicycle and Pedestrian Group includes but is not limited to the Bicycle Master Plan as well as design and construction of Baltimore City bicycle infrastructure and its trails system. FY20 projects:
 *FY 2020 Planning: Druid Park Lake Drive Complete Streets Realignment Study, Wolfe Street and Washington Street Bicycle Feasibility Study, Arlington Avenue Greenway Planning Study
 *FY 2020 Engineering: Bush Street Cycle Track, Middle Branch Greenway Network, Eutaw Place Cycle Track, Potomac Street Phase II
 *FY 2020 Construction: Baker Street Bicycle Boulevard, Melrose Avenue Bicycle Boulevard, Covington Street Bicycle Boulevard, S Hanover Street Bicycle Lanes, Biddle Street Bicycle Lanes, West Baltimore Bicycle Boulevards, Madison Street Bicycle Lanes, St Lo Drive Cycle Track

Justification:

Infrastructure to improve multi-modal access throughout the city. A citywide bicycle network will encourage alternative modes of transportation, reduce emissions, and decrease dependence on single occupancy vehicles.



Connection to Long-Range Transportation Planning Goals:

- 1.E Improve System Safety -- Improve safety conditions for pedestrians and bicyclists.
- 2.F Improve and Maintain the Existing Infrastructure -- Improve the condition of pedestrian and bicycle facilities.
- 3.E Improve Accessibility -- Provide or improve pedestrian and bicycle facilities that link to activity centers and public transit.



Citywide Bicycle and Pedestrian Improvements

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$960	\$240	\$600	\$120	\$657	\$131	\$875	\$175	\$3,758
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$360	\$90	\$0	\$0	\$0	\$0	\$0	\$0	\$450
PL	\$464	\$116	\$0	\$0	\$0	\$0	\$0	\$0	\$580
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$1,784	\$446	\$600	\$120	\$657	\$131	\$875	\$175	\$4,788
Total	\$1,784	\$446	\$600	\$120	\$657	\$131	\$875	\$175	\$4,788

Citywide Traffic Signals, Intelligent Transportation System and Safety Improvements

TIP ID	12-1218-07	Year of Operation	Ongoing
Agency	Baltimore City	Project Type	ITS
Project Category	Emission Reduction Strategy	Functional Class	NA
Conformity Status	Exempt	Physical Data	NA
CIP or CTP ID(s)	512-077, 512-078, 512-080, 512-009	Est. Total Cost	\$22,511,000

Description:

Intelligent Transportation System (ITS) related work includes but is not limited to: traffic signal system integration, traffic surveillance camera expansion, traffic signal replacement and upgrade, fiber optic connections, variable message signs, and traffic detector upgrade, including geometric improvement of intersections. Projects included in this TIP ID are: CCTV and signal rewiring citywide, installation of fiber optic and copper communications citywide, ITS deployment and upgrades citywide, geometric improvements at multiple intersections, and traffic signal reconstruction.

Justification:

It is necessary to upgrade the aging infrastructure of traffic signals and ITS devices to reduce congestion and delays, distribute traffic volumes through the roadway network, and improve the safety of motorists and pedestrians.

Connection to Long-Range Transportation Planning Goals:

- 2.B Improve and Maintain the Existing Infrastructure -- Replace traffic signals and ITS elements.
- 4.D Increase Mobility -- Apply mobility-related management and operations techniques.
- 5.D Conserve and Enhance the Environment -- Reduce greenhouse gas emissions in accordance with state and local sustainability and climate change plans.





Citywide Traffic Signals, Intelligent Transportation System and Safety Improvements

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$14,720	\$3,565	\$991	\$445	\$1,540	\$250	\$0	\$0	\$21,511
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$1,000	\$0	\$0	\$0	\$0	\$0	\$0	\$1,000
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$14,720	\$4,565	\$991	\$445	\$1,540	\$250	\$0	\$0	\$22,511
Total	\$14,720	\$4,565	\$991	\$445	\$1,540	\$250	\$0	\$0	\$22,511

Transportation Management Center Upgrade

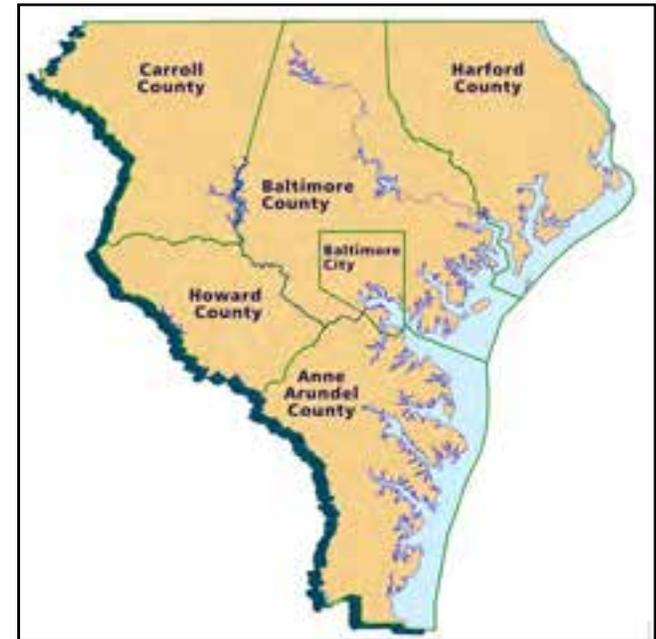
TIP ID	12-1701-04	Year of Operation	2021
Agency	Baltimore City	Project Type	Traffic engineering
Project Category	Emission Reduction Strategy	Functional Class	NA
Conformity Status	Exempt	Physical Data	NA
CIP or CTP ID(s)	512-005	Est. Total Cost	\$6,000,000

Description:

System integration and facility equipment upgrade citywide. This project will upgrade the central computer system or Advance Traffic Management System (ATMS) which controls and communicates with traffic signals in the field. The system includes software and computer hardware (servers and switches). The current system, known as an “i2 System,” is more than ten years old and replacement is not available since the vendor has discontinued the system. Replacement with a new system requires a complete upgrade of hardware and software, installation of communication equipment for fiber optics, and a copper cable network and camera control system to complete the functions of the ATMS.

Justification:

Existing system requires upgrades and expansion for better functioning of the Traffic Management Center.



Connection to Long-Range Transportation Planning Goals:

- 4.D Increase Mobility -- Apply mobility-related management and operations techniques.
- 6.C Improve System Security -- Apply security-related management and operations techniques.



Transportation Management Center Upgrade

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$4,200	\$1,050	\$0	\$0	\$0	\$0	\$0	\$0	\$5,250
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$600	\$150	\$0	\$0	\$0	\$0	\$0	\$0	\$750
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$4,800	\$1,200	\$0	\$0	\$0	\$0	\$0	\$0	\$6,000
Total	\$4,800	\$1,200	\$0	\$0	\$0	\$0	\$0	\$0	\$6,000

Perring Parkway Ramp and Hillen Road Bridge

TIP ID	12-1215-13	Year of Operation	2022
Agency	Baltimore City	Project Type	Bridge repair/deck replacement
Project Category	Highway Preservation	Functional Class	Other Principal Arterial
Conformity Status	Exempt	Physical Data	4 to 4 lanes
CIP or CTP ID(s)	506-760	Est. Total Cost	\$11,070,000

Description:

Replace Perring Parkway Ramp over Herring Run and Hillen Road Bridge over Herring Run.

Engineering for this project was originally authorized in FY16.

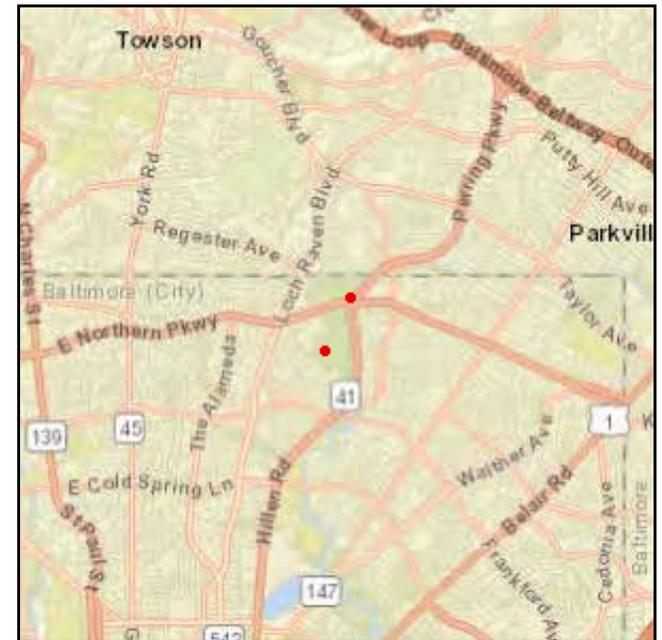
Justification:

Deteriorated bridges require replacement to maintain the safety and function of the roadway network. This project is necessary to protect public safety.

The City of Baltimore reviews every project throughout the design and engineering process for complete streets and bicycle facilities compatibility. DOT has a complete streets policy whereby projects are evaluated to ensure they meet goals for the corridor and neighborhood. DOT also has a bicycle policy whereby projects are reviewed for compliance with the Bicycle Master Plan and to the extent possible will install appropriate bicycle and pedestrian facilities to create a multi-modal transportation system throughout the City.

Connection to Long-Range Transportation Planning Goals:

2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).





2020 - 2023 Transportation Improvement Program

Perring Parkway Ramp and Hillen Road Bridge

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$8,200	\$1,800	\$0	\$0	\$10,000
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$0	\$0	\$0	\$0	\$8,200	\$1,800	\$0	\$0	\$10,000
Total	\$0	\$0	\$0	\$0	\$8,200	\$1,800	\$0	\$0	\$10,000

Sisson Street Bridge over CSX Railroad

TIP ID	12-1216-13	Year of Operation	2022
Agency	Baltimore City	Project Type	Bridge repair/deck replacement
Project Category	Highway Preservation	Functional Class	Minor Collector
Conformity Status	Exempt	Physical Data	2 to 2 Lanes
CIP or CTP ID(s)	506-766	Est. Total Cost	\$8,250,000

Description:

The 133-foot long bridge was originally built in 1914 and was rehabilitated in 1950, but severe deterioration is now evident throughout and the structure must be replaced. The existing sidewalks will be replaced with standard SHA and ADA compliant sidewalks. CSX is providing 75% of the construction cost for the project.

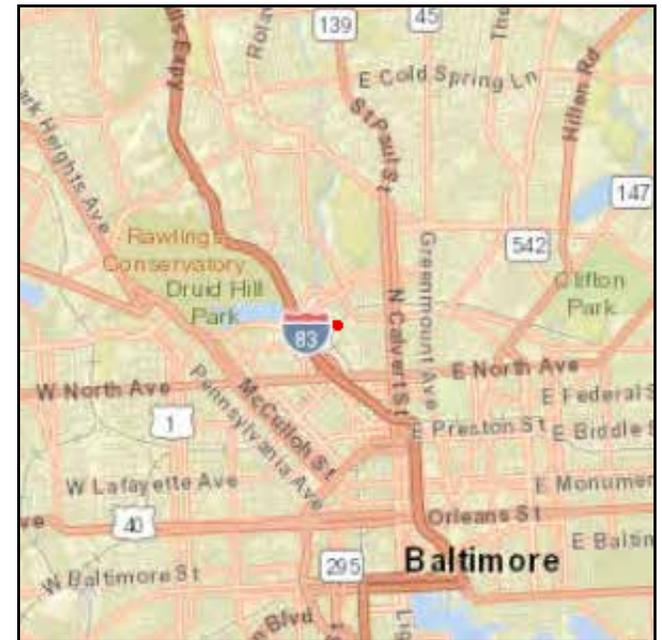
Engineering funds for this project were authorized in FY19.

Justification:

Deteriorated bridge requires replacement to maintain the safety and function of the roadway network. With a current Bridge Sufficiency Rating of only 37, the bridge requires a total replacement structure.

Connection to Long-Range Transportation Planning Goals:

2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).





Sisson Street Bridge over CSX Railroad

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$1,500	\$6,000	\$0	\$0	\$0	\$0	\$0	\$0	\$7,500
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$1,500	\$6,000	\$0	\$0	\$0	\$0	\$0	\$0	\$7,500
Total	\$1,500	\$6,000	\$0	\$0	\$0	\$0	\$0	\$0	\$7,500

Wilkens Avenue Bridge Over Gwynns Falls

TIP ID	12-1403-13	Year of Operation	2023
Agency	Baltimore City	Project Type	Bridge repair/deck replacement
Project Category	Highway Preservation	Functional Class	Other Principal Arterial
Conformity Status	Exempt	Physical Data	4 to 4 lanes
CIP or CTP ID(s)	509-326	Est. Total Cost	\$14,800,000

Description:

This project involves replacement of the bridge, which has deteriorated beyond repair. The existing sidewalks will be replaced with standard SHA and ADA compliant sidewalks.

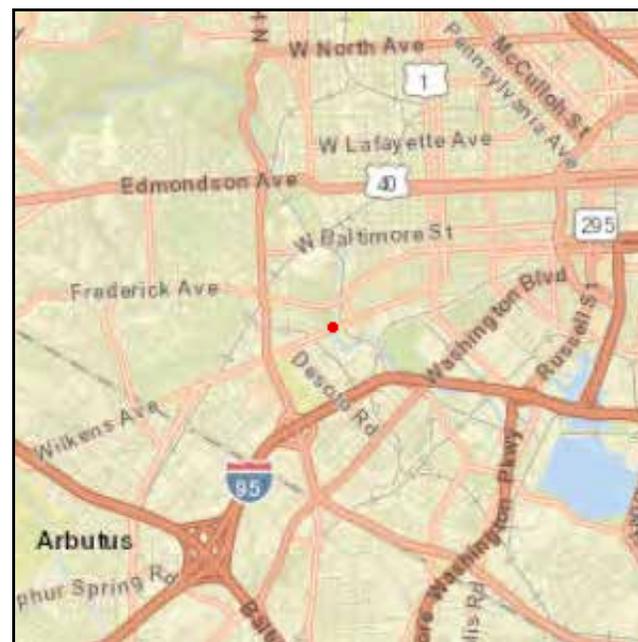
Engineering for this project was originally authorized in FY 2013 under TIP ID 12-1030-13.

Justification:

This bridge has deteriorated beyond repair. The bridge sufficiency rating is 43.7. City funding will leverage other fund sources, including an 80-20 federal aid match to MVR. Project coordination involves SHA, MdTA, MTA, DNR, MDE, MHT, USACE and USF&WS, as appropriate. This project is necessary to protect public safety.

Connection to Long-Range Transportation Planning Goals:

2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).





2020 - 2023 Transportation Improvement Program

Wilkens Avenue Bridge Over Gwynns Falls

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$11,040	\$2,760	\$0	\$0	\$0	\$0	\$0	\$0	\$13,800
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$11,040	\$2,760	\$0	\$0	\$0	\$0	\$0	\$0	\$13,800
Total	\$11,040	\$2,760	\$0	\$0	\$0	\$0	\$0	\$0	\$13,800

Belair Road Complete Streets

TIP ID	12-1404-11	Year of Operation	2024
Agency	Baltimore City	Project Type	Road resurfacing/rehabilitation
Project Category	Highway Preservation	Functional Class	Other Principal Arterial
Conformity Status	Exempt	Physical Data	4 to 4 lanes
CIP or CTP ID(s)	527-008	Est. Total Cost	\$12,100,000

Description:

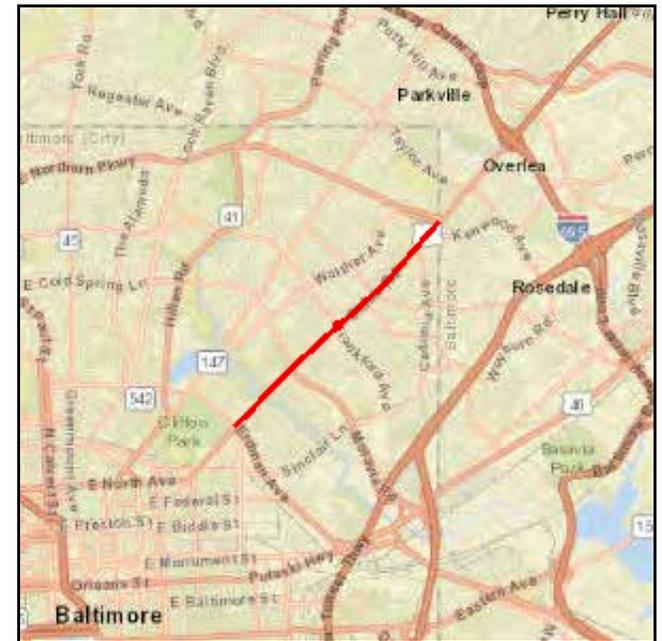
Design and construction for street, sidewalk, bike improvements and greening at key nodes on Belair Road, including Frankford Ave., Erdman Ave., and Fleetwood Ave. This project is a major implementation item from the Urban Land Institute Belair Road report and BCDOT traffic study. FY 2020 Eng and FY 2023 construction funds are for Phase II which includes the intersection of Belair Rd and Erdman Ave. FY 2021 Eng and FY 2024 construction funds are for Phase III which includes the intersection of Belair Rd and Fleetwood Ave. Phase I, which includes the intersection of Belair Rd and Frankford Avenue, advertised for construction in FY19.

Justification:

Belair Road is a high speed corridor with numerous pedestrian and vehicle collisions. Improvements will improve multi-modal access and safety on the corridor near major retail nodes.

Connection to Long-Range Transportation Planning Goals:

- 1.E Improve System Safety -- Improve safety conditions for pedestrians and bicyclists.
- 2.F Improve and Maintain the Existing Infrastructure -- Improve the condition of pedestrian and bicycle facilities.
- 3.A Improve Accessibility -- Increase transportation alternatives for all segments of the population.





Belair Road Complete Streets

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$6,080	\$1,520	\$7,600
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$800	\$200	\$480	\$120	\$0	\$0	\$0	\$0	\$1,600
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$800	\$200	\$480	\$120	\$0	\$0	\$6,080	\$1,520	\$9,200
Total	\$800	\$200	\$480	\$120	\$0	\$0	\$6,080	\$1,520	\$9,200

Citywide System Preservation

TIP ID	12-1414-11	Year of Operation	Ongoing
Agency	Baltimore City	Project Type	Road resurfacing/rehabilitation
Project Category	Highway Preservation	Functional Class	Varies
Conformity Status	Exempt	Physical Data	Varies
CIP or CTP ID(s)	508-056	Est. Total Cost	\$3,500,000

Description:

Citywide system preservation includes resurfacing, rehabilitation and maintenance, streetscapes, signals, and intersection improvements, as well as ADA ramps and sidewalk improvements on federal-aid roadways. Current projects include, but are not limited to:

- Russell Street concrete pavement rehabilitation from Russell Street viaduct to Waterview Avenue
- Clinton Street rehabilitation from Boston Street to Keith Avenue

Justification:

This project will bring key streets and intersections into a state of good repair while improving access, safety and aesthetics.

Connection to Long-Range Transportation Planning Goals:

- 1.C Improve System Safety -- Eliminate hazardous or substandard conditions.
- 2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).
- 3.B Improve Accessibility -- Improve ADA-related conditions for pedestrians / transit riders.





Citywide System Preservation

(Funding in Thousands)

National Highway Performance Program (National Highway System, Interstate Maintenance, Bridge (on-System))

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$2,400	\$600	\$0	\$0	\$0	\$0	\$0	\$0	\$3,000
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$2,400	\$600	\$0	\$0	\$0	\$0	\$0	\$0	\$3,000

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$400	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$500
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$400	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$500
Total	\$2,800	\$700	\$0	\$0	\$0	\$0	\$0	\$0	\$3,500

Hanover Street Bridge Multimodal Corridor

TIP ID	12-1419-13	Year of Operation	n/a
Agency	Baltimore City	Project Type	Bridge repair/deck replacement
Project Category	Highway Preservation	Functional Class	Other Principal Arterial
Conformity Status	Exempt	Physical Data	5 to 5 lanes, 1 mile
CIP or CTP ID(s)	509-006	Est. Total Cost	\$3,000,000

Description:

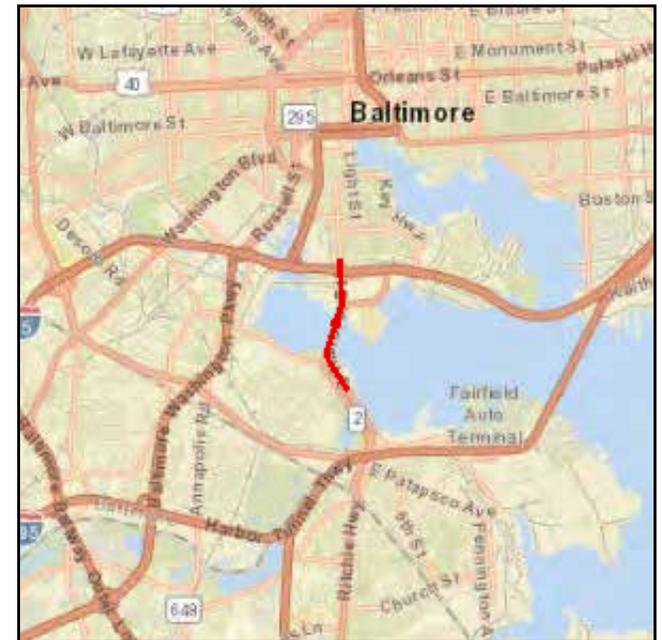
A Multimodal Corridor Plan, completed in 2018, established the framework for Baltimore City’s investment in the Hanover Street Bridge Corridor for transportation, education, recreation, regional competitiveness and economic development. It determined potential alternatives and cost estimates for these alternatives. This study will determine whether the Hanover Street Bridge should be rehabilitated, or a new bridge should be designed and constructed.

Justification:

The Hanover Street Bridge serves as a gateway from South Baltimore to the City’s urban core, and is frequently used as a secondary route for Baltimore’s booming ports. As the ports enhance and expand their services, the number of freight vehicles utilizing this bridge will continue to rise. The existing bridge was constructed in 1916 and is rated in fair condition, according to the Federal Highway Administration’s National Bridge Inspection Condition Ratings. This is only one rating above structurally deficient. Increased truck volumes have reduced the useable lifespan of the bridge.

Connection to Long-Range Transportation Planning Goals:

- 2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).
- 3.B Improve Accessibility -- Improve ADA-related conditions for pedestrians / transit riders.
- 7.E Promote Prosperity and Economic Opportunity -- Improve access to existing communities and regional generators of economic activity.





Hanover Street Bridge Multimodal Corridor

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$2,400	\$600	\$0	\$0	\$0	\$0	\$0	\$0	\$3,000
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$2,400	\$600	\$0	\$0	\$0	\$0	\$0	\$0	\$3,000
Total	\$2,400	\$600	\$0	\$0	\$0	\$0	\$0	\$0	\$3,000

Orleans Street Bridge over I-83 and City Streets

TIP ID	12-1601-13	Year of Operation	2028
Agency	Baltimore City	Project Type	Bridge repair/deck replacement
Project Category	Highway Preservation	Functional Class	Other Principal Arterial
Conformity Status	Exempt	Physical Data	6 to 6 lanes, 1728 feet
CIP or CTP ID(s)	506-006	Est. Total Cost	\$8,000,000

Description:

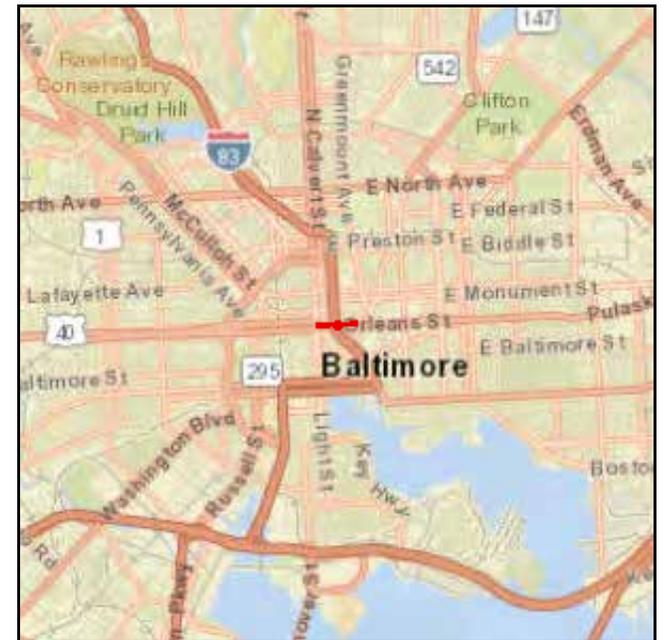
This work will include but will not be limited to rehabilitating the deteriorated bridge with structural improvements, cleaning and painting of the steel elements, replacing and reconfiguring the storm drain system and other repairs in order to correct the deteriorated components of the bridge. The sidewalk along the south side of the bridge will remain in place.

Justification:

The project will correct the bridges deteriorated condition and will provide increased structural and traffic safety. The bridge is exhibiting continued deterioration and spalling (when concrete separates from steel reinforcement bars) as well as settlement of the riding surface. The current sufficiency rating is 64.8.

Connection to Long-Range Transportation Planning Goals:

2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).





Orleans Street Bridge over I-83 and City Streets

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$512	\$128	\$0	\$0	\$0	\$0	\$640
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$0	\$0	\$512	\$128	\$0	\$0	\$0	\$0	\$640
Total	\$0	\$0	\$512	\$128	\$0	\$0	\$0	\$0	\$640

Remington Avenue Bridge over Stony Run

TIP ID	12-1602-13	Year of Operation	2024
Agency	Baltimore City	Project Type	Bridge repair/deck replacement
Project Category	Highway Preservation	Functional Class	Minor Arterial
Conformity Status	Exempt	Physical Data	2 to 2 lanes
CIP or CTP ID(s)	506-761	Est. Total Cost	\$9,900,000

Description:

This work will include but will not be limited to rehabilitating the deteriorating bridge so that it meets current standards. The existing sidewalks will be replaced with standard SHA and ADA compliant sidewalks. The estimated total cost has decreased from \$17.1 million due to a change in scope from a replacement to a rehabilitation. Rehabilitation of the bridge will achieve the same goals without the additional costs associated with replacement.

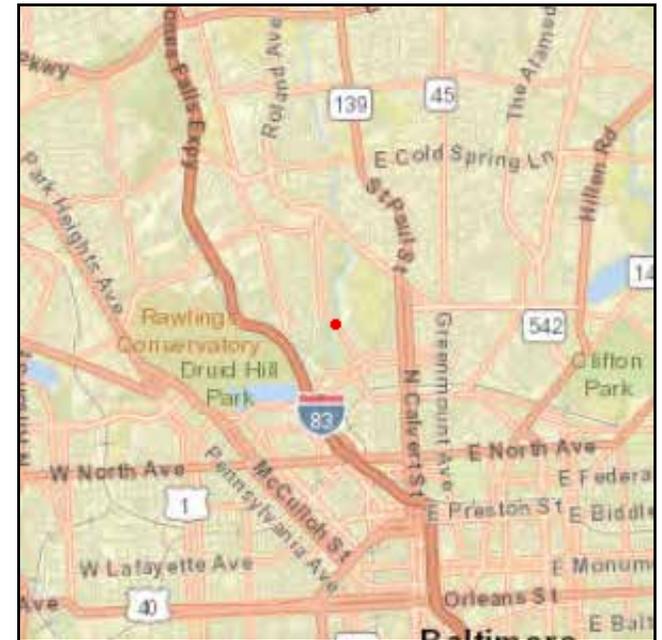
Engineering for this project was authorized in FY16.

Justification:

The project will correct the bridges' deteriorated condition and will provide increased structural and traffic safety. The bridge is exhibiting continued deterioration and spalling (when concrete separates from steel reinforcement bars) as well as undermining of the substructure. The current sufficiency rating is 17.1

Connection to Long-Range Transportation Planning Goals:

2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).





Remington Avenue Bridge over Stony Run

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$7,200	\$1,800	\$0	\$0	\$9,000
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$0	\$0	\$0	\$0	\$7,200	\$1,800	\$0	\$0	\$9,000
Total	\$0	\$0	\$0	\$0	\$7,200	\$1,800	\$0	\$0	\$9,000

Radecke Avenue over Moores Run

TIP ID	12-1603-13	Year of Operation	2026
Agency	Baltimore City	Project Type	Bridge repair/deck replacement
Project Category	Highway Preservation	Functional Class	Minor Arterial
Conformity Status	Exempt	Physical Data	2 to 2 lanes
CIP or CTP ID(s)	506-762	Est. Total Cost	\$5,850,000

Description:

This work will include but will not be limited to replacing the deteriorated bridge with a new structure that will meet current standards. The existing sidewalks will be replaced with standard SHA and ADA compliant sidewalks.

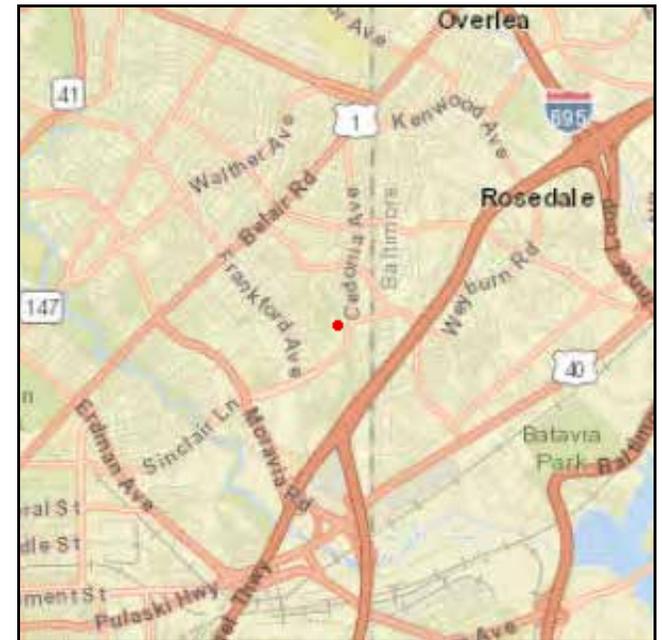
Engineering for this project was authorized in FY19.

Justification:

The project will correct the deteriorated condition of the bridge and will provide increased structural and traffic safety. The bridge is exhibiting continued deterioration and spalling (when concrete separates from steel reinforcement bars) as well as severe corrosion of the steel beams. The current sufficiency rating is 51.4.

Connection to Long-Range Transportation Planning Goals:

2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).





Radecke Avenue over Moores Run

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$2,400	\$600	\$3,000
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$0	\$0	\$0	\$0	\$0	\$0	\$2,400	\$600	\$3,000
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$2,400	\$600	\$3,000

I-83 Concrete Deck Mill and Resurface

TIP ID	12-1604-13	Year of Operation	2025
Agency	Baltimore City	Project Type	Bridge repair/deck replacement
Project Category	Highway Preservation	Functional Class	Interstate
Conformity Status	Exempt	Physical Data	6 to 6 lanes
CIP or CTP ID(s)	509-005	Est. Total Cost	\$16,250,000

Description:

This work will include but will not be limited to rehabilitating the deteriorating concrete decks of the bridges with new wearing surfaces that meet current standards. The limits of this project are between Exit 1 and Exit 10.

Justification:

The project will correct the bridges' deteriorated condition and will provide increased structural and traffic safety. The bridges are exhibiting continued deterioration and spalling (when concrete separates from steel reinforcement bars) of the concrete decks, causing numerous potholes.

Connection to Long-Range Transportation Planning Goals:

2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).





I-83 Concrete Deck Mill and Resurface

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$800	\$200	\$0	\$0	\$0	\$0	\$0	\$0	\$1,000
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$800	\$200	\$0	\$0	\$0	\$0	\$0	\$0	\$1,000
Total	\$800	\$200	\$0	\$0	\$0	\$0	\$0	\$0	\$1,000

Moravia Road Ramp Bridge over Pulaski Highway

TIP ID	12-1605-13	Year of Operation	2026
Agency	Baltimore City	Project Type	Bridge repair/deck replacement
Project Category	Highway Preservation	Functional Class	Other Principal Arterial
Conformity Status	Exempt	Physical Data	4 to 4 lanes
CIP or CTP ID(s)	508-184	Est. Total Cost	\$5,675,000

Description:

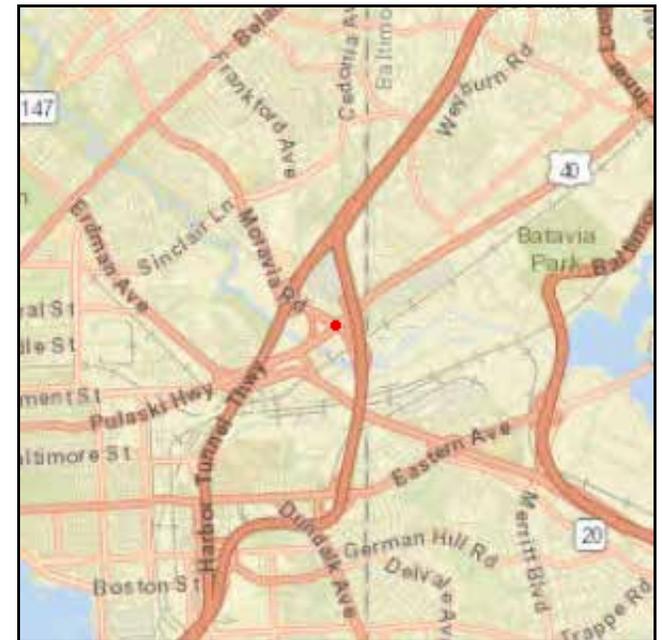
This work will include but will not be limited to rehabilitating the existing deteriorated bridge with new bridge components that meet current standards.

Justification:

The project will correct the bridges deteriorated condition and will provide increased structural and traffic safety. The bridge exhibits continued deterioration and spalling (when concrete separates from steel reinforcement bars) as well as settlement of the riding surface. The current sufficiency rating is 80.8.

Connection to Long-Range Transportation Planning Goals:

2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).





Moravia Road Ramp Bridge over Pulaski Highway

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$960	\$240	\$0	\$0	\$1,200
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$0	\$0	\$0	\$0	\$960	\$240	\$0	\$0	\$1,200
Total	\$0	\$0	\$0	\$0	\$960	\$240	\$0	\$0	\$1,200

MLK Blvd. and Howard St. Intersection Improvements

TIP ID	12-1706-11	Year of Operation	2024
Agency	Baltimore City	Project Type	Road resurfacing/rehabilitation
Project Category	Highway Preservation	Functional Class	Other Principal Arterial
Conformity Status	Exempt	Physical Data	6 to 6 lanes
CIP or CTP ID(s)	508-398	Est. Total Cost	\$6,000,000

Description:

Martin Luther King Jr. Blvd. and Howard Street Intersection improvements will include roadway pavement rehabilitation and realignment, pedestrian ramp modifications, storm water drainage, stormwater management, signals, signing, roadway markings, street lighting and landscaping within the project limits.

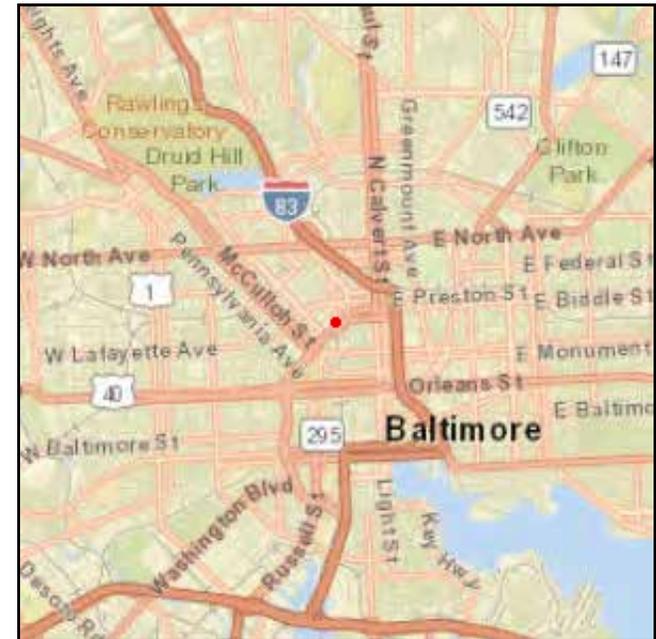
This project was previously included in the TIP as Citywide Earmarks and Enhancements (12-1212-99).

Justification:

To improve and enhance transportation facilities throughout the city of Baltimore, and to create more inviting, livable, neighborhood-friendly streets which can still accommodate business patrons, local and through traffic.

Connection to Long-Range Transportation Planning Goals:

- 1.C Improve System Safety -- Eliminate hazardous or substandard conditions.
- 2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).
- 3.G Improve Accessibility -- Improve system connectivity and continuity among modes and across boundaries.





MLK Blvd. and Howard St. Intersection Improvements

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$4,400	\$1,100	\$0	\$0	\$5,500
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$400	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$500
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$400	\$100	\$0	\$0	\$4,400	\$1,100	\$0	\$0	\$6,000
Total	\$400	\$100	\$0	\$0	\$4,400	\$1,100	\$0	\$0	\$6,000

25th Street Rehabilitation from Greenmount Avenue to Kirk Avenue

TIP ID	12-2001-11	Year of Operation	2025
Agency	Baltimore City	Project Type	Road resurfacing/rehabilitation
Project Category	Highway Preservation	Functional Class	Minor Arterial
Conformity Status	Exempt	Physical Data	4 to 4 lanes, 2,050 ft
CIP or CTP ID(s)	508-044	Est. Total Cost	\$9,500,000

Description:

Roadway rehabilitation work includes concrete roadway slab replacement, concrete type I and type II repair, full depth base repair, milling, paving, ADA compliant sidewalks, pedestrian ramps, crosswalks, drainage improvements, traffic signal replacement, signage, pavement markings, curb and gutter replacement, landscaping, trees, new street lights, and street light fixture upgrades.

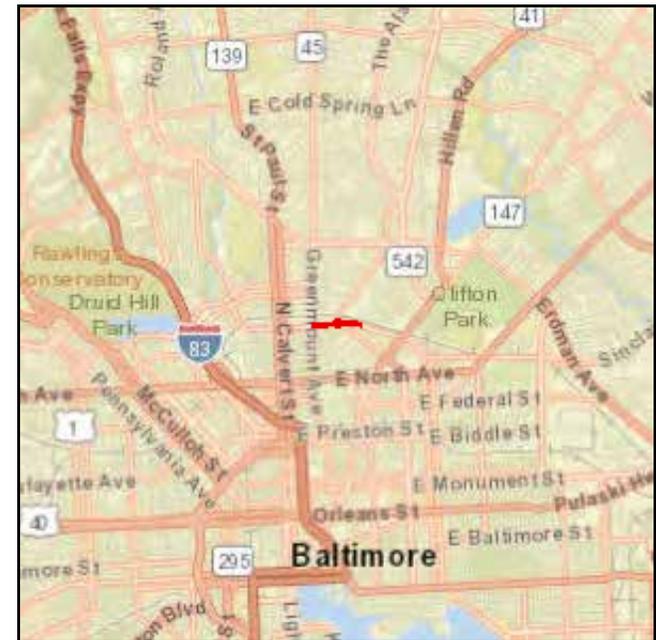
In addition to roadway rehabilitation, a mixed use trail to accommodate bicycles and pedestrians will be included in the project.

Justification:

Roadways need to be repaired and maintained at this time to halt the type of physical deterioration that jeopardizes the safety of all users and increases maintenance activities. The work will improve road conditions along 25th Street and provide improved accommodations for pedestrians and cyclists.

Connection to Long-Range Transportation Planning Goals:

- 1.E Improve System Safety -- Improve safety conditions for pedestrians and bicyclists.
- 2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).
- 3.A Improve Accessibility -- Increase transportation alternatives for all segments of the population.
- 5.A Conserve and Enhance the Environment -- Provide alternatives to single-occupant passenger





25th Street Rehabilitation from Greenmount Avenue to Kirk Avenue

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$6,400	\$1,600	\$8,000
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$1,200	\$300	\$0	\$0	\$0	\$0	\$0	\$0	\$1,500
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$1,200	\$300	\$0	\$0	\$0	\$0	\$6,400	\$1,600	\$9,500
Total	\$1,200	\$300	\$0	\$0	\$0	\$0	\$6,400	\$1,600	\$9,500

41st Street over I-83, MTA Light Rail Tracks, and Jones Falls

TIP ID	12-2002-13	Year of Operation	2030
Agency	Baltimore City	Project Type	Bridge repair/deck replacement
Project Category	Highway Preservation	Functional Class	Minor Arterial
Conformity Status	Exempt	Physical Data	4 to 4 lanes, 1,238 ft
CIP or CTP ID(s)	506-010	Est. Total Cost	\$50,600,000

Description:

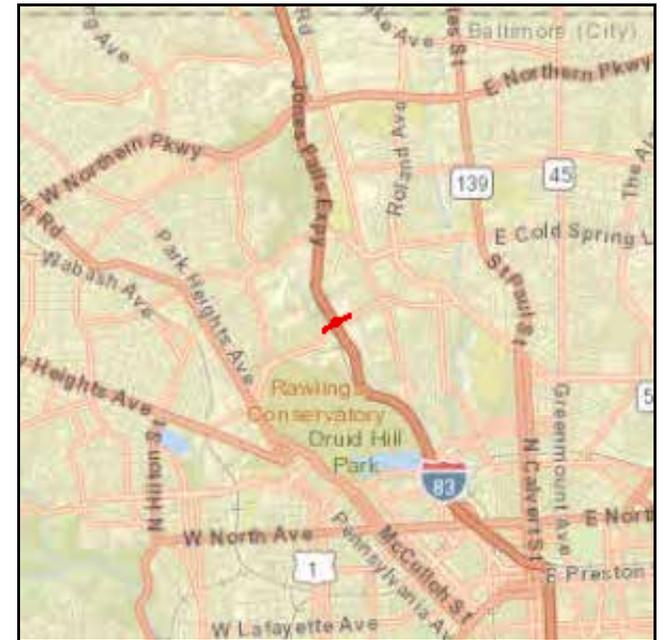
The 1,238-foot long bridge was originally built in 1930 and was rehabilitated in 1986, but severe deterioration is now evident throughout and the structure must be evaluated to determine whether the bridge should be rehabilitated or replaced. The estimated total cost of \$50.6 million assumes a bridge replacement, which is substantially more expensive than a rehabilitation. The existing sidewalks will be replaced with standard SHA and ADA compliant sidewalks. The existing lighting system will also be upgraded.

Justification:

The deteriorated bridge requires a rehabilitation or replacement to maintain the safety and function of the roadway network. The current Bridge Sufficiency Rating is 48.7.

Connection to Long-Range Transportation Planning Goals:

- 1.E Improve System Safety -- Improve safety conditions for pedestrians and bicyclists.
- 2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).





41st Street over I-83, MTA Light Rail Tracks, and Jones Falls

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$800	\$200	\$1,000
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$0	\$0	\$0	\$0	\$0	\$0	\$800	\$200	\$1,000
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$800	\$200	\$1,000

Citywide Asset Management

TIP ID	12-2003-19	Year of Operation	Ongoing
Agency	Baltimore City	Project Type	Other
Project Category	Highway Preservation	Functional Class	NA
Conformity Status	Exempt	Physical Data	NA
CIP or CTP ID(s)	527-044	Est. Total Cost	\$2,500,000

Description:

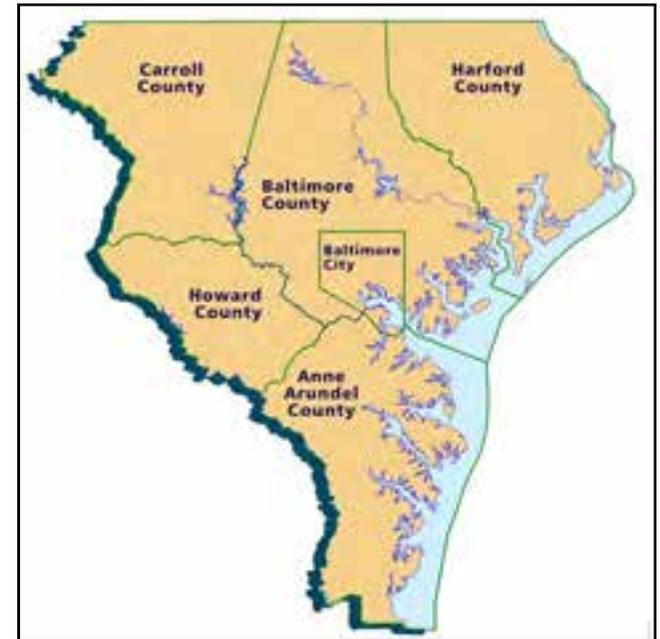
This project is for activities related to the development and implementation of a performance based management program for Baltimore City federal-aid roadways. These activities will include, but are not limited to data collection, condition assessment, condition index rating for prioritization rankings, road treatments, licensing software and equipment required for risk-based asset management

Justification:

The key drivers for the implementation of an asset management system are: (1) an aging infrastructure, (2) the need for service improvement at a reduced cost due to declining budgets and (3) an increased demand from the travelling public and communities.

Connection to Long-Range Transportation Planning Goals:

- 9. Promote Informed Decision Making





Citywide Asset Management

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$800	\$200	\$400	\$100	\$400	\$100	\$400	\$100	\$2,500
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$800	\$200	\$400	\$100	\$400	\$100	\$400	\$100	\$2,500
Total	\$800	\$200	\$400	\$100	\$400	\$100	\$400	\$100	\$2,500

Baltimore Street from Howard Street to President Street

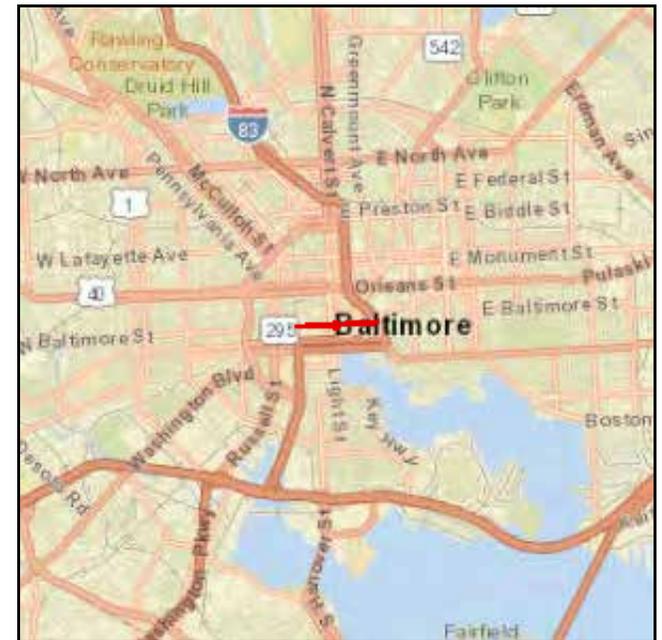
TIP ID	12-2004-11	Year of Operation	2026
Agency	Baltimore City	Project Type	Road resurfacing/rehabilitation
Project Category	Highway Preservation	Functional Class	Other Principal Arterial
Conformity Status	Exempt	Physical Data	4 to 4 lanes, 3750 feet
CIP or CTP ID(s)	508-118	Est. Total Cost	\$20,000,000

Description:

Roadway rehabilitation work includes concrete roadway slab replacement, concrete type I and type II repair, full depth base repair, milling, paving, ADA compliant sidewalks, pedestrian ramps, crosswalks, drainage improvements, traffic signal replacement, signage, pavement markings, curb and gutter replacement, landscaping, trees, new street lights, and street light fixture upgrades. Project includes potential for improved transit facilities and improved pedestrian safety treatments.

Justification:

Baltimore Street experiences major pavement deterioration and shoving due to transit and truck traffic. The roadway needs to be repaired and maintained at this time to halt the type of physical deterioration that jeopardizes the safety of roadway users and increases maintenance activities.



Connection to Long-Range Transportation Planning Goals:

- 1.E Improve System Safety -- Improve safety conditions for pedestrians and bicyclists.
- 2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).
- 5.A Conserve and Enhance the Environment -- Provide alternatives to single-occupant passenger vehicles / apply emission reduction technologies.



Baltimore Street from Howard Street to President Street

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$1,200	\$300	\$0	\$0	\$0	\$0	\$1,500
PL	\$1,200	\$300	\$0	\$0	\$0	\$0	\$0	\$0	\$1,500
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$1,200	\$300	\$1,200	\$300	\$0	\$0	\$0	\$0	\$3,000
Total	\$1,200	\$300	\$1,200	\$300	\$0	\$0	\$0	\$0	\$3,000

Brehms Lane over Herring Run

TIP ID	12-2005-13	Year of Operation	2027
Agency	Baltimore City	Project Type	Bridge repair/deck replacement
Project Category	Highway Preservation	Functional Class	Minor Collector
Conformity Status	Exempt	Physical Data	2 to 2 lanes, 92 ft
CIP or CTP ID(s)	506-011	Est. Total Cost	\$5,000,000

Description:

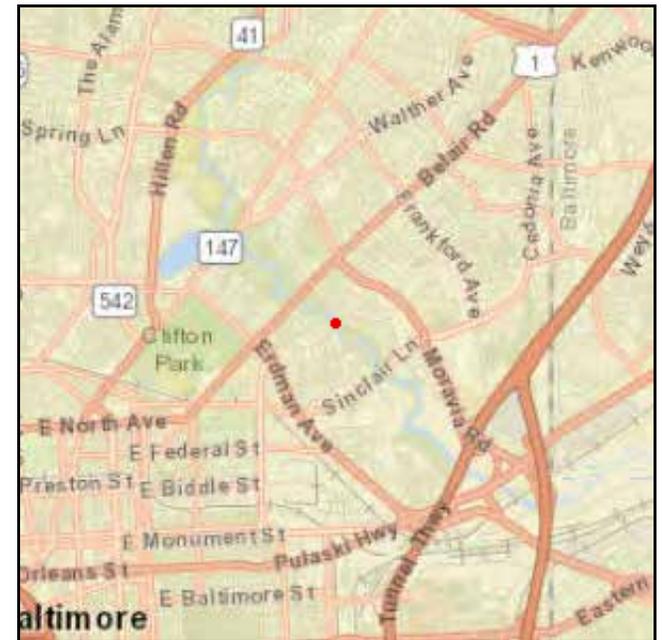
The 92-foot long bridge was originally built in 1963, but severe deterioration is now evident throughout and the structure must be replaced. The existing sidewalks will be replaced with standard SHA and ADA compliant sidewalks.

Justification:

The deteriorated bridge requires replacement to maintain the safety and function of the roadway network. With a current Bridge Sufficiency of only 46.3, the bridge requires a total replacement structure.

Connection to Long-Range Transportation Planning Goals:

- 1.E Improve System Safety -- Improve safety conditions for pedestrians and bicyclists.
- 2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).





Brehms Lane over Herring Run

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$480	\$120	\$0	\$0	\$0	\$0	\$600
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$0	\$0	\$480	\$120	\$0	\$0	\$0	\$0	\$600
Total	\$0	\$0	\$480	\$120	\$0	\$0	\$0	\$0	\$600

Fremont Avenue Rehabilitation from Lafayette Avenue to Presstman Street

TIP ID	12-2007-11	Year of Operation	2025
Agency	Baltimore City	Project Type	Road resurfacing/rehabilitation
Project Category	Highway Preservation	Functional Class	Major Collector
Conformity Status	Exempt	Physical Data	2 to 2 lanes, 2500 ft
CIP or CTP ID(s)	508-051	Est. Total Cost	\$7,500,000

Description:

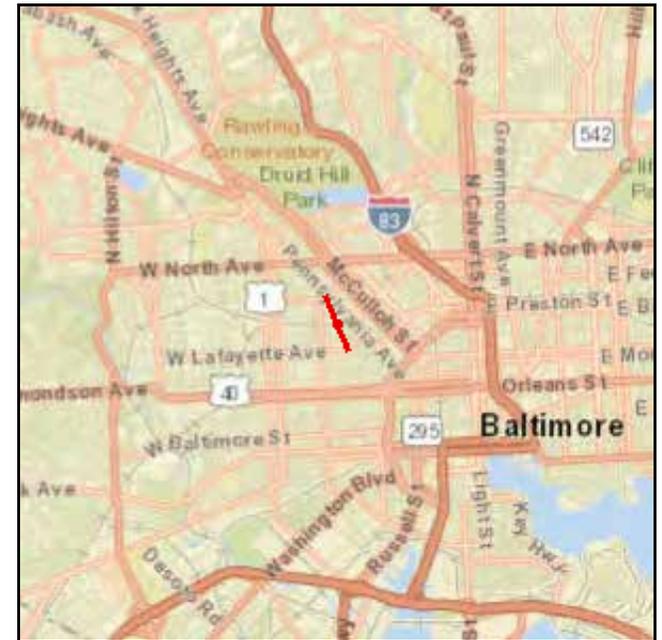
Roadway rehabilitation work includes concrete roadway slab replacement, concrete type I and type II repair, full depth base repair, milling, paving, ADA compliant sidewalks, pedestrian ramps, crosswalks, drainage improvements, traffic signal replacement, signage, pavement markings, curb and gutter replacement, landscaping, trees, new street lights, and street light fixture upgrades. The project will also include pedestrian safety improvements.

Justification:

Roadways need to be repaired and maintained at this time to halt the type of physical deterioration that jeopardizes motorist safety and increases maintenance activities. The work will improve road conditions along major routes leading to and from Baltimore and its neighborhoods without increasing roadway capacity and will provide an opportunity to improve walkways and crossings where needed along these routes.

Connection to Long-Range Transportation Planning Goals:

- 1.E Improve System Safety -- Improve safety conditions for pedestrians and bicyclists.
- 2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).





Fremont Avenue Rehabilitation from Lafayette Avenue to Presstman Street

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$4,800	\$1,200	\$6,000
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$1,200	\$300	\$0	\$0	\$0	\$0	\$0	\$0	\$1,500
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$1,200	\$300	\$0	\$0	\$0	\$0	\$4,800	\$1,200	\$7,500
Total	\$1,200	\$300	\$0	\$0	\$0	\$0	\$4,800	\$1,200	\$7,500

Hanover Street Over CSX

TIP ID	12-2008-13	Year of Operation	2027
Agency	Baltimore City	Project Type	Bridge repair/deck replacement
Project Category	Highway Preservation	Functional Class	Other Principal Arterial
Conformity Status	Exempt	Physical Data	5 to 5 lanes, 375 ft
CIP or CTP ID(s)	506-519	Est. Total Cost	\$20,205,000

Description:

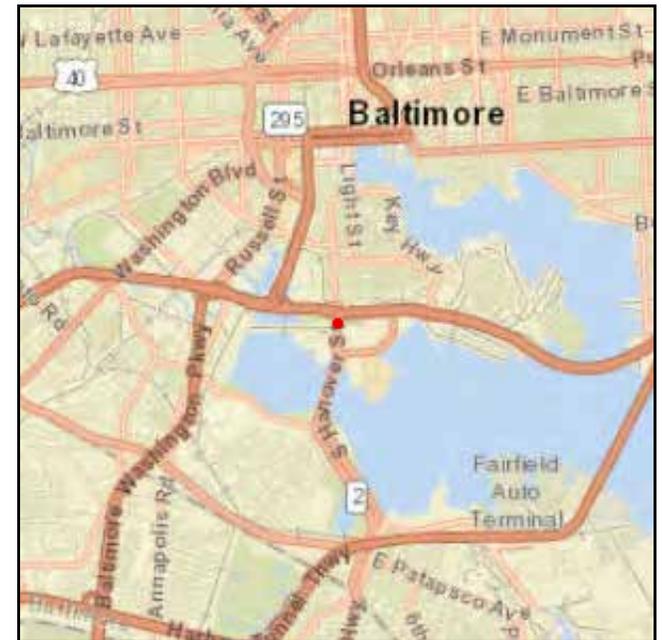
The 367-foot long bridge was originally built in 1900 and was rehabilitated in 1975, but severe deterioration is now evident throughout and the structure must be replaced. The existing sidewalks will be replaced with standard SHA and ADA compliant sidewalks.

Justification:

The deteriorated bridge requires replacement to maintain the safety and function of the roadway network. With a current Bridge Sufficiency of only 60.6, the bridge requires a total replacement structure.

Connection to Long-Range Transportation Planning Goals:

- 1.E Improve System Safety -- Improve safety conditions for pedestrians and bicyclists.
- 2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).





Hanover Street Over CSX

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$735	\$185	\$0	\$0	\$920
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$0	\$0	\$0	\$0	\$735	\$185	\$0	\$0	\$920
Total	\$0	\$0	\$0	\$0	\$735	\$185	\$0	\$0	\$920

Howard Street over I-83, CSX, Amtrak, and Jones Falls

TIP ID	12-2009-13	Year of Operation	2030
Agency	Baltimore City	Project Type	Bridge repair/deck replacement
Project Category	Highway Preservation	Functional Class	Other Principal Arterial
Conformity Status	Exempt	Physical Data	5 to 5 lanes, 979 ft
CIP or CTP ID(s)	506-009	Est. Total Cost	\$49,450,000

Description:

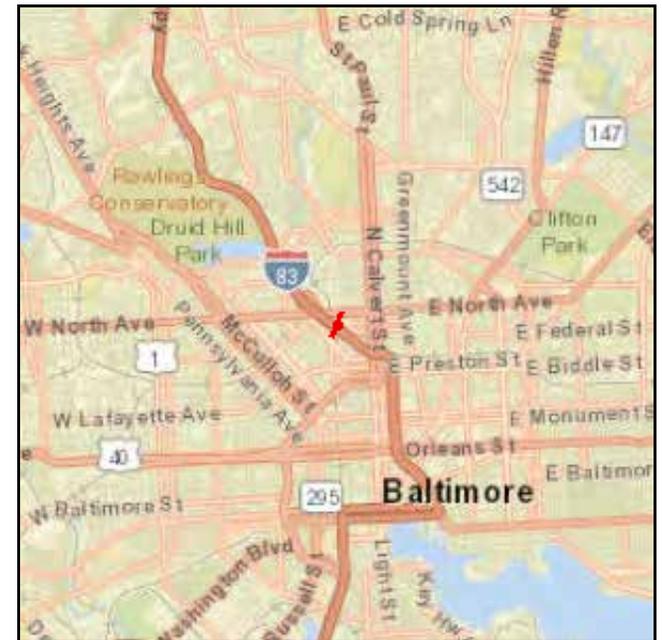
The 979-foot long bridge was originally built in 1938 and was rehabilitated in 1981, but severe deterioration is now evident throughout and the structure must be studied for either rehabilitation or replacement. The estimated total cost of \$49.45 million assumes a bridge replacement, which is substantially more expensive than a rehabilitation. The existing sidewalks will be replaced with standard SHA and ADA compliant sidewalks. The existing lighting system will also be upgraded.

Justification:

The deteriorated bridge requires rehabilitation or replacement to maintain the safety and function of the roadway network. The current Bridge Sufficiency Rating is 31.2.

Connection to Long-Range Transportation Planning Goals:

- 1.E Improve System Safety -- Improve safety conditions for pedestrians and bicyclists.
- 2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).





Howard Street over I-83, CSX, Amtrak, and Jones Falls

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$800	\$200	\$0	\$0	\$1,000
PL	\$0	\$0	\$0	\$250	\$0	\$0	\$0	\$0	\$250
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$0	\$0	\$0	\$250	\$800	\$200	\$0	\$0	\$1,250
Total	\$0	\$0	\$0	\$250	\$800	\$200	\$0	\$0	\$1,250

Madison Street Rehabilitation from North Milton Avenue to Edison Highway

TIP ID	12-2010-11	Year of Operation	2026
Agency	Baltimore City	Project Type	Road resurfacing/rehabilitation
Project Category	Highway Preservation	Functional Class	Other Principal Arterial
Conformity Status	Exempt	Physical Data	2 to 2 lanes, 2700 ft
CIP or CTP ID(s)	508-053	Est. Total Cost	\$8,000,000

Description:

Roadway rehabilitation work includes concrete roadway slab replacement, concrete type I and type II repair, full depth base repair, milling, paving, ADA compliant sidewalks, pedestrian ramps, crosswalks, drainage improvements, traffic signal replacement, signage, pavement markings, curb and gutter replacement, landscaping, trees, new street lights, and street light fixture upgrades.

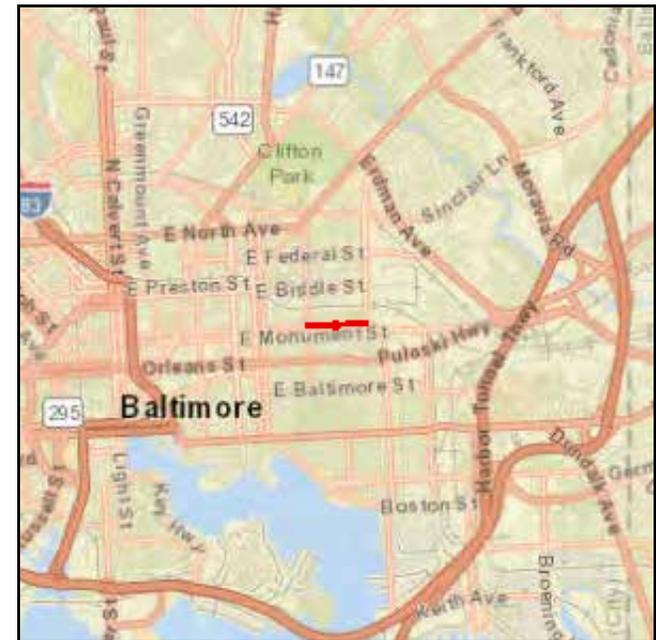
Pedestrian improvements include bump outs for shorter crossings and improved crosswalks/intersections.

Justification:

Roadways need to be repaired and maintained at this time to halt the type of physical deterioration that jeopardizes the safety of all users and increases maintenance activities. The work will improve road conditions along Madison Street and provide improved pedestrian accommodations through shorter crossings.

Connection to Long-Range Transportation Planning Goals:

- 1.E Improve System Safety -- Improve safety conditions for pedestrians and bicyclists.
- 2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).





Madison Street Rehabilitation from North Milton Avenue to Edison Highway

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$5,200	\$1,300	\$6,500
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$1,200	\$300	\$0	\$0	\$0	\$0	\$0	\$0	\$1,500
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$1,200	\$300	\$0	\$0	\$0	\$0	\$5,200	\$1,300	\$8,000
Total	\$1,200	\$300	\$0	\$0	\$0	\$0	\$5,200	\$1,300	\$8,000

Park Heights Avenue from West Rogers Avenue to Strathmore Avenue

TIP ID	12-2011-11	Year of Operation	2025
Agency	Baltimore City	Project Type	Road resurfacing/rehabilitation
Project Category	Highway Preservation	Functional Class	Minor Arterial
Conformity Status	Exempt	Physical Data	4 to 4 lanes, 4100 ft
CIP or CTP ID(s)	508-046	Est. Total Cost	\$15,000,000

Description:

Roadway rehabilitation work includes concrete roadway slab replacement, concrete type I and type II repair, full depth base repair, milling, paving, ADA compliant sidewalks, pedestrian ramps, crosswalks, drainage improvements, traffic signal replacement, signage, pavement markings, curb and gutter replacement, landscaping, trees, new street lights, and street light fixture upgrades.

Justification:

Roadways need to be repaired and maintained at this time to halt the type of physical deterioration that jeopardizes motorist safety and increases maintenance activities. The work will improve road conditions along major routes leading to and from Baltimore and its neighborhoods without increasing roadway capacity. Pedestrian safety improvements will be included in the project.



Connection to Long-Range Transportation Planning Goals:

- 1.E Improve System Safety -- Improve safety conditions for pedestrians and bicyclists.
- 2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).



Park Heights Avenue from West Rogers Avenue to Strathmore Avenue

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$10,800	\$2,700	\$13,500
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$1,200	\$300	\$0	\$0	\$0	\$0	\$0	\$0	\$1,500
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$1,200	\$300	\$0	\$0	\$0	\$0	\$10,800	\$2,700	\$15,000
Total	\$1,200	\$300	\$0	\$0	\$0	\$0	\$10,800	\$2,700	\$15,000

Patapsco Avenue from Magnolia Avenue to Patapsco River Bridge

TIP ID	12-2012-11	Year of Operation	2026
Agency	Baltimore City	Project Type	Road resurfacing/rehabilitation
Project Category	Highway Preservation	Functional Class	Other Principal Arterial
Conformity Status	Not Exempt	Physical Data	6 to 4 lanes, 5075 ft
CIP or CTP ID(s)	508-072	Est. Total Cost	\$15,100,000

Description:

Roadway rehabilitation work includes concrete roadway slab replacement, concrete type I and type II repair, full depth base repair, milling, paving, ADA compliant sidewalks, pedestrian ramps, crosswalks, drainage improvements, traffic signal replacement, signage, pavement markings, curb and gutter replacement, landscaping, trees, new street lights, and street light fixture upgrades.

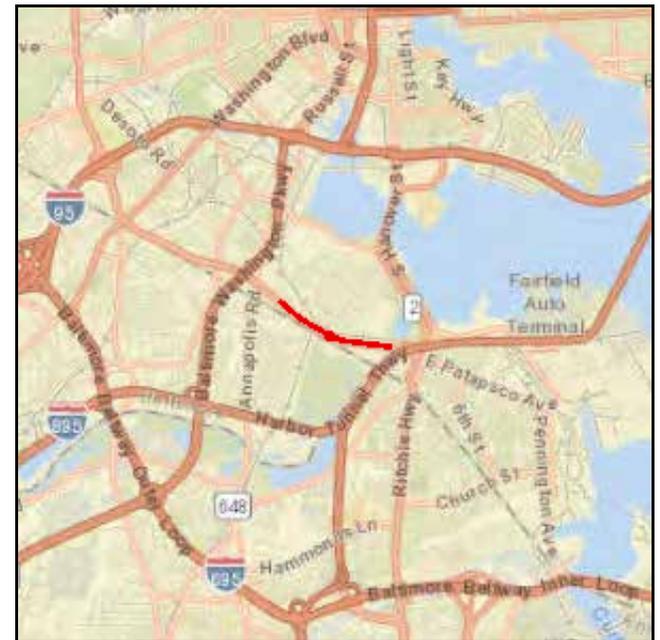
A mixed use trail and pedestrian accommodations will be added to the north side of Patapsco Avenue.

Justification:

Roadways need to be repaired and maintained at this time to halt the type of physical deterioration that jeopardizes motorist safety and increases maintenance activities. The work will improve road conditions along major routes leading to and from Baltimore and its neighborhoods without increasing roadway capacity and will provide an opportunity to improve walkways where needed along these routes.

Connection to Long-Range Transportation Planning Goals:

- 2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).
- 3.B Improve Accessibility -- Improve ADA-related conditions for pedestrians / transit riders.
- 3.E Improve Accessibility -- Provide or improve pedestrian and bicycle facilities that link to activity centers and public transit.





Patapsco Avenue from Magnolia Avenue to Patapsco River Bridge

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$10,880	\$2,720	\$13,600
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$1,200	\$300	\$0	\$0	\$0	\$0	\$0	\$0	\$1,500
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$1,200	\$300	\$0	\$0	\$0	\$0	\$10,880	\$2,720	\$15,100
Total	\$1,200	\$300	\$0	\$0	\$0	\$0	\$10,880	\$2,720	\$15,100

Pennington Avenue Rehabilitation from Birch Street to East Ordnance Road

TIP ID	12-2013-11	Year of Operation	2024
Agency	Baltimore City	Project Type	Road resurfacing/rehabilitation
Project Category	Highway Preservation	Functional Class	Other Principal Arterial
Conformity Status	Exempt	Physical Data	4 to 4 lanes, 3500 ft
CIP or CTP ID(s)	508-056	Est. Total Cost	\$10,400,000

Description:

Roadway rehabilitation work includes concrete roadway slab replacement, concrete type I and type II repair, full depth base repair, milling, paving, ADA compliant sidewalks, pedestrian ramps, crosswalks, drainage improvements, traffic signal replacement, signage, pavement markings, curb and gutter replacement, landscaping, trees, new street lights, and street light fixture upgrades.

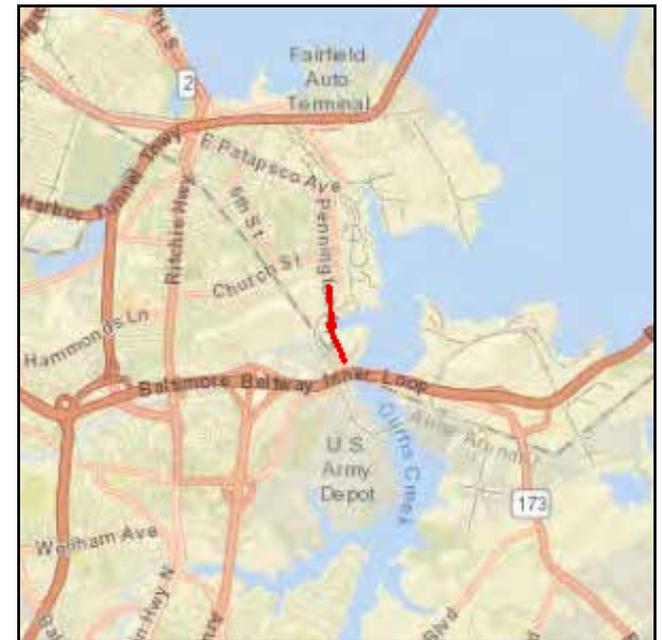
ADA compliant sidewalks will be added where there are no existing sidewalks.

Justification:

This project will bring key streets and intersections into a state of good repair while improving access, safety, and aesthetics

Connection to Long-Range Transportation Planning Goals:

- 1.C Improve System Safety -- Eliminate hazardous or substandard conditions.
- 2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).
- 3.B Improve Accessibility -- Improve ADA-related conditions for pedestrians / transit riders.





Pennington Avenue Rehabilitation from Birch Street to East Ordnance Road

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$7,520	\$1,880	\$0	\$0	\$9,400
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$800	\$200	\$0	\$0	\$0	\$0	\$0	\$0	\$1,000
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$800	\$200	\$0	\$0	\$7,520	\$1,880	\$0	\$0	\$10,400
Total	\$800	\$200	\$0	\$0	\$7,520	\$1,880	\$0	\$0	\$10,400

Waterview Avenue over Ramp to 295

TIP ID	12-2015-13	Year of Operation	2027
Agency	Baltimore City	Project Type	Bridge repair/deck replacement
Project Category	Highway Preservation	Functional Class	Minor Arterial
Conformity Status	Exempt	Physical Data	4 to 4 lanes, 75 ft
CIP or CTP ID(s)	506-007	Est. Total Cost	\$6,000,000

Description:

The 75-foot long bridge was originally built in 1950, but severe deterioration is now evident throughout and the structure must be evaluated to determine whether the bridge should be rehabilitated or replaced. The estimated total cost of \$6 million assumes a bridge replacement, which is substantially more expensive than a rehabilitation. The existing sidewalks will be replaced with standard SHA and ADA compliant sidewalks.

Justification:

The deteriorated bridge requires rehabilitation or replacement to maintain the safety and function of the roadway network. The current Bridge Sufficiency Rating is 55.5.

Connection to Long-Range Transportation Planning Goals:

- 1.E Improve System Safety -- Improve safety conditions for pedestrians and bicyclists.
- 2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).





Waterview Avenue over Ramp to 295

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$384	\$96	\$0	\$0	\$0	\$0	\$480
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$0	\$0	\$384	\$96	\$0	\$0	\$0	\$0	\$480
Total	\$0	\$0	\$384	\$96	\$0	\$0	\$0	\$0	\$480

Baltimore City Locked Gate Interstate Access Point Approval (IAPA)

TIP ID	12-1201-99	Year of Operation	2021
Agency	Baltimore City	Project Type	Miscellaneous
Project Category	Miscellaneous	Functional Class	NA
Conformity Status	Exempt	Physical Data	Controlled Access Point
CIP or CTP ID(s)	NA	Est. Total Cost	\$1,000,000

Description:

This project would modify the North Charles Street on-ramp to I-83 to allow access to Amtrak property west of Penn Station. This would be a controlled access point with a locked gate.

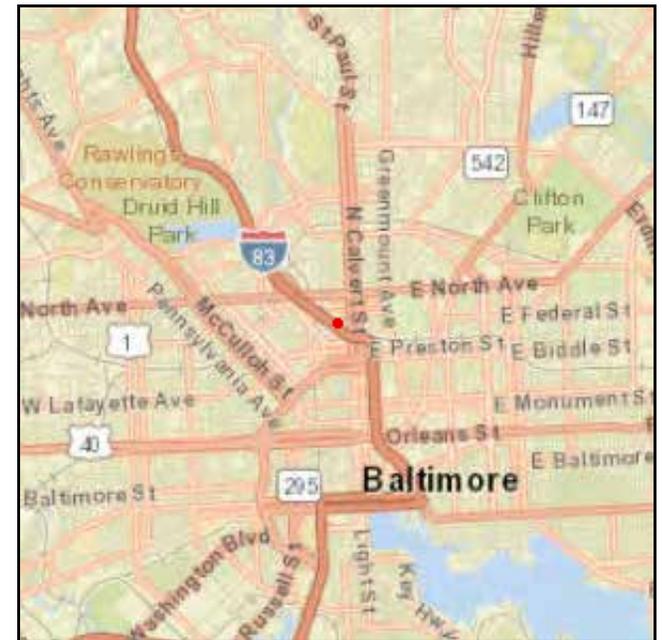
The construction phase of this project will be primarily funded by Amtrak Capital funds.

Justification:

Since Baltimore City has jurisdiction over I-83 and this project involves a modification to an interstate, FHWA is requiring this project to be in the TIP. However, Baltimore is not managing any portion of design and construction.

Connection to Long-Range Transportation Planning Goals:

- 1.C Improve System Safety -- Eliminate hazardous or substandard conditions.





Baltimore City Locked Gate Interstate Access Point Approval (IAPA)

(Funding in Thousands)

Other

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$1,000	\$0	\$0	\$0	\$0	\$0	\$0	\$1,000
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$0	\$1,000	\$0	\$0	\$0	\$0	\$0	\$0	\$1,000
Total	\$0	\$1,000	\$0	\$0	\$0	\$0	\$0	\$0	\$1,000

Capital Project Delivery Services

TIP ID	12-1901-99	Year of Operation	Ongoing
Agency	Baltimore City	Project Type	Miscellaneous
Project Category	Miscellaneous	Functional Class	NA
Conformity Status	Exempt	Physical Data	NA
CIP or CTP ID(s)	508-378	Est. Total Cost	\$2,000,000

Description:

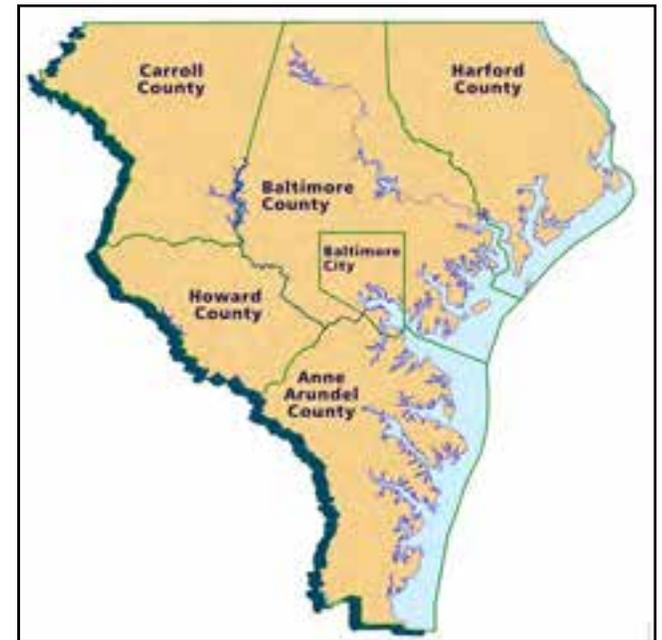
The purpose of this project is to provide the technological and project management improvements needed to support the design and construction phases of CIP projects. The TIP funding will be used for project delivery services of capital federal-aid roadway projects. This program was initiated in FY 2019.

Justification:

The project will provide continued support for the Oracle Contract Management application and will establish a Project Management Office within the Office of the Director.

Connection to Long-Range Transportation Planning Goals:

- 9. Promote Informed Decision Making





Capital Project Delivery Services

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$500	\$1,500	\$0	\$0	\$0	\$0	\$0	\$0	\$2,000
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$500	\$1,500	\$0	\$0	\$0	\$0	\$0	\$0	\$2,000
Total	\$500	\$1,500	\$0	\$0	\$0	\$0	\$0	\$0	\$2,000

Citywide Transportation Plan

TIP ID	12-2006-99	Year of Operation	2021
Agency	Baltimore City	Project Type	Miscellaneous
Project Category	Miscellaneous	Functional Class	NA
Conformity Status	Exempt	Physical Data	NA
CIP or CTP ID(s)	508-641	Est. Total Cost	\$1,700,000

Description:

The Citywide transportation plan seeks to utilize previously approved and adopted transportation plans specific to areas and build on these with a comprehensive and multi-modal transportation master plan that will provide a transportation vision for the Department of Transportation to advance in future years.

Justification:

The master plan will guide the City toward reaching its goals of improved accessibility of all users, improved economic growth, and improved safety for all roadway users. The plan will aid in providing informed decision making and prioritization for future city projects.

Connection to Long-Range Transportation Planning Goals:

- 9. Promote Informed Decision Making





Citywide Transportation Plan

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$1,200	\$500	\$0	\$0	\$0	\$0	\$0	\$0	\$1,700
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$1,200	\$500	\$0	\$0	\$0	\$0	\$0	\$0	\$1,700
Total	\$1,200	\$500	\$0	\$0	\$0	\$0	\$0	\$0	\$1,700

Citywide Transportation Studies

TIP ID	12-2014-99	Year of Operation	Ongoing
Agency	Baltimore City	Project Type	Miscellaneous
Project Category	Miscellaneous	Functional Class	NA
Conformity Status	Exempt	Physical Data	NA
CIP or CTP ID(s)	527-047	Est. Total Cost	\$3,400,000

Description:

This project is to provide funding for transportation studies on federal-aid eligible roads related to, but not limited to, crash studies, traffic circulation studies, bicycle and pedestrian studies, and safety studies.

Justification:

The Baltimore City Department of Transportation often has to be flexible in planning around a changing transportation environment, with a fund dedicated to transportation studies that can address issues that arise and propose solutions for engineering and design.

Connection to Long-Range Transportation Planning Goals:

- 9. Promote Informed Decision Making





Citywide Transportation Studies

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$1,200	\$200	\$800	\$200	\$800	\$200	\$0	\$0	\$3,400
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$1,200	\$200	\$800	\$200	\$800	\$200	\$0	\$0	\$3,400
Total	\$1,200	\$200	\$800	\$200	\$800	\$200	\$0	\$0	\$3,400

Dogwood Road Bridge No. B-0072 Over Dogwood Run

TIP ID	13-0001-13	Year of Operation	2022
Agency	Baltimore County	Project Type	Bridge repair/deck replacement
Project Category	Highway Preservation	Functional Class	Minor Collector
Conformity Status	Exempt	Physical Data	2 to 2 Lanes
CIP or CTP ID(s)	207P230	Est. Total Cost	\$3,225,000

Description:

Replacement of existing bridge. New structure will have one 3 foot shoulder and one 6 foot shoulder.

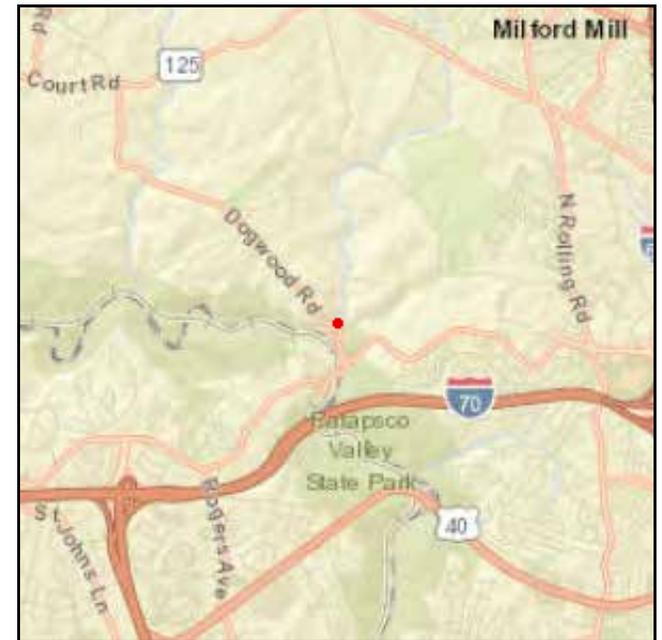
Engineering funds were included in FY 2013.

Justification:

The National Bridge Inspection Program recommends replacement due to extensive concrete contamination. This project is consistent with federal, state and local bridge replacement policies.

Connection to Long-Range Transportation Planning Goals:

2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).





Dogwood Road Bridge No. B-0072 Over Dogwood Run

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$2,320	\$580	\$0	\$0	\$0	\$0	\$2,900
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$0	\$0	\$2,320	\$580	\$0	\$0	\$0	\$0	\$2,900
Total	\$0	\$0	\$2,320	\$580	\$0	\$0	\$0	\$0	\$2,900

Mohrs Lane Bridge No. B-0143 over CSX Railroad

TIP ID	13-0803-13	Year of Operation	2022
Agency	Baltimore County	Project Type	Bridge repair/deck replacement
Project Category	Highway Preservation	Functional Class	Local
Conformity Status	Exempt	Physical Data	2 to 2 Lanes
CIP or CTP ID(s)	205P376	Est. Total Cost	\$12,600,000

Description:

Replacement of existing bridge to include sidewalks and wider lanes as well as the approaches to accommodate future Campbell Blvd. New structure will have 8 foot shoulders on both sides.

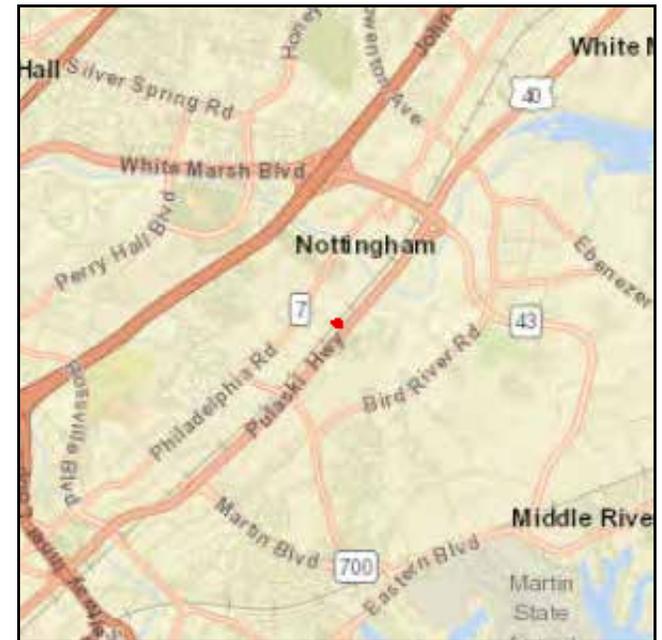
Engineering funds were included in FY 2013.

Justification:

This replacement project will enhance transportation facilities, improve safety, and provide access for goods movement.

Connection to Long-Range Transportation Planning Goals:

- 1.C Improve System Safety -- Eliminate hazardous or substandard conditions.
- 1.E Improve System Safety -- Improve safety conditions for pedestrians and bicyclists.
- 2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).





Mohrs Lane Bridge No. B-0143 over CSX Railroad

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$9,600	\$2,400	\$0	\$0	\$0	\$0	\$0	\$0	\$12,000
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$9,600	\$2,400	\$0	\$0	\$0	\$0	\$0	\$0	\$12,000
Total	\$9,600	\$2,400	\$0	\$0	\$0	\$0	\$0	\$0	\$12,000

Gunpowder Road Bridge No. B-0409

TIP ID	13-1005-13	Year of Operation	2025
Agency	Baltimore County	Project Type	Bridge repair/deck replacement
Project Category	Highway Preservation	Functional Class	Local
Conformity Status	Exempt	Physical Data	2 to 2 lanes
CIP or CTP ID(s)	207P002	Est. Total Cost	\$2,000,000

Description:

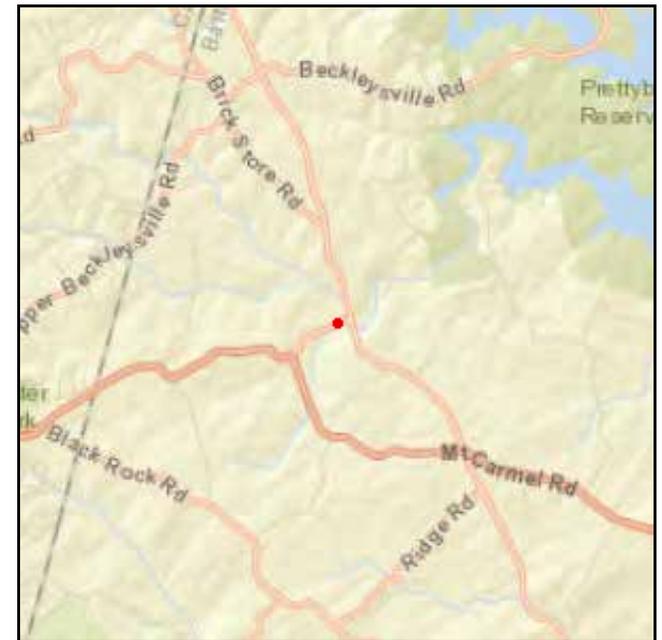
Replacement of the existing bridge. New bridge will have minimum 2 foot wide shoulders. Lane, shoulders and sidewalks to be evaluated during preliminary design.

Justification:

This replacement project will enhance transportation facilities, improve safety, and provide access for goods movement.

Connection to Long-Range Transportation Planning Goals:

2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).





Gunpowder Road Bridge No. B-0409

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$400	\$100	\$0	\$0	\$500
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$0	\$0	\$0	\$0	\$400	\$100	\$0	\$0	\$500
Total	\$0	\$0	\$0	\$0	\$400	\$100	\$0	\$0	\$500

Hammonds Ferry Road Bridge No. B-0100 over CSX Railroad

TIP ID	13-1012-13	Year of Operation	2022
Agency	Baltimore County	Project Type	Bridge repair/deck replacement
Project Category	Highway Preservation	Functional Class	Minor Arterial
Conformity Status	Exempt	Physical Data	4 to 4 Lanes
CIP or CTP ID(s)	207P280	Est. Total Cost	\$5,500,000

Description:

Deck replacement and rehabilitation of Bridge No. B-100 on Hammonds Ferry Road over CSX railroad. The existing bridge has two 5 foot wide sidewalks and two 6 foot striped shoulders. The new structure will have sidewalks and shoulders of the same width.

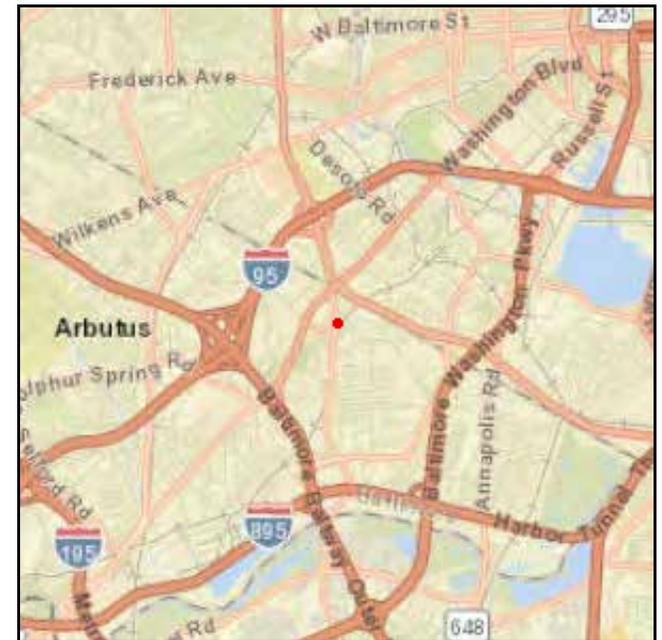
Engineering funds were included in FY 2013. The estimated total cost has increased from \$3.6 million to \$5.5 million. The original cost estimate was based on pre-design study costs. The updated estimated total cost reflects preliminary design cost estimates as well as larger than anticipated utility relocation costs.

Justification:

Bridge has deteriorated and is in need of rehabilitation.

Connection to Long-Range Transportation Planning Goals:

2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).





Hammonds Ferry Road Bridge No. B-0100 over CSX Railroad

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$3,944	\$986	\$0	\$0	\$0	\$0	\$4,930
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$0	\$0	\$3,944	\$986	\$0	\$0	\$0	\$0	\$4,930
Total	\$0	\$0	\$3,944	\$986	\$0	\$0	\$0	\$0	\$4,930

Lansdowne Boulevard Bridge No. B-0113 over CSX Railroad

TIP ID	13-1105-13	Year of Operation	2026
Agency	Baltimore County	Project Type	Bridge repair/deck replacement
Project Category	Highway Preservation	Functional Class	Minor Arterial
Conformity Status	Exempt	Physical Data	4 to 4 Lanes
CIP or CTP ID(s)	207P279	Est. Total Cost	\$3,300,000

Description:

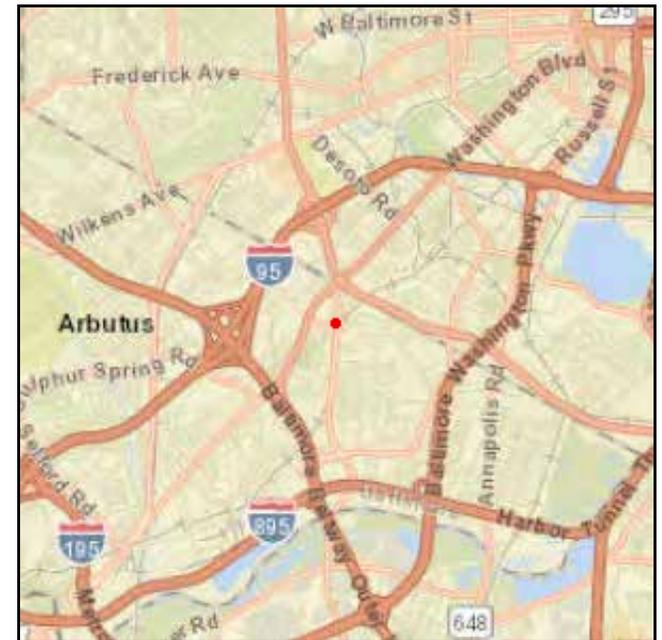
Steel girder bridge carrying two lanes of traffic each way and two 5 foot sidewalks on Lansdowne Boulevard over CSX railroad tracks. The project is still in planning, but any proposed structure will maintain the existing cross section.

Justification:

This structurally deficient bridge is deteriorated and is in need of major rehabilitation. A superstructure replacement is anticipated for this project.

Connection to Long-Range Transportation Planning Goals:

2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).





Lansdowne Boulevard Bridge No. B-0113 over CSX Railroad

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$640	\$160	\$0	\$0	\$800
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$0	\$0	\$0	\$0	\$640	\$160	\$0	\$0	\$800
Total	\$0	\$0	\$0	\$0	\$640	\$160	\$0	\$0	\$800

Piney Grove Road Bridge No. B-0140 over CSX railroad

TIP ID	13-1107-13	Year of Operation	2025
Agency	Baltimore County	Project Type	Bridge repair/deck replacement
Project Category	Highway Preservation	Functional Class	Local
Conformity Status	Not Exempt	Physical Data	1 to 2 Lanes
CIP or CTP ID(s)	207P237	Est. Total Cost	\$4,100,000

Description:

Existing timber bridge, 44' long, 16' wide carrying a single lane of traffic over CSX railroad tracks. There are no sidewalks on the approaches, but the need for sidewalks will be evaluated during preliminary design.

Justification:

Bridge is classified as structurally deficient and currently posted for 8 tons (SUV) and 13 tons (CVW). It is in need of total replacement. The Bridge is currently owned and maintained by CSX but Baltimore County inspects the bridge. Before beginning preliminary engineering the bridge ownership will be transferred from CSX to Baltimore County.

Connection to Long-Range Transportation Planning Goals:

2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).





Piney Grove Road Bridge No. B-0140 over CSX railroad

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$480	\$120	\$0	\$0	\$600
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$0	\$0	\$0	\$0	\$480	\$120	\$0	\$0	\$600
Total	\$0	\$0	\$0	\$0	\$480	\$120	\$0	\$0	\$600

Peninsula Expressway Bridge No. B-0119 over CSX Railroad

TIP ID	13-1108-13	Year of Operation	2027
Agency	Baltimore County	Project Type	Bridge repair/deck replacement
Project Category	Highway Preservation	Functional Class	Minor Arterial
Conformity Status	Exempt	Physical Data	4 to 4 lanes
CIP or CTP ID(s)	207P278	Est. Total Cost	\$8,400,000

Description:

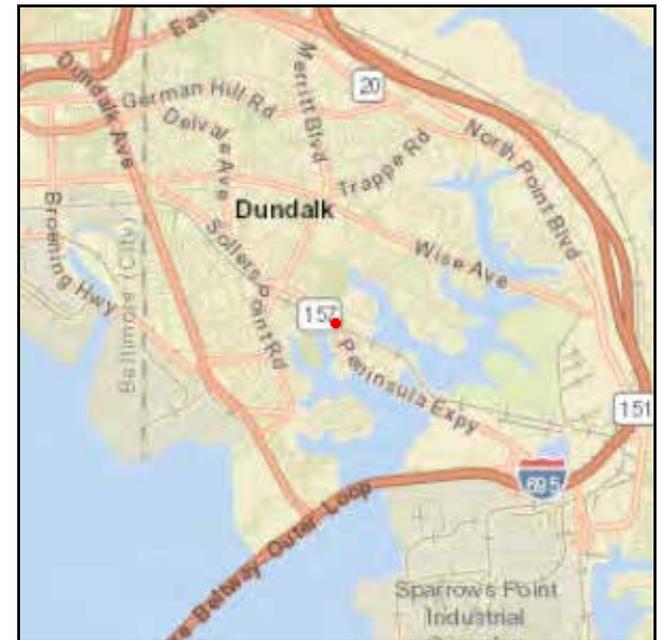
Replacement of Dual Bridge No. 119 on Peninsula Expressway over CSX railroad tracks. Both structures have 3 foot wide shoulders on both sides. The need for sidewalks will be evaluated during preliminary design.

Justification:

The dual steel girder bridges are classified as structurally deficient and are in need of total replacement.

Connection to Long-Range Transportation Planning Goals:

2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).





Peninsula Expressway Bridge No. B-0119 over CSX Railroad

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$800	\$200	\$1,000
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$0	\$0	\$0	\$0	\$0	\$0	\$800	\$200	\$1,000
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$800	\$200	\$1,000

Old Ingleside Avenue Bridge No. B-0096 over Dead Run

TIP ID	13-1202-13	Year of Operation	2025
Agency	Baltimore County	Project Type	Bridge repair/deck replacement
Project Category	Highway Preservation	Functional Class	Local
Conformity Status	Exempt	Physical Data	2 to 2 Lanes
CIP or CTP ID(s)	207P002	Est. Total Cost	\$2,600,000

Description:

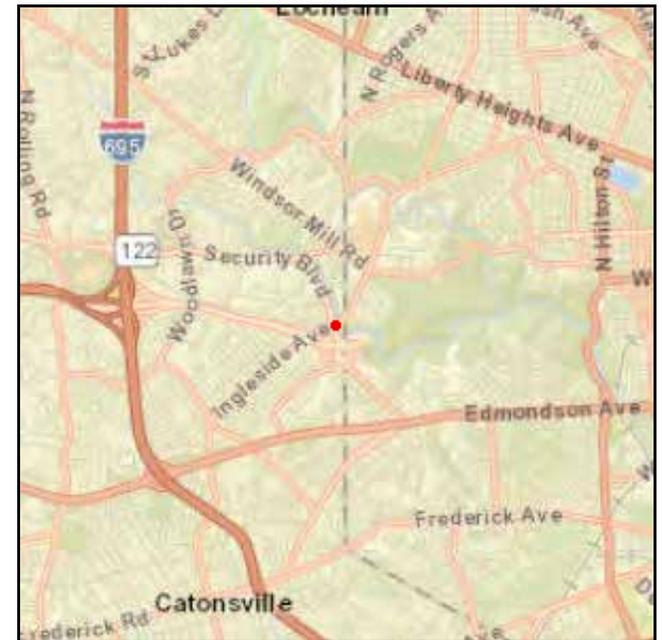
Replacement of Bridge No. B-0096 on Old Ingleside Avenue over Dead Run. The existing bridge is a historic arch structure. Preliminary design will include evaluation of rehabilitation versus replacement. The proposed bridge will have at least one 5 foot wide sidewalk along the north side of the deck. Exact lane and sidewalk widths to be determined during preliminary design.

Justification:

Deteriorated structure with a Bridge Sufficiency Rating of 18.6%. The Structural Inventory and Assessment Items No. 67 & 68 equal 2 and the bridge is classified as structurally deficient. Item No. 67 is for structural evaluation and No. 68 is for deck geometry. A rating of 2 for these items equates to "basically intolerable requiring high priority of replacement."

Connection to Long-Range Transportation Planning Goals:

2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).





Old Ingleside Avenue Bridge No. B-0096 over Dead Run

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$480	\$120	\$0	\$0	\$600
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$0	\$0	\$0	\$0	\$480	\$120	\$0	\$0	\$600
Total	\$0	\$0	\$0	\$0	\$480	\$120	\$0	\$0	\$600

Old Court Road Bridge No. B-0237 over Bens Run

TIP ID	13-1204-13	Year of Operation	2020
Agency	Baltimore County	Project Type	Bridge repair/deck replacement
Project Category	Highway Preservation	Functional Class	Minor Arterial
Conformity Status	Exempt	Physical Data	4 to 4 Lanes
CIP or CTP ID(s)	207P002	Est. Total Cost	\$2,100,000

Description:

Superstructure replacement for Bridge No. B-237 on Old Court Road over Bens Run. The existing bridge has two 5 foot sidewalks. The new superstructure will maintain the existing cross section.

Engineering funds were included in FY 2014.

Justification:

Existing hollow prestressed concrete box beams are deteriorated. The bridge sufficiency rating is 45.3% and both the superstructure and deck are in poor condition.

Connection to Long-Range Transportation Planning Goals:

2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).





Old Court Road Bridge No. B-0237 over Bens Run

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$1,440	\$460	\$0	\$0	\$0	\$0	\$0	\$0	\$1,900
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$1,440	\$460	\$0	\$0	\$0	\$0	\$0	\$0	\$1,900
Total	\$1,440	\$460	\$0	\$0	\$0	\$0	\$0	\$0	\$1,900

Sparks Road Bridge No. B-0018 over Gunpowder Falls

TIP ID	13-1206-13	Year of Operation	2022
Agency	Baltimore County	Project Type	Bridge repair/deck replacement
Project Category	Highway Preservation	Functional Class	Minor Collector
Conformity Status	Exempt	Physical Data	2 to 2 Lanes
CIP or CTP ID(s)	207P002	Est. Total Cost	\$550,000

Description:

Cleaning and painting of Bridge No. B-18 on Sparks Road over Gunpowder Falls. The existing bridge is a historic truss structure. The project includes no structural modifications.

Justification:

The existing paint coating is deteriorated and in need of replacement.

Connection to Long-Range Transportation Planning Goals:

2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).





Sparks Road Bridge No. B-0018 over Gunpowder Falls

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$400	\$100	\$0	\$0	\$500
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$40	\$10	\$0	\$0	\$0	\$0	\$50
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$0	\$0	\$40	\$10	\$400	\$100	\$0	\$0	\$550
Total	\$0	\$0	\$40	\$10	\$400	\$100	\$0	\$0	\$550

Golden Ring Road Bridge No. B-0110 over Stemmers Run

TIP ID	13-1208-13	Year of Operation	2026
Agency	Baltimore County	Project Type	Bridge repair/deck replacement
Project Category	Highway Preservation	Functional Class	Minor Arterial
Conformity Status	Exempt	Physical Data	2 to 2 Lanes
CIP or CTP ID(s)	207P002	Est. Total Cost	\$2,600,000

Description:

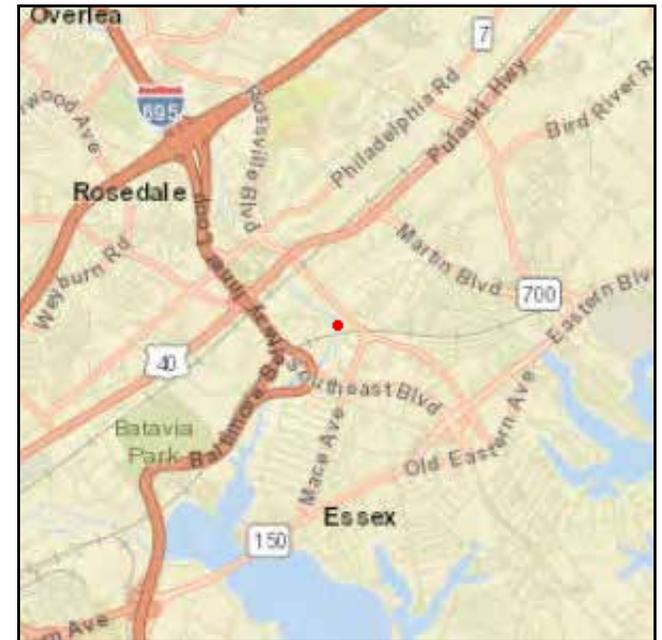
Replacement of Bridge No. B-110 on Golden Ring Road over Stemmers Run. Proposed bridge will have minimum 2 foot shoulders. Shoulder widths and sidewalks to be evaluated during preliminary design.

Justification:

Existing bridge is deteriorated and is classified as structurally deficient. The bridge sufficiency rating is 26.2% with the superstructure in poor condition.

Connection to Long-Range Transportation Planning Goals:

2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).





Golden Ring Road Bridge No. B-0110 over Stemmers Run

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$480	\$120	\$0	\$0	\$600
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$0	\$0	\$0	\$0	\$480	\$120	\$0	\$0	\$600
Total	\$0	\$0	\$0	\$0	\$480	\$120	\$0	\$0	\$600

Rolling Road Bridge No. B-0358 over Branch of Dead Run

TIP ID	13-1209-13	Year of Operation	2027
Agency	Baltimore County	Project Type	Bridge repair/deck replacement
Project Category	Highway Preservation	Functional Class	Local
Conformity Status	Exempt	Physical Data	4 to 4 Lanes
CIP or CTP ID(s)	207P002	Est. Total Cost	\$2,000,000

Description:

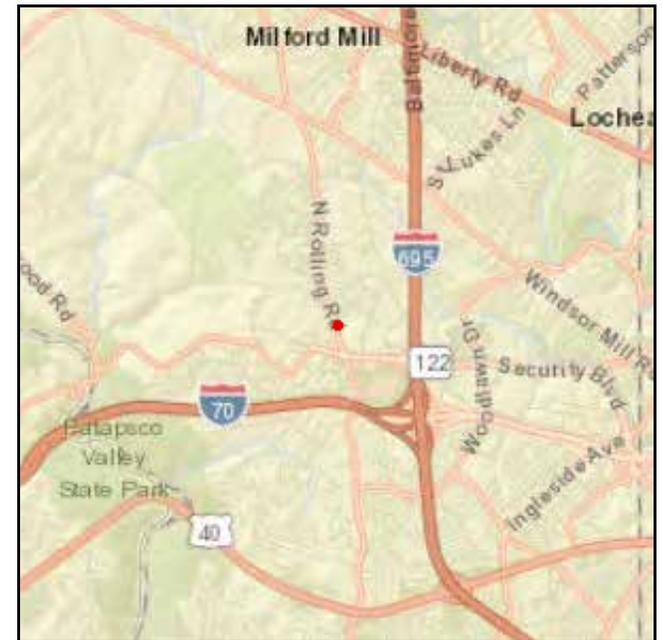
Replacement of Bridge No. B-0358 on Rolling Road over Branch of Dead Run. The proposed structure will have 5 foot wide sidewalks along both sides of the road and tie into the existing conditions.

Justification:

Existing concrete box culvert is deteriorated and in poor condition with a bridge sufficiency rating of 14.3%.

Connection to Long-Range Transportation Planning Goals:

2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).





Rolling Road Bridge No. B-0358 over Branch of Dead Run

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$400	\$100	\$500
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$0	\$0	\$0	\$0	\$0	\$0	\$400	\$100	\$500
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$400	\$100	\$500

Forest Park Avenue N. Bridge No. B-0097 over Dead Run and Dogwood Road

TIP ID	13-1210-13	Year of Operation	2024
Agency	Baltimore County	Project Type	Bridge repair/deck replacement
Project Category	Highway Preservation	Functional Class	Minor Arterial
Conformity Status	Exempt	Physical Data	2 to 2 Lanes
CIP or CTP ID(s)	207P002	Est. Total Cost	\$2,600,000

Description:

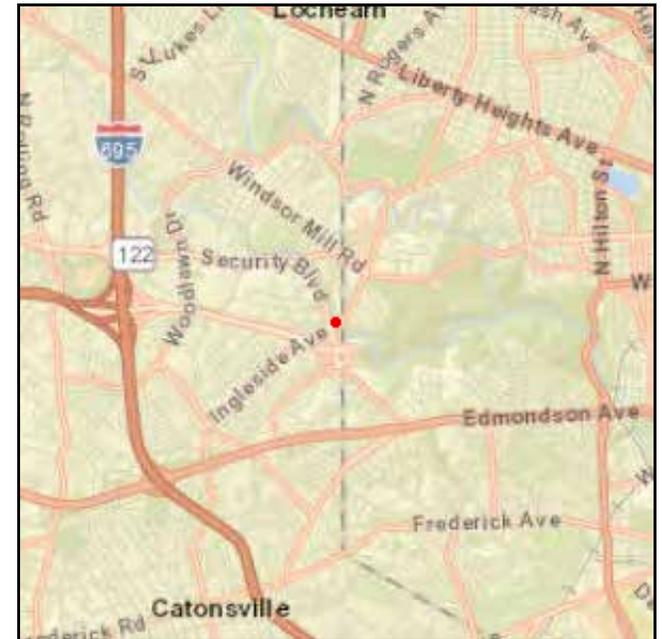
Deck replacement and rehabilitation of Bridge No. B-97 on Ingleside Avenue over Dead Run and Dogwood Road. The proposed structure will have a 5 foot wide sidewalk along the north side of the deck. Shoulder and sidewalk widths to be determined during preliminary design.

Justification:

Existing bridge is deteriorated and in need of overall rehabilitation. The bridge sufficiency rating is 59.3% and the Structural Inventory and Assessment Item No. 68 equals 2. Structural Inventory and Assessment Item No. 68 is for deck geometry. A rating of 2 for this item equates to "basically intolerable requiring high priority of replacement."

Connection to Long-Range Transportation Planning Goals:

2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).





Forest Park Avenue N. Bridge No. B-0097 over Dead Run and Dogwood Road

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$1,600	\$400	\$2,000
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$480	\$120	\$0	\$0	\$600
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$0	\$0	\$0	\$0	\$480	\$120	\$1,600	\$400	\$2,600
Total	\$0	\$0	\$0	\$0	\$480	\$120	\$1,600	\$400	\$2,600

Rossville Blvd. Bridge No. B-0132 over Amtrak & Orems Rd.

TIP ID	13-1701-13	Year of Operation	2025
Agency	Baltimore County	Project Type	Bridge repair/deck replacement
Project Category	Highway Preservation	Functional Class	Minor Arterial
Conformity Status	Exempt	Physical Data	4 to 4 lanes
CIP or CTP ID(s)	207P279	Est. Total Cost	\$5,600,000

Description:

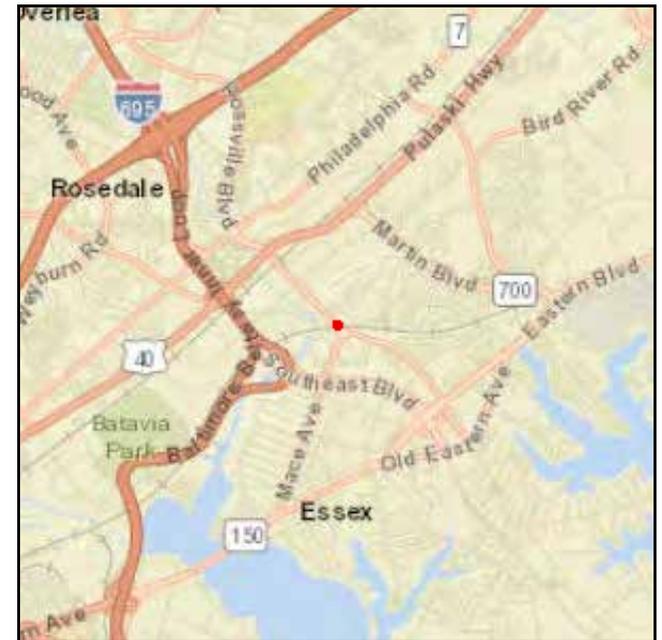
Rehabilitation of Bridge No. B-0132 on Rossville Boulevard over Amtrak Railroad & Orems Road. The proposed bridge will have 5 foot wide sidewalks along both sides of the deck.

Justification:

Bridge is in poor condition with a Bridge Sufficiency Rating of 44.4%, NBIS Substructure rating of 4 (poor) and is classified as structurally deficient.

Connection to Long-Range Transportation Planning Goals:

2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).





Rossville Blvd. Bridge No. B-0132 over Amtrak & Orems Rd.

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$640	\$160	\$0	\$0	\$800
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$0	\$0	\$0	\$0	\$640	\$160	\$0	\$0	\$800
Total	\$0	\$0	\$0	\$0	\$640	\$160	\$0	\$0	\$800

Phoenix Road Bridge No. BC6507 over Gunpowder Falls & NCR Trail

TIP ID	13-2001-13	Year of Operation	2022
Agency	Baltimore County	Project Type	Bridge repair/deck replacement
Project Category	Highway Preservation	Functional Class	Local
Conformity Status	Exempt	Physical Data	2 to 2 Lanes
CIP or CTP ID(s)	557-068 (Baltimore City CIP)	Est. Total Cost	\$12,000,000

Description:

Replacement of Bridge No. BC6507 on Phoenix Road over the Gunpowder Falls and the NCR Trail. This bridge is located in Baltimore County, but is owned and maintained by Baltimore City as it is located within the Loch Raven Reservoir. The construction phase is funded with federal funds originally intended for Baltimore County. Both Baltimore City and Baltimore County are contributing matching funds. The old bridge provided 20' of clear roadway width for two lanes and no shoulders. The new bridge will provide 30' clear roadway width (between traffic barriers) for two 12' lanes and two 3' shoulders.

Engineering was completed in FY 2019 with local funds only.

Justification:

The bridge is in overall poor condition and is in need of total replacement.

Connection to Long-Range Transportation Planning Goals:

2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).





Phoenix Road Bridge No. BC6507 over Gunpowder Falls & NCR Trail

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$9,600	\$2,400	\$0	\$0	\$0	\$0	\$0	\$0	\$12,000
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$9,600	\$2,400	\$0	\$0	\$0	\$0	\$0	\$0	\$12,000
Total	\$9,600	\$2,400	\$0	\$0	\$0	\$0	\$0	\$0	\$12,000

Bridge Inspection Program

TIP ID	13-8901-14	Year of Operation	Ongoing
Agency	Baltimore County	Project Type	Bridge inspections
Project Category	Highway Preservation	Functional Class	NA
Conformity Status	Exempt	Physical Data	NA
CIP or CTP ID(s)		Est. Total Cost	\$6,000,000

Description:

Countywide inspection of all bridges as federally mandated. Includes review of countywide bridge inspection reports and bridge replacement and/or rehabilitation federal aid capital projects.

Justification:

Federally mandated and federally aided program which requires inspection of all bridges over 20 feet every two years. The county also inspects all bridges under 20 feet every two years. Certain critical bridges and the investigation of scour effects on bridges are included in this program.

Connection to Long-Range Transportation Planning Goals:

- 2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).
- 9. Promote Informed Decision Making





Bridge Inspection Program

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$2,900	\$0	\$0	\$0	\$3,100	\$0	\$6,000
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$0	\$0	\$2,900	\$0	\$0	\$0	\$3,100	\$0	\$6,000
Total	\$0	\$0	\$2,900	\$0	\$0	\$0	\$3,100	\$0	\$6,000

Bixler Church Road Bridge over Big Pipe Creek

TIP ID	14-1101-13	Year of Operation	2020
Agency	Carroll County	Project Type	Bridge repair/deck replacement
Project Category	Highway Preservation	Functional Class	Local
Conformity Status	Exempt	Physical Data	2 to 2 lanes
CIP or CTP ID(s)		Est. Total Cost	\$833,000

Description:

Replace the existing 2-cell culvert with a new 2-cell concrete box culvert.

Engineering funds in the amount of \$295,750 have been approved.

Funding for this project had previously been included in the Countywide Bridge Maintenance, Repair, and Replacement project (TIP ID 14-1402-13).

Justification:

This work will address structural safety issues and deterioration of the existing structure. Weight limits will be removed. The new structure will address any functionally obsolete or structurally deficient items.

Connection to Long-Range Transportation Planning Goals:

2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).





Bixler Church Road Bridge over Big Pipe Creek

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$429	\$107	\$0	\$0	\$0	\$0	\$0	\$0	\$536
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$429	\$107	\$0	\$0	\$0	\$0	\$0	\$0	\$536
Total	\$429	\$107	\$0	\$0	\$0	\$0	\$0	\$0	\$536

Shepherds Mill Road Bridge over Little Pipe Creek

TIP ID	14-1102-13	Year of Operation	2020
Agency	Carroll County	Project Type	Bridge repair/deck replacement
Project Category	Highway Preservation	Functional Class	Minor Collector
Conformity Status	Exempt	Physical Data	2 to 2 lanes
CIP or CTP ID(s)		Est. Total Cost	\$4,101,450

Description:

Replace the existing 3-span bridge with a new structure, including piers and abutments.

Engineering funds were included in FY 2011.

Funding for this project had previously been included in the Countywide Bridge Maintenance, Repair, and Replacement project (TIP ID 14-1402-13).

Justification:

This work will address structural safety issues and deterioration of the existing structure. The new structure will address any functionally obsolete or structurally deficient items.

Connection to Long-Range Transportation Planning Goals:

2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).





Shepherds Mill Road Bridge over Little Pipe Creek

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$2,993	\$748	\$0	\$0	\$0	\$0	\$0	\$0	\$3,741
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$2,993	\$748	\$0	\$0	\$0	\$0	\$0	\$0	\$3,741
Total	\$2,993	\$748	\$0	\$0	\$0	\$0	\$0	\$0	\$3,741

Stone Chapel Road Bridge over Little Pipe Creek

TIP ID	14-1103-13	Year of Operation	2022
Agency	Carroll County	Project Type	Bridge repair/deck replacement
Project Category	Highway Preservation	Functional Class	Minor Collector
Conformity Status	Exempt	Physical Data	2 to 2 lanes
CIP or CTP ID(s)		Est. Total Cost	\$915,000

Description:

Rehabilitation of existing bridge to provide efficient access for local truck traffic to MD 31.

Justification:

The repairs/replacement of this structure will allow for the roadway to carry the current legal loads and the weight limit postings will be eliminated. This project will enhance the safety of the county's infrastructure. The new structure will address any functionally obsolete or structurally deficient items.

Connection to Long-Range Transportation Planning Goals:

2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).





Stone Chapel Road Bridge over Little Pipe Creek

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$516	\$129	\$0	\$0	\$645
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$216	\$54	\$0	\$0	\$0	\$0	\$0	\$0	\$270
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$216	\$54	\$0	\$0	\$516	\$129	\$0	\$0	\$915
Total	\$216	\$54	\$0	\$0	\$516	\$129	\$0	\$0	\$915

Babylon Road Bridge over Silver Run

TIP ID	14-1601-13	Year of Operation	2023
Agency	Carroll County	Project Type	Bridge repair/deck replacement
Project Category	Highway Preservation	Functional Class	Local
Conformity Status	Exempt	Physical Data	2 to 2 lanes
CIP or CTP ID(s)		Est. Total Cost	\$1,010,000

Description:

Replacement of existing bridge to provide efficient access for local traffic and emergency service vehicles.

Engineering funds totaling \$280,000 were approved in FY 2016 and FY 2018.

Justification:

This project will enhance the safety of the County's infrastructure. The new structure will address any functionally obsolete or structurally deficient items. The replacement of this structure will allow current legal vehicles to cross the structure and weight limit postings will be eliminated.

Connection to Long-Range Transportation Planning Goals:

2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).





Babylon Road Bridge over Silver Run

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$584	\$146	\$730
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$0	\$0	\$0	\$0	\$0	\$0	\$584	\$146	\$730
Total	\$0	\$0	\$0	\$0	\$0	\$0	\$584	\$146	\$730

Gaither Road Bridge over South Branch Patapsco River

TIP ID	14-1602-13	Year of Operation	2023
Agency	Carroll County	Project Type	Bridge repair/deck replacement
Project Category	Highway Preservation	Functional Class	Minor Collector
Conformity Status	Exempt	Physical Data	2 to 2 lanes
CIP or CTP ID(s)		Est. Total Cost	\$2,117,000

Description:

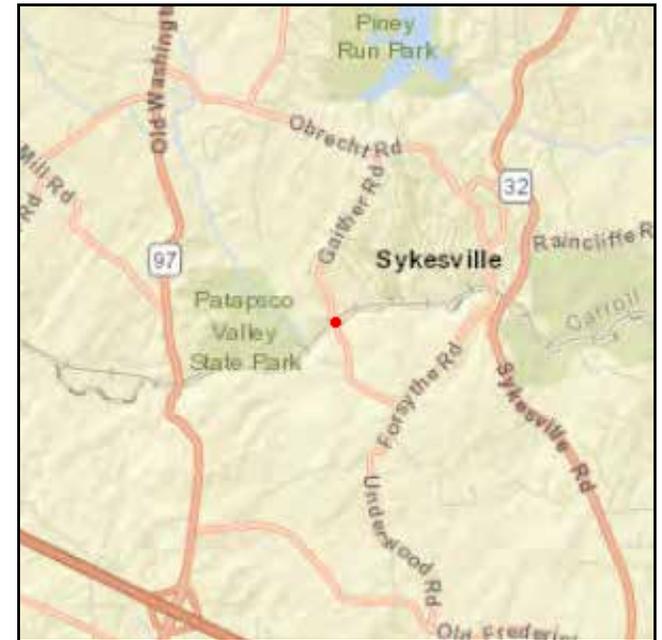
Rehabilitation of existing bridge with a new superstructure (type TBD) to provide efficient access for local traffic and emergency service vehicles.

Justification:

The replacement of this superstructure will provide a long-term solution to the issues associated with an Acrow panel structure type. The new structure will address any functionally obsolete or structurally deficient items.

Connection to Long-Range Transportation Planning Goals:

2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).





Gaither Road Bridge over South Branch Patapsco River

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$1,474	\$368	\$1,842
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$220	\$55	\$0	\$0	\$0	\$0	\$0	\$0	\$275
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$220	\$55	\$0	\$0	\$0	\$0	\$1,474	\$368	\$2,117
Total	\$220	\$55	\$0	\$0	\$0	\$0	\$1,474	\$368	\$2,117

McKinstry's Mill Road Bridge over Sam's Creek

TIP ID	14-1603-13	Year of Operation	2022
Agency	Carroll County	Project Type	Bridge repair/deck replacement
Project Category	Highway Preservation	Functional Class	Local
Conformity Status	Exempt	Physical Data	2 to 2 lanes
CIP or CTP ID(s)		Est. Total Cost	\$1,154,000

Description:

Replacement of existing bridge with a new structure (type TBD) to provide efficient access for local traffic and emergency service vehicles.

Justification:

This project will enhance the safety of the County's infrastructure. The new structure will address any functionally obsolete or structurally deficient items. The replacement of this structure will allow current legal vehicles to cross the structure and weight limit postings will be eliminated.

Connection to Long-Range Transportation Planning Goals:

2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).





McKinstry's Mill Road Bridge over Sam's Creek

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$694	\$173	\$0	\$0	\$867
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$184	\$46	\$0	\$0	\$0	\$0	\$0	\$0	\$230
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$184	\$46	\$0	\$0	\$694	\$173	\$0	\$0	\$1,097
Total	\$184	\$46	\$0	\$0	\$694	\$173	\$0	\$0	\$1,097

Hughes Shop Road Bridge over Bear Branch

TIP ID	14-1802-13	Year of Operation	2022
Agency	Carroll County	Project Type	Bridge repair/deck replacement
Project Category	Highway Preservation	Functional Class	Local
Conformity Status	Exempt	Physical Data	2 to 2 lanes
CIP or CTP ID(s)		Est. Total Cost	\$1,698,000

Description:

Replacement of existing bridge with a new structure (type TBD).

Justification:

The replacement of this structure will provide a new structure that eliminates the issues associated with the current structure type. The new structure will address any functionally obsolete or structurally deficient items.

Connection to Long-Range Transportation Planning Goals:

2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).





Hughes Shop Road Bridge over Bear Branch

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$1,128	\$282	\$0	\$0	\$1,410
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$224	\$56	\$0	\$0	\$0	\$0	\$0	\$0	\$280
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$224	\$56	\$0	\$0	\$1,128	\$282	\$0	\$0	\$1,690
Total	\$224	\$56	\$0	\$0	\$1,128	\$282	\$0	\$0	\$1,690

Bridge Inspection Program

TIP ID	14-9401-14	Year of Operation	Ongoing
Agency	Carroll County	Project Type	Bridge inspections
Project Category	Highway Preservation	Functional Class	Varies
Conformity Status	Exempt	Physical Data	NA
CIP or CTP ID(s)		Est. Total Cost	\$1,020,000

Description:

This project includes a field inspection of 133 County-owned and maintained structures and completion and submittal of inspection reports to county and state agencies for each structure.

Justification:

Ensure compliance with National Bridge Inspection Program, preserve highway infrastructure, and maintain safety.

Connection to Long-Range Transportation Planning Goals:

- 2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).
- 9. Promote Informed Decision Making





Bridge Inspection Program

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$510	\$0	\$0	\$0	\$510	\$0	\$0	\$0	\$1,020
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$510	\$0	\$0	\$0	\$510	\$0	\$0	\$0	\$1,020
Total	\$510	\$0	\$0	\$0	\$510	\$0	\$0	\$0	\$1,020

Bata Boulevard Access Road

TIP ID	15-1402-42	Year of Operation	2023
Agency	Harford County	Project Type	New or extended roadways
Project Category	Highway Capacity	Functional Class	Local
Conformity Status	Not Exempt	Physical Data	0 to 2 lanes, 700 feet
CIP or CTP ID(s)		Est. Total Cost	\$535,000

Description:

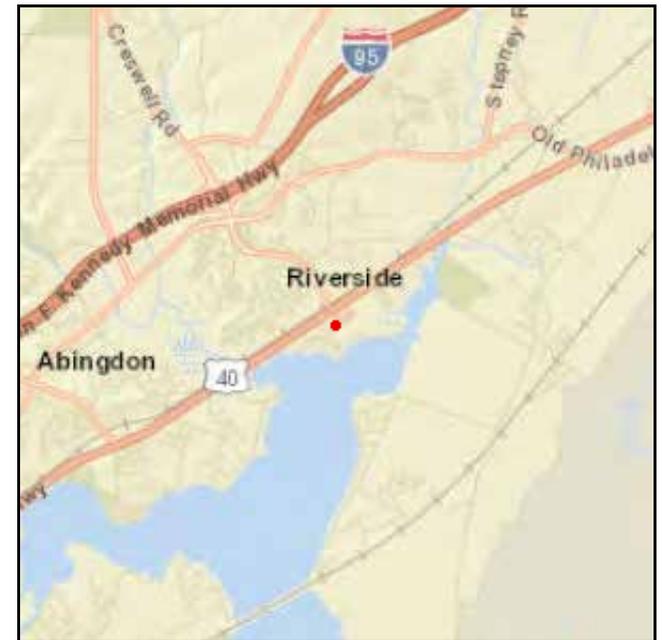
The project will construct an access road from MD 543 directly to Bata Boulevard. The project has been planned since the redevelopment of the Bata land site. Right of way to construct the road has been reserved and the alignment is rough graded. This project will relieve existing and anticipated delays at the existing US 40/MD 543 intersection by eliminating the left turns from MD 543 to westbound US 40. Increases in traffic from both Perryman and BRAC will necessitate the capacity improvements. This project will be multi-modal in that bicycle lanes and pedestrian access will be considered where possible and appropriate.

Justification:

This project is consistent with the Master Planning goal of maintaining a safe and adequate transportation system to serve existing and future populations. The anticipated increases in traffic volumes from BRAC will also create additional delays at the MD 543/US 40 interchange. This project will divert some traffic to another location thereby reducing delays and adding capacity to the intersection.

Connection to Long-Range Transportation Planning Goals:

- 1.E Improve System Safety -- Improve safety conditions for pedestrians and bicyclists.
- 4. Increase Mobility
- 7.E Promote Prosperity and Economic Opportunity -- Improve access to existing communities and regional generators of economic activity.





Bata Boulevard Access Road

(Funding in Thousands)

Other

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$400	\$400
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$25	\$25
ENG	\$0	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$100
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$10	\$0	\$0	\$10
Subtotal	\$0	\$100	\$0	\$0	\$0	\$10	\$0	\$425	\$535
Total	\$0	\$100	\$0	\$0	\$0	\$10	\$0	\$425	\$535

Abingdon Road Bridge #169 over CSX Railroad

TIP ID	15-1001-13	Year of Operation	2021
Agency	Harford County	Project Type	Bridge repair/deck replacement
Project Category	Highway Preservation	Functional Class	Minor Arterial
Conformity Status	Exempt	Physical Data	2 to 2 lanes
CIP or CTP ID(s)	H104501	Est. Total Cost	\$4,180,000

Description:

Replace the bridge that carries Abingdon Road over the CSX Railroad tracks. Five foot sidewalk planned on one side of the road.

Engineering funds were included in a previous TIP.

Justification:

Replacement is necessary due to the bridge's multiple deficiencies that include substandard railings and curbs, a deteriorating deck and deteriorating beams.

Connection to Long-Range Transportation Planning Goals:

2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).





Abingdon Road Bridge #169 over CSX Railroad

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$200	\$0	\$2,200	\$550	\$0	\$0	\$0	\$0	\$2,950
OTH	\$0	\$0	\$120	\$30	\$0	\$0	\$0	\$0	\$150
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$50
Subtotal	\$200	\$50	\$2,320	\$580	\$0	\$0	\$0	\$0	\$3,150
Total	\$200	\$50	\$2,320	\$580	\$0	\$0	\$0	\$0	\$3,150

Chestnut Hill Bridge #40

TIP ID	15-1101-13	Year of Operation	2020
Agency	Harford County	Project Type	Bridge repair/deck replacement
Project Category	Highway Preservation	Functional Class	Local
Conformity Status	Not Exempt	Physical Data	1 to 2 lanes
CIP or CTP ID(s)	H114501	Est. Total Cost	\$1,560,000

Description:

This project will replace the existing Chestnut Hill Road Bridge. Three foot shoulders planned on both sides of the road.

Engineering funds were included in a previous TIP.

Justification:

The current structure is a single-lane bridge with a deteriorating superstructure and an inadequate waterway opening.

Connection to Long-Range Transportation Planning Goals:

2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).





Chestnut Hill Bridge #40

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$1,072	\$308	\$0	\$0	\$0	\$0	\$0	\$0	\$1,380
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$1,072	\$308	\$0	\$0	\$0	\$0	\$0	\$0	\$1,380
Total	\$1,072	\$308	\$0	\$0	\$0	\$0	\$0	\$0	\$1,380

Phillips Mill Road Bridge #70 over East Branch Tributary

TIP ID	15-1102-13	Year of Operation	2020
Agency	Harford County	Project Type	Bridge repair/deck replacement
Project Category	Highway Preservation	Functional Class	Local
Conformity Status	Exempt	Physical Data	2 to 2 lanes
CIP or CTP ID(s)	H114502	Est. Total Cost	\$3,485,000

Description:

This project is to replace the bridge that carries Phillips Mill Road over a tributary to East Branch. Three foot shoulders planned on both sides of the road.

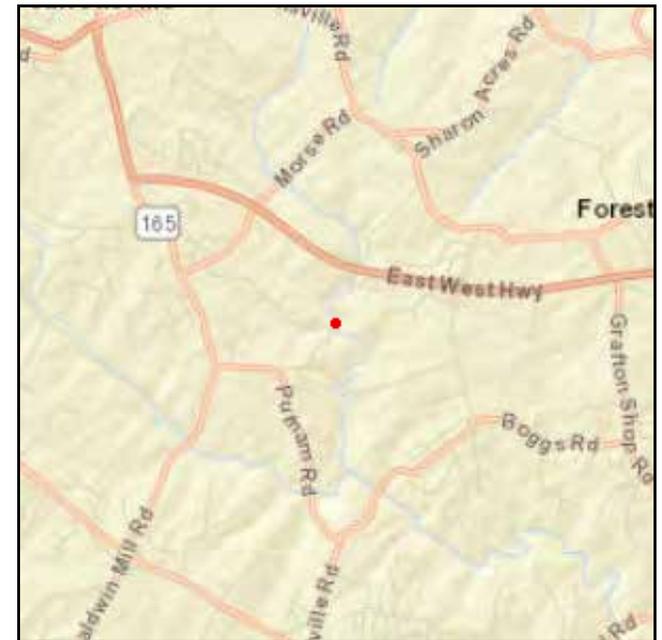
Engineering funds were included in a previous TIP.

Justification:

The existing structure shows scour around the abutments, a deteriorated deck, and an undersized waterway opening.

Connection to Long-Range Transportation Planning Goals:

2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).





Phillips Mill Road Bridge #70 over East Branch Tributary

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$2,240	\$560	\$0	\$0	\$0	\$0	\$0	\$0	\$2,800
OTH	\$60	\$90	\$0	\$0	\$0	\$0	\$0	\$0	\$150
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$2,300	\$650	\$0	\$0	\$0	\$0	\$0	\$0	\$2,950
Total	\$2,300	\$650	\$0	\$0	\$0	\$0	\$0	\$0	\$2,950

Stafford Road Bridge #24 over Deer Creek

TIP ID	15-1501-13	Year of Operation	2021
Agency	Harford County	Project Type	Bridge repair/deck replacement
Project Category	Highway Preservation	Functional Class	Local
Conformity Status	Exempt	Physical Data	2 to 2 lanes
CIP or CTP ID(s)	H154502	Est. Total Cost	\$3,100,000

Description:

This is a replacement of the entire bridge superstructure including bridge deck and steel beams. The project cost has increased from \$1.8 million in the last TIP to \$3.1 million due to a scope change to replace the entire bridge superstructure in lieu of only replacing the bridge deck. The current sufficiency rating is 52.3. A four foot shoulder is planned on the east side of the bridge.

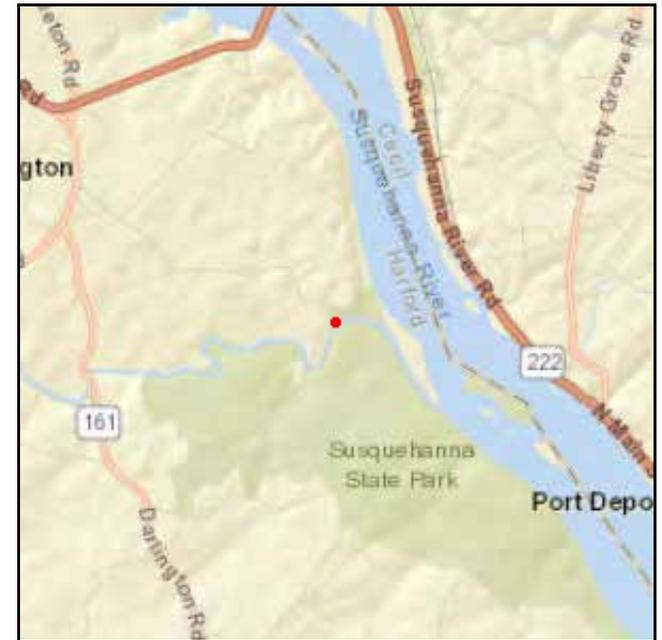
Engineering funds were included in a previous TIP. Additional engineering funds are included in FY20 to account for the design change from a deck replacement to a replacement of the entire superstructure.

Justification:

The bridge, built in 1950, shows numerous deficiencies and areas of deterioration. The purpose of this project is to rehabilitate the bridge to extend its useful life for another 40 years.

Connection to Long-Range Transportation Planning Goals:

2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).





Stafford Road Bridge #24 over Deer Creek

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$2,160	\$540	\$0	\$0	\$0	\$0	\$2,700
OTH	\$0	\$0	\$40	\$60	\$0	\$0	\$0	\$0	\$100
ENG	\$100	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$200
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$100	\$100	\$2,200	\$600	\$0	\$0	\$0	\$0	\$3,000
Total	\$100	\$100	\$2,200	\$600	\$0	\$0	\$0	\$0	\$3,000

Glenville Road Bridge #30

TIP ID	15-1601-13	Year of Operation	2023
Agency	Harford County	Project Type	Bridge repair/deck replacement
Project Category	Highway Preservation	Functional Class	Local
Conformity Status	Not Exempt	Physical Data	1 to 2 lanes
CIP or CTP ID(s)	H164501	Est. Total Cost	\$1,440,000

Description:

Replace the bridge that carries Glenville Road over Mill Brook. Three foot shoulders planned on both sides of the road.

Engineering funds were included in a previous TIP.

Justification:

The existing bridge is a single lane, steel beam, concrete deck structure. The existing concrete deck, exterior beams, and wingwalls are severely deteriorated and there is evidence of scour under the western abutment.

Connection to Long-Range Transportation Planning Goals:

2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).





Glenville Road Bridge #30

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$1,040	\$260	\$1,300
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$21	\$0	\$0	\$0	\$0	\$21
Subtotal	\$0	\$0	\$0	\$21	\$0	\$0	\$1,040	\$260	\$1,321
Total	\$0	\$0	\$0	\$21	\$0	\$0	\$1,040	\$260	\$1,321

Grier Nursery Road Bridge #43

TIP ID	15-2001-13	Year of Operation	2023
Agency	Harford County	Project Type	Bridge repair/deck replacement
Project Category	Highway Preservation	Functional Class	Minor Collector
Conformity Status	Exempt	Physical Data	2 to 2 lanes
CIP or CTP ID(s)		Est. Total Cost	\$2,425,000

Description:

The project is to replace the entire superstructure for the Grier Nursery Road bridge over Deer Creek. Bridge will include shoulders but not sidewalks.

Justification:

The deck is in poor condition. The project is consistent with the Master Planning goal of maintaining a safe and adequate transportation system to serve existing and future populations.

Connection to Long-Range Transportation Planning Goals:

2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).





Grier Nursery Road Bridge #43

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$1,440	\$360	\$1,800
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$80	\$20	\$100
ENG	\$400	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$500
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$25	\$0	\$0	\$0	\$0	\$25
Subtotal	\$400	\$100	\$0	\$25	\$0	\$0	\$1,520	\$380	\$2,425
Total	\$400	\$100	\$0	\$25	\$0	\$0	\$1,520	\$380	\$2,425

Hookers Mill Road Bridge #13

TIP ID	15-2002-13	Year of Operation	2022
Agency	Harford County	Project Type	Bridge repair/deck replacement
Project Category	Highway Preservation	Functional Class	Minor Collector
Conformity Status	Exempt	Physical Data	2 to 2 lanes
CIP or CTP ID(s)	H094502	Est. Total Cost	\$3,180,000

Description:

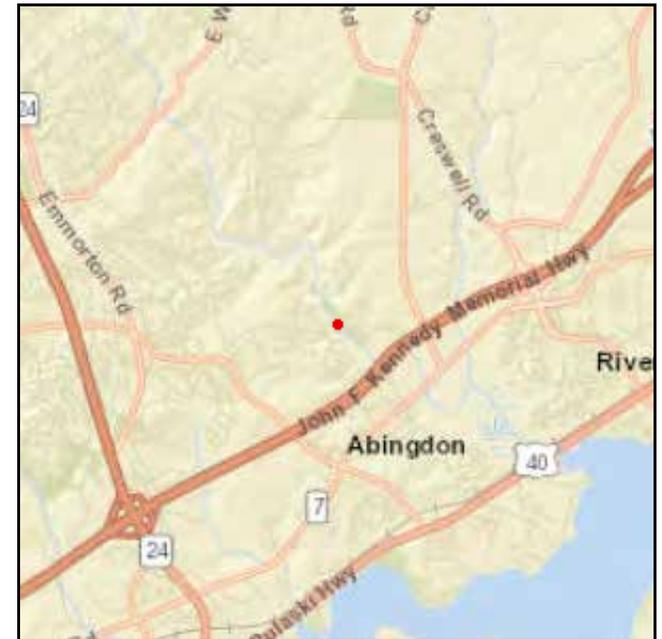
This project is to replace the entire bridge that carries Hookers Mill over Bynum Run. The design is anticipated to include a 30-foot clear roadway consisting of two 11-foot travel lanes and two 4-foot shoulders with a sidewalk on one side.

Justification:

The beams, deck and abutments are deteriorated and need to be replaced. This project is consistent with the Master Planning goal of maintaining a safe and adequate transportation system to serve existing and future populations.

Connection to Long-Range Transportation Planning Goals:

2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).





Hookers Mill Road Bridge #13

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$2,000	\$500	\$0	\$0	\$2,500
OTH	\$0	\$0	\$0	\$0	\$120	\$30	\$0	\$0	\$150
ENG	\$400	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$500
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$30	\$0	\$0	\$0	\$0	\$30
Subtotal	\$400	\$100	\$0	\$30	\$2,120	\$530	\$0	\$0	\$3,180
Total	\$400	\$100	\$0	\$30	\$2,120	\$530	\$0	\$0	\$3,180

Bridge Inspection Program

TIP ID	15-9411-14	Year of Operation	Ongoing
Agency	Harford County	Project Type	Bridge inspections
Project Category	Highway Preservation	Functional Class	NA
Conformity Status	Exempt	Physical Data	NA
CIP or CTP ID(s)	H054501	Est. Total Cost	\$2,500,000

Description:

This federal program provides funding for the inspection of bridges in Harford County.

Justification:

Federal law mandates the inspection of all bridges over 20 feet clear span on a two-year cycle. The bridge inspection data is analyzed to develop priorities for bridge repairs & replacements. As of 2019, Harford County inspects a total of 250 bridges. 160 bridges are longer than 20 feet and are inspected with federal funding.

Connection to Long-Range Transportation Planning Goals:

- 2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).
- 9. Promote Informed Decision Making





Bridge Inspection Program

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$150	\$0	\$1,100	\$0	\$0	\$0	\$1,250	\$0	\$2,500
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$150	\$0	\$1,100	\$0	\$0	\$0	\$1,250	\$0	\$2,500
Total	\$150	\$0	\$1,100	\$0	\$0	\$0	\$1,250	\$0	\$2,500

Dorsey Run Road: MD 175 to CSX Railroad Spur

TIP ID	16-1403-41	Year of Operation	2023
Agency	Howard County	Project Type	Roadway widening
Project Category	Highway Capacity	Functional Class	Local
Conformity Status	Not Exempt	Physical Data	2 to 4 lanes, 1.1 miles
CIP or CTP ID(s)	J4182	Est. Total Cost	\$12,200,000

Description:

This project is to study, design, and reconstruct Dorsey Run Road to four lanes from MD 175 south to the CSX railroad spur crossing; a distance of 6,000 linear feet. The project will incorporate sidewalks, and bike facilities (paved shoulders), to increase transportation alternatives. Once the design is finalized, more information will be provided. This project is funded through local funds (bonds, developer contributions, excise tax, & excise tax backed bonds).

Justification:

The existing road is substandard with varying width and limited capacity. Dorsey Run Road is classified in the Plan Howard 2030 as a major collector and four lanes are needed to accommodate the increasing volumes of traffic.

Connection to Long-Range Transportation Planning Goals:

- 3.A Improve Accessibility -- Increase transportation alternatives for all segments of the population.
- 4. Increase Mobility
- 7.E Promote Prosperity and Economic Opportunity -- Improve access to existing communities and regional generators of economic activity.





Dorsey Run Road: MD 175 to CSX Railroad Spur

(Funding in Thousands)

Other

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$9,700	\$9,700
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$800	\$0	\$0	\$0	\$0	\$0	\$0	\$800
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$0	\$800	\$0	\$0	\$0	\$0	\$0	\$9,700	\$10,500
Total	\$0	\$800	\$0	\$0	\$0	\$0	\$0	\$9,700	\$10,500

Guilford Road: US 1 to Dorsey Run Road

TIP ID	16-1405-41	Year of Operation	2023
Agency	Howard County	Project Type	Roadway widening
Project Category	Highway Capacity	Functional Class	Local
Conformity Status	Not Exempt	Physical Data	2 to 3 lanes; 1 mile
CIP or CTP ID(s)	J4181	Est. Total Cost	\$16,500,000

Description:

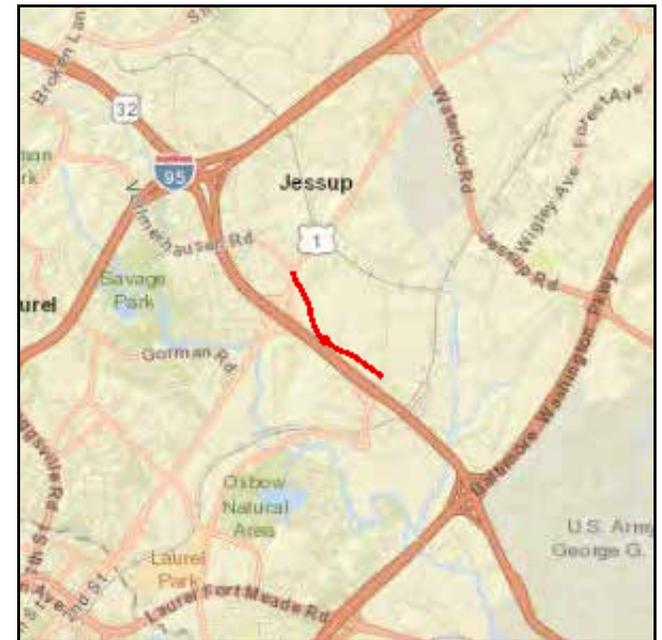
This project is to study, design, and reconstruct Guilford Road to three lanes from US 1 to Old Dorsey Run Road; a distance of 5,800 linear feet. The project will incorporate sidewalks to increase transportation alternatives. Once the design is finalized, more information will be provided. This project is funded through local funds (bonds, developer contributions, excise tax, excise tax backed bonds).

Justification:

The existing road is sub-standard with varying width and limited capacity. Guilford Road is classified as a major collector in the Plan Howard 2030 and three lanes are needed to accommodate the increasing volume of commercial traffic.

Connection to Long-Range Transportation Planning Goals:

- 3.A Improve Accessibility -- Increase transportation alternatives for all segments of the population.
- 4. Increase Mobility
- 7.E Promote Prosperity and Economic Opportunity -- Improve access to existing communities and regional generators of economic activity.





Guilford Road: US 1 to Dorsey Run Road

(Funding in Thousands)

Other

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$14,350	\$14,350
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$720	\$0	\$0	\$0	\$0	\$0	\$0	\$720
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$0	\$720	\$0	\$0	\$0	\$0	\$0	\$14,350	\$15,070
Total	\$0	\$720	\$0	\$0	\$0	\$0	\$0	\$14,350	\$15,070

MD 175 at Oakland Mills Rd Interchange

TIP ID	16-1407-46	Year of Operation	2022
Agency	Howard County	Project Type	New interchange
Project Category	Highway Capacity	Functional Class	Other Freeway & Expressways
Conformity Status	Not Exempt	Physical Data	Full interchange
CIP or CTP ID(s)	J4237	Est. Total Cost	\$25,000,000

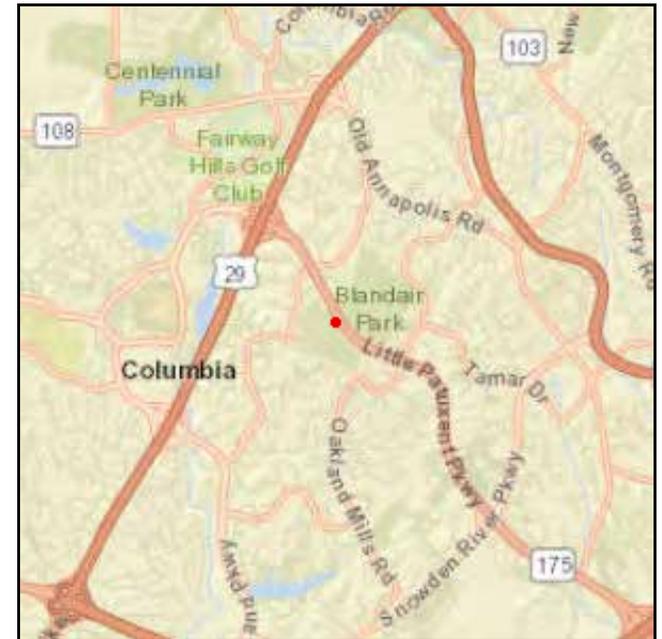
Description:

Grade-separated bridge with ramps at MD 175/Oakland Mills Road extended. Will provide access to and from Howard County Blandair Park. The project will incorporate sidewalks and bike facilities to increase transportation alternatives. Once the design is finalized, more information will be provided. This project is funded through local funds (bonds and excise tax backed bonds).

Phase I involved improvements in Blandair Park and was completed in 2018. Phase II is the grade-separated bridge with ramps at MD 175/Oakland Mills Road and will be complete in 2022.

Justification:

MD 175, an 8-lane principal arterial from I-95 to US 29, has significant regional peak hour traffic. The proposed interchange with Oakland Mills Road will ensure future capacity, level of service, and acceptable operating conditions, as well as improved access to Blandair park.



Connection to Long-Range Transportation Planning Goals:

- 3.A Improve Accessibility -- Increase transportation alternatives for all segments of the population.
- 4. Increase Mobility
- 7.E Promote Prosperity and Economic Opportunity -- Improve access to existing communities and regional generators of economic activity.



MD 175 at Oakland Mills Rd Interchange

(Funding in Thousands)

Other

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$10,500	\$0	\$0	\$0	\$0	\$0	\$0	\$10,500
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$0	\$10,500	\$0	\$0	\$0	\$0	\$0	\$0	\$10,500
Total	\$0	\$10,500	\$0	\$0	\$0	\$0	\$0	\$0	\$10,500

Snowden River Parkway: Broken Land Parkway to Oakland Mills Road

TIP ID	16-1410-41	Year of Operation	2023
Agency	Howard County	Project Type	Roadway widening
Project Category	Highway Capacity	Functional Class	Minor Arterial
Conformity Status	Not Exempt	Physical Data	4 to 6 lanes, 6300 feet
CIP or CTP ID(s)	J4222	Est. Total Cost	\$12,275,000

Description:

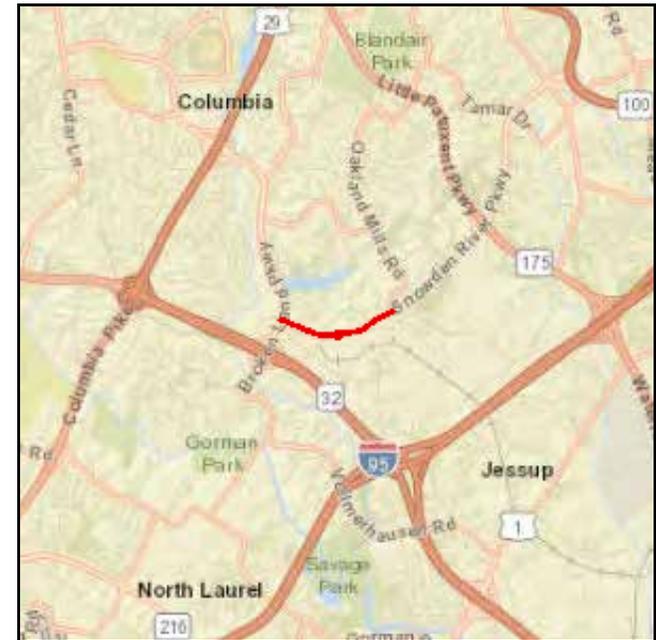
A project to design and construct a widening of Snowden River Parkway by adding a third lane in each direction and shared-use paths from Broken Land Parkway to Oakland Mills Road. The project will incorporate shared use pathways to increase transportation alternatives to activity centers and public transit. This project is funded through local funds (bonds, developer contributions, and excise tax backed bonds).

Justification:

This project will develop the third lane on each side between these two intersections, will increase the capacity of the roadway and provide an improved level of service. Project requested by the Traffic Division.

Connection to Long-Range Transportation Planning Goals:

- 3.A Improve Accessibility -- Increase transportation alternatives for all segments of the population.
- 3.E Improve Accessibility -- Provide or improve pedestrian and bicycle facilities that link to activity centers and public transit.
- 4. Increase Mobility





Snowden River Parkway: Broken Land Parkway to Oakland Mills Road

(Funding in Thousands)

Other

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$7,000	\$0	\$0	\$0	\$0	\$7,000
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$850	\$0	\$0	\$0	\$0	\$0	\$0	\$850
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$0	\$850	\$0	\$7,000	\$0	\$0	\$0	\$0	\$7,850
Total	\$0	\$850	\$0	\$7,000	\$0	\$0	\$0	\$0	\$7,850

US 29/Broken Land Parkway Interchange and North South Connector Road

TIP ID	16-1901-42	Year of Operation	2022
Agency	Howard County	Project Type	New or extended roadways
Project Category	Highway Capacity	Functional Class	Major Collector
Conformity Status	Not Exempt	Physical Data	3.1 miles of new lanes on ramps and new roadways
CIP or CTP ID(s)		Est. Total Cost	\$26,950,990

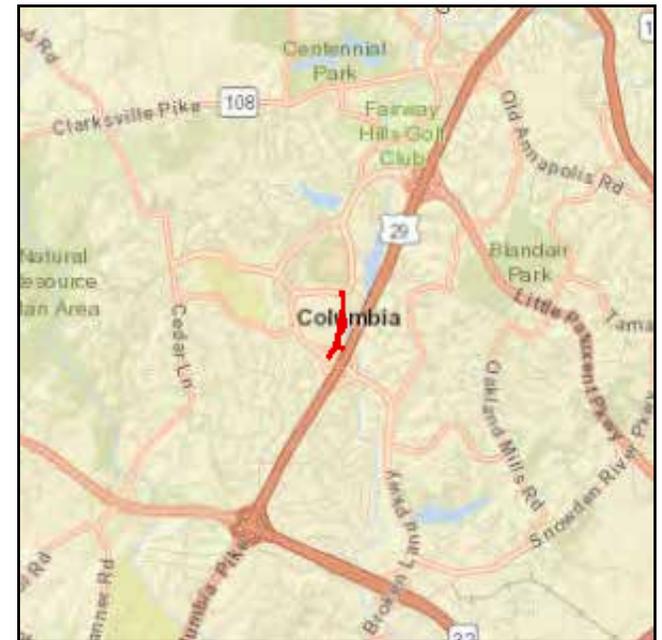
Description:

The project will provide new direct connections from the westbound US 29/Broken Land Parkway interchange ramp to a new road (Merriweather Drive) and to Little Patuxent Parkway. The project will also provide a direct connection from Merriweather Drive to Broken Land Parkway, including configuring the north and south bound US 29 ramps at Broken Land Parkway into a signalized intersection. The project will also remove an existing ramp from Broken Land Parkway to US 29 southbound.

The project will be funded locally through the recently approved tax increment financing (TIF) district.

Justification:

The new US 29/Broken Land Parkway north/south collector road connection to Little Patuxent Parkway is needed to increase vehicular and pedestrian mobility, address safety concerns, and provide adequate capacity to meet the future growth and development as outlined in Downtown Columbia. The project will address the future traffic demand along the Broken Land Parkway link from US 29 to downtown Columbia by providing an additional access and new central link to downtown Columbia for traffic from points southeast of Columbia and primarily for US 29 traffic to and from the south.



Connection to Long-Range Transportation Planning Goals:

- 2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).
- 6.F Improve System Security -- Increase system redundancy.
- 7.D Promote Prosperity and Economic Opportunity -- Invest within local- and state-designated growth areas.



US 29/Broken Land Parkway Interchange and North South Connector Road

(Funding in Thousands)

Other

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$18,000	\$0	\$7,200	\$0	\$0	\$0	\$0	\$25,200
OTH	\$0	\$250	\$0	\$100	\$0	\$0	\$0	\$0	\$350
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$0	\$18,250	\$0	\$7,300	\$0	\$0	\$0	\$0	\$25,550
Total	\$0	\$18,250	\$0	\$7,300	\$0	\$0	\$0	\$0	\$25,550

Bridge Repairs and Deck Replacement

TIP ID	16-0436-13	Year of Operation	Ongoing
Agency	Howard County	Project Type	Bridge repair/deck replacement
Project Category	Highway Preservation	Functional Class	NA
Conformity Status	Exempt	Physical Data	Varies
CIP or CTP ID(s)	Various projects	Est. Total Cost	\$9,370,000

Description:

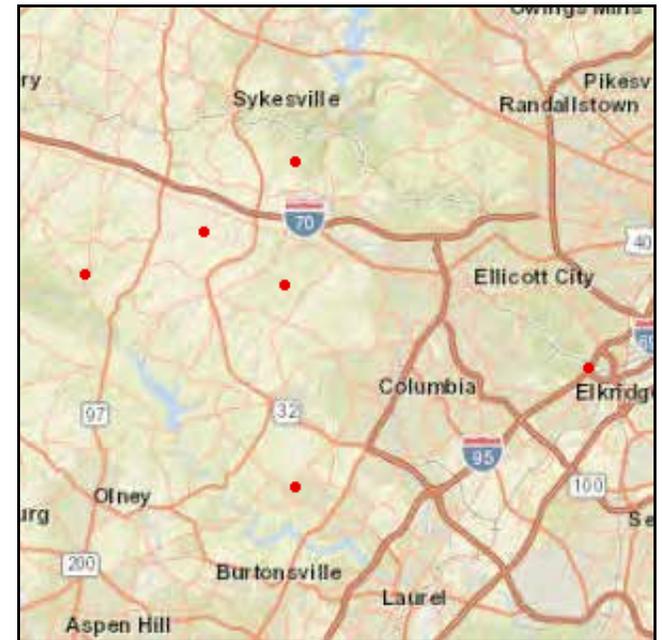
This project is to repair/replace bridge decks at the following locations: River Road bridge over Rockburn Branch, Henryton Road bridge over a tributary to the Patapsco River (~2.5 foot shoulders), Pindell School Road bridge over Hammond Branch (~6 foot shoulders), Daisy Road bridge over Little Cattail Creek (~6 foot shoulders), Pfefferkorn Road bridge over Middle Patuxent River (shoulders TBD: in design), Carroll Mill Road bridge over Benson Branch (shoulders TBD: in design), and emergency structure reconstruction.

Justification:

This project will alleviate bridge deterioration and improve the safety and longevity of all bridges included in the bridge repair and rehabilitation program.

Connection to Long-Range Transportation Planning Goals:

2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).





Bridge Repairs and Deck Replacement

(Funding in Thousands)

Other

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$900	\$0	\$1,000	\$1,900
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$7,470	\$0	\$0	\$0	\$0	\$0	\$0	\$7,470
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$0	\$7,470	\$0	\$0	\$0	\$900	\$0	\$1,000	\$9,370
Total	\$0	\$7,470	\$0	\$0	\$0	\$900	\$0	\$1,000	\$9,370

Bus Rapid Transit

TIP ID	16-2001-67	Year of Operation	NA
Agency	Howard County	Project Type	Transit capacity expansion
Project Category	Transit Capacity	Functional Class	NA
Conformity Status	Exempt	Physical Data	NA
CIP or CTP ID(s)		Est. Total Cost	\$2,000,000

Description:

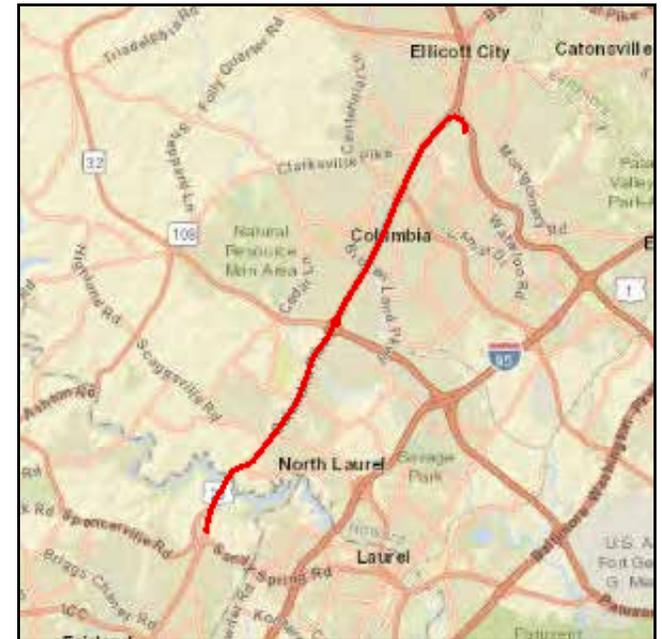
The implementation of the Bus Rapid Transit system would represent a significant investment for the County and the state of Maryland and should be pursued only where frequent bus service could be supported. In order to ensure that the BRT project is successful, Howard County is currently going through a planning/design phase primarily focusing along the US 29 Corridor. Funds are from the state of Maryland and will not take the project past 30% design.

Justification:

The analysis was performed with the aid of the Baltimore Metropolitan Council's regional travel demand model. As part of this study, the model was validated and minor adjustments were implemented to fit the needs of this specific investigation. The travel demand model was also used to screen measures of effectiveness (MOEs) including travel time, average annual daily traffic (AADT), and person-throughput; to refine alignments and potential stations; and to test specific operational characteristics (e.g. headways and speeds).

Connection to Long-Range Transportation Planning Goals:

- 3.H Improve Accessibility -- Increase transportation equity throughout the system
- 4.C Increase Mobility -- Expand transit service coverage / hours of operation.
- 5.A Conserve and Enhance the Environment -- Provide alternatives to single-occupant passenger vehicles / apply emission reduction technologies.





Bus Rapid Transit

(Funding in Thousands)

Other

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$2,000	\$0	\$0	\$0	\$0	\$0	\$0	\$2,000
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$0	\$2,000	\$0	\$0	\$0	\$0	\$0	\$0	\$2,000
Total	\$0	\$2,000	\$0	\$0	\$0	\$0	\$0	\$0	\$2,000

I-95 Fort McHenry Tunnel: Moravia Road to Tunnel Improvements

TIP ID	22-1601-41	Year of Operation	2018
Agency	Maryland Transportation Authority	Project Type	Roadway widening
Project Category	Highway Capacity	Functional Class	Interstate
Conformity Status	Not Exempt	Physical Data	3.7 miles, 6 to 8 lanes
CIP or CTP ID(s)	MdTA-12	Est. Total Cost	\$73,807,000

Description:

This project will reconfigure I-95 to provide four continuous mainline lanes in each direction. The specific limits are from north of the Fort McHenry Toll Plaza to the I-95 Express Toll Lanes (ETLs) in the northbound direction, and from north of the Fort McHenry Toll Plaza to north of O'Donnell Street in the southbound direction. The total work within the limits extends for 3.7 miles in the northbound direction and 1.1 miles in the southbound direction. The project involves restriping I-95 to provide one additional lane of traffic including reconstruction of at-grade shoulders, replacement of at-grade median concrete traffic barriers, and reconstruction of portions of existing bridge decks and all concrete bridge parapets. Construction continues, but the project opened to traffic for beneficial use in 2018. The project is funded with MDTA toll revenues.

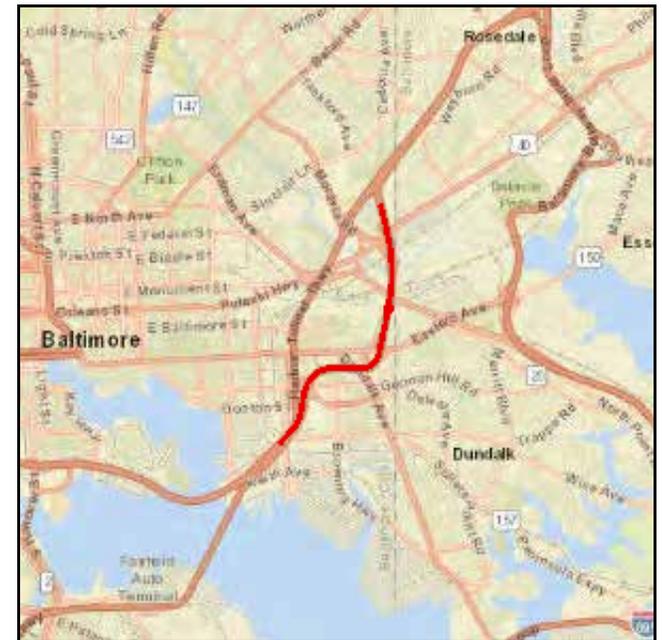
Justification:

This project will provide lane continuity and additional capacity along I-95 between the Fort McHenry Tunnel and the I-95 ETLs. This is needed to address existing congestion and to accommodate diverted traffic from I-895 that will result from MDTA's Canton Viaduct Project.

The project will also improve safety by providing higher roadside concrete traffic barrier and bridge parapets.

Connection to Long-Range Transportation Planning Goals:

- 1.C Improve System Safety -- Eliminate hazardous or substandard conditions.
- 2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).
- 6.F Improve System Security -- Increase system redundancy.





I-95 Fort McHenry Tunnel: Moravia Road to Tunnel Improvements

(Funding in Thousands)

Other

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$977	\$0	\$0	\$0	\$0	\$0	\$0	\$977
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$0	\$977	\$0	\$0	\$0	\$0	\$0	\$0	\$977
Total	\$0	\$977	\$0	\$0	\$0	\$0	\$0	\$0	\$977

I-95 Fort McHenry Tunnel: Port Covington Access

TIP ID	22-1901-45	Year of Operation	2029
Agency	Maryland Transportation Authority	Project Type	Interchange ramp added or widened
Project Category	Highway Capacity	Functional Class	Interstate
Conformity Status	Not Exempt	Physical Data	7 miles, 8 lanes
CIP or CTP ID(s)	MdTA-13	Est. Total Cost	\$495,000,000

Description:

The Maryland Transportation Authority (MDTA) and Baltimore City Department of Transportation (BCDOT) have developed a suite of improvements to Interstate 95 (I-95) ramps and other nearby transportation facilities to support ongoing and planned redevelopment of the Port Covington peninsula in South Baltimore and to address traffic needs in the Port Covington area. The study limits for these improvements are Caton Avenue to the Fort McHenry Tunnel, involving approximately seven miles of I-95 and sections of Hanover Street, McComas Street and Key Highway.

The total project cost is estimated to be \$495 million and will have phased construction, with completion anticipated in 2029. The project will be funded with MDTA funds, grant monies and developer sources.

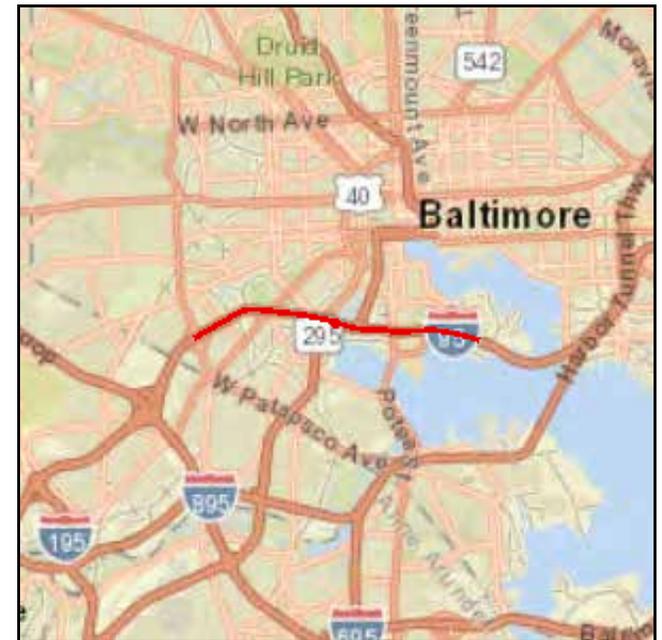
Justification:

The improvements will support local and regional economic development in Baltimore and the region. The improvements will improve connectivity to existing land uses along the I-95 corridor and major local roads, including Hanover Street, McComas Street, and Key Highway.

The improvements will increase access to planned development that is envisioned for the Port Covington peninsula, and as described in the Port Covington Master Plan, thereby increasing connectivity to planned residential development, businesses, waterways, parks, and new transit facilities on improved street grids.

Connection to Long-Range Transportation Planning Goals:

- 4. Increase Mobility
- 7.E Promote Prosperity and Economic Opportunity -- Improve access to existing communities and regional generators of economic activity.





I-95 Fort McHenry Tunnel: Port Covington Access

(Funding in Thousands)

Other

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$5,500	\$0	\$11,000	\$16,500
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$0	\$0	\$0	\$0	\$0	\$5,500	\$0	\$11,000	\$16,500
Total	\$0	\$0	\$0	\$0	\$0	\$5,500	\$0	\$11,000	\$16,500

I-95 Express Toll Lanes Northbound Extension

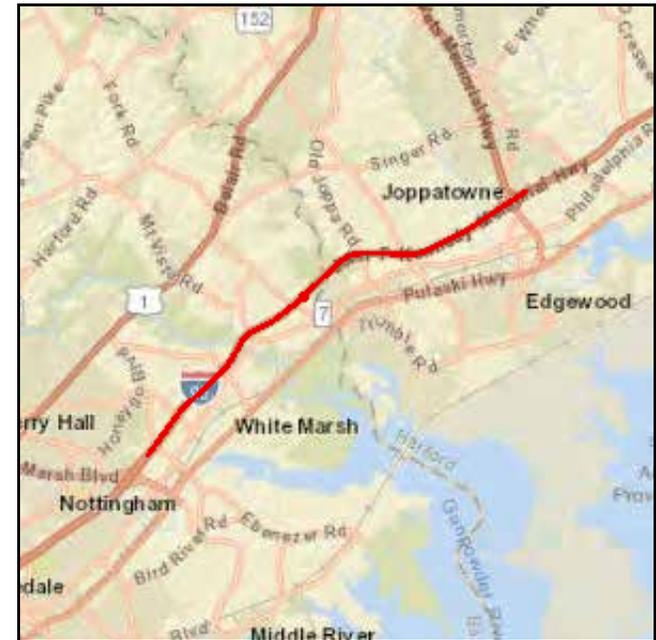
TIP ID	25-1801-41	Year of Operation	2026
Agency	Maryland Transportation Authority	Project Type	Roadway widening
Project Category	Highway Capacity	Functional Class	Interstate
Conformity Status	Not Exempt	Physical Data	10.1 miles, 6 to 8 lanes
CIP or CTP ID(s)	MdTA-2	Est. Total Cost	\$1,100,000,000

Description:

The I-95 Express Toll Lanes (ETL) Northbound Extension project is the first phase of implementation of I-95 Section 200. The project is funded by MDTA toll revenues and includes the provision of two additional ETLs for more than 10 miles on I-95 from north of MD 43 in Baltimore County to north of MD 24 in Harford County. This section includes reconstruction of the I-95 interchanges at MD 152 and MD 24 to provide access from the northbound ETL as well as an ~3/4 mile auxiliary lane connecting the interchange ramps. The project also involves reconstruction of the overpasses at Raphael, Bradshaw, Old Joppa, Clayton, and Abingdon roads to accommodate the larger area needed for the ETLs. Additionally, the I-95 northbound bridges over the Big Gunpowder Falls, Little Gunpowder Falls and Winters Run will be widened and improved. Five new noise walls will also be installed along the corridor on both sides of I-95.

Justification:

The ETLs project will bring much needed traffic relief to one of the most congested portions of I-95 in Baltimore and Harford counties. The ETLs will address capacity, operational, and safety concerns that exist along northbound I-95. Tolls are collected automatically at highway speeds using E-ZPass or Video Tolling. The project will also address quality of life issues along the I-95 corridor by providing noise walls. An ITS system will allow MDTA to better operate the ETL and GPL facility and address transportation safety along I-95.



Connection to Long-Range Transportation Planning Goals:

- 1.B Improve System Safety -- Apply safety-related management and operations techniques.
- 2.B Improve and Maintain the Existing Infrastructure -- Replace traffic signals and ITS elements.
- 4.D Increase Mobility -- Apply mobility-related management and operations techniques.



I-95 Express Toll Lanes Northbound Extension

(Funding in Thousands)

Other

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$37,378	\$0	\$93,813	\$0	\$195,693	\$0	\$228,887	\$555,771
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$100	\$0	\$0	\$0	\$0	\$0	\$0	\$100
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$0	\$37,478	\$0	\$93,813	\$0	\$195,693	\$0	\$228,887	\$555,871
Total	\$0	\$37,478	\$0	\$93,813	\$0	\$195,693	\$0	\$228,887	\$555,871

Seagirt Marine Terminal Modernization: Berth Improvements

TIP ID	32-2001-83	Year of Operation	2021
Agency	Maryland Port Administration	Project Type	Facility expansion
Project Category	Ports	Functional Class	NA
Conformity Status	Exempt	Physical Data	NA
CIP or CTP ID(s)	MPA-4	Est. Total Cost	\$58,401,000

Description:

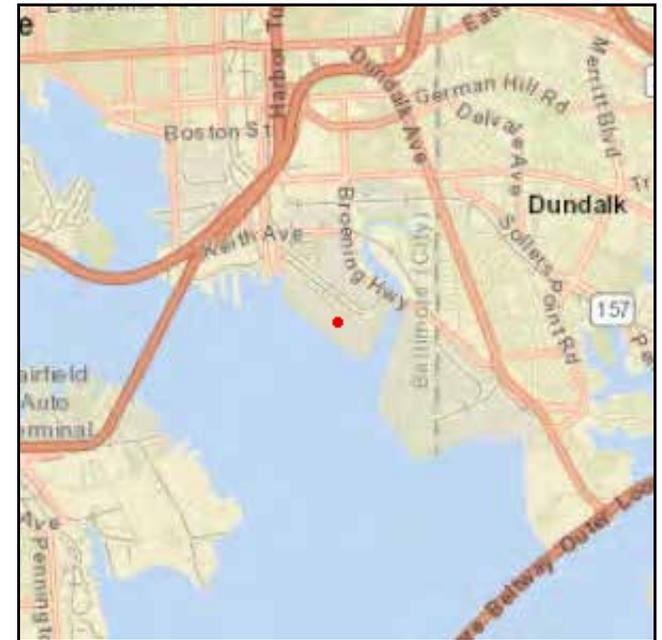
MDOT MPA received a BUILD discretionary grant from the US DOT to modernize Berth 3 at the Seagirt Marine Terminal. As the size of container vessels continues to increase, Baltimore is becoming berth-constrained and will soon be excluded from continued international trade growth unless it provides an additional deep-draft berth. This public-private partnership will widen the turning basin and deepen the access channel to Seagirt Berth 3 to 50-foot deep. Ports America Chesapeake is a private partner and tenant with MDOT-MPA and will fund berth-side improvements to Seagirt Berth 3. These improvements include construction of a toe-wall, crane tie-downs, new fenders, pavement repairs and concrete RTG runways. The federal (\$6.555 million) and state (\$33.446 million) funds in the funding table are for the Berth improvements. Ports America will provide an additional \$18.4 million for berth-side improvements.

Justification:

Adding a second berth capable of serving 50-foot draft Ultra Large Container Vessels and the necessary supporting berth-side improvements will: relieve the terminal's berth capacity bottleneck; support the region's cargo growth demand; provide growth opportunities for capturing additional containerized cargo, including the ability to accommodate one additional weekly service immediately and a second additional weekly service within 5 years; increase operational and commercial flexibility; enable vessels to more efficiently move in and out of the terminal; allow MPA to maximize the use of its infrastructure assets; more cost-effectively serve the growing export and import markets in the port of Baltimore's hinterland; reduce MPA's maintenance costs; and reduce the all-in cost to container shipping lines calling at the Port of Baltimore.

Connection to Long-Range Transportation Planning Goals:

7.F Promote Prosperity and Economic Opportunity -- Provide context-sensitive infrastructure and facilities.





Seagirt Marine Terminal Modernization: Berth Improvements

(Funding in Thousands)

Better Utilizing Investments to Leverage Development (BUILD) Discretionary Grant

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$6,555	\$22,586	\$0	\$10,353	\$0	\$0	\$0	\$0	\$39,494
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$507	\$0	\$0	\$0	\$0	\$0	\$0	\$507
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$6,555	\$23,093	\$0	\$10,353	\$0	\$0	\$0	\$0	\$40,001
Total	\$6,555	\$23,093	\$0	\$10,353	\$0	\$0	\$0	\$0	\$40,001

Urban Transit Systems - Capital Assistance

TIP ID	40-1602-05	Year of Operation	Ongoing
Agency	MTA - Transit	Project Type	Fleet improvement
Project Category	Emission Reduction Strategy	Functional Class	NA
Conformity Status	Exempt	Physical Data	NA
CIP or CTP ID(s)	N/A	Est. Total Cost	\$3,328,000

Description:

Capital assistance for the purchase of vehicles, equipment, and facilities for Harford County (Harford County Transportation Services).

Justification:

Urban transit capital assistance will enable Harford County locally operated transportation systems to operate such that local needs for service can be met.

Connection to Long-Range Transportation Planning Goals:

- 2.C Improve and Maintain the Existing Infrastructure -- Maintain/replace transit vehicles.
- 3.A Improve Accessibility -- Increase transportation alternatives for all segments of the population.
- 5.A Conserve and Enhance the Environment -- Provide alternatives to single-occupant passenger vehicles / apply emission reduction technologies.





Urban Transit Systems - Capital Assistance

(Funding in Thousands)

Section 5307 Urbanized Area Formula Program (funding for capital projects)

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$533	\$133	\$533	\$133	\$533	\$133	\$533	\$133	\$2,664
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$533	\$133	\$533	\$133	\$533	\$133	\$533	\$133	\$2,664

Section 5339 (Bus and Bus Facilities Formula Program)

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$133	\$33	\$133	\$33	\$133	\$33	\$133	\$33	\$664
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$133	\$33	\$133	\$33	\$133	\$33	\$133	\$33	\$664
Total	\$666	\$166	\$666	\$166	\$666	\$166	\$666	\$166	\$3,328

Bus and Paratransit Vehicle Overhaul and Replacement

TIP ID	40-1802-05	Year of Operation	Ongoing
Agency	MTA - Transit	Project Type	Fleet improvement
Project Category	Emission Reduction Strategy	Functional Class	NA
Conformity Status	Exempt	Physical Data	NA
CIP or CTP ID(s)	Multiple	Est. Total Cost	\$217,678,000

Description:

This project provides for the routine replacement of buses past their useful service life. Planned purchases include 278 forty-foot clean diesel buses. MDOT MTA will also proactively repair and replace bus components at key points in the vehicle’s life, including the vehicle engine, battery, brakes, suspension, body, paint, and wheelchair/ADA, electrical, and pneumatic systems. Batteries in hybrid electric buses near the end of their useful life will be replaced. This project also covers the purchase of paratransit vehicles under MTA’s Mobility program. Mobility is a specialized door-to-door service for people with disabilities who are not able to ride fixed route public transportation, including lift equipped buses. Planned purchases include 25 small cutaway and 75 large cutaway vehicles purchased annually from FY20 through FY23. In addition to the matching funds listed, MTA has committed \$51.5 million in state dollars.

Justification:

In order to reduce operating and maintenance costs, the MTA is committed to procuring new buses to support fleet capacity requirements and to replace aging equipment. This systematic replacement reduces high out of commission rates and the excessive major repair problems that arise from retaining buses beyond their economic life. Replacement with clean diesel buses helps meet higher federal emissions standards. To improve bus reliability, the mini overhaul program for bus vehicles will simultaneously increase vehicle lifespan, improve maintenance efficiency, reduce mechanical breakdowns, mitigate safety risks, develop the workforce through training, and create cost savings. Funds are also needed to provide paratransit vehicles within the Baltimore region. MTA’s Mobility program satisfies the American with Disabilities Act (ADA) provisions adopted by the Federal Transit Administration.

Connection to Long-Range Transportation Planning Goals:

- 2.C Improve and Maintain the Existing Infrastructure -- Maintain/replace transit vehicles.
- 3.A Improve Accessibility -- Increase transportation alternatives for all segments of the population.
- 3.B Improve Accessibility -- Improve ADA-related conditions for pedestrians / transit riders.
- 5.A Conserve and Enhance the Environment -- Provide alternatives to single-occupant passenger vehicles / apply emission reduction technologies.





Bus and Paratransit Vehicle Overhaul and Replacement

(Funding in Thousands)

Section 5307 Urbanized Area Formula Program (funding for capital projects)

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$2,400	\$600	\$4,409	\$1,102	\$3,388	\$847	\$0	\$0	\$12,746
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$2,400	\$600	\$4,409	\$1,102	\$3,388	\$847	\$0	\$0	\$12,746

Section 5339 (Bus and Bus Facilities Formula Program)

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$5,790	\$1,448	\$7,238
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$0	\$0	\$0	\$0	\$0	\$0	\$5,790	\$1,448	\$7,238



Bus and Paratransit Vehicle Overhaul and Replacement

(Funding in Thousands)

Congestion Mitigation and Air Quality

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$43,250	\$10,813	\$43,250	\$10,813	\$40,196	\$10,049	\$31,458	\$7,865	\$197,694
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$43,250	\$10,813	\$43,250	\$10,813	\$40,196	\$10,049	\$31,458	\$7,865	\$197,694
Total	\$45,650	\$11,413	\$47,659	\$11,915	\$43,584	\$10,896	\$37,248	\$9,313	\$217,678

Small Urban Transit Systems - Capital Assistance

TIP ID	40-9502-05	Year of Operation	Ongoing
Agency	MTA - Transit	Project Type	Fleet improvement
Project Category	Emission Reduction Strategy	Functional Class	NA
Conformity Status	Exempt	Physical Data	NA
CIP or CTP ID(s)	NA	Est. Total Cost	\$1,600,000

Description:

Capital assistance to small urban transit systems throughout the region to purchase vehicles, equipment, and facilities. The Baltimore region's small urban transit systems include Carroll Transit System, Anne Arundel County and Howard County.

Justification:

Small urban transit capital assistance will enable locally operated transportation systems to operate such that local needs for services can be met. The small urban systems are important components of the regional transportation network.

Connection to Long-Range Transportation Planning Goals:

- 2.C Improve and Maintain the Existing Infrastructure -- Maintain/replace transit vehicles.
- 3.A Improve Accessibility -- Increase transportation alternatives for all segments of the population.
- 5.A Conserve and Enhance the Environment -- Provide alternatives to single-occupant passenger vehicles / apply emission reduction technologies.





Small Urban Transit Systems - Capital Assistance

(Funding in Thousands)

Section 5307 Urbanized Area Formula Program (funding for capital projects)

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$160	\$40	\$160	\$40	\$160	\$40	\$160	\$40	\$800
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$160	\$40	\$160	\$40	\$160	\$40	\$160	\$40	\$800



Small Urban Transit Systems - Capital Assistance

(Funding in Thousands)

Section 5339 (Bus and Bus Facilities Formula Program)

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$160	\$40	\$160	\$40	\$160	\$40	\$160	\$40	\$800
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$160	\$40	\$160	\$40	\$160	\$40	\$160	\$40	\$800
Total	\$320	\$80	\$320	\$80	\$320	\$80	\$320	\$80	\$1,600

Ridesharing - Baltimore Region

TIP ID	40-9901-01	Year of Operation	Ongoing
Agency	MTA - Transit	Project Type	Ridesharing
Project Category	Emission Reduction Strategy	Functional Class	NA
Conformity Status	Exempt	Physical Data	NA
CIP or CTP ID(s)	Multiple	Est. Total Cost	\$5,972,000

Description:

The ridesharing project covers the activities of the ridesharing program in all jurisdictions in the Baltimore region, including the Guaranteed Ride Home (GRH) Program. Entities eligible to receive funding include Baltimore City, the Baltimore Metropolitan Council, and Anne Arundel, Howard, and Harford counties.

Justification:

The Maryland Ridesharing Program promotes the use of alternatives to the single occupant vehicle through mass transit, carpools, and vanpools with financial assistance under the Rideshare/Commuter Assistance Program. Funding is provided to eligible entities to assist with the promotion and management of their Rideshare Program.

Connection to Long-Range Transportation Planning Goals:

- 3.A Improve Accessibility -- Increase transportation alternatives for all segments of the population.
- 5.A Conserve and Enhance the Environment -- Provide alternatives to single-occupant passenger vehicles / apply emission reduction technologies.
- 5.D Conserve and Enhance the Environment -- Reduce greenhouse gas emissions in accordance with state and local sustainability and climate change plans.





Ridesharing - Baltimore Region

(Funding in Thousands)

Congestion Mitigation and Air Quality

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$1,550	\$0	\$1,658	\$0	\$1,214	\$0	\$1,550	\$0	\$5,972
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$1,550	\$0	\$1,658	\$0	\$1,214	\$0	\$1,550	\$0	\$5,972
Total	\$1,550	\$0	\$1,658	\$0	\$1,214	\$0	\$1,550	\$0	\$5,972

Small Urban Transit Systems - Operating Assistance

TIP ID	40-0104-61	Year of Operation	Ongoing
Agency	MTA - Transit	Project Type	Operating assistance
Project Category	Transit Preservation	Functional Class	NA
Conformity Status	Exempt	Physical Data	NA
CIP or CTP ID(s)	NA	Est. Total Cost	\$2,608,000

Description:

Operating assistance to small urban transit systems throughout the Baltimore region. Transit agencies eligible for funding include Carroll Transit System.

Costs generally associated with operating assistance can include utilities, miscellaneous equipment, fuel/oil, and driver, maintenance staff, and administrative salaries.

Justification:

Small urban transit operating assistance will enable transportation systems to finance the operation of their services.

Connection to Long-Range Transportation Planning Goals:

3.A Improve Accessibility -- Increase transportation alternatives for all segments of the population.
 5.A Conserve and Enhance the Environment -- Provide alternatives to single-occupant passenger vehicles / apply emission reduction technologies.





Small Urban Transit Systems - Operating Assistance

(Funding in Thousands)

Section 5307 Urbanized Area Formula Program (funding for operating projects)

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$326	\$326	\$326	\$326	\$326	\$326	\$326	\$326	\$2,608
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$326	\$326	\$326	\$326	\$326	\$326	\$326	\$326	\$2,608
Total	\$326	\$326	\$326	\$326	\$326	\$326	\$326	\$326	\$2,608

Kirk Bus Facility Replacement - Phase 1 & 2

TIP ID	40-1203-65	Year of Operation	2021
Agency	MTA - Transit	Project Type	Rehabilitation of facilities
Project Category	Transit Preservation	Functional Class	NA
Conformity Status	Exempt	Physical Data	NA
CIP or CTP ID(s)	0705	Est. Total Cost	\$153,000,000

Description:

Approximately 163 buses are stored, operated and maintained at the Kirk Division Bus Facility. Operations include preventive bus maintenance, inspections, heavy repairs, fueling, washing, administration, operator support facilities and dispatching. Phase I is the construction of a 100,000 square foot state-of-the-art, sustainable design, energy-efficient/green technology building that will house maintenance work to be performed in an enclosed environment, thereby enabling MTA to better control noise, exhaust fumes and visibility of the buses to the surrounding community. Phase II is the construction of a similar building to store buses overnight.

Note: In addition to the matching funds listed, MTA has committed \$41.2 million in state dollars.

Justification:

The current facility supports 14 bus routes operating in Baltimore City and Baltimore County and was built over 65 years ago and cannot accommodate MTA's modern fleet or hybrid and articulated buses. A new facility is required to ensure efficient transit traffic and parking. MTA has worked with the community for many years to develop a plan to modernize the Kirk Bus Facility. Phase 1 completed; Phase 2 year of completion - 2021.



Connection to Long-Range Transportation Planning Goals:

- 2.E Improve and Maintain the Existing Infrastructure -- Improve the condition of transit infrastructure and stations/stops.
- 5.D Conserve and Enhance the Environment -- Reduce greenhouse gas emissions in accordance with state and local sustainability and climate change plans.



Kirk Bus Facility Replacement - Phase 1 & 2

(Funding in Thousands)

Section 5307 Urbanized Area Formula Program (funding for capital projects)

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$4,069	\$1,017	\$7,947	\$1,987	\$0	\$0	\$0	\$0	\$15,020
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$4,069	\$1,017	\$7,947	\$1,987	\$0	\$0	\$0	\$0	\$15,020

Section 5339 (Bus and Bus Facilities Formula Program)

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$5,456	\$1,364	\$3,165	\$791	\$5,676	\$1,419	\$0	\$0	\$17,871
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$5,456	\$1,364	\$3,165	\$791	\$5,676	\$1,419	\$0	\$0	\$17,871
Total	\$9,525	\$2,381	\$11,112	\$2,778	\$5,676	\$1,419	\$0	\$0	\$32,891

Bus and Rail Preventive Maintenance

TIP ID	40-1204-64	Year of Operation	Ongoing
Agency	MTA - Transit	Project Type	Preservation and improvements
Project Category	Transit Preservation	Functional Class	NA
Conformity Status	Exempt	Physical Data	NA
CIP or CTP ID(s)	NA	Est. Total Cost	\$195,520,000

Description:

Provides preventative maintenance on the Bus, Light Rail and Metro systems to improve safety, reliability and passenger comfort.

Justification:

Regular preventive maintenance on the transit system will allow MTA to provide safe and reliable service. Proper maintenance extends the useful life of transit vehicles.

Connection to Long-Range Transportation Planning Goals:

- 1.C Improve System Safety -- Eliminate hazardous or substandard conditions.
- 2.C Improve and Maintain the Existing Infrastructure -- Maintain/replace transit vehicles.
- 6.A Improve System Security -- Provide security-related features at transit facilities or on transit vehicles.





Bus and Rail Preventive Maintenance

(Funding in Thousands)

Section 5307 Urbanized Area Formula Program (funding for capital projects)

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$12,790	\$3,198	\$12,264	\$3,066	\$11,727	\$2,932	\$11,180	\$2,795	\$59,952
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$12,790	\$3,198	\$12,264	\$3,066	\$11,727	\$2,932	\$11,180	\$2,795	\$59,952

Section 5337 (State of Good Repair Formula Program)

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$26,314	\$6,578	\$26,840	\$6,710	\$27,377	\$6,844	\$27,924	\$6,981	\$135,568
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$26,314	\$6,578	\$26,840	\$6,710	\$27,377	\$6,844	\$27,924	\$6,981	\$135,568
Total	\$39,104	\$9,776	\$39,104	\$9,776	\$39,104	\$9,776	\$39,104	\$9,776	\$195,520

Seniors and Individuals with Disabilities

TIP ID	40-1502-69	Year of Operation	Ongoing
Agency	MTA - Transit	Project Type	Other
Project Category	Transit Preservation	Functional Class	NA
Conformity Status	Exempt	Physical Data	NA
CIP or CTP ID(s)	N/A	Est. Total Cost	\$9,360,000

Description:

Capital and operating assistance to non-profit agencies who provide transportation services for the elderly and individuals with disabilities. Non-profit recipients are determined through a competitive selection process and based upon the Baltimore Area Coordinated Public Transit - Human Services Transportation Plan.

Justification:

This program is intended to enhance mobility for seniors and individuals with disabilities by providing capital and operating funds for programs to serve the special needs of transit-dependent populations beyond traditional public transportation services and ADA complementary paratransit services.

Connection to Long-Range Transportation Planning Goals:

3.B Improve Accessibility -- Improve ADA-related conditions for pedestrians / transit riders.





Seniors and Individuals with Disabilities

(Funding in Thousands)

Section 5310 Enhanced Mobility of Seniors and Individuals with Disabilities Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$0	\$0	\$3,370	\$1,310	\$0	\$0	\$3,370	\$1,310	\$9,360
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$0	\$0	\$3,370	\$1,310	\$0	\$0	\$3,370	\$1,310	\$9,360
Total	\$0	\$0	\$3,370	\$1,310	\$0	\$0	\$3,370	\$1,310	\$9,360

Urban Transit Systems - Operating Assistance

TIP ID	40-1603-61	Year of Operation	Ongoing
Agency	MTA - Transit	Project Type	Operating assistance
Project Category	Transit Preservation	Functional Class	NA
Conformity Status	Exempt	Physical Data	NA
CIP or CTP ID(s)	N/A	Est. Total Cost	\$13,008,000

Description:

Operating assistance to urban transit systems throughout the Aberdeen/Bel Air North/Bel Air South urbanized area. Transit agencies eligible for funding include Harford County.

Costs generally associated with operating assistance can include utilities, miscellaneous equipment, fuel/oil, and driver, maintenance staff, and administrative salaries.

Justification:

Urban transit operating assistance will enable transportation systems to finance the operation of their services.

Connection to Long-Range Transportation Planning Goals:

3.A Improve Accessibility -- Increase transportation alternatives for all segments of the population.
 5.A Conserve and Enhance the Environment -- Provide alternatives to single-occupant passenger vehicles / apply emission reduction technologies.





Urban Transit Systems - Operating Assistance

(Funding in Thousands)

Section 5307 Urbanized Area Formula Program (funding for operating projects)

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$1,626	\$1,626	\$1,626	\$1,626	\$1,626	\$1,626	\$1,626	\$1,626	\$13,008
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$1,626	\$1,626	\$1,626	\$1,626	\$1,626	\$1,626	\$1,626	\$1,626	\$13,008
Total	\$1,626	\$1,626	\$1,626	\$1,626	\$1,626	\$1,626	\$1,626	\$1,626	\$13,008

Agencywide System Preservation and Improvement

TIP ID	40-1801-64	Year of Operation	Ongoing
Agency	MTA - Transit	Project Type	Preservation and improvements
Project Category	Transit Preservation	Functional Class	NA
Conformity Status	Exempt	Physical Data	NA
CIP or CTP ID(s)	Multiple	Est. Total Cost	\$35,284,000

Description:

This is an ongoing project to rehabilitate agency-wide facilities, systems, and infrastructure, including park-and-ride lots, roofing, bridge and subway inspection, a transit asset management system, a system network migration and upgrade, system-wide elevators and escalators, and a mobility CAD/AVL system replacement.

In addition to the matching funds listed, MTA has committed \$98.9 million in state dollars.

Justification:

The associated projects support regional management and operation initiatives to improve service, safety, and assure the preservation of infrastructure agency-wide.



Connection to Long-Range Transportation Planning Goals:

- 1.B Improve System Safety -- Apply safety-related management and operations techniques.
- 2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).
- 2.E Improve and Maintain the Existing Infrastructure -- Improve the condition of transit infrastructure and stations/stops.



Agencywide System Preservation and Improvement

(Funding in Thousands)

Section 5307 Urbanized Area Formula Program (funding for capital projects)

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$1,571	\$393	\$10,973	\$2,743	\$3,759	\$940	\$11,924	\$2,981	\$35,284
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$1,571	\$393	\$10,973	\$2,743	\$3,759	\$940	\$11,924	\$2,981	\$35,284
Total	\$1,571	\$393	\$10,973	\$2,743	\$3,759	\$940	\$11,924	\$2,981	\$35,284

Bus System Preservation and Improvement

TIP ID	40-1803-64	Year of Operation	Ongoing
Agency	MTA - Transit	Project Type	Preservation and improvements
Project Category	Transit Preservation	Functional Class	NA
Conformity Status	Exempt	Physical Data	NA
CIP or CTP ID(s)	Multiple	Est. Total Cost	\$3,000,000

Description:

This is an ongoing project to rehabilitate bus facilities and infrastructure, including operating division and MTA offices. Projects included are the replacement of historic gable windows at Bush Division and a paint booth at Washington Boulevard.

In addition to the matching funds listed, MTA has committed \$187,000 in state dollars.

Justification:

The associated projects support regional management and operation initiatives to improve service, safety, and the preservation of the bus system.

Connection to Long-Range Transportation Planning Goals:

- 2.C Improve and Maintain the Existing Infrastructure -- Maintain/replace transit vehicles.
- 2.E Improve and Maintain the Existing Infrastructure -- Improve the condition of transit infrastructure and stations/stops.
- 3.A Improve Accessibility -- Increase transportation alternatives for all segments of the population.





Bus System Preservation and Improvement

(Funding in Thousands)

Section 5339 (Bus and Bus Facilities Formula Program)

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$2,400	\$600	\$0	\$0	\$0	\$0	\$3,000
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$0	\$0	\$2,400	\$600	\$0	\$0	\$0	\$0	\$3,000
Total	\$0	\$0	\$2,400	\$600	\$0	\$0	\$0	\$0	\$3,000

Metro and Light Rail Rolling Stock Overhauls and Replacement

TIP ID	40-1804-63	Year of Operation	Ongoing
Agency	MTA - Transit	Project Type	Fleet improvement
Project Category	Transit Preservation	Functional Class	NA
Conformity Status	Exempt	Physical Data	NA
CIP or CTP ID(s)	Multiple	Est. Total Cost	\$245,667,000

Description:

The Metro Railcar fleet consists of 90 cars that have surpassed the 30-year design life. Replacement of the railcar fleet will provide passengers with enhanced comfort, conveniences, and ensure improved reliability. The Light Rail vehicle fleet will require the plan and design of maintenance objectives to perform a 15-year inspection of the major and sub-assemblies of the original 35-vehicle fleet. The inspections will identify and remedy all obsolete parts issues in order to overhaul the major and sub-assemblies according to manufacturer recommendations and facilitate any modifications deemed necessary by engineering or OEM for 15-year maintenance. The first vehicles were placed back in service in 2015, and the last vehicle will be placed back in service in 2022. In addition to the matching funds listed, MTA has committed \$82.3 million in state dollars.

Justification:

The replacement of Metro vehicles and the Signaling System with modern and reliable equipment will enhance passenger comfort, ensure better reliability and offer improved safety. The MTA's Metro Signaling System consists of a double tracked train controlled signaling system that is 15 miles long. The Metro train control system was installed in three phases and the oldest section is currently 30 yrs old. The Automatic Train Protection system is currently experiencing reliability issues due to its age and parts obsolescence thus increasing maintainability issues across its various systems and sub-systems. The replacement of the Signaling System with modern, reliable equipment will enhance passenger comfort, ensure better reliability and offer improved safety. Light rail fleet overhaul is designed to reduce system failures and improve reliability and service.

Connection to Long-Range Transportation Planning Goals:

- 1.C Improve System Safety -- Eliminate hazardous or substandard conditions.
- 2.C Improve and Maintain the Existing Infrastructure -- Maintain/replace transit vehicles.
- 6.A Improve System Security -- Provide security-related features at transit facilities or on transit vehicles.





Metro and Light Rail Rolling Stock Overhauls and Replacement

(Funding in Thousands)

Section 5307 Urbanized Area Formula Program (funding for capital projects)

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$37,530	\$9,383	\$15,415	\$3,854	\$47,491	\$11,873	\$50,337	\$12,584	\$188,467
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$37,530	\$9,383	\$15,415	\$3,854	\$47,491	\$11,873	\$50,337	\$12,584	\$188,467

Section 5307 Flex (STBG funds flexed to Section 5307)

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$16,847	\$4,212	\$13,730	\$3,433	\$0	\$0	\$0	\$0	\$38,222
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$16,847	\$4,212	\$13,730	\$3,433	\$0	\$0	\$0	\$0	\$38,222



Metro and Light Rail Rolling Stock Overhauls and Replacement

(Funding in Thousands)

Congestion Mitigation and Air Quality

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$3,390	\$848	\$11,792	\$2,948	\$18,978
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$0	\$0	\$0	\$0	\$3,390	\$848	\$11,792	\$2,948	\$18,978
Total	\$54,377	\$13,595	\$29,145	\$7,287	\$50,881	\$12,721	\$62,129	\$15,532	\$245,667

Metro and Light Rail System Preservation and Improvement

TIP ID	40-1805-64	Year of Operation	Ongoing
Agency	MTA - Transit	Project Type	Preservation and improvements
Project Category	Transit Preservation	Functional Class	NA
Conformity Status	Exempt	Physical Data	NA
CIP or CTP ID(s)	Multiple	Est. Total Cost	\$46,819,000

Description:

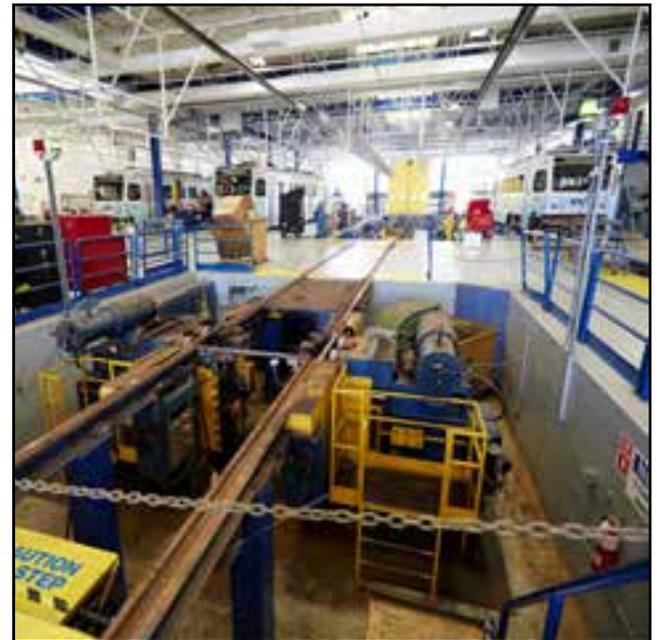
This is an ongoing project to rehabilitate Light Rail and Metro facilities, infrastructure, track, and equipment. In addition to the matching funds listed, MTA has committed \$211.5 million in state dollars.

Justification:

The associated projects support regional management and operation initiatives to improve service and safety and assure the preservation of the Light Rail and Metro systems.

Connection to Long-Range Transportation Planning Goals:

- 2.C Improve and Maintain the Existing Infrastructure -- Maintain/replace transit vehicles.
- 2.E Improve and Maintain the Existing Infrastructure -- Improve the condition of transit infrastructure and stations/stops.
- 3.G Improve Accessibility -- Improve system connectivity and continuity among modes and across boundaries.





Metro and Light Rail System Preservation and Improvement

(Funding in Thousands)

Section 5307 Urbanized Area Formula Program (funding for capital projects)

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$12,239	\$3,060	\$19,581	\$4,895	\$5,635	\$1,409	\$0	\$0	\$46,819
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$12,239	\$3,060	\$19,581	\$4,895	\$5,635	\$1,409	\$0	\$0	\$46,819
Total	\$12,239	\$3,060	\$19,581	\$4,895	\$5,635	\$1,409	\$0	\$0	\$46,819

Rural Transit Systems - Operating Assistance

TIP ID	40-9204-61	Year of Operation	Ongoing
Agency	MTA - Transit	Project Type	Operating assistance
Project Category	Transit Preservation	Functional Class	NA
Conformity Status	Exempt	Physical Data	NA
CIP or CTP ID(s)	None	Est. Total Cost	\$1,904,000

Description:

Operating assistance to transit systems located in the Baltimore region. Transit agencies eligible for funding include Baltimore County (Baltimore County Office of Aging) and Carroll Transit System.

Costs generally associated with operating assistance can include utilities, miscellaneous equipment, fuel/oil, and driver, maintenance staff, and administrative salaries.

Justification:

Rural transit operating assistance will enable transportation systems to finance the operation of their services.

Connection to Long-Range Transportation Planning Goals:

3.A Improve Accessibility -- Increase transportation alternatives for all segments of the population.
 5.A Conserve and Enhance the Environment -- Provide alternatives to single-occupant passenger vehicles / apply emission reduction technologies.





Rural Transit Systems - Operating Assistance

(Funding in Thousands)

Section 5311 Nonurbanized Area Formula Program (funding for operating assistance in non-urbanized areas)

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$238	\$238	\$238	\$238	\$238	\$238	\$238	\$238	\$1,904
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$238	\$238	\$238	\$238	\$238	\$238	\$238	\$238	\$1,904
Total	\$238	\$238	\$238	\$238	\$238	\$238	\$238	\$238	\$1,904

MARC Rolling Stock Overhauls and Replacement

TIP ID	70-1501-53	Year of Operation	Ongoing
Agency	MTA - Commuter Rail	Project Type	Fleet improvement
Project Category	Commuter Rail Preservation	Functional Class	NA
Conformity Status	Exempt	Physical Data	NA
CIP or CTP ID(s)	Multiple	Est. Total Cost	\$23,595,000

Description:

This is an ongoing project for the overhaul and replacement of MARC rolling stock. The overhaul of MARC coaches and locomotives is performed in accordance with "10-year minor" and "20-year midlife" schedules and/or the manufacturer's schedule. MARC vehicles will be upgraded with federally-mandated Positive Train Control safety features. In addition to the matching funds listed, MTA has committed \$10.5 million in state dollars.

Justification:

Overhauls will extend the life of mechanical systems and car bodies. This will have the effect of providing safe and reliable vehicles for MARC service while also complying with federally mandated maintenance regulations.

Connection to Long-Range Transportation Planning Goals:

2.C Improve and Maintain the Existing Infrastructure -- Maintain/replace transit vehicles.





MARC Rolling Stock Overhauls and Replacement

(Funding in Thousands)

Section 5307 Urbanized Area Formula Program (funding for capital projects)

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$781	\$195	\$0	\$0	\$0	\$0	\$976
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$0	\$0	\$781	\$195	\$0	\$0	\$0	\$0	\$976

Section 5337 (State of Good Repair Formula Program)

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$7,291	\$1,823	\$5,076	\$1,269	\$1,231	\$308	\$4,497	\$1,124	\$22,619
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$7,291	\$1,823	\$5,076	\$1,269	\$1,231	\$308	\$4,497	\$1,124	\$22,619
Total	\$7,291	\$1,823	\$5,857	\$1,464	\$1,231	\$308	\$4,497	\$1,124	\$23,595

MARC Improvements

TIP ID	70-1502-54	Year of Operation	Ongoing
Agency	MTA - Commuter Rail	Project Type	Preservation and improvements
Project Category	Commuter Rail Preservation	Functional Class	NA
Conformity Status	Exempt	Physical Data	NA
CIP or CTP ID(s)	Multiple	Est. Total Cost	\$52,104,000

Description:

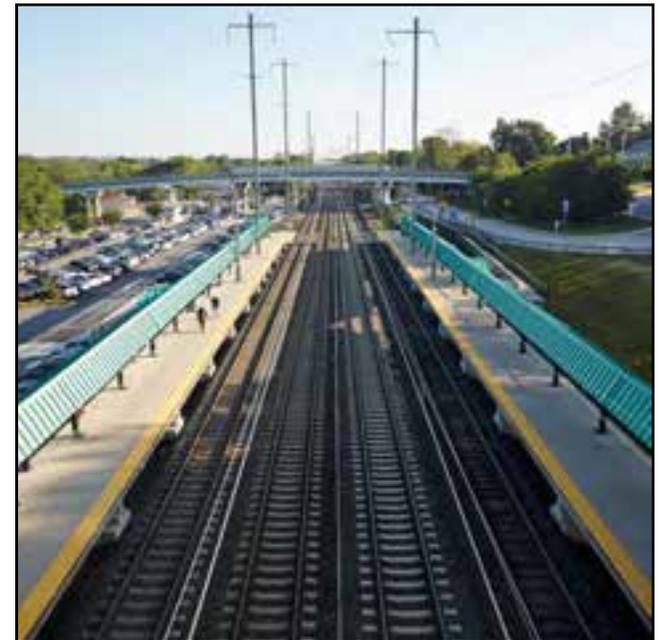
This project provides funding to implement ongoing improvements derived from the MARC Master Plan and Amtrak/CSX Operating Agreements. Projects include: improvements to the Penn line, improvements to the Brunswick and Camden lines, system-wide parking lot improvements, the design, procurement, and installation of an ADA compliant public address system at all MARC stations on the Brunswick, Camden, and Penn lines, installation of an audio/visual warning system for approaching MARC trains, uninterruptible power supply and lighting protections, and the collaborative cost-sharing arrangement to advance development of the Northeast corridor infrastructure. In addition to the matching funds listed, MTA has committed \$18.1 million in state dollars.

Justification:

Investments in passenger rail corridor infrastructure improvements are necessary to maintain/improve the safety and quality of MARC infrastructure.

Connection to Long-Range Transportation Planning Goals:

- 1.C Improve System Safety -- Eliminate hazardous or substandard conditions.
- 2.E Improve and Maintain the Existing Infrastructure -- Improve the condition of transit infrastructure and stations/stops.
- 3.G Improve Accessibility -- Improve system connectivity and continuity among modes and across boundaries.





MARC Improvements

(Funding in Thousands)

Section 5307 Urbanized Area Formula Program (funding for capital projects)

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$86	\$22	\$2,637	\$659	\$1,242	\$311	\$624	\$156	\$5,737
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$86	\$22	\$2,637	\$659	\$1,242	\$311	\$624	\$156	\$5,737

Section 5337 (State of Good Repair Formula Program)

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$11,333	\$2,833	\$5,374	\$1,344	\$8,100	\$2,025	\$12,286	\$3,072	\$46,367
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$11,333	\$2,833	\$5,374	\$1,344	\$8,100	\$2,025	\$12,286	\$3,072	\$46,367
Total	\$11,419	\$2,855	\$8,011	\$2,003	\$9,342	\$2,336	\$12,910	\$3,228	\$52,104

MARC Facilities

TIP ID	70-1503-55	Year of Operation	Ongoing
Agency	MTA - Commuter Rail	Project Type	Rehabilitation of facilities
Project Category	Commuter Rail Preservation	Functional Class	NA
Conformity Status	Exempt	Physical Data	NA
CIP or CTP ID(s)	Multiple	Est. Total Cost	\$80,919,000

Description:

- 1) Procure Riverside maintenance facility, which CSX has offered to sell to MTA. Maintenance activities for equipment on the MARC Camden Line would then be under direct control of MARC. MTA & CSX are jointly working with MDE to remediate hazardous material contamination.
- 2) Design and engineering for BWI MARC/Amtrak facility renovation and improvements. This work involves station improvements and new canopies.
- 3) MARC Martin State Airport – Purchase private property & construct 2 additional storage tracks.
- 4) Construction of Riverside heavy maintenance facility.

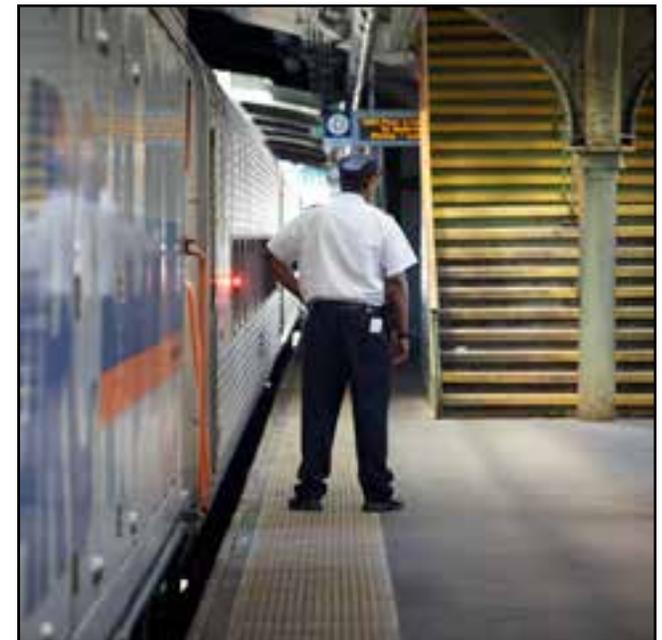
Justification:

- 1 & 4) Space needed in the Baltimore region for MARC train maintenance and storage.
- 2) Repairs will extend the useful life of the garages and support continued ridership on the MARC system from this location.
- 3) Space needed in the Baltimore region for MARC train maintenance and storage.

Note: In addition to the matching funds listed, MTA has committed \$4.5 million in state dollars.

Connection to Long-Range Transportation Planning Goals:

- 1.C Improve System Safety -- Eliminate hazardous or substandard conditions.
- 2.E Improve and Maintain the Existing Infrastructure -- Improve the condition of transit infrastructure and stations/stops.
- 3.B Improve Accessibility -- Improve ADA-related conditions for pedestrians / transit riders.





MARC Facilities

(Funding in Thousands)

Section 5337 (State of Good Repair Formula Program)

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$24,147	\$6,037	\$27,287	\$6,822	\$13,301	\$3,325	\$80,919
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$0	\$0	\$24,147	\$6,037	\$27,287	\$6,822	\$13,301	\$3,325	\$80,919
Total	\$0	\$0	\$24,147	\$6,037	\$27,287	\$6,822	\$13,301	\$3,325	\$80,919

State Safety Oversight

TIP ID	90-1401-39	Year of Operation	Ongoing
Agency	Office of the Secretary	Project Type	Other
Project Category	Environmental/Safety	Functional Class	NA
Conformity Status	Exempt	Physical Data	NA
CIP or CTP ID(s)	N/A	Est. Total Cost	\$2,400,000

Description:

The Maryland Department of Transportation (MDOT) intends to use these Section 5329 Funds to provide administrative expenses for training, consultant services and miscellaneous equipment to oversee MTA's Light Rail and Metro systems and its operations in the Baltimore, Maryland metropolitan area.

Justification:

To make transit safer through policy development, hazard investigation, data collection, risk analysis, effective oversight programs and information sharing.

Connection to Long-Range Transportation Planning Goals:

- 1.B Improve System Safety -- Apply safety-related management and operations techniques.
- 1.D Improve System Safety -- Improve emergency response time.





State Safety Oversight

(Funding in Thousands)

Section 5329 (State Safety Oversight)

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$400	\$200	\$400	\$200	\$400	\$200	\$400	\$200	\$2,400
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$400	\$200	\$400	\$200	\$400	\$200	\$400	\$200	\$2,400
Total	\$400	\$200	\$400	\$200	\$400	\$200	\$400	\$200	\$2,400

Baltimore-Washington Superconducting Maglev (SCMAGLEV) Project

TIP ID	90-1901-99	Year of Operation	NA
Agency	Office of the Secretary	Project Type	Miscellaneous
Project Category	Miscellaneous	Functional Class	NA
Conformity Status	Exempt	Physical Data	NA
CIP or CTP ID(s)	TSO-5	Est. Total Cost	\$17,380,000

Description:

Baltimore-Washington Rapid Rail (BWRR), a private company based in Maryland, is proposing to construct an SCMAGLEV train system between Baltimore, Maryland and Washington, DC with an intermediate stop at BWI Marshall Airport. An Environmental Impact Statement (EIS) is being prepared to evaluate the potential impacts of the construction and operation of such a system.

This phase of the project is being funded by a grant from the Federal Railroad Administration with matching funds provided by BWRR. This project is represented in both the Baltimore Regional Transportation Board (BRTB) (50%) and National Capital Region Transportation Planning Board (TPB) (50%) TIPs.

Justification:

Over the next 30 years, population in the Baltimore-Washington region is expected to grow by 30 percent, significantly increasing demand on roadways and railways between the two cities. The purpose of BWRR's proposed action is to increase capacity, reduce travel time, and improve both reliability and mobility options between Baltimore and Washington, with possible future extensions to New York City.

Connection to Long-Range Transportation Planning Goals:

- 4.C Increase Mobility -- Expand transit service coverage / hours of operation.
- 5.A Conserve and Enhance the Environment -- Provide alternatives to single-occupant passenger vehicles / apply emission reduction technologies.
- 7.E Promote Prosperity and Economic Opportunity -- Improve access to existing communities and regional generators of economic activity.





Baltimore-Washington Superconducting Maglev (SCMAGLEV) Project

(Funding in Thousands)

Federal Railroad Administration

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$13,900	\$3,480	\$0	\$0	\$0	\$0	\$0	\$0	\$17,380
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$13,900	\$3,480	\$0	\$0	\$0	\$0	\$0	\$0	\$17,380
Total	\$13,900	\$3,480	\$0	\$0	\$0	\$0	\$0	\$0	\$17,380

Port of Baltimore Enhancements

TIP ID	92-1401-83	Year of Operation	2018
Agency	Office of the Secretary	Project Type	Facility expansion
Project Category	Ports	Functional Class	NA
Conformity Status	Exempt	Physical Data	NA
CIP or CTP ID(s)	MPA-9	Est. Total Cost	\$58,890,000

Description:

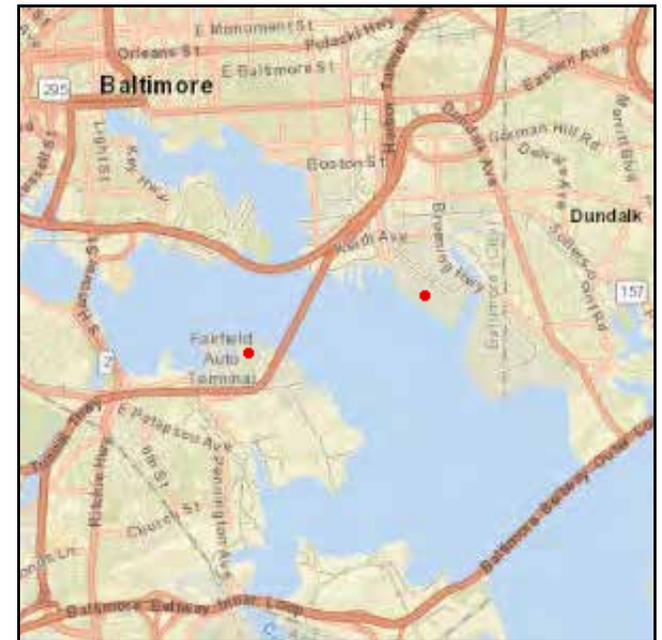
MPA's TIGER project has three portions: provide rail access to Fairfield Marine Terminal; widening and straightening the navigation channel to Seagirt Marine Terminal; and filling the Fairfield Basin to develop seven acres of new land for cargo storage.

Justification:

The current access channel to Seagirt is deep enough; however, it has several turns and is too narrow for the next generation of container ships that are able to transit the Panama Canal. The suitable material dredged from this widening will be used as fill in the WWII-era shipbuilding basin to create new land needed for cargo storage (and cost avoidance to replace dilapidated bulkheads). Rail access to Fairfield will allow more efficient cargo movement.

Connection to Long-Range Transportation Planning Goals:

- 7.E Promote Prosperity and Economic Opportunity -- Improve access to existing communities and regional generators of economic activity.
- 7.F Promote Prosperity and Economic Opportunity -- Provide context-sensitive infrastructure and facilities.





Port of Baltimore Enhancements

(Funding in Thousands)

Transportation Investment Generating Economic Recovery

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$1,074	\$2,000	\$0	\$0	\$0	\$0	\$0	\$0	\$3,074
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$1,074	\$2,000	\$0	\$0	\$0	\$0	\$0	\$0	\$3,074
Total	\$1,074	\$2,000	\$0	\$0	\$0	\$0	\$0	\$0	\$3,074

Areawide Transportation Alternatives Projects

TIP ID	60-9903-29	Year of Operation	Ongoing
Agency	SHA - Regional	Project Type	Other
Project Category	Enhancement Program	Functional Class	NA
Conformity Status	Exempt	Physical Data	NA
CIP or CTP ID(s)	N/A	Est. Total Cost	\$36,800,000

Description:

This is an ongoing program to expand travel choices and enhance the transportation experience by improving the cultural, historic, and environmental aspects of our transportation infrastructure. These projects may include but are not limited to pedestrian/bicycle facilities; rehabilitation of historic transportation facilities, including railroad facilities and canals; conversion and use of abandoned railway corridors; archeological activities related to transportation impacts; and mitigation of water pollution due to highway runoff. This program also includes Safe Routes to School projects.

Justification:

Transportation enhancements are projects which add community and environmental value to the transportation system.



Connection to Long-Range Transportation Planning Goals:

- 1.E Improve System Safety -- Improve safety conditions for pedestrians and bicyclists.
- 2.F Improve and Maintain the Existing Infrastructure -- Improve the condition of pedestrian and bicycle facilities.
- 3.A Improve Accessibility -- Increase transportation alternatives for all segments of the population.
- 5.E Conserve and Enhance the Environment -- Preserve and protect natural and cultural resources.



Areawide Transportation Alternatives Projects

(Funding in Thousands)

Transportation Alternatives (Transportation Enhancement, Safe Routes to School)

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$6,400	\$1,600	\$6,400	\$1,600	\$6,400	\$1,600	\$6,400	\$1,600	\$32,000
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$640	\$160	\$640	\$160	\$480	\$120	\$480	\$120	\$2,800
PL	\$320	\$80	\$320	\$80	\$320	\$80	\$320	\$80	\$1,600
ROW	\$80	\$20	\$80	\$20	\$80	\$20	\$80	\$20	\$400
Subtotal	\$7,440	\$1,860	\$7,440	\$1,860	\$7,280	\$1,820	\$7,280	\$1,820	\$36,800
Total	\$7,440	\$1,860	\$7,440	\$1,860	\$7,280	\$1,820	\$7,280	\$1,820	\$36,800

Areawide Environmental Projects

TIP ID	60-9506-38	Year of Operation	Ongoing
Agency	SHA - Regional	Project Type	Environmental other
Project Category	Environmental/Safety	Functional Class	NA
Conformity Status	Exempt	Physical Data	NA
CIP or CTP ID(s)	A-20	Est. Total Cost	\$170,800,000

Description:

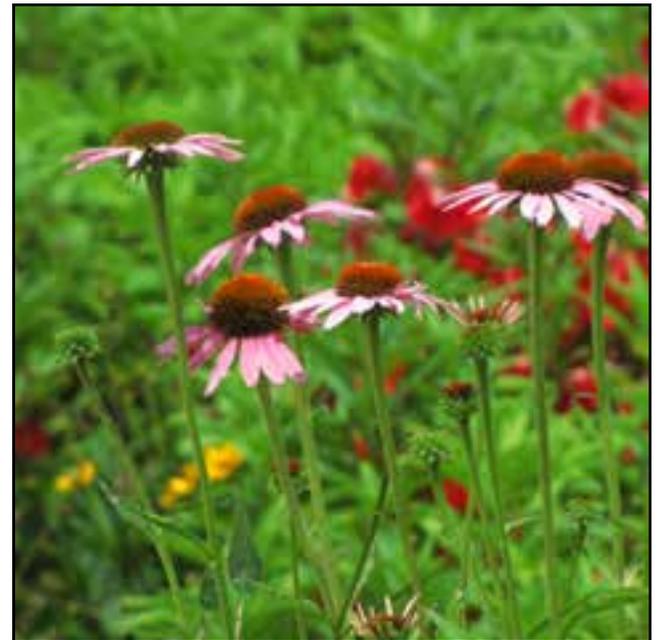
This is an ongoing program to provide environmental and aesthetic improvements on State highways. These are non-capacity improvements which include, but are not limited to, projects dealing with noise abatement, wetlands, reforestation, landscape planting, scenic beautification, and pedestrian or bicycle facilities. This program also includes National Recreational Trails projects.

Justification:

Will restore important wetlands, enhance the surrounding environment and community, and reduce noise impacts.

Connection to Long-Range Transportation Planning Goals:

- 2.F Improve and Maintain the Existing Infrastructure -- Improve the condition of pedestrian and bicycle facilities.
- 5.E Conserve and Enhance the Environment -- Preserve and protect natural and cultural resources.





Areawide Environmental Projects

(Funding in Thousands)

Highway Safety Improvement Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$640	\$160	\$640	\$160	\$640	\$160	\$640	\$160	\$3,200
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$160	\$40	\$160	\$40	\$160	\$40	\$160	\$40	\$800
PL	\$40	\$10	\$40	\$10	\$40	\$10	\$40	\$10	\$200
ROW	\$40	\$10	\$40	\$10	\$40	\$10	\$40	\$10	\$200
Subtotal	\$880	\$220	\$880	\$220	\$880	\$220	\$880	\$220	\$4,400



Areawide Environmental Projects

(Funding in Thousands)

National Highway Performance Program (National Highway System, Interstate Maintenance, Bridge (on-System))

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$3,200	\$800	\$3,200	\$800	\$3,200	\$800	\$3,200	\$800	\$16,000
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$160	\$40	\$160	\$40	\$160	\$40	\$160	\$40	\$800
PL	\$80	\$20	\$80	\$20	\$80	\$20	\$80	\$20	\$400
ROW	\$80	\$20	\$80	\$20	\$80	\$20	\$80	\$20	\$400
Subtotal	\$3,520	\$880	\$3,520	\$880	\$3,520	\$880	\$3,520	\$880	\$17,600

Recreational Trails Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$160	\$40	\$160	\$40	\$160	\$40	\$160	\$40	\$800
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$80	\$20	\$80	\$20	\$80	\$20	\$80	\$20	\$400
PL	\$240	\$60	\$240	\$60	\$240	\$60	\$240	\$60	\$1,200
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$480	\$120	\$480	\$120	\$480	\$120	\$480	\$120	\$2,400



Areawide Environmental Projects

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$36,000	\$9,000	\$36,000	\$9,000	\$20,000	\$5,000	\$20,000	\$5,000	\$140,000
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$800	\$200	\$800	\$200	\$800	\$200	\$800	\$200	\$4,000
PL	\$240	\$60	\$240	\$60	\$240	\$60	\$240	\$60	\$1,200
ROW	\$240	\$60	\$240	\$60	\$240	\$60	\$240	\$60	\$1,200
Subtotal	\$37,280	\$9,320	\$37,280	\$9,320	\$21,280	\$5,320	\$21,280	\$5,320	\$146,400
Total	\$42,160	\$10,540	\$42,160	\$10,540	\$26,160	\$6,540	\$26,160	\$6,540	\$170,800

Areawide Congestion Management

TIP ID	60-9504-04	Year of Operation	Ongoing
Agency	SHA - Regional	Project Type	Traffic engineering
Project Category	Emission Reduction Strategy	Functional Class	Varies
Conformity Status	Exempt	Physical Data	NA
CIP or CTP ID(s)	A-21	Est. Total Cost	\$93,800,000

Description:

This is an ongoing program to provide traffic control, management, and monitoring on State highways. These improvements may include but are not limited to the employment of variable message signs, video for traffic management (CCTV), traffic management detectors, signal systemization and remote timing, permanent congestion monitoring systems employed by the CHART program, deployment of local jurisdiction intelligent transportation system (ITS) projects, and the development of park-and-ride facilities.

This project also includes a program that replaces older drayage trucks serving the Port of Baltimore with newer trucks that meet or exceed 2007 EPA emissions certified engine standards.

Justification:

These projects together provide an important air quality component of reducing emissions from motor vehicles in the Baltimore region. Most of these projects will improve safety and traffic flow operations on the existing highway system without major new construction. They will save motorists time by allowing them to avoid traffic congestion. Some of the projects will reduce congestion through the use of ITS technology innovations in communication, advanced traffic management, traveler information, etc.

Connection to Long-Range Transportation Planning Goals:

- 4.A Increase Mobility -- Provide techniques or alternatives as part of a Congestion Management Process (CMP).
- 5.C Conserve and Enhance the Environment -- Provide incentives for zero-emission vehicles.





Areawide Congestion Management

(Funding in Thousands)

Congestion Mitigation and Air Quality

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$1,440	\$360	\$1,440	\$360	\$1,440	\$360	\$1,440	\$360	\$7,200
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$240	\$60	\$240	\$60	\$240	\$60	\$240	\$60	\$1,200
PL	\$80	\$20	\$80	\$20	\$80	\$20	\$80	\$20	\$400
ROW	\$80	\$20	\$80	\$20	\$80	\$20	\$80	\$20	\$400
Subtotal	\$1,840	\$460	\$1,840	\$460	\$1,840	\$460	\$1,840	\$460	\$9,200

National Highway Performance Program (National Highway System, Interstate Maintenance, Bridge (on-System))

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$800	\$200	\$800	\$200	\$800	\$200	\$800	\$200	\$4,000
OTH	\$1,600	\$400	\$1,600	\$400	\$1,600	\$400	\$1,600	\$400	\$8,000
ENG	\$80	\$20	\$80	\$20	\$80	\$20	\$80	\$20	\$400
PL	\$800	\$200	\$800	\$200	\$640	\$160	\$640	\$160	\$3,600
ROW	\$40	\$10	\$40	\$10	\$40	\$10	\$40	\$10	\$200
Subtotal	\$3,320	\$830	\$3,320	\$830	\$3,160	\$790	\$3,160	\$790	\$16,200



Areawide Congestion Management

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$2,400	\$600	\$2,400	\$600	\$2,400	\$600	\$2,400	\$600	\$12,000
OTH	\$8,000	\$2,000	\$8,000	\$2,000	\$8,000	\$2,000	\$8,000	\$2,000	\$40,000
ENG	\$2,400	\$600	\$2,400	\$600	\$2,400	\$600	\$2,400	\$600	\$12,000
PL	\$800	\$200	\$800	\$200	\$800	\$200	\$800	\$200	\$4,000
ROW	\$80	\$20	\$80	\$20	\$80	\$20	\$80	\$20	\$400
Subtotal	\$13,680	\$3,420	\$13,680	\$3,420	\$13,680	\$3,420	\$13,680	\$3,420	\$68,400
Total	\$18,840	\$4,710	\$18,840	\$4,710	\$18,680	\$4,670	\$18,680	\$4,670	\$93,800

Areawide Bridge Replacement And Rehabilitation

TIP ID	60-9310-13	Year of Operation	Ongoing
Agency	SHA - Regional	Project Type	Bridge repair/deck replacement
Project Category	Highway Preservation	Functional Class	NA
Conformity Status	Exempt	Physical Data	NA
CIP or CTP ID(s)	A-20	Est. Total Cost	\$148,400,000

Description:

This is an ongoing program to provide major upgrades and maintenance of structures on State highways. These are non-capacity improvements which may include but are not limited to structural replacements, deck rehabilitation, superstructure replacements, parapet reconstruction, cleaning and painting, and general maintenance on various state-owned bridges.

Justification:

Will preserve existing structures, increase safety, and improve highway beautification.

Connection to Long-Range Transportation Planning Goals:

2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).





2020 - 2023 Transportation Improvement Program

Areawide Bridge Replacement And Rehabilitation

(Funding in Thousands)

National Highway Performance Program (National Highway System, Interstate Maintenance, Bridge (on-System))

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$16,000	\$4,000	\$16,000	\$4,000	\$12,000	\$3,000	\$12,000	\$3,000	\$70,000
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$960	\$240	\$960	\$240	\$960	\$240	\$960	\$240	\$4,800
PL	\$320	\$80	\$320	\$80	\$320	\$80	\$320	\$80	\$1,600
ROW	\$320	\$80	\$320	\$80	\$320	\$80	\$320	\$80	\$1,600
Subtotal	\$17,600	\$4,400	\$17,600	\$4,400	\$13,600	\$3,400	\$13,600	\$3,400	\$78,000



2020 - 2023 Transportation Improvement Program

Areawide Bridge Replacement And Rehabilitation

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$6,400	\$1,600	\$6,400	\$1,600	\$6,400	\$1,600	\$6,400	\$1,600	\$32,000
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$6,400	\$1,600	\$6,400	\$1,600	\$6,400	\$1,600	\$6,400	\$1,600	\$32,000
PL	\$640	\$160	\$640	\$160	\$640	\$160	\$640	\$160	\$3,200
ROW	\$640	\$160	\$640	\$160	\$640	\$160	\$640	\$160	\$3,200
Subtotal	\$14,080	\$3,520	\$14,080	\$3,520	\$14,080	\$3,520	\$14,080	\$3,520	\$70,400
Total	\$31,680	\$7,920	\$31,680	\$7,920	\$27,680	\$6,920	\$27,680	\$6,920	\$148,400

Areawide Resurfacing And Rehabilitation

TIP ID	60-9501-11	Year of Operation	Ongoing
Agency	SHA - Regional	Project Type	Road resurfacing/rehabilitation
Project Category	Highway Preservation	Functional Class	Varies
Conformity Status	Exempt	Physical Data	NA
CIP or CTP ID(s)	A-20	Est. Total Cost	\$417,200,000

Description:

This is an ongoing program to provide periodic resurfacing and upgrading of auxiliary features on State highways. These are non-capacity improvements which may include but are not limited to milling, patching, sealing, and resurfacing of existing deteriorated state roadways. Other improvements such as ADA or guardrail may be included incidental to other resurfacing and rehabilitation improvements.

Justification:

Will improve safety and the flow of traffic. This project listing represents a large funding request for many small resurfacing projects throughout the Baltimore region. Project selection is based upon need and is subject to change.

Connection to Long-Range Transportation Planning Goals:

2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).





2020 - 2023 Transportation Improvement Program

Areawide Resurfacing And Rehabilitation

(Funding in Thousands)

Highway Safety Improvement Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$6,000	\$1,500	\$6,000	\$1,500	\$6,000	\$1,500	\$6,000	\$1,500	\$30,000
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$240	\$60	\$240	\$60	\$240	\$60	\$240	\$60	\$1,200
PL	\$80	\$20	\$80	\$20	\$80	\$20	\$80	\$20	\$400
ROW	\$80	\$20	\$80	\$20	\$80	\$20	\$80	\$20	\$400
Subtotal	\$6,400	\$1,600	\$6,400	\$1,600	\$6,400	\$1,600	\$6,400	\$1,600	\$32,000



2020 - 2023 Transportation Improvement Program

Areawide Resurfacing And Rehabilitation

(Funding in Thousands)

National Highway Performance Program (National Highway System, Interstate Maintenance, Bridge (on-System))

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$46,400	\$11,600	\$46,400	\$11,600	\$36,000	\$9,000	\$36,000	\$9,000	\$206,000
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$1,040	\$260	\$1,040	\$260	\$1,040	\$260	\$1,040	\$260	\$5,200
PL	\$400	\$100	\$400	\$100	\$400	\$100	\$400	\$100	\$2,000
ROW	\$400	\$100	\$400	\$100	\$400	\$100	\$400	\$100	\$2,000
Subtotal	\$48,240	\$12,060	\$48,240	\$12,060	\$37,840	\$9,460	\$37,840	\$9,460	\$215,200

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$36,000	\$9,000	\$36,000	\$9,000	\$28,000	\$7,000	\$28,000	\$7,000	\$160,000
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$1,200	\$300	\$1,200	\$300	\$1,200	\$300	\$1,200	\$300	\$6,000
PL	\$400	\$100	\$400	\$100	\$400	\$100	\$400	\$100	\$2,000
ROW	\$400	\$100	\$400	\$100	\$400	\$100	\$400	\$100	\$2,000
Subtotal	\$38,000	\$9,500	\$38,000	\$9,500	\$30,000	\$7,500	\$30,000	\$7,500	\$170,000
Total	\$92,640	\$23,160	\$92,640	\$23,160	\$74,240	\$18,560	\$74,240	\$18,560	\$417,200

Areawide Safety And Spot Improvements

TIP ID	60-9508-19	Year of Operation	Ongoing
Agency	SHA - Regional	Project Type	Other
Project Category	Highway Preservation	Functional Class	NA
Conformity Status	Exempt	Physical Data	NA
CIP or CTP ID(s)	A-20	Est. Total Cost	\$239,600,000

Description:

This is an ongoing program to provide localized improvements to address safety and/or operational issues on State highways. These are highway improvements which may include but are not limited to projects dealing with bypass lanes, acceleration and deceleration lanes, turn lanes, rail crossings, intersection realignment, geometric improvements, safety improvements including bridge, bicycle, and pedestrian safety improvements, pavement markers, ADA improvements, guardrails, and roundabouts. Other improvements such as slope repairs, drainage improvements, and joint sealing may be included incidental to other safety improvements.

Justification:

Will improve safety and the flow of traffic, thereby reducing fatalities, injuries, congestion, and queuing.

Connection to Long-Range Transportation Planning Goals:

- 1.B Improve System Safety -- Apply safety-related management and operations techniques.
- 2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).
- 3.B Improve Accessibility -- Improve ADA-related conditions for pedestrians / transit riders.





2020 - 2023 Transportation Improvement Program

Areawide Safety And Spot Improvements

(Funding in Thousands)

Congestion Mitigation and Air Quality

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$2,400	\$600	\$2,400	\$600	\$2,400	\$600	\$2,400	\$600	\$12,000
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$160	\$40	\$160	\$40	\$160	\$40	\$160	\$40	\$800
PL	\$80	\$20	\$80	\$20	\$80	\$20	\$80	\$20	\$400
ROW	\$80	\$20	\$80	\$20	\$80	\$20	\$80	\$20	\$400
Subtotal	\$2,720	\$680	\$2,720	\$680	\$2,720	\$680	\$2,720	\$680	\$13,600



2020 - 2023 Transportation Improvement Program

Areawide Safety And Spot Improvements

(Funding in Thousands)

Highway Safety Improvement Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$6,400	\$1,600	\$6,400	\$1,600	\$6,400	\$1,600	\$6,400	\$1,600	\$32,000
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$480	\$120	\$480	\$120	\$480	\$120	\$480	\$120	\$2,400
PL	\$400	\$100	\$400	\$100	\$400	\$100	\$400	\$100	\$2,000
ROW	\$240	\$60	\$240	\$60	\$240	\$60	\$240	\$60	\$1,200
Subtotal	\$7,520	\$1,880	\$7,520	\$1,880	\$7,520	\$1,880	\$7,520	\$1,880	\$37,600

National Highway Performance Program (National Highway System, Interstate Maintenance, Bridge (on-System))

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$16,000	\$4,000	\$16,000	\$4,000	\$16,000	\$4,000	\$16,000	\$4,000	\$80,000
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$480	\$120	\$480	\$120	\$480	\$120	\$480	\$120	\$2,400
PL	\$240	\$60	\$240	\$60	\$240	\$60	\$240	\$60	\$1,200
ROW	\$960	\$240	\$960	\$240	\$960	\$240	\$960	\$240	\$4,800
Subtotal	\$17,680	\$4,420	\$17,680	\$4,420	\$17,680	\$4,420	\$17,680	\$4,420	\$88,400



2020 - 2023 Transportation Improvement Program

Areawide Safety And Spot Improvements

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$17,600	\$4,400	\$16,000	\$4,000	\$16,000	\$4,000	\$16,000	\$4,000	\$82,000
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$1,600	\$400	\$1,600	\$400	\$1,600	\$400	\$1,600	\$400	\$8,000
PL	\$400	\$100	\$400	\$100	\$400	\$100	\$400	\$100	\$2,000
ROW	\$1,600	\$400	\$1,600	\$400	\$1,600	\$400	\$1,600	\$400	\$8,000
Subtotal	\$21,200	\$5,300	\$19,600	\$4,900	\$19,600	\$4,900	\$19,600	\$4,900	\$100,000
Total	\$49,120	\$12,280	\$47,520	\$11,880	\$47,520	\$11,880	\$47,520	\$11,880	\$239,600

Areawide Urban Reconstruction

TIP ID	60-9511-19	Year of Operation	Ongoing
Agency	SHA - Regional	Project Type	Other
Project Category	Highway Preservation	Functional Class	NA
Conformity Status	Exempt	Physical Data	NA
CIP or CTP ID(s)	A-20	Est. Total Cost	\$24,280,000

Description:

This is an ongoing program to provide roadway rehabilitation and streetscape improvements on State highways in towns and urban areas. These are non-capacity highway improvements which may include but are not limited to projects dealing with drainage, curb and gutter, pavement milling and resurfacing, sidewalks, streetscapes, signs, and markings and lighting improvements.

Justification:

Will improve safety and the flow of traffic, thereby reducing delay, queuing and congestion. This will also enhance the surrounding environment and community.

Connection to Long-Range Transportation Planning Goals:

- 1.C Improve System Safety -- Eliminate hazardous or substandard conditions.
- 2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).
- 2.F Improve and Maintain the Existing Infrastructure -- Improve the condition of pedestrian and bicycle facilities.





2020 - 2023 Transportation Improvement Program

Areawide Urban Reconstruction

(Funding in Thousands)

National Highway Performance Program (National Highway System, Interstate Maintenance, Bridge (on-System))

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$40	\$10	\$40	\$10	\$40	\$10	\$40	\$10	\$200
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$8	\$2	\$8	\$2	\$8	\$2	\$8	\$2	\$40
PL	\$4	\$1	\$4	\$1	\$4	\$1	\$4	\$1	\$20
ROW	\$4	\$1	\$4	\$1	\$4	\$1	\$4	\$1	\$20
Subtotal	\$56	\$14	\$56	\$14	\$56	\$14	\$56	\$14	\$280



2020 - 2023 Transportation Improvement Program

Areawide Urban Reconstruction

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$4,000	\$1,000	\$4,000	\$1,000	\$4,000	\$1,000	\$4,000	\$1,000	\$20,000
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$320	\$80	\$320	\$80	\$320	\$80	\$320	\$80	\$1,600
PL	\$160	\$40	\$160	\$40	\$160	\$40	\$160	\$40	\$800
ROW	\$320	\$80	\$320	\$80	\$320	\$80	\$320	\$80	\$1,600
Subtotal	\$4,800	\$1,200	\$4,800	\$1,200	\$4,800	\$1,200	\$4,800	\$1,200	\$24,000
Total	\$4,856	\$1,214	\$4,856	\$1,214	\$4,856	\$1,214	\$4,856	\$1,214	\$24,280

Morgan State University Transportation Research Program

TIP ID	60-0702-99	Year of Operation	Ongoing
Agency	SHA - Regional	Project Type	Miscellaneous
Project Category	Miscellaneous	Functional Class	NA
Conformity Status	Exempt	Physical Data	NA
CIP or CTP ID(s)		Est. Total Cost	\$90,000

Description:

Transportation research, education and technology transfer activities involving university faculty, staff and students.

Justification:

The project will support research and solutions to real world transportation issues and meet state and federal transportation objectives.

Connection to Long-Range Transportation Planning Goals:

9. Promote Informed Decision Making





Morgan State University Transportation Research Program

(Funding in Thousands)

Other

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$45	\$0	\$45	\$0	\$0	\$0	\$0	\$0	\$90
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$45	\$0	\$45	\$0	\$0	\$0	\$0	\$0	\$90
Total	\$45	\$0	\$45	\$0	\$0	\$0	\$0	\$0	\$90

MD 198: MD 295 to MD 32

TIP ID	61-1403-41	Year of Operation	2034
Agency	SHA - Anne Arundel County	Project Type	Roadway widening
Project Category	Highway Capacity	Functional Class	Other Principal Arterial
Conformity Status	Not Exempt	Physical Data	2 to 4 lanes, 2.7 Miles
CIP or CTP ID(s)	AA5101	Est. Total Cost	\$188,800,000

Description:

This project will address capacity needs on MD 198 from MD 295 to MD 32. The project will include a four-lane divided roadway with an off-road shared use path, sidewalks and a flyover ramp at the MD 198 interchange with MD 32.

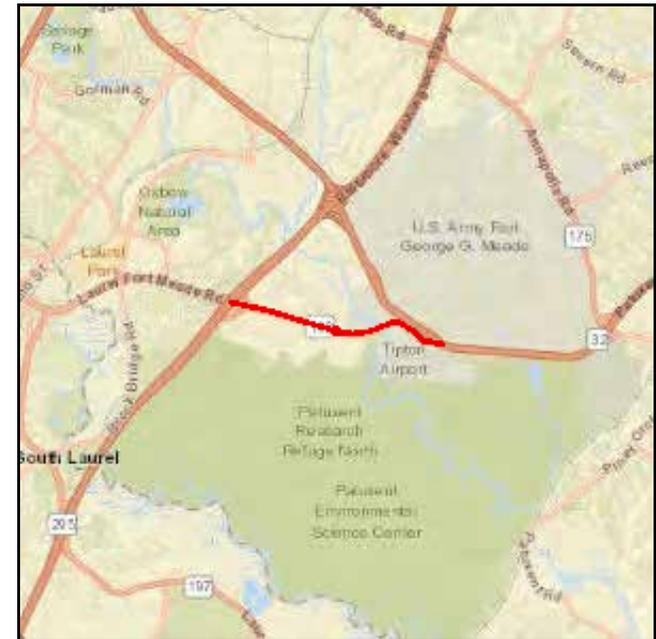
Phase I, the MD 198/MD 295 partial interchange project, is funded for preliminary engineering and is flowed under this TIP ID. The total cost includes projected funding that will be required to construct the remainder of the corridor improvements. No schedule or funding for the remaining segments has been identified.

Justification:

MD 198 is a key link to Fort Meade from points south and west. The area in and around Fort Meade has experienced substantial growth as a result of BRAC expansion.

Connection to Long-Range Transportation Planning Goals:

- 2.F Improve and Maintain the Existing Infrastructure -- Improve the condition of pedestrian and bicycle facilities.
- 4. Increase Mobility
- 7.E Promote Prosperity and Economic Opportunity -- Improve access to existing communities and regional generators of economic activity.





MD 198: MD 295 to MD 32

(Funding in Thousands)

Other

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$170	\$0	\$292	\$0	\$0	\$0	\$0	\$462
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$0	\$170	\$0	\$292	\$0	\$0	\$0	\$0	\$462
Total	\$0	\$170	\$0	\$292	\$0	\$0	\$0	\$0	\$462

US 50: MD 70 to MD 2

TIP ID	61-1404-41	Year of Operation	2018
Agency	SHA - Anne Arundel County	Project Type	Roadway widening
Project Category	Highway Capacity	Functional Class	Other Freeway & Expressways
Conformity Status	Not Exempt	Physical Data	6 to 7 lanes, 1.66 miles
CIP or CTP ID(s)	AA2211	Est. Total Cost	\$26,094,000

Description:

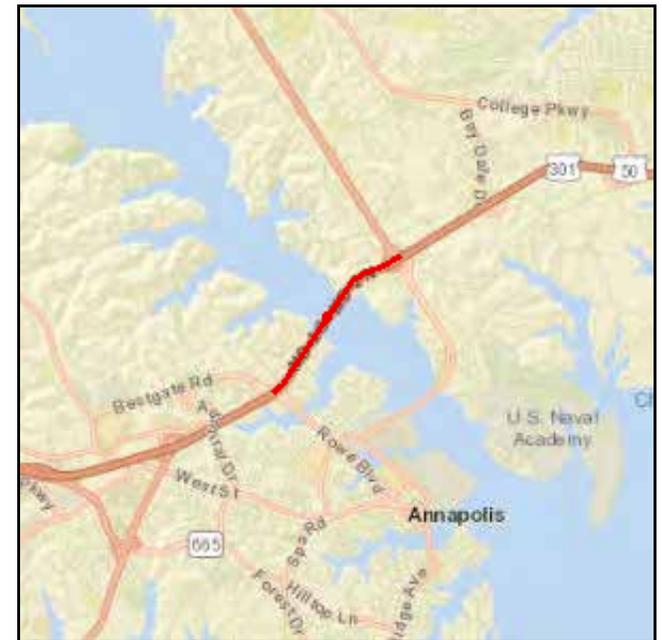
Project to ease congestion on US 50 from MD 70 to MD 2 (northbound), by restriping lanes on the Severn River/Pearl Harbor Memorial Bridge to accommodate one additional eastbound travel lane for the length of the project. The remainder of the funding for this project will complete right-of-way acquisition. The improvements opened to traffic in May of 2018.

Justification:

The approaches to the Severn River/Pearl Harbor Memorial Bridge experience severe congestion, particularly the eastbound direction during the evening peak period.

Connection to Long-Range Transportation Planning Goals:

- 4. Increase Mobility





2020 - 2023 Transportation Improvement Program

US 50: MD 70 to MD 2

(Funding in Thousands)

Other

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$39	\$0	\$0	\$0	\$0	\$0	\$0	\$39
Subtotal	\$0	\$39	\$0	\$0	\$0	\$0	\$0	\$0	\$39
Total	\$0	\$39	\$0	\$0	\$0	\$0	\$0	\$0	\$39

MD 175: Disney Road to Reece Road

TIP ID	61-1601-41	Year of Operation	2020
Agency	SHA - Anne Arundel County	Project Type	Roadway widening
Project Category	Highway Capacity	Functional Class	Minor Arterial
Conformity Status	Not Exempt	Physical Data	2 to 6 lanes, 1.13 miles
CIP or CTP ID(s)	AA4364	Est. Total Cost	\$28,486,000

Description:

This project is Phase 2 of the MD 175: MD 295 to MD 170 corridor project, which had TIP ID #61-0605-41 in previous TIPs. It will widen MD 175 from Disney Road to Reece Road, from the existing two lane roadway to a six lane roadway. Bicycle and pedestrian facilities will be provided.

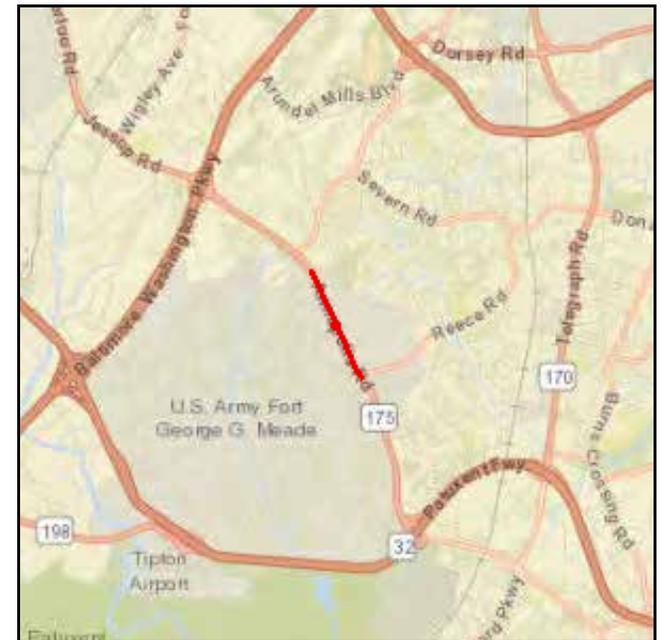
Phase 1, widening MD 175 through the MD 295 interchange from National Business Parkway to McCarron Court, has TIP ID #61-1701-41.

Justification:

This project will improve safety and operations along MD 175 and ease growing congestion related to BRAC expansion at Fort Meade.

Connection to Long-Range Transportation Planning Goals:

- 2.F Improve and Maintain the Existing Infrastructure -- Improve the condition of pedestrian and bicycle facilities.
- 4. Increase Mobility
- 7.E Promote Prosperity and Economic Opportunity -- Improve access to existing communities and regional generators of economic activity.





2020 - 2023 Transportation Improvement Program

MD 175: Disney Road to Reece Road

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$4,083	\$3,530	\$0	\$0	\$0	\$0	\$0	\$0	\$7,613
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$4,083	\$3,530	\$0	\$0	\$0	\$0	\$0	\$0	\$7,613
Total	\$4,083	\$3,530	\$0	\$0	\$0	\$0	\$0	\$0	\$7,613

MD 175: National Business Parkway to McCarron Court

TIP ID	61-1701-41	Year of Operation	2021
Agency	SHA - Anne Arundel County	Project Type	Roadway widening
Project Category	Highway Capacity	Functional Class	Minor Arterial
Conformity Status	Not Exempt	Physical Data	2 to 6 lanes, 1.1 miles
CIP or CTP ID(s)	AA4363	Est. Total Cost	\$72,361,000

Description:

This project will widen MD 175 from National Business Parkway to McCarron Court from two lanes to six lanes, including through the MD 295 interchange. It also reconfigures ramps in the northeast and southwest quadrants of the MD 295 interchange to create signalized left turns at MD 175. Bicycle and pedestrian facilities will be provided.

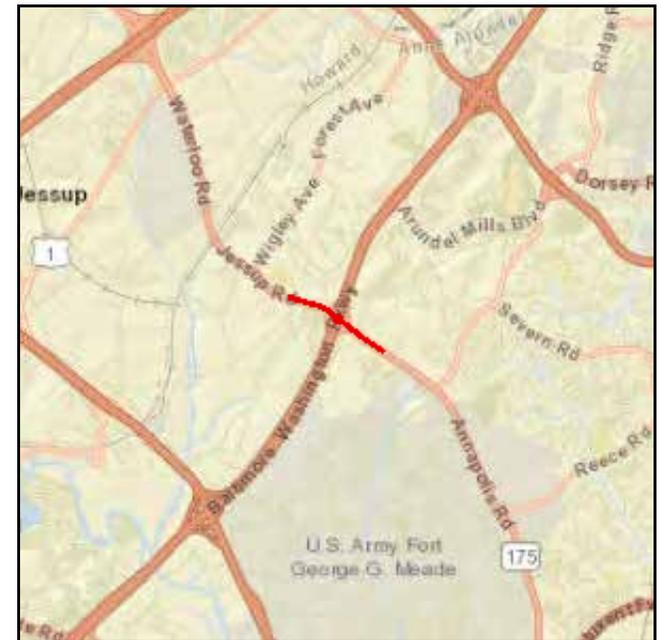
This project is Phase 1 of the improvements identified in the MD 175: MD 295 to MD 170 corridor project, which has TIP ID # 61-0605-41. Phase 2, widening MD 175 from Disney Road to Reece Road, has TIP ID# 61-1601-41.

Justification:

This project will improve safety and operation along MD 175 and ease growing congestion related to the BRAC expansion at Fort Meade.

Connection to Long-Range Transportation Planning Goals:

- 2.F Improve and Maintain the Existing Infrastructure -- Improve the condition of pedestrian and bicycle facilities.
- 4. Increase Mobility
- 7.E Promote Prosperity and Economic Opportunity -- Improve access to existing communities and regional generators of economic activity.





2020 - 2023 Transportation Improvement Program

MD 175: National Business Parkway to McCarron Court

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$7,815	\$2,181	\$9,441	\$2,634	\$9,479	\$2,645	\$7,707	\$2,151	\$44,053
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$7,815	\$2,181	\$9,441	\$2,634	\$9,479	\$2,645	\$7,707	\$2,151	\$44,053



MD 175: National Business Parkway to McCarron Court

(Funding in Thousands)

Other

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$1,493	\$0	\$1,072	\$0	\$583	\$0	\$0	\$3,148
Subtotal	\$0	\$1,493	\$0	\$1,072	\$0	\$583	\$0	\$0	\$3,148
Total	\$7,815	\$3,674	\$9,441	\$3,706	\$9,479	\$3,228	\$7,707	\$2,151	\$47,201

I-695 at Cromwell Bridge Road - Drainage Improvement

TIP ID	63-1801-38	Year of Operation	2020
Agency	SHA - Baltimore County	Project Type	Environmental other
Project Category	Environmental/Safety	Functional Class	Interstate
Conformity Status	Exempt	Physical Data	NA
CIP or CTP ID(s)	BA7121	Est. Total Cost	\$11,809,000

Description:

This project includes: restoration of the stream channel and repair of SHA drainage outfalls and outfall channels, construction of stormwater management facilities to provide water quality treatment, and relocation of the Baltimore County sewer line.

Justification:

The stream channel is degraded, is causing erosion, and needs repair. Water from SHA impervious surfaces is currently untreated. These improvements provide mitigation for I-695 from US 40 to MD 144 (SWOL II - BA7275172) and for future MDOT SHA projects.

Connection to Long-Range Transportation Planning Goals:

- 5.B Conserve and Enhance the Environment -- Reduce surface runoff.
- 5.E Conserve and Enhance the Environment -- Preserve and protect natural and cultural resources.





2020 - 2023 Transportation Improvement Program

I-695 at Cromwell Bridge Road - Drainage Improvement

(Funding in Thousands)

National Highway Performance Program (National Highway System, Interstate Maintenance, Bridge (on-System))

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$2,846	\$920	\$1,093	\$354	\$0	\$0	\$0	\$0	\$5,213
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$2,846	\$920	\$1,093	\$354	\$0	\$0	\$0	\$0	\$5,213

Other

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$85	\$0	\$85	\$0	\$43	\$0	\$0	\$213
Subtotal	\$0	\$85	\$0	\$85	\$0	\$43	\$0	\$0	\$213

Total	\$2,846	\$1,005	\$1,093	\$439	\$0	\$43	\$0	\$0	\$5,426
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MD 140: Painters Mill Road to Owings Mills Boulevard - Phase 2

TIP ID	63-0802-41	Year of Operation	2025
Agency	SHA - Baltimore County	Project Type	Roadway widening
Project Category	Highway Capacity	Functional Class	Other Principal Arterial
Conformity Status	Not Exempt	Physical Data	0.4 miles, 4 to 6 lanes
CIP or CTP ID(s)	BA7291	Est. Total Cost	\$18,500,000

Description:

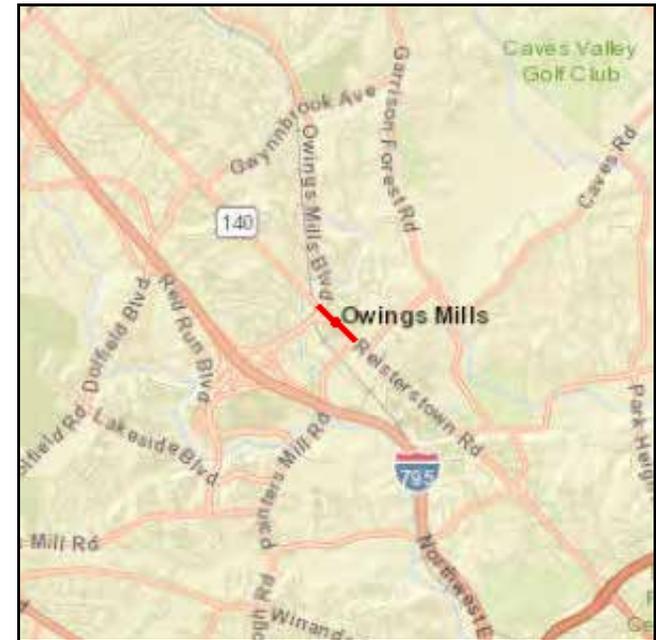
Capacity and safety improvements to MD 140 from north of Painters Mill Road to Owings Mills Boulevard including; an additional through lane on northbound and southbound MD 140, addition of left and right turn lanes, and added width for bicycle compatibility. This results in three through lanes on northbound MD 140 and three through lanes on southbound MD 140. The Estimated Total Cost includes projected funding that will be required to construct this project. No schedule or funding for construction have been identified. This is phase 2 of the MD 140 corridor improvements. Phase I - MD 140: Garrison View Road to Painters Mill Road, including the intersection, has TIP ID #63-1203-41.

Justification:

This project will provide additional capacity and access for the planned development in Owings Mills, including the Owings Mills Town Center, the Owings Mills Metro Station and the MD 140 business corridor.

Connection to Long-Range Transportation Planning Goals:

- 3.E Improve Accessibility -- Provide or improve pedestrian and bicycle facilities that link to activity centers and public transit.
- 4. Increase Mobility





MD 140: Painters Mill Road to Owings Mills Boulevard - Phase 2

(Funding in Thousands)

Other

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$530	\$0	\$0	\$0	\$0	\$0	\$0	\$530
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$0	\$530	\$0	\$0	\$0	\$0	\$0	\$0	\$530
Total	\$0	\$530	\$0	\$0	\$0	\$0	\$0	\$0	\$530

I-795: Dolfield Boulevard Interchange

TIP ID	63-0803-46	Year of Operation	2040
Agency	SHA - Baltimore County	Project Type	New interchange
Project Category	Highway Capacity	Functional Class	Interstate
Conformity Status	Not Exempt	Physical Data	Full Interchange, 4 to 6 lanes
CIP or CTP ID(s)	BA4511	Est. Total Cost	\$115,500,000

Description:

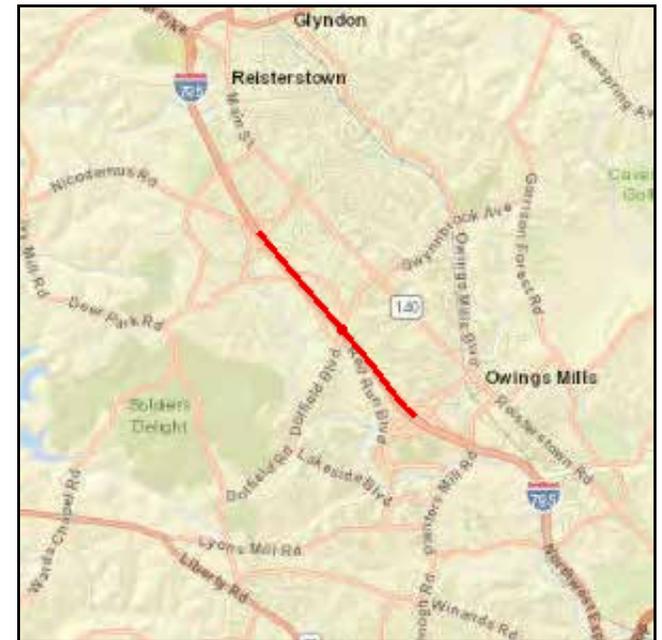
This study has identified a preferred alternative that constructs a new interchange at the existing Pleasant Hill Road overpass. The project also includes widening I-795 from 4 to 6 lanes between Owings Mills and Franklin Boulevards. Current funding will take engineering to the 30% stage, when phasing options will be evaluated. The Estimated Total Cost includes projected funding that will be required to construct this project. No schedule or funding for construction have been determined. Baltimore County contributed \$0.625 million towards planning.

Justification:

This project will provide improved access to the planned growth corridor along Red Run Boulevard in Owings Mills.

Connection to Long-Range Transportation Planning Goals:

- 4. Increase Mobility





2020 - 2023 Transportation Improvement Program

I-795: Dolfield Boulevard Interchange

(Funding in Thousands)

National Highway Performance Program (National Highway System, Interstate Maintenance, Bridge (on-System))

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$990	\$110	\$1,391	\$154	\$191	\$22	\$0	\$0	\$2,858
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$990	\$110	\$1,391	\$154	\$191	\$22	\$0	\$0	\$2,858
Total	\$990	\$110	\$1,391	\$154	\$191	\$22	\$0	\$0	\$2,858

MD 140: Garrison View Road to Painters Mill Road - Phase 1

TIP ID	63-1203-41	Year of Operation	2019
Agency	SHA - Baltimore County	Project Type	Roadway widening
Project Category	Highway Capacity	Functional Class	Other Principal Arterial
Conformity Status	Not Exempt	Physical Data	0.2 Miles, 2 to 3 lanes
CIP or CTP ID(s)	BA7292	Est. Total Cost	\$18,272,000

Description:

Improvements include widening northbound MD 140 to provide a third through lane (lane is 16'-wide bicycle-compatible) and 5' raised median, constructing 5' ADA-compliant sidewalks, resurfacing the roadway, landscaping, and utility relocations. Southbound improvements are to be provided by a developer. The remaining funding for this project will complete right-of-way acquisition.

This is phase 1 of MD 140 construction. Phase 2 is the MD 140: North of Painters Mill Road to Owings Mills Boulevard project (TIP ID #63-0802-41).

Justification:

This project will enhance motorist, bicycle and pedestrian safety, and reduce congestion along the corridor. Traffic is expected to increase as a result of the proposed development in the area, including the transit-oriented development at the Owings Mills Metro Station and Foundry Row.

Connection to Long-Range Transportation Planning Goals:

- 3.E Improve Accessibility -- Provide or improve pedestrian and bicycle facilities that link to activity centers and public transit.
- 4. Increase Mobility





MD 140: Garrison View Road to Painters Mill Road - Phase 1

(Funding in Thousands)

Other

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$74	\$0	\$16	\$0	\$0	\$0	\$0	\$90
Subtotal	\$0	\$74	\$0	\$16	\$0	\$0	\$0	\$0	\$90
Total	\$0	\$74	\$0	\$16	\$0	\$0	\$0	\$0	\$90

I-695: US 40 to MD 144

TIP ID	63-1601-41	Year of Operation	2021
Agency	SHA - Baltimore County	Project Type	Roadway widening
Project Category	Highway Capacity	Functional Class	Interstate
Conformity Status	Not Exempt	Physical Data	3 to 4 lanes, 1.2 miles
CIP or CTP ID(s)	BA7271	Est. Total Cost	\$105,496,000

Description:

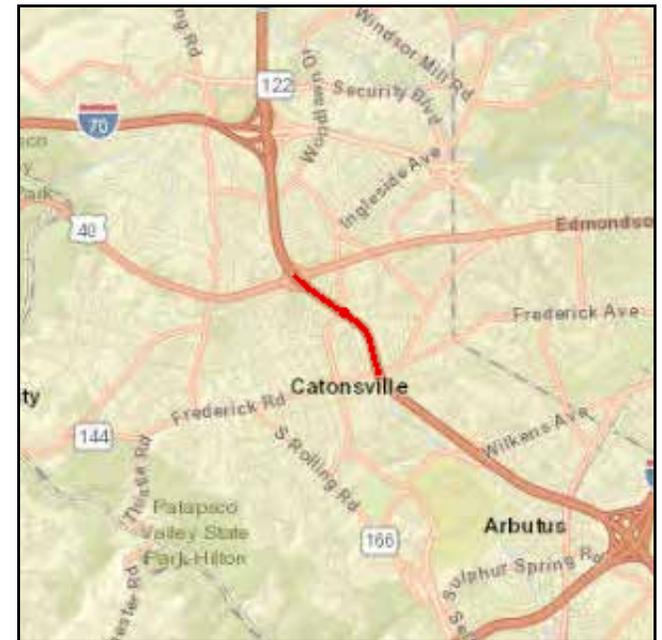
This project will widen the I-695 outer loop from US 40 to MD 144 from three to four through lanes. This project will also accommodate the final configuration of this section of the beltway. The noise barrier on the inner loop will be replaced and extended from Shady Nook to US 40 as part of this project.

Justification:

This project will provide additional capacity and improve safety and operations on this segment of I-695.

Connection to Long-Range Transportation Planning Goals:

- 1.B Improve System Safety -- Apply safety-related management and operations techniques.
- 4. Increase Mobility





2020 - 2023 Transportation Improvement Program

I-695: US 40 to MD 144

(Funding in Thousands)

National Highway Performance Program (National Highway System, Interstate Maintenance, Bridge (on-System))

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$12,124	\$260	\$0	\$2,124	\$0	\$9,657	\$0	\$5,219	\$29,384
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$12,124	\$260	\$0	\$2,124	\$0	\$9,657	\$0	\$5,219	\$29,384

Other

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$348	\$0	\$0	\$0	\$0	\$0	\$0	\$348
Subtotal	\$0	\$348	\$0	\$0	\$0	\$0	\$0	\$0	\$348

Total	\$12,124	\$608	\$0	\$2,124	\$0	\$9,657	\$0	\$5,219	\$29,732
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I-695: Bridge Replacements at Benson Ave and US 1

TIP ID	63-1602-43	Year of Operation	2018
Agency	SHA - Baltimore County	Project Type	Bridge widening
Project Category	Highway Capacity	Functional Class	Interstate
Conformity Status	Not Exempt	Physical Data	NA
CIP or CTP ID(s)	BA3661	Est. Total Cost	\$48,860,000

Description:

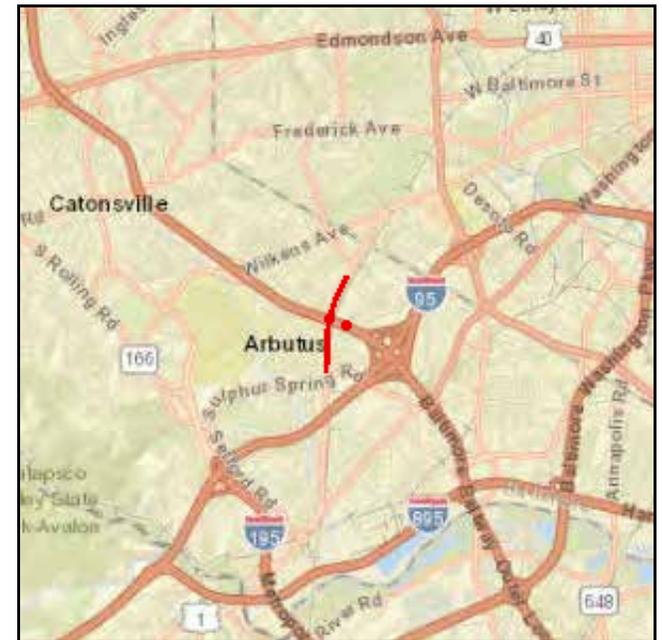
Replacement of Bridge 0311305 on the I-695 Inner Loop over Benson Ave and Bridge 0311405 on the I-695 Inner Loop over Leeds Avenue, US 1, AMTRAK and Herbert Run. The project also includes the realignment of the I-695 northbound on-ramp from Leeds Avenue to US 1. Both bridges will be widened to accommodate the future widening of I-695. US 1 will be narrowed to one lane in each direction extending approximately 2,400 feet north and south of I-695. The project is open to service, with the remaining funding for this project completing right-of-way acquisition.

Justification:

The bridges on the I-695 Inner Loop over Benson and Leeds/US 1/ AMTRAK/ Herbert Run are nearing the end of their useful life and were rated in poor condition. An existing ramp will be realigned as part of this project to provide a more direct connection from US 1 to the Inner Loop of I-695 and to remove interstate traffic from residential areas.

Connection to Long-Range Transportation Planning Goals:

- 2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).
- 3.E Improve Accessibility -- Provide or improve pedestrian and bicycle facilities that link to activity centers and public transit.
- 4. Increase Mobility





2020 - 2023 Transportation Improvement Program

I-695: Bridge Replacements at Benson Ave and US 1

(Funding in Thousands)

Other

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$50	\$0	\$34	\$0	\$0	\$0	\$0	\$84
Subtotal	\$0	\$50	\$0	\$34	\$0	\$0	\$0	\$0	\$84
Total	\$0	\$50	\$0	\$34	\$0	\$0	\$0	\$0	\$84

I-695: I-70 to MD 43

TIP ID	63-1802-41	Year of Operation	2024
Agency	SHA - Baltimore County	Project Type	Roadway widening
Project Category	Highway Capacity	Functional Class	Interstate
Conformity Status	Not Exempt	Physical Data	6 to 8 lanes, 19 miles
CIP or CTP ID(s)	BANEW2	Est. Total Cost	\$281,101,000

Description:

The purpose of this project is to utilize the inside shoulder to create a new travel lane on the inner and outer loops of I-695 during daily peak travel periods from I-70 to MD 43. This project includes reconfiguration of the I-695 and I-70 interchange and potential future adaptive ramp metering. The estimated total cost has increased from \$251 million to \$281.1 million due to the addition of dynamic lane controls to the project.

Justification:

This project will address capacity, safety, and operations concerns along I-695.



Connection to Long-Range Transportation Planning Goals:

- 1.B Improve System Safety -- Apply safety-related management and operations techniques.
- 4.D Increase Mobility -- Apply mobility-related management and operations techniques.



2020 - 2023 Transportation Improvement Program

I-695: I-70 to MD 43

(Funding in Thousands)

National Highway Performance Program (National Highway System, Interstate Maintenance, Bridge (on-System))

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$14,859	\$10,192	\$37,597	\$28,103	\$50,856	\$19,343	\$56,314	\$17,983	\$235,247
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$2,340	\$4,159	\$1,949	\$550	\$0	\$0	\$0	\$0	\$8,998
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$17,199	\$14,351	\$39,546	\$28,653	\$50,856	\$19,343	\$56,314	\$17,983	\$244,245
Total	\$17,199	\$14,351	\$39,546	\$28,653	\$50,856	\$19,343	\$56,314	\$17,983	\$244,245

I-83: Bridge Replacement over Padonia Road

TIP ID	63-1701-13	Year of Operation	2021
Agency	SHA - Baltimore County	Project Type	Bridge repair/deck replacement
Project Category	Highway Preservation	Functional Class	Other Principal Arterial
Conformity Status	Exempt	Physical Data	3 to 3 Lanes
CIP or CTP ID(s)	BA0381	Est. Total Cost	\$25,755,000

Description:

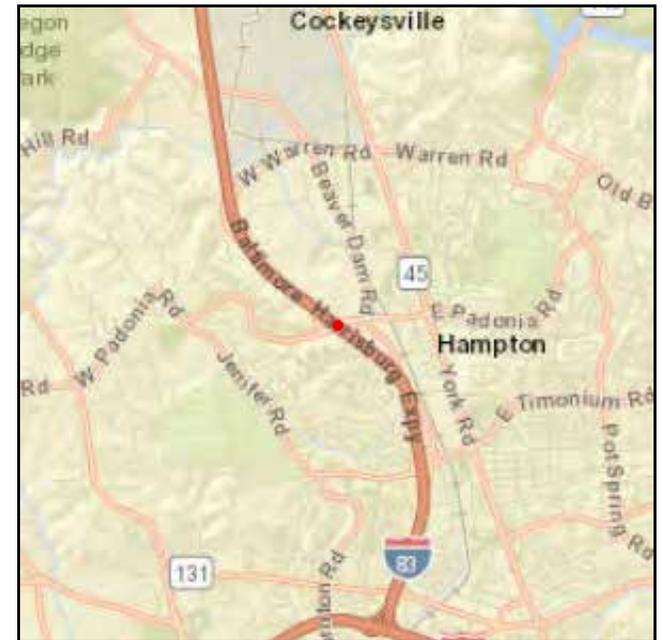
Replace bridge no. 03062 along I-83 over Padonia Road, which carries both northbound and southbound traffic.

Justification:

The existing bridge, constructed in 1950, is rated in poor condition. The bridge serves as a major link along the I-83 commuter and freight route from southern Pennsylvania to Baltimore County and City.

Connection to Long-Range Transportation Planning Goals:

2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).





2020 - 2023 Transportation Improvement Program

I-83: Bridge Replacement over Padonia Road

(Funding in Thousands)

National Highway Performance Program (National Highway System, Interstate Maintenance, Bridge (on-System))

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$6,564	\$278	\$4,894	\$640	\$2,191	\$287	\$0	\$0	\$14,854
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$6,564	\$278	\$4,894	\$640	\$2,191	\$287	\$0	\$0	\$14,854



2020 - 2023 Transportation Improvement Program

I-83: Bridge Replacement over Padonia Road

(Funding in Thousands)

Other

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$611	\$0	\$0	\$0	\$0	\$0	\$0	\$611
Subtotal	\$0	\$611	\$0	\$0	\$0	\$0	\$0	\$0	\$611
Total	\$6,564	\$889	\$4,894	\$640	\$2,191	\$287	\$0	\$0	\$15,465

MD 137: Bridge Replacement over I-83

TIP ID	63-1703-13	Year of Operation	2018
Agency	SHA - Baltimore County	Project Type	Bridge repair/deck replacement
Project Category	Highway Preservation	Functional Class	Minor Arterial
Conformity Status	Exempt	Physical Data	2 to 2 Lanes
CIP or CTP ID(s)	BA0801	Est. Total Cost	\$8,923,000

Description:

The project replaces bridge no. 03050 along MD 137 (Mount Carmel Road) over I-83. A 5 foot shoulder is included on both sides of the roadway. Construction and right-of-way acquisition are State funded. Construction is complete, with the remaining funding for this project completing right-of-way acquisition.

Justification:

The existing bridge was built in 1955 and is rated in poor condition. The bridge links communities on either side of I-83.

Connection to Long-Range Transportation Planning Goals:

2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).





MD 137: Bridge Replacement over I-83

(Funding in Thousands)

Other

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$56	\$0	\$23	\$0	\$0	\$0	\$0	\$79
Subtotal	\$0	\$56	\$0	\$23	\$0	\$0	\$0	\$0	\$79
Total	\$0	\$56	\$0	\$23	\$0	\$0	\$0	\$0	\$79

US 1: Bridge Replacement over CSX

TIP ID	63-1704-13	Year of Operation	2021
Agency	SHA - Baltimore County	Project Type	Bridge repair/deck replacement
Project Category	Highway Preservation	Functional Class	Minor Arterial
Conformity Status	Exempt	Physical Data	4 to 4 Lanes
CIP or CTP ID(s)	BA5341	Est. Total Cost	\$34,004,000

Description:

The project will replace bridge no. 03008 along US 1 (Washington Boulevard) over CSX railroad track and property. An 8 foot shoulder is planned on both sides of the roadway. The estimated total cost has increased from \$29.78 million to \$34.004 million due to an unfavorable bid and additional right-of-way needs.

Justification:

The existing bridge, built in 1930, is rated in poor condition.

Connection to Long-Range Transportation Planning Goals:

2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).





US 1: Bridge Replacement over CSX

(Funding in Thousands)

National Highway Performance Program (National Highway System, Interstate Maintenance, Bridge (on-System))

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$7,495	\$2,084	\$6,420	\$1,790	\$3,362	\$939	\$0	\$0	\$22,090
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$7,495	\$2,084	\$6,420	\$1,790	\$3,362	\$939	\$0	\$0	\$22,090

Other

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$42	\$0	\$42	\$0	\$31	\$0	\$0	\$115
Subtotal	\$0	\$42	\$0	\$42	\$0	\$31	\$0	\$0	\$115

Total	\$7,495	\$2,126	\$6,420	\$1,832	\$3,362	\$970	\$0	\$0	\$22,205
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US 40: Bridge Replacements over Little & Big Gunpowder Falls

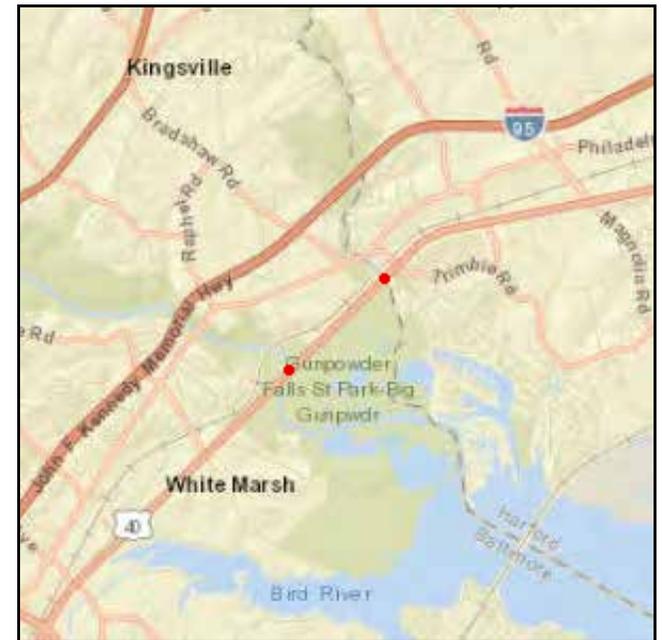
TIP ID	63-1706-13	Year of Operation	2021
Agency	SHA - Baltimore County	Project Type	Bridge repair/deck replacement
Project Category	Highway Preservation	Functional Class	Other Principal Arterial
Conformity Status	Exempt	Physical Data	4 to 4 lanes
CIP or CTP ID(s)	BA6091	Est. Total Cost	\$30,414,000

Description:

This project will replace and widen the superstructure on bridges #0303403 and #0303404 along eastbound and westbound US 40 over Little Gunpowder Falls and bridges #0303503 and #0303504 along eastbound and westbound US 40 over Big Gunpowder Falls. The new bridge superstructures will maintain two 12 foot lanes on each bridge, as well as 4 foot inside shoulders and 10 foot outside shoulders to match the approach roadways. This project was delayed one year due to an environmental permitting issue. The estimated total cost has increased from \$25.79 million to \$30.41 million due to an unfavorable bid.

Justification:

The existing bridges, built in 1935, are rated in poor condition.



Connection to Long-Range Transportation Planning Goals:

- 1.C Improve System Safety -- Eliminate hazardous or substandard conditions.
- 2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).



2020 - 2023 Transportation Improvement Program

US 40: Bridge Replacements over Little & Big Gunpowder Falls

(Funding in Thousands)

National Highway Performance Program (National Highway System, Interstate Maintenance, Bridge (on-System))

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$5,653	\$1,786	\$5,975	\$1,886	\$4,471	\$1,407	\$104	\$26	\$21,308
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$5,653	\$1,786	\$5,975	\$1,886	\$4,471	\$1,407	\$104	\$26	\$21,308
Other									
Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$3	\$0	\$3	\$0	\$2	\$0	\$0	\$8
Subtotal	\$0	\$3	\$0	\$3	\$0	\$2	\$0	\$0	\$8
Total	\$5,653	\$1,789	\$5,975	\$1,889	\$4,471	\$1,409	\$104	\$26	\$21,316

MD 45: Padonia Rd to Wight Ave

TIP ID	63-1707-11	Year of Operation	2021
Agency	SHA - Baltimore County	Project Type	Road resurfacing/rehabilitation
Project Category	Highway Preservation	Functional Class	Other Principal Arterial
Conformity Status	Exempt	Physical Data	2.55 miles
CIP or CTP ID(s)	BA5381	Est. Total Cost	\$16,396,000

Description:

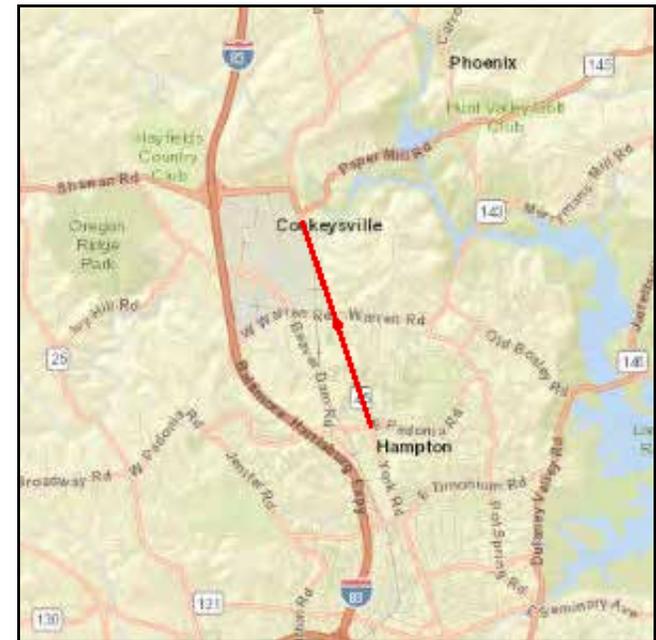
This project will replace a 24-inch water main and resurface the roadway within the project limits. The project also includes: reconstructing sidewalks, ramps, curbs and driveways; constructing drainage improvements, replacing damaged inlets and cleaning existing storm drains; installing new signage; and, upgrading intersection signal systems. Baltimore County is contributing \$12.3 million for water utility replacement. This project was delayed due to a minor environmental permitting issue.

Justification:

This project will provide significant improvements to the roadway and will render aging drainage, sidewalk, and utility infrastructure in good repair. The intersection signal upgrades will improve safety, capacity and operations.

Connection to Long-Range Transportation Planning Goals:

- 1.B Improve System Safety -- Apply safety-related management and operations techniques.
- 2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).
- 2.F Improve and Maintain the Existing Infrastructure -- Improve the condition of pedestrian and bicycle facilities.





MD 45: Padonia Rd to Wight Ave

(Funding in Thousands)

National Highway Performance Program (National Highway System, Interstate Maintenance, Bridge (on-System))

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$900	\$4,879	\$900	\$4,881	\$60	\$332	\$0	\$0	\$11,952
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$900	\$4,879	\$900	\$4,881	\$60	\$332	\$0	\$0	\$11,952
Total	\$900	\$4,879	\$900	\$4,881	\$60	\$332	\$0	\$0	\$11,952

MD 151/MD 151B: Bridge Replacements

TIP ID	63-2001-13	Year of Operation	2023
Agency	SHA - Baltimore County	Project Type	Bridge repair/deck replacement
Project Category	Highway Preservation	Functional Class	Minor Arterial
Conformity Status	Exempt	Physical Data	Bridge 0335100: 2 to 2, Bridge 0309900: 4 to 4
CIP or CTP ID(s)	BA8602	Est. Total Cost	\$21,000,000

Description:

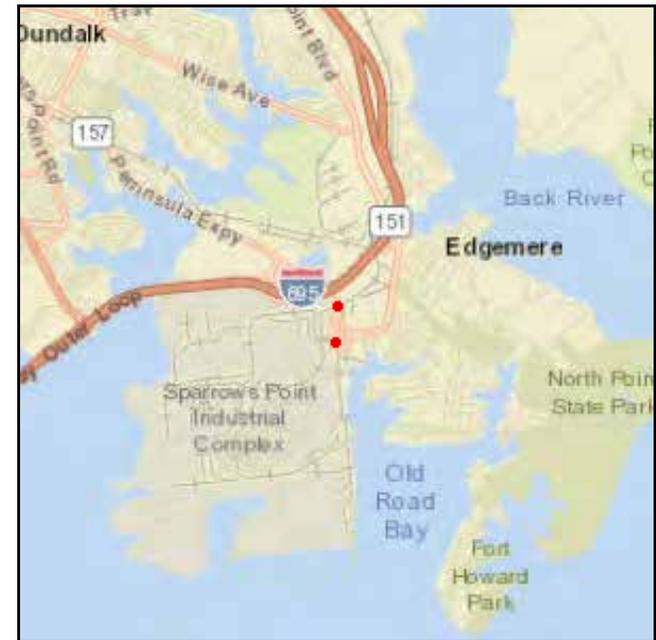
This project will replace bridge 0309900 on MD 151 and bridge 0335000 on MD 151B. The replacement of the deck on bridge 0335100 on MD 151B is also included in this project.

Justification:

The existing bridges built in 1954, 1955 and 1957 are rated in poor condition. Baltimore County has identified the replacement of these bridges as important for the redevelopment of this area.

Connection to Long-Range Transportation Planning Goals:

- 2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).
- 7.D Promote Prosperity and Economic Opportunity -- Invest within local- and state-designated growth areas.





MD 151/MD 151B: Bridge Replacements

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$1,067	\$301	\$5,341	\$1,507	\$5,547	\$1,565	\$3,644	\$1,028	\$20,000
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$1,067	\$301	\$5,341	\$1,507	\$5,547	\$1,565	\$3,644	\$1,028	\$20,000

Other

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$322	\$0	\$0	\$0	\$0	\$0	\$0	\$322
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$0	\$322	\$0	\$0	\$0	\$0	\$0	\$0	\$322

Total	\$1,067	\$623	\$5,341	\$1,507	\$5,547	\$1,565	\$3,644	\$1,028	\$20,322
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MD 30 Business: North Woods Trail to CSX Railroad (Hampstead Community Safety & Enhancement)

TIP ID	64-1401-19	Year of Operation	2020
Agency	SHA - Carroll County	Project Type	Other
Project Category	Highway Preservation	Functional Class	Other Principal Arterial
Conformity Status	Exempt	Physical Data	1.58 miles, 2 to 2 lanes
CIP or CTP ID(s)	CL3411	Est. Total Cost	\$31,230,000

Description:

The purpose of this project is to provide improvements on MD 30 Business (Main Street in Hampstead) from North Woods Trail to CSX Railroad including reconstruction of the existing roadway with ADA compliant sidewalks on both sides of the street; curb and gutter; crosswalks; and driveway entrances. The project will also upgrade the drainage system, stormwater management facilities, landscaping, traffic signals, and relocate utilities. Because of the low speeds and constrained urban environment, bicycles will be accommodated in the travel lanes.

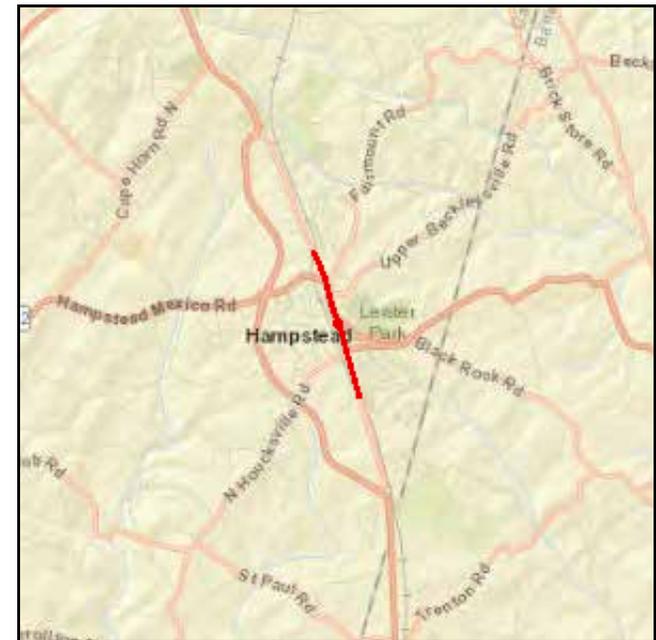
Engineering and right-of-way phases were funded under the Areawide Urban Reconstruction Program.

Justification:

This project will provide significant improvements to the roadway, sidewalk and drainage infrastructure in the town of Hampstead. It will also address operational issues at intersections.

Connection to Long-Range Transportation Planning Goals:

- 2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).
- 2.F Improve and Maintain the Existing Infrastructure -- Improve the condition of pedestrian and bicycle facilities.
- 3.B Improve Accessibility -- Improve ADA-related conditions for pedestrians / transit riders.





MD 30 Business: North Woods Trail to CSX Railroad (Hampstead Community Safety & Enhancement)

(Funding in Thousands)

Other

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$8,466	\$0	\$33	\$0	\$0	\$0	\$0	\$8,499
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$0	\$8,466	\$0	\$33	\$0	\$0	\$0	\$0	\$8,499



MD 30 Business: North Woods Trail to CSX Railroad (Hampstead Community Safety & Enhancement)

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$9	\$2	\$7	\$1	\$0	\$0	\$0	\$0	\$19
Subtotal	\$9	\$2	\$7	\$1	\$0	\$0	\$0	\$0	\$19
Total	\$9	\$8,468	\$7	\$34	\$0	\$0	\$0	\$0	\$8,518

MD 86: Bridge Replacement over Gunpowder Falls

TIP ID	64-1701-13	Year of Operation	2021
Agency	SHA - Carroll County	Project Type	Bridge repair/deck replacement
Project Category	Highway Preservation	Functional Class	Major Collector
Conformity Status	Exempt	Physical Data	2 to 2 Lanes
CIP or CTP ID(s)	CL2391	Est. Total Cost	\$7,540,000

Description:

The project will replace bridge no. 06019 along MD 86 (Lineboro Road) over the South Branch of Gunpowder Falls. A 5 foot minimum shoulder is planned on both sides of the road. Construction was delayed to accommodate the relocation of utilities.

Justification:

The existing bridge, built in 1929, is rated in poor condition.

Connection to Long-Range Transportation Planning Goals:

2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).





MD 86: Bridge Replacement over Gunpowder Falls

(Funding in Thousands)

Other

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$1,918	\$0	\$30	\$0	\$28	\$0	\$26	\$2,002
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$55	\$0	\$55	\$0	\$5	\$0	\$0	\$115
Subtotal	\$0	\$1,973	\$0	\$85	\$0	\$33	\$0	\$26	\$2,117
Total	\$0	\$1,973	\$0	\$85	\$0	\$33	\$0	\$26	\$2,117

MD 496: Bridge Replacement over Big Pipe Creek

TIP ID	64-1702-13	Year of Operation	2018
Agency	SHA - Carroll County	Project Type	Bridge repair/deck replacement
Project Category	Highway Preservation	Functional Class	Major Collector
Conformity Status	Exempt	Physical Data	2 to 2 Lanes
CIP or CTP ID(s)	CL4031	Est. Total Cost	\$5,784,000

Description:

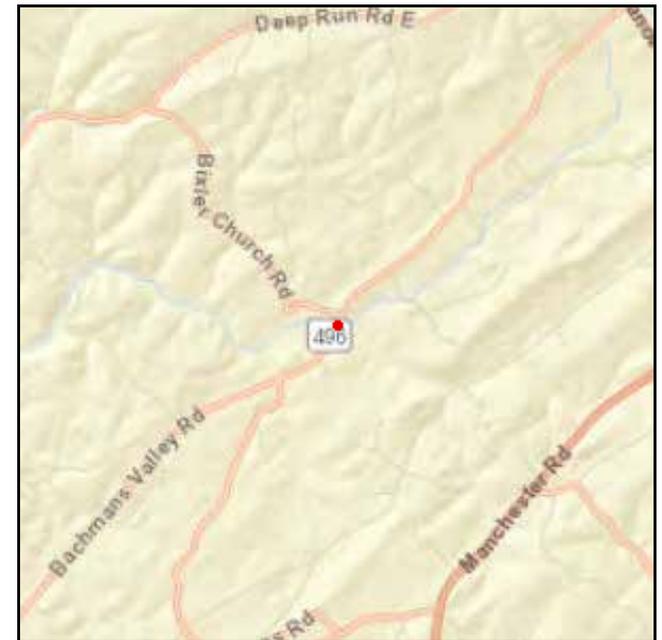
The project will replace bridge no. 06038 along MD 496 (Bachmans Valley Road) over Big Pipe Creek. A 5 foot minimum shoulder is planned on both sides of the roadway. This project is State funded. The bridge was open to service in fall 2018. The remaining funding is for utility work.

Justification:

The existing structure, built in 1932, is rated in poor condition.

Connection to Long-Range Transportation Planning Goals:

2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).





MD 496: Bridge Replacement over Big Pipe Creek

(Funding in Thousands)

Other

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$71	\$0	\$71	\$0	\$59	\$0	\$0	\$201
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$0	\$71	\$0	\$71	\$0	\$59	\$0	\$0	\$201
Total	\$0	\$71	\$0	\$71	\$0	\$59	\$0	\$0	\$201

US 40: MD 7 & MD 159 Intersection Reconstruction - Phase 2

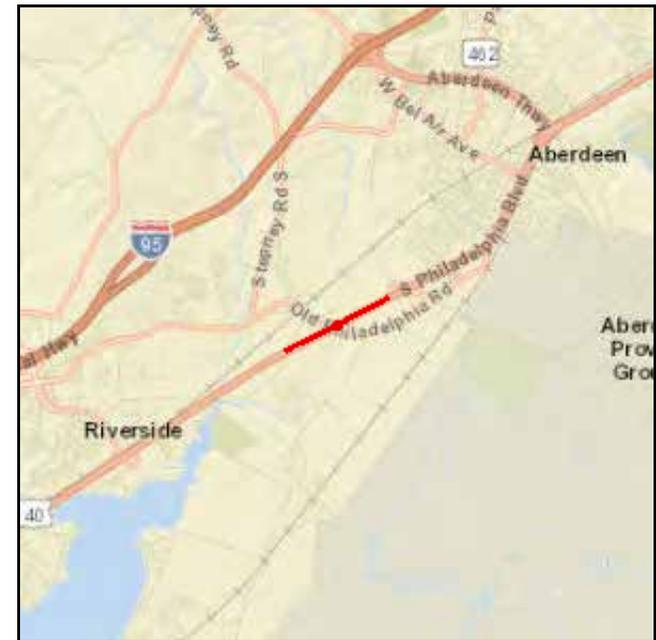
TIP ID	65-1402-41	Year of Operation	2019
Agency	SHA - Harford County	Project Type	Roadway widening
Project Category	Highway Capacity	Functional Class	Other Principal Arterial
Conformity Status	Not Exempt	Physical Data	Intersection, 4 to 6 Lanes
CIP or CTP ID(s)	HA3487	Est. Total Cost	\$24,884,000

Description:

The project includes widening US 40 from two through lanes to three through lanes in each direction, plus added turn lanes. West bound US 40 widening will extend approximately 2,500 feet west of MD 7. East bound US 40 widening will extend approximately 3,000 feet east to tie into previous widening at the MD 715 interchange. MD 159 will be modified to tie into US 40 eastbound widening. The bridge over Cranberry Run will also be widened. The project is anticipated to be completed in calendar year 2019, fiscal year 2020.

Justification:

Improved access to Aberdeen Proving Ground is a vital component needed to accommodate the increase of employment as a result of BRAC. The intersection improvements will improve safety, capacity and operations in the near-term.



Connection to Long-Range Transportation Planning Goals:

- 2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).
- 4. Increase Mobility
- 7.E Promote Prosperity and Economic Opportunity -- Improve access to existing communities and regional generators of economic activity.



2020 - 2023 Transportation Improvement Program

US 40: MD 7 & MD 159 Intersection Reconstruction - Phase 2

(Funding in Thousands)

National Highway Performance Program (National Highway System, Interstate Maintenance, Bridge (on-System))

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$3,062	\$489	\$314	\$38	\$0	\$0	\$0	\$0	\$3,903
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$3,062	\$489	\$314	\$38	\$0	\$0	\$0	\$0	\$3,903

Other

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$50
Subtotal	\$0	\$50	\$0	\$0	\$0	\$0	\$0	\$0	\$50
Total	\$3,062	\$539	\$314	\$38	\$0	\$0	\$0	\$0	\$3,953

MD 24: South of Stirrup Run Culvert to Deer Creek Bridge, Section G

TIP ID	65-1601-12	Year of Operation	TBD
Agency	SHA - Harford County	Project Type	Road reconstruction
Project Category	Highway Preservation	Functional Class	Major Collector
Conformity Status	Exempt	Physical Data	1.8 Miles
CIP or CTP ID(s)	HA3342	Est. Total Cost	\$8,206,000

Description:

MD 24 will be resurfaced and reconstructed including slope repair and guardrail replacement. This is the southern section (Section G) of MD 24, Rocks Road, from 900 feet south of Sharon Road to 1,700 feet north of Ferncliff Lane.

The Estimated Total Cost includes estimated funding to complete construction of this project. A schedule and funding for construction have yet to be determined.

Justification:

The purpose of this project is to improve road safety by remediating the slope supporting MD 24, repairing the pavement, improving roadway drainage and addressing roadside safety concerns.

Connection to Long-Range Transportation Planning Goals:

- 1.C Improve System Safety -- Eliminate hazardous or substandard conditions.
- 2.A Improve and Maintain the Existing Infrastructure -- Improve the condition of roadway systems (pavement, bridges, tunnels).





MD 24: South of Stirrup Run Culvert to Deer Creek Bridge, Section G

(Funding in Thousands)

Surface Transportation Block Grant Program

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$482	\$168	\$427	\$148	\$0	\$0	\$0	\$0	\$1,225
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$482	\$168	\$427	\$148	\$0	\$0	\$0	\$0	\$1,225



MD 24: South of Stirrup Run Culvert to Deer Creek Bridge, Section G

(Funding in Thousands)

Other

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$67	\$0	\$0	\$0	\$0	\$0	\$0	\$67
Subtotal	\$0	\$67	\$0	\$0	\$0	\$0	\$0	\$0	\$67
Total	\$482	\$235	\$427	\$148	\$0	\$0	\$0	\$0	\$1,292

US 29: Middle Patuxent River to Seneca Drive - Phase 2

TIP ID	66-1406-41	Year of Operation	2030
Agency	SHA - Howard County	Project Type	Roadway widening
Project Category	Highway Capacity	Functional Class	Other Freeway & Expressways
Conformity Status	Not Exempt	Physical Data	5 to 6 lanes; 1.7 miles
CIP or CTP ID(s)	HO3173	Est. Total Cost	\$60,400,000

Description:

Widen the northbound section of US 29 from the Middle Patuxent River to Seneca Drive (Phase 2) from 2 to 3 lanes (1.7 miles). This project includes intersection improvements at Rivers Edge Road.

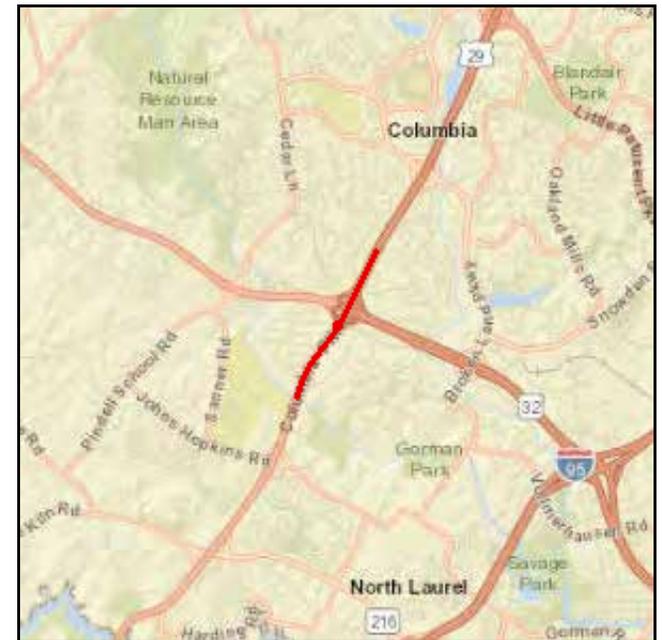
The estimated total cost includes projected funding that will be required to construct this project. No schedule or funding for construction have been identified.

Justification:

This project will improve safety and reduce congestion by upgrading northbound US 29 to match the southbound section, which is currently 3 lanes in each direction.

Connection to Long-Range Transportation Planning Goals:

- 1.C Improve System Safety -- Eliminate hazardous or substandard conditions.
- 4. Increase Mobility





US 29: Middle Patuxent River to Seneca Drive - Phase 2

(Funding in Thousands)

Other

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$664	\$0	\$621	\$0	\$0	\$0	\$0	\$1,285
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$0	\$664	\$0	\$621	\$0	\$0	\$0	\$0	\$1,285
Total	\$0	\$664	\$0	\$621	\$0	\$0	\$0	\$0	\$1,285

MD 32: MD 108 to Linden Church Road

TIP ID	66-1602-41	Year of Operation	2019
Agency	SHA - Howard County	Project Type	Roadway widening
Project Category	Highway Capacity	Functional Class	Other Principal Arterial
Conformity Status	Not Exempt	Physical Data	2 to 4 lanes, 2.25 miles
CIP or CTP ID(s)	HO1411	Est. Total Cost	\$44,362,000

Description:

This project will widen MD 32 in both directions, from two lanes to a four lane divided roadway, from MD 108 to Linden Church Road. Howard County is contributing \$16.5 million in funding for construction of this project. The remainder of the project is State funded. The project will open to service in fall 2019. Right-of-way acquisition will be complete in fiscal year 2021.

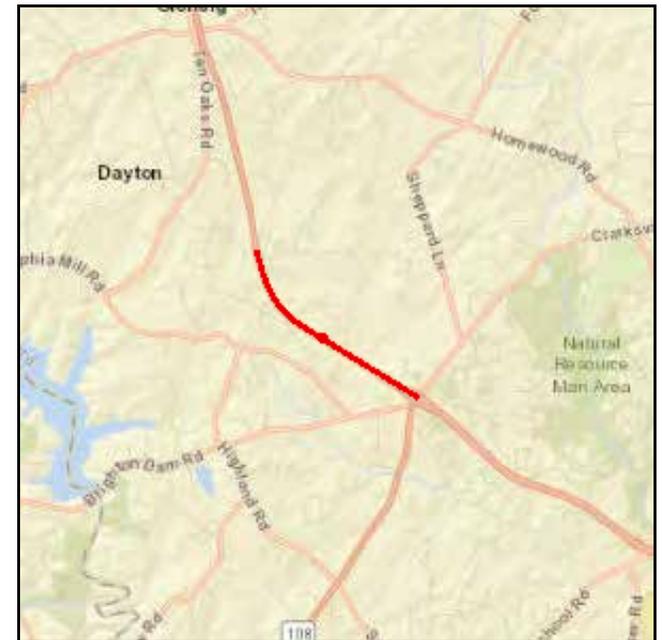
This project is segment 1 of the MD 32: MD 108 to I-70 Corridor project that had TIP Reference #66-1405-41 in previous TIPs.

Justification:

This project will address congestion and safety problems which have been experienced as a result of increasing traffic volumes on the existing two lane roadway.

Connection to Long-Range Transportation Planning Goals:

- 1.C Improve System Safety -- Eliminate hazardous or substandard conditions.
- 4. Increase Mobility
- 7.E Promote Prosperity and Economic Opportunity -- Improve access to existing communities and regional generators of economic activity.





2020 - 2023 Transportation Improvement Program

MD 32: MD 108 to Linden Church Road

(Funding in Thousands)

Other

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$2,151	\$0	\$0	\$0	\$0	\$0	\$0	\$2,151
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$461	\$0	\$77	\$0	\$0	\$0	\$0	\$538
Subtotal	\$0	\$2,612	\$0	\$77	\$0	\$0	\$0	\$0	\$2,689
Total	\$0	\$2,612	\$0	\$77	\$0	\$0	\$0	\$0	\$2,689

MD 32: Linden Church Road to I-70, Capacity & Safety Improvements

TIP ID	66-1703-41	Year of Operation	2022
Agency	SHA - Howard County	Project Type	Roadway widening
Project Category	Highway Capacity	Functional Class	Other Principal Arterial
Conformity Status	Not Exempt	Physical Data	2 to 4 Lanes, 6.6 Miles
CIP or CTP ID(s)	HO7561	Est. Total Cost	\$127,665,000

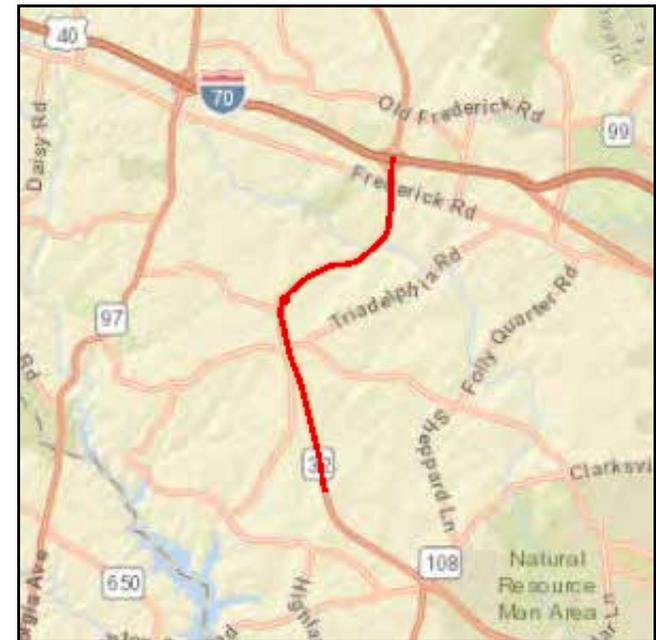
Description:

This project will widen MD 32 in both directions from a two lane to a four-lane divided roadway, from just north of the Linden Church Road interchange to just south of the I-70 interchange. The project also includes replacement of the Triadelphia Road bridge over MD 32.

This is a design build project and segment II of the MD 32: MD 108 to I-70 Corridor project improvements, which had TIP ID #66-1405-41 in previous TIPs. This is the final phase and contains the funding for the original corridor project planning. Phase 1, MD 108 to Linden Church Road, has TIP ID #66-1602-41. Road improvements are anticipated to be completed in 2022. The remaining funds in FY 2023 will complete right-of-way acquisition.

Justification:

The project will address congestion and safety problems which have been experienced as a result of increasing traffic volumes on the existing two lane roadway.



Connection to Long-Range Transportation Planning Goals:

- 1.C Improve System Safety -- Eliminate hazardous or substandard conditions.
- 4. Increase Mobility
- 7.D Promote Prosperity and Economic Opportunity -- Invest within local- and state-designated growth areas.



MD 32: Linden Church Road to I-70, Capacity & Safety Improvements

(Funding in Thousands)

National Highway Performance Program (National Highway System, Interstate Maintenance, Bridge (on-System))

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$24,167	\$4,896	\$27,613	\$5,736	\$23,367	\$4,039	\$0	\$0	\$89,818
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$1,950	\$1,574	\$1,170	\$1,354	\$2,125	\$2,305	\$532	\$151	\$11,161
Subtotal	\$26,117	\$6,470	\$28,783	\$7,090	\$25,492	\$6,344	\$532	\$151	\$100,979
Total	\$26,117	\$6,470	\$28,783	\$7,090	\$25,492	\$6,344	\$532	\$151	\$100,979

I-95: Active Traffic Management

TIP ID	66-1801-41	Year of Operation	TBD
Agency	SHA - Howard County	Project Type	Roadway widening
Project Category	Highway Capacity	Functional Class	Interstate
Conformity Status	Exempt	Physical Data	4.5 Miles
CIP or CTP ID(s)	HO7261	Est. Total Cost	\$1,800,000

Description:

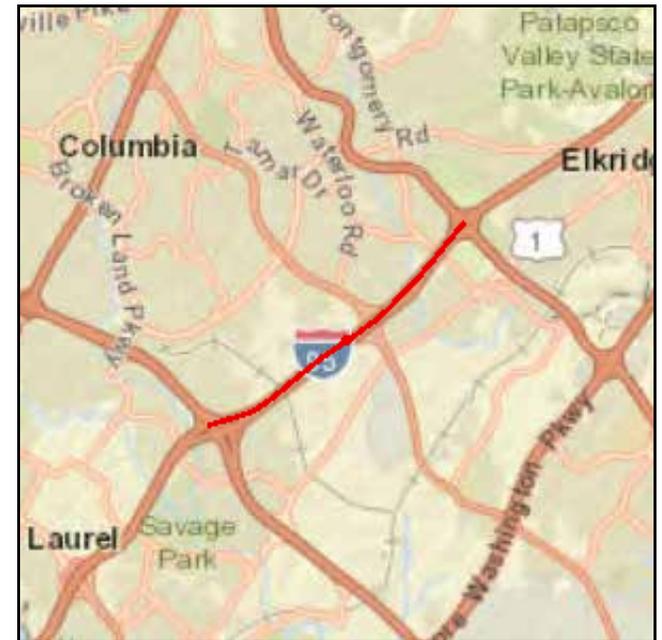
This project (formerly CTP# HONEW2) will construct facilities to accommodate peak hour shoulder use on I-95 between MD 32 and MD 100 in Howard County. This project is currently funded for partial preliminary engineering only and would result in part-time capacity improvements.

Justification:

This project will address capacity and safety concerns along I-95 at closely spaced interchanges with higher than average crash rates.

Connection to Long-Range Transportation Planning Goals:

- 1.B Improve System Safety -- Apply safety-related management and operations techniques.
- 4.D Increase Mobility -- Apply mobility-related management and operations techniques.





I-95: Active Traffic Management

(Funding in Thousands)

Other

Phase	FY 2020 Federal Funds	FY 2020 Matching Funds	FY 2021 Federal Funds	FY 2021 Matching Funds	FY 2022 Federal Funds	FY 2022 Matching Funds	FY 2023 Federal Funds	FY 2023 Matching Funds	Total Four-Year Funding Request
CON	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OTH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENG	\$0	\$342	\$0	\$0	\$0	\$0	\$0	\$0	\$342
PL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ROW	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$0	\$342	\$0	\$0	\$0	\$0	\$0	\$0	\$342
Total	\$0	\$342	\$0	\$0	\$0	\$0	\$0	\$0	\$342

APPENDIX A

COMMITTEE AND STAFF ROSTER

METROPOLITAN PLANNING ORGANIZATION STAFF

BALTIMORE METROPOLITAN COUNCIL

**Mike Kelly
Executive Director**

**Todd Lang
Director, Transportation Planning**

**Regina Aris
Assistant Director & Manager of Policy Development**

**Zach Kaufman
TIP Project Manager**

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BALTIMORE CITY

Graham Young, Complete Streets Manager

BALTIMORE COUNTY

Kevin Sabolcik, Chief of Structural Design Section

CARROLL COUNTY

Deborah Butler, Chief of Bureau of Engineering

HARFORD COUNTY

Alex Rawls, Transportation Planner

HOWARD COUNTY

Rashidi Jackson, Planner

QUEEN ANNE'S COUNTY

Steve Cohoon, Public Facilities Planner

MARYLAND DEPARTMENT OF TRANSPORTATION

Office of Planning and Capital Programming

Dan Janousek, Regional Planner

**Maryland Transit Administration
(Commuter Rail and Transit)**

Jacob Dunkle, Assistant Manager, Capital Programming

State Highway Administration

Tara Penders, Assistant Division Chief, RIPD

Lisa Sirota, Regional Planner, RIPD

Maryland Transportation Authority

Russell Walto, Planning & Community Relations Manager

BALTIMORE REGIONAL TRANSPORTATION BOARD

AGENCY	MEMBER	EMPOWERED REPRESENTATIVE
CITY OF ANNAPOLIS	Hon. Gavin Buckley Mayor	Sally Nash, Chief of Comp Planning Department of Planning & Zoning
ANNE ARUNDEL COUNTY	Hon. Steuart Pittman County Executive	Ramond Robinson, Transportation Officer Office of Planning & Zoning
CITY OF BALTIMORE	Hon. Bernard C. "Jack" Young (Chair) Mayor	Valorie LaCour, Manager of Strategic Initiatives Department of Transportation
BALTIMORE COUNTY	Hon. John Olszewski, Jr. County Executive	Greg Carski, Bureau Chief Traffic Engineering and Transportation Planning
CARROLL COUNTY	Hon. Stephen Wantz (Vice Chair) County Commissioner	Lynda Eisenberg, Director Department of Planning
HARFORD COUNTY	Hon. Barry Glassman County Executive	Alex Rawls, Transportation Planner Department of Planning & Zoning
HOWARD COUNTY	Hon. Calvin Ball County Executive	Bruce Gartner, Administrator Office of Transportation
QUEEN ANNE'S COUNTY	Hon. Stephen Wilson County Commissioner	Steve Cohoon, Public Facilities Planner Department of Public Works
MARYLAND DEPARTMENT OF TRANSPORTATION	Hon. Pete Rahn Secretary	Heather Murphy, Director Office of Planning and Capital Programming
REPRESENTATIVE FOR ELIGIBLE PUBLIC TRANSIT OPERATORS	Gary Blazinsky Administrator, Harford County Transit	
MARYLAND DEPARTMENT OF THE ENVIRONMENT (non-voting)	Hon. Ben Grumbles Secretary	Tad Aburn, Director Air & Radiation Management Administration
MARYLAND DEPARTMENT OF PLANNING (non-voting)	Hon. Rob McCord Acting Secretary	Bihui Xu, Manager Transportation Planning
MARYLAND TRANSIT ADMINISTRATION (non-voting)	Mr. Kevin Quinn Administrator	Holly Arnold, Deputy Administrator and Chief Planning & Capital Programming

TECHNICAL COMMITTEE

AGENCY	CONTACT PERSON
ANNE ARUNDEL COUNTY	Martha Arzu McIntosh , Transportation Planner
BALTIMORE CITY	Graham Young , Complete Streets Manager
BALTIMORE COUNTY	Angelica Daniel , Project Engineer
CARROLL COUNTY	Mary Lane , Transportation Planner
HARFORD COUNTY	Joel Gallihue , Chief of Long-Range Planning
HOWARD COUNTY	David Cookson , Planning Manager
QUEEN ANNE'S COUNTY	Steve Cohoon , Public Facilities Planner
CITY OF ANNAPOLIS	Kwaku Duah , Senior Transportation Planner
MARYLAND DEPARTMENT OF TRANSPORTATION	
Office of Planning and Capital Programming	Dan Janousek , Regional Planner
Maryland Transit Administration	Zach Chissell , Manager of Project Development
State Highway Administration	Tara Penders , Assistant Division Chief, RIPD
Maryland Transportation Authority	Russell Walto , Planning & Community Relations Manager
MARYLAND DEPARTMENT OF THE ENVIRONMENT	Alexandra Brun , Natural Resources Planner III
MARYLAND DEPARTMENT OF PLANNING	Ken Choi , Senior Transportation Analyst

APPENDIX B

DOCUMENTATION OF PROJECT PRIORITIZATION, FINANCIAL REASONABLENESS AND FLEXIBLE FUNDING

Criteria for prioritizing projects in the TIP

Project sponsors must consider a range of criteria when submitting projects for consideration in the TIP. Sponsors ascertain the ability of projects to meet the following criteria which supports long-range plan goals. Additionally, capacity projects must come from the region's approved long-range transportation plan.

1. Preserves the regional transportation system.
2. Implements emission reduction measures.
3. Reduces congestion and prevents congestion where it does not yet occur.
4. Is consistent with all applicable short-range and long-term comprehensive land use plans.
5. Implements MAP-21 Transportation Alternatives activities, including historic resource preservation where related to transportation facilities.
6. Provides or enhances accessibility and/or intermodal connectivity among major destinations important to the regional economy.
7. Provides for connectivity of transportation facilities within the metropolitan area with transportation facilities outside the metropolitan area.
8. Enhances social, energy and environmental efforts.
9. Facilitates the use of transit and/or alternatives to the single occupant vehicle.
10. Implements transportation system management strategies so as to meet transportation needs by using existing facilities more efficiently.
11. Improves pedestrian safety and access for transportation.
12. Improves bicycle safety and access for transportation.
13. Permits timely advancement and continuity of transportation projects.
14. Enhances transportation safety.

FY 2020 – 2023 Transportation Improvement Program Prioritization

Criteria for prioritizing projects in the TIP	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Anne Arundel County Projects														
Hanover Road Corridor Improvement			X	X										X
Furnace Avenue Bridge over Deep Run	X			X										X
Harwood Road Bridge over Stocketts Run	X			X										X
Magothy Bridge Road Bridge over Magothy River	X			X										X
O'Connor Road Bridge over Deep Run	X			X										X
McKendree Road Culvert over Lyons Creek	X			X										X
Polling House Road Bridge over Rock Branch	X			X										X
Baltimore City Projects														
Citywide Bicycle and Pedestrian Improvements	X	X		X	X	X		X	X		X	X		X
Citywide Traffic Signals, Intelligent Transportation System and Safety Improvements	X	X	X	X						X				X
Transportation Management Center Upgrade								X		X				
Perring Parkway Ramp and Hillen Road Bridge	X			X										X
Sisson Street Bridge over CSX Railroad	X			X										X
Wilkins Avenue Bridge over Gwynns Falls	X			X										X
Belair Road Complete Streets	X	X		X	X	X			X		X	X		X
Citywide System Preservation	X			X	X						X			X

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| <ol style="list-style-type: none"> 1. Preserves the regional transportation system 2. Implements emission reduction measures 3. Reduces congestion and prevents congestion in new areas 4. Consistent with applicable short- and long-term comprehensive plans 5. Implements Transportation Alternatives activities 6. Provides accessibility and/or intermodal connectivity among major destinations 7. Provides for connectivity of facilities within the region to facilities outside the region | <ol style="list-style-type: none"> 8. Enhances social, energy and environmental efforts 9. Facilitates transit and/or alternatives to the single occupant vehicle 10. Implements transportation system management strategies 11. Improves pedestrian safety and access 12. Improves bicycle safety and access 13. Permits timely advancement and continuity of projects 14. Enhances transportation safety |
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TIP project name	Criteria for prioritizing projects in the TIP													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Hanover Street Bridge Multimodal Corridor	X			X	X	X			X		X			X
Orleans Street Bridge over I-83 and City Streets	X			X										X
Remington Avenue Bridge over Stony Run	X			X										X
Radecke Avenue over Moore's Run	X			X										X
I-83 Concrete Deck Mill and Resurface	X			X										X
Moravia Road Ramp Bridge over Pulaski Highway	X			X										X
MLK Blvd. and Howard St. Intersection Improvements	X			X	X	X					X			X
25 th Street Rehabilitation from Greenmount Ave to Kirk Ave	X	X		X	X	X		X	X		X	X		X
41 st Street over I-83, MTA Light Rail Tracks, and Jones Falls	X			X							X			X
Citywide Asset Management	X			X						X				X
Baltimore Street from Howard Street to President Street	X	X		X	X	X		X	X		X			X
Brehms Lane over Herring Run	X			X							X			X
Fremont Ave Rehabilitation from Lafayette Ave to Presstman St	X			X	X						X			X
Hanover Street over CSX	X			X							X			X
Howard Street over I-83, CSX, Amtrak, and Jones Falls	X			X							X			X
Madison St. Rehabilitation from N Milton Ave to Edison Highway	X			X	X						X			X
Park Heights Ave from West Rogers Ave to Strathmore Ave	X			X	X						X			X
Patapsco Ave from Magnolia Ave to the Patapsco River Bridge	X	X		X	X	X		X	X		X	X		X
Pennington Ave Rehabilitation from Birch St to E Ordnance Rd	X			X	X						X			X

<ol style="list-style-type: none"> 1. Preserves the regional transportation system 2. Implements emission reduction measures 3. Reduces congestion and prevents congestion in new areas 4. Consistent with applicable short- and long-term comprehensive plans 5. Implements Transportation Alternatives activities 6. Provides accessibility and/or intermodal connectivity among major destinations 7. Provides for connectivity of facilities within the region to facilities outside the region 	<ol style="list-style-type: none"> 8. Enhances social, energy and environmental efforts 9. Facilitates transit and/or alternatives to the single occupant vehicle 10. Implements transportation system management strategies 11. Improves pedestrian safety and access 12. Improves bicycle safety and access 13. Permits timely advancement and continuity of projects 14. Enhances transportation safety
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TIP project name	Criteria for prioritizing projects in the TIP													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Waterview Avenue over Ramp to 295	X			X							X			X
Baltimore City Locked Gate – Interstate Access Point Approval				X										X
Capital Project Delivery Services				X									X	
Citywide Transportation Plan				X										
Citywide Transportation Studies				X										
Baltimore County Projects														
Dogwood Road Bridge No. B-0072 over Dogwood Run	X			X										X
Mohrs Lane Bridge No. B-0143 over CSX Railroad	X			X							X			X
Gunpowder Road Bridge No. B-0409	X			X										X
Hammonds Ferry Road Bridge No. B-0100 over CSX Railroad	X			X										X
Lansdowne Boulevard Bridge No. B-0113 over CSX Railroad	X			X										X
Piney Grove Road Bridge No. B-0140 over CSX Railroad	X			X										X
Peninsula Expressway Bridge No. B-0119 over CSX Railroad	X			X										X
Old Ingleside Avenue Bridge No. B-0096 over Dead Run	X			X										X
Old Court Road Bridge No. B-0237 over Bens Run	X			X										X
Sparks Road Bridge No. B-0018 over Gunpowder Falls	X			X										X
Golden Ring Road Bridge No. B-0110 over Stemmers Run	X			X										X
Rolling Road Bridge No. B-0358 over Branch of Dead Run	X			X										X
Forest Park Avenue N. Bridge No. B-0097 over Dead Run and Dogwood Run	X			X										X

<ol style="list-style-type: none"> 1. Preserves the regional transportation system 2. Implements emission reduction measures 3. Reduces congestion and prevents congestion in new areas 4. Consistent with applicable short- and long-term comprehensive plans 5. Implements Transportation Alternatives activities 6. Provides accessibility and/or intermodal connectivity among major destinations 7. Provides for connectivity of facilities within the region to facilities outside the region 	<ol style="list-style-type: none"> 8. Enhances social, energy and environmental efforts 9. Facilitates transit and/or alternatives to the single occupant vehicle 10. Implements transportation system management strategies 11. Improves pedestrian safety and access 12. Improves bicycle safety and access 13. Permits timely advancement and continuity of projects 14. Enhances transportation safety
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TIP project name	Criteria for prioritizing projects in the TIP													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Rossville Blvd. Bridge No. B-0132 over Amtrak & Orems Rd.	X			X										X
Phoenix Rd Bridge No. BC6507 over Gunpowder Falls & NCR	X			X										X
Baltimore County Bridge Inspection Program	X			X										X
Carroll County Projects														
Bixler Church Road Bridge over Big Pipe Creek	X			X										X
Shepherds Mill Road Bridge over Little Pipe Creek	X			X										X
Stone Chapel Road over Little Pipe Creek	X			X										X
Babylon Road Bridge over Silver Run	X			X										X
Gaither Road Bridge over South Branch of the Patapsco River	X			X										X
McKinstry's Mill Road Bridge over Sam's Creek	X			X										X
Hughes Shop Road Bridge over Bear Branch	X			X										X
Carroll County Bridge Inspection Program	X			X										X
Harford County Projects														
Bata Boulevard Access Road			X	X		X					X			X
Abingdon Road Bridge #169 over CSX Railroad	X			X										X
Chestnut Hill Bridge #40	X			X										X
Phillips Mill Road Bridge #70 over East Branch Tributary	X			X										X
Stafford Road Bridge #24 over Deer Creek	X			X										X
Glenville Road Bridge #30	X			X										X

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TIP project name	Criteria for prioritizing projects in the TIP													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Grier Nursery Road Bridge #43	X			X										X
Hookers Mill Road Brige #13	X			X										X
Harford County Bridge Inspection Program	X			X										X
Howard County Projects														
Dorsey Run Road: MD 175 to CSX Railroad Spur	X		X	X	X	X					X	X		X
Guilford Road: US 1 to Dorsey Run Road	X		X	X	X	X					X			X
MD 175 at Oakland Mills Rd Interchange	X		X	X	X	X		X	X		X	X		X
Snowden River Parkway: Broken Land Parkway to Oakland Mills Road	X		X	X	X	X		X	X		X	X		X
US 29/Broken Land Parkway Interchange and North South Connector Road	X		X	X	X	X					X	X		X
Howard County Bridge Repairs and Deck Replacement	X			X										X
Bus Rapid Transit		X	X	X		X	X	X	X					X
Maryland Transportation Authority Projects														
I-95 Fort McHenry Tunnel: Moravia Rd to Tunnel Improvements	X		X	X			X						X	X
I-95 Fort McHenry Tunnel: Port Covington Access	X		X	X		X	X						X	X
I-95 Express Toll Lane Northbound Extension	X		X	X			X			X			X	X
Maryland Port Administration Projects														
Seagirt Marine Terminal Modernization: Birth Improvements				X			X							
Maryland Transit Administration Projects														
Urban Transit Systems – Capital Assistance	X	X		X		X		X	X					X
<ol style="list-style-type: none"> 1. Preserves the regional transportation system 2. Implements emission reduction measures 3. Reduces congestion and prevents congestion in new areas 4. Consistent with applicable short- and long-term comprehensive plans 5. Implements Transportation Alternatives activities 6. Provides accessibility and/or intermodal connectivity among major destinations 7. Provides for connectivity of facilities within the region to facilities outside the region 							<ol style="list-style-type: none"> 8. Enhances social, energy and environmental efforts 9. Facilitates transit and/or alternatives to the single occupant vehicle 10. Implements transportation system management strategies 11. Improves pedestrian safety and access 12. Improves bicycle safety and access 13. Permits timely advancement and continuity of projects 14. Enhances transportation safety 							

TIP project name	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Bus and Paratransit Vehicle Overhaul and Replacement	X	X		X		X		X	X					X
Small Urban Transit Systems – Capital Assistance	X	X		X		X		X	X					X
Ridesharing – Baltimore Region		X	X	X				X	X					
Small Urban Transit Systems - Operating Assistance		X		X		X		X	X					
Kirk Bus Facility Replacement - Phase 1 & 2	X	X		X				X						X
Bus and Rail Preventive Maintenance	X			X		X			X					X
Seniors and Individuals with Disabilities	X			X		X		X	X					X
Urban Transit Systems – Operating Assistance		X		X		X		X	X					
Agencywide System Preservation and Improvement	X			X		X		X	X					X
Bus System Preservation and Improvement	X	X	X	X		X		X	X					X
Metro and Light Rail Rolling Stock Overhauls and Replacement	X	X		X		X		X	X					X
Metro and Light Rail System Preservation and Improvement	X	X		X		X		X	X					X
Rural Transit Systems - Operating Assistance		X		X		X		X	X					
MARC Rolling Stock Overhauls and Replacement	X	X		X		X	X		X					X
MARC Improvements	X	X		X	X	X	X		X					X
MARC Facilities	X			X		X	X	X	X		X			X
Office of the Secretary Projects														
State Safety Oversight				X										X
Baltimore-Washington Superconducting Maglev (SCMAGLEV) Project	X	X	X	X		X	X	X	X					X

<ul style="list-style-type: none"> 1. Preserves the regional transportation system 2. Implements emission reduction measures 3. Reduces congestion and prevents congestion in new areas 4. Consistent with applicable short- and long-term comprehensive plans 5. Implements Transportation Alternatives activities 6. Provides accessibility and/or intermodal connectivity among major destinations 7. Provides for connectivity of facilities within the region to facilities outside the region 	<ul style="list-style-type: none"> 8. Enhances social, energy and environmental efforts 9. Facilitates transit and/or alternatives to the single occupant vehicle 10. Implements transportation system management strategies 11. Improves pedestrian safety and access 12. Improves bicycle safety and access 13. Permits timely advancement and continuity of projects 14. Enhances transportation safety
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TIP project name	Criteria for prioritizing projects in the TIP													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Port of Baltimore Enhancements	X			X		X	X	X						X
SHA Projects – Regional														
Areawide Transportation Alternatives Projects	X	X	X	X	X	X		X	X		X	X		X
Areawide Environmental Projects				X	X			X						
Areawide Congestion Management		X	X	X				X		X				X
Areawide Bridge Replacement and Rehabilitation	X			X										X
Areawide Resurfacing and Rehabilitation	X			X										X
Areawide Safety and Spot Improvements	X		X	X							X	X		X
Areawide Urban Reconstruction	X		X	X							X	X		X
Morgan State University Transportation Research Program				X				X					X	
SHA Projects – Anne Arundel County														
MD 198: MD 295 to MD 32	X		X	X	X	X					X	X		X
US 50: MD 70 to MD 2	X		X	X										
MD 175: Disney Road to Reece Road	X		X	X	X	X					X	X		X
MD 175: National Business Parkway to McCarron Court	X		X	X	X	X					X	X		X
SHA Projects – Baltimore County														
I-695 at Cromwell Bridge Road – Drainage Improvement	X			X				X						X
MD 140: Painters Mill Road to Owings Mills Boulevard - Phase 2	X		X	X							X	X		X
I-795: Dolfield Boulevard Interchange	X		X	X										X

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TIP project name	Criteria for prioritizing projects in the TIP													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
MD 140: Garrison View Road to Painters Mill Road – Phase 1	X		X	X							X	X		X
I-695: US 40 to MD 144	X		X	X										X
I-695: Bridge Replacements at Benson Avenue and US 1	X		X	X							X	X		X
I-695: I-70 to MD 43	X		X	X						X				X
I-83: Bridge Replacement over Padonia Road	X			X										X
MD 137: Bridge Replacement over I-83	X			X										X
US 1: Bridge Replacement over CSX	X			X										X
US 40: Bridge Replacements over Little & Big Gunpowder Falls	X			X										X
MD 45: Padonia Road to Wight Ave	X			X				X			X			X
MD 151/MD 151B: Bridge Replacements	X			X										X
SHA Projects – Carroll County														
MD 30 Business: North Woods Trail to CSX Railroad	X			X	X			X			X			X
MD 86: Bridge Replacement over Gunpowder Falls	X			X										X
MD 496: Bridge Replacement over Big Pipe Creek	X			X										X
SHA Projects – Harford County														
US 40: MD 7 and MD 159 Intersection Reconstruction - Phase 2	X		X	X		X								X
MD 24: South of Stirrup Run Culvert to Deer Creek Bridge, Sec G	X			X										X
SHA Projects – Howard County														
US 29: Middle Patuxent River to Seneca Drive - Phase 2			X	X		X								X

<ul style="list-style-type: none"> 1. Preserves the regional transportation system 2. Implements emission reduction measures 3. Reduces congestion and prevents congestion in new areas 4. Consistent with applicable short- and long-term comprehensive plans 5. Implements Transportation Alternatives activities 6. Provides accessibility and/or intermodal connectivity among major destinations 7. Provides for connectivity of facilities within the region to facilities outside the region 	<ul style="list-style-type: none"> 8. Enhances social, energy and environmental efforts 9. Facilitates transit and/or alternatives to the single occupant vehicle 10. Implements transportation system management strategies 11. Improves pedestrian safety and access 12. Improves bicycle safety and access 13. Permits timely advancement and continuity of projects 14. Enhances transportation safety
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TIP project name	Criteria for prioritizing projects in the TIP													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
MD 32: MD 108 to Linden Church Road	X		X	X										X
MD 32: Linden Church Road to I-70, Capacity & Safety Improvements	X		X	X										X
I-95: Active Traffic Management	X		X	X		X	X			X				X

<ul style="list-style-type: none"> 1. Preserves the regional transportation system 2. Implements emission reduction measures 3. Reduces congestion and prevents congestion in new areas 4. Consistent with applicable short- and long-term comprehensive plans 5. Implements Transportation Alternatives activities 6. Provides accessibility and/or intermodal connectivity among major destinations 7. Provides for connectivity of facilities within the region to facilities outside the region 	<ul style="list-style-type: none"> 8. Enhances social, energy and environmental efforts 9. Facilitates transit and/or alternatives to the single occupant vehicle 10. Implements transportation system management strategies 11. Improves pedestrian safety and access 12. Improves bicycle safety and access 13. Permits timely advancement and continuity of projects 14. Enhances transportation safety
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Relating TIP Projects to Long-Range Plan Goals and Performance Measures

Agency	TIP ID	Project Name	TIP Evaluation Criteria Note: TIP projects generally comply with the TIP evaluation criterion: "Consistent with applicable short- and long-term comprehensive plans."	Long-Range Plan Goals	Long-Range Plan Performance Measures / Targets To conserve space, a list of adopted performance measures and targets follows this table.
Anne Arundel County	11-1801-42	Hanover Road Corridor Improvements	3. Reduces congestion and prevents congestion in new areas 14. Enhances transportation safety	Increase Mobility ¹ Improve System Safety ² Promote Prosperity and Economic Opportunity ³	System Performance – Congestion Highway Safety
Anne Arundel County	11-1103-13	Furnace Avenue Bridge over Deep Run	1. Preserves the regional transportation system	Improve and Maintain Existing Infrastructure ⁴	Bridge Condition
Anne Arundel County	11-1208-13	Harwood Road Bridge over Stocketts Run	1. Preserves the regional transportation system	Improve and Maintain Existing Infrastructure	Bridge Condition
Anne Arundel County	11-1402-13	Magothy Bridge Road Bridge over Magothy River	1. Preserves the regional transportation system	Improve and Maintain Existing Infrastructure	Bridge Condition
Anne Arundel County	11-1403-13	O'Connor Road Bridge over Deep Run	1. Preserves the regional transportation system	Improve and Maintain Existing Infrastructure	Bridge Condition
Anne Arundel County	11-1601-19	McKendree Road Culvert over Lyons Creek	1. Preserves the regional transportation system	Improve and Maintain Existing Infrastructure	Bridge Condition
Anne Arundel County	11-1602-13	Polling House Road Bridge over Rock Branch	1. Preserves the regional transportation system	Improve and Maintain Existing Infrastructure	Bridge Condition

¹ Help people and freight to move reliably and efficiently.

² Make conditions safer for pedestrians, bicyclists, transit riders and operators, and motorists.

³ Support the revitalization of communities, the development of activity centers, and the movement of goods and services.

⁴ Improve the conditions of existing transportation facilities; systematically maintain and replace transportation assets as needed.

Relating TIP Projects to Long-Range Plan Goals and Performance Measures

Baltimore City	12-1217-25	Citywide Bicycle and Pedestrian Improvements	2. Implements emission reduction measures 6. Provides accessibility and/or intermodal connectivity among major destinations 11. Improves pedestrian safety and access 12. Improves bicycle safety and access	Conserve and Enhance the Environment ⁵ Improve Accessibility ⁶ Improve System Safety Improve and Maintain Existing Infrastructure	Highway Safety System Performance – Congestion System Performance – Emissions
Baltimore City	12-1218-07	Citywide Traffic Signals, Intelligent Transportation System and Safety Improvements	2. Implements emission reduction measures 3. Reduces congestion and prevents congestion in new areas 10. Implements transportation system management strategies 14. Enhances transportation safety	Conserve and Enhance the Environment Improve and Maintain Existing Infrastructure Increase Mobility Improve System Safety Promote Informed Decision Making ⁷	Highway Safety Transit Safety System Performance – Congestion System Performance – Emissions
Baltimore City	12-1701-04	Transportation Management Center Upgrade	10. Implements transportation system management strategies	Increase Mobility Improve System Security ⁸	System Performance – Congestion
Baltimore City	12-1215-13	Perring Parkway Ramp and Hillen Road Bridge	1. Preserves the regional transportation system	Improve and Maintain Existing Infrastructure	Bridge Condition
Baltimore City	12-1216-13	Sisson Street Bridge over CSX Railroad	1. Preserves the regional transportation system	Improve and Maintain Existing Infrastructure	Bridge Condition
Baltimore City	12-1403-13	Wilkins Avenue Bridge Over Gwynns Falls	1. Preserves the regional transportation system	Improve and Maintain Existing Infrastructure	Bridge Condition
Baltimore City	12-1404-11	Belair Road Complete Streets	1. Preserves the regional transportation system 5. Implements Transportation Alternatives activities 11. Improves pedestrian safety and access 12. Improves bicycle safety and access	Improve and Maintain Existing Infrastructure Improve Accessibility Improve System Safety	Highway Safety Pavement Condition

⁵ Pass on to future generations the healthiest natural and human environments possible.
⁶ Help people of all ages and abilities to access specific destinations.
⁷ Ensure that adopted transportation policies and performance measures guide the regional decision making process.
⁸ Provide a secure traveling environment for everyone; improve the region’s ability to respond to natural and man-made disasters.

Relating TIP Projects to Long-Range Plan Goals and Performance Measures

Baltimore City	12-1414-11	Citywide System Preservation	1. Preserves the regional transportation system 5. Implements Transportation Alternatives activities 11. Improves pedestrian safety and access	Improve and Maintain Existing Infrastructure Improve Accessibility Improve System Safety	Highway Safety Pavement Condition
Baltimore City	12-1419-13	Hanover Street Bridge Multimodal Corridor	1. Preserves the regional transportation system 5. Implements Transportation Alternatives activities 11. Improves pedestrian safety and access	Improve and Maintain Existing Infrastructure Improve Accessibility Improve System Safety Promote Prosperity and Economic Opportunity	Highway Safety Bridge Condition System Performance – Freight
Baltimore City	12-1601-13	Orleans Street Bridge over I-83 and City Streets	1. Preserves the regional transportation system	Improve and Maintain Existing Infrastructure	Bridge Condition
Baltimore City	12-1602-13	Remington Avenue Bridge over Stony Run	1. Preserves the regional transportation system	Improve and Maintain Existing Infrastructure	Bridge Condition
Baltimore City	12-1603-13	Radecke Avenue over Moores Run	1. Preserves the regional transportation system	Improve and Maintain Existing Infrastructure	Bridge Condition
Baltimore City	12-1604-13	I-83 Concrete Deck Mill and Resurface	1. Preserves the regional transportation system	Improve and Maintain Existing Infrastructure	Bridge Condition
Baltimore City	12-1605-13	Moravia Road Ramp Bridge over Pulaski Highway	1. Preserves the regional transportation system	Improve and Maintain Existing Infrastructure	Bridge Condition
Baltimore City	12-1706-11	MLK Blvd. and Howard St. Intersection Improvements	1. Preserves the regional transportation system 5. Implements Transportation Alternatives activities 11. Improves pedestrian safety and access	Improve and Maintain Existing Infrastructure Improve Accessibility Improve System Safety	Highway Safety Pavement Condition
Baltimore City	12-2001-11	25 th Street Rehabilitation from Greenmount Ave to Kirk Ave	1. Preserves the regional transportation system 2. Implements emission reduction measures 11. Improves pedestrian safety & access 12. Improves bicycle safety & access	Conserve and Enhance the Environment Improve and Maintain Existing Infrastructure Improve Accessibility Improve System Safety	Highway Safety Pavement Condition System Performance – Congestion System Performance – Emissions

Relating TIP Projects to Long-Range Plan Goals and Performance Measures

Baltimore City	12-2002-13	41 st Street over I-83, MTA Light Rail Tracks, and Jones Falls	1. Preserves the regional transportation system 11. Improves pedestrian safety & access	Improve and Maintain Existing Infrastructure Improve System Safety	Highway Safety Bridge Condition
Baltimore City	12-2003-19	Citywide Asset Management	1. Preserves the regional transportation system 10. Implements transportation system management strategies	Promote Informed Decision Making	No performance measures specifically addressing implementation of a performance-based management program
Baltimore City	12-2004-11	Baltimore Street from Howard Street to President Street	1. Preserves the regional transportation system 2. Implements emission reduction measures 5. Implements Transportation Alternatives activities 11. Improves pedestrian safety & access	Conserve and Enhance the Environment Improve and Maintain Existing Infrastructure Improve System Safety	Highway Safety Pavement Condition System Performance – Congestion System Performance – Emissions
Baltimore City	12-2005-13	Brehms Lane over Herring Run	1. Preserves the regional transportation system 11. Improves pedestrian safety & access	Improve and Maintain Existing Infrastructure Improve System Safety	Highway Safety Bridge Condition
Baltimore City	12-2007-11	Fremont Ave Rehabilitation from Lafayette Ave to Presstman St	1. Preserves the regional transportation system 5. Implements Transportation Alternatives activities 11. Improves pedestrian safety & access	Improve and Maintain Existing Infrastructure Improve System Safety	Highway Safety Pavement Condition
Baltimore City	12-2008-13	Hanover Street over CSX	1. Preserves the regional transportation system 11. Improves pedestrian safety & access	Improve and Maintain Existing Infrastructure Improve System Safety	Highway Safety Bridge Condition
Baltimore City	12-2009-13	Howard Street over I-83, CSX, Amtrak, and Jones Falls	1. Preserves the regional transportation system 11. Improves pedestrian safety & access	Improve and Maintain Existing Infrastructure Improve System Safety	Highway Safety Bridge Condition
Baltimore City	12-2010-11	Madison St. Rehabilitation from N Milton Ave to Edison Highway	1. Preserves the regional transportation system 5. Implements Transportation Alternatives activities 11. Improves pedestrian safety & access	Improve and Maintain Existing Infrastructure Improve System Safety	Highway Safety Pavement Condition

Relating TIP Projects to Long-Range Plan Goals and Performance Measures

Baltimore City	12-2011-11	Park Heights Ave from West Rogers Ave to Strathmore Ave	1. Preserves the regional transportation system 5. Implements Transportation Alternatives activities 11. Improves pedestrian safety & access	Improve and Maintain Existing Infrastructure Improve System Safety	Highway Safety Pavement Condition
Baltimore City	12-2012-11	Patapsco Ave from Magnolia Ave to the Patapsco River Bridge	1. Preserves the regional transportation system 2. Implements emission reduction measures 5. Implements Transportation Alternatives activities 6. Provides accessibility and/or intermodal connectivity among major destinations	Conserve and Enhance the Environment Improve and Maintain Existing Infrastructure Improve Accessibility Improve System Safety	Highway Safety Pavement Condition System Performance – Congestion System Performance – Emissions
Baltimore City	12-2013-11	Pennington Ave Rehabilitation from Birch St to E Ordnance Rd	1. Preserves the regional transportation system 5. Implements Transportation Alternatives activities 11. Improves pedestrian safety & access	Improve and Maintain Existing Infrastructure Improve Accessibility Improve System Safety	Highway Safety Pavement Condition
Baltimore City	12-2015-13	Waterview Avenue over Ramp to 295	1. Preserves the regional transportation system 11. Improves pedestrian safety & access	Improve and Maintain Existing Infrastructure Improve System Safety	Highway Safety Bridge Condition
Baltimore City	12-1201-99	Baltimore City Locked Gate Interstate Access Point Approval (IAPA)	14. Enhances transportation safety	Improve System Safety	Highway Safety
Baltimore City	12-1901-99	Capital Project Delivery Services	13. Permits timely advancement and continuity of projects	Promote Informed Decision Making	No performance measures specifically addressing project delivery
Baltimore City	12-2006-99	Citywide Transportation Plan	4. Consistent with applicable short- and long-term comprehensive plans	Promote Informed Decision Making	No performance measures specifically addressing transportation plans
Baltimore City	12-2014-99	Citywide Transportation Studies	4. Consistent with applicable short- and long-term comprehensive plans	Promote Informed Decision Making	No performance measures specifically addressing transportation studies
Baltimore County	13-0001-13	Dogwood Road Bridge No. B-0072 Over Dogwood Run	1. Preserves the regional transportation system	Improve and Maintain Existing Infrastructure	Bridge Condition

Relating TIP Projects to Long-Range Plan Goals and Performance Measures

Baltimore County	13-0803-13	Mohrs Lane Bridge No. B-0143 over CSX Railroad	1. Preserves the regional transportation system 11. Improves pedestrian safety and access	Improve and Maintain Existing Infrastructure Improve Accessibility Improve System Safety	Highway Safety Bridge Condition
Baltimore County	13-1005-13	Gunpowder Road Bridge No. B-0409	1. Preserves the regional transportation system	Improve and Maintain Existing Infrastructure	Bridge Condition
Baltimore County	13-1012-13	Hammonds Ferry Road Bridge No. B-0100 over CSX Railroad	1. Preserves the regional transportation system	Improve and Maintain Existing Infrastructure	Bridge Condition
Baltimore County	13-1105-13	Lansdowne Boulevard Bridge No. B-0113 over CSX Railroad	1. Preserves the regional transportation system	Improve and Maintain Existing Infrastructure	Bridge Condition
Baltimore County	13-1107-13	Piney Grove Road Bridge No. B-0140 over CSX railroad	1. Preserves the regional transportation system	Improve and Maintain Existing Infrastructure	Bridge Condition
Baltimore County	13-1108-13	Peninsula Expressway Bridge No. B-0119 over CSX Railroad	1. Preserves the regional transportation system	Improve and Maintain Existing Infrastructure	Bridge Condition
Baltimore County	13-1202-13	Old Ingleside Avenue Bridge No. B-0096 over Dead Run	1. Preserves the regional transportation system	Improve and Maintain Existing Infrastructure	Bridge Condition
Baltimore County	13-1204-13	Old Court Road Bridge No. B-0237 over Bens Run	1. Preserves the regional transportation system	Improve and Maintain Existing Infrastructure	Bridge Condition
Baltimore County	13-1206-13	Sparks Road Bridge No. B-0018 over Gunpowder Falls	1. Preserves the regional transportation system	Improve and Maintain Existing Infrastructure	Bridge Condition
Baltimore County	13-1208-13	Golden Ring Road Bridge No. B-0110 over Stemmers Run	1. Preserves the regional transportation system	Improve and Maintain Existing Infrastructure	Bridge Condition

Relating TIP Projects to Long-Range Plan Goals and Performance Measures

Baltimore County	13-1209-13	Rolling Road Bridge No. B-0358 over Branch of Dead Run	1. Preserves the regional transportation system	Improve and Maintain Existing Infrastructure	Bridge Condition
Baltimore County	13-1210-13	Forest Park Avenue N. Bridge No. B-0097 over Dead Run and Dogwood Road	1. Preserves the regional transportation system	Improve and Maintain Existing Infrastructure	Bridge Condition
Baltimore County	13-1701-13	Rossville Blvd. Bridge No. B-0132 over Amtrak & Orems Rd.	1. Preserves the regional transportation system	Improve and Maintain Existing Infrastructure	Bridge Condition
Baltimore County	13-2001-13	Phoenix Road Bridge No. BC6507 over Gunpowder Falls & NCR Trail	1. Preserves the regional transportation system	Improve and Maintain Existing Infrastructure	Bridge Condition
Baltimore County	13-8901-14	Bridge Inspection Program	1. Preserves the regional transportation system	Improve and Maintain Existing Infrastructure Promote Informed Decision Making	Bridge Condition
Carroll County	14-1101-13	Bixler Church Road Bridge over Big Pipe Creek	1. Preserves the regional transportation system	Improve and Maintain Existing Infrastructure	Bridge Condition
Carroll County	14-1102-13	Shepherds Mill Road Bridge over Little Pipe Creek	1. Preserves the regional transportation system	Improve and Maintain Existing Infrastructure	Bridge Condition
Carroll County	14-1103-13	Stone Chapel Road Bridge over Little Pipe Creek	1. Preserves the regional transportation system	Improve and Maintain Existing Infrastructure	Bridge Condition
Carroll County	14-1601-13	Babylon Road Bridge over Silver Run	1. Preserves the regional transportation system	Improve and Maintain Existing Infrastructure	Bridge Condition
Carroll County	14-1602-13	Gaither Road Bridge over South Branch Patapsco River	1. Preserves the regional transportation system	Improve and Maintain Existing Infrastructure	Bridge Condition

Relating TIP Projects to Long-Range Plan Goals and Performance Measures

Carroll County	14-1603-13	McKinstry's Mill Road Bridge over Sam's Creek	1. Preserves the regional transportation system	Improve and Maintain Existing Infrastructure	Bridge Condition
Carroll County	14-1802-13	Hughes Shop Road Bridge over Bear Branch	1. Preserves the regional transportation system	Improve and Maintain Existing Infrastructure	Bridge Condition
Carroll County	14-9401-14	Bridge Inspection Program	1. Preserves the regional transportation system	Improve and Maintain Existing Infrastructure Promote Informed Decision Making	Bridge Condition
Harford County	15-1402-42	Bata Boulevard Access Road	3. Reduces congestion and prevents congestion in new areas 6. Provides accessibility and/or intermodal connectivity among major destinations 11. Improves pedestrian safety & access	Improve System Safety Increase Mobility Promote Prosperity and Economic Opportunity	Highway Safety System Performance – Congestion
Harford County	15-1001-13	Abingdon Road Bridge #169 over CSX Railroad	1. Preserves the regional transportation system	Improve and Maintain Existing Infrastructure	Bridge Condition
Harford County	15-1101-13	Chestnut Hill Bridge #40	1. Preserves the regional transportation system	Improve and Maintain Existing Infrastructure	Bridge Condition
Harford County	15-1102-13	Phillips Mill Road Bridge #70 over East Branch Tributary	1. Preserves the regional transportation system	Improve and Maintain Existing Infrastructure	Bridge Condition
Harford County	15-1501-13	Stafford Road Bridge #24 over Deer Creek	1. Preserves the regional transportation system	Improve and Maintain Existing Infrastructure	Bridge Condition
Harford County	15-1601-13	Glenville Road Bridge #30	1. Preserves the regional transportation system	Improve and Maintain Existing Infrastructure	Bridge Condition
Harford County	15-2001-13	Grier Nursery Road Bridge #43	1. Preserves the regional transportation system	Improve and Maintain Existing Infrastructure	Bridge Condition
Harford County	15-2002-13	Hookers Mill Road Bridge #13	1. Preserves the regional transportation system	Improve and Maintain Existing Infrastructure	Bridge Condition
Harford County	15-9411-14	Bridge Inspection Program	1. Preserves the regional transportation system	Improve and Maintain Existing Infrastructure Promote Informed Decision Making	Bridge Condition

Relating TIP Projects to Long-Range Plan Goals and Performance Measures

Howard County	16-1403-41	Dorsey Run Road: MD 175 to CSX Railroad Spur	<p>3. Reduces congestion and prevents congestion in new areas</p> <p>6. Provides accessibility and/or intermodal connectivity among major destinations</p> <p>11. Improves pedestrian safety and access</p> <p>12. Improves bicycle safety and access</p>	<p>Increase Mobility</p> <p>Improve Accessibility</p> <p>Promote Prosperity and Economic Opportunity</p>	<p>Highway Safety</p> <p>Pavement Condition</p> <p>System Performance – Congestion</p>
Howard County	16-1405-41	Guilford Road: US 1 to Dorsey Run Road	<p>3. Reduces congestion and prevents congestion in new areas</p> <p>6. Provides accessibility and/or intermodal connectivity among major destinations</p> <p>11. Improves pedestrian safety and access</p>	<p>Increase Mobility</p> <p>Improve Accessibility</p> <p>Promote Prosperity and Economic Opportunity</p>	<p>Highway Safety</p> <p>Pavement Condition</p> <p>System Performance – Congestion</p>
Howard County	16-1407-46	MD 175 at Oakland Mills Rd Interchange	<p>3. Reduces congestion and prevents congestion in new areas</p> <p>6. Provides accessibility and/or intermodal connectivity among major destinations</p> <p>11. Improves pedestrian safety and access</p> <p>12. Improves bicycle safety and access</p>	<p>Increase Mobility</p> <p>Improve Accessibility</p> <p>Promote Prosperity and Economic Opportunity</p>	<p>Highway Safety</p> <p>Pavement Condition</p> <p>System Performance – Congestion</p>
Howard County	16-1410-41	Snowden River Parkway: Broken Land Parkway to Oakland Mills Road	<p>3. Reduces congestion and prevents congestion in new areas</p> <p>6. Provides accessibility and/or intermodal connectivity among major destinations</p> <p>11. Improves pedestrian safety and access</p> <p>12. Improves bicycle safety and access</p>	<p>Increase Mobility</p> <p>Improve Accessibility</p> <p>Promote Prosperity and Economic Opportunity</p>	<p>Highway Safety</p> <p>Pavement Condition</p> <p>System Performance – Congestion</p>
Howard County	16-1901-42	US 29/Broken Land Parkway Interchange and North South Connector Road	<p>3. Reduces congestion and prevents congestion in new areas</p> <p>6. Provides accessibility and/or intermodal connectivity among major destinations</p> <p>11. Improves pedestrian safety and access</p> <p>12. Improves bicycle safety and access</p>	<p>Increase Mobility</p> <p>Improve Accessibility</p> <p>Improve System Security</p> <p>Promote Prosperity and Economic Opportunity</p>	<p>Highway Safety</p> <p>Pavement Condition</p> <p>System Performance – Congestion</p>
Howard County	16-0436-13	Bridge Repairs and Deck Replacement	<p>1. Preserves the regional transportation system</p>	<p>Improve and Maintain Existing Infrastructure</p>	<p>Bridge Condition</p>

Relating TIP Projects to Long-Range Plan Goals and Performance Measures

Howard County	16-2001-67	Bus Rapid Transit	<p>2. Implements emission reduction measures</p> <p>3. Reduces congestion and prevents congestion in new areas</p> <p>6. Provides accessibility and/or intermodal connectivity among major destinations</p> <p>9. Facilitates alternatives to the single occupant vehicle</p>	<p>Conserve and Enhance the Environment</p> <p>Improve Accessibility</p> <p>Increase Mobility</p>	<p>System Performance – Congestion</p> <p>System Performance – Emissions</p>
Maryland Transportation Authority	22-1601-41	I-95 Fort McHenry Tunnel – Moravia Road to Tunnel Improvements	<p>3. Reduces congestion and prevents congestion in new areas</p> <p>7. Provides for connectivity of facilities within the region to facilities outside the region</p> <p>13. Permits timely advancement and continuity of projects</p> <p>14. Enhances transportation safety</p>	<p>Improve and Maintain Existing Infrastructure</p> <p>Increase Mobility</p> <p>Improve System Safety</p> <p>Improve System Security</p>	<p>Highway Safety</p> <p>Pavement Condition</p> <p>Bridge Condition</p> <p>System Performance – Congestion</p> <p>System Performance – Reliability</p> <p>System Performance – Freight</p>
Maryland Transportation Authority	22-1901-45	I-95 Fort McHenry Tunnel – Port Covington Access	<p>3. Reduces congestion and prevents congestion in new areas</p> <p>6. Provides accessibility and/or intermodal connectivity among major destinations</p> <p>7. Provides for connectivity of facilities within the region to facilities outside the region</p> <p>13. Permits timely advancement and continuity of projects</p>	<p>Improve and Maintain Existing Infrastructure</p> <p>Increase Mobility</p> <p>Promote Prosperity and Economic Opportunity</p>	<p>Pavement Condition</p> <p>Bridge Condition</p> <p>System Performance – Congestion</p> <p>System Performance – Reliability</p>
Maryland Transportation Authority	25-1801-41	I-95 Express Toll Lane Northbound Extension	<p>3. Reduces congestion and prevents congestion in new areas</p> <p>7. Provides for connectivity of facilities within the region to facilities outside the region</p> <p>13. Permits timely advancement and continuity of projects</p> <p>14. Enhances transportation safety</p>	<p>Improve and Maintain Existing Infrastructure</p> <p>Increase Mobility</p> <p>Improve System Safety</p> <p>Improve System Security</p>	<p>Highway Safety</p> <p>Pavement Condition</p> <p>Bridge Condition</p> <p>System Performance – Congestion</p> <p>System Performance – Reliability</p> <p>System Performance – Freight</p>
Maryland Port Administration	32-2001-83	Seagirt Marine Terminal Modernization: Berth Improvements	<p>7. Provides for connectivity of facilities within the region to facilities outside the region</p>	<p>Promote Prosperity and Economic Opportunity</p>	<p>System Performance – Freight</p>

Relating TIP Projects to Long-Range Plan Goals and Performance Measures

MTA - Transit	40-1602-05	Urban Transit Systems – Capital Assistance	<ul style="list-style-type: none"> 1. Preserves the regional transportation system 2. Implements emission reduction measures 8. Enhances social, energy, and environmental efforts 9. Facilitates transit and/or alternatives to the single-occupant vehicle 	<ul style="list-style-type: none"> Improve and Maintain Existing Infrastructure Conserve and Enhance the Environment Improve Accessibility 	<ul style="list-style-type: none"> System Performance – Congestion System Performance – Emissions Transit Asset Management Transit Safety
MTA - Transit	40-1802-05	Bus and Paratransit Vehicle Overhaul and Replacement	<ul style="list-style-type: none"> 1. Preserves the regional transportation system 2. Implements emission reduction measures 8. Enhances social, energy, and environmental efforts 9. Facilitates transit and/or alternatives to the single-occupant vehicle 	<ul style="list-style-type: none"> Improve and Maintain Existing Infrastructure Conserve and Enhance the Environment Improve Accessibility 	<ul style="list-style-type: none"> System Performance – Congestion System Performance – Emissions Transit Asset Management Transit Safety
MTA - Transit	40-9502-05	Small Urban Transit Systems – Capital Assistance	<ul style="list-style-type: none"> 1. Preserves the regional transportation system 2. Implements emission reduction measures 8. Enhances social, energy, and environmental efforts 9. Facilitates transit and/or alternatives to the single-occupant vehicle 	<ul style="list-style-type: none"> Improve and Maintain Existing Infrastructure Conserve and Enhance the Environment Improve Accessibility 	<ul style="list-style-type: none"> System Performance – Congestion System Performance – Emissions Transit Asset Management Transit Safety
MTA - Transit	40-9901-01	Ridesharing - Baltimore Region	<ul style="list-style-type: none"> 2. Implements emission reduction measures 8. Enhances social, energy, and environmental efforts 9. Facilitates transit and/or alternatives to the single-occupant vehicle 	<ul style="list-style-type: none"> Conserve and Enhance the Environment Improve Accessibility 	<ul style="list-style-type: none"> System Performance – Congestion System Performance – Emissions
MTA - Transit	40-0104-61	Small Urban Transit Systems – Operating Assistance	<ul style="list-style-type: none"> 2. Implements emission reduction measures 8. Enhances social, energy, and environmental efforts 9. Facilitates transit and/or alternatives to the single-occupant vehicle 	<ul style="list-style-type: none"> Conserve and Enhance the Environment Improve Accessibility 	<ul style="list-style-type: none"> System Performance – Congestion System Performance – Emissions Transit Safety

Relating TIP Projects to Long-Range Plan Goals and Performance Measures

MTA - Transit	40-1203-65	Kirk Bus Facility Replacement - Phase 1 & 2	<ul style="list-style-type: none"> 1. Preserves the regional transportation system 2. Implements emission reduction measures 8. Enhances social, energy, and environmental efforts 	<ul style="list-style-type: none"> Improve and Maintain Existing Infrastructure Conserve and Enhance the Environment 	<ul style="list-style-type: none"> System Performance – Congestion System Performance – Emissions Transit Asset Management
MTA - Transit	40-1204-64	Bus and Rail Preventive Maintenance	<ul style="list-style-type: none"> 1. Preserves the regional transportation system 9. Facilitates transit and/or alternatives to the single-occupant vehicle 	<ul style="list-style-type: none"> Improve and Maintain Existing Infrastructure Improve System Safety Improve System Security 	<ul style="list-style-type: none"> System Performance – Congestion System Performance – Emissions Transit Asset Management Transit Safety
MTA - Transit	40-1502-69	Seniors and Individuals with Disabilities	<ul style="list-style-type: none"> 8. Enhances social, energy, and environmental efforts 9. Facilitates transit and/or alternatives to the single-occupant vehicle 	<ul style="list-style-type: none"> Improve Accessibility 	<ul style="list-style-type: none"> System Performance – Congestion System Performance – Emissions
MTA - Transit	40-1603-61	Urban Transit Systems – Operating Assistance	<ul style="list-style-type: none"> 2. Implements emission reduction measures 8. Enhances social, energy, and environmental efforts 9. Facilitates transit and/or alternatives to the single-occupant vehicle 	<ul style="list-style-type: none"> Conserve and Enhance the Environment Improve Accessibility 	<ul style="list-style-type: none"> System Performance – Congestion System Performance – Emissions Transit Safety
MTA - Transit	40-1801-64	Agencywide System Preservation and Improvement	<ul style="list-style-type: none"> 1. Preserves the regional transportation system 8. Enhances social, energy, and environmental efforts 9. Facilitates transit and/or alternatives to the single-occupant vehicle 	<ul style="list-style-type: none"> Improve and Maintain Existing Infrastructure Improve System Safety 	<ul style="list-style-type: none"> System Performance – Congestion System Performance – Emissions Transit Asset Management
MTA - Transit	40-1803-64	Bus System Preservation and Improvement	<ul style="list-style-type: none"> 1. Preserves the regional transportation system 8. Enhances social, energy, and environmental efforts 9. Facilitates transit and/or alternatives to the single-occupant vehicle 	<ul style="list-style-type: none"> Improve and Maintain Existing Infrastructure Improve Accessibility 	<ul style="list-style-type: none"> System Performance – Congestion System Performance – Emissions Transit Asset Management

Relating TIP Projects to Long-Range Plan Goals and Performance Measures

MTA - Transit	40-1804-63	Metro and Light Rail Rolling Stock Overhauls and Replacement	<ul style="list-style-type: none"> 1. Preserves the regional transportation system 8. Enhances social, energy, and environmental efforts 9. Facilitates transit and/or alternatives to the single-occupant vehicle 	<ul style="list-style-type: none"> Improve and Maintain Existing Infrastructure Improve System Safety Improve System Security Improve Accessibility 	<ul style="list-style-type: none"> System Performance – Congestion System Performance – Emissions Transit Asset Management Transit Safety
MTA - Transit	40-1805-64	Metro and Light Rail System Preservation and Improvement	<ul style="list-style-type: none"> 1. Preserves the regional transportation system 8. Enhances social, energy, and environmental efforts 9. Facilitates transit and/or alternatives to the single-occupant vehicle 	<ul style="list-style-type: none"> Improve and Maintain Existing Infrastructure Improve Accessibility 	<ul style="list-style-type: none"> System Performance – Congestion System Performance – Emissions Transit Asset Management Transit Safety
MTA - Transit	40-9204-61	Rural Transit Systems - Operating Assistance	<ul style="list-style-type: none"> 2. Implements emission reduction measures 8. Enhances social, energy, and environmental efforts 9. Facilitates transit and/or alternatives to the single-occupant vehicle 	<ul style="list-style-type: none"> Conserve and Enhance the Environment Improve Accessibility 	<ul style="list-style-type: none"> System Performance – Congestion System Performance – Emissions Transit Safety
MTA - Commuter Rail	70-1501-53	MARC Rolling Stock Overhauls and Replacement	<ul style="list-style-type: none"> 1. Preserves the regional transportation system 6. Provides accessibility and/or intermodal connectivity among major destinations 9. Facilitates transit and/or alternatives to the single occupant vehicle 	<ul style="list-style-type: none"> Improve and Maintain Existing Infrastructure 	<ul style="list-style-type: none"> System Performance – Congestion System Performance – Emissions Transit Asset Management Transit Safety
MTA - Commuter Rail	70-1502-54	MARC Improvements	<ul style="list-style-type: none"> 1. Preserves the regional transportation system 5. Implements Transportation Alternatives activities 6. Provides accessibility and/or intermodal connectivity among major destinations 9. Facilitates transit and/or alternatives to the single-occupant vehicle 	<ul style="list-style-type: none"> Improve and Maintain Existing Infrastructure Improve Accessibility Improve System Safety Improve System Security 	<ul style="list-style-type: none"> System Performance – Congestion System Performance – Emissions Transit Asset Management Transit Safety

Relating TIP Projects to Long-Range Plan Goals and Performance Measures

MTA - Commuter Rail	70-1503-55	MARC Facilities	<ul style="list-style-type: none"> 1. Preserves the regional transportation system 8. Enhances social, energy, and environmental efforts 9. Facilitates transit and/or alternatives to the single-occupant vehicle 	<ul style="list-style-type: none"> Improve and Maintain Existing Infrastructure Conserve and Enhance the Environment Improve Accessibility Improve System Safety Improve System Security 	<ul style="list-style-type: none"> System Performance – Congestion System Performance – Emissions Transit Asset Management Transit Safety
Office of the Secretary	90-1401-39	State Safety Oversight	<ul style="list-style-type: none"> 14. Enhances transportation safety 	<ul style="list-style-type: none"> Improve System Safety 	<ul style="list-style-type: none"> Transit Safety
Office of the Secretary	90-1901-99	Baltimore-Washington Superconducting Maglev (SCMAGLEV) project	<ul style="list-style-type: none"> 2. Implements emission reduction measures 6. Provides accessibility and/or intermodal connectivity among major destinations 7. Provides for connectivity of facilities within the region to facilities outside the region 9. Facilitates transit and/or alternatives to the single-occupant vehicle 	<ul style="list-style-type: none"> Conserve and Enhance the Environment Improve Accessibility Improve System Safety Increase Mobility Promote Prosperity and Economic Opportunity 	<ul style="list-style-type: none"> System Performance – Congestion System Performance – Emissions Transit Safety
Office of the Secretary	92-1401-83	Port of Baltimore Enhancements	<ul style="list-style-type: none"> 6. Provides accessibility and/or intermodal connectivity among major destinations 7. Provides for connectivity of facilities within the region to facilities outside the region 8. Enhances social, energy, and environmental efforts 	<ul style="list-style-type: none"> Promote Prosperity and Economic Opportunity 	<ul style="list-style-type: none"> System Performance – Freight
SHA: Areawide	60-9903-29	Areawide Transportation Alternatives Projects	<ul style="list-style-type: none"> 1. Preserves the regional transportation system 5. Implements Transportation Alternatives activities 8. Enhances social, energy, and environmental efforts 11. Improves pedestrian safety and access 12. Improves bicycle safety and access 	<ul style="list-style-type: none"> Improve and Maintain Existing Infrastructure Improve Accessibility Improve System Safety Conserve and Enhance the Environment 	<ul style="list-style-type: none"> Highway Safety Pavement Condition System Performance – Congestion System Performance – Emissions

Relating TIP Projects to Long-Range Plan Goals and Performance Measures

SHA: Areawide	60-9506-38	Areawide Environmental Projects	5. Implements Transportation Alternatives activities 8. Enhances social, energy, and environmental efforts	Improve and Maintain Existing Infrastructure Conserve and Enhance the Environment	Highway Safety System Performance – Congestion System Performance – Emissions
SHA: Areawide	60-9504-04	Areawide Congestion Management	2. Implements emission reduction measures 8. Enhances social, energy, and environmental efforts 10. Implements transportation system management strategies	Increase Mobility Conserve and Enhance the Environment Promote Informed Decision Making	System Performance – Congestion System Performance – Emissions System Performance – Reliability System Performance – Freight
SHA: Areawide	60-9310-13	Areawide Bridge Replacement And Rehabilitation	1. Preserves the regional transportation system	Improve and Maintain Existing Infrastructure	Bridge Condition
SHA: Areawide	60-9501-11	Areawide Resurfacing And Rehabilitation	1. Preserves the regional transportation system	Improve and Maintain Existing Infrastructure	Pavement Condition
SHA:Areawide	60-9508-19	Areawide Safety And Spot Improvements	1. Preserves the regional transportation system 11. Improves pedestrian safety and access 12. Improves bicycle safety and access 14. Enhances transportation safety	Improve and Maintain Existing Infrastructure Improve Accessibility Improve System Safety	Highway Safety Pavement Condition Bridge Condition System Performance – Congestion System Performance – Emissions
SHA:Areawide	60-9511-19	Areawide Urban Reconstruction	1. Preserves the regional transportation system 11. Improves pedestrian safety and access 12. Improves bicycle safety and access	Improve and Maintain Existing Infrastructure Improve Accessibility Improve System Safety	Highway Safety Pavement Condition
SHA:Areawide	60-0702-99	Morgan State University Transportation Research Program	8. Enhances social, energy, and environmental efforts 13. Permits timely advancement and continuity of projects	Foster Participation and Cooperation Among Stakeholders ⁹ Promote Informed Decision Making	No performance measures specifically addressing transportation research programs

⁹ Enable all interested and affected parties to participate and cooperate to find workable solutions.

Relating TIP Projects to Long-Range Plan Goals and Performance Measures

SHA: Anne Arundel County	61-1403-41	MD 198: MD 295 to MD 32	3. Reduces congestion and prevents congestion in new areas 6. Provides accessibility and/or intermodal connectivity among major destinations 12. Improve bicycle safety and access	Improve and Maintain Existing Infrastructure Increase Mobility Promote Prosperity and Economic Opportunity	Highway Safety Pavement Condition System Performance – Congestion System Performance – Reliability
SHA: Anne Arundel County	61-1404-41	US 50: MD 70 to MD 2	3. Reduces congestion and prevents congestion in new areas	Increase Mobility	System Performance – Congestion System Performance – Reliability
SHA: Anne Arundel County	61-1601-41	MD 175: Disney Road to Reece Road	3. Reduces congestion and prevents congestion in new areas 6. Provides accessibility and/or intermodal connectivity among major destinations 12. Improve bicycle safety and access	Improve and Maintain Existing Infrastructure Increase Mobility Promote Prosperity and Economic Opportunity	Highway Safety Pavement Condition System Performance – Congestion System Performance – Reliability
SHA: Anne Arundel County	61-1701-41	MD 175: National Business Parkway to McCarron Court	3. Reduces congestion and prevents congestion in new areas 6. Provides accessibility and/or intermodal connectivity among major destinations 12. Improve bicycle safety and access	Improve and Maintain Existing Infrastructure Increase Mobility Promote Prosperity and Economic Opportunity	Highway Safety Pavement Condition System Performance – Congestion System Performance – Reliability
SHA: Baltimore County	63-1801-38	I-695 at Cromwell Bridge Road – Drainage Improvement	1. Preserves the regional transportation system 8. Enhances social, energy, and environmental efforts	Improve and Maintain Existing Infrastructure Conserve and Enhance the Environment	Pavement Condition
SHA: Baltimore County	63-0802-41	MD 140: Painters Mill Road to Owings Mills Boulevard - Phase 2	3. Reduces congestion and prevents congestion in new areas 11. Improves pedestrian safety and access	Increase Mobility Improve Accessibility	Highway Safety Pavement Condition System Performance – Congestion System Performance – Reliability
SHA: Baltimore County	63-0803-46	I-795: Dolfield Boulevard Interchange	3. Reduces congestion and prevents congestion in new areas	Increase Mobility	Pavement Condition System Performance – Congestion System Performance – Reliability
SHA: Baltimore County	63-1203-41	MD 140: Garrison View Road to Painters Mill Road - Phase 1	3. Reduces congestion and prevents congestion in new areas 11. Improves pedestrian safety and access	Increase Mobility Improve Accessibility	Highway Safety Pavement Condition System Performance – Congestion System Performance – Reliability

Relating TIP Projects to Long-Range Plan Goals and Performance Measures					
SHA: Baltimore County	63-1601-41	I-695: US 40 to MD 144	3. Reduces congestion and prevents congestion in new areas	Increase Mobility Improve System Safety	Highway Safety Pavement Condition System Performance – Congestion System Performance – Reliability System Performance – Freight
SHA: Baltimore County	63-1602-43	I-695: Bridge Replacements at Benson Ave and US 1	3. Reduces congestion and prevents congestion in new areas 12. Improves bicycle safety and access	Improve and Maintain Existing Infrastructure Increase Mobility Improve Accessibility	Highway Safety Bridge Condition Pavement Condition System Performance – Congestion System Performance – Reliability System Performance – Freight
SHA: Baltimore County	63-1802-41	I-695: I-70 to MD 43	1. Preserves the regional transportation system 3. Reduces congestion and prevents congestion in new areas 10. Implements transportation system management strategies 14. Enhances transportation safety	Increase Mobility Improve System Safety	Highway Safety Bridge Condition Pavement Condition System Performance – Congestion System Performance – Reliability System Performance – Freight
SHA: Baltimore County	63-1701-13	I-83: Bridge Replacement over Padonia Road	1. Preserves the regional transportation system	Improve and Maintain Existing Infrastructure	Bridge Condition
SHA: Baltimore County	63-1703-13	MD 137: Bridge Replacement over I-83	1. Preserves the regional transportation system	Improve and Maintain Existing Infrastructure	Bridge Condition
SHA: Baltimore County	63-1704-13	US 1: Bridge Replacement over CSX	1. Preserves the regional transportation system	Improve and Maintain Existing Infrastructure	Bridge Condition
SHA: Baltimore County	63-1706-13	US 40: Bridge Replacements over Little & Big Gunpowder Falls	1. Preserves the regional transportation system	Improve and Maintain Existing Infrastructure Improve System Safety	Bridge Condition
SHA: Baltimore County	63-1707-11	MD 45: Padonia Rd to Wight Ave	1. Preserves the regional transportation system 11. Improves pedestrian safety and access 14. Enhances transportation safety	Improve and Maintain Existing Infrastructure Improve System Safety	Highway Safety Pavement Condition

Relating TIP Projects to Long-Range Plan Goals and Performance Measures

SHA: Baltimore County	63-2001-13	MD 151/MD 151B: Bridge Replacements	1. Preserves the regional transportation system	Improve and Maintain Existing Infrastructure Promote Prosperity and Economic Opportunity	Bridge Condition
SHA: Carroll County	64-1401-19	MD 30 Business: North Woods Trail to CSX Railroad (Hampstead Community Safety & Enhancement)	1. Preserves the regional transportation system 5. Implements Transportation Alternatives activities 11. Improves pedestrian safety and access	Improve and Maintain Existing Infrastructure Improve Accessibility Improve System Safety	Highway Safety Pavement Condition
SHA: Carroll County	64-1701-13	MD 86: Bridge Replacement over Gunpowder Falls	1. Preserves the regional transportation system	Improve and Maintain Existing Infrastructure	Bridge Condition
SHA: Carroll County	64-1702-13	MD 496: Bridge Replacement over Big Pipe Creek	1. Preserves the regional transportation system	Improve and Maintain Existing Infrastructure	Bridge Condition
SHA: Harford County	65-1402-41	US 40: MD 7 & MD 159 Intersection Reconstruction - Phase 2	3. Reduces congestion and prevents congestion in new areas 6. Provides accessibility and/or intermodal connectivity among major destinations	Improve and Maintain Existing Infrastructure Increase Mobility Promote Prosperity and Economic Opportunity	Highway Safety Pavement Condition System Performance – Congestion System Performance – Reliability
SHA: Harford County	65-1601-12	MD 24: South of Stirrup Run Culvert to Deer Creek Bridge, Section G	1. Preserves the regional transportation system	Improve and Maintain Existing Infrastructure Improve System Safety	Highway Safety Pavement Condition
SHA: Howard County	66-1406-41	US 29: Middle Patuxent River to Seneca Drive - Phase 2	3. Reduces congestion and prevents congestion in new areas 14. Enhances transportation safety	Increase Mobility Improve System Safety	Highway Safety Pavement Condition System Performance – Congestion System Performance – Reliability
SHA: Howard County	66-1602-41	MD 32: MD 108 to Linden Church Road	3. Reduces congestion and prevents congestion in new areas 14. Enhances transportation safety	Increase Mobility Improve System Safety Promote Prosperity and Economic Opportunity	Highway Safety Pavement Condition System Performance – Congestion System Performance – Reliability

Relating TIP Projects to Long-Range Plan Goals and Performance Measures

SHA: Howard County	66-1703-41	MD 32: Linden Church Road to I-70, Capacity & Safety Improvements	3. Reduces congestion and prevents congestion in new areas 14. Enhances transportation safety	Increase Mobility Improve System Safety Promote Prosperity and Economic Opportunity	Highway Safety Pavement Condition Bridge Condition System Performance – Congestion System Performance – Reliability
SHA: Howard County	66-1801-41	I-95: Active Traffic Management	3. Reduces congestion and prevents congestion in new areas 10. Implements transportation system management strategies 14. Enhances transportation safety	Increase Mobility Improve System Safety	Highway Safety System Performance – Congestion System Performance – Reliability System Performance – Freight

Long-Range Plan Performance Measures and Targets

Highway Safety	<ul style="list-style-type: none"> • Number of fatalities • Rate of fatalities per 100 million vehicle miles traveled (VMT) • Number of serious injuries • Rate of serious injuries per 100 million VMT • Number of non-motorized fatalities + non-motorized serious injuries – pedestrian and bicycle
Pavement Condition	<ul style="list-style-type: none"> • % of pavement on the interstate system in good condition • % of pavement on the interstate system in poor condition • % of pavement on the National Highway System (NHS) (excluding the interstate system) in good condition • % of pavement on the NHS (excluding the interstate system) in poor condition
Bridge Condition	<ul style="list-style-type: none"> • % of NHS bridges by deck area classified as in good condition • % of NHS bridges by deck area classified as in poor condition
System Performance – Congestion	<ul style="list-style-type: none"> • Annual hours of peak-hour excessive delay (PHED) per capita • % of non-SOV (single-occupancy vehicle) travel
System Performance – Emissions	<ul style="list-style-type: none"> • Total emissions reductions: 2-year and 4-year cumulative reported emission reductions of each criteria pollutant and applicable precursors (PM2.5, PM10, CO, VOC, and NOx) for which the area is designated nonattainment or maintenance [<i>Note: the BRTB region is in nonattainment only with respect to ozone</i>]
System Performance – Travel Time Reliability	<ul style="list-style-type: none"> • % of person-miles traveled on the interstate system that are reliable • % of person-miles traveled on the non-interstate NHS that are reliable
System Performance – Freight	<ul style="list-style-type: none"> • % of interstate system mileage providing for reliable truck travel times (Truck Travel Time Reliability Index – TTTR)

Long-Range Plan Performance Measures and Targets

Transit Asset Management	<ul style="list-style-type: none">• % of non-revenue service vehicles that have either met or exceeded their Useful Life Benchmarks (ULBs)• % of revenue vehicles within an asset class that have either met or exceeded their ULBs• Infrastructure (rail fixed-guideway, track, signals, systems): % of track segments with performance restrictions• % of facilities within an asset class rated below condition 3 on the Transit Economic Requirements Model (TERM) scale. Condition 3 on the TERM scale is Adequate.
Transit Safety	<ul style="list-style-type: none">• Number of reportable fatalities and rate per total vehicle revenue miles• Number of reportable injuries and rate per total vehicle revenue miles• Number of reportable safety events and rate per total vehicle revenue miles• Mean distance between major mechanical failures



Larry Hogan
Governor
Boyd K. Rutherford
Lt. Governor
Pete K. Rahn
Secretary

April 16, 2019

Mr. Todd Lang
Director
Transportation Planning
Baltimore Metropolitan Council
1500 Whetstone Way, Suite 300
Baltimore MD 21230

Dear Mr. Lang:

The Baltimore Regional Transportation Board's (BRTB) Fiscal Year 2020-2023 Transportation Improvement Program (TIP) contains all of the projects with which the Maryland Department of Transportation (MDOT) plans to implement in the Baltimore Region. MDOT is submitting the accompanying documentation to demonstrate the financial capacity and financial reasonableness for the funding of those projects that MDOT has identified in the BRTB's TIP. The attached documentation includes a statement of the Submission of Projects, the Operating and Capital Program Summary from MDOT's Consolidated Transportation Program, and the Financial Forecast developed for the BRTB's Long Transportation Range Plan.

At this time, it is expected that all of the programmed projects have funding available for implementation. The statement of Submission of Projects also addresses the fiscal reasonableness of the program and flexibility in the use of federal funds.

Should you need any further information, please contact me at 410-865-1284 or via email at tbyrne@mdot.state.md.us.

Sincerely,

Tyson Byrne
Manager
Regional Planning
Office of Planning and Capital Programming

Enclosures

MARYLAND DEPARTMENT OF TRANSPORTATION

Submission of Projects for inclusion in the Baltimore Region Transportation Improvement Program FY 2020-2023 April 2019

Fiscal Reasonableness of the MDOT Program

The following table entitled "*DEPARTMENT OF TRANSPORTATION OPERATING AND CAPITAL PROGRAM SUMMARY*" provides a summary of the Maryland Department of Transportation's (MDOT) Operating and Capital Program. All MDOT projects incorporated into the BRTB FY 2020-2023 Transportation Improvement Program (TIP) come from the current legislatively approved MDOT Consolidated Transportation Program (CTP). The accompanying table demonstrates that the MDOT CTP program is fiscally reasonable, since programmed outlays do not exceed projected available revenues for the program period.

Exercising Flexibility in the use of Federal Funds

The MDOT, in its submission to the Baltimore Region TIP, is exercising the funding flexibility provisions possible under the federal Fixing America's Surface Transportation Act. MDOT is responsible for a mix of transportation facilities throughout the state that includes highways, transit, port, aviation, as well as bicycle and pedestrian trail projects. This structure assures that intermodal opportunities are considered during all phases of project development.

All MDOT activities are funded from the Maryland Transportation Trust Fund (TTF), which is a dedicated source of funding that can only be used for transportation purposes. This fund combines revenue from transportation user fees, licensing and registration fees, motor fuel taxes, bond proceeds, and federal grants into a source that permits maximum flexibility in addressing intermodal transportation needs. Therefore, there are no administrative barriers to programming TTF money on whatever mode of transportation project best meets a particular need. MDOT's organizational structure and TTF enable the consideration of all possible applications of federal funding categories.

**DEPARTMENT OF TRANSPORTATION
OPERATING AND CAPITAL PROGRAM SUMMARY
BY FISCAL YEAR
(\$ MILLIONS)**

	CURRENT YEAR <u>2019</u>	BUDGET YEAR <u>2020</u>	Planning Years				SIX - YEAR TOTAL
			<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	
<u>CAPITAL PROGRAM</u>							
The Secretary's Office ^{AD}	118.2	57.0	27.7	13.6	12.7	15.2	244.4
Motor Vehicle Administration	32.4	43.9	22.7	14.5	14.9	15.0	143.4
Maryland Aviation Administration ^D	165.3	212.4	97.4	67.0	39.6	62.8	644.5
Maryland Port Administration	117.6	153.4	219.6	157.7	103.3	90.9	842.5
Maryland Transit Administration ^D	679.8	713.4	632.6	619.7	337.9	326.6	3,310.0
Washington Metropolitan Area Transit ^{ACD}	255.8	450.0	459.9	464.7	469.7	474.8	2,574.9
State Highway Administration ^B	1,494.1	1,688.7	1,514.6	1,388.7	1,311.6	1,280.8	8,678.5
TOTAL CAPITAL	2,863.2	3,318.8	2,974.5	2,725.9	2,289.7	2,266.1	16,438.2
Special Funds	1,572.2	1,681.8	1,454.7	1,418.2	1,248.8	1,260.9	8,636.6
Federal Funds	1,049.4	1,210.1	1,165.0	923.5	759.9	737.4	5,845.3
Other Funds ^F	241.5	426.9	354.8	384.4	281.1	267.7	1,956.4
<u>OPERATING PROGRAM</u>							
The Secretary's Office ^A	93.1	100.9	101.0	106.0	109.0	112.0	622.0
Motor Vehicle Administration	204.7	207.2	210.0	220.0	227.0	234.0	1,302.9
Maryland Aviation Administration	201.3	205.1	208.0	218.0	225.0	232.0	1,289.4
Maryland Port Administration	50.3	50.8	52.0	54.0	56.0	57.0	320.1
Maryland Transit Administration	849.4	886.4	925.0	966.0	1,079.0	1,142.0	5,847.8
Washington Metropolitan Area Transit	388.9	392.9	405.0	417.0	430.0	443.0	2,476.8
State Highway Administration	293.8	307.8	313.0	329.0	338.0	347.0	1,928.6
TOTAL OPERATING	2,081.5	2,151.1	2,214.0	2,310.0	2,464.0	2,567.0	13,787.6
Special Funds	1,983.1	2,043.1	2,109.0	2,205.0	2,359.0	2,462.0	13,161.2
Federal Funds	98.4	108.0	105.0	105.0	105.0	105.0	626.4
Other Funds	-	-	-	-	-	-	-

	CURRENT	BUDGET	Planning Years				SIX - YEAR TOTAL
	YEAR 2019	YEAR 2020	2021	2022	2023	2024	
<u>DISTRIBUTION OF SHARED REVENUES</u>							
County and Municipal Program	178.1	-	-	-	-	-	178.1
County and Municipal Capital	71.8	71.8	71.8	71.8	71.8	77.8	436.8
TOTAL DISTRIBUTION OF SHARED REVENUES	249.9	71.8	71.8	71.8	71.8	77.8	614.9
Special Funds	184.1	6.0	5.9	5.9	5.9	5.3	213.1
Federal Funds	65.8	65.8	65.9	65.9	65.9	72.5	401.8
<u>DEBT SERVICE REQUIREMENTS</u>							
	-	-	-	-	-	-	-
Special Funds	333.8	354.8	421.0	469.0	515.0	486.0	2,579.6
<u>DEPARTMENT TOTAL</u>	<u>5,194.6</u>	<u>5,541.7</u>	<u>5,260.3</u>	<u>5,107.7</u>	<u>4,825.5</u>	<u>4,910.9</u>	<u>30,840.7</u>
Special Funds	4,073.2	4,085.7	3,990.6	4,098.1	4,128.7	4,214.2	24,590.5
Federal Funds	1,213.6	1,383.9	1,335.9	1,094.4	930.8	914.9	6,873.5
Other Funds	241.5	426.9	354.8	384.4	281.1	267.7	1,956.4

^A - WMATA capital and operating grants in the Secretary's Office budget are shown for informational purposes.

^B - Includes County and Municipality transfer funds from the federal government.

^C - Capital Program WMATA Grants line federal funds received by WMATA directly.

^D - "Other" funds are included in the totals for TSO, MAA, MTA, and WMATA.

^E - Debt Service for County Bonds is not included in FY 21-24.

^F - Funds not received through the Trust Fund. Includes from Passenger and Facility Charges (PFC), Maryland Transportation Authority (MdTA) funds, Certificates of Participation (COPS), County participation and federal funds received by WMATA directly.

**Financially Constrained Long Range Plan
Year 2017 to 2045 Update
For The
Baltimore Metropolitan Area**

**Prepared by
Maryland Department of Transportation**

August 2017

DOCUMENTATION OF ASSUMPTIONS

Date: August 2017
Subject: Methodology and Assumptions used to derive the 2017 – 2045 Constrained Long-range Transportation Plan

Total Program Revenues/Expenditures (operating and capital):

- FY 1981 to FY 2016 figures are actual expenditures from historical records, FY 2017 to FY 2022 are from the FY 2017 Transportation Trust Fund Financial Plan and Consolidated Transportation Plan (CTP).
- The federal funds received directly by WMATA are not included in this exercise.
- FY 2023 to FY 2045 projections of state funds use a historical annual average growth rate of 5.3%. Federal fund projections for the same period are based on an average growth rate of 3.0% for Highway and Transit program funds.

Operating Expenditures:

- FY 1981 to FY 2016 figures are actual expenditures from historical records. Expenditures for FY 2017 to FY 2022 are the operating budget projections contained in the current Trust Fund Forecast.
- FY 2023 to FY 2045 projections are derived by inflating the previous year with an estimate for the percentage change in CPI-U plus 2%. The Consumer Price Index is a generally accepted measure of inflation. The projected annual change in index figures is based on information received from two economic forecasting firms. Two percent (2%) is added to the forecasted rate to account for the additional operating costs associated with new capital expansions.

Capital - Systems Preservation:

- Department records were used to determine the split between systems preservation and expansion for FY 1981 to FY 2016. Amounts for FY 2017 to FY 2022 represent the current version of the capital program.
- For the period FY 2023 – FY 2045, an annual growth rate of 2.0% is assumed for systems preservation projects, not to exceed 70% of the total program.

Capital - Expansion:

- Expenditures for capital expansion were derived by subtracting both operating and systems preservation expenditures from the total program expenditures for each year.

Baltimore Area – Percentage of Capital Expansion:

- Total capital figures from FY 1981 to present were split into surface and non-surface. Surface included highway (SHA) and transit (MTA, MARC, and WMATA) costs. Non-surface included the Maryland Port, Aviation, and Motor Vehicle Administrations and the Secretary's Office expenses.
- The surface / non-surface data and the system preservation / expansion data were combined, analyzed, and evaluated to produce estimates of the percentage of Maryland expansion associated with surface transportation for the various time periods.
- Surface capital in the Baltimore Region was derived by adding the expenditures for all of MTA (excluding LOTS and non-Baltimore region Park and Ride expenditures), one-half of MARC and that portion of SHA that pertained to the region (Anne Arundel, Baltimore, Carroll, Harford, and Howard counties).
- These Baltimore specific figures were used to derive estimates of Baltimore surface expansion. These figures, when used with the above-mentioned projections, produce the estimates shown for Baltimore as a percent of Total Surface Expansion and as a percent of Total Maryland Expansion.

MDOT Operating & Capital Expenditures - Statewide
History, Program & Forecast

(Millions of Dollars)

Fiscal Year	Operating	Systems Preservation	Operating & Systems Pres.	Expansion	Statewide Total
1991	266	111	376	247	623
1992	267	136	403	236	639
1993	323	164	486	264	750
1994	352	167	519	246	765
1995	365	204	569	310	879
1996	426	234	662	403	1,065
1997	441	264	705	506	1,211
1998	478	260	738	616	1,353
1999	506	227	735	677	1,412
2000	551	276	827	760	1,587
2001	591	266	857	773	1,630
2002	677	187	864	652	1,516
2003	636	254	890	416	1,306
2004	689	276	965	393	1,358
2005	709	400	1,109	407	1,516
2006	784	391	1,175	466	1,641
2007	776	417	1,193	593	1,786
2008	808	461	1,269	411	1,680
2009	888	516	1,403	490	1,893
2010	913	476	1,389	456	1,845
2011	979	676	1,655	632	2,287
2012	1,045	612	1,657	772	2,429
2013	1,166	620	1,786	772	2,558
2014	1,176	619	1,797	762	2,559
2015	1,237	714	1,951	780	2,731
2016	1,303	729	2,032	763	2,795
2017	1,306	724	2,030	701	2,731
2018	1,406	766	2,172	680	2,852
2019	1,493	974	2,467	366	2,833
2020	1,603	967	2,570	276	2,846
2021	1,646	966	2,612	376	2,988
2022	1,672	1,066	2,738	366	3,104
2023	1,636	1,164	2,800	416	3,216
2024	1,643	1,324	2,967	477	3,444
2025	1,959	1,436	3,395	603	3,998
2026	1,917	1,369	3,286	606	3,892
2027	1,947	1,660	3,607	1,123	4,730
2028	2,030	1,660	3,690	1,071	4,761
2029	2,060	1,667	3,727	1,066	4,793
2030	2,131	1,476	3,606	687	4,293
2031	2,161	1,391	3,552	463	4,066
2032	2,264	1,449	3,713	400	4,113
2033	2,464	1,264	3,728	566	4,294
2034	2,692	1,269	3,961	640	4,601
2035	2,866	1,332	4,198	571	4,769
2036	2,811	1,406	4,217	603	4,820
2037	2,924	1,490	4,414	636	5,050
2038	3,043	1,676	4,719	676	5,395
2039	3,176	1,661	4,837	712	5,549
2040	3,313	1,666	4,979	666	5,645
2041	3,451	1,732	5,183	614	5,797
2042	3,697	1,766	5,463	1,030	6,493
2043	3,764	1,862	5,626	1,146	6,772
2044	3,911	1,936	5,847	1,270	7,117
2045	4,079	1,974	6,053	1,416	7,469
2046	4,267	1,912	6,179	1,669	7,848
2047	4,433	1,950	6,383	1,721	8,104
2048	4,633	1,989	6,622	1,679	8,301
2049	4,837	2,029	6,866	2,062	8,928
2050	5,049	2,070	7,119	2,242	9,361
2051	5,266	2,111	7,377	2,444	9,821
2052	5,476	2,163	7,639	2,667	10,306
2053	5,717	2,166	7,883	2,889	10,772
2054	5,963	2,240	8,203	3,131	11,334
2055	6,228	2,265	8,493	3,383	11,876

BALTIMORE METROPOLITAN AREA Percentage of Capital Expansion

Surface Enhancement % of Maryland Enhancement:	
1981 - 2016	86.4%



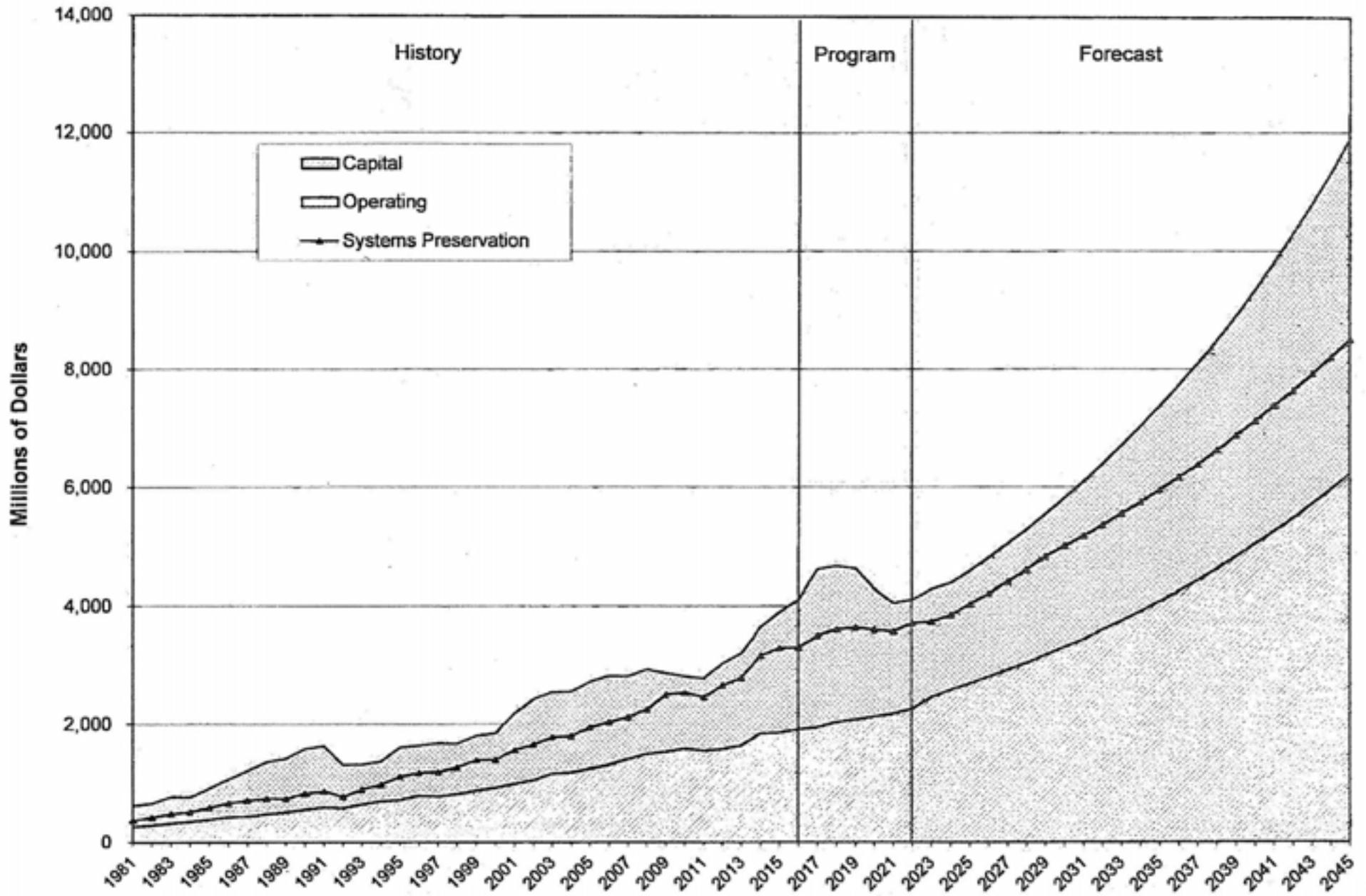
Baltimore Enhancement % of Surface Enhancement:	
1981 - 2016	40.3%



Fiscal Year	Statewide Expansion Funds	Surface Percentage	Private Funds	Total Surface Available	Baltimore Percentage	Total Balto. Expansion Funds
2014	477					155
2015	603					192
2016	806					282
2017	1,123					90
2018	1,071					90
2019	1,005					107
2020	687					80
2021	483					83
2022	400					69
2023	550	475	23	498	201	201
2024	540	467	23	490	197	197
2025	571	493	23	516	208	208
2026	603	521	23	544	219	219
2027	639	552	23	575	232	232
2028	676	584	24	608	245	245
2029	712	615	24	639	258	258
2030	805	696	24	720	290	290
2031	914	790	24	814	328	328
2032	1,030	890	24	914	368	368
2033	1,148	990	25	1,015	409	409
2034	1,279	1,105	25	1,130	455	455
2035	1,416	1,224	25	1,249	503	503
2036	1,559	1,347	25	1,372	553	553
2037	1,721	1,487	25	1,512	609	609
2038	1,879	1,624	26	1,650	665	665
2039	2,052	1,773	26	1,799	725	725
2040	2,242	1,938	26	1,964	791	791
2041	2,444	2,112	26	2,138	861	861
2042	2,667	2,305	26	2,331	939	939
2043	2,889	2,497	27	2,524	1,017	1,017
2044	3,131	2,706	27	2,733	1,101	1,101
2045	3,383	2,924	27	2,951	1,189	1,189
Total '23-'46	34,848	30,116	571	30,687	12,363	12,363
Total '14-'45	41,503					13,511

MDOT - Office of Finance
18-Aug-17

MDOT Operating & Capital Expenditures - Statewide History, Program & Forecast





M A R Y L A N D
County Executive Stewart L. Pittman

Office of Transportation
Anne Arundel County Government
2664 Riva Road, 3rd Floor - MS-6600
Annapolis, MD 21401
410-222-7440

Ramond Robinson
Director of Transportation

April 16, 2019

Mr. Todd Lang
Baltimore Regional Transportation Planning Director
1500 Whetstone Way, Suite 300
Baltimore, MD 21230

Dear Mr. Lang,

Please accept this letter as documentation for the financial capacity and financial reasonableness indicated for funding by Anne Arundel County for the 2020-2023 Transportation Improvement Program (TIP).

Anne Arundel County, subject to appropriation by the County Council, provides the necessary matching operating and capital funds for the Federal transportation related programs in Anne Arundel County. Traditionally, the sources of these funds are an appropriation from the General Revenue of Anne Arundel County. The General Revenue funds provide matching funds to Federal and State funds, which support the Federal Aid Bridge Program. Anne Arundel County funds provide resources to plan and construct highways, sidewalks, and other various transportation facilities.

Documentation and approval of the local funds are contained in Anne Arundel County's Operating and Capital Budgets. Matching funds are appropriated in anticipation of Federal and/or State funds provided through direct earmarks or allocations by mode of the Maryland Department of Transportation. Given these facts, it is our belief that the Anne Arundel County 2020-2023 TIP projects are financially reasonable.

If you should have any questions, please contact me at 410-222-3294.

Sincerely,



Ramond Robinson, Director

Cc: Pete Baron, Director, Government Relations
Brian Ulrich, Planning Administrator
Crystal McGill-Belk, Transportation Administrator



CITY OF BALTIMORE

Bernard C. "Jack" Young, Ex Officio, Mayor
100 N. Holliday Street, Room 250
Baltimore, Maryland 21202



DEPARTMENT OF TRANSPORTATION

Michelle Pourciau, Director
417 E. Fayette Street, 5th Floor
Baltimore, Maryland 21202

April 11, 2019

Mr. Todd R. Lang, Director
Transportation Planning Director
Baltimore Metropolitan Council
1500 Whestone Way, Suite 300
Baltimore, Maryland 21230

Dear Mr. Lang,

This letter provides the "Statement of Financial Reasonableness" for Baltimore City's Transportation Improvement Program (TIP) funding request for FY 2020 to FY 2023.

The FY 2020-2025 Six year Capital Improvement Program was approved by the Baltimore City Planning Commission in March, 2019, and by the Baltimore City Board of Finance on April 2, 2019. The capital budget for FY 2020 - 2025 provides sufficient local matching funds for federal-funded transportation-related projects, as well as for local projects, all of which are contained in the FY 2020 - 2023 Baltimore City TIP. That is, prior appropriations combined with projected Highway User Revenue / MDOT County Transportation Revenue Bond funds will be sufficient to cover Baltimore City's matching share for federal-aid requested through the Baltimore Metropolitan Council.

Please feel free to contact Mr. Muhammed Khalid, Chief Engineer, at (410) 396-6802 or via email at Muhammed.Khalid@baltimorecity.gov should you have any questions or concerns regarding the information provided herein.

Respectfully,


Michelle Pourciau

Director

Cc: Mr. Muhammed Khalid, Deputy Director/Chief Engineer, BCDOT
Mr. Theo Ngongang, Deputy Director/Chief of Policy and Planning, BCDOT
Mr. Bimal Devkota, Chief of Transportation Engineering & Construction, BCDOT
Mr. Dharendra Sinha, Chief of Fiscal Services, BCDOT



JOHN A. OLSZEWSKI, JR.
County Executive

STEVEN A. WALSH, Director
Department of Public Works

March 22, 2019

Mr. Todd Lang, Director
Transportation Planning
Baltimore Metropolitan Council
1500 Whetstone Way, Suite 300
Baltimore, MD 21230

Re: 2020-2023 Transportation Improvement Program
Baltimore County Financial Commitment

Dear Mr. Lang:

Baltimore County's portion of the 2020-2023 Transportation Improvement Program (TIP) is financially feasible. Baltimore County General Obligation Bonds and General Funds constitute the local matching funds for the County's TIP projects. A summary of the approved operating budget and sources of revenue can be found on the County's website at: https://www.baltimorecountymd.gov/Agencies/executive/temp_archive/budget-message/budgetmessageFY19/BudgetDetailsfy19.pdf. As stated on the website, the General Obligation Bonds are backed by the Debt Service category and General Funds are included in the Capital-Pay-As-You-Go category.

Should you have any questions please contact Mr. Kevin Saboleik of our Design Division at telephone 410-887-3737 or via email at ksaboleik@baltimorecountymd.gov.

Sincerely,

Steven A. Walsh, P.E., Director
Department of Public Works

SAW: TK:JP:KJS
6/5

cc: Greg Carski-Balt. Co. Traffic

5:00 PM Baltimore County Engineering Design Services/Financial Aid TIP County Financial Commitment_FY2019.docx

Lynda D. Eisenberg
Director
Department of Planning

410-386-5145, fax 410-386-2836
Toll-free 1-888-302-8978
MD Relay service 7-1-1/800-735-2258



Carroll County Government
225 North Center Street
Westminster, Maryland 21157
email: ccplanning@carrollcountymd.gov

April 11, 2019

Todd Lang, Director of Transportation Planning
Baltimore Metropolitan Council
Offices at McHenry Row
1500 Whetstone Way, Suite 300
Baltimore, MD 21230

**Re: Letter of Financial Commitment for the FY 2020-2023 Transportation
Improvement Program (TIP)**

Dear Mr. Lang,

Carroll County's list of projects for the FY 2020-2023 TIP comprises eight (8) projects to replace or rehabilitate County-maintained bridges and a bridge inspection program for County-owned and maintained structures. Two (2) of the bridge projects, and the bridge inspection program, are included as capital projects in both the current FY 2019-2024 CIP and the proposed FY 2020-2025 CIP. Four (4) bridge projects are included as capital projects in the proposed CIP. Finally, all eight (8) TIP projects are identified in the current CIP as "Active Capital Projects with Prior Appropriations".

It is my understanding that this letter satisfies the financial commitment requirement of the TIP process. If you need additional information, please contact Bobbi Moser at (410) 386-5145 (bmoser@carrollcountymd.gov).

Sincerely,

Lynda D. Eisenberg, Director
Department of Planning

cc: Jeff Castonguay, Director, Department of Public Works
Doug Brown, Deputy Director, Department of Public Works
Debbie Butler, Chief, Bureau, Bureau of Engineering
Bobbi Moser, Planner, Department of Planning

DEPARTMENT OF PLANNING
Planning for success in Carroll County

BARRY GLASSMAN
HARFORD COUNTY EXECUTIVE
BILLY BONIFACE
DIRECTOR OF ADMINISTRATION



BRADLEY F. KILLIAN
DIRECTOR OF PLANNING & ZONING

April 8, 2019

Todd Lang
Director, Transportation Division
Baltimore Metropolitan Council
Offices @ McHenry Row
1500 Whetstone Way, Suite 300
Baltimore, Maryland 21230

RE: Harford County's 2020-2023 Transportation Improvement Program

Dear Mr. Lang:

This letter provides documentation to satisfy the "Statement of Financial Reasonableness" requirement of the FY 2020-2023 Transportation Improvement Program. Harford County's submittal for the Baltimore region's Transportation Improvement Program includes bridge rehabilitation and replacement projects. Please note that all transit projects will be submitted on behalf of Harford County by the Maryland Transit Administration.

Conformity Qualification

Harford County recommends that all projects qualify as air quality conformity projects and do not impact regional emissions or require a local carbon monoxide impact analysis. The bridge projects are preservation projects, consisting of structural and safety-related improvements. Most of the bridge projects improve the existing span and improve road alignment; two projects involve modifying single-lane bridges to allow for two-way traffic. Allowing vehicles to travel across these bridges from either side without waiting eliminates idling and reduces carbon monoxide emissions.

Priority Statement

Harford County requests that the projects listed in the Transportation Improvement Program be prioritized by the year in which the funding is requested. The priority ranking will be on a year to year basis. If more than one project is submitted for funding in the same year, each project has the same priority.

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410.638.3103 | 410.879.2000 | TTY Maryland Relay 711 | www.harfordcountymd.gov
220 South Main Street, Bel Air, Maryland 21014

THIS DOCUMENT IS AVAILABLE IN ALTERNATIVE FORMAT UPON REQUEST

Todd Lang
Baltimore Metropolitan Council
April 8, 2019
Page 2

Financial Reasonableness

All projects in the Transportation Improvement Program require a match from Harford County. The match for the projects comes from funds already approved in the Fiscal Year 2019 Harford County Capital Budget under Highway Capital Projects. Other traditional funding sources for land acquisition, engineering and construction of Bridge Replacement and Restoration projects in the Harford County Capital Budget includes the Highway General Fund Revenue and Future County Bonds and/or Transportation Revenue Sharing funding sources.

If you have any questions or need additional information, please contact Alex Rawls, (410) 638-3103, extension 1372.

Sincerely,



Bradley F. Killian,
Director of Planning and Zoning

AR/lap

cc: The Honorable Barry Glassman, Harford County Executive
Joseph J. Siemek, Director, Department of Public Works
Gary Blazinsky, Administrator, Harford LINK
Jenny B. King, Deputy Director, Department of Planning and Zoning
Joel A. Gallihue, Long-Range Planning Chief, Department of Planning and Zoning
Alex A. Rawls, Transportation Planner, Department of Planning and Zoning



HOWARD COUNTY OFFICE OF TRANSPORTATION
3430 Court House Drive ■ Ellicott City, Maryland 21043 ■ 410-313-0702

Chris Eatough, Acting Administrator

www.howardcountymd.gov
FAX 410-313-3467
TDD 410-313-2323

April 3, 2019

Mr. Todd Lang
Director of Transportation Planning
Baltimore Metropolitan Council
Office @ McHenry Row
1500 Whetstone way, Suite 300
Baltimore, MD 21230

Dear Mr. Lang:

This letter provides documentation to satisfy the financial reasonableness requirement of the Transportation Improvement Program (TIP) process.

Howard County's project submissions for the FY 2020-2023 TIP are for bridge repairs and deck replacements throughout the county. The Regionally Significant Projects include:

- Dorsey Run Road reconstruction from MD 175 south to the CSX Railroad spur crossing
- Guilford Road reconstruction from US 1 to Old Dorsey Run Road
- MD 175 interchange at Oakland Mills Road
- Snowden River Parkway widening from Broken Land Parkway to Oakland Mills Road
- Route 29 / Broken Land Parkway interchange and North South Connector Road
- Bus Rapid Transit Study from Ellicott City to Burtonsville (Montgomery County) along US 29

The County has committed adequate matching funds in the form of bonds and local revenues to match state and federal funding commitments, including projects the county will fund independently.

The projects are funded by year of expenditure. The anticipated availability of these local matching funds is documented in the:

- Howard County Spending Affordability Advisory Committee Report, Fiscal Year 2020
- Draft Howard County Fiscal Year 2020 Capital Budget.
- CB70-2016 and CR105-2016, approving creation of Development District in Downtown Columbia as a special taxing district for the development of public improvements.

These documents will be provided via electronic mail correspondence for your review.

Should you have any questions, please contact David Cookson 410-313-3842.

Sincerely,


Chris Eatough
Acting Administrator

Cc: Lonnie Robbins, Chief Administrative Officer
Sameer Sidh, Chief of Staff
James Irvin, Director, Howard County Department of Public Works
Val Lazdins, Planning Director Howard County Department of Planning and Zoning

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APPENDIX C

SELF-CERTIFICATION

BALTIMORE METROPOLITAN PLANNING ORGANIZATION

**BALTIMORE REGIONAL TRANSPORTATION BOARD
RESOLUTION #20-4**

**APPROVING THE SELF-CERTIFICATION REVIEW OF THE
BALTIMORE REGIONAL TRANSPORTATION BOARD**

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

WHEREAS, the Metropolitan Transportation Planning Final Rule was jointly issued by the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) on May 27, 2016 and requires that the MPO shall annually certify to the FHWA and the FTA that the planning process is addressing the major issues facing the metropolitan area and is being conducted in accordance with all applicable requirements as listed below; and

WHEREAS, §450.336 of the Metropolitan Planning Rule directs all Transportation Management Areas, meaning urbanized areas with a population of 200,000 or more, concurrent with the submittal of the proposed Transportation Improvement Program to the FHWA and the FTA as part of the Statewide Transportation Improvement Program approval, to certify that the metropolitan transportation planning process is being carried out by the State and the MPO in accordance with all applicable requirements (see Attachment 1) including:

- 1) 23 U.S.C. 134, 49 U.S.C. Section 5303 and 23 U.S.C. 450 Subpart 336 (Metropolitan Planning);
- 2) In nonattainment and maintenance areas, Sections 174 and 176 (c) and (d) of the Clean Air Act, as amended (42 U.S.C. 7504, 7506 (c) and (d)) and 40 CFR part 93 (Conformity Determination);
- 3) Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d-1) and 49 CFR part 21 (Nondiscrimination-Civil Rights);
- 4) 49 U.S.C. Section 5332 prohibiting discrimination on the basis of race, color, creed, national origin, sex, or age in employment or business opportunity (Nondiscrimination-General);
- 5) Section 1101(b) of the Fixing America's Surface Transportation Act, known as FAST, (Public Law 114-357) and 49 CFR part 26 regarding the involvement of disadvantaged business enterprises in U.S. DOT-funded projects (DBE);

- 6) 23 CFR part 230, regarding the implementation of an equal employment opportunity program on Federal and Federal-aid highway construction contracts (Equal Employment Opportunity);
- 7) The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) and 49 CFR parts 27, 37, and 38 (Nondiscrimination-ADA);
- 8) The Older Americans Act, as amended (42 U.S.C. 6101) prohibiting discrimination on the basis of age in programs or activities receiving Federal financial assistance (Nondiscrimination-Aging);
- 9) Section 324 of Title 23 U.S.C. regarding the prohibition of discrimination based on gender (Nondiscrimination-Gender); and
- 10) Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794) and 49 CFR part 27 regarding discrimination against individuals with disabilities (Nondiscrimination-Disabilities); and

NOW, THEREFORE, BE IT RESOLVED the Baltimore Regional Transportation Board has reviewed and documented that the transportation planning process is addressing the major issues in the Baltimore metropolitan planning area and is being conducted in accordance with all the applicable federal requirements.

WE HEREBY CERTIFY that the Baltimore Regional Transportation Board, as the Metropolitan Planning Organization for the Baltimore region, approved the aforementioned resolution at its July 23, 2019 meeting.

7/23/2019

Date

Lynda D. Eisenberg

Lynda Eisenberg, Chair
Baltimore Regional Transportation Board

7-11-19

Date

Pete K. Rahn

Pete K. Rahn, Secretary
Maryland Department of Transportation

**BALTIMORE REGIONAL TRANSPORTATION BOARD
2019 SELF CERTIFICATION OF THE REGIONAL PLANNING PROCESS**

BACKGROUND

Baltimore Regional Transportation Board

Under the Fixing America's Surface Transportation Act, known as FAST, every urbanized area in the U.S. with a population greater than 50,000 is required to have a metropolitan planning organization (MPO). The functions of the MPO include:

- coordinating federal funding for transportation,
- conducting transportation planning in cooperation with the federal government, state agencies, and the operators of publicly owned transit services,
- ensuring that transportation expenditures are based on a continuing, cooperative, and comprehensive (3-C) planning process, and
- providing reasonable opportunity for input from the public and interested parties

The Baltimore Regional Transportation Board (BRTB) is the federally designated MPO for the Baltimore region. The BRTB includes official representatives of the cities of Annapolis and Baltimore; the counties of Anne Arundel, Baltimore, Carroll, Harford, Howard, and Queen Anne's; the Maryland Departments of Transportation, the Environment, and Planning; the Maryland Transit Administration; and Harford Transit. The BRTB certifies that the Baltimore region metropolitan transportation planning process complies with applicable requirements, noted in the resolution, to meet the requirements of 23 USC 134 and 23 CFR 450.336. This is evidenced by the summaries that follow.

Metropolitan planning in the Baltimore region is coordinated closely with the U.S. Department of Transportation through the Federal Highway Administration (FHWA) Maryland Division Office, the Federal Transit Administration (FTA) Region 3 Office, the Maryland Department of Transportation (MDOT), member jurisdictions, locally operated transit service providers, and the public.

Baltimore Metropolitan Council

The Baltimore Metropolitan Council (BMC) serves as the host agency of the BRTB. In this capacity, the BMC provides staff to assist the BRTB and its advisory committees. These staff include transportation planners and engineers, traffic modelers, demographers, urban designers, GIS specialists, and other planning professionals.

The BMC staff develops the regional transportation plans and programs for the BRTB. The staff also supports transportation planning for the region by providing demographic and economic analyses, travel demand modeling, air quality modeling, environmental coordination, and GIS services. Another BMC staff responsibility is maintaining a database of building permits issued throughout the region.

The BMC also serves as the host agency for other important regional functions and programs. These include the Urban Area Work Group (responsible for coordinating regional emergency preparedness activities), Reservoir Watershed Protection Committee, and Regional Cooperative Purchasing Committee.

BRTB Subcommittees and Advisory Groups

Several committees, subcommittees, and groups advise the BRTB in specific technical and policy areas. Through these committees, the BRTB is able to learn more about specific areas of interest, receive feedback and recommendations, and engage professionals in related fields and the general public. The work of the committees also aids the BRTB as it works to ensure that transportation planning is integrated into the region's efforts to address economic development and quality of life issues.

Current BRTB subcommittees and advisory groups include:

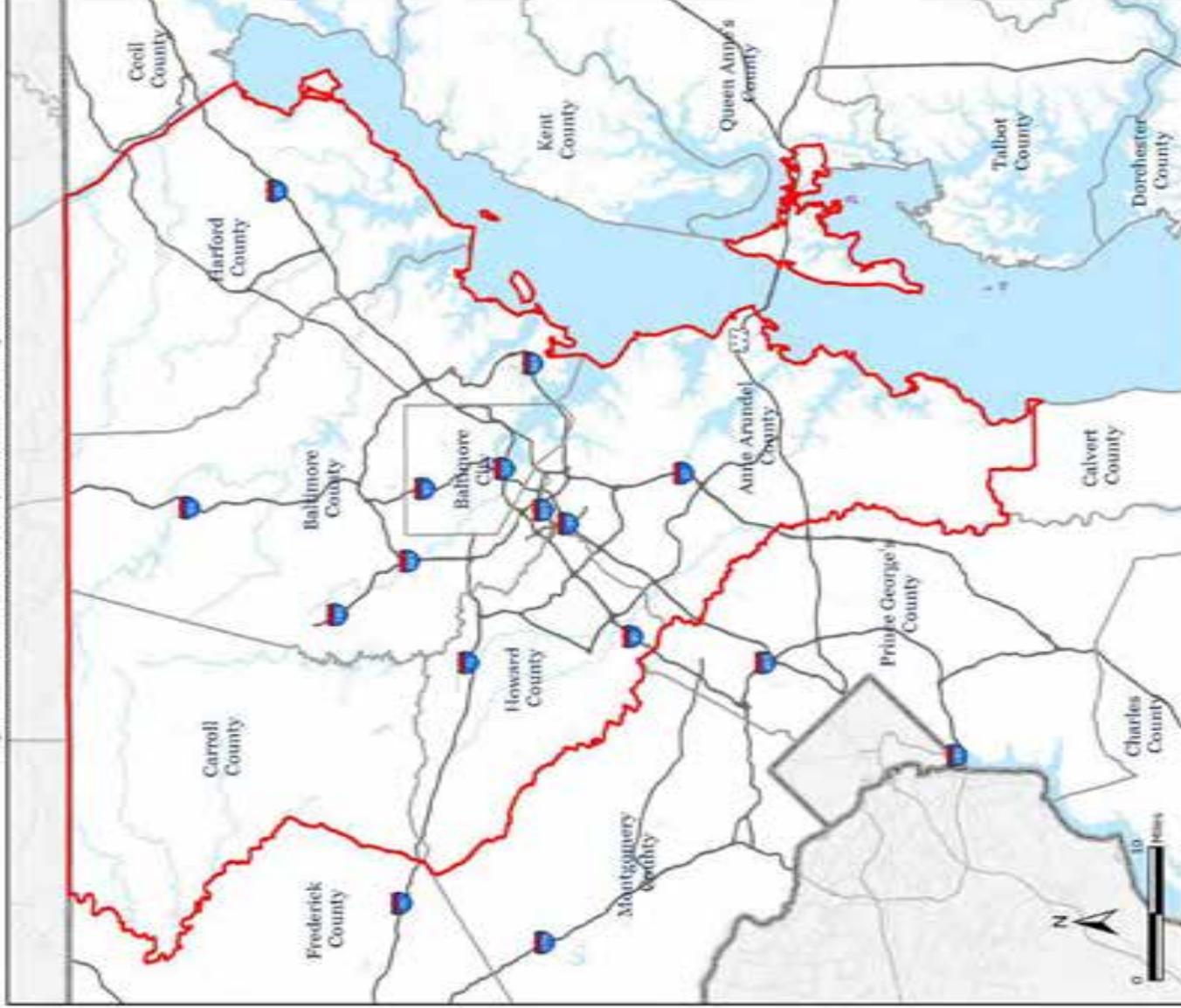
- Executive Committee
- Bicycle and Pedestrian Advisory Group
- Budget Subcommittee
- Public Advisory Committee
- Cooperative Forecasting Group
- Freight Movement Task Force
- Interagency Consultation Group
- Safety Committee
- Technical Committee
- Traffic Incident Management for the Baltimore Region
- Traffic Signal Subcommittee
- Transportation & Public Works Subcommittee

Baltimore Region Urbanized Area

On June 27, 2013 the BRTB adopted a new urbanized area boundary for the Baltimore region.

At a minimum, a Metropolitan Planning Area (MPA) must cover the urbanized area and contiguous geographic areas likely to become urbanized within the next 20 years. The Baltimore MPA consists of Baltimore City; all of Anne Arundel, Baltimore, Carroll, Harford, and Howard counties; and a portion of Queen Anne's County (see Figure 1 for the geographic location of each participating local jurisdiction).

Figure 1- Baltimore Metropolitan Planning Area



The planning area is part of the 2010 U.S. Census Bureau's Baltimore – Columbia – Towson Metropolitan Statistical Area (MSA), containing the Baltimore Urbanized Area, the Aberdeen – Bel Air South – Bel Air North Urbanized Area, and the Westminster – Eldersburg Urbanized area. Also included within the Baltimore region are 13 smaller incorporated municipalities.

TRANSPORTATION PLANNING PROCESS

Federal Planning Factors

The FAST Act and federal regulations (23 CFR 450.306) stipulate that the metropolitan transportation planning process incorporate ten specific factors reflecting sound planning principles. These factors are to be explicitly considered, analyzed as appropriate, and reflected in each MPO's planning products (including the LRTP and TIP). These 10 factors are:

1. Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.
2. Increase the safety of the transportation system for motorized and non-motorized users.
3. Increase the security of the transportation system for motorized and non-motorized users.
4. Increase accessibility and mobility of people and freight.
5. Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and state and local planned growth and economic development patterns.
6. Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight.
7. Promote efficient system management and operation.
8. Emphasize preservation of the existing transportation system.
9. Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation; and
10. Enhance travel and tourism.

Regional Transportation Goals

To address the federal planning factors and advance regional and local priorities, the BRTB established a set of regional goals for the surface transportation system:

- Improve System Safety – Make conditions safer for pedestrians, bicyclists, transit riders, and motorists.
- Improve and Maintain the Existing Infrastructure – Improve the conditions of existing transportation facilities; systematically maintain and replace transportation assets as needed.
- Improve Accessibility – Help people of all ages and abilities to access specific destinations.
- Increase Mobility – Help people and freight to move reliably and efficiently.
- Conserve and Enhance the Environment – Pass on to future generations the healthiest natural and human environments possible
- Improve System Security – Provide a secure traveling environment for everyone; improve the region's ability to respond to natural or man-made disasters
- Promote Prosperity and Economic Opportunity – Support the revitalization of communities, the development of activity centers, and the movement of goods and services.
- Foster Participation and Cooperation among Stakeholders – Enable all interested and affected parties to participate and cooperate to find workable solutions.
- Promote Informed Decision Making – Ensure that adopted transportation policies and performance measures guide the regional decision making process.

FHWA Performance Management Measures / National Goals

The FAST Act's predecessor, known as Moving Ahead for Progress in the 21st Century, or MAP-21, placed a major emphasis on managing and measuring the performance of the surface transportation system. The FAST Act maintains this commitment. The national transportation goals for highway systems are:

- Safety – Achieve a significant reduction in traffic fatalities and serious injuries on all public roads
- Infrastructure Condition – Maintain the highway infrastructure asset system in a state of good repair
- Congestion Reduction – Achieve a significant reduction in congestion on the National Highway System
- System Reliability – Improve the efficiency of the surface transportation system
- Freight Movement And Economic Vitality – Improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development
- Environmental Sustainability – Enhance the performance of the transportation system while protecting/enhancing the natural environment
- Reduced Project Delivery Delays – Reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies' work practices

FTA Performance Management Measures / National Standards

MAP-21 also required the FTA to develop a National Transit Safety Plan and to issue minimum safety performance standards for public transportation vehicles used in revenue operations. The FAST Act continues this requirement.

Each recipient of Section 5307 or Section 5311 funds is required to certify that it has a Transit Agency Safety Plan that conforms to the national plan. In addition, the FTA is required to develop standards for a Safety Certification Training Program, and each fund recipient must have a safety training program consistent with the national standards.

The FTA also is required to establish a National Transit Asset Management (TAM) System. All recipients and sub-recipients of FTA funds must develop a TAM Plan. As part of the national TAM system, the FTA is required to define "Transit State of Good Repair" and establish standards for measuring the condition of the capital assets of fund recipients.

BRTB Performance Management Measures and Targets

Consistent with the federal legislation's emphasis on performance-based planning, the BRTB coordinated with MDOT SHA and MDTA to develop performance measures and targets. These will enable the BRTB to monitor and evaluate, over time, the performance of the region's transportation system relative to the regional goals.

The adopted measures cover the areas required by federal legislation:

- System Safety – Roadways
- System Safety – Transit
- System Conditions – Roadways and Bridges
- System Conditions – Transit

- System Performance – Congestion
- System Performance – Freight
- System Performance – Emissions

BMC will continue to work with MDOT SHA and MDOT MTA to update performance targets in accordance with federal requirements and to refine the processes for gathering data for performance measures.

AIR QUALITY CONFORMITY

According to 42 U.S.C. 7506 (c)(1): "No metropolitan planning organization designated under section 134 of title 23, shall give its approval to any project, program or plan which does not conform to an implementation plan approved or promulgated under section 7410 of this title." The Intermodal Surface Transportation Efficiency Act of 1991 included provisions responsive to the mandates of the CAA. Subsequent implementing regulations have maintained this strong connection. Provisions governing air quality-related transportation planning are incorporated in a number of metropolitan planning regulations.

The region's air quality State Implementation Plan (SIP) is prepared by the Maryland Department of the Environment (MDE). The SIP must demonstrate how a state will attain and/or maintain national ambient air quality standards (NAAQS) established by the U.S. Environmental Protection Agency (EPA). The EPA sets the NAAQS for certain air pollutants, called "criteria pollutants," to protect public health. The EPA then determines the areas of the country that do not meet the NAAQS. For each MPO, "conformity" means that the programs and projects in its regional transportation plans will not cause new air quality violations, worsen existing violations, or delay timely attainment of the NAAQS.

The Baltimore region is currently designated by EPA as a "nonattainment" area for the 2008 and 2015 8-hour ozone NAAQS.

For MPOs that are declared to be air quality nonattainment or maintenance areas, there are many special requirements in addition to the basic requirements for a metropolitan planning process. These include formal agreements to address air quality planning requirements, requirements for setting metropolitan planning area boundaries, interagency coordination, transportation plan content and updates, requirements for a congestion management process, public meeting requirements, and conformity determinations on the regional transportation plans and programs.

CONSULTATION WITH STAKEHOLDERS AND THE PUBLIC

The FAST Act requires MPOs to consult with state and local officials, transit operators, and the public when conducting transportation planning. As did its predecessor legislation, the FAST Act emphasizes the broadening of public participation to include stakeholders who have not traditionally been involved in providing input to transportation decisions.

In ensuring full and effective participation by the public and other interested parties, the BRTB adheres to the following guiding principles:

- Public involvement is an important element of a high quality transportation planning process, not a simple "add on" to meet federal requirements.
- Effective transportation planning must include the participation of those whose everyday lives are critically affected by how they are able to get to work, home, school, stores, and services.

- It is essential to ask for public participation, not just wait for it. It is essential to respect and seriously consider input that is received, not just collect it.
- Informing and educating the public about transportation planning issues and the transportation planning process is key to obtaining good quality public input.
- Additional emphasis should be placed on involving persons and groups typically under-represented in transportation planning or with special transportation needs, including low-income, minority, elderly, and disabled populations.

Public Participation Plan

The Public Participation Plan (PPP) for the Baltimore region, approved in 2018 in accordance with the FAST Act, assists the BRTB in carrying out its responsibility to reach out to and engage the public and other interested parties. The PIP provides an open process that offers complete information, timely public notice, full public access to key decisions, and support for early and continued involvement of stakeholders.

BMC staff made several changes in the 2018 Public Participation Plan to reflect changes in law and regulations as well as comments from the Public Advisory Committee and the public at large. These changes are summarized below:

Change #1: Updated list of interested parties to meet current regulations

Recent updates to federal metropolitan transportation planning regulations expanded the list of interested parties that an MPO must engage:

- Public ports
- Private providers of transportation, including intercity bus operators, employer-based commuting programs, such as carpool program, vanpool program, transit benefit program, parking cash-out program, shuttle program, or telework program
- Travel and tourism agencies
- Officials responsible for natural disaster risk reduction

BMC staff has added these interested parties to the PPP. Throughout the past several years, representatives of these interested parties have presented information to the Technical Committee and to the BRTB on topics related to regional transportation issues.

Change #2: Updated process for making amendments to the TIP and long-range transportation plan

- Any project proposed for inclusion in the TIP or Plan that requires a conformity assessment will automatically trigger a 30-day public review and public meeting.
- All amendments, regardless of 30-day review, will go to the Technical Committee and BRTB for consideration and approval. A resolution with project information will be available online for the public to view 6 weeks prior to a BRTB vote.
- The Executive Committee will continue to review and approve Administrative Modifications (minor amendments).

Change #3: Minor updates – For example, adding Queen Anne’s County.

Public Advisory Committee

The BRTB conducts various activities to engage the public in the transportation planning process. The purpose of the Public Advisory Committee (PAC) is to review and evaluate public involvement techniques, particularly as they relate to the LRTP and new strategies for public involvement and outreach and to provide independent, region-oriented advice regarding regional transportation planning and related issues. Members also assist in promoting equity and public awareness and public participation in the planning process.

BMC staff coordinate monthly meetings of the PAC and its two subcommittees: Policy & Legislation and Public Involvement. Recent presentations to the PAC have been on topics such as Environmental Justice and transportation equity, BMC's travel demand model, BaltimoreLINK, MDTA's mobility program, the Baltimore Bike Share program, final rules for performance measures (covering system condition and system performance), *Maximize2045*, the TIP and amendments to the TIP, and the UPWP.

Other Examples of the BRTB's Commitment to Public Involvement

All meetings of the BRTB, its subcommittees and advisory groups are open to the public. The BMC website includes minutes of past BRTB and committee meetings; agendas for upcoming meetings; documents distributed for public review; and publications.

Other features of the public involvement program include:

- surveys to evaluate public opinion of its plans and programs
- notification of new comment periods and events posted on BMC website (over 5,500 followers on social media; emails to over 600 interested parties)
- organizing the "What's on Tap?" event series featuring well known speakers about technology and other related issues facing the region
- scheduled public appearances at various locations throughout the region to discuss issues face-to-face
- translation of the PPP and a summary of the LRTP and TIP into Spanish
- publication of *B'more Involved* in a *COG Quarterly* e-newsletters, distributed to over 2,600 subscribers each and cross posted on Facebook and Twitter.
- cross posting of e-newsletters and press releases on social media and on the BMC website at www.baltometro.org.

TITLE VI / ENVIRONMENTAL JUSTICE / LIMITED ENGLISH PROFICIENCY

As an MPO, the BRTB is required to convene its members and provide opportunities for engagement for stakeholder organizations, interested parties and citizens in order to conduct a cooperative, comprehensive and continuing (3C) transportation planning process. Moreover, as a sub-recipient of federal financial assistance via MDTA, the BRTB is required to be compliant with Title VI of the Civil Rights Act of 1964.

In particular, Title VI of the Civil Rights Act of 1964 provides that no person in the United States shall, on the grounds of race, color or national origin be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity receiving federal financial assistance.

The Civil Rights Restoration Act of 1987 broadened the coverage of Title VI by expanding the definition of the term "programs or activities" to include all programs or activities of federal aid

recipients, sub-recipients, and contractors, whether such programs and activities are federally assisted or not.

In accordance with Title VI, the BRTB must submit a signed assurance to the United States Department of Transportation that it will not discriminate in the administration of its programs and activities. And it must document its compliance with Title VI in accordance with Federal Transit Administration (FTA) Circular C4702.1B: Title VI Requirements and Guidelines for Federal Transit Administration Recipients (2012). This circular placed a renewed emphasis on Title VI in the transportation planning process.

On May 28, 2019, the Baltimore Regional Transportation Board approved, via BRTB Resolution #19-22, its Title VI Program. Documentation of the program details how the BRTB meets the requirements of the aforementioned authorities—in particular the requirements set forth in FTA Circular C4702.1—in the MPO planning process for the Baltimore region. Recent accomplishments include:

- evaluated and updated the BMC website to improve online access to Title VI / nondiscrimination policies and information.
- completed new Four-Factor Analysis based on the most recent American Community Survey Five-Year Estimates. Drafted and approved, via BRTB Resolution #19-23, the Limited English Proficiency Plan.
- developed and rolled out (to staff, BMC partners, and the public) an ArcGIS web application for the Vulnerable Population Index (VPI) and its composite data on the location and concentration of seven vulnerable populations in the Baltimore region.
- initiated the second phase of contact relationship management (CRM) implementation to better connect with vulnerable populations / interested parties in the region.

Environmental Justice

Environmental Justice seeks to ensure that the benefits and burdens of transportation investments are shared as equitably as possible among all affected communities.

Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority and Low Income Populations," addresses this issue. This Executive Order and its accompanying memorandum reinforce the requirements of Title VI that focus federal attention on environmental and human health conditions in minority and low-income communities.

BMC staff members attended an FHWA workshop on Environmental Justice in September 2018. This workshop presented information on federal requirements and best practices relative to EJ from state DOTs and MPOs around the country. As noted in subsequent sections, staff incorporated some of these best practices in analyzing the potential EJ effects of projects in the long-range transportation plan and the Transportation Improvement Program.

Limited English Proficiency Plan

In accordance with "U.S. Department of Transportation Policy Guidance Concerning Recipients' Responsibilities to Limited English Proficiency Persons," BMC staff conducted a four-factor analysis to determine the "reasonable steps" the BRTB must take to ensure meaningful access to information and services it provides.

Based on the current low levels of residents with LEP in the Baltimore region and their limited interaction with the BRTB, full translation of all BRTB Plans and Programs is not required at this time. However, in order to engage the diverse population in the region, the BRTB is committed to

providing appropriate language assistance to the LEP population. The following information outlines key actions:

- BMC staff prepared an Executive Summary in Spanish for the following key documents: long-range transportation plan (draft and final), short-range transportation program (final), Public Participation Plan, Limited English Proficiency Plan, Title VI Policy and Complaint Form, and the "About the BRTB" brochure.
- the BRTB will provide limited oral language services to Spanish-speaking LEP individuals.
- BMC staff will review the data on which this plan is based at least every four years.
- as a recipient of federal financial assistance, the BRTB has adopted a Title VI complaint procedure.

In May 2019, the BRTB approved the 2019 Limited English Proficiency Plan for the Baltimore region (Resolution #19-23).

REGIONAL TRANSPORTATION PLANNING – REQUIRED DOCUMENTS

The FAST Act requires that MPOs produce three documents:

- Unified Planning Work Program (UPWP)
- Long-Range Transportation Plan (LRTP)
- Transportation Improvement Program (TIP), a short-range transportation program

Unified Planning Work Program – UPWP

The UPWP is the basis for the Baltimore region transportation planning work scope. Every two years, the MPO begins developing the program in November and FHWA/FTA approves it by June. The UPWP identifies the planning budget and the planning activities to be undertaken by the agencies participating in the BRTB's metropolitan planning process during the program year. The UPWP also serves as the project budget for planning tasks funded by the FHWA and FTA. In addition, the UPWP supports the BRTB's priorities. The total funding proposed for the FY 2020 transportation planning activities for the Baltimore region is \$7,898,500, and the estimated budget for FY 2021 is \$6,286,750.

The development of the UPWP is a joint responsibility of the BRTB and MDOT. The public transit operators and other local agencies responsible for carrying out transportation and related planning activities also assist in the development and approval of the UPWP through their participation on the Technical Committee.

The BRTB has been timely in its submittal of the draft and final report for approval. However, the Federal Review Team recommended during the 2016 certification review that the BRTB increase its efforts to close out projects, submit invoices, and report in a timely manner. The BRTB produces monthly reports for each planning grant. These reports document staff salary, planning consultant, and other expenditures.

Transportation Plans – LRTP and TIP

The LRTP provides information on the region's transportation-related goals and policies as well as socioeconomic, environmental, and other factors that will affect the operation of the transportation system over the next 20-25 years. The document includes a list of major federally funded capital projects planned for this period, their estimated year-of-expenditure costs, and the revenues reasonably expected to be available to fund the projects. The LRTP is updated every four years.

The TIP is a 4-year listing of all federally funded transportation projects, generally updated every year. The TIP serves as the programming element of the LRTP, showing those projects with committed funds and established schedules. The TIP includes a listing of projects for which federal funds have been obligated in the preceding year. This list is compiled annually and published online.

Both the LRTP and the TIP are required by law to be fiscally constrained. In the case of the LRTP, this means projecting the amount of funding the region reasonably anticipates will be available over the next 20-25 years. The total estimated cost of the projects and programs in the LRTP cannot exceed the projected funding. For the TIP, this means providing (1) budgets showing committed funding for whichever project phase (planning, engineering, right of way acquisition, or construction) is being covered and (2) realistic implementation schedules based on when these committed funds will be available.

Another way of expressing fiscal constraint is that neither the LRTP nor the TIP can be a "wish list" of projects. Both of these documents must show how the region expects to pay for each project.

Long-Range Transportation Plan

The BRTB will adopt the next LRTP, titled *Maximize2045: A Performance-Based Transportation Plan*, in July 2019. Federal agency approval is expected to follow later in the summer of 2019.

Regional Goals, Strategies, and Performance Measures/Targets

As part of the development of *"Maximize2045: A Performance-Based Transportation Plan,"* the current regional long-range transportation plan, the BRTB adopted broad regional goals, specific implementation strategies, regional performance measures, and regional performance targets to comply with federal requirements. These efforts will enable the region to monitor and evaluate system performance more effectively. This in turn will enable the BRTB to respond to trends indicating specific areas that may merit additional attention.

As a first step in the development of the next plan, the BRTB adopted the same set of goals from *Maximize2040*. With input from the Technical Committee and the Public Advisory Committee, the BRTB added some implementation strategies to support these goals. These new strategies are intended to:

- strengthen planning related to two new planning factors added in the FAST Act: (1) improve resiliency and reliability, specifically with respect to system redundancy and evacuation routes, and (2) enhance travel and tourism
- acknowledge the need to consider emerging technologies (e.g., autonomous and connected vehicles, smartphone apps) and shared mobility options (e.g., ride hailing services, micro-transit services, ridesharing) in project planning and programming.

Evaluation of Candidate Projects / Fiscal Constraint of Plan

BMC staff scored the candidate projects submitted by jurisdictions and modal agencies. This scoring applied BRTB-adopted evaluation criteria, based on regional goals and performance measures, to determine the relative technical merits of each candidate project. BMC staff provided the results to the Technical Committee and the BRTB to use as a tool in determining the best mix of major projects and programs to advance regional goals and address transportation needs.

In addition, MDOT SHA, MDOT MTA, and the jurisdictions provided 2019 cost estimates for these projects. BMC staff applied an inflation factor, consistent with MDOT methodology, to these estimates to determine year of expenditure cost estimates. The Technical Committee and BRTB then determined the best mix of projects, ensuring that given the YOE estimated costs did not exceed anticipated revenues provided by MDOT. In this way, *Maximize2045* was demonstrated to be fiscally constrained, in accordance with federal requirements.

Maximize2045 Environmental Justice Analysis

Based on information received at the September 2018 Environmental Justice workshop, BMC staff looked at additional performance measures related to accessibility and mobility as part of the EJ analysis for *Maximize2045*. Staff analyzed these performance measures under two scenarios: (1) 2045 Existing and Committed Scenario, which included all projects that are already in progress or that have committed funds and schedules in the 2020-2023 time frame and (2) 2045 Preferred Alternative Scenario, which included all projects from the Existing and Committed Scenario as well as projects in the *Maximize2045 Preferred Alternative*. Staff analyzed the impacts on EJ and non-EJ Transportation Analysis Zones (TAZs) for the following measures:

- average number of jobs accessible
- average number of shopping opportunities accessible
- average commute time
- average travel time for shopping purposes
- average travel time to closest hospital
- percent of population close to a supermarket
- percent of population close to a hospital
- percent of population close to a college or university

The EJ analysis of *Maximize2045* showed that the surface transportation investments in the Preferred Alternative should not have disproportionate effects on EJ TAZs.

Maximize2045 Public Outreach and Engagement

Throughout the 2-year process to develop *Maximize2045*, the BRTB shared information through publishing flyers and e-newsletters as well as through providing links on the BMC website that people could use to follow *Maximize2045* on Twitter and Facebook. In addition, the BRTB provided the public with opportunities to comment on draft goals and implementation strategies, share ideas about critical future trends and possible future conditions, submit project ideas, attend public meetings, and give feedback throughout the process.

The BRTB made the draft *Maximize2045* available to the public for review and comment for a 45-day period from May 9 through June 18, 2019. Staff held public open house meetings in each jurisdiction and an online virtual meeting to present information and accept input/comments. The BRTB also posted the draft *Maximize2045* online along with a map of projects and advertised in 14 newspapers and online sites. The BRTB addressed public comments in preparing the final version of *Maximize2045*.

FY 2020-2023 TIP

The BRTB and its Technical Committee reviewed the projects proposed for the 2020-2023 TIP. This included review by BMC staff for consistency with *Maximize2045*, MDOT's Consolidated Transportation Program (CTP), the local Transit Development Plans, and adopted local government comprehensive plans. The BRTB worked with its subcommittees, particularly the

Public Advisory Committee, to review and evaluate the proposed list of projects. Based on results of this evaluation, the proposed projects were selected for inclusion in the TIP.

Projects identified in the TIP are funded using current/available revenue sources listed in the state's six-year CTP. The estimated total cost of projects in the 2020-2023 TIP is \$3.66 billion.

BMC staff annually reviews the previous year's list of priority projects to determine those projects programmed in MDOT's CTP. Projects must support the LRTP goals before they can be included in the TIP. In addition, capacity projects must come from the approved LRTP and must have been considered in the congestion management process for the region.

FY 2020-2023 TIP Financial Considerations

As noted, the 2020-2023 TIP uses current and available revenue sources listed in the 2019-2024 CTP. The TIP also includes letters of financial reasonableness from agencies and jurisdictions stating that funding has been committed and will be available to apply to the listed projects. Schedules and budgets included in the TIP show the allocation of these current/available funding sources to cover the estimated year of expenditure costs of each phase of each project. In these ways, the TIP demonstrates fiscal constraint as required under the FAST Act.

FY 2020-2023 TIP and Performance-Based Planning and Programming

As required by the FAST Act, the 2020-2023 TIP includes a summary of the 25 federally mandated performance measures and targets as well as a discussion of the anticipated impact of investments in the TIP towards their achievement.

FY 2020-2023 TIP Public Outreach and Engagement

The public review period for the draft FY 2020-2023 TIP and the associated draft Air Quality Conformity Determination took place from May 9 through June 18, 2019. Staff held public open house meetings in each jurisdiction and an online virtual meeting. The BRTB also posted the draft TIP online along with an interactive map of TIP projects and advertised in 14 newspapers and online sites.

Air Quality Conformity – Maximize2045 and FY 2020-2023 TIP

The conformity rule, as it applies to the Baltimore nonattainment area, requires the LRTP and TIP to conform to the motor vehicle emissions budgets established in the SIP. The applicable SIP for the Conformity Determination of the 2020-2023 TIP is the RFP SIP for 8-hour ozone (determined to be adequate in 2016).

The results of the conformity analysis for the Baltimore nonattainment area indicate that the projected mobile source emissions are below the applicable motor vehicle emission budgets for the established analysis years of 2020, 2030, 2040, and 2045. Therefore, the BRTB, in its capacity as the Metropolitan Planning Organization for the Baltimore region, has concluded that *Maximize2045* and the FY 2020-2023 TIP are found to be in conformity with the requirements of the Clean Air Act Amendments of 1990 and the relevant sections of the Final Transportation Conformity Regulations (40 CFR Part 93).

DISADVANTAGED BUSINESS PROGRAM (DBE) / EQUAL EMPLOYMENT OPPORTUNITY

Disadvantaged Business Enterprise (DBE) Program

The BRTB actively seeks to ensure that the planning process gains input and includes participation by minority, disabled, and elderly representatives through committee representation and public participation. In addition, the BRTB seeks to ensure equity through its consultant

contracting DBE participation requirements and through equal opportunity employment practices. The BRTB adopted DBE procedures to define clearly the standards for ensuring DBE participation. DBE targets are set annually.

The BRTB-approved DBE participation target for FY 2020 is 31.7% (approved through Resolution #19-19). Specifically, the BRTB is using the goal of MDOT as the primary recipient of U.S. Department of Transportation funds located in the same or a substantially similar market as the BRTB.

The BRTB participates in the Regional Procurement Diversity Expo, "Meet the Primes," which is sponsored, in part, by the Baltimore Regional Cooperative Purchasing Committee, a subcommittee of the BMC. The most recent Expo took place in October 2018. More than 400 attendees and 300 exhibitors participated. The event featured individual introductory sessions between prime contractors and minority- and women-owned subcontractors. The next event is scheduled for October 16, 2019.

Additionally, all cooperative contracting led by participating entities in the Baltimore Regional Cooperative Purchasing Committee complies with the lead entity's minority business enterprise procedures and goals while still allowing for flexibility for entities that choose to participate in these contracts to increase these goals should their individual minority business enterprise goals be higher than what is set by the lead entity.

Equal Employment Opportunity

BMC's Equal Employment Opportunity policy is included as Policy Number 101 in the BMC Policy and Procedure Manual (PPM). The new PPM went into effect on July 1, 2016. The Equal Employment Opportunity policy, unchanged since the last update of the manual (from March 1, 2007), states:

In order to provide equal employment opportunity to all individuals, employment decisions at BMC will be based on qualifications, abilities, and performance. BMC does not discriminate in employment opportunities or practices on the basis of race, color, religion, sex, national origin, age, disability, sexual orientation, or any other characteristic protected by law.

BMC will make reasonable accommodations for qualified individuals with known disabilities unless doing so would result in an undue hardship. This policy governs all aspects of employment, including selection, job assignment, compensation, discipline, termination, and access to benefits and training.

AMERICANS WITH DISABILITIES ACT

The BRTB and its subcommittees are fully committed to the spirit and intent of the ADA legislation. To facilitate participation by people with disabilities, the following guidelines and activities apply:

- all public meetings and formal events of the BRTB will be held in facilities that are accessible to persons with disabilities. Additional accommodations will be provided on an as-needed basis.
- all public notices of BRTB events state that accommodations for qualified individuals with disabilities will be provided on request. One-week notice is required for provisions of appropriate auxiliary aids and services.
- all documents available to the public will be provided in alternative formats for qualified individuals with disabilities, upon request.

- the website is accessible to and usable by individuals with vision impairments.
- the telephone number of the Maryland Relay Service will be included on all agendas and materials for public review of the BRTB.
- a list of resources for auxiliary aids and services has been developed and is maintained.

The Public Advisory Committee maintains a strong role in the consideration of the disabled population. In addition, the planning process now utilizes the most recent, applicable data from the U.S. Census Bureau to identify possible concentrations of disabled individuals. Such an approach, based on public input and the best possible planning assumptions, is similar to those used by the MDOT MTA and the Locally Operated Transit Systems (LOTS) in developing fixed-route and on-demand transit services across the region.

Other ADA-related Activities

The BMC undertook an ADA Self-Evaluation and the associated Transition Plan. Recognizing the importance of the offices where employees work on a regular basis as well as where public meetings are held on a regular basis, the BMC completed a review of the interior of the offices. Several areas have been noted where improvements are needed to maintain a fully compliant space, adjustments are now completed. The exterior were reviewed by the development company and a significant upgrade was completed which will be added to the next report.

BRTB staff participates in trainings and offers assistance and advice on pedestrian accessibility issues through participation in steering committees for bicycle and pedestrian plans and review of LRTP and TIP projects for pedestrian accommodations. Staff has also given presentations on the subject of pedestrian and transit accommodations for people with disabilities to a variety of audiences, including the self-advocacy group of the Arc of Howard County.

OLDER AMERICANS ACT

The BRTB acknowledges that older residents are a growing percentage of the population and continues to monitor aging residents of the Baltimore region to ensure that this segment of the population is served by the transportation system as required by the Older Americans Act, as amended (42 U.S.C. 6101). Information on travel studies related to the needs of the elderly (see examples below) is posted on the BMC web site: www.baltonmetro.org.

1999 - Baltimore Region Elderly Travel Study

This study explores the activity patterns and travel characteristics of the elderly in the Baltimore region. In addition, the study also documents the major causal factors which directly affect how, when, and where the elderly travel, including the pervasive influence of the in-place retirement phenomena on elderly travel behavior. This study was one of the first regional elderly travel studies in the United States. Its findings have been since confirmed by other elderly travel studies.

2012 - Naturally Occurring Retirement Communities (NORCs) in the Baltimore Region; 2010 Census Update

This study documents the distribution of the elderly population in the Baltimore region. The findings of this study show that the existing elderly population is widely scattered throughout low density suburban areas where public transportation service is not available and possibly not feasible. The study also documented that portions of the existing elderly population are concentrated in 31 population clusters throughout the region. These elderly population clusters could serve as the basis for planning transportation services to meet the travel needs of elderly residents that are no longer able to drive.

2015 – *The Aging of the Regional Population and Its Effect on Travel*
The Baby Boom Generation (born 1946 through 1964) began to turn 65 in 2011. As they age, the elderly population of the Baltimore region will increase, with consequences for transportation, healthcare, and economics. Part of the series "Directions: Travel Trends in the Baltimore Region."

TRANSPORTATION SERVICES FOR DISABLED PEOPLE AND THE ELDERLY

The BRTB strives to provide transportation options for individuals with disabilities as stated by the Americans with Disabilities Act of 1990 (42 U.S.C. 1210 and 49 CFR parts 27, 37 and 38). There are a number of travel options for people with disabilities, the elderly, and/or others with special mobility needs. Paratransit program information is posted on the BMC web site: www.baltometro.org.

Coordinated Public Transit – Human Services Transportation Plan
The BRTB collaborated with MDOT MTA in developing the 2015 *Baltimore Area Coordinated Public Transit – Human Services Transportation Plan*. This plan meets SAFETEA-LU's federal planning requirement that projects selected for funding under the Enhanced Mobility of Seniors and Individuals with Disabilities (Section 5310), Job Access and Reverse Commute (JARC), and New Freedom programs be derived from a locally developed, coordinated public transit-human services transportation plan. Although the FAST Act's predecessor, MAP-21, eliminated the JARC and New Freedom programs, these type of services continue to be eligible for funding other FTA programs.

In June 2015, two regional workshops provided a forum for stakeholders to discuss and update the transportation needs in the 2010 Plan. Strategies for how to best serve the needs of seniors and the disabled as well as the low-income employed were finalized at an August 2015 meeting also attended by regional stakeholders. BMC staff is currently working with MDOT MTA to update the 2015 Plan to reflect current stakeholder input.

2017 – *Attitudes and Behavior of Baltimore Area Residents with Access to Transit*
Related to the topic of the transportation needs of the region's residents, the BRTB sponsored a survey to gather information on people's travel behavior and attitudes with respect to public transit. From November 14, 2017 to January 16, 2018, the BRTB's consultant team conducted more than 1,200 interviews of residents in zip codes served by transit. The team used the data to determine attitudes by demographic characteristics, education level, and income level. In addition, the team conducted a market segmentation analysis and provided recommendations to the BRTB on how the region could more effectively reach and serve current and potential transit riders.

MDOT MTA Mobility/Paratransit
Mobility/Paratransit is a specialized, curb-to-curb service for people with disabilities who are not able to ride fixed-route public transportation including lift-equipped buses.

Anne Arundel County
Regional Transportation Agency of Central Maryland (RTA) Mobility is a specialized transportation service for individuals who cannot ride fixed route buses. RTA Mobility consists of two service components: General Paratransit and ADA Services.

Baltimore County
CountyRide provides specialized transportation services to Baltimore County residents 60 years of age or older, persons with disabilities ages 18 to 59, and rural residents of all ages. Destinations include medical appointments, shopping and other general purpose trips.

Carroll County
Ride With Us is a non-profit formed in 2016 to provide demand-response transportation to meet the needs of seniors, people with disabilities, and the transportation disadvantaged of Carroll County.

Harford County
Harford Transit LINK provides services in accordance with the ADA. Vehicles are wheelchair accessible.

Howard County
Regional Transportation Agency of Central Maryland (RTA) Mobility is a specialized transportation service for individuals who cannot ride fixed route buses. RTA Mobility consists of two service components: General Paratransit and ADA Services.

Action in Maturity (AIM)
AIM is a senior center without walls providing transportation and social services to aging adults in Baltimore City.

Neighbor Ride
Neighbor Ride provides affordable, volunteer-based supplemental transportation for Howard County's seniors.

Partners In Care
Partners In Care is a nonprofit organization that helps Anne Arundel County's older adults remain independent in their homes. It provides no-cost transportation to members for doctors' appointments, pharmacy trips, shopping and running various other errands via a team of volunteer drivers.

REHABILITATION ACT

Section 504 of the Rehabilitation Act of 1973 (29 USC 794 and 49 CFR part 27) addresses accessible features such as curb cuts, ramps, continuous sidewalks, and detectible warnings, particularly as they relate to the needs of children, the elderly, and people with physical disabilities. The activities and work done to comply with and promote understanding of the ADA also relates to the provisions of the Rehabilitation Act.

APPENDIX D

AREAWIDE PROJECTS

KNOWN FY 2020 AREAWIDE PROJECTS AT TIME OF SUBMITTAL – BASED ON THE 2019-2024 CONSOLIDATED TRANSPORTATION PROGRAM

Jurisdiction	Route	Termini	Description of Improvements
Areawide Transportation Alternatives Projects (60-9903-29)			
Anne Arundel County		MD 3 at Millersville Rd. to Waterbury Rd. at Bacon Ridge Rd.	Bike and pedestrian trail construction
Anne Arundel County		Cowhide Branch	Stream Restoration
Baltimore City		Downtown Baltimore Bike Network	Bicycle access improvements
Baltimore City		Baltimore Waterfront Promenade at the Inner Harbor	Bike and pedestrian improvements
Carroll County		Sykesville Middle School	Safe Routes to School (SRTS) sidewalk improvements
Carroll County		Langdon, near Westminster Avenue	Stormwater management facility construction
Harford County		Aberdeen MARC Station	Bike and pedestrian improvements
Areawide Environmental Projects (60-9506-38)			
Anne Arundel County	Various		Drainage improvement
Anne Arundel County	Various		Tree planting and landscaping
Carroll County	Various		Misc. Drainage Improvements
Howard County	Various		Misc. Drainage Improvements
Areawide Congestion Management Projects (60-9504-04)			
Regional	Various	CHART vehicle purchase FY 2020	
Regional	Various	CHART operating budget FY 2020	
Regional	Various	CHART device maintenance FY 2020	
Areawide Safety and Spot Improvement (60-9508-19)			
Anne Arundel County	MD 174	Severn Road	Intersection Improvements
Carroll County	MD 140	Mayberry Road	Intersection Improvements
Carroll County	MD 27	Gillis Falls Rd/Harrisville Rd	Intersection Improvements
Howard County	MD 103	US 29 to Long Gate Shopping Center	Geometric Improvements

Areawide Bridge Replacement and Rehabilitation Projects (60-9310-13)			
Baltimore County	Putty Hill Ave.	Bridge over I-695	Bridge rehabilitation
Baltimore County	various	Baltimore beltway and Northwest Expressway	Clean, paint bridges
Howard County	US 40	Bridge 13055 over I-70	Bridge rehabilitation
Areawide Resurfacing and Rehabilitation Projects (60-9501-11)			
Anne Arundel County	MD 295	MD 175 to MD 100	Resurfacing
Baltimore County	Various	Interstate roadways in Baltimore County	Resurfacing, patching
Carroll County	Various	Various locations in Carroll County	Resurfacing
Howard County	US 40	US 29 to Baltimore County line	Resurfacing
Howard County	I-70 WB	Baltimore County line to Marriottsville Rd	Resurfacing

APPENDIX E

PROJECTS BETWEEN FUNDING STAGES OR ON HOLD AND INFORMATIONAL PROJECTS

Projects Between Funding Stages or On Hold

Project Id	Project Title	Jurisdiction	Year of Operation	Project Category	Project Type
11-1802-19	Mountain Road Corridor Revitalization – Phase I	Anne Arundel County	TBD	Highway Preservation	Other
12-0002-99	Transportation Career Development Innovation Program	Baltimore City	2019	Miscellaneous	Miscellaneous
12-0207-11	Citywide Road Resurfacing – Federal Aid Program	Baltimore City	Ongoing	Highway Preservation	Road resurfacing/rehabilitation
12-1206-99	Pavement Management System	Baltimore City	2020	Miscellaneous	Miscellaneous
12-1222-19	Citywide Guide Sign Replacement	Baltimore City	Ongoing	Highway Preservation	Other
12-1413-56	Bayview MARC Intermodal Station	Baltimore City	2018	Commuter Rail	New rail facilities
12-1416-11	Concrete Roadway Slab Repairs	Baltimore City	Ongoing	Highway Preservation	Road resurfacing/rehabilitation
12-1606-12	Reconnecting Charles Street – Mt. Royal to Lanvale Street	Baltimore City	2018	Highway Preservation	Road reconstruction
12-1607-12	Citywide Road Reconstruction	Baltimore City	Ongoing	Highway Preservation	Road reconstruction
12-1704-11	Curtis Avenue Corridor Improvements (Phase I and II)	Baltimore City	2025	Highway Preservation	Road resurfacing/rehabilitation
12-1705-13	Hanover Street Bridge Deck Repair over Middle Branch	Baltimore City	2025	Highway Preservation	Bridge repair/deck replacement
12-1801-13	Monroe Street Ramp over CSX and Russell Street over CSX	Baltimore City	2027	Highway Preservation	Bridge repair/deck replacement
13-1406-42	Security Boulevard Extension	Baltimore County	2018	Highway Capacity	New or extended roadways
16-1409-42	Skylark Boulevard extended to MD 216	Howard County	2017	Highway Capacity	New or extended roadways
92-1101-99	Baltimore and Potomac Tunnel	Office of the Secretary	n/a	Miscellaneous	Miscellaneous
95-1401-59	Susquehanna Bridges	Office of the Secretary	n/a	Commuter Rail	Other
75-1101-02	MARC Aberdeen Station Parking Expansion D&E	MTA – Commuter Rail	2018	Emission Reduction Strategy	Park-and-ride lots
61-0105-41	MD 3: US 50 to MD 32, Corridor Study	SHA	NA	Highway Capacity	Roadway Widening
61-0505-41	MD 295: MD 100 to I-195, Corridor Study	SHA	NA	Highway Capacity	Roadway Widening
63-0602-41	I-695: I-95 to MD 122 (Southwest Beltway)	SHA	2025	Highway Capacity	Roadway Widening
64-1703-41	MD 32: MD 26 to I-70 Corridor Study	SHA	NA	Highway Capacity	Roadway Widening
66-0501-19	US 1: Baltimore County to Prince George's County Line Study	SHA	NA	Highway Preservation	Other
66-1403-41	I-70: MD 32 to US 29 Corridor Study	SHA	NA	Highway Capacity	Roadway widening

Baltimore City Projects that had been on hold and are no longer being pursued

Project Id	Project Title	Jurisdiction	Year of Operation	Project Category	Project Type
12-0723-19	Reversible Lane System Replacement	Baltimore City	Ongoing	Highway Preservation	Other
12-1030-13	Citywide Bridge Preservation and Rehabilitation	Baltimore City	Ongoing	Highway Preservation	Bridge repair/deck replacement
12-1102-42	Boston Street Realignment and Reconstruction	Baltimore City	2016	Highway Capacity	New or extended roadways
12-1116-42	New Vail Street	Baltimore City	2014	Highway Capacity	New or extended roadways
12-1213-11	Citywide Street and Urban Reconstruction	Baltimore City	Ongoing	Highway Preservation	Road resurfacing/rehabilitation
12-1406-12	Waterview Avenue and Hollins Ferry Road Reconstruction	Baltimore City	2017	Highway Preservation	Road reconstruction
12-1409-11	Seton Hill Complete Streets	Baltimore City	2017	Highway Preservation	Road resurfacing/rehabilitation
12-1410-11	Citywide Roundabout Construction	Baltimore City	2018	Highway Preservation	Road resurfacing/rehabilitation

APPENDIX F

FY 2019-2022 TIP AMENDMENT AND ADMINISTRATIVE MODIFICATION LOG

Summary of 2019 – 2022 TIP Amendments and Administrative Modifications

TIP ID	Project Title	Agency	Amendment/Administrative Modification Reason	Project Description	Date of BRTB/ Executive Committee Approval
22-1901-45	I-95 Access Improvements: Construction & Right-of-Way	Maryland Transportation Authority	This amendment adds a new project to the FY 2019-2022 TIP to support redevelopment of the Port Covington peninsula. The total cost of the project is \$495 million, with \$27.75 million in funding added to the 2019-2022 TIP.	<p>The Maryland Transportation Authority (MDTA) and Baltimore City Department of Transportation (BCDOT) have developed a suite of improvements to Interstate 95 (I-95) ramps and other nearby transportation facilities to support ongoing and planned redevelopment of the Port Covington peninsula in South Baltimore and to address traffic needs in the Port Covington area. The study limits for these improvements are Caton Avenue to the Fort McHenry Tunnel, involving approximately seven miles of I-95 and sections of Hanover Street, McComas Street and Key Highway.</p> <p>The total project cost is \$450 million to \$495 million and will have phased construction, with completion anticipated in 2029. The project will be funded with MDTA funds, grant monies and developer sources.</p> <p>Conformity Status: Not Exempt</p>	Resolution 19-5: 9/25/2018
25-1801-41	I-95 Express Toll Lanes Northbound Extension	Maryland Transportation Authority	This amendment updates funds for the project to include the first phase of implementation of I-95 Section 200 that was announced by the Hogan Administration on June 15, 2018. Funding in the 2019-2022 TIP increases by \$622 million and the year of operation changes to 2026. The total cost of the project increases from \$210 million to \$1.1 billion. The project is funded with MDTA toll revenues.	<p>The I-95 Express Toll Lanes (ETL) Northbound Extension project is the first phase of implementation of I-95 Section 200. The project will be funded by MDTA toll revenues and includes the provision of two additional ETLs for more than 10 miles on I-95 from north of MD 43 in Baltimore County to north of MD 24 in Harford County. This section includes reconstruction of the I-95 interchanges at MD 152 and MD 24 to provide access from the northbound ETL. The project involves significant bridge improvements, including reconstruction of the overpasses at Raphael Road, Bradshaw Road, Old Joppa Road, and Clayton Road to accommodate the larger area needed for the ETLs. Additionally, the I-95 northbound bridges over the Big Gunpowder Falls, Little Gunpowder Falls and Winters Run will be widened and improved. The project will also include the installation of five new noise walls along the corridor on both sides of I-95.</p> <p>Conformity Status: Not Exempt</p>	Resolution 19-5: 9/25/2018

40-1901-69	Beyond the Bus Stop	Maryland Transit Administration	This amendment adds a new project to the 2019-2022 TIP using a federal Bus and Bus Facilities discretionary grant in the amount of \$2.6 million along with \$650,000 in matching funds. MTA will use the funds to improve amenities for riders and operators at bus stops. The amendment adds \$3.25 million to the 2019-2022 TIP.	The Beyond the Bus Stop program aims to improve amenities for both riders and operators at bus stops around the network. The Beyond the Bus Stop program will improve the customer experience by adding real-time information signage and shelter improvements to bus stops, including some multi-modal transfers. The program also includes constructing comfort stations at Cedonia Loop and Patapsco Light Rail Station for use by MTA operators. Blue Light phones will also be added at these locations. In addition to the matching funds listed, MTA has committed \$2.35 million in state dollars. Conformity Status: Exempt	Resolution 19-6: 9/25/2018
60-9504-04	Areawide Congestion Management	State Highway Administration	This administrative modification shifts and adds state and federal funds for the "other" project phase to more effectively track areawide projects that do not include construction, such as CHART vehicle purchases. Construction phase funds in the TIP decrease by \$26.4 million while other phase funds increase by \$34 million, for a total increase of \$7.6 million in the TIP.	This is an ongoing program to provide traffic control, management, and monitoring on State highways. These improvements may include but are not limited to the employment of variable message signs, video for traffic management (CCTV), traffic management detectors, signal systemization and remote timing, permanent congestion monitoring systems employed by the CHART program, deployment of local jurisdiction intelligent transportation system (ITS) projects, and the development of park-and-ride facilities. This project also includes a program that replaces older drayage trucks serving the Port of Baltimore with newer trucks that meet or exceed 2007 EPA emissions certified engine standards. Conformity Status: Exempt	Admin Mod: 9/25/2018
40-0104-61	Small Urban Transit Systems – Operating Assistance	Maryland Transit Administration	This administrative modification updates FTA Section 5307 funds in FY 2019 to reflect the difference between the estimated and actual budgetary needs of the grant sub-recipient. Funds increase in the amount of \$29,000 federal along with \$29,000 in matching funds. Total funding in the TIP increases from \$2.376 million to \$2.434 million.	Operating assistance to small urban transit systems throughout the Baltimore region. Transit agencies eligible for funding include Carroll Transit System. Costs generally associated with operating assistance can include utilities, miscellaneous equipment, fuel/oil, and driver, maintenance staff, and administrative salaries. Conformity Status: Exempt	Admin Mod: 10/5/2018
40-1602-05	Urban Transit Systems – Capital Assistance	Maryland Transit Administration	This administrative modification updates FTA Section 5307 and 5339 funds in FY 2019. Section 5307 funds increase in the amount of \$352,000 along with an increase of \$88,000 in matching funds. Section 5339 funds increase in the amount of \$115,000 along with an increase of \$29,000 in matching funds. These funds will be used to provide continued preventive maintenance, two medium duty bus replacements, and a support vehicle with a plow. Total funding in the TIP increases from \$2.364 million to \$2.948 million.	Capital assistance for the purchase of vehicles, equipment, and facilities for Harford County (Harford County Transportation Services). Conformity Status: Exempt	Admin Mod: 10/5/2018

15-1401-13	Robinson Mill Road Bridge #154 over Broad Creek	Harford County	This amendment updates Surface Transportation Block Grant funds for the construction phase in FY 2019. The increase reflects the total cost for construction now that the project is ready for advertisement. Funds had been budgeted for construction in previous TIPs but the project was delayed due to difficulties with land acquisition. STBG funds in FY 2019 are now \$1.185 million along with \$380,000 in matching funds. The estimated total cost remains unchanged at \$1.815 million. The year of operation shifts from 2018 to 2019.	This project is to replace the entire bridge that carries Robinson Mill Road over Broad Creek. The two-lane approach road on both ends of the bridge includes horizontal curves that restrict sight distance across the bridge. Three foot shoulders planned on both sides of the road. PE funds were in a previous TIP. Conformity Status: Exempt	Resolution 19-12: 10/23/2018
60-9310-13	Areawide Bridge Replacement and Rehabilitation	State Highway Administration	This administrative modification shifts and adds federal and state funds for the construction phase. The admin mod shifts \$4 million (\$3.2 million federal/\$800,000 matching) from STBG to NHPP in FY 2019-2022. An additional \$10 million (\$8 million federal/\$2 million matching) in NHPP funds is added to FY 2019. Total funding in the TIP increases from \$125.4 million to \$135.4 million. These funding changes are necessary to accommodate differences between committed and estimated funding flows in the TIP. Specifically, these changes accommodate the number of bridge rehabilitation projects funded with NHPP instead of STBG.	This is an ongoing program to provide major upgrade and maintenance of structures on State highways. These are non-capacity improvements, which may include but are not limited to, structural replacements, deck rehabilitation, superstructure replacements, parapet reconstruction, cleaning and painting, and general maintenance on various state-owned bridges. Conformity Status: Exempt	Admin Mod: 11/9/2018
60-9506-38	Areawide Environmental Projects	State Highway Administration	This administrative modification shifts federal HSIP, NHPP, and STBG funds for the preliminary engineering and construction phases in FY 2019-2022. The admin mod shifts \$100,000 (\$80,000 federal/\$20,000 matching) in PE funds from both HSIP and NHPP to STBG in all fiscal years. It also shifts \$1 million (\$800,000 federal/\$200,000 matching) in construction funds from NHPP to STBG in FY 2020 and FY 2021. Finally, it shifts \$5 million (\$4 million federal/\$1 million matching) in STBG construction funds from FY 2022 to FY 2019. Funding in the TIP is unchanged. These funding changes are necessary to accommodate differences between committed and estimated funding flows in the TIP. Specifically, these changes accommodate the number of committed projects funded with STBG funds instead of HSIP and NHPP.	This is an ongoing program to provide environmental and aesthetic improvements on State highways. These are non-capacity improvements, which may include but are not limited to, projects dealing with noise abatement, wetlands, reforestation, landscape planting, scenic beautification, and pedestrian or bicycle facilities. This program also includes National Recreational Trails projects. Conformity Status: Exempt	Admin Mod: 11/9/2018

60-9501-11	Areawide Resurfacing and Rehabilitation	State Highway Administration	<p>This administrative modification shifts and adds federal and state funds for the construction phase. The admin mod shifts NHPP funds in the following amounts: \$20 million (\$16 million federal/\$4 million matching) from FY22 to FY19 and \$5 million (\$4 million federal/\$1 million matching) from FY21 to FY20. STBG funds are shifted in the amount of \$10 million (\$8 million federal/\$2 million matching) from FY22 to FY20. In addition, \$10 million (\$8 million federal/\$2 million matching) in STBG funds is added to FY 2019. Total funding in the TIP increases from \$386 million to \$396 million. These funding changes are necessary to accommodate differences between committed and estimated funding flows in the TIP. Specifically, these changes accommodate the large number of projects committed in FY19 and FY20, which exceeded estimates.</p>	<p>This is an ongoing program to provide periodic resurfacing and upgrading of auxiliary features on State highways. These are non-capacity improvements, which may include but are not limited to, milling, patching, sealing, and resurfacing of existing deteriorated state roadways. Other improvements such as ADA or guardrail may be included incidental to other resurfacing and rehabilitation improvements.</p> <p>Conformity Status: Exempt</p>	Admin Mod: 11/9/2018
60-9508-19	Areawide Safety and Spot Improvements	State Highway Administration	<p>This administrative modification shifts and adds federal and state funds for the right-of-way phase. The admin mod shifts NHPP funds in the amount of \$100,000 (\$80,000 federal/\$20,000 matching) from FY21 to FY20. In addition, STBG funds in the amount of \$100,000 (\$80,000 federal/\$20,000 matching) are added to FY 19-22. Total funding in the TIP increases from \$234.06 million to \$234.46 million. These funding changes are necessary to accommodate differences between committed and estimated funding flows in the TIP. Specifically, these changes accommodate the slightly higher number of committed ROW projects with NHPP and STBG funding.</p>	<p>This is an ongoing program to provide localized improvements to address safety and/or operational issues on State highways. These are highway improvements which may include but are not limited to projects dealing with bypass lanes, acceleration and deceleration lanes, turn lanes, rail crossings, intersection realignment, geometric improvements, safety improvements including bridge, bicycle, and pedestrian safety improvements, pavement markers, ADA improvements, guardrails, and roundabouts. Other improvements such as slope repairs, drainage improvements, and joint sealing may be included incidental to other safety improvements.</p> <p>Conformity Status: Exempt</p>	Admin Mod: 11/9/2018
40-9502-05	Small Urban Transit Systems – Capital Assistance	Maryland Transit Administration	<p>This amendment updates FTA Section 5339 funds in FY 2019. Section 5339 funds increase in the amount of \$806,000 along with an increase of \$302,000 in matching funds. These funds will be used for one small cutaway replacement bus in Carroll County, two medium buses and mobile radios in Anne Arundel County, and two heavy duty replacement buses in Howard County. Total funding in the TIP increases from \$1.6 million to \$2.708 million.</p>	<p>Capital assistance to small urban transit systems throughout the region to purchase vehicles, equipment, and facilities. The Baltimore region's small urban transit systems include Carroll Transit System, Anne Arundel County, and Howard County.</p> <p>Conformity Status: Exempt</p>	Resolution 19-13: 11/27/2018

60-9508-19	Areawide Safety and Spot Improvements	State Highway Administration	This administrative modification adds federal STBG and state funds for the right-of-way phase. STBG funds in the amount of \$2,100,000 (\$1,680,000 federal/\$420,000 matching) are added to FY19 and FY20. In addition, STBG funds in the amount of \$300,000 (\$240,000 federal/\$60,000 matching) are added to FY21. Total funding in the TIP increases from \$234.46 million to \$238.96 million. These funding changes accommodate a switch to federal funding from state only funding for the right-of-way phase for geometric improvements at the intersection of MD 147 (Harford Road) and Joppa Road.	This is an ongoing program to provide localized improvements to address safety and/or operational issues on State highways. These are highway improvements which may include but are not limited to projects dealing with bypass lanes, acceleration and deceleration lanes, turn lanes, rail crossings, intersection realignment, geometric improvements, safety improvements including bridge, bicycle, and pedestrian safety improvements, pavement markers, ADA improvements, guardrails, and roundabouts. Other improvements such as slope repairs, drainage improvements, and joint sealing may be included incidental to other safety improvements. Conformity Status: Exempt	Admin Mod: 11/27/2018
40-1802-05	Bus and Paratransit Vehicle Overhaul and Replacement	Maryland Transit Administration	This admin mod adds previously unobligated FTA Section 5307, 5307 Flex, and CMAQ funds from FY 2017 and FY 2018 to FY 2019. It also removes Section 5339 funds in FY 2019. These funds will be used to procure buses and mobility vehicles and to purchase key vehicle components. Federal funding increases by \$17.105 million along with an increase of \$4.278 million in matching funds. Total funding in the TIP increases from \$198.626 million to \$220.009 million.	This project provides for the routine replacement of buses past their useful service life. Planned purchases include 301 forty-foot clean diesel buses. MDOT MTA will also proactively repair and replace bus components at key points in the vehicle's life, including the vehicle engine, battery, brakes, suspension, body, paint, and wheelchair/ADA, electrical, and pneumatic systems. Batteries in hybrid electric buses near the end of their useful life will be replaced. This project also covers the purchase of paratransit vehicles under MTA's Mobility program. Mobility is a specialized door-to-door service for people with disabilities who are not able to ride fixed route public transportation, including lift equipped buses. In addition to the matching funds listed, MTA has committed \$97.5 million in state dollars. Conformity Status: Exempt	Admin Mod: 7/1/2019
40-1203-65	Kirk Bus Facility Replacement - Phase 1 & 2	Maryland Transit Administration	This administrative modification updates FTA Section 5307 funds in FY 2019. Section 5307 funds decrease in the amount of \$4.55 million along with a decrease of \$1.138 million in matching funds. Total funding in the TIP decreases from \$33.84 million to \$28.152 million. These changes do not impact the project schedule or scope.	Approximately 163 buses are stored, operated and maintained at the Kirk Division Bus Facility. Operations include preventive bus maintenance, inspections, heavy repairs, fueling, washing, administration, operator support facilities and dispatching. Phase I is the construction of a 100,000 square foot state-of-the-art, sustainable design, energy-efficient/green technology building that will house maintenance work to be performed in an enclosed environment, thereby enabling MTA to better control noise, exhaust fumes and visibility of the buses to the surrounding community. Phase II is the construction of a similar building to store buses overnight. Note: In addition to the matching funds listed, MTA has committed \$52.4 million in state dollars. Conformity Status: Exempt	Admin Mod: 7/1/2019

70-1503-55	MARC Facilities	Maryland Transit Administration	This administrative modification removes FTA Section 5337 funds in FY 2019. Section 5337 funds decrease in the amount of \$5.53 million along with a decrease of \$1.383 million in matching funds. Total funding in the TIP decreases from \$38.344 million to \$31.431 million. These changes do not impact the project schedule or scope.	<p>1) Procure Riverside Maintenance Facility, which CSXT has offered to sell to MTA. Maintenance activities for equipment on the MARC Camden Line would then be under direct control of MARC. MTA & CSX are jointly working with MDE to remediate hazardous material contamination.</p> <p>2) BWI Garage - Comprehensive structural inspection of garages 1 & 2, w/ design & construction of recommended structural repairs and repairs to mechanical, plumbing, fire protection and electrical systems & elevators.</p> <p>3) MARC Martin State Airport – Purchase private property & construct 2 additional storage tracks.</p> <p>4) BWI Station Improvements - Renovation of BWI Station</p> <p>Conformity Status: Exempt</p>	Admin Mod: 7/1/2019
40-1804-63	Metro and Light Rail Rolling Stock Overhauls and Replacement	Maryland Transit Administration	This administrative modification adds previously unobligated FTA Section 5307, 5307 Flex, and CMAQ funds from FY 2017 and FY 2018 to FY 2019. These funds will be used to assist in efforts to overhaul the metro and light rail vehicle fleets. Federal funding increases by \$3.686 million along with an increase of \$922,000 in matching funds. Total funding in the TIP increases from \$225.791 million to \$230.399 million.	<p>The Metro Railcar fleet consists of 90 cars that have surpassed the 30-year design life. Replacement of the railcar fleet will provide passengers with enhanced comfort, conveniences, and ensure improved reliability. The Light Rail vehicle fleet will require the plan and design of maintenance objectives to perform a 15-year inspection of the major and sub-assemblies of the original 35-vehicle fleet. The inspections will identify and remedy all obsolete parts issues in order to overhaul the major and sub-assemblies according to manufacturer recommendations and facilitate any modifications deemed necessary by engineering or OEM for 15-year maintenance. The first vehicles were placed back in service in 2015, and the last vehicle will be placed back in service in 2020. In addition to the matching funds listed, MTA has committed \$147.2 million in state dollars.</p> <p>Conformity Status: Exempt</p>	Admin Mod: 7/1/2019
40-9901-01	Ridesharing	Maryland Transit Administration	This administrative modification adds federal CMAQ funds to FY 2019. The increase is attributable to differences in planned funding versus actual need throughout the region. CMAQ funds increase in the amount of \$43,000. Total funding in the TIP increases from \$2.672 million to \$2.715 million.	<p>The ridesharing project covers the activities of the ridesharing program in all jurisdictions in the Baltimore region, including the Guaranteed Ride Home (GRH) Program. Entities eligible to receive funding include Baltimore City, Baltimore Metropolitan Council, and Anne Arundel, Howard, and Harford counties.</p> <p>Conformity Status: Exempt</p>	Admin Mod: 7/1/2019
40-1502-69	Seniors and Individuals with Disabilities	Maryland Transit Administration	This administrative modification adds Section 5310 funds to FY 2019. These funds will be used to add and replace minivans and small cutaway buses throughout the region as well as for mobility management, operating assistance, and preventive maintenance. Section 5310 funds increase in the amount of \$621,000 along with an increase of \$498,000 in matching funds. Total funding in the TIP increases from \$9.36 million to \$10.479 million.	<p>Capital and operating assistance to non-profit agencies who provide transportation services for the elderly and individuals with disabilities. Non-profit recipients are determined through a competitive selection process and based upon the Baltimore Area Coordinated Public Transit - Human Services Transportation Plan.</p> <p>Conformity Status: Exempt</p>	Admin Mod: 7/1/2019

40-1801-64	Agencywide System Preservation and Improvement	Maryland Transit Administration	This amendment adds previously unobligated Section 5307 funds from FY 2017 and FY 2018 to the 2019-2022 TIP. MTA intends to obligate these funds prior to the end of FY 2019. These funds will be used for improvements including elevator and escalator upgrades throughout the Metro system, roofing repairs, drainage corrections, transit asset management, and fare collection system software upgrades. Section 5307 funds increase in the amount of \$5.986 million along with an increase of \$1.497 million in matching funds. Total funding in the TIP increases from \$20.245 million to \$27.728 million.	This is an ongoing project to rehabilitate agency-wide facilities, systems, and infrastructure, including elevator and escalator upgrades, roofing, park-and-ride lots, concrete bus loops, drainage corrections, bridge and subway inspections, signage improvements, a treasury fare collection system, and a transit asset management system. In addition to the matching funds listed, MTA has committed \$80.4 million in state dollars. Conformity Status: Exempt	Resolution 20-1: 7/23/2019
40-1803-64	Bus System Preservation and Improvement	Maryland Transit Administration	This amendment adds previously unobligated Section 5307 flex funds from FY 2017 and FY 2018 to the 2019-2022 TIP. MTA intends to obligate these funds prior to the end of FY 2019. These funds will be used to rehabilitate historic gable windows at the Bush Division and to install a paint booth at the Washington Boulevard facility. Section 5307 flex funds increase in the amount of \$834,000 along with an increase of \$208,000 in matching funds. Total funding in the TIP increases from \$3.227 million to \$4.269 million.	This is an ongoing project to rehabilitate bus facilities and infrastructure, including operating division and MTA offices. This ongoing project also includes funding for the BaltimoreLink project to include Bus Link Transit Hubs and Bus Link Transit Signal Priority. In addition to the matching funds listed, MTA has committed \$10.6 million in state dollars. Conformity Status: Exempt	Resolution 20-1: 7/23/2019
70-1502-54	MARC Improvements	Maryland Transit Administration	This amendment adds previously unobligated Section 5337 funds from FY 2017 and FY 2018 to the 2019-2022 TIP. MTA intends to obligate these funds prior to the end of FY 2019. These funds will be used to enhance accessibility and safety for riders including installation of an ADA compliant public address system, positive train control, and an audio/visual warning system for approaching MARC trains. Section 5337 funds increase in the amount of \$20.12 million along with an increase of \$5.03 million in matching funds. Total funding in the TIP increases from \$40.895 million to \$66.045 million.	This project provides funding to implement ongoing improvements derived from the MARC Master Plan and Amtrak/CSX Operating Agreements. Projects include: improvements to the Penn line, improvements to the Brunswick and Camden lines, system-wide parking lot improvements, the design, procurement, and installation of an ADA compliant public address system at all MARC stations on the Brunswick, Camden, and Penn lines, implementation and development of Positive Train Control for MARC, implementation of an audio/visual warning system for approaching MARC trains, and the collaborative cost-sharing arrangement to advance development of the Northeast corridor infrastructure. In addition to the matching funds listed, MTA has committed \$15.4 million in state dollars. Conformity Status: Exempt	Resolution 20-1: 7/23/2019
70-1501-53	MARC Rolling Stock Overhaul and Replacement	Maryland Transit Administration	This amendment adds previously unobligated Section 5337 funds from FY 2017 and FY 2018 to the 2019-2022 TIP. MTA intends to obligate these funds prior to the end of FY 2019. These funds will be used for the ongoing overhaul and replacement of MARC rolling stock in accordance with the manufacturer's 10-year minor and 20-year midlife schedules. Section 5337 funds increase in the amount of \$6.651 million along with an increase of \$1.663 million in matching funds. Total funding in the TIP increases from \$38.885 million to \$47.199 million.	This is an ongoing project for the overhaul and replacement of MARC rolling stock. The overhaul of MARC coaches and locomotives is performed in accordance with "10-year Minor" and "20-year Midlife" schedules and/or the manufacturer's schedule. MARC vehicles will be upgraded with federally-mandated Positive Train Control safety features. In addition to the matching funds listed, MTA has committed \$13.2 million in state dollars. Conformity Status: Exempt	Resolution 20-1: 7/23/2019

40-1805-64	Metro and Light Rail System Preservation and Improvement	Maryland Transit Administration	This amendment adds previously unobligated Section 5307 funds from FY 2017 and FY 2018 to the 2019-2022 TIP. MTA intends to obligate these funds prior to the end of FY 2019. These funds will be used to rehabilitate infrastructure, track, equipment, and facilities along the metro and light rail systems. Section 5307 funds increase in the amount of \$9.762 million along with an increase of \$2.44 million in matching funds. Total funding in the TIP increases from \$32.359 million to \$44.561 million.	This is an ongoing project to rehabilitate Light Rail and Metro facilities, infrastructure, track, and equipment. In addition to the matching funds listed, MTA has committed \$209.3 million in state dollars. Conformity Status: Exempt	Resolution 20-1: 7/23/2019
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APPENDIX G

PUBLIC PARTICIPATION COMPONENT



**TRANSPORTATION MATTERS;
SO DOES YOUR OPINION.**

Over 200 transportation projects worth \$15 billion are planned for the region over the next 25 years.

Let us know what you think about our plans to invest in the future of transportation.

JOIN US AT A MEETING

May 20 – Bel Air	June 5 – CCBC Essex
May 21 – Baltimore City	June 6 – Westminster
May 30 – Stevensville	June 10 – Online Mtg
June 4 – Arundel Mills Mall	June 11 – Elkridge

BRTB
Baltimore Regional Transportation Board

MAXIMIZE2045
A PERFORMANCE-BASED TRANSPORTATION PLAN

CHECK OUT OUR PLAN

Icons: Car, Pedestrian, Bus, Bicycle

PRESS RELEASE



FOR IMMEDIATE RELEASE
CONTACT: Clara Blaw
Communications Associate
(410) 732-9564

TRANSPORTATION MATTERS; SO DOES YOUR OPINION BRTB seeks public comments on regional transportation plans totaling over \$15 billion in projects.

BALTIMORE, MD (Wednesday, May 9th, 2019) - The Baltimore Regional Transportation Board (BRTB), as the federally recognized metropolitan planning organization for the region, is asking the public to weigh in on \$15.66 billion in key transportation projects planned for the region over the next 25 years. The Baltimore Metropolitan Council (BMC) provides staff support to the BRTB in its regional transportation planning efforts.

Over 290 projects are outlined in two regional transportation investment plans - *Maximize2045: A Performance-Based Transportation Plan* and *the 2020-2023 Transportation Improvement Program (TIP)*, both open for public comment from **Thursday, May 9 through Tuesday, June 18**. The BRTB is scheduled to vote on these plans at their meeting on Tuesday, July 23.

"Transportation matters; so does your opinion," said Michael B. Kelly, BMC's Executive Director. "We are seeking public feedback on these two major plans over the next 45 days as we work to deliver a strong, accessible and connected transportation system that helps all people lead regional lives."

Maximize2045 contains a list of major capital transportation projects totaling \$12 billion, which the region expects to implement from 2024 to 2045. Maximize2045 includes \$65 billion in planned investment overall, with \$53 billion allocated for operations and preservation of transportation systems in the region. The plan also establishes the region's broad transportation goals and performance measures, which serve as guiding principles as the region plans and carries out projects. Developed over a two-year period, Maximize2045 takes into account anticipated funding levels through 2045, and future trends and demographics.

The 2020-2023 Transportation Improvement Program details more than \$3.66 billion in proposed federal, state and local money for maintaining, operating and expanding highway, transit, bicycle and pedestrian networks during the next four years.

As part of the development of these plans, the BRTB conducted a comprehensive analysis, published in an Air Quality Conformity Determination. The analysis shows that implementation of the project

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In Maximize2045 and 2020-2023 TIP will not worsen the region's air quality or delay the timely attainment of national air quality standards.

[Learn more and download plans at maximize2045.com](#)

Get Involved in Our Region's Transportation Planning

The BRTB will host a series of public meetings about Maximize2045, the TIP, and the Air Quality Report. Details are as follows:

- **Monday, May 20 from 6 to 8:30 p.m.**
Harford County Government Center, Room 157 (220 S Main St, Bel Air, MD 21014)
- **Tuesday, May 21 from 5 to 7:30 p.m.**
Enoch Pratt Free Library - Pennsylvania Ave Branch (1521 W North Ave, Baltimore, MD 21217)
- **Thursday, May 30 from 5 to 7:30 p.m.**
Keet Island Senior Center (891 Love Point Rd, Stevensville, MD 21666)
- **Tuesday, June 4 from 6 to 8:30 p.m.**
Academy Mills Mall, Harmons Community Room (7000 Arundel Mills Circle, Hanover, MD 21076)
- **Wednesday, June 5 from 6 to 8:30 p.m.**
CCBC Essex - Administrative Building (7201 Rossville Blvd, Baltimore, MD 21237)
- **Thursday, June 6 from 6 to 8:30 p.m.**
Carroll County Government Center, Reagan Room #3 (225 N. Center St, Westminster, MD 21157)
- **Monday, June 10 from noon to 1 p.m.**
Online Meeting via computer, tablet or smartphone. [Register to participate](#)
- **Tuesday, June 11 from 5 to 7:30 p.m.**
Elkridge Public Library, Belmont/Mockley Room (6540 Washington Blvd, Elkridge, MD 21075)

In addition, public comments will be accepted by email at comments@baltimore.org, on Twitter [@BaltimoreCo](https://twitter.com/BaltimoreCo) and [@BaltimoreCo](https://twitter.com/BaltimoreCo) using the hashtag #BRTBlistens, via our online comment form at bit.ly/BRTBlistens, or by mail at:

The Baltimore Regional Transportation Board
Attn: Public Involvement Coordinator
1500 Whetstone Way, Suite 300
Baltimore, MD 21220

The BRTB operates its programs and services without regard to race, color, or national origin in accordance with Title VI of the Civil Rights Act of 1964, and other applicable laws. Appropriate services

ANN ARUNDEL COUNTY | BALTIMORE CITY | BALTIMORE COUNTY | CARROLL COUNTY | HARRIS COUNTY | HOWARD COUNTY | MONTGOMERY COUNTY

EVENT FLYER



MAXIMIZE 2045

A PERFORMANCE-BASED TRANSPORTATION PLAN

TRANSPORTATION MATTERS; SO DOES YOUR OPINION.

You have the chance to help shape the future by sharing your thoughts on \$15 billion in key transportation projects planned for the region over the next 25 years.

Over 200 projects are part of two transportation plans open for public comment through June 18.

Let us know what you think about our plans to invest in the future of transportation.

Learn more at maximize2045.com.

The BRTB operates its programs and services without regard to race, color, or national origin in accordance with Title VI of the Civil Rights Act of 1964, and other applicable laws. Appropriate services can be provided to qualified individuals with disabilities or those in need of language assistance who submit a request at least seven days prior to a meeting. Call 410-732-0500.

PUBLIC MEETING DATES

MONDAY, MAY 20, 2019
Harford County Government Center, Room 157
220 S. Main Street, Bel Air, MD 21014
6:00 - 8:30 PM

TUESDAY, MAY 21, 2019
Enoch Pratt Free Library, Pennsylvania Avenue Branch
1551 W. North Avenue, Baltimore, MD 21217
5:00 - 7:30 PM

THURSDAY, MAY 30, 2019
Kent Island Senior Center
891 Love Point Road, Stevensville, MD 21156
5:00 - 7:30 PM

TUESDAY, JUNE 4, 2019
Arundel Mills Mall, Harmons Community Room
7000 Arundel Mills Circle, Hanover, MD 21076
6:00 - 8:30 PM

WEDNESDAY, JUNE 5, 2019
CCBC Essex, Administrative Building
7201 Rossville Boulevard, Baltimore, MD 21237
6:00 - 8:30 PM

THURSDAY, JUNE 6, 2019
Carroll County Government Center, Reagan Room #3
225 N. Center Street, Westminster, MD 21157
6:00 - 8:30 PM

MONDAY, JUNE 10, 2019
Online Meeting - Register at <https://bit.ly/2FvCzrQ>
Noon - 1:00 PM

TUESDAY, JUNE 11, 2019
Elkridge Public Library, Belmont/Hockley Room
6540 Washington Boulevard, Elkridge, MD 21075
5:00 - 7:30 PM



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TRANSPORTATION MATTERS; SO DOES YOUR OPINION.

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CHECK OUT OUR PLAN

Let us know what you think about our plans to invest in the future of transportation.

JOIN US AT A MEETING

May 20 – Bel Air	June 5 – CCBC Essex
May 21 – Baltimore City	June 6 – Westminster
May 30 – Stevensville	June 10 – Online Mtg
June 4 – Arundel Mills Mall	June 11 – Elkridge




EL TRANSPORTE ES IMPORTANTE; SU OPINION TAMBIEN LO ES

Mas de 200 proyectos de transporte con un valor de \$15 billones se están planificando en la región para los próximos 25 años.



ECHÉ UN VISTAZO A NUESTRO PLAN



TRANSPORTATION MATTERS; SO DOES YOUR OPINION.

Over 200 transportation projects worth \$15 billion are planned for the region over the next 25 years.

Are we on the right track?

CHECK OUT OUR PLAN

Let us know what you think about our plans to invest in the future of transportation.



ABOUT THE TIP

The Transportation Improvement Program (TIP) is a short range transportation plan.

- \$3.66 billion in funding for:
 - Operating the system (\$0.15 billion)
 - Maintaining the system (\$1.7 billion)
 - Building / Expanding (\$1.8 billion)
- Projects – Committed funds and schedules
 - Highway
 - Transit
 - Bicycle and pedestrian
- Updated every year – this TIP covers 2020-2023



AIR QUALITY ANALYSIS

The Baltimore region has been designated as not meeting the National Ambient Air Quality Standards and so must review its current transportation plans and programs to ensure conformity with the State Air Quality Implementation Plan (SIP).

- The Baltimore region does not meet national air quality standards for ozone.
- Analysis looks at the possible effects of transportation projects on the region's air quality
- Report shows projects will not make air quality worse.



EXAMPLE OF EMAIL TO INTERESTED PARTIES

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MAXIMIZE2045

A PERFORMANCE-BASED TRANSPORTATION PLAN

TRANSPORTATION MATTERS; SO DOES YOUR OPINION.

Over 200 transportation projects worth \$15 billion are planned for the region over the next 25 years. Let us know what you think about our plans to invest in the future of transportation.

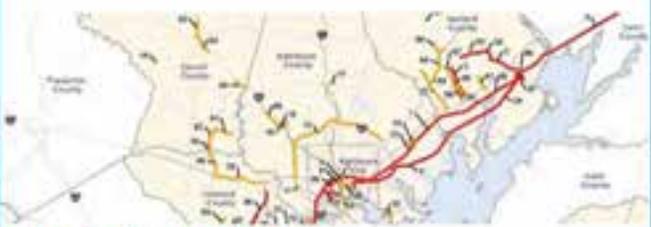


BRTB

You have the chance to help shape the future by sharing your thoughts on over \$15 billion in key transportation projects planned for the region over the next 25 years.

Over 200 projects are part of two regional transportation investment plans covering the next 25 years: *Maximize2045: A Performance-Based Transportation Plan* and the *2020-2023 Transportation Improvement Program (TIP)*. The transportation plans **open for public comment through Tuesday, June 18**. Also available for review is the associated Air Quality Conformity Determination.

Visit maximize2045.com to learn more and to let the Baltimore Regional Transportation Board (BRTB) know what you think about its plans to invest in the future of transportation.



PROPOSED PROJECTS

Over 200 projects are included in *Maximize2045* and the *2020-2023 Transportation Improvement Program*

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- Bridge Preservation: Replace the Howard Street Bridge over I-83, rail lines, Falls Road, and the Jones Falls
- Transit related: Add Bus Rapid Transit along U.S. 29 from Ellicott City / Downtown Columbia Transit Center to MD 198

[Visit Maximize2045.com to see a full list of projects.](#)

[View the draft 2020-2023 TIP through BRTB's interactive project map.](#)

SHARE YOUR THOUGHTS

To share your thoughts and ideas, submit all comments by **Tuesday, June 18** to:

Online: Via the [BRTB Comment Force](#)

Email: comments@baltimore.com

Twitter: [@BaltimoreCo](#) and [@BaltimoreTIP](#) using the hashtag #BRTBplans

Mail: The Baltimore Regional Transportation Board
Attn: Public Involvement Coordinator
1500 Whitestone Way, Suite 300
Baltimore, MD 21220

Fax: 410-737-8248

Comments are also welcome during the public comment opportunity at the BRTB meeting at 9 a.m. on Tuesday, July 23 (scheduled vote). Please check the BMC website for meeting location.

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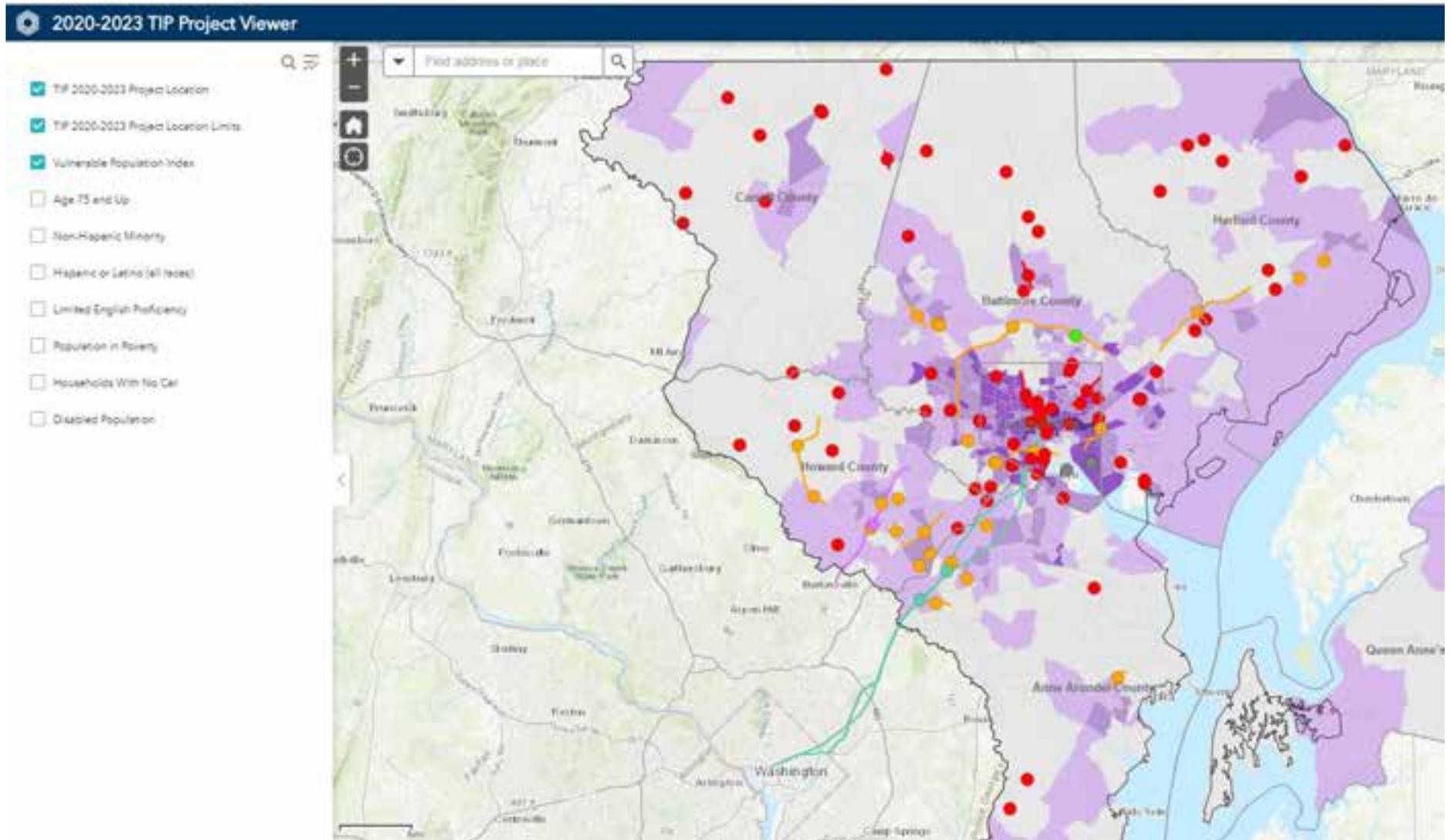



BALTIMORE METROPOLITAN COUNCIL

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INTERACTIVE MAP OF TIP PROJECTS ON VULNERABLE POPULATIONS INDEX (VPI) MAPPING TOOL



RESPONSES TO PUBLIC COMMENTS ON *MAXIMIZE2045*, FY 2020-2023 TIP, AND AIR QUALITY CONFORMITY DETERMINATION (A FULL RECORD OF COMMENTS IS AVAILABLE ONLINE)

Comment	BRTB Response
Commenter: Steve Sprecher	
<p>... bring back a Red Line of some sort, even if is not the same as the one envisioned. Baltimore needs an east-west rail route. The new infrastructure bill would be a great choice.</p>	<p>The State and regional partners are evaluating the transit needs in central Maryland through the Regional Transit Plan (rtp.mta.maryland.gov). We look to provide a vision for the next 25 years with this plan.</p>
<p>I do love the 310 Commuter Bus service from Columbia to my job in downtown Baltimore! Keep up the good work in advocating for these routes.</p>	<p>Good to hear from a rider when a service is working out.</p>
Commenter: Stuart Stainman	
<p>Does long range 2045 transport plan include study of alt east-west red line for canceled light rail line?</p>	<p>The draft plan does not include a replacement for an east-west transit connection other than the BaltimoreLink improvements that were previously enacted. The State has initiated the Regional Transit Plan (rtp.mta.maryland.gov) which will look to provide a vision for Transit over the next 25 years. Projects identified could be added to the next BRTB long-range plan.</p>
Commenter: David and Constance Highfield	
<p>Carroll County needs to have the Metro extended to Finksburg to provide a timely connection to Owings Mill and points south to Johns Hopkins.</p> <p>We also need a more direct connection to BWI air and Amtrak.</p>	<p>The policy of Carroll County, through our adopted plans and Board of County Commissioners' resolutions, has always been to provide transit services only within the County. There are currently no plans to expand this type of service outside of the County.</p> <p>The County is however in the process of updating our Transit Development Plan (TDP), which will provide a plan for public transportation improvements in the County over the next five years. Please contact Stacey Nash at 410 386-2301 to provide input into the TDP process.</p>

Commenter: Baltimore-Washington Rapid Rail (BWRR)	
Update the description of SCMaglev in Chapter 2 of the Plan.	<p><i>Maximize2045</i>, the regional long-range transportation plan, includes a brief description of the SCMaglev project in a section called “mega-regional projects.” This intent of this section is to keep regional planners and decision makers informed about potential major projects that, while not directly under the BRTB’s influence, could affect regional travel patterns in the future.</p> <p>The BRTB will include some of the information you have suggested in an enhanced project description to provide planners and decision makers with additional context. However, even the projects in the plan’s Preferred Alternative do not have detailed descriptions since their scopes for the most part are conceptual. The regional long-range transportation plan is updated every four years, so the development of the next plan will afford another opportunity to revisit where projects may be in the development process.</p>
Suggested changes to SCMaglev content in the TIP.	Most of the changes suggested were incorporated into the TIP, particularly the revised funding update.
Support of and coordination with four projects in the Plan. (MD 198 widening, Hanover St Bridge over Middle River, MD 32 widening in AA Co, and I-95 Port Covington Access Improvements.)	<p>Thank you for your support of the projects in the plan and for noting their relationship to a possible SCMaglev project in the immediate vicinity.</p> <p>Regarding I-95 Port Covington Access Improvements, there are no changes proposed that would affect or eliminate this turn onto Annapolis Road.</p> <p>From a more general perspective, three of these projects are not at a level of design to enable anything beyond speculative comments. The BRTB expects the MD 198 and Hanover Street Bridge projects to be implemented before the MD 32 project, assuming current conditions and future expectations hold steady. This could change over time as conditions evolve and future funding sources become clearer. Project sponsors will continue to consider the potential interactions among these projects.</p>
Support of and coordination with four projects located in Baltimore City included in the TIP. (Hanover St Bridge Study, Hanover St Bridge over CSX, Reconstruct Patapsco Avenue, and Waterview Avenue Bridge over MD 295.)	<p>The Hanover Street Bridge is moving forward in the investigation as to whether to rebuild or rehab the structure. At this time the State of Maryland is taking steps to bank funds for the bridge’s rehabilitation/rebuild. It is unknown at this time whether the building of a Maglev station and stop in Cherry Hill would affect the LOS of the Hanover Street Bridge, that would have to be investigated. The study did determine that the increase of traffic due to Port Covington would not necessarily affected the LOS for the Hanover Bridge once reconstructed; except during peak hours. The structural condition of the Hanover Bridge St. over the CSX has been rated fair to poor. BCDOT is working to improve the condition of the bridge, however the load rating has not been affected by this structure condition rating.</p> <p>Patapsco Avenue and Waterview Avenue Bridge roadway and bridge improvements have begun and these improvements would benefit SCMaglev.</p>

Commenter: Despacito Nibva	
Well you see I used the transportation once, all I gotta say is clean up.	Without knowing more, your comment about conditions should be addressed to the particular agency, whether highway or transit. They would appreciate hearing about your experience as a way to improve the customer experience.
Commenter: Frederick Leong	
No consideration to extending WMATA's DC Metro from Greenbelt to BWI via Columbia, with connectivity to Fort Meade.	<p>In the Washington area where WMATA operates, there have been studies looking at expanding WMATA's service north, however at this time WMATA is not in an expansion phase.</p> <p>In the Baltimore region, both Anne Arundel and Howard counties have initiatives or projects:</p> <p>Included in <i>Maximize2045</i> however is a Bus Rapid Transit (BRT) project submitted by Howard County that is studying the use of BRT in the U.S. 29 corridor that would provide a connection from Columbia into Prince George's County.</p> <p>In Anne Arundel County's 2018 Transit Development Plan, the communicated a desire to connect Anne Arundel County to the Greenbelt Metro Station. The proposal would extend existing bus route 502, which is a regional route operated by Regional Transit Agency of Central Maryland (RTA). The goal is to bring service on MD 198 to the Baltimore-Washington Parkway, into Fort Meade, and continuing past Arundel Mills to BWI Airport as proposed. Service into Fort Meade will be contingent on the transit bus being able to access the base with general public riders onboard.</p>
...plans for connecting Howard County to Fort Meade and National Business Park appear both inadequate and are often deferred.	The U.S. 1 corridor, MD 175, and access to Columbia Gateway are all being looked at or are in various stages of study. Howard County has many needs and the County and State are looking at most if not all of them.
MD 200 is vastly underused...need is for a connection to the Dulles Corridor	<p>MD 200 is outside of the Baltimore region. However, improvements to MD 295 are being considered, just not at a point to be included in this plan.</p> <p>While at this time the MDTA has no plans in its six-year Consolidated Transportation Program to extend the ICC (MD 200) beyond where it is located today, we appreciate your suggestion to extend the ICC westward towards Virginia and eastward towards MD 295.</p>
Commenter: Ben Martorana – Director of Planning City of Havre de Grace	
...improvements to the very complex and highly stressed U.S. 40/Otsego St/Ohio St intersection which is very near the Hatem Bridge...	Harford County is aware of the importance of this project to the City of Havre de Grace and to the region. The County will continue to work with MDOT and the BRTB to pursue this project. However, this MDOT SHA roadway competes statewide for limited funding. Should funding become available in the future, this project will be one of many considered by BRTB and its partners.

Commenter: Columbia Town Center Community Association

...as more options such as the North South Connector are designed, please adhere to the Howard Co Complete Streets plan.

Your comments regarding Projects 16-1901-42, 16-2001-67 as well as encouragement to conform with air quality standards, adopt complete streets policies to make biking and walking safer and a more viable option are all in line with County Executive Ball's transportation priorities. Howard County is in the process of finalizing a complete streets policy and will be working with developers to ensure that transportation improvements completed in support of increased development do not compromise and could potentially improve our ability to expand walking and biking as alternatives in Columbia.

We hope this helps, and if you have any questions, please feel free to reach out to the Howard County Office of Transportation with any other concerns.

Support for BRT on U.S. 29, this and other BRT projects are important alternatives to single-occupant car use.

With respect to Bus Rapid Transit (BRT), Howard County is continuing its evaluation of BRT options along the U.S. 29 corridor by identifying choke points and modifications to the corridor that will make enhanced transit service competitive to vehicle travel in the corridor. As part of the Central Maryland Regional Transit Plan Commission, Howard County is also requesting MDOT MTA increase their investment in both short-term service improvements and longer-term studies and plans to increase Bus and MARC service along congested corridors such as I-95 that help provide Howard County residents increased access to employment opportunities and reduce the negative impacts of congestion on the environment and livability of the Central Maryland Region.

Several proposed widenings (U.S. 29, MD 32, I-70, and U.S. 1 should consider impacts to landscapes, drainage, and sufficient wildlife crossings incorporated.

MDOT SHA takes all of these impacts into consideration through the National Environmental Policy Act (NEPA) process. Your concerns have been noted and forwarded to MDOT SHA.

Commenter: William Cowan

Since the LOOP Tunnel project is included in the TIP as a viable project, MD should assume this means that tunneling costs would decrease in the future – and thus making transit tunnels cost effective.

At the request of the FHWA, the Loop project has been removed from the final version of the TIP. Instead, the final version of *Maximize2045* will include a general description of the technologies an underground transport system might use. This section will be in Chapter 3: "Emerging Technologies."

Over the next several years, the BRTB and its state partners will make every effort to stay informed about tunneling techniques and costs.

<p>For Map ID 43, does this infer that the widening will use ROW for the previously studied yellow line?</p>	<p>The project, MD 100: Howard County line to I-97, may use right-of-way considered as part of the Yellow Line light rail project. At this time, this project is not expected to be implemented until possibly after 2035. The situation could change in the meantime, depending on future traffic conditions, future funding availability, and future regional and/or local priorities. The regional long-range transportation plan is updated every four years, so the development of the next plan will afford another opportunity to revisit where projects may be in the development process.</p>
<p>LOS measures should be change to VMT and density based on persons (person trips). Utilizing standards LOS as a 2045 measure does not take into account decreased headways for autonomous vehicles and is soon becoming an outdated measure.</p>	<p>Agree that LOS is an older measure and several other measures have been developed/adopted using observed real time data. The region's current aggregate trip based model and static highway assignment has limited capabilities. The region is developing/implementing disaggregate travel behavior (Activity Based Model) and traffic simulation (Dynamic Traffic Assignment) tools that will provide horizon year simulated data to calculate additional performance measures.</p> <p>Too early in autonomous vehicle development to fully understand their impact on travel behavior, traffic, and location choice decisions. National and other metropolitan area autonomous vehicle simulation studies have relied on scenario planning using "what if" assumptions in estimating the range of possible outcomes.</p>
<p>Include previous rapid transit plans. Baltimore and suburban communities will not thrive without a modern transportation network built around walking, biking, and transit.</p>	<p>By Federal regulation neither the TIP nor Plan are "wish lists", meaning only projects included in reasonably available funding are considered. However, the State and regional partners are currently evaluating transit needs in central Maryland through the Regional Transit Plan. This activity looks to provide a transit vision for the next 25 years.</p>
<p>Previously the City was committed to studying removal of the lower portion of the JFX. As part of the TIP, this alternative should be studied in order to foster economic development east of the current elevated JFX.</p>	<p>Currently Baltimore City is not looking at removing the lower part of the Jones Falls Expressway (I-83).</p>
<p>Commenter: Gloria Moon</p>	
<p>... widening highways is a stop-gap measure at best. Congestion will continue when widened lanes lead to more development where none was readily accessible.</p> <p>Transit needs to be increase and made east in the Baltimore-DC area.</p> <p>The use of ETs is not financially viable as it will not pay its way. Instead it destroys more valuable land instead of just increasing the interstate lanes. There is no real justification for ET lanes. Use HOV instead.</p>	<p>Please see mdta.maryland.gov/I95section200/home.html for a description of these projects. ETL's have a revenue source attached to them to pay for their construction, while HOV does not. ETL's are an economical approach to providing additional capacity. The State is not able to afford building more lanes and maintain them without some additional revenue source.</p> <p>The current ETLs within Section 100 have been utilized at greater numbers than anticipated and are considered to be very successful in reducing congestion, improving safety, and allowing routine maintenance to occur safely and efficiently. It is anticipated that the extension of the ETLs into Section 200 will have similar results.</p>

	<p>The MDTA has coordinated with MDOT MTA for the corridor in regards to transit improvements. MDOT MTA's priority is on rail transit with improvements directed at the MARC service. The I-95 ETL NB Extension improvements are being designed to accommodate MDOT MTA bus service.</p> <p>Congestion – The I-95 ETL NB Extension is being designed to address these current and forecasted needs. Congestion is forecasted to continue to grow worse based upon approved land use and regional trends.</p> <p>MDTA has evaluated HOV-ETL options in the past and will continue to explore these solutions in the future to address congestion need. The original I-95 Master Plan considered several options including HOV lanes. It was determined during the planning process with the federal and state agencies that the ETL alternative was the preferred solution.</p> <p>Other – MDTA is working with Baltimore City to ensure that the 108" waterline is protected or replaced when conditions merit that work. The revenue from toll dollars can not be shifted to other public needs.</p>
<p>The Park & Ride at MD 152 is a major concern for those living in the area. It MUST be confined to the designated Development Envelope growth area and not placed in the wetland areas zoned Agricultural.</p>	<p>Both MDTA and Harford County disagree with this interpretation. Harford County has provided direction that the MD 152 Park-&-Ride is consistent with HarfordNEXT, their latest County Master Plan. MDTA is evaluating the potential to include the MD 24/MD 924 Park-&-Ride facility within the proposed Program.</p> <p>The current MD 152 Park-&-Ride will be impacted and cannot remain in the current location. The relocation is being finalized in conjunction with resource/permitting agencies and Harford County.</p>
<p>Commenter: Judy Rose</p>	
<p>I am still opposed to any highway expansion of I-95. I do not believe ET lanes are the answer to congestion and I am not convinced this state has the ability to maintain its existing roadways. Transit is what the people want and need for the future and our elected officials apparently do not have the political will or incentives to pursue it. Maybe because it just makes sense.</p>	<p>The MDTA has coordinated with MDOT MTA for the corridor in regards to transit improvements. MDOT MTA's priority on rail transit improvements is to the MARC service and does not see the value in another rail transit line within the I-95 right-of-way. The I-95 ETL NB Extension improvements are being designed to accommodate MDOT MTA bus service.</p>
<p>Our air quality in Harford County is not the best thanks to vehicular emissions and we have a high rate of cancer, COPD, and heart issues which could be attributed to the close proximity of such highways. We are losing vegetative growth, forestation, and wetland areas which we cannot afford to lose.</p>	<p>The reduction in congestion with the ETL improvements will improve overall air quality. As part of the evaluation a detailed air quality analysis was completed.</p>
<p>Commenter: James Rice</p>	
<p>From Woodlawn to Bayview it takes 4 buses when previously it took 1 bus. Why? Fix it please.</p>	<p>MDOT MTA will consider these comments in our next service change evaluation. Service changes are made three times per year.</p>

	Current changes for September 2019 are nearing completion so this comment will be considered in the next round. A minor service change, if implemented, could occur in February 2020. If this is a major service change and implemented, it will require public meetings and if implemented it would change in September 2020.
Need bus stop at Liberty Rd. and Northwest Hospital. Was previously but they canceled. It's 3 blocks to catch a bus going east into town. It wasn't like that at first and should be a bus stop at or by the corner of Liberty Rd. and Old Court Rd.	MDOT MTA will consider these comments during a service change evaluation. Service changes are made three times per year.
Lime Bus Please.	By "Lime Bus," we assume you mean the CityLink bus running from Northwest Hospital to Harbor East. It would be helpful if you would let MDOT MTA know any specific concerns you have about this particular service.
Commenter: John Pawlus	
<p>Please provide Manchester Bypass. I live on Hanover Pike. Traffic is brutal.</p> <p>Option to Manchester Bypass: Widen Bachman Valley Road, direct traffic to Bachman Valley Road then to 97 where your expansion is. Have weight limit for trucks going through Hanover Pike.</p>	<p>Carroll County submitted the MD 30 (Manchester Bypass) project for consideration as part of the development of the 2015 regional long-range transportation plan. The BRTB did not select this project to be included in the 2015 plan. This decision was based on a combination of factors, including the relative merits of the project compared to other projects under consideration and the amount of revenues expected to be available to pay for future projects. That is, there would not be enough money in the future to pay for everything that the local jurisdictions and state agencies would like to build. By federal law, the region must show fiscal constraint in its regional transportation plans (i.e., estimated future project costs cannot exceed the revenues forecasted to be available in the future). Given this fiscal reality, projects determined to have more potential regional benefits moved forward while projects determined to have fewer potential regional benefits did not.</p> <p>Carroll County chose not to submit the Manchester Bypass project for consideration for <i>Maximize2045</i> because the county is currently working on a Countywide Transportation Master Plan. This plan will evaluate MD 30 for these issues. The County, Town and MDOT SHA are working together on MD 30 efforts.</p>
Commenter: Walt Seymour	
... suggest a traffic light at Mayfield Ave. and Meadowridge Rd. Bad blind spot due to the hill and people not adhering to speed limit.	<p>The challenges at this intersection have also been raised by other members of the community. This intersection is on a state road, therefore Howard County reached out to MDOT SHA for information.</p> <p>MDOT SHA informed us that they have evaluated this intersection many times in the past. The last study was conducted in 2017. MDOT SHA uses, as required by Maryland vehicle law, the Manual on Uniform Traffic Control Devices (MUTCD) to guide traffic signal studies and installations.</p>

	<p>The analysis performed at this location included:</p> <ul style="list-style-type: none"> • 13-hour traffic count on a typical weekday to capture the traffic volume on each leg of the intersection • an analysis of crash data • on-site observations of traffic operations during peak travel periods <p>Based on the results of the study, MDOT SHA did not recommend installation of a traffic signal at this intersection.</p> <p>We hope this clarifies how decisions to install new traffic signals are made. If you have any questions or need additional information, please do not hesitate to contact the Howard County Office of Transportation.</p>
<p>Commenter: Anonymous</p>	
<p>Eliminate Beltway active shoulder projects. Convert to peak hour transit. This undermines much of the TDML work currently under construction.</p>	<p>Using the shoulders on I-695 during peak travel hours is an example of how MDOT SHA has begun to emphasize operational approaches to addressing traffic congestion, as opposed to the traditional approach of adding lanes.</p> <p>The State and regional partners are evaluating the transit needs in central Maryland through the Regional Transit Plan (rtp.mta.maryland.gov). As for ETLs please see mdta.maryland.gov/I95section200/home.html for a description of these projects.</p>
<p>Eliminate MDTA Section 100 completion and Section 200 through Harford County.</p>	<p>The current ETLs within Section 100 have been utilized at greater numbers than anticipated and are considered to be very successful in reducing congestion, improving safety, and allowing routine maintenance to occur safely and efficiently. It is anticipated that the extension of the ETLs into Section 200 will have similar results.</p>
<p>Promote U.S. 50 BRT project.</p>	<p>Anne Arundel County's Transportation Master Plan, promotes the development of options along major corridors, with U.S. 50 being one. The strategies include operation of an all-day weekday high-quality transit service (four routes) along this corridor with stops in Annapolis, Navy Stadium Park-&-Ride lot, Parole Town Center, Davidsonville, Bowie and continued service to key destinations in downtown Washington, D.C. The transit service would be permitted to run in the carpool lanes at all times. Another benefit is "Enhancing Active and Event Traffic Management" through the implementation of variable speed limits, dynamic lane marking, Variable Message Signs, and enhanced traveler information system this is a corridor identified at both the local and regional level.</p>

	<p>Specifically, U.S. 50 Bus Rapid Transit (BRT) project covering the distance from Parole in Anne Arundel County to New Carrollton in Prince George’s County is included in <i>Maximize2045</i>.</p> <p>The State and regional partners are currently evaluating the transit needs in central Maryland through the Regional Transit Plan.</p>
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Committer: Anonymous	
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<p>Bike infrastructure badly needed in Elkridge.</p> <p>3 choke points: CXS and U.S. 1, Montgomery Road over I-95, Lawyers Hill to Marshall.</p> <p>Connect Meadowridge to Ducketts and Loudon Ave. over 100.</p> <p>Elkridge kids should be able to ride bikes to our parks too. Access to Rockburn and Troy should be comparable to the existing access to Centennial and Blandair.</p> <p>Elkridge commuters should be able to bike and walk to the Dorsey MARC too!</p>	<p>Thank you for your comments regarding cycling and walking access in the Elkridge community. We understand your frustration and concerns.</p> <p>BikeHoward’s goal is to create a connected network of bicycle facilities countywide, including in Elkridge, which are accessible to all ages, especially to children. Specifically, BikeHoward calls for the following improvements in the mid- to long-term, which correspond to your suggestions:</p> <ul style="list-style-type: none"> • Refurbishment and reopening of the tunnel under the CSX tracks in Elkridge to reconnect the two sides of Main Street • Addition of shoulders and bike lanes along Montgomery Road to facilitate access between Elkridge, Rockburn Park, and areas west • Building of protected bike lanes or shared-use path along U.S. 1 to access Troy Hill Drive • Construction of a bridge from Santa Barbara Court to a new pathway on the east side of the CSX tracks, which will provide access under MD 100, to Oxford Square, and to the Dorsey MARC station. <p>We hope this helps, and if you have any questions, please feel free to reach out to the Howard County Office of Transportation with any other concerns.</p> <p>And while early in the process, Howard County, Baltimore County and the Baltimore Metropolitan Council are currently writing a Request for Proposals to conduct a feasibility study for a segment of the Patapsco Regional Greenway from Guinness Brewery to Elkridge that should provide bike infrastructure in the Elkridge community.</p>
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Commenter: James Himel – Elkridge Rotary Club

De-construct 1.5 miles of I-895 from I-95 north to I-195. This is a low-traffic/obsolete stretch of I-895 that should be served by existing I-95 and I-195. Benefits redevelopment of historic U.S. 1 Elkridge and returns open space to Patapsco State Park for needed parking and recreation. Eliminates multiple bridges from future MDOT maintenance with new construction limited to 2 ramps at I-95 and I-895 existing overpass.

MDOT does not agree with your assessment, the connection to I-95 is an essential component of the roadway.

While at this time the MDTA has no plans in its six-year Consolidated Transportation Program to eliminate I-895 between the I-95 southern interchange and I-195, we appreciate your suggestion. Your comment has been forwarded to MDTA Planning and Program Development Director Melissa Williams, so that she is aware.

RESPONSES TO PUBLIC ADVISORY COMMITTEE COMMENTS ON *MAXIMIZE2045*, FY 2020-2023 TIP, AND AIR QUALITY CONFORMITY DETERMINATION

Comment	BRTB Response
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BRTB RESPONSE TO PUBLIC ADVISORY COMMITTEE COMMENTS

<p>... with respect to the rapidly transforming transportation environment, it is important that the plan focus on creating choice, reliability and both mitigate and adapt to the impacts of climate change because these are the factors that are driving trends and they will comprise the future that we are planning for.</p>	<p>The BRTB acknowledges that the transportation environment is rapidly transforming and that creating safe and reliable travel options for users of the system is important for both travelers and for the environment. The BRTB will shortly issue a solicitation that will help BRTB members identify which choices and travel options work for people (“Practices for changing mobility”) and new guidelines for how development will impact the transportation network (“Regional traffic impact study guidelines”). Better data and practices can help us identify which of these choices and options provide the best environmental benefits and how we might achieve these benefits.</p>
<p>Chapters 2 and 3 of the Plan present an overview of a number of trends in the Baltimore region. However, the policies, analysis and investments contained in the fiscally constrained plan do not directly address a number of trends and advancements in communication and transportation technologies, including but not limited to, the integration of connected and automated vehicles (both automation of passenger and freight vehicles) into the transportation network. Other trends in transportation that are not accounted for in the <i>Maximize2045</i> analysis and investments include mobility as a service, scooters and bike share programs.</p>	<p>The BRTB recognizes the need to have information on future trends and conditions inform the decision making related to selection of projects. This is a key reason for including these types of discussions in the plan.</p> <p>During the development of the 2015 long-range regional transportation plan, the BRTB held a workshop to conduct some initial exploratory scenario planning. One of the topics considered was the potential effects of autonomous and connected vehicles. The intent of this workshop was to get decision makers thinking about trends that might have major effects in the future.</p> <p>This is part of a continual process of hearing periodically from transportation service providers in order to stay informed about developments in these trends, including mobility as a service and scooter and bike share programs, and how they might affect travel behavior and patterns in the future.</p>
<p>Performance Measures: Quality of performance in terms of transit should be tracked and presented, particularly to inform decisions related to project prioritization and selection. Access to a transit stop or station is not valuable to riders if the service does not provide access to destinations, frequencies, or travel times. The same goes for a measure that states number of jobs accessible by a bus stop or rail transit station. If the option is not reliable to provide good quality access in a reasonable amount of time, it doesn’t matter how close the station is. This is also very important for meeting the transportation needs of underserved and</p>	<p>Some general points about performance measures: Over the past three plans, the BRTB has recognized the importance of—and attempted to be proactive in establishing—relevant performance measures. This plan is the first one to incorporate fully all of the federally required performance measures and targets, owing to the fact that not all of the federal regulations were in place during the development of previous plans.</p>

<p>vulnerable populations. Recommendations for measures to consider include assessing the number of jobs accessible by premium public transportation (bus transfer center, rail transit station, major bus route) within 30, 45 and 60 minutes. Additionally or in place of that measure, there could be a measure of the percentage of jobs in the region accessible by walking, transit, and other non SOV/non-driving method of travel.</p>	<p>The BRTB will continue to try to remain proactive in following a performance-based approach to planning and programming projects. At the same time, the region must carefully consider which performance measures (for example, to address accessibility issues) should be added to the measures already required by federal law and regulations. With the number of federally required measures reaching 25, the FHWA and other MPOs caution against adopting an amount of measures that would make data gathering and monitoring too difficult in terms of time, staff availability, and data availability. The BRTB will attempt to find the correct balance between these concerns and the desire to be responsive to the needs of the traveling public.</p> <p>The environmental justice (EJ) analysis in <i>Maximize2045</i> addresses transit accessibility, travel times, and proximity to key destinations. Specifically, it assesses the impact of the preferred alternative on EJ and non-EJ transportation analysis zones (TAZs) in the context of a number of accessibility and mobility measures. These include: average number of jobs accessible; average number of shopping opportunities accessible; average commute time; average travel time for shopping purposes; average travel time to the closest hospital; and the percentage of the population close to a supermarket, hospital, and college/university. Each of these were evaluated individually for both auto and transit.</p> <p>This analysis represents a significant expansion of the EJ analysis conducted for previous plans. However, there are certainly opportunities to improve. The job accessibility measure used a transit travel time of 60 minutes. While a variety of time thresholds (15, 30, 45, 60 minutes) were analyzed for proximity to supermarkets, hospitals, and colleges/universities, as a recommendation of BMC staff, BRTB members agree that it would be useful to expand the job accessibility analysis to include multiple time thresholds. The chosen modes for the EJ analysis (auto and transit) could also be expanded in the future to include walking accessibility.</p>
<p>Performance Measures: Congestion on highways should not be measured as a LOS or volume/capacity ratio, but in terms of travel times and delay which better reflect user experience and perspective. Adding capacity to highways is known to induce additional demand and is therefore an unsustainable long term strategy for addressing highway capacity and congestions.</p> <p>These measures focus attention on building capacity for vehicles rather than serving trips and travel purposes. There is a variety of published literature and research available to support the adoption of measures that help evaluate transportation performance from the perspective of transportation system users, from personal travelers and commuters to goods distributors and consumers.</p>	<p>The performance measures in <i>Maximize2045</i> (described in Chapter 5) address delay and travel time reliability. Level of service (LOS) is one of the factors in the project evaluation criteria (described in Appendix B of <i>Maximize2045</i>) and is not included in any of the performance measures. As part of the development of the next regional long-range transportation plan, the BRTB will continue to refine the methodologies used in selecting the most effective set of projects to carry forward.</p>

	<p>BMC staff is aware of the published literature and research on performance measures and is currently using INRIX probe data to monitor user's experience of existing conditions. The region's aggregate trip base model and static highway assignment has limited capabilities. The region is developing and is moving towards adoption of a micro-simulation - disaggregate activity based model (travel behavior) and dynamic traffic simulation (traffic). Disaggregate micro-simulation of individual user's travel behavior and vehicle trajectories provides horizon year simulated data needed to calculated performance measures from a user's perspective.</p>
<p>Performance measures and analysis should help identify and target highway and system investments to address barriers to efficient travel across the network, such as conflicts between freight and commuter travel.</p>	<p>See discussion above about the need to carefully consider which performance measures should be added to the measures already required.</p>
<p>Performance Measures: More attention should be paid to the performance of networks and systems over individual units within them (such as individual highways or transit routes) within the networks. In many cases, systems are served by multiple modes, services and facilities. For example, the network of highways, railways and water based services and facilities serving freight travel should be analyzed for its performance in delivering goods locally and serving the national and international freight distribution taking place via the Port of Baltimore, rail and highway transportation networks.</p>	<p>The travel demand model that BMC staff uses to predict the potential effects of projects in the TIP and the regional long-range transportation plan considers these potential effects across the multimodal transportation network. This includes considering the effects of travel in areas contiguous to the Baltimore metropolitan area (for example, the Washington, DC area; the Wilmington, Delaware area; and so on).</p> <p>It is a good point about attempting to measure how effectively the freight network moves goods within and throughout the region. At this point, the sole freight-related measure involves the reliability of truck travel times. This is a federally required measure. The BRTB will continue to consider additional measures, beyond those that federal laws and regulations require, to address other regional concerns.</p>
<p>Funding: Transportation needs far outstrip the dollars available to fund them. The PAC encourages the BRTB to fully investigate and analyze methods of supplementing state and federal funding with regionally collected revenues, which may require a change in State law to implement.</p>	<p>It is true across the country that needs outstrip available dollars. The BRTB will ask BMC staff to explore available information on regional transportation funded processes and possibly undertake broader efforts to explore this in a future UPWP.</p>
<p>Funding: the BRTB should encourage MDOT and the State of Maryland to consider alternatives to the motor fuel tax as the primary source of revenue in light of well documented research that the gas tax is not a sustainable source of revenues. Opportunities for capturing revenues should at a minimum be considered for electric vehicles (currently under paying to the Transportation Trust Fund due to their lack of gasoline consumption).</p>	<p>In response to a similar comment from the PAC on the UPWP, the BRTB provided a response that is applicable here.</p> <p>The BRTB is aware of MDOTs efforts to actively monitor and participate in national discussions on this complex topic. That said, MDOT further advised the BRTB:</p> <p>"Through participation in regional and national organizations and committees, such as the American Association of State Highway and Transportation Officials (AASHTO) and the I-95 Corridor Coalition, the Maryland Department of Transportation (MDOT) is monitoring the potential impacts of increased corporate average fuel economy (CAFE), including the economic impacts of alternative fuel vehicles such as electric vehicles. The current and projected population of electric</p>

	vehicles is a very small percentage of the fleet population. In fact, electric vehicles will comprise less than one percent of the light-duty vehicle fleet population in 2020.”
The plan appears to favor areas other than Carroll County. The items in Carroll County planned to start sooner are relatively inexpensive streetscape projects, while major improvements, such as the MD RT140 and MD RT91 intersection/corridor improvements are pushed again, out to 2035 or later.	All projects submitted by Carroll County, and in consultation with MDOT SHA, have been included in <i>Maximize2045</i> . The reason these projects appear in the first phase of the plan are because they are further along in the overall process (i.e., they have a percent of design complete and some funding is committed as well as having a reasonable cost that can be funded). These are major considerations in the timing of projects.
Project prioritization and selection needs to be less focused on individual jurisdictions and more focused on how to reach regional transportation goals and objectives. How do these investments improve the performance of full systems of transportation services and facilities?	Projects in the TIP and <i>Maximize2045</i> are grouped by jurisdiction simply to allow for easier review by stakeholders. In terms of project selection, the criteria with the most weight – technical criteria – do not consider jurisdiction outright (more on specific location or corridor) and are calculated by BMC staff. Policy scores are determined by the project sponsors and reflect their role as the decision-makers on the BRTB.
Central Maryland Regional Transit Plan: Included in the Central Maryland Regional Transit Plan should be an analysis of funding and finance options for public transportation. We hope that included in this plan will be consideration of methods for seamless payment of transportation service alternatives such as public transportation, bike share, parking and other mobility services.	The BRTB encourages you to participate in MDOT MTA’s process to develop a Regional Transit Plan for Central Maryland . We have forwarded your suggestion to MDOT MTA for consideration in this plan process.
Central Maryland Regional Transit Plan: the regional transportation forum, BRTB could partner with MTA to provide modeling analysis and impact assessment of different scenarios and conduct studies to demonstrate the impact and implications of new shared mobility services and transportation options on road congestion, safety, transit ridership, revenues, etc. For example, BRTB could identify and test a variety of scenarios that include a range of potential outcomes caused by the growth of MaaS (mobility as a service), OnDemand services by Ubers and Lyfts alike and the possible design of networks that include high capacity and/or on-demand bus services. The transit plan could seek to identify a model in which more people can have access to the full range of modes in a newly designed system, which is competitive in travel time and cost to car.	MDOT MTA’s Regional Transportation Plan (RTP) process, while run on a completely separate mandate and timeline from BRTB’s <i>Maximize2045</i> , will overlap in so far as there is BMC and several BRTB members participating in the MDOT MTA run RTP. The BRTB is in the process of issuing a solicitation to identify which choices and travel options work for people (“Practices for changing mobility”) and new guidelines for how development will impact the transportation network (“Regional traffic impact study guidelines”). However it is not clear that the MTA will be able to use results from these efforts as they are mandated to have a draft Plan by April 2020.
TIP: The PAC recommends that the TIP be presented as a regional program of projects rather than by individual jurisdiction. There should be efforts to show the connectivity of the individual projects within the context of a regional transportation system and	Projects in the TIP and <i>Maximize2045</i> are grouped by jurisdiction simply to allow for easier review by stakeholders.

<p>network of services and infrastructure with the purpose of meeting regional transportation goals and needs.</p>	<p>While the BRTB and BMC staff have utilized various methods to show what is being asked here (to show connectivity within a regional context and the connection to regional goals and needs), the BRTB will explore better ways to accomplish that suggestion.</p>
<p>TIP: BRTB members are encouraged to use the MPO forum to analyze locally defined transportation projects and needs within the regional context. Land use modeling could also be woven into these analyses and should be done using a regional model so that all the same basic factors and assumptions are woven into the model. The BRTB staff and the forum are there to facilitate this analysis and develop such a blueprint.</p>	<p>Similar to the response above, the process used to analyze projects is done on a regional basis. The travel demand model looks at trips by individuals to and from specific locations and not at a high level such as a jurisdiction. Land use via cooperative forecasts are included as a basic building block of the model.</p> <p>There is a Cooperative Forecasting Group (committee) that meets every two months to discuss issues and occasionally the Planning Directors in the region meet to discuss significant issues. Several years ago this Directors group met extensively to understand the densities needed to support major transit projects and therefore make informed decisions during the comprehensive zoning process. BRTB members have also engaged in several scenario planning exercises to better understand impacts on travel in the region.</p> <p>The BRTB encourages the PAC to outline additional steps they feel would be useful to pursue.</p>

BRTB RESPONSE TO COMMENTS FROM INDIVIDUAL PAC MEMBERS	
<p>Project prioritization and selection should be looking to measuring the quality of improving transportation issues on individual jurisdictions while showing how these projects improve regional transportation goals and objectives. Continuously supporting and improving Smart growth strategies in our transportation systems. This initiative will better serve more people while fostering economic vitality for both businesses and communities.</p>	<p>The BRTB does not disagree with such an approach. The 2-year process has entailed numerous types of analyses and evaluations to result in projects that support the goals the BRTB identified and support. There is a great deal of interaction and at times it is difficult to tell what specifically impacted a particular result.</p> <p>Through interaction with other MPOs and national organizations, and through local experiences, the BRTB strives to improve the process it pursues when making decisions with considerable impact and cost.</p>
<p>I support the PAC comments, and add that no funds should be spent on projects that do not immediately begin to eradicate inequity, reduce carbon emissions, or shift mode away from personal automobiles. We are in a global climate crisis and the survival of billions of people relies on a coordinated effort to radically change our transportation and land use planning. This TIP and <i>Maximize2045</i> hardly begin to address this reality.</p>	<p>The BRTB collaborates with all members for workable solutions to address what you are suggesting. MDOT supports a wide range of climate-related programs and initiatives to reduce greenhouse gas emissions, as does the Maryland Department of the Environment. MDOT has also reinvigorated a program called Commuter Choice to assist people in choices other than SOV travel and promotes equity in its plans and programs.</p>

<p>It's hard to give a yes or no answer to a broad statement for a large metropolitan area. There is emphasis on transportation resources changing (bikeshare, scooters, Lyft, Uber....) but no mention of the fact that in the largest city in our consideration, there is a large fraction of the population totally reliant on public transportation.</p>	<p>The metropolitan area the BRTB covers has a diverse set of transportation needs and concerns. The challenge is to come up with a mix of projects that balance these needs and concerns while remaining fiscally responsible and while remaining mindful of the need to find equitable ways of helping people reach the places they need to go. As a regional agency, the BRTB affords opportunities for proponents of varying approaches to have conversations about the best ways to move forward.</p>
<p>Carroll County is seeing its rural nature erode, but the only projects mentioned there are for more highways, something which is out of what seems to me the general thrust of the board.</p>	<p>No new highway projects are being proposed in <i>Maximize2045</i> by the county. The county is proposing capacity enhancement projects to account for existing and future demand on Carroll County roads. Streetscape projects are also included and are some of the higher ranked projects. These projects are intended to enhance the main streets of the towns they are in as well as address much needed infrastructure upgrades at the same time.</p>
<p>The issue of lessening congestion in the region is not directly addressed.</p>	<p>The BRTB will work with a consultant to improve the regional Congestion Management Process (CMP). Work on this contract is expected to begin shortly after the adoption of the final <i>Maximize2045</i>.</p> <p>Appendix D of the plan discusses the CMP and specific strategies to manage congestion in the region. This includes a table with descriptions of congestion management approaches the jurisdictions and agencies propose as part of the scopes of both highway and transit projects (see the table starting on Page 11 of Appendix D).</p> <p>MDOT SHA and the local jurisdictions are placing greater emphasis on multimodal and operational approaches to addressing traffic congestion, as opposed to the traditional approach of adding lanes. Some examples:</p> <ul style="list-style-type: none"> • MDOT SHA proposes to use the shoulders on I-695 during peak travel hours to relieve congestion (see Page 9 of Chapter 7, Map ID 12) • To encourage modes other than single-occupancy vehicle (SOV), Harford County proposes to add a high-occupancy vehicle (HOV) lane as part of its MD 22 project serving Aberdeen Proving Ground (see Page 11 of Chapter 7) • Anne Arundel and Howard counties propose to establish Bus Rapid Transit (BRT) service along major corridors as a means of decreasing reliance on auto travel.

APPENDIX H

ASSOCIATED BRTB RESOLUTIONS

BALTIMORE METROPOLITAN PLANNING ORGANIZATION

BALTIMORE REGIONAL TRANSPORTATION BOARD RESOLUTION #20-2

APPROVAL OF THE BALTIMORE REGION 2020-2023 TRANSPORTATION IMPROVEMENT PROGRAM AND THE CONFORMITY DETERMINATION OF THE 2020-2023 TIP

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

WHEREAS, the FY 2020-2023 Baltimore Region Transportation Improvement Program was prepared in response to MAP-21's successor, the Fixing America's Surface Transportation (FAST) Act, and meets all of the requirements of the May 2016 final rule governing the development of metropolitan plans and programs, and all projects and activities funded in the FY 2020-2023 TIP have been developed in relationship to the regionally adopted *Maximize2045: A Performance-Based Transportation Plan*; and

WHEREAS, the FY 2020-2023 Baltimore Region Transportation Improvement Program is a prioritized program of transportation projects which are financially constrained by year and includes a financial plan that demonstrates that projects can be implemented using current revenue sources; and

WHEREAS, the conformity analysis as reported in the "Conformity Determination of *Maximize2045* and the FY 2020-2023 Transportation Improvement Program," dated July 2019, provides the basis for a finding of conformity to the 8-hour ozone national ambient air quality standard (NAAQS) SIP for the Baltimore region, which includes meeting the 2012 Reasonable Further Progress motor vehicle emissions budgets, as determined adequate by U.S. EPA. This addresses three ozone NAAQS: 1997, 2008, and 2015. (Attachment 1: Tables 1 through 2); and

WHEREAS, a range of outreach strategies were employed to share information about the FY 2020-2023 Baltimore Region Transportation Improvement Program including a public review from May 9 to June 18, 2019. The public review included seven public meetings throughout the region as well as an online webinar. The draft FY 2020-2023 TIP document was also supported by an online interactive map. There were a range of comments submitted and considered by the BRTB; and

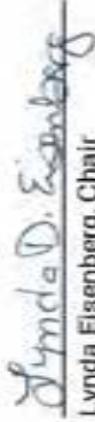
WHEREAS, the FY 2020-2023 Baltimore Region Transportation Improvement Program uses federal and matching funds for the following project categories: 32.1 percent highway preservation, 30.0 percent highway capacity, 16.0 percent transit

preservation, 9.6 percent emission reduction strategies, 4.9 percent environmental and/or safety, 4.3 percent commuter rail preservation, 1.2 percent ports, 1.1 percent enhancement program, 0.7 percent miscellaneous, 0.1 percent transit capacity, and 0.0 percent commuter rail capacity.

NOW, THEREFORE, BE IT RESOLVED that the Baltimore Regional Transportation Board approves the FY 2020-2023 Baltimore Region Transportation Improvement Program.

I HEREBY CERTIFY that the Baltimore Regional Transportation Board, as the Metropolitan Planning Organization for the Baltimore region, approved the aforementioned resolution at its July 23, 2019 meeting.

7/23/2019
Date



Lynda Eisenberg, Chair
Baltimore Regional Transportation Board

Table 1. VOC Emissions Test Results (average summer weekday, tons/day)

	2020	2030	2040	2045
Total Emissions Modeled	21.6	12.3	9.7	9.6
2012 Conformity Budget¹	40.2	40.2	40.2	40.2
Conformity Result	Pass	Pass	Pass	Pass

¹ 8-hour ozone Reasonable Further Progress (RFP) SIP Budget for Baltimore region (motor vehicle emissions budgets determined to be "adequate" by U.S. EPA on February 22, 2016)

Table 2. NOx Emissions Test Results (average summer weekday, tons/day)

	2020	2030	2040	2045
Total Emissions Modeled	47.0	20.1	17.4	17.9
2012 Conformity Budget¹	93.5	93.5	93.5	93.5
Conformity Result	Pass	Pass	Pass	Pass

¹ 8-hour ozone Reasonable Further Progress (RFP) SIP Budget for Baltimore region (motor vehicle emissions budgets determined to be "adequate" by U.S. EPA on February 22, 2016)

BALTIMORE METROPOLITAN PLANNING ORGANIZATION

**BALTIMORE REGIONAL TRANSPORTATION BOARD
RESOLUTION #20-3**

**APPROVAL OF MAXIMIZE 2045: A PERFORMANCE-BASED TRANSPORTATION PLAN
AND THE CONFORMITY DETERMINATION OF MAXIMIZE2045**

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

WHEREAS, the Baltimore Regional Transportation Board, as the Metropolitan Planning Organization for the Baltimore region, is required under the Fixing America's Surface Transportation (FAST) Act to complete a long-range transportation plan at least every four years for the Baltimore region; and

WHEREAS, the Baltimore Regional Transportation Board has coordinated with Baltimore Metropolitan Council staff to ensure its compliance with FAST act requirements as documented in the Metropolitan Transportation Planning regulations (May 27, 2016 *Federal Register*); and

WHEREAS, development of the long-range transportation plan results from a continuous, cooperative, and comprehensive planning process and considers and integrates as appropriate the federal planning factors documented in the Metropolitan Transportation Planning regulations (May 27, 2016 *Federal Register*); and

WHEREAS, the Baltimore Regional Transportation Board, in accordance with the FAST Act, developed a list of highway and transit projects, referred to as the Preferred Alternative; and

WHEREAS, the Baltimore Regional Transportation Board, as the Metropolitan Planning Organization for the Baltimore region, is required under the Clean Air Act Amendments of 1990 and the U.S. Environmental Protection Agency's Transportation Conformity Rule to conduct analyses to ensure that the region's transportation plans and programs conform with the State Implementation Plan (SIP); and

WHEREAS, the conformity analysis as reported in the "Conformity Determination of Maximize2045 and the FY 2020-2023 Transportation Improvement Program," dated July 2019, provides the basis for a finding of conformity to the 8-hour ozone national ambient air quality standard (NAAQS) SIP for the Baltimore region, which includes meeting the 2012 Reasonable Further Progress motor vehicle emissions budgets, as determined adequate

by U.S. EPA. This addresses three ozone NAAQS: 1997, 2008, and 2015. (Attachment I: Tables 1 through 2); and

WHEREAS, opportunities for public comment were provided—including a 45-day public comment period, outreach at community and transportation-related events, seven public open-house meetings (one held in each jurisdiction), an online virtual meeting, and regularly scheduled meetings of the Baltimore Regional Transportation Board, Interagency Consultation Group, and Public Advisory Committee—with respect to the draft *Maximize2045* and the methodology and results of the conformity analysis; and these comments were duly considered by the Metropolitan Planning Organization in this deliberation process; and

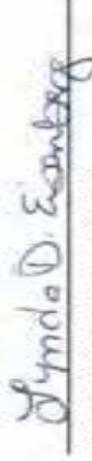
WHEREAS, the BRTB employed a range of outreach strategies to share information about *Maximize 2045* and the Conformity Determination, supported by opportunities for public comment (e.g., seven public open-house meetings and one online virtual meeting), and a 45-day review was offered and numerous public comments were considered by the BRTB.

NOW, THEREFORE, BE IT RESOLVED that the Baltimore Regional Transportation Board approves *Maximize2045: A Performance-Based Transportation Plan* and the *Conformity Determination of Maximize 2045 and the FY 2020-2023 Baltimore Region Transportation Improvement Program*.

I HEREBY CERTIFY that the Baltimore Regional Transportation Board, as the Metropolitan Planning Organization for the Baltimore region, approved the aforementioned resolution at its July 23, 2019 meeting.

7/23/2019

Date



Lynda Eisenberg, Chair
Baltimore Regional Transportation Board

Table 1. VOC Emissions Test Results (average summer weekday, tons/day)

	2020	2030	2040	2045
Total Emissions Modeled	21.6	12.3	9.7	9.6
2012 Conformity Budget¹	40.2	40.2	40.2	40.2
Conformity Result	Pass	Pass	Pass	Pass

¹ 8-hour ozone Reasonable Further Progress (RFP) SIP Budget for Baltimore region (motor vehicle emissions budgets determined to be "adequate" by U.S. EPA on February 22, 2016)

Table 2. NOx Emissions Test Results (average summer weekday, tons/day)

	2020	2030	2040	2045
Total Emissions Modeled	47.0	20.1	17.4	17.9
2012 Conformity Budget¹	93.5	93.5	93.5	93.5
Conformity Result	Pass	Pass	Pass	Pass

¹ 8-hour ozone Reasonable Further Progress (RFP) SIP Budget for Baltimore region (motor vehicle emissions budgets determined to be "adequate" by U.S. EPA on February 22, 2016)

APPENDIX I

GLOSSARY OF TERMS

GLOSSARY OF TERMS

3-C	Coordinated, comprehensive, and continuing	MAP-21	Moving Ahead for Progress in the 21st Century
ACS	American Community Survey	MARC	Maryland Commuter Rail
ADA	Americans with Disabilities Act of 1990	MDE	Maryland Department of the Environment
BMC	Baltimore Metropolitan Council	MDOT	Maryland Department of Transportation
BRTB	Baltimore Regional Transportation Board	MPO	Metropolitan Planning Organization
CAA	Clean Air Act Amendments of 1990	MTA	Maryland Transit Administration
CFR	Congressional Federal Register	NAAQS	National Ambient Air Quality Standards
CIP	Capital Improvement Program	NEPA	National Environmental Policy Act
CMAQ	Congestion Mitigation and Air Quality	NHS	National Highway System
CMP	Congestion Management Process	NOx	Oxides of Nitrogen
CO	Carbon Monoxide	OA	Obligation Authority
CTP	Consolidated Transportation Program	PAC	Public Advisory Committee
DBE	Disadvantaged Business Enterprise	PBPP	Performance Based Planning and Programming
DOT	Department of Transportation	PM2.5	Particles smaller than 2.5 micrometers
EJ	Environmental Justice	ROW	Right-of-Way
EPA	Environmental Protection Agency	SHA	State Highway Administration
ERS	Emission Reduction Strategy	SIP	State Implementation Plan
FAST	Fixing America's Surface Transportation	STIP	State Transportation Improvement Program
FHWA	Federal Highway Administration	TAM	Transit Asset Management
FTA	Federal Transit Administration	TAZ	Transportation Analysis Zone
HUR	Highway User Revenue	TIP	Transportation Improvement Program
ICG	Interagency Consultation Group	TTF	Transportation Trust Fund
ITS	Intelligent Transportation Systems	USC	United States Code
M&O	Management and Operations	VOC	Volatile Organic Compounds
MAA	Maryland Aviation Administration	WMATA	Washington Metropolitan Area Transit Authority

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11-1103-13 - Furnace Avenue Bridge over Deep Run	98
11-1208-13 - Harwood Road Bridge over Stocketts Run	100
11-1402-13 - Magothy Bridge Road Bridge over Magothy River	102
11-1403-13 - O'Connor Road Bridge over Deep Run	104
11-1601-19 - McKendree Road Culvert over Lyons Creek	106
11-1602-13 - Polling House Road Bridge over Rock Branch	108

Baltimore City

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13-1005-13 - Gunpowder Road Bridge No. B-0409	178
13-1012-13 - Hammonds Ferry Road Bridge No. B-0100 over CSX Railroad	180

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13-1107-13 - Piney Grove Road Bridge No. B-0140 over CSX railroad	184
13-1108-13 - Peninsula Expressway Bridge No. B-0119 over CSX Railroad	186
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