

**BALTIMORE REGION
FY 2022-2023
UNIFIED PLANNING WORK PROGRAM
FOR TRANSPORTATION PLANNING**

APRIL 16, 2021

**PREPARED FOR THE
BALTIMORE REGIONAL TRANSPORTATION BOARD
The designated Metropolitan Planning Organization
for the Baltimore Region**



The BRTB is staffed by the:
BALTIMORE METROPOLITAN COUNCIL

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**BALTIMORE REGION
FY 2022-2023 UNIFIED PLANNING WORK PROGRAM
FOR TRANSPORTATION PLANNING**

**The Honorable Stephen Wantz
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Baltimore Regional Transportation Board**

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April 16, 2021

**Produced under the auspices of the Baltimore Regional Transportation Board,
the Metropolitan Planning Organization for the Baltimore Region**

**Baltimore Metropolitan Council
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Table of Contents

I.	INTRODUCTION.....	7
II.	PROGRAM MANAGEMENT & COORDINATION.....	22
	UPWP MANAGEMENT	24
	PROFESSIONAL CONSULTANT SERVICES	26
	TECHNICAL ANALYSIS IN SUPPORT OF STATE AND LOCAL INITIATIVES.....	28
III.	PLANNING CONTEXT	30
	LONG-RANGE TRANSPORTATION PLANNING.....	32
	TRANSPORTATION IMPROVEMENT PROGRAM.....	34
IV.	PROMOTING INCLUSIVENESS & COOPERATION	36
	PUBLIC PARTICIPATION AND COMMUNITY OUTREACH.....	38
	TRANSPORTATION EQUITY PLANNING	40
V.	GATHERING & ANALYZING DATA	41
	GIS ACTIVITIES	43
	DEMOGRAPHIC AND SOCIOECONOMIC FORECASTING	45
	DEVELOPMENT MONITORING	47
	ANALYSIS OF REGIONAL DATA AND TRENDS.....	49
	MAINTENANCE OF CURRENT SIMULATION TOOLS.....	51
	SIMULATION TOOLS: APPLICATIONS AND ANALYSIS	54
VI.	SAFETY & SECURITY	56
	SAFETY PLANNING AND ANALYSIS	58
	TRANSPORTATION SYSTEMS MANAGEMENT AND OPERATIONS PLANNING.....	60
	EMERGENCY PREPAREDNESS PLANNING	63
VII.	MOBILITY, ACCESSIBILITY & CONNECTIVITY	65
	SYSTEM PERFORMANCE: MONITORING AND ADAPTING.....	67
	FREIGHT MOBILITY PLANNING.....	70
	BICYCLE AND PEDESTRIAN PLANNING	72
	TRANSIT AND HUMAN SERVICE TRANSPORTATION PLANNING.....	75
VIII.	PROTECTING CURRENT & FUTURE RESOURCES	77
	ENVIRONMENTAL PLANNING.....	79
	AIR QUALITY CONFORMITY ANALYSIS	81

IX.	APPENDIX A.....	83
	FY 2022-2023 BUDGET DETAILS	83
X.	APPENDIX B.....	93
	PROJECT: TRANSPORTATION AND LAND USE CONNECTION GRANTS.....	95
	PROJECT: IMPLEMENTATION OF REGIONAL TRANSIT PLAN – CONTINUATION OF CORRIDOR ANALYSIS	97
	PROJECT: REGIONAL TRAFFIC IMPACT STUDY GUIDELINES: PHASE 2.....	99
	PROJECT: PLANNING PROCESS REVIEW	101
	PROJECT: ONLINE CRASH DATA DASHBOARD.....	102
	PROJECT: JURISDICTIONAL ONLINE TRANSPORTATION DASHBOARDS	103
	PROJECT: CLIMATE CHANGE RESOURCE GUIDE: TRAINING AND NEXT STEPS.....	104
	PROJECT: TRANSPORTATION ISSUES IN HISTORICAL TOWN CENTERS.....	105
XI.	APPENDIX C.....	108
	PUBLIC REVIEW PROCESS.....	108
XII.	APPENDIX D.....	130
	LIST OF ACRONYMS.....	130

INTRODUCTION

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UNIFIED PLANNING WORK PROGRAM DEVELOPMENT PROCESS

The Fiscal Years (FY) 2022-2023 Unified Planning Work Program (UPWP) outlines the planning activities to be performed by all state, regional, and local participants involved in the Baltimore metropolitan transportation planning process over the two fiscal years (July 1, 2021 through June 30, 2023). It defines the regionally agreed upon planning priorities and the roles and responsibilities of the various participants in this process.

The work program reflects a careful consideration of critical transportation issues currently facing the region, as well as the analytical capabilities needed to address them. The UPWP is required as a basis and condition for all federal funding assistance for transportation planning by the joint planning regulations of the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA).

Through the FY 2022-2023 UPWP, as well as previous UPWP initiatives, the Baltimore Regional Transportation Board (BRTB), acting as the designated metropolitan planning organization (MPO), will address and support the short-term and long-range transportation planning priorities of the Baltimore metropolitan area. In July 2019, the BRTB approved *Maximize2045: A Performance-Based Transportation Plan*, the long-range regional transportation plan that guides the region's short-term and long-term multimodal investments. The BRTB completed all phases for this plan including submittal to the Federal Highway Administration, Federal Transit Administration, and U.S. Environmental Protection Agency for review and approval. This included the continued development of processes and procedures to address requirements related to performance-based planning and programming. This UPWP includes studies and programs to those ends.

The UPWP is funded through an 80 percent planning grant provided by FHWA and FTA and a 20 percent match provided by the Maryland Department of Transportation (MDOT) and the local governments of the Baltimore metropolitan planning area. Federal funding sources include Title 1, Section 112 metropolitan planning funds (Federal Highway Act (PL-93-87)) and Title III, Section 5303 metropolitan planning funds. The total funding proposed for the FY 2022 transportation planning activities for the Baltimore region is \$9 Million and the estimated budget for FY 2023 is \$6.3 Million.

Developing this UPWP has relied on the continued cooperation among State (specifically transportation, air quality, and planning agencies), local, and regional entities. This and previous UPWPs were prepared with the involvement of these organizations, acting through the BRTB and its subcommittee structure.

The work tasks delineated in the UPWP are performed primarily by staff working in the Transportation Planning Division of the Baltimore Metropolitan Council (BMC), with limited support provided by other functioning units within the BMC. Specific elements of the UPWP, at times, are contracted out to consultants in accordance with the work program project descriptions and the budget. Some UPWP funds are also "passed through" to local jurisdiction members of the BRTB for specific transportation planning studies that support the regional transportation planning process.

METROPOLITAN PLANNING AREA

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 as well as Anne Arundel, Baltimore, Carroll, Harford, Howard and portions of Queen Anne's counties (see **Figure 1** for the geographic location of each participating local jurisdiction).

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-Havre De Grace-Bel Air Urbanized Area, the Westminster Urbanized area, and a portion of Queen Anne's County. Also included within the Baltimore region are thirteen smaller incorporated municipalities. The renamed Baltimore-Towson metropolitan area (excluding Queen Anne's County) has also been designated by the Environmental Protection Agency (EPA) as a "moderate" nonattainment area for the 8- hour ozone standard.

The entire nonattainment area is in the northern portion of the 2010 U.S. Census Bureau designated Washington-Baltimore-Northern Virginia, DC-MD-VA-WV Combined Statistical Area (CSA).

PUBLIC INPUT INTO THE UPWP

In keeping with the proactive public involvement spirit of the Fixing America's Surface Transportation (FAST) Act, the FY 2022-2023 UPWP is being released to the public for a 30-day review and comment opportunity. Information on the public review process (including outreach) is shown in Appendix C this document.

METROPOLITAN TRANSPORTATION PLANNING

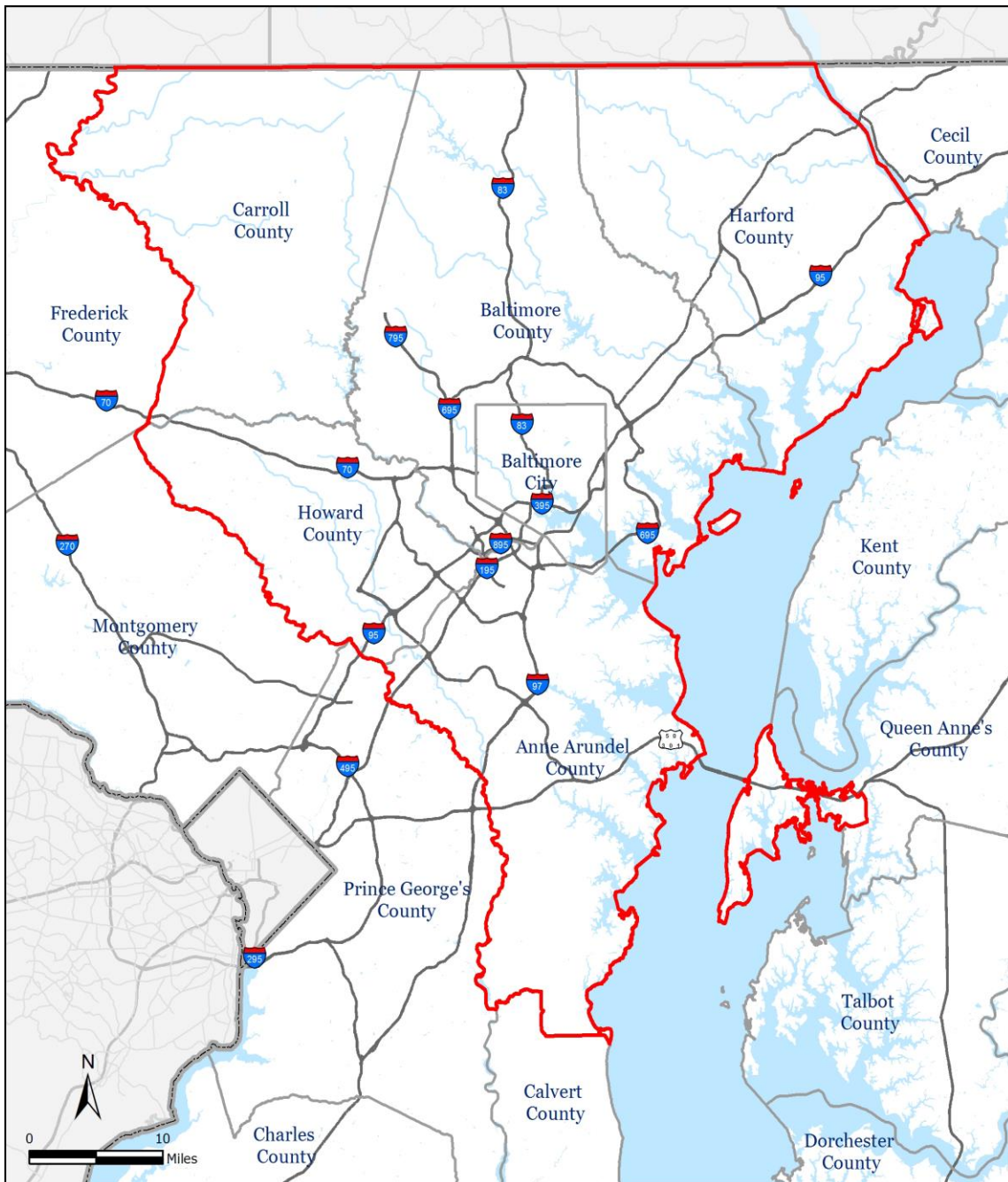
The most recent federal transportation legislative program, Fixing America's Surface Transportation (FAST) Act, was signed into law on December 4, 2015. FAST preserves the commitment to the metropolitan transportation planning process established in previous federal initiatives. On May 27, 2016, the U.S. Department of Transportation (U.S. DOT) issued the latest regulations regarding metropolitan transportation planning, specifically outlining the planning requirements associated with the metropolitan planning process, including the Transportation Improvement Program and the Long- Range Transportation Plan.

Performance-Based Planning and Programming

In an effort to plan for future regional transportation needs and to comply with the intention of MAP-21 and the Clean Air Act Amendments of 1990 (CAAA), the BRTB developed *Maximize2045: A Performance-Based Transportation Plan*, the long-range transportation plan, during 2018 and 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 the FAST Act and corresponding regulations. These measures and targets help the BRTB and operating agencies gauge system-wide progress relative to regional goals and strategies.

FIGURE 1
THE BALTIMORE REGION



Compliant with requirements of the FAST Act and deadlines set forth in regulations, MDOT, public transportation providers, and the BRTB coordinated efforts to develop and adopt a series of regional performance targets. Performance targets have been adopted for transit asset management, roadway safety, roadway and bridge conditions, and system performance.

Out of the set of 25 federally mandated performance targets, the BRTB has adopted all 25. In some instances updates to original targets have been adopted. The 25 mandated targets include:

- four transit asset management measures and targets (adopted in June 2017): (1) percentage of non-revenue service vehicles that have either met or exceeded their Useful Life Benchmarks (ULBs), (2) percentage of revenue vehicles within an asset class that have either met or exceeded their ULBs, (3) with respect to infrastructure (rail fixed-guideway, track, signals, systems): percentage of track segments with performance restrictions, and (4) percentage of facilities within an asset class rated below condition 3 on the TERM scale
- five highway safety measures and targets (first adopted in January 2018, and updated each year through January 2021): (1) Number of fatalities, (2) rate of fatalities per 100 million VMT, (3) number of serious injuries, (4) rate of serious injuries per 100 million VMT, and (5) number of non-motorized fatalities + non-motorized serious injuries – pedestrian and bicycle
- two system performance measures and targets to assess traffic congestion (unified MDOT/BRTB targets for the urbanized area; adopted in May 2018): (1) annual hours of peak-hour excessive delay per capita (PHED measure) and (2) percentage of non-SOV (single-occupancy vehicle) travel.
- one measure to assess on-road mobile source emissions (applies to projects with CMAQ funding) (adopted in June 2018 and updated in September 2020): total emissions reduction: 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 [*Note: the BRTB region is in nonattainment only with respect to ozone*]
- four measures to assess pavement condition (adopted in October 2018): (1) percentage of pavement on the interstate system in good condition, (2) percentage of pavement on the interstate system in poor condition, (3) percentage of pavement on the NHS (excluding the interstate system) in good condition – state/local, and (4) percentage of pavement on the NHS (excluding the interstate system) in poor condition – state/local
- two measures to assess bridge condition (adopted in October 2018): (1) percentage of NHS bridges by deck area classified as in good condition and (2) percentage of NHS bridges by deck area classified as in poor condition
- two measures to assess performance of the National Highway System (NHS) under the National Highway Performance Program (expressed as Level of Travel Time Reliability (LOTTR) (adopted in October 2018): (1) percentage of person-miles traveled on the interstate system that are reliable (Interstate Travel Time Reliability measure) and (2) percentage of person-miles traveled on the non-interstate NHS that are reliable (non-interstate NHS Travel Time Reliability measure)
- one measure to assess freight movement on the interstate system (adopted in October 2018): percentage of interstate system mileage providing for reliable truck travel times (Truck Travel Time Reliability Index – TTTR)

- four transit safety measures (reported by mode) (adopted in January 2021): (1) number of reportable fatalities and rate per total vehicle revenue miles, (2) number of reportable injuries and rate per total vehicle revenue miles, (3) number of reportable safety events and rate per total vehicle revenue miles, and (4) mean distance between major mechanical failures.

All of the measures and targets will be used to guide MDOT and the BRTB in carrying out the requirements of the applicable FHWA and FTA laws and regulations, including the Highway Safety Improvement Program (HSIP).

All Transportation Improvement Programs (TIPs) adopted after May 2019 will follow the performance-based approach described in the long-range transportation plan. These TIPs now include a narrative explaining how the programmed projects relate to specific regional performance measures and targets.

MPO Roles and Responsibilities

The BRTB is the federally designated MPO acting as the regional transportation planning and policy making body for the Baltimore region. In this capacity, the BRTB is directly responsible for conducting the continuing, cooperative and comprehensive (3-C) transportation planning process for the Baltimore metropolitan region in accordance with the metropolitan planning requirements of Section 134 (Title 23 U.S.C.) of the Federal Highway Act of 1962 and Section 8 of the Federal Transit Act. The BRTB provides overall program management of the UPWP work tasks and budget as well as policy direction and oversight in the development of the federally mandated long-range transportation plan, the Transportation Improvement Program, and the transportation element of the State Air Quality Implementation Plan.

The BRTB is a 13-member policy board consisting of the cities of Annapolis and Baltimore; the counties of Anne Arundel, Baltimore, Carroll, Harford, Howard, and Queen Anne's; and MDOT, the Maryland Department of the Environment (MDE), the Maryland Department of Planning (MDP), the Maryland Transit Administration (MDOT MTA) and a Representative of Public Transportation (currently Annapolis Transit). Voting rights are extended to all members with the exception of the Maryland Department of the Environment, the Maryland Department of Planning and the Maryland Transit Administration. These agencies serve the BRTB in an advisory capacity. Annapolis Transit currently serves the role of "representative of public transportation" on the Board based on a vote of the public transit providers in the region. Representatives from the local jurisdictions and agencies have been designated and empowered by their respective lead elected official or department secretary to integrate locally oriented policies and needs into a regionally based agenda.

In the Baltimore metropolitan area, the roles and responsibilities of the BRTB, state and local transportation operators and transportation-related state agencies for cooperatively conducting transportation planning and programming have been established over several years.

A network of committees and subcommittees was formulated to focus on specific technical and policy areas at the direction of the BRTB. In 2020, the BRTB approved a new committee, the Congestion Management Process Committee. Coordination of this diversified transportation planning structure, a

direct responsibility of the BRTB, serves to ensure that transportation planning is integrated with the region's efforts to address economic and environmental challenges, land development and quality of life issues such as public health. The BRTB establishes a Budget Subcommittee annually to review projects and work tasks included in the UPWP to ensure regional significance and quality control.

The MDOT has a standing Memorandum of Understanding (MOU) with the BMC that delineates responsibilities in support of the regional transportation planning process. This agreement, initiated in 1992 with the re-designation of the BRTB and reauthorized in 2004 and amended most recently in 2020, stipulates that MDOT will apply for federal transportation planning grants from both FHWA and FTA to support the UPWP as well as provide a portion of the nonfederal matching funds required. In addition, MDOT formally represents all State-affiliated transportation modes and authorities on the BRTB.

As the leading air quality agency, MDE is an active member in the transportation planning process. Providing technical input and direction, MDE has assumed an advocacy role in the development of transportation system improvements that enhance the region's efforts to reach attainment by the prescribed timelines. MDP provides a direct linkage between transportation planning decisions and statewide growth management and land planning strategies.

MDOT MTA operates a comprehensive transit system throughout the Baltimore and Washington metropolitan areas. The MTA works closely with the BRTB on planning improved transit in the Baltimore region.

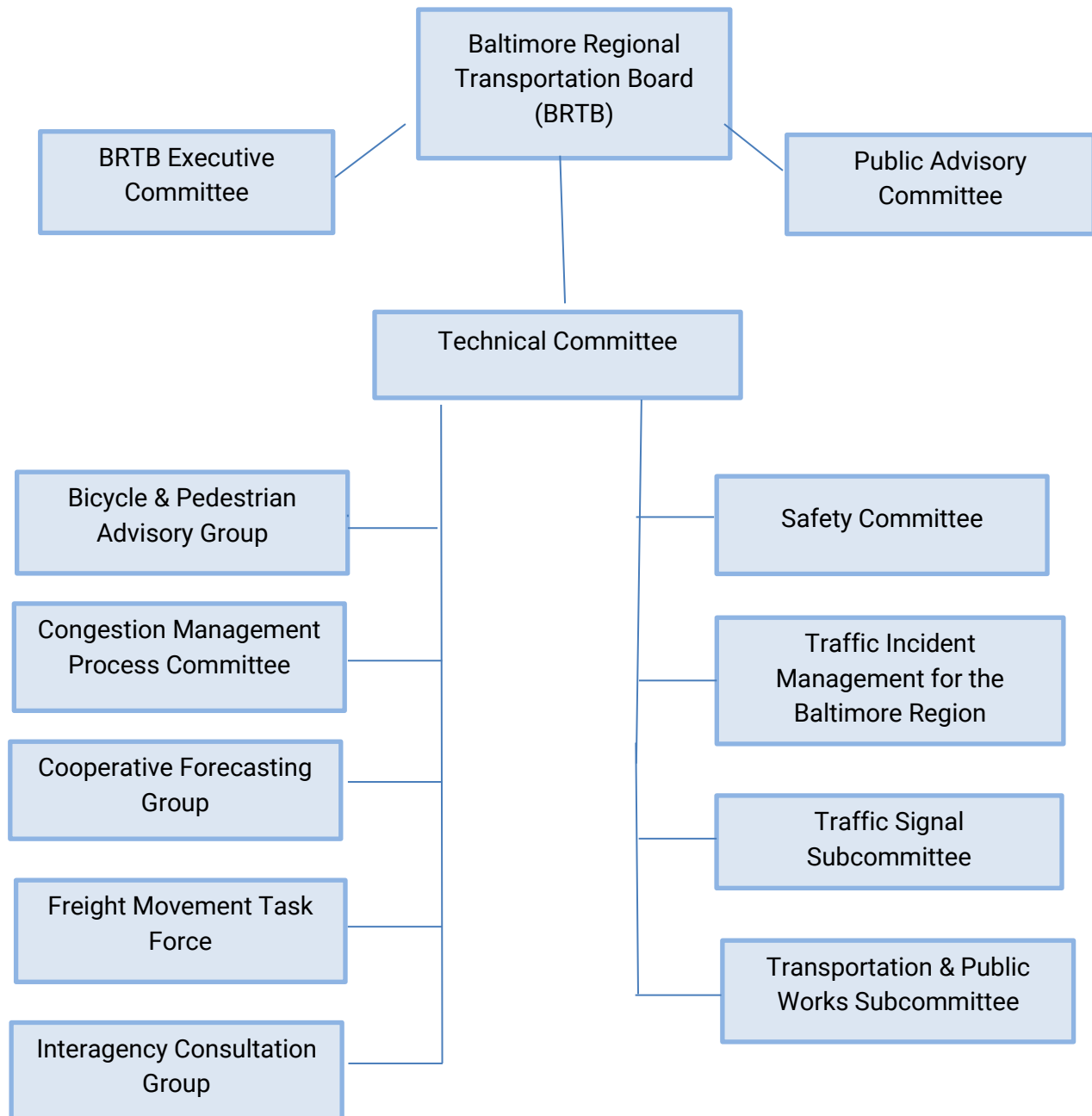
TABLE 1

ROLES AND RESPONSIBILITIES FOR TRANSPORTATION PLANNING AND PROGRAMMING

Planning Responsibility	Memorandum of Understanding (MOU)	Date Executed	Status	Changes Planned
UPWP Development	Formal MOU establishing the BRTB as the Baltimore MPO and develop a UPWP consistent with the 3-C planning process.	7/1/2004	In Effect	No
UPWP Development	Formal Memorandum of Agreement (MOA) between MDOT and BMC outlining managerial oversight of the UPWP.	7/1/2004	In Effect	No
Transportation Conformity and State Implementation Plan Development	Formal procedures of Interagency Consultation Process	1996	In Effect	No
Public Transit Operators and MPO Process	Formal MOA between BRTB, MDOT and MDOT MTA defining roles and responsibilities of public transit operator and State Department of Transportation in the Baltimore regional planning process.	2/26/2008	In Effect	No
Financial Plan for Long-range Transportation Plan and Transportation Improvement Program	Formal MOA between BRTB, MDOT and MDOT MTA defining roles and responsibilities of public transit operator and State Department of Transportation in the Baltimore regional planning process.	2/26/2008	In Effect	No
Corridor Planning Studies	Formal MOA between BRTB, MDOT and MDOT MTA defining roles and responsibilities of public transit operator and State Department of Transportation in the Baltimore regional planning process.	2/29/2008	In Effect	No
MPO Certification	Formal MOA between BRTB, MDOT and MDOT MTA defining roles and responsibilities of public transit operator and State Department of Transportation in the Baltimore regional planning process.	2/29/2020	In Effect	No

FIGURE 2

**BALTIMORE REGIONAL TRANSPORTATION BOARD
COMMITTEE STRUCTURE**



Federal Certification Review Process

At least every four years, the FTA and FHWA must jointly certify that the transportation planning process in urbanized areas with a population greater than 200,000 (i.e. Transportation Management Area (TMA)), is being conducted in accordance with the joint planning requirements. The primary purpose of a certification review is to formalize the continuing oversight and day-to-day evaluation of the planning process. The certification review process ensures that the planning requirements under Title 23 are being satisfactorily implemented. In a broader sense, the certification review process is a valuable opportunity to provide advice and guidance to a TMA, for enhancing the planning process and improving the quality of transportation investment decisions.

While the FHWA and FTA interact with TMA planning officials, state DOTs, transit operators, etc. on a routine basis—reviewing and approving planning products, providing technical assistance, and promoting good practice—the formal assessment during a certification review provides an objective view of the TMA transportation planning process. It can serve as a catalyst to improve the effectiveness and efficiency of the planning process, and help ensure that the major transportation planning issues facing a metropolitan area are being addressed.

2020 Federal Certification Review

The most recent certification review took place virtually on April 22 2020. In general, the federal team determined that the BRTB continues to conduct a “3-C” transportation planning process that satisfies the federal provisions governing metropolitan planning.

The review team commended the BRTB for its efforts in several areas, including:

- updating a single comprehensive metropolitan planning agreement to support performance-based transportation planning
- including in the current LRTP a table showing the breakdown of forecasted federal revenues by funding program from 2024-2045
- working with Baltimore City and FHWA Maryland Division to update the TIP project phase definitions to clarify the distinction between planning and preliminary engineering
- developing interactive mapping for assisting the public locating TIP projects and associated data
- for being innovative in air quality program, for publishing “Protecting Our Resources” that utilizes data visualizations to explain regional air quality conformity to their stakeholders and the public
- consistently completed past conformity determinations with ample time to allow EPA to thoroughly review for concurrence in a timely matter
- including specific strategies in the CMP that provide congestion management benefits for each proposed project in Maximize2045
- for written procedures for PM1, PM2, PM3, and Transit Asset Management measures and targets

The team also identified areas in need of improvement. These include:

- MDOT should review the remaining balance of unobligated metropolitan planning funds and provide this information to the BRTB and all Maryland MPOs

- MDOT should use the updated TIP project phase definitions in the next STIP update and should encourage the remaining MPOs to use similar definitions in their TIPs
- revise and update the Title VI complaint process and policies on the BMC website
- continue to coordinate with regional partners to determine emission reduction activities
- train technical staff in upcoming MOVES modeling software
- continue to make significant contributions to future development of any new 8-hour ozone and perhaps future PM2.5 SIP development
- continue to expand its PBPP framework to include using performance measures and targets to evaluate the success of the planning process and investment decisions toward achieving the region's
- transportation system goals

The FY 2022-2023 UPWP attempts to encompass all of the required planning and programming tasks, to continue to build on the commended practices identified in the 2020 federal certification review, and to address the recommendations for improvement identified in this certification review.

UPWP Priorities: Regional Transportation Goals / Performance-Based Approach

The tasks delineated in the UPWP are linked to the region's transportation goals, as adopted by the BRTB in developing the next plan, *Maximize2045: A Performance-Based Transportation Plan*. The region's transportation goals as adopted for *Maximize2045* are:

1. **Improve System Safety** – Make conditions safer for pedestrians, bicyclists, transit riders and operators, and motorists.
2. **Improve and Maintain Existing Infrastructure** – Improve the conditions of existing transportation facilities; systematically maintain and replace transportation assets as needed.
3. **Improve Accessibility** – Help people of all ages and abilities to reach specific destinations.
4. **Increase Mobility** – Help people and freight to move reliably and efficiently.
5. **Conserve and Enhance the Environment** – Pass on to future generations the healthiest natural and human environments possible.
6. **Improve Transportation System Security** – Provide a secure traveling environment for everyone; improve the region's ability to respond to natural and man-made disasters.
7. **Promote Prosperity and Economic Opportunity** – Support the revitalization of communities, the development of activity centers, and the movement of goods and services.
8. **Foster Participation and Cooperation among Stakeholders** – Enable all interested and affected parties to participate and cooperate to find workable solutions.
9. **Promote Informed Decision Making** – Ensure that adopted transportation policies and performance measures guide the regional decision making process.

These goals and their supporting strategies are the means by which the Baltimore region can make sound, responsible investments in transportation systems. They also provide the framework through which the region can make progress toward improving accessibility and mobility for people and goods, in as safe and secure and environmentally sustainable a manner as possible, to advance the overall prosperity of the Baltimore region and the opportunities available to its communities and citizens.

Table 2 below shows how the UPWP tasks relate to these regional transportation goals:

TABLE 2

UPWP Tasks	Regional Goals (✓ = primary association; ▪ = peripheral association)								
	1	2	3	4	5	6	7	8	9
Program Management and Coordination									
UPWP Management								✓	✓
Professional Consultant Services									
Trans./Land Use Connection			✓				✓		
Patapsco Greenway: 3rd Segment			✓				✓		
RTP - Corridor Analysis			✓	✓					
TIS Guidelines: Follow-up	✓			✓					
Planning Process Review									✓
Crash Data Mapping	✓							✓	
Online Transportation Dashboards	✓		✓	✓					
Climate Change Toolkit: Follow-up					✓				✓
InSITE Re-calibration									✓
Transportation Issues in Historic Town Centers	✓	✓	✓	✓			✓		
U.S. 40: Aberdeen to Havre de Grace	✓	✓	✓	✓			✓		
NHTS Add-On Data									✓
Technical Analysis in Support of State and Local Initiatives									✓
Planning Context									
Long-range Transportation Planning	✓	✓	✓	✓	✓	✓	✓	✓	✓
Transportation Improvement Program	✓	✓	✓	✓	✓	✓	✓	✓	✓
Promoting Inclusiveness and Cooperation									
Public Participation and Community Outreach	▪	▪	▪	▪	▪	▪	▪	✓	✓
Transportation Equity Planning			✓				▪	✓	✓
Gathering and Analyzing Data									
GIS Activities	▪	▪	▪	▪	▪	▪	▪	▪	✓
Demographic and Socioeconomic Forecasting				▪			✓	✓	✓

BALTIMORE REGION UPWP
FY 2022-2023 UNIFIED PLANNING WORK PROGRAM

UPWP Tasks	Regional Goals (✓ = primary association; ▪ = peripheral association)								
	1	2	3	4	5	6	7	8	9
Development Monitoring					▪		✓		✓
Analysis of Regional Data and Trends	✓		✓	✓	▪	▪	▪		✓
Maintenance of Current Simulation Tools			✓	✓			▪		✓
Simulation Tools: Applications and Analysis			✓	✓			▪		✓
Safety and Security									
Safety Planning and Analysis	✓							▪	✓
Transportation Systems Management and Operations Planning	▪			✓		✓		▪	✓
Emergency Preparedness Planning				▪		✓			✓
Mobility, Accessibility and Connectivity									
System Performance: Monitoring and Adapting				✓					✓
Freight Mobility Planning	▪	▪		✓		▪	✓	▪	✓
Bicycle and Pedestrian Planning	✓	▪	✓		▪			▪	✓
Transit and Human Service Transportation Planning	▪	▪	✓	▪		▪		✓	✓
Protecting Current and Future Resources									
Environmental Planning					✓			▪	✓
Air Quality Conformity Analysis				▪	✓			▪	✓

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PROGRAM MANAGEMENT & COORDINATION

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UPWP MANAGEMENT

PURPOSE: To manage, coordinate, and guide the activities of the Unified Planning Work Program (UPWP) and the regional transportation planning process. This requires a variety of means, including: direct involvement in planning activities, public education and public participation opportunities, and support of the multi-disciplined and multi-agency transportation committees essential to a coordinated regional planning process.

During Fiscal Year (FY) 2021 staff coordinated with local jurisdictions to collect products and billing information. Monthly Progress Reports and Invoices were submitted to the Maryland Department of Transportation (MDOT). Agendas and minutes for the Baltimore Regional Transportation Board (BRTB) as well as all standing committees were made available to the public and remain available online. The Executive Committee provided guidance on BRTB agendas as well as direction on Transportation Improvement Program (TIP)-related Administrative Modifications. Baltimore Metropolitan Council (BMC) managed several contracts throughout the year as identified in the FY 2021 UPWP Addendum. In January 2021 the BRTB and the Technical Committee (TC) held a Retreat to assess progress in the current year and then plan for the upcoming UPWP work program. A schedule was endorsed to complete the work program with an opportunity for the public to review.

In FY 2022-2023, BMC staff will continue to provide administrative support for the UPWP. Staff manages the work program and budget, and is charged with preparation of work programs, contracts and progress reports. Included within this budget category are non-staff expenses that support transportation planning functions. Typical expenses include: 1) staff training and education, participation at meetings and other transportation-related seminars, workshops and conferences; 2) membership fees for professional organizations and associations; 3) publication costs including printing and design; 4) travel expenses; 5) preparation for special events; 6) purchase of computers and related software for BMC staff; and 7) annual computer maintenance agreements for BMC and local/state participants. The BMC is working with MDOT to identify and spend down available funds.

Staff also will provide support activity to committees such as the BRTB, TC, Interagency Consultation Group, Public Advisory Committee, Bicycle & Pedestrian Advisory Group, Freight Movement Task Force, Congestion Management Process Committee, Cooperative Forecasting Group, etc., including the preparation of meeting notices, minutes, agendas, mailings, and reports on issues of special committee interest.

The local jurisdictions are also responsible for a similar set of work tasks that are required as part of their involvement in the administration of the UPWP. This includes preparation of invoices and progress reports, financial reports, project work programs, annual UPWP contracts, and related correspondence. This activity also supports the professional development and training activities of the local government staffs.

BMC staff will continue to promote participation of minority business enterprises in the planning process and implementation of transportation projects within the Baltimore region in accordance with Title VI of the Civil Rights Act of 1964 and the requirements set forth in 49 Code of Federal

Regulations (CFR) Part 23. Staff will also promote Federal Transit Administration's (FTA) policy to encourage private enterprise participation in the planning and provision of transportation services.

Based on the level of funding made available by the Federal Highway Administration (FHWA) and the FTA, funding for the FY 2022 UPWP is in place, with an estimated budget for FY 2023. Should some additional funding above that which is documented at this time, there will be an opportunity to consider additional BMC consultants and/or Local Subarea projects. Any changes will be reflected in an amended budget table.

PRODUCTS/MILESTONES	SCHEDULE
Minutes, resolutions and special reports	Monthly
Progress Reports, invoices, and financial reports	Monthly (BMC) Quarterly (Locals)
Training opportunities	As scheduled
FY 2022 UPWP amendments	Throughout Fiscal Year
FY 2022 UPWP budget adjustments	3 rd Quarter
FY 2023 UPWP budget development and local contracts as necessary	4 th Quarter

FY 2022 BUDGET: **\$885,000**

FY 2023 EST. BUDGET: **\$885,000**

PROFESSIONAL CONSULTANT SERVICES

PURPOSE: To retain consultant services for work activities in the Unified Planning Work Program (UPWP) that requires external support due to complexity or uniqueness of the tasks. These work efforts will strengthen the overall regional transportation planning process and expand the capabilities of the Baltimore Regional Transportation Board (BRTB).

During Fiscal Year (FY) 2020 and FY 2021, contracts were utilized for the following activities:

- Continued Development of an Activity Based Travel Demand Model
- Support for the Traffic Count Program
- Household Travel Survey
- Patapsco Regional Greenway Planning Advancement: Sykesville to McKeldin
- Regional Traffic Impact Study Guidelines
- Development Review Practices For Changing Mobility
- CMP Corridor Assessment
- Transportation/Land Use Connection Grants
- Pedestrian Infrastructure Assessment
- Infrastructure in a Changing Climate
- Transit Priority Screening and Bus Stop Assessments Study
- Promoting Healthy Communities and Local CIP Study
- Baltimore Region Transit Regional Governance/Funding
- Implementation of RTP - Corridor Analysis

In FY 2022, the continued use of consultant services will be employed. At the direction of the BRTB, BMC staff expects to explore using consultant services for the following activities:

Transportation/Land Use Connection Grants - Continuation of FY 2021 UPWP Project

Patapsco Greenway Third Segment –Guinness North toward Baltimore City.

Implementation of RTP - Corridor Analysis –Continuation of FY 2021 UPWP Project.

TIS Guidelines – Follow-up from FY 2020 UPWP Project.

Planning Process Review –Similar to TIS Review, documents planning process of each jurisdiction with emphasis on transportation issues, national recommendations.

Crash Data Mapping – Using the Denver Regional Council of Governments as a model to improve accessibility and use of traffic crash data for problem identification and project evaluation throughout the region.

Jurisdictional Online Transportation Dashboards – Individual Tableau Sites for each jurisdiction based upon BMC Regional Dashboard, include Transportation Data Book items.

Climate Change Toolkit – Follow-up from FY 2021 UPWP Project.

InSITE Re-Calibration – Existing model validated to 2008/2009 HHTS, this will calibrate to the 2019 Household Travel Survey.

Transportation Issues in Historical Town Centers –The Baltimore region includes a number of historic areas, such as Historic Ellicott city, that have developed with significant geographic constraints and experience challenges with parking management, wayfinding and multimodal access, which unless resolved, continue to impact their safety and economic viability.

U.S. 40 - Aberdeen to Havre de Grace – A Land Use and Transportation Study that includes rail, bus, roadways, bicycle accessibility, neighborhoods, and employment centers.

NHTS Add-On OD Data –Cooperative purchase with MDOT SHA - Hourly weekday/weekend monthly flow data by mode and purpose. Could stand up a few Tableau dashboards monitoring travel/recovery.

RTP Implementation – Continue to analyze corridors in consultation with MDOT MTA and BRTB members.

PRODUCTS/MILESTONES	SCHEDULE
Develop RFPs, select consultants, write contracts	1 st Quarter
Memoranda/Reports	Throughout Fiscal Year

FY 2022 BUDGET: **\$2,730,000**

FY 2023 EST. BUDGET: **\$440,000**

TECHNICAL ANALYSIS IN SUPPORT OF STATE AND LOCAL INITIATIVES

PURPOSE: To provide the modal administrations of the Maryland Department of Transportation (MDOT) technical assistance using regionally-generated data, development goals, forecasts, as well as regional priorities for transportation planning activities related to the Baltimore region.

The Baltimore Metropolitan Council (BMC) continues to work cooperatively with MDOT's modal administrations, as well as local jurisdictions, coordinating data collection, model development and maintenance and technical assistance for model application and data analysis.

Over the last several fiscal years, BMC and MDOT SHA have coordinated the transition from an aggregate Trip Based Model to a disaggregate Activity Based Model (ABM) using state and regional resources. In addition, the coordinated efforts lead to three Strategic Highway Research Program (SHRP 2) travel modeling enhancement demonstration grants. The BMC/MDOT SHA team developed an integrated, advanced travel demand model and a fine-grained, time-sensitive network (SHRP 2 C10), incorporated travel reliability within travel models (SHRP 2 L04) and developed a freight demand model (SHRP C20). The SHRP 2 C10 and L04 demonstration grants advanced state and regional modeling staff knowledge on advanced techniques and provided experience on mesoscopic highway loading. The C20 estimated, calibrated and validated freight modeling system was incorporated within the region's Initiative to Simulate Individual Travel Events (InSITE) model.

MDOT MTA requested technical assistance in support of developing "A Regional Transit Plan for Central Maryland". BMC assisted with mapping identified activity centers for the base year and a horizon year as well as simulated part- and full-time workers long-term choice usual place of work using InSITE. Maps were used during MDOT MTA outreach with local planning staff facilitating discussion on commuter travel sheds and patterns. Technical assistance was requested to analyze draft COVID-19 transit service changes effects on accessibility and transit network system operations. BMC staff adapted the TBM transit network performance measures model scripts converting syntax to InSITE compatible. InSITE calculated transit network performance measures were mapped and graphed.

MDOT SHA requested technical assistance in support of project planning studies. BMC applied the InSITE travel model to the Baltimore region proposed traffic relief initiatives. The proposed I-695 traffic relief initiative, peak period hard shoulder running, was coded into the highway network and simulated 2045 traffic was estimated. The disaggregate origin and destination travel patterns were shared. BMC staff supports MDOT SHA and consultants on the application of the TBM. The support effort entails disseminating transportation networks, latest planning assumptions (demographic data), and modeling scripts. In addition, BMC staff provided modeling script trouble shooting support in diagnosing errors, creating simulation summary routines, and implementing modeling enhancements.

The University of Maryland – National Smart Growth Center requested technical support on an MDOT grant to evaluate the health benefits of the Purple Line. BMC staff is assisting the Smart Growth Center's development of the Integrated Transportation and Health Impact Modelling Tool (ITHIM) using InSITE disaggregate data. The ITHIM analysis requires travel estimates segmented by gender and co-hort. The analysis is being completed using build (with Purple Line) and no-build (without Purple Line) networks.

In FY 2022 and FY 2023, staff will continue to support MDOT modal administrations in several areas: 1) investigation/coordination data acquisition and analysis, 2) InSITE transition as the endorsed regional modeling tool, 3) state and regional technical tool coordination and enhancements, and 4) technical analysis.

The region and MDOT have a comprehensive data program collecting system usage (traffic counts and automatic passenger counts) and revealed data (Maryland Household Travel and On-Board Transit Surveys) to estimate models, monitor system performance, and identify travel patterns and trends. Advancements in technology are causing a shift from revealed data collected from households and transit passenger boarding to passively collected data from various sources. Agencies currently monitor system performance using the University of Maryland CATT lab application developed from On-board vehicle sensor data. Other data providers have emerged offering origin and destination data developed from location-based services and other mobile applications. BMC staff will continue to monitor advancements in passively collected data and when appropriate will acquire data in support of regional performance monitoring, corridor/project planning analysis, and model calibration / validation.

The BRTB has endorsed InSITE as the region's travel simulation model supporting TIP/LRTP regional mobile source emission analysis, LRTP development and corridor analysis. BMC will facilitate the transition to InSITE providing technical support on implementing InSITE model on agencies' and consultant's hardware. BMC staff will provide instruction on developing InSITE input data for: 1) transportation networks, 2) previous aggregate model travel, and 3) jurisdiction and small area demographic margins.

BMC and MDOT SHA have coordinated regional and statewide travel simulation tool development adopting similar TBM and ABM modeling frameworks. The 2019 Maryland Household Travel Survey revealed data will be used to calibrate regional and statewide model components and provides an opportunity to enhance model capabilities in response to policy initiatives.

When requested, BMC staff will support MDOT modal administration with technical tool application and data analysis. BMC staff will continue to coordinate with MDOT MTA Regional Transit Plan Corridor Study providing simulated data on identifying major transit travel patterns and transit user demographics and ridership estimates. Corridor study alternative modes and alignments will be coded in model transportation networks and reflected in InSITE ridership estimates.

PRODUCTS/MILESTONES	SCHEDULE
Investigation/Coordination Data Acquisition and Analysis	Ongoing FY 2022-2023
InSITE Transition Support	Ongoing FY 2022-2023
Technical Tool Coordination and Enhancements	Ongoing FY 2022-2023
Technical Analysis	Ongoing FY 2022-2023

FY 2022 BUDGET: **\$180,000**

FY 2023 EST. BUDGET: **\$180,000**

PLANNING CONTEXT

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LONG-RANGE TRANSPORTATION PLANNING

PURPOSE: Maintain the regional planning process in response to guidance in the Metropolitan Planning Regulations. Develop the plan guiding long-term investments in the region's transportation systems.

During Fiscal Year (FY) 2020/2021 a range of activities supporting long-range transportation planning were completed.

2019 Plan – The Baltimore Regional Transportation Board (BRTB) adopted the final 2019 plan, known as *Maximize2045: A Performance-Based Transportation Plan*, and the corresponding air quality conformity determination in July 2019. The Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) approved the final plan and the U.S. Environmental Protection Agency (EPA) accepted the determination of air quality conformity in July 2019.

Also in FY 2020, BMC staff continued to keep committees informed about developments related to trends discussed in the plan. These efforts included presentations to the Technical Committee on highway safety trends, the region's Congestion Management Process activities, regional emergency preparedness planning initiatives, transportation and climate change initiatives at MDOT and MDE, the FY 2020 UPWP task related to new mobility modes, and transit priority efforts at MDOT MTA.

2023 Plan – Activities related to development of the next regional long-range transportation plan accomplished during FY 2020 include development of a draft schedule for the 2023 plan and a review of potential changes to the goals and strategies for the next plan.

Development of the 2023 plan will continue to follow the performance-based approach established in the Moving Ahead for Progress in the 21st Century Act (MAP-21) and refined in the Fixing America's Surface Transportation (FAST) Act. To this end, BMC staff worked with MDOT prior to FY 2020 to adopt federally required performance measures and targets. In FY 2020, BMC worked with MDOT SHA to update regional highway safety performance targets first adopted in January 2018. The BRTB adopted these updated highway safety performance targets in January 2020 and 2021. Transit safety targets were adopted for the first time in 2021.

In FY 2021, BMC staff sent a series of surveys to BRTB and TC members to get input on the name and branding for the 2023 plan. BMC staff anticipate approving a brand and logo for the 2023 plan in the 3rd or 4th quarter of FY 2021. Public involvement staff will also work to gather input on draft goals and strategies from the public and the PAC, with a BRTB vote in the 3rd or 4th quarter of FY 2021. BMC staff are also working to evaluate methods to improve the environmental justice analysis for the plan as it pertains to the new activity-based model (InSITE). As a first step, BMC staff will replicate the EJ analysis from *Maximize2045* with the InSITE model to compare the results. BMC staff will also share EJ analysis results from the prior plan and any updates to the EJ analysis methodology with the Technical Committee prior to the submittal of candidate projects for the 2023 plan.

FY 2022 Activities will include: development of the socioeconomic forecast and final forecast. BMC staff will begin the evaluation of and writing on emerging trends and issues – these topics will be shared with the public as they become available. In preparation for possible new projects, staff will

BALTIMORE REGION UPWP
FY 2022-2023 UNIFIED PLANNING WORK PROGRAM

work with the TC to document the list of existing & committed projects. From there a call for projects will go out to members.

FY 2023 Activities are anticipated to include: BRTB adoption of demographic forecasts, evaluation and selection of major projects and programs, modeling and testing of the preferred alternative (air quality conformity modeling, travel demand modeling, environmental justice analysis, coordination with resource agencies on effects relative to natural and cultural resources), preparation of a draft plan, followed by a public review and comment period, and consideration of partner and public comments during preparation of the final plan

PRODUCTS/MILESTONES	SCHEDULE
Coordinate development of population and employment forecasts with the Cooperative Forecasting Group	1 st and 2 nd Quarter of FY 2022
BMC staff evaluation and writing on emerging trends and issues	2 nd Quarter of FY 2022
Coordinate development of financial forecast with MDOT	2 nd Quarter of FY 2022
BRTB adoption of financial forecast	3 rd Quarter of FY 2022
Development of existing & committed projects from the TIP	4 th Quarter of FY 2022
Jurisdiction and state agency submittal of candidate projects	4 th Quarter of FY 2022
Continued coordination with MDOT on the development of performance measures and targets	Throughout

FY 2022 BUDGET: **\$160,000**

FY 2023 EST. BUDGET: **\$160,000**

TRANSPORTATION IMPROVEMENT PROGRAM

PURPOSE: To assemble a comprehensive listing of requests for federal funds and regionally significant projects based on planned state and local transportation investments and in support of regionally adopted performance measures and targets over the next four-year period. Coordinate the Baltimore Regional Transportation Board (BRTB) Transportation Improvement Program (TIP) process to ensure member transportation projects fulfill all related federal requirements.

Baltimore Metropolitan Council (BMC) staff have utilized the web-based online TIP system to produce every TIP document since the 2016-2019 TIP. In addition, all jurisdictions and agencies submit, view and edit their TIP projects through the online web-based portal. BMC staff continue to train agency staff as necessary and distribute a step-by-step guide to using the web-based system at the beginning of each call for projects.

Staff continue to work with Data Transfer Solutions LLC (DTS) staff to integrate updates and functionality into the TIP system as necessary. For example, the 2020-2023 TIP included two additional project categories at the request of the Public Advisory Committee (PAC). Transit and commuter rail projects were split into “preservation” and “capacity” categories to match the categorization of highway projects. In FY 2021, staff worked with DTS to integrate recommendations from the updated Congestion Management Process. The TIP database was updated to include questions intended to capture and track CMP strategies associated with TIP projects.

In FY 2020, the BRTB unanimously approved the 2020-2023 TIP on July 23, 2019, with approval from federal agencies on July 29, 2019. The 2020-2023 TIP was published online in PDF form as well as in an interactive project map developed by BMC staff. A listing of projects with federally obligated funds from FY 2019 was published in January 2020, as the Maryland Department of Transportation (MDOT) provided the necessary data on January 7, 2020. Staff reviewed and coordinated with the region’s conformity determination in the processing of five amendments and seventeen administrative modifications to the 2020-2023 TIP.

The 2020-2023 TIP included an updated Environmental Justice section, including more detailed data on EJ populations and a discussion of the methodology used to identify EJ Transportation Analysis Zones. In addition, as required by the FAST Act, the 2020-2023 TIP included a discussion of the 25 federally required performance measures and targets as well as a discussion of the anticipated impact of TIP investments towards their achievement.

Also in FY 2020, BMC staff worked with BRTB members to prepare for the FY 2021-2024 TIP. Project sponsors completed project submittals in March 2020 followed by the Interagency Consultation Group (ICG) determination of exempt/nonexempt status for projects in April. The public comment period extended from June 16 through July 17. The public review was virtual due to the Coronavirus pandemic. Highlights included an ArcGIS Storymap, an interactive project map allowing commenting directly from the map, and a Tableau dashboard. BMC staff also held two virtual public meetings and presented to various committees. BMC staff anticipate using these materials for future TIP cycles.

The TIP cycle in FY 2021 followed a relatively similar schedule. MDOT requested a one month delay in the BRTB vote on the 2021-2024 TIP, which was granted after consulting with local jurisdictions. The

BRTB approved the 2021-2024 TIP on August 25, 2020, with federal approval received on October 19. BMC staff prepared and published the FY 2020 obligated listing when data became available from MDOT. BMC staff worked with BRTB members to prepare for the FY 2022-2025 TIP, with project submittals anticipated by March 2021, a public comment period extending from mid-May to mid-June, and a BRTB vote in July. Staff reviewed and coordinated with the region's conformity determination in the processing of seven amendments and four administrative modifications to the 2021-2024 TIP (as of December 2020).

FY 2022 and FY 2023 activities will include:

- A similar TIP production process to FY 2021 will take place in FY 2022 and FY 2023. In keeping with current surface transportation legislation, a listing of projects with federally obligated funds from the previous TIP's annual element will be published within ninety days after the end of FY 2021 and FY 2022.
- BMC staff will continue to use and improve materials used to summarize and disseminate the TIP to the public including interactive maps, storymaps, and Tableau dashboards.
- The current LRTP, *Maximize2045*, included an improved EJ analysis documenting the anticipated impact of transportation investments on EJ and non-EJ TAZs for measures including access to jobs, access to shopping opportunities, travel times, and access to key destinations such as grocery stores, educational institutions, and hospitals. BMC staff will work to integrate improved EJ analysis methods into future TIP documents in FY 2022 and FY 2023.
- BMC staff will work to improve the Performance-Based Planning and Programming section of the TIP. Specifically, BMC staff will work to improve the methods utilized to analyze the impact of TIP investments on the achievement of performance measures and targets.

PRODUCTS/MILESTONES	SCHEDULE
Approval of the FY 2022 – 2025 TIP	1st Quarter of FY 2022
Approval of the FY 2023 – 2026 TIP	1 st Quarter of FY 2023
FY 2021 Obligated Listing Development	2nd Quarter of FY 2022
FY 2022 Obligated Listing Development	2nd Quarter of FY 2023

FY 2022 BUDGET: **\$145,000**

FY 2023 EST. BUDGET: **\$145,000**

PROMOTING INCLUSIVENESS & COOPERATION

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PUBLIC PARTICIPATION AND COMMUNITY OUTREACH

PURPOSE: To allow both individuals, organizations, and groups the opportunity to actively engage in the regional transportation planning process through a variety of methods. The Baltimore Regional Transportation Board (BRTB) has affirmed that it is important to ask for public participation, not just wait for it. Active participation, by the public and partner agencies alike, is an essential part of a meaningful transportation planning process because it enables government agencies to understand and account for the concerns and needs of the public, particularly at times when key decisions regarding the region's transportation network are made.

In Fiscal Year (FY) 2020 staff informed and engaged the public in a variety of ways, including: soliciting public comments through comment periods and public meetings on a variety of plans including the Unified Planning Work Program (UPWP), Transportation Improvement Program (TIP), the Federal Certification of the BRTB, and a project to design a portion of the Patapsco Regional Greenway; convening meetings of the Public Advisory Committee (PAC); improving communications and outreach efforts; utilize social media to share information and grow audiences on Facebook and Twitter for BaltoMetroCo, B'more Involved, and Bike2WorkCentralMD; and a team of staff collaborated on a regional Bike to Work Week.

In FY 2021-2022, staff will continue to educate and engage the public early and often throughout the planning process. Ongoing activities include:

Support ongoing efforts to solicit public input throughout the planning process by promoting public comment opportunities, hosting public meetings, and conducting outreach and education efforts throughout the region. In particular, staff will promote public involvement opportunities for the next LRTP, TIP, UPWP, Air Quality Conformity Determination, and other plans and programs issued for public review by the BRTB.

Comments from the public will be shared with the BRTB members and incorporated into plans when feasible. Responses to public comments will be coordinated and monthly reports on comments will be provided to the BRTB.

Currently the PAC is on hiatus while the BRTB reviews consultant recommendations and staff input. However, if the PAC continues, staff will continue to assist with the fulfillment of their mission by providing support to the PAC members and convening monthly meetings of the PAC and its subcommittees.

Staff will continue to plan and host educational public engagement events such as the Every Voice Counts Transportation Academy. Every Voice Counts was developed utilizing a United States Department of Transportation (U.S. DOT) toolkit to provide key background information and tools for emerging transportation leaders and other stakeholders who have traditionally been underserved or who have limited experience with the transportation decision-making process.

An internal communications team will meet regularly to coordinate and collaborate on outreach and education efforts including: the LRTP, Bike to Work Day, Every Voice Counts, What's on Tap, and other planning efforts.

Staff will utilize a variety of communications tools and techniques to reach the public including: outreach at local meetings and events; sending press releases and e-newsletters, maintaining a robust social media presence on B'more Involved (promoting civic engagement) and BaltoMetroCo (BMC/BRTB announcements, opportunities, and events); distributing surveys, place advertisements in local media outlets, etc.

Staff will incorporate an annual report on public involvement activities into the agency's Annual Report.

Staff will coordinate a series of regional events that bring together the public with local and national thought leaders and innovators to learn about future trends and technology, share ideas and best practices, and discuss a wide-range of important topics. The goals of these events are to build relationships with area residents and local institutions; provide opportunities for learning, collaborating, and networking; and increase awareness of the BRTB and opportunities for involvement in the planning process.

Staff will continue to work with BRTB members and elected officials to identify opportunities to move BRTB meetings out into the community.

Staff will also collaborate with local organizations to identify event speakers, locations, sponsors, and interested stakeholders, plan event objectives and programs, conduct marketing and promotion, and review event evaluations and identify ways to overcome barriers to involvement.

PRODUCTS/MILESTONES	SCHEDULE
Solicit and Address Public Comments	Throughout Fiscal Year
Public Advisory Committee	Monthly (or as needed)
B'More Involved, Press releases, and other e-news/social media marketing	Throughout Fiscal Year
Conduct outreach and promote initiatives	Throughout Fiscal Year

FY 2022 BUDGET: **\$260,000**

FY 2023 EST. BUDGET: **\$260,000**

TRANSPORTATION EQUITY PLANNING

PURPOSE: To encourage equitable outcomes and involvement in the regional transportation planning process.

During Fiscal Year (FY) 2020 and 2021, staff completed the Title VI Annual Report, and Title VI Assurances to accompany this Unified Planning Work Program (UPWP). In addition, staff updated the Vulnerable Population Index (VPI) datasets based on current American Community Survey (ACS) data and also updated the Limited English Proficiency Plan. Staff also worked with the Public Advisory Committee (PAC) to determine enhancements to analyses that are considered for various documents, particularly the long-range transportation plan. Staff participated in advanced training for environmental justice applications and are now beginning to implement improvements.

The VPI data and other datasets were used to develop/refine methods to evaluate the benefits and burdens associated with the Transportation Improvement Program (TIP) and long-range transportation plan. To support the determination of benefits and burdens, a module was developed that is integrated into the operation of the new InSITE to advance our process for determining outcomes.

In FY 2022 there is greater emphasis on integrating an equity lens throughout the regional planning process. Major national events have greatly influenced how all of us conduct our business to adjust for a full and fair approach to the work we undertake. Many training opportunities are being offered and will likely continue and be refined with local inputs. BMC will continue to monitor contracts for Disadvantaged Business Enterprise (DBE) participation and host the annual “Meet the Primes” event. The VPI will be updated with new data as it becomes available.

Throughout the year, staff will continue to make sure all elements of the metropolitan planning process in the Baltimore region are undertaken in the most equitable fashion.

PRODUCTS/MILESTONES	SCHEDULE
Review DBE Participation Goal	2 nd Quarter, FY 2022, 2023
Prepare Title VI Annual Report	3 rd Quarter, FY 2022, 2023
Evaluate Benefits and Burdens for the LRTP, TIP	3 rd Quarter, FY 2022, 2023
Review ADA Policies	1 st Quarter, FY 2023

FY 2022 BUDGET: \$115,000

FY 2023 EST. BUDGET: \$115,000

GATHERING & ANALYZING DATA

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GIS ACTIVITIES

PURPOSE: To maintain the Geographic Information System (GIS) that allows for information and data to be spatially organized, updated, analyzed, disseminated, and graphically depict demographic, socio-economic, and travel information.

During Fiscal Year (FY) 2020-2021 the Baltimore Metropolitan Council (BMC) played a key role in coordinating regional GIS initiatives on a number of subjects of interest to our local jurisdictions. This included updating a single GIS data layer for bicycle trails and hosting GIS working group meetings in a remote environment. BMC was the boundary submitting authority for the 2020 Census and coordinated boundary delineation with local governments in the region. BMC continues to be a liaison between state and local government on GIS issues.

Staff maintain a large enterprise database of transportation, planning, and demographic data for use in mapping and GIS analysis. This data supported a number of key projects at BMC including *Maximize2045*, Analysis of Impediments to Affordable Housing, Travel Choices, Critical Urban Freight Corridors, and the Elderly Study. BMC continued to build on its online technology with a new Congestion Management Process app that lets users analyze traffic bottlenecks in conjunction with other travel speed and road data. BMC significantly expanded its online presence this year in order to supplement outreach efforts that had been disrupted by COVID. This included an app that allowed users to submit comments on TIP projects, and a Story Map for Phase I of the Patapsco Greenway.

In FY 2022-2023 work will include:

BMC staff will provide ongoing GIS maintenance, geospatial analysis, and technical support for various transportation planning activities including analysis for the long-range transportation plan, the Transportation Improvement Program, and the travel demand model.

BMC will continue to support and expand BMC's web presence through our Open Data website, which allows users to download GIS data as well as incorporate it into their own applications. Additional web mapping applications will be created to assist in public outreach and in the creation of planning and analysis tools including an improved CMP map, an emergency food distribution analysis tool, a Census 2020 regional information app, and other transportation information applications.

Staff will continue to coordinate with the local jurisdictions on regional projects. Work with the Baltimore Regional Geographic Information System Committee (BRGISC) will continue with ongoing coordination of regional projects, advocacy for regional interests at the state level, and by providing networking and training opportunities to GIS staff from our member jurisdictions.

BMC will continue its leadership role in state GIS activities, including working with the Maryland State Geographic Information Committee (MSGIC), coordinating with state GIS entities at MD iMap Technical Committee meetings, and assisting with the Towson GIS conference.

BALTIMORE REGION UPWP
FY 2022-2023 UNIFIED PLANNING WORK PROGRAM

PRODUCTS/MILESTONES	SCHEDULE
GIS mapping and geospatial analysis	Throughout Fiscal Year
Manage, update, and maintain an enterprise GIS database system	Throughout Fiscal Year
Organize and participate in BRGISC and coordinate regional GIS projects	Throughout Fiscal Year
Participate in MSGIC and other GIS activities in the state and region	Throughout Fiscal Year
Develop new mapping applications and GIS web services	Throughout Fiscal Year

FY 2022 BUDGET: **\$390,000**

FY 2023 EST. BUDGET: **\$390,000**

DEMOGRAPHIC AND SOCIOECONOMIC FORECASTING

PURPOSE: To develop and maintain population, household, and employment forecasts for the Baltimore metropolitan region. The cooperative forecasts serve as a key input to the regional travel demand forecasting process and the development of the long-range transportation plan. Staff of the local jurisdictions comprise the Cooperative Forecasting Group (CFG) and coordinate the development of their jurisdiction's estimates and forecasts. Jurisdictional staff utilize local comprehensive plans, adopted zoning maps and regulations, and an inventory of available residential holding capacity to inform their forecast process.

During Fiscal Years (FY) 2020 and 2021, the CFG continued to meet on a bi-monthly basis, evaluate the need for updating the forecasts, and developed updated forecasts as necessary. On July 28, 2020 the Baltimore Regional Transportation Board (BRTB) endorsed the Round 9A cooperative forecasts. Three jurisdictions participated in Round 9A: Anne Arundel County; Baltimore County; and Howard County. Each of the participating jurisdictions made adjustments to population and households estimates and forecasts, with no changes to employment.

The planned Round 9B forecast update, with submissions due from local jurisdictions November 30, 2020, was to have extended the horizon year of the forecast period to 2050, requiring participation of all jurisdictions. The onset of the COVID-19 pandemic in the spring of 2020 caused massive disruptions to the national, state, regional, and local economies. While it was clear that it would be important for the next approved forecast to capture estimates of the impacts of the pandemic, it was also evident that there was neither enough time nor adequate data to support their development in the timeframe allotted in the Round 9B update schedule. As a result, the Round 9B was cancelled, and FY 2021 began with the development of a plan and schedule for Round 10, a product that will support the development of the 2023 Long-Range Transportation Plan update. Round 10 will incorporate 2020 Census data, which will serve to calibrate population and households for the new base year of 2020, and Round 10 will extend the forecast horizon year to 2050. During the third and fourth quarters of FY 2021, BMC staff and CFG membership worked collaboratively in the development of a new set of TAZ boundaries based upon 2020 Census geography files and supporting 2020 Census and employment data. Also in FY 2021, a new regionally consistent base year employment methodology was developed and adopted, as necessitated by the Round 10 forecast schedule and the timing of source data availability.

BMC was the submitting authority for the Census 2020 Participant Statistical Areas Program (PSAP). Census boundary delineation work for local jurisdictions was coordinated through BMC along with training, technical support, and resolving issues between the Census and local jurisdictions. BMC also assisted with Census 2020 outreach, and staff created a Census self-response tracking web application to allow local jurisdictions to monitor low response areas and adjust their outreach coordination efforts.

In FY 2022 and FY 2023, the CFG will continue to meet on a bi-monthly basis. The group will continue work on the Round 10 forecast dataset, with jurisdictional level estimates and forecasts due in the first half of FY 2022, and TAZ level estimates and forecasts due in the third quarter of FY 2022. In

the second half of FY 2022, BMC staff will create travel demand model inputs based upon the data points submitted by CFG membership (total population, group quarters population, households, and total employment). When Round 10 is complete, the group will continue to evaluate the need for updated forecasts on an annual basis, and update the forecasts as necessary. BMC staff will continue to monitor the release of Census data that pertains to population, households, and employment, document the proceedings of the CFG meetings, document comparisons between Round 10 and future long-range population, household, and employment forecasts, provide small area residential and employment estimates and forecasts to local jurisdictions on request, continue data compilation, data development, and technical assistance for BMC partners, and continue discussions on bi-regional growth assumptions with the Metropolitan Washington Council of Governments (MWCOC) and Wilmington Area Planning Commission (WILMAPCO).

PRODUCTS/MILESTONES	SCHEDULE
Evaluate need for update to forecasts	Throughout Fiscal Years
Update forecasts as necessary	Throughout Fiscal Years
Round 10 jurisdictional level estimates and forecasts due	2 nd Quarter, FY 2022
Round 10 TAZ level estimates and forecasts due	3 rd Quarter, FY 2022
Develop travel demand model inputs	3 rd and 4 th Quarters, FY 2022
Monitor and review relevant Census data releases	Throughout Fiscal Years
Document proceedings of the CFG	Throughout Fiscal Years
Provide data to local jurisdictions upon request	Throughout Fiscal Years
Provide data compilation, data development, and technical assistance	Throughout Fiscal Years

FY 2022 BUDGET: **\$270,000**

FY 2023 EST. BUDGET: **\$270,000**

DEVELOPMENT MONITORING

PURPOSE: To track new land development patterns in the region by type (residential, non-residential, mixed-use etc.), location, and timing. Tracking development activity is important to the transportation planning process as it recognizes the placement of household and employment growth across the region, and assists in the analysis of the associated demands upon the transportation network. Ongoing contact with state and local agencies provides data needed for this activity.

During Fiscal Year (FY) 2020 - 2021, Baltimore Metropolitan Council (BMC) staff continued to collect and process building permits from each of the local jurisdictions, bringing them into one common system. The Building Permit Data System (BPDS) at the BMC is the source for various products and services including reports and analyses of regional trends (supported by charts, tables, and maps highlighting notable development activity) and BPDS Online, which allows users to develop their own queries and search the building permit files online through subscription. In FY 2021, BMC staff modified the monthly report format with an emphasis on graphics and improved data visualizations, making the data easier to interpret. Also in FY 2021, BMC staff completed the process of incorporating Queen Anne's County into the BPDS, improving the coverage to include all Baltimore region jurisdictions. In addition, staff continues to make available the BPDS Quick Viewer, which is a free online mapping product that allows the user to view the location of selected building permits on a map. Staff also contributed detailed building permit data to the Regional Recovery Dashboard and made multiple presentations on development monitoring activities to the Cooperative Forecasting Group and Technical Committee of the Baltimore Regional Transportation Board (BRTB).

In FY 2022-2023, staff will continue to prepare monthly and quarterly reports of plans for new residential and non-residential development. Staff will continue the production of annual reports on "green" construction activity. "Green" refers to the Addition/Alteration/Repair permit category that contains features directed toward energy conservation. Staff will continue to create an annual report on residential hot spots, detailing which residential developments in the region are permitting the most units. Additionally, there will be an annual analysis of building permit activity by sewer service areas and priority funding areas. Staff will also continue to support the work of local planning partners by fulfilling requests for customized building permit data extractions, reports, and analyses.

PRODUCTS/MILESTONES	SCHEDULE
Reports on residential/non-residential development plans	Throughout Fiscal Years
Reports on “green” construction activity	1 st Quarter 2022 - 2023
Report on residential hot spots	2 nd Half FY 2022 – 2023
Analyses/Maps of residential building permit activity by sewer service areas and Priority Funding Areas	2 nd Half FY 2022 – 2023
Provide local planning partners with customized building permit data extractions and reports upon request	Throughout Fiscal Years

FY 2022 BUDGET: \$280,000

FY 2023 EST. BUDGET: \$280,000

ANALYSIS OF REGIONAL DATA AND TRENDS

PURPOSE: To identify regional travel trends and related policy issues, using existing Baltimore Metropolitan Council (BMC) datasets and outside resources where available. The results of the analysis will be communicated to local officials and the public. Also to review, analyze and develop relevant transportation planning products from data released by relevant agencies such as the U.S. Department of Commerce and the U.S. Census Bureau; and to manage the 2017-2018 Household Travel Survey.

During FY 2020-2021, staff completed the following activities:

Regional Indicators – The scope of the Regional Indicators task reflects the broad social and economic forces that influence, and are influenced by, the policies and programs of the Baltimore Regional Transportation Board (BRTB). BRTB policy goals and program initiatives are articulated in documents such as Maximize2045, the region’s long-range transportation plan.

With the release of the new 2015-2019 ACS 5-year estimates and the 2020 Census results, staff updated all regional indicators to reflect the latest data.

Household Travel Survey – The Household Travel Survey is BMC’s primary source for demographic and travel data. Individual and Household demographics (e.g., gender, income, employment status, age, and number of children) have more influence over people’s travel activity and travel need than any other factor. Demographics are important for planning all transportation modes and are particularly important for planning transit service, where data on demand for transit service is aggregated by cohorts, e.g., young adults, elderly, etc.

Data collection began in May 2018 and ended in July 2019. Concurrently, the Metropolitan Washington Council of Governments (MWCOC) conducted its Regional Travel Survey. Post-processing of the survey data also began in July 2019. Staff collaborated with the consultant and MWCOC to check and clean the survey data and calculate final sample weights. After post-processing, the products of these surveys were combined to provide a uniform dataset for the state of Maryland.

Staff then began to analyze and report on survey results for the Baltimore region, including a series of presentations to the Technical Committee between fall 2020 and spring 2021.

Staff also responded to requests for Custom Data Products received from member governments. In particular, staff has completed the following analyses:

- 1) Study of Telecommuting in the Baltimore Region, and
- 2) Study of Long-Distance Commuting and the Geography of Consumer Spending

In addition, staff released a Public Access Database (PADB) of the survey data. The PADB protects the confidential information of households that participated in the Survey, while providing member governments the ability to conduct their own analyses.

Jurisdictional Data Books – Working with local jurisdictions and state agency staff, staff developed a series of standardized annual publications containing transportation and related data for each of the member jurisdictions. Another product of this initiative was a regional compendium to assist in local and regional planning and decision-making.

Later, the data books were revised in consultation with member governments. The data books are available in print and online.

In FY 2022 and FY 2023, staff will complete the following activities:

Regional Indicators – Staff will continue to update all regional indicators as new data from the Census Bureau and other sources are released.

Household Travel Survey – Staff will continue to analyze and report on survey results for the Baltimore Region. Major sub-tasks are Trend and Policy Analysis and Custom Data Products.

Trend and Policy Analysis – Staff will identify Baltimore region demographic and travel trends using data from the recent Survey and the previous 2007-2008 Survey.

Trend and Policy Analysis can track the progress of current BRTB policy goals and program initiatives, as well as inform the development of future regional long-range transportation plans. Analyses will include Daily Travel, Household Travel and Energy, Travel Differences by Age, Gender, and Lifecycle, and others to be determined.

Custom Data Products – Staff will continue to respond to requests for Custom Data Products received from member governments.

Jurisdictional Data Books – Staff will update the data books annually.

PRODUCTS/MILESTONES	SCHEDULE
Analyze/Synthesize Current Data	Throughout FY 2022-FY 2023
Demographic and Socioeconomic Horizon Year Scenario Planning	Throughout FY 2022-FY 2023
Update Regional Indicators	Throughout FY 2022-FY 2023
Update Data Books	Throughout FY 2022-FY 2023
Analyze and Report on Survey Results	Throughout FY 2022-FY 2023

FY 2022 BUDGET: \$300,000

FY 2023 EST. BUDGET: \$300,000

MAINTENANCE OF CURRENT SIMULATION TOOLS

PURPOSE: Development and maintenance of the region's aggregate and disaggregate demand and traffic simulation tools and enhancing modeling methods.

The region has transitioned and adopted an Activity Based Model, known locally as Initiative to Simulate Individual Travel Events (InSITE). The InSITE model consist of three components: 1) a synthetic household/population generator, 2) a freight modeling system simulating long distance commodity flows and a urban truck/commercial vehicle touring model, and 3) household's and person's long term choices and daily activity tour/trip roster. The InSITE model is used in mobile source emission estimation, long-range transportation development, environmental justice analysis, and corridor planning studies.

In previous fiscal years, staff maintained the InSITE model revising user interface, incorporating the freight modeling system, creating demographic tools enhancing and streamlining the development of jurisdiction and TAZ household/person margins, and developing PostgreSQL demographic, long term choice, and daily activity tour/trip roster summary scripts.

In FY 2021, staff maintained InSITE input demographic and network assumptions. Washington region transit networks initially were configured using MWCOC's coding schema requiring BMC staff to learn and use two different transit coding schemas. In order to streamline and create consistent transit networks, BMC staff converted the Washington region transit to be consistent with Baltimore's practices. The InSITE Time of Day (TOD) choice model uses ½ hour increments relying on 4 (am peak, mid-day, pm peak, and overnight) highway skims and 2 (peak and off-peak) transit skims. Tour/trip TOD analysis resulted in transit trips during overnight hours as a result of using peak transit skim for am and pm peak hours and off-peak transit skims for mid-day and overnight hours. The off-peak transit network is code reflecting midday schedule service and headways. Staff reviewed Washington and Baltimore transit scheduled and created an over-night transit network reflecting scheduled service and revised InSITE TOD mode choice to reflect available schedule service.

In FY 2022 and FY 2023, staff will continue developing and maintaining the travel simulation tools, enhancing and updating methods in preparing model inputs and assumptions, calibrating and validating InSITE with the incorporation of the 2019 Maryland Household Travel Survey, and continue exploring approaches summarizing, visualizing, and communicating InSITE simulation results.

State of model development practice advises simulation tools to be calibrated with current revealed data and federal transportation conformity guidance requires transportation demand planning model to be validated no more than 10 years from the first TIP/LRP regional emission analysis horizon year. The InSITE model was estimated from the 2008 Household Travel Survey and validated to a 2012 base year. The Maryland Household Travel Survey was completed in 2019 collecting all household members' activates beyond the household that required travel using a detail dairy on time of day, purpose, model and destination for tours/trips. BMC in cooperation with a consultant team, will calibrate InSITE using the 2019 survey and validate InSITE to a current year. Revealed survey data

will be used in updating InSITE model component calibration spreadsheets and using an iterative approach adjust InSITE model component variable coefficients and constants matching simulated travel behavior, patterns, and choices with 2019 revealed observations. BMC staff will update validation spreadsheets assembling, analyzing, tabulating, and summarizing observed traffic counts and transit passenger boarding/alighting data.

BMC staff will continue to refine and update model region transportation networks in supporting InSITE calibration/validation, TIP/LRP development and mobile source emission analysis, and corridor planning alternative analysis. InSITE model calibration/validation transportation networks will be expanded to include Queen Anne's, County Maryland and Adams and York counties, Pennsylvania. InSITE geographic expansion will transfer expanded jurisdictions networks and zone structures using work completed under the TBM. The expanded geographic InSITE networks will be updated to the validation year. In support of LRP update, transportation networks will be coded using submitted candidate project list and finalized representing preferred alternative. InSITE TIP and LRP horizon year networks will be coded for Baltimore, Washington, and Pennsylvania using BRTB member submitted projects and coordinating with Washington and Pennsylvania MPOs. In support of corridor analysis, transportation networks will be refined coding alternatives and in order to improve corridor sensitivity simulation results incorporate a refined zone structure.

The 2020 decennial Census will revise TIGER/Lin geography and provide complete person and household counts. InSITE expanded model geography Transportation Analysis Zone (TAZ) structure will be reviewed and modified to reflect 2020 TIGER/Line boundaries with the goal of maintaining existing TAZs structure. Further 2020 TAZ structure refinement will be coordinated with Cooperative Forecasting members splitting TAZs in areas with large 2010 to 2020 population increases and to enhance transit station/stop walk access/egress for employment and/or residential activity centers. Complete person and household counts will be used in updating pOPTICS and Cooperative Forecasts. The pOPTICS 5 year increment spreadsheet model estimates jurisdiction cohort components of population change (births, deaths, and migration). The pOPTICS spreadsheet model was estimated using 2010 and 2015 Census data and Maryland Department of Health vital statistics. The spreadsheet model will be updated using an analysis of 2015 to 2020 data. The 2020 decennial Census and the updated Master Establishment File (MEF) provides the TAZ base year demographic and socio-economic data in the development of Round 10. Round 10, upon BRTB adoption, will become the latest planning assumptions and incorporated into InSITE.

Simulated InSITE person and household long term choices and daily activity tour/trip roster is stored in a PostgreSQL database. BMC staff will continue developing SQL routines to tabulate and summarize InSITE simulation results. Staff will explore Tableau dashboards and other methods to visualize and communicate model results.

The InSITE model is implement using various scripting language. Staff will continue to address user identified script routine errors. In order to meet regional policy needs, staff will enhance and customize modeling scripts in changing model sensitivity, updating simulated outputs and/or tabulate results to meet policy questions.

With InSITE adoption, staff will review and revise the mobile source emission process and the

Environmental Justice (EJ) technical analysis. Mobile source emission process will be modified incorporating link travel demand from eight highway network time periods. The EJ technical process will replace the aggregate EJ Emphasize Area TAZ analysis with enhanced race/poverty PopGen synthetic data. The revised PopGen script uses jurisdiction gender and cohort race/poverty pOPTICS marginal data in synthesizing population. The EJ analysis will be based on mobility and accessibility at the person level.

PRODUCTS/MILESTONES	SCHEDULE
InSITE Calibration and Validation	FY 2022
InSITE Network Maintenance/Development	Ongoing FY 2022-2023
2020 Census Refinements – TAZs and Demographics	Ongoing FY 2022-2023
InSITE Model Visualization	Ongoing FY 2022-2023
Simulation Tools Script Maintenance and Method Development	Ongoing FY 2022-2023

FY 2022 BUDGET: **\$350,000**

FY 2023 EST. BUDGET: **\$350,000**

SIMULATION TOOLS: APPLICATIONS AND ANALYSIS

PURPOSE: Apply aggregate and disaggregate demand and traffic simulation tools supporting the development of short and long-range transportation plans, the forecast of project corridor demand, and scenario analysis.

In previous fiscal years, simulation tools were applied to support *Maximize 2045* development, technical analysis of Mobile Source Emissions, and Environmental Justice. Simulation tools were used to score *Maximize2045* candidate projects and model link level highway demand was combined with EPS's MOVES emission factors estimating horizon year mobile source emissions. An analysis of plan and program simulated identify EJ TAZ emphasize areas mobility and accessibility was performed measure racial and economic disparities.

In FY 2021, BMC staff applied simulation tools estimated highway link level demand with EPS's MOVES emission factors estimating 2021-2024 TIP mobile source emissions. The TIPs estimated mobile source emissions are used in determining federal transportation conformity.

BMC modeling and demographic staff developed demographic planning tools – pOPTICS and PopGen. Working with the Cooperative Forecasting committee, fertility and migration scenarios were developed and summary analysis shared. The analysis started conversation on population components of change and impact on jurisdiction and small area demographic forecasts.

In FY 2022 and FY 2023, staff will continue supporting the development of plans and programs and required technical analysis. Working with state and local agencies simulation tools and data analysis of public databases and/or purchased sensor data will be analyzed and applied in support of corridor market travel flow analysis, scenario planning, and horizon year demand and travel forecasts supporting project planning.

BMC staff will support the update to the region's long range plan scheduled for FY 2023 adoption. Policy board member submitted candidate projects will be translated into InSITE transportation networks and used in estimating horizon year demand and travel. Link level simulated travel, network performance, and mobility/accessibility calculation will be used in project scoring. The policy board, using technical and policy project scoring, will develop a preferred alternative. Prior to adoption, EJ and mobile source emission technical analysis will be completed. The EJ process will be revised converting from aggregate TAZ EJ emphasize areas to disaggregate population estimates of Non-Hispanic White/other and in/out of poverty.

The annual Transportation Improvement Program requires a mobile source emission analysis and conformity determination prior to adoption. Working with the ICG, staff will translated agency submitted air quality non-exempt projects into InSITE transportation networks and estimate link level highway demand. The region's mobile source emission process is completed cooperatively with MDE staff, who is responsible for updating and maintaining several MOVES database input assumptions. BMC and MDE staff will coordinate MOVES database input assumptions verifying latest planning assumptions.

BMC staff has used various federal/state and purchased private sector databased, in support of

planning studies. Census Bureau decennial and American Commuter Survey data sets provided person and household demographics and information on commuters used in developing/calibrating models and developing trends. Private sector datasets along with State of Maryland administrative records provide information on firms and worker characteristics used in employment estimates and commuter travel shed analysis. New emerging sensor data is providing unique cost effective opportunities to monitor travel movement with imputed characteristics on a frequent bases allowing seasonal variation monitoring and analysis of travel behavior choices/trends. Staff, partnering with MDOT-SHA is working to identify and procure OD sensor data.

BMC modeling staff, supporting local and regional planner, will provide technical modeling support in corridor demographic analysis, travel trends, and travel forecasting. The InSITE model can provided base and horizon year corridor alternative travel market analysis.

PRODUCTS/MILESTONES	SCHEDULE
Plan Development Analysis Support	Ongoing FY 2022-2023
Program/Plan Mobile Source Emission and EJ Technical Analysis	Ongoing FY 2022-2023
Census/Sensor Data Analysis	Ongoing FY 2022-2023
Project Corridor Demand and Traffic Forecast	Ongoing FY 2020-2021

FY 2022 BUDGET: **\$300,000**

FY 2023 EST. BUDGET: **\$300,000**

SAFETY & SECURITY

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SAFETY PLANNING AND ANALYSIS

PURPOSE: Improve safety in the region by supporting State and local efforts to reduce crashes, injuries, and fatalities. Fully integrate Baltimore Regional Transportation Board (BRTB) activities with the Maryland Strategic Highway Safety Plan (SHSP) as well as local safety planning efforts.

In Fiscal Year (FY) 2020, Baltimore Metropolitan Council (BMC) continued to play an active role in the implementation of the state's 5-year (2016-2020) SHSP and the development of the upcoming 2021-2025 plan. The SHSP is a blueprint for reducing crashes, injuries, and fatalities across the state and the region. BMC co-chaired the Highway Infrastructure Emphasis Area Team (EAT) and played an active role on the Pedestrian and Distracted Driving EAT and the SHSP Implementation Team. In those roles, staff worked closely with the Maryland Department of Transportation and its consultant to restructure the infrastructure role in the upcoming SHSP. Staff continued to participate on safety task forces in each jurisdiction led by regional traffic safety partners. Staff worked with partners throughout the region and supported other safety efforts for the BRTB, including setting targets for traffic and transit safety performance measures, facilitating the Baltimore Region Safety Subcommittee (BRSS), and supporting the development of regional pedestrian safety campaigns and law enforcement trainings. Staff have also been contacting peer agencies and researching ways to improve the safety project scoring methodology for the long-range plans.

The BRSS met quarterly to work with safety stakeholders to identify regional safety issues and develop programs and resources to reduce the number of crashes, injuries, and fatalities in the region. The BRSS brings together state and local representatives from many disciplines including the 4 E's of traffic safety – Engineering, Education, Enforcement, and Emergency Medical Services. A focus of the subcommittee was pedestrian safety as crash-related injury and fatality trends continued to climb. Another focus of the subcommittee was fostering the development of local SHSPs throughout the region. Several partners have been identified as best practices for state-level meetings and workshops and continue to support other jurisdictions in planning efforts.

In FY 2022 and FY 2023, staff and the BRSS will continue to play an advisory role to MDOT, especially the MDOT Motor Vehicle Administration's Highway Safety Office (MHSO) and local jurisdictions towards developing and implementing programs and projects that would help reduce the overall crashes, injuries, and fatalities. Local SHSPs will continue to be a priority in the region: Baltimore, Carroll, Harford, and Howard Counties will be implementing plans in 2021; it is anticipated that Anne Arundel County and Baltimore City will finalize plans and begin implementation in 2021. Continued development is a focus and subsequent implementation is critical for success on the local level. BMC staff will continue to support all statewide EATs as the new state SHSP begins implementation in January 2021. Additionally, as Highway Safety Improvement Program (HSIP) funds become available to local agencies in 2021, more support will be provided by BMC staff.

The BRSS will meet continue to meet quarterly under the direction of a new chairperson to highlight progress being made around the Vision Zero goal adopted by Maryland. Staff members will work with the chairperson to identify themes for each meeting relevant to state crash trends and countermeasures. Staff will also work collaboratively with MHSO, MDOT SHA, and MDOT MTA to

develop and monitor traffic and transit safety performance targets for the Baltimore region as required by the Fixing America's Surface Transportation (FAST) Act. Updated targets were adopted by the BRTB in January 2020.

BMC is an active, non-voting member of the technical and executive committees of the Traffic Records Coordinating Committee (TRCC), as well as the state SHSP executive committee. The mission of the TRCC is to coordinate all traffic records system components (crash, roadway, citation/adjudication, driver, vehicle, injury surveillance) using data quality performance measures (timeliness, completeness, accuracy, accessibility, integration, uniformity) in an effort to advance the Maryland traffic safety community. Staff will continue to get crash data and analytical support from the MHSO, Washington College, and the National Study Center Trauma & EMS at the University of Maryland, Baltimore (NSC). Staff will share data summary reports with the various subcommittees on a regular/as-needed basis. Relevant information gleaned from the TRCC will also be shared with local SHSP teams to broaden communication channels. Finally, staff will explore the feasibility of building an online dashboard for traffic safety data similar to the Baltimore Regional Recovery Dashboard.

BMC staff will continue to support several projects funded by the MHSO, including two pedestrian safety efforts. A new pedestrian and bicycle safety outreach campaign was launched in 2019 with Sherry Matthews, Inc. Creative materials were revised to accommodate changes due to the COVID pandemic and associated safer-at-home orders. Those changes allow the campaign to strategically enhance the safety message with an adaptive platform. BMC is managing the consultant contract and supporting outreach efforts. The second project is aimed at law enforcement training for pedestrian safety and will involve potentially modifying existing curriculum. BMC is facilitating this effort with regional law enforcement partners and the MHSO, which is anticipated to provide enforcement funding upon completion of the training courses.

PRODUCTS/MILESTONES	SCHEDULE
Regional Safety Subcommittee Meetings	Quarterly
Collaborate with state and local agencies on safety	Ongoing

FY 2022 BUDGET: **\$180,000**

FY 2023 EST. BUDGET: **\$180,000**

TRANSPORTATION SYSTEMS MANAGEMENT AND OPERATIONS PLANNING

PURPOSE: To improve the movement of people and goods and to increase the safety and efficiency of the transportation system through enhanced coordination of existing transportation systems management and operations (TSMO) activities and implementation of new TSMO activities.

Transportation Systems Management and Operations (TSMO) is defined as “An integrated program to optimize the performance of existing infrastructure through the implementation of systems, services, and projects designed to preserve capacity and improve security, safety, and reliability of the transportation system.” During Fiscal Years (FY) 2020 - 2021, staff supported the ongoing activities of several TSMO-focused committees described below. Staff also continued to support TSMO efforts of the State, neighboring regions, and professional organizations such as the Intelligent Transportation Society of Maryland (ITSMD). Staff has also worked to identify opportunities to further integrate TSMO into the transportation planning process, particularly through closer coordination with the regional Congestion Management Process (CMP) and performance monitoring work.

Supporting Regional TSMO Committees:

Traffic Signal Subcommittee – This group meets quarterly to discuss signal operations and ways to improve mobility and safety for all road users, including pedestrians, bicyclists, and motorcycle riders. MDOT SHA and local jurisdictions continue to deploy adaptive and other signal control systems to improve operations and safety. In FY20-21, the signal subcommittee organized the 10th regional signal forum and facilitated a FHWA workshop on Active Cycle Management.

Traffic Incident Management for the Baltimore Region (TIMBR) Committee – This group has continued to meet quarterly to improve communication, coordination and cooperation needed for safe and efficient traffic incident management in the region. Staff continued to support activities of the committee, such as working on action items from the annual TIM Self-Assessments and updating the Funeral Procession Contact List each quarter. Over the last two years, the TIMBR Committee Chair and staff held outreach meetings to each local jurisdiction to identify local TIM issues to bring back to the TIMBR Committee and broaden the message of the TIMBR Committee. Staff continued worked with MDOT SHA and Maryland State Police (MSP) representatives to schedule and promote the Strategic Highway Research Program (SHRP) 2 TIM Training. Staff also worked with committee members to plan and hold a virtual TIM conference.

Transportation & Public Works Committee – The Committee pursued daily operations and public works topics as well as supported homeland security / emergency preparedness planning. (Refer to Emergency Preparedness Planning section for emergency preparedness activities). In FY 2020 and FY 2021, the T&PW Committee continued to discuss issues of concern to department of public works and transportation, such as road closure tracking.

Connected and Automated Vehicles – Over the last several years, staff has been learning about connected and automated vehicles (CAVs) and involved in CAV committees at the state and national level, including Maryland CAV Work Group and its Emergency Responder and Freight

Subgroups, MDOT SHA CAV Work Group, and AMPO CAV Work Group.

Coordination with TSMO Partners:

In addition to supporting regional activities, committees, and initiatives, staff support local and state partners by participating in their TSMO planning activities. Staff is a member of the State's Coordinated Highways Action Response Team (CHART) Board, Maryland CAV Work Group and Emergency Response SubGroup, SHA CAV Work Group, and District 4 Tri-Agency Committee. Staff also participates in state and local TSMO projects regularly.

In FY 2022-2023, staff will continue to focus on: supporting regional TSMO committees; work on corridor studies; coordinating with TSMO partners; and coordinating with internal and external stakeholders on using archived operations data to support the regional CMP and measuring performance, as required by federal performance requirements.

Supporting Regional TSMO Committees:

Traffic Signal Subcommittee - The subcommittee will hold its next Regional Traffic Signal Forum in late 2021. The Subcommittee will also coordinate with the CMP and corridor analysis teams to identify potential projects that could be eligible for Congestion Management and Air Quality (CMAQ) and/or other types of funding.

Traffic Incident Management for the Baltimore Region Committee – the TIMBR Committee will continue to improve communication, coordination and cooperation needed for safe and efficient traffic incident management in the region and continue to meet quarterly. Staff will: continue to update and distribute the Funeral Procession Contact List quarterly; support MDOT SHA, as the lead organization, in scheduling SHRP2 TIM Training sessions for responders; work on items identified in the annual TIM self-assessments; and advance priority initiatives identified by the TIMBR Committee.

TIM Conference: Since FY 2000, the TIMBR Committee has held numerous TIM conferences funded with regional, state, and federal funds. These events have been very well-received and successful in spreading the message of the importance of TIM to field staff and managers. If funds are identified, the TIMBR Committee will hold another in-person TIM conference. Staff will also consider holding one or more virtual conferences. While virtual conferences provide a forum to share information with responders, the most effective approach is in person where responders can easily talk informally with their peers from other disciplines.

Transportation & Public Works Committee – The Committee will continue to identify topics for discussion at regional information exchange forums, with the goal of holding one or two in each fiscal year, as topics are identified and funding is available. The committee will also consider holding virtual forums.

Corridor Studies: This work, which began in FY 2017, was initiated to identify congestion management strategies for locally- or state-maintained corridors that may need study due to significant operational issues. This work has been developed as a consultant task during FY 2021 and will continue in FY 2022 – 2023.

Connected and Automated Vehicles – Staff will continue to participate in state and national CAV committees and support local efforts as needed, including acting as a convener and champion.

Coordination with TSMO Partners:

Staff will continue to support TSMO activities of various partners, such as corridor operations project in the region, CAV project in the region, project arising from the MDOT SHA TSMO Strategic Deployment Plan, and continued participation on the CHART Board.

PRODUCTS/MILESTONES	SCHEDULE
Support subcommittee meetings and prepare agendas and minutes	Throughout FY 2022 - FY 2023
Support stakeholder TSMO activities	Throughout FY 2022 - FY 2023
Hold an incident management conference in person (if funding is available) or virtually	TBD
Hold T&PW forum(s) (as topics are identified and funding is available, if needed)	TBD
Hold Traffic Signal Forum	2nd Quarter FY 2022
Corridor studies	Throughout FY 2022 - FY 2023
Coordinate with regional CMP	Throughout FY 2022 - FY 2023
Support local and state CAV efforts as needed	Throughout FY 2022 - FY 2023

FY 2022 BUDGET: **\$190,000**

FY 2023 EST. BUDGET: **\$190,000**

EMERGENCY PREPAREDNESS PLANNING

PURPOSE: To identify risks and conditions that impact the security of the transportation system and its users and develop plans, programs, and projects that increase transportation security and emergency preparedness of system users and operators. This work supports the Baltimore Regional Transportation Board (BRTB) as well as the Baltimore Urban Area Homeland Security Work Group (UAWG).

During Fiscal Years (FY) 2020 - 2021, staff supported the ongoing activities of the Transportation & Public Works (T&PW) Committee, which provides input to both the BRTB as well as the UAWG. The T&PW Committee met quarterly and highlights over the last two years include a 2-workshop series on evacuation planning, adding evacuation routes to RITIS, and discussions about road closure tracking capabilities. In December 2020, the kick-off was held for the committee-initiated consultant project to Develop a Resource Guide for Planning, Designing, Operating, and Maintaining Local Infrastructure in a Changing Climate. Staff also continued to support the Disaster Debris Planning Task Force that, over the last two years, hosted presentations by and discussions with each of the five debris firms under contract with the state. Staff also continued to support emergency preparedness planning efforts of the State and local jurisdictions.

In FY 2022-2023, staff efforts will continue to focus on supporting BMC/BRTB emergency preparedness committees and coordination with, and support of, emergency preparedness partners.

Supporting BMC/BRTB emergency preparedness committees:

Transportation & Public Works Committee – The T&PW Committee addresses daily operations and public works topics as well as supports homeland security/emergency preparedness planning. (Refer to Transportation Systems Management & Operations (TSMO) section for TSMO Planning activities). Staff will continue to support quarterly T&PW Committee meetings and projects. The committee will continue to follow up on the action items from the Evacuation Workshops held in FY2020. This Committee submits project funding requests to the UAWG, if projects are identified. Staff will continue to take the lead in preparing the T&PW project proposal submissions to the UAWG (which are now submitted through the UAWG Emergency Management Committee). The Committee will also initiate projects that are funded through other sources or do not require funding. Committee projects will focus on evacuation planning and coordination as well as other aspects of emergency preparedness of public works/transportation departments. The committee will also work to identify DPW/DOT issues and projects related to the pandemic and climate change. Climate change projects will include follow-on work to the Climate Change Resource Guide, which could include developing a short training program for its use, creating additional interactive mapping, and other projects and needs identified through work on the Resource Guide.

Disaster Debris Planning Task Force – The Disaster Debris Planning Task Force, which is a subcommittee of the T&PW Committee, meets quarterly to address coordination issues related to disaster debris planning, handling, and removal. In FY 2022 - 2023, staff will continue to work with the Task Force to address items identified in past exercises and training sessions, as well as support

new issues that arise during discussions at quarterly meetings. This group will continue to meet quarterly. BMC staff will continue to provide support to this group and act as project manager for its projects. If additional Urban Area Security Initiative (UASI) funds are allocated to the Task Force, staff will continue in the role of grant administrator.

Coordination with and Support of Emergency Preparedness Partners: Staff also supports other regional emergency preparedness planning efforts through membership in the UAWG and several of its other subcommittees, including Emergency Management, Recovery, and Public Information. Staff regularly attends the UAWG and subcommittee meetings to provide a transportation perspective on emergency preparedness planning.

PRODUCTS/MILESTONES	SCHEDULE
Support committee meetings, prepare agendas and minutes	Throughout Fiscal Year
Work on projects and issues identified by the T&PW Committee	Throughout Fiscal Year
Identify and work on follow-up projects to Climate Change Resource Guide	Throughout Fiscal Year
Work on projects and issues identified by the Disaster Debris Planning Task Force	Throughout Fiscal Year
Support the UAWG and its subcommittees as needed	Throughout Fiscal Year

FY 2022 BUDGET: **\$150,000**

FY 2023 EST. BUDGET: **\$150,000**

MOBILITY, ACCESSIBILITY & CONNECTIVITY

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SYSTEM PERFORMANCE: MONITORING AND ADAPTING

PURPOSE: Monitor performance of the system by collecting data to track travel conditions, reliability, and trends throughout the Baltimore region and using this data to analyze system performance. System performance data is used to support various planning needs including inputs to the regional travel demand model, air quality monitoring, and calculation of national system performance measures, Congestion Management Process (CMP), and the long-range transportation plan (LRTP) process. The ultimate goal of system performance monitoring is safe, efficient, and reliable mobility for people and goods.

Monitoring system performance is a critical task; this work supports a variety of other tasks in the UPWP as well as supporting the work of our partners. This task encompasses the following activities: traffic counts; speed and travel time collection; trip generation; asset management; documenting system performance; and monitoring measures for federal system performance requirements. Data from these activities directly supports the work of planning for and managing the system.

During FY 2020 and FY 2021, staff completed the following activities to support performance monitoring:

Traffic Counts: The Baltimore Metropolitan Council (BMC) completed a multi-year contract with a vendor to perform all forms of traffic counts from FY 2017-2020. In February of FY 2020 12 turning movement counts were collected to support the Carroll County Master Plan effort. In March, BMC's traffic count program was put on hold due to COVID-19. BMC's Traffic Count Dashboard featuring the latest count information in an attractive, intuitive and interactive web page continues to be a popular and useful tool for planners both inside and outside the agency as well as the general public. In FY 2021 a new vendor was selected for a 3-year contract spanning FY 2021-FY 2023. The on-call contract will require the vendor to perform various types of traffic counts including, but not limited to: volume, vehicle classification, turning movement, and bicycle and pedestrian data.

Speed and Travel Time Collection: Over the last several years, staff has been able to significantly expand data collection activities due to the availability of travel data accessible through the Eastern Transportation Coalition Probe Data Analytics (PDA) Suite. Staff has been very active on the Eastern Transportation Coalition's PDA User Group, which has helped enhance how the PDA Suite has been leveraged for use in the Baltimore region. Projects have been completed by request for multiple jurisdictions most notably a route 40 corridor congestion analysis report for Harford County.

Asset Management: MAP-21 includes requirements pertaining to the process for development of Risk Based Transportation Asset Management Plans (TAMP) that includes strategies leading to a program of projects that would make progress toward achievement of the State targets for asset condition and performance of the National Highway System (NHS). MDOT SHA is responsible for creating a TAMP based on data and analysis including consideration of engineering, life-cycle cost, and risk analysis with investment strategies being developed to best manage the physical assets with the limited funding available and anticipated in the future. The BRTB is responsible for incorporating asset management into the LRTP.

Documenting System Performance: Since FY 2014, staff has been preparing quarterly bottleneck reports that identify the top ten bottlenecks in the region. The document known as the “Quarterly Congestion Analysis Report” has evolved over time. In FY 2020 and FY 2021 staff incorporated suggestions submitted by the CMP Steering Committee. Bottleneck rankings are now based on the more refined measure of “Total Delay” and traffic volume comparisons from SHA permanent count stations are now also included in each report. FY 2021 staff developed a CMP Annual Report in the form of an ESRI Story Map. In FY 2020 staff created a web application called the CMP Analysis Tool. The tool is an interactive map that visually displays congestion data such as the most recent congested locations as well as transportation project data. This tool helps identify the top corridors for more in-depth analysis and serves as input into the project prioritization process.

Monitoring Federal System Performance Requirements: In FY 2018–2019, a significant focus of staff efforts were on developing regional system performance targets, based on federal system performance requirements, and on incorporating them into plans and programs. Federal guidance requires targets be developed in three performance areas: Safety (PM1), Bridge and Pavement (PM2), and System Performance, Freight Movement, and Air Quality (PM3). In FY 2020 and 2021 BMC staff coordinated with SHA to acquire and analyze GIS bridge and pavement condition data. Data from the PDA Suite was used to develop results for PM3 System Performance measures.

In FY 2020 and FY 2021, staff will work in the same areas:

Traffic Counts: With the help of a new traffic count vendor, a targeted approach to data collection supporting regional corridor studies and the travel demand model will continue through the length of the contract. Staff will update and improve BMC’s online interactive maps and dashboards. Staff will also continue exploring its non-vehicular count program in coordination with the Bicycle and Pedestrian Advisory Group (BPAG) and State Highway Administration (MDOT SHA). BMC will participate in a new project with MDOT SHA to create a Bicycle and Pedestrian Internet Traffic Monitoring System. BMC will provide any bicycle and pedestrian and turning movement counts it collects. MDOT SHA will house and share the data it received as well as factoring the raw data.

Speed and Travel Time Collection: Staff will expand CMP activities incorporating the new applications and data available through the Eastern Transportation Coalition PDA Suite. Staff will continue to be active on the Eastern Transportation Coalition’s Probe Data Analytics User Group. INRIX XD data is now available through the PDA Suite allowing analysis of Speed and Travel Time Data at a more granular level in FY 2022 and FY 2023.

Trip Generation: BMC will continue to research new Origin Destination Survey Data technologies to support future travel survey initiatives.

Asset Management: Staff will continue to work with state and local stakeholders to incorporate asset management into the LRTP and other planning efforts as appropriate. Staff will also work with state and local stakeholders to track how regional bridge and pavement conditions compare to the two-year targets developed for the region in FY 2019.

Documenting System Performance: Staff will continue preparing Quarterly Congestion Analysis

Reports that identify the top ten bottlenecks in the region. Staff will also continue the development of an Annual Congestion ESRI Story Map that was issued in FY 2021. Staff will also continue to prepare, as relevant, congestion brochures and press releases about holiday, work zone, or other special event conditions. In addition, staff will work with a consultant to perform a CMP corridor study. Staff will work through the CMP Steering Committee to further develop the CMP Analysis Tool. BMC staff will also participate in the CATT Lab's Performance Measures Focus group. Activities include testing sample templates designed to automate many of the steps required in generating various reports such as corridor studies, bottleneck reports, and before and after studies.

Monitoring Federal System Performance Requirements: Staff will continue to work closely with state and local partners to monitor status toward meeting regional performance targets and to develop regional performance targets for Safety (PM1), Bridge and Pavement (PM2), and System Performance, Freight Movement, and Air Quality (PM3).

PRODUCTS/MILESTONES	SCHEDULE
Highway and arterial traffic counts, turning movement counts with bicycle and pedestrian data to support travel demand model and CMP	Throughout FY 2022-FY 2023
Travel data products to support the CMP including CMP Corridor studies	Throughout FY 2022-FY 2023
Update Online Traffic Count Map and Dashboards	Throughout FY 2022-FY 2023
Presentation and documentation materials, including Quarterly Congestion Analysis Reports and the CMP Annual Report	Throughout FY 2022-FY 2023
Documentation of Asset Management Integration into the Long Range Transportation Plan	Throughout FY 2022-FY 2023
Monitor regional performance and calculate measures for 2-year target period for PM2 and PM3 System Performance	Throughout FY2022-FY2023

FY 2022 BUDGET: **\$395,000**

FY 2023 EST. BUDGET: **\$395,000**

FREIGHT MOBILITY PLANNING

PURPOSE: To incorporate freight movement into the regional transportation planning process by bringing together public and private sector freight stakeholders and providing data and analytical tools that help prioritize freight investments.

The Freight Movement Task Force (FMTF) serves as an advisory committee to the Baltimore Regional Transportation Board (BRTB). Its function is to provide a voice for public and private freight transportation stakeholders in the metropolitan planning process. The Task Force includes representatives from rail - CSX and Norfolk Southern, highway - Maryland Department of Transportation (MDOT), State Highway Administration (MDOT SHA), Maryland Transportation Authority (MDTA)-, water - Maryland Port Administration (MDOT MPA), trucking - Maryland Motor Truck Association (MMTA) as well as local economic development, traffic and planning representatives.

In Fiscal Years (FY) 2020-2021, the FMTF met several times to discuss topics of regional, local and national significance. The Port-to-Point study conducted in FY 2017-2018 to determine the volume of truck traffic between the Port and TradePoint Atlantic (TPA) continues to be an active topic for discussion during FMTF meetings. In 2019, the Maryland General Assembly approved a heavy weight port corridor to facilitate movement of heavier loads between the port and TPA.

In 2020, the FMTF meetings focused primarily on the impacts of the COVID-19 pandemic on port and industry operations. Several major companies in the region – Domino Sugar, McCormick, and Floor and Décor – talked about impacts to their operations. The FMTF will continue to monitor these impacts into 2021 and beyond.

The FMTF and BMC also helped MDOT SHA with the development of the Maryland Strategic Goods Movement Plan, the overnight truck parking plan and in assigning critical urban freight corridors (CUFCs) as required under the Fixing America’s Surface Transportation (FAST) Act.

During FY 2022-2023, the FMTF will continue to meet on an as-needed basis to work on projects of local and regional significance and continue to develop partnerships with the private sector. One specific area that requires attention/study is overnight parking along local roadways. The FMTF will facilitate a roundtable discussion with key stakeholders and study this issue in-depth. Staff will also work collaboratively with MDOT SHA and other agencies towards developing and monitoring performance targets as required under the FAST Act.

PRODUCTS/MILESTONES	SCHEDULE
Freight Movement Task Force Meetings	As required
Collaborate with state and local agencies	Throughout Fiscal Year

FY 2022 BUDGET: **\$165,000**

FY 2023 EST. BUDGET: **\$165,000**

BICYCLE AND PEDESTRIAN PLANNING

PURPOSE: To strategically develop and support implementation of regional and local plans which promote opportunities for an integrated multi-modal transportation system. Development of various plans should be related to regional goals in an effort to improve mobility and air quality as well as promote mode shift.

During Fiscal Year (FY) 2020 and 2021, the Baltimore Metropolitan Council (BMC) facilitated and supported a number of plans, projects and activities on a regional level to improve bicycle and pedestrian connectivity, mobility, air quality and mode shift.

In FY 2020, BMC facilitated the development of a strategic plan and dominant themes for the 2020 Bicycle and Pedestrian Advisory Group meetings. Three priority interest areas were identified: encouraging the development of Complete Streets policies at a local level, developing a tool for better estimating costs of local projects, and setting a baseline for walking and biking in the region. MDOT agreed to develop the tool for statewide use. Members also received a demonstration of the MD Department of Planning's online Transit Station Area Profile Tool that provides local and regional planners with important data on locations within one-half mile of a transit station.

In FY 2020-2021, BPAG heard seven presentations on Complete Streets and Context Sensitive design from MDOT and jurisdictions planning and implementing Complete Streets policies and manuals of their own. Members shared their knowledge and experience with one another on specific topics of interest by responding to surveys prepared by BMC. The Bicycle Cost Estimator tool, prepared by MDOT TSO with input from a BPAG working group was posted on MDOT and BMC's websites for use by planners and development and grant application reviewers. It will be updated annually. A separate but similar pedestrian facility cost estimator tool will be prepared by MDOT SHA.

BPAG members also contributed to BMC's update to the Regional Bicycle Facility Map and updates to the Transportation Regional Goals and Strategies. In FY 2021, BMC facilitated another discussion on priority interest areas. Three new or continuing topics were identified: assistance with bicycle and pedestrian project grants and research on new potential funding sources, compiling regional baseline bicycle and pedestrian counts and formation of an Equity and Inclusion working group.

In FY 2020 the Bike to Work Day working group commenced planning for a 2021 event after hosting over 1,800 riders the previous year. BMC also continued researching other Bike to Work Day programs around the country as the regional attendance has not grown in recent years. In FY 2021, with the arrival of the COVID-19 pandemic it became clear that a national Bike to Work Day would not occur in May. BMC and the Bike to Work Day working group pivoted to a week-long virtual event in September, coinciding with the League of American Bicyclists rescheduled date. Rather than traditional rallies and pit stops, BMC partnered with 20 bike shops throughout the region to distribute t-shirts and safety gear provided by MHSO and MDOT SHA. The virtual event drew 950 riders, many of whom were new to the event.

Concurrently with planning the Bike to Work Week event, and after receiving approval to repurpose Rideshare marketing funds during the pandemic, BMC also sponsored a pilot of the Love to Ride

platform. Love to Ride is an online cycling engagement and encouragement community for all levels of riders, particularly new riders. The pilot included participation in Cycle September, a month-long workplace and community riding challenge. The platform attracted 675 users during the pilot with approximately 360 riders participating in the challenge. While starting a new program during the lockdowns and office closures was challenging, BMC and our members and partners learned lessons to apply to future Love to Ride engagement to increase the number of recreational and utility riders in the region.

In FY 2020-2021, BMC prepared a Request for Proposals (RFP), selected a consultant team led by A. Morton Thomas & Associates, and managed the preliminary design of a 2 mile segment of the Patapsco Regional Greenway connecting Patapsco Valley State Park with the Town of Elkridge and the Guinness Open Gate Brewery. Work included stakeholder engagement with a Steering Committee of private and public property owners, Howard County, Baltimore County and Maryland Park Service, as well as input from a local public advisory group and input from the interested public. Two virtual public comment periods included an online newsletter, interactive StoryMap, recorded presentation and a survey. Preliminary design concluded in January 2021.

In FY 2021, BMC also solicited and selected a consultant team led by RK&K to begin design of a segment of the Patapsco Regional Greenway from the Sykesville Historic District to the McKeldin Area of the Patapsco Valley State Park. The approximately 6-mile trail section includes a shared use path or on-road segment from Sykesville to the existing trail at Freedom Park, a single-track natural surface trail from Freedom Park to the McKeldin Area, and exploration of a connection to the Henryton Trail in Howard County via a bridge crossing over the Patapsco River.

In FY 2021, BMC also supported MDOT's First Annual Walktober by promoting the event and hosting a walk at our Baltimore office. Based on a request from Baltimore City, BMC also hosted a Shared Mobility Forum to help inform and educate planners, law enforcement and safety officials throughout the region on current and emerging e-bike and e-scooter programs. Forum topics included setting up a dockless program, dockless operations, how to respond to vehicles that are disabled or found outside of their permitted areas and shared and new mobility trends in the region.

In FY 2021, members and partners in BPAG and the Bike to Work Day working group expressed interest in expanding regional bicycle and pedestrian engagement activities. There is also an interest in migrating from a single Bike to Work Day event to a more robust Bike Month that includes Bike to Work Week, the traditional annual event, and cross-promotion with the Bike Month Challenge on the Love to Ride platform. BMC will continue to research and share ideas to support these interests, while seeking opportunities to more fully integrate walking and biking programs with other regional initiatives such as Car Free September, Walktober, Healthy Communities and a focus on air quality. Additionally, members and partners have expressed interest in expanding the Bike to Work working group to an overall Active Transportation working group to explore additional opportunities.

BPAG and members will continue to support efforts such as periodic safety programs, emerging Complete Streets and Shared Mobility projects, Walktober and other active transportation opportunities. BPAG will also support efforts surrounding the collection of and reporting on data related to alternative transportation options.

BMC will provide support in three key areas identified by BPAG members:

1. Assistance with bicycle and pedestrian project grants, particularly in identifying potential new funding sources that benefit cross-jurisdictional projects
2. Compiling a regional baseline bicycle and pedestrian counts
3. Forming an Equity and Inclusion working group to explore best outreach practices for public projects.

Additionally, BMC will support interest in expanding active transportation outreach and engagement to complement other initiatives in the region:

1. Bike Month/Bike to Work Week
2. Love to Ride Bike Month, Cycle September and ongoing participant challenges
3. Explore additional pedestrian and bicycle outreach and engagement opportunities

PRODUCTS/MILESTONES	SCHEDULE
Staff Bicycle and Pedestrian Advisory Group	Bi-Monthly
Coordinate Active Transportation Programs/Events	Ongoing

FY 2022 BUDGET: **\$155,000**

FY 2023 EST. BUDGET: **\$155,000**

TRANSIT AND HUMAN SERVICE TRANSPORTATION PLANNING

PURPOSE: Support planning activities on behalf of the Baltimore Regional Transportation Board (BRTB) member governments related to transit access and mobility. The purpose is to improve transit service in the Baltimore region generally, with an emphasis on transit access to employment and services. This task will also seek to address transportation needs of the elderly and individuals with disabilities in conjunction with ongoing transit, paratransit, and community-based transportation planning activities.

During Fiscal Year (FY) 2020 and 2021, staff assisted in reviewing and recommending projects funded through the Federal Transit Administration (FTA) Section 5310 Grant Program. BMC also supported a new MDOT MTA new state-funded Job Access and Reverse Commute (JARC) program that included endorsement by metropolitan planning organizations. The BRTB also co-managed the update of the new Coordinated Human Service Transportation Plan. BMC undertook a consultant study looking at elderly trip characteristics. BMC completed a project to look at all bus stops LOTS and MDOT MTA bus stops that are located within one quarter mile of each other to ascertain the status of the locations and the characteristics that direct riders to a nearby service for transfers. More recently, the BRTB adopted targets for MDOT MTA and the LOTS around safety performance measures. An assessment of the remaining 1600 LOTS bus stops was started in FY 2021 and is expected to be completed early in FY 2022.

In FY 2022 staff will continue refining work flows and products that are informed by performance measures to be integrated in a range of tasks such as the long-range transportation plan and short-range TIP. Under the direction of the voting transit representative of the BRTB, staff will work on regional transit activities through a working group consisting of representatives from MDOT MTA and the Locally Operated Transit Systems (LOTS) agencies. This can include updates to Transit Development Plans, transit signal priority, or farebox reciprocity agreements. The BRTB is pursuing analysis of RTP corridors in conjunction with MDOT MTA. A study to look at regional transit governance and funding was completed in mid-2021. Additional RTP corridors have been selected for analysis as well as implementation of recommendations from several tasks completed in late FY 2021 such as signal priority. Transit safety targets will be updated annually and approved by the BRTB in January of each year.

PRODUCTS/MILESTONES	SCHEDULE
Support implementation efforts from the MDOT MTA/LOTS Bus Stop Study	Throughout Fiscal Year
Review applications for funding for programs such as: 5310, MD JARC, and Senior Rides	FY 2022 2 nd & 3 rd Quarters FY 2023 2 nd & 3 rd Quarters
Look to implement strategies in the Coordinated Human Services Transportation Plan	Throughout Fiscal Year

FY 2022 BUDGET: \$500,000

FY 2023 EST. BUDGET: \$500,000

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PROTECTING CURRENT & FUTURE RESOURCES

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ENVIRONMENTAL PLANNING

PURPOSE: To coordinate and facilitate the continuing relationship between planning for mobile emissions and transportation planning in the Baltimore region. To coordinate with state and local agencies responsible for land use management, natural resources, environmental protection, conservation, and historic preservation as part of the long-range transportation planning process.

In FY 2020 and FY 2021, staff gathered and summarized information on air quality monitoring data in the Baltimore region, to share with staff and others as requested. Staff will continue to do this work in FY 2022 and FY 2023, for informational purposes.

During FY 2022 and FY 2023, staff will chair the Interagency Consultation Group (ICG) meetings approximately six times per year and will address major steps in the air quality conformity process for the long-range transportation plan and Transportation Improvement Program (TIP). Staff will also assist with any discussion of the ICG or its working groups regarding changes in the motor vehicle emission budget (MVEB) in the state implementation plan (SIP). Staff will work with the ICG Technical Working Group to coordinate on the development of any future SIP budgets, in addition to updates to the emissions model, and inputs to conformity determination modeling.

Staff will continue to work with local jurisdictions to explore implementation potential for emission reduction projects. In FY 2020 and FY 2021, staff worked with local jurisdictions to gather information local emission reduction projects, or other projects that would likely reduce emissions from transportation. This data was added to a MS Access database, and was the reported in the Conformity Document appendices, along with information on state agency emission reducing projects.

Staff will coordinate with state and local agencies responsible for land use management, natural resources, environmental protection, conservation, and historic preservation, as part of the development of the long range plan. Staff will perform an assessment of submitted long range transportation plan projects to determine their impact on environmental and cultural resources.

Air Quality Outreach: Staff will continue to support the Clean Air Partners (CAP) Program and the work activities associated with the Clean Commute public awareness initiative.

PRODUCTS/MILESTONES	SCHEDULE
Support ICG meetings	Approx. Bi-Monthly
Monitor new air quality initiatives, policies, and guidance. Research changes to environmental requirements.	Throughout Fiscal Year
Conduct air quality outreach for the metropolitan area.	Throughout Fiscal Year
Continue coordinating environmental and long range planning.	Throughout Fiscal Year
Update/educate committees and their members on significant changes to environmental requirements in transportation, or opportunities for funding environmentally-beneficial projects.	Throughout Fiscal Year

FY 2022 BUDGET: **\$350,000**

FY 2023 EST. BUDGET: **\$350,000**

AIR QUALITY CONFORMITY ANALYSIS

PURPOSE: To conduct a technical and public policy analysis of emissions associated with the Transportation Improvement Program (TIP) and long-range transportation plan (LRTP). To work with state agencies, local jurisdictions, and private stakeholders to develop a coordinated program of emission reduction strategies as an effective means of meeting the National Ambient Air Quality Standards (NAAQS) and reducing traffic congestion.

Transportation plans and programs are required by the federal Clean Air Act (CAA) to demonstrate that mobile source emissions generated in designated horizon years are less than or equal to the motor vehicle emission budgets established in the State Implementation Plan (SIP). These emission budgets are set for criteria air pollutants for which the region is designated “non-attainment” or “maintenance”. The Baltimore Regional Transportation Board (BRTB) is required to show that implementation of the LRTP or TIP will not delay timely attainment of the NAAQS in the Baltimore region.

During Fiscal Year (FY) 2020 and 2021, staff, in coordination with the Maryland Departments of Environment (MDE) and Transportation (MDOT), developed and evaluated horizon year emissions estimates using the U.S. Environmental Protection Agency (EPA) Motor Vehicle Emissions Simulator (MOVES) model. These emissions estimates were developed separately for both the Conformity Determination of the FY 2020-2023 TIP and *Maximize 2045* and the Conformity Determination of the 2021-2023 TIP and *Maximize 2045*.

In FY 2022, staff, in coordination with MDOT and MDE will continue to conduct the conformity determination of the 2022-2025 TIP and *Maximize2045*. Working through the Interagency Consultation Group (ICG) process and its members, staff will conduct this conformity determination using methodologies for 8-hour ozone which have been approved by EPA. In the last two quarters of FY 2022, staff will begin work on the conformity determination of the FY 2023-2026 TIP and Plan. In FY 2023, staff will work on the conformity determination of the FY 2024-2027 TIP and Plan.

Through the ICG Working Group, staff will continue to coordinate with MDE mobile source modeling staff and MDOT to share and verify model inputs and parameters, and to evaluate the interface between the region’s travel demand model and the EPA MOVES model to ensure conformity determinations can be conducted and verified by both Baltimore Metropolitan Council (BMC) and MDE staff.

PRODUCTS/MILESTONES	SCHEDULE
Conduct conformity analysis of the 2022-2025 TIP and <i>Maximize2045</i>	1st Quarter FY 2022
Conduct conformity analysis of the 2023-2026 TIP and Plan	3 rd & 4 th Quarters FY 2022, 1 st Quarter FY 2023
Conduct conformity analysis of the 2024-2027 TIP and Plan	3 rd & 4 th Quarters FY 2023
Prepare memorandums on Plan and TIP amendments	Throughout Fiscal Year

FY 2022 BUDGET: **\$130,000**

FY 2023 EST. BUDGET: **\$130,000**

APPENDIX A
FY 2022-2023 BUDGET DETAILS

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FY 2022 UPWP BUDGET

SOURCES

	FHWA	FTA	MDOT	LOCAL	TOTAL
FY 22 Appropriations	\$3,738,126	\$1,300,295	\$858,000	\$942,000	\$6,838,421
FY 21 Carryover	\$1,660,422	\$504,550			\$2,164,972
FY 22 Funds Available	\$5,398,548	\$1,804,845	\$858,000	\$942,000	\$9,003,393

USES

BMC Staff	\$5,850,000
Consultants	\$2,730,000
BMC Total	\$8,580,000
City of Annapolis	\$50,000
Anne Arundel County	\$50,000
Baltimore City	\$50,000
Baltimore County	\$50,000
Carroll County	\$50,000
Harford County	\$50,000
Howard County	\$70,000
Queen Anne's County	\$50,000
Local Total	\$420,000
TOTAL USES	\$9,000,000

BALTIMORE REGION UPWP
FY 2022-2023 UNIFIED PLANNING WORK PROGRAM

FY 2022 WORK PROGRAM BY TASK & FUND SOURCE
(\$)

	FHWA	FTA	MDOT	LOCAL	TOTAL
UPWP Management	530,646	177,354	88,500	88,500	885,000
Professional Consultant Services	1,888,740	631,260	273,000	357,000	3,150,000
Technical Analysis for State and Local Initiatives	107,928	36,072	18,000	18,000	180,000
Long-Range Transportation Planning	95,936	32,064	16,000	16,000	160,000
Transportation Improvement Program	86,942	29,058	14,500	14,500	145,000
Public Participation and Community Outreach	155,896	52,104	26,000	26,000	260,000
Transportation Equity Planning	68,954	23,046	11,500	11,500	115,000
GIS Activities	233,844	78,156	39,000	39,000	390,000
Demographic and Socioeconomic Forecasting	161,892	54,108	27,000	27,000	270,000
Development Monitoring	167,888	56,112	28,000	28,000	280,000
Analysis of Regional Data and Trends	179,880	60,120	30,000	30,000	300,000
Maintenance of Current Simulation Tools	209,860	70,140	35,000	35,000	350,000
Simulation Tools: Applications and Analysis	179,880	60,120	30,000	30,000	300,000
Safety Planning and Analysis	107,928	36,072	18,000	18,000	180,000
TSMO Planning	113,924	38,076	19,000	19,000	190,000
Emergency Preparedness Planning	89,940	30,060	15,000	15,000	150,000
System Performance: Monitoring and Adapting	236,842	79,158	39,500	39,500	395,000
Freight Mobility Planning	98,934	33,066	16,500	16,500	165,000
Bicycle and Pedestrian Planning	92,938	31,062	15,500	15,500	155,000
Transit and Human Service Planning	299,800	100,200	50,000	50,000	500,000
Environmental Planning	209,860	70,140	35,000	35,000	350,000
Air Quality Conformity Analysis	77,948	26,052	13,000	13,000	130,000
Total	5,396,400	1,803,600	858,000	942,000	9,000,000

BALTIMORE REGION UPWP
FY 2022-2023 UNIFIED PLANNING WORK PROGRAM

FY 2022 FUNDING BY TASK AND PROJECT SPONSOR

WORK TASKS	BMC SHARE	ANNAPOLIS SHARE	ANNE ARUNDEL COUNTY SHARE	BALTIMORE CITY SHARE	BALTIMORE COUNTY SHARE	CARROLL COUNTY SHARE	HARFORD COUNTY SHARE	HOWARD COUNTY SHARE	QUEEN ANNE'S COUNTY SHARE	TOTAL
UPWP Management	885,000									\$885,000
Professional Consultant Services	2,730,000	50,000	50,000	50,000	50,000	50,000	50,000	70,000	50,000	\$3,150,000
Technical Analysis for State and Local Initiatives	180,000									\$180,000
Long-Range Transportation Planning	160,000									\$160,000
Transportation Improvement Program	145,000									\$145,000
Public Participation and Community Outreach	260,000									\$260,000
Transportation Equity Planning	115,000									\$115,000
GIS Activities	390,000									\$390,000
Demographic and Socioeconomic Forecasting	270,000									\$270,000
Development Monitoring	280,000									\$280,000
Analysis of Regional Data and Trends	300,000									\$300,000
Maintenance of Current Simulation Tools	350,000									\$350,000
Simulation Tools: Applications and Analysis	300,000									\$300,000
Safety Planning and Analysis	180,000									\$180,000
TSMO Planning	190,000									\$190,000
Emergency Preparedness Planning	150,000									\$150,000
System Performance: Monitoring and Adapting	395,000									\$395,000
Freight Mobility Planning	165,000									\$165,000
Bicycle and Pedestrian Planning	155,000									\$155,000
Transit and Human Service Planning	500,000									\$500,000
Environmental Planning	350,000									\$350,000
Air Quality Conformity Analysis	130,000									\$130,000
TOTAL	8,580,000	50,000	50,000	50,000	50,000	50,000	50,000	70,000	50,000	9,000,000

**FY 2022 FOCUS AREA PROJECTS (LISTED UNDER PROFESSIONAL CONSULTANT SERVICES)
PROJECTS & FUND SOURCE**

WORK TASKS	FHWA	FTA	MDOT	LOCAL	TOTAL
Transportation and Land Use Connection Grants	\$60,480	\$19,520	\$10,000	\$10,000	\$ 100,000
Patapsco Greenway: Third Segment	\$196,560	\$63,440	\$32,500	\$32,500	\$ 325,000
Implementation of RTP - Corridor Analysis	\$254,016	\$81,984	\$42,000	\$42,000	\$ 420,000
TIS Guidelines - Followup	\$66,528	\$21,472	\$11,000	\$11,000	\$ 110,000
Planning Process Review	\$181,440	\$58,560	\$30,000	\$30,000	\$ 300,000
Crash Data Mapping	\$90,720	\$29,280	\$15,000	\$15,000	\$ 150,000
Jurisdictional Online Transportation Dashboards	\$163,296	\$52,704	\$27,000	\$27,000	\$ 270,000
Climate Change Toolkit Followup	\$36,288	\$11,712	\$6,000	\$6,000	\$ 60,000
InSITE Re-Calibration (to 2019 HHTS)	\$181,440	\$58,560	\$30,000	\$30,000	\$ 300,000
Transportation Issues in Historic Town Centers	\$114,912	\$37,088	\$19,000	\$19,000	\$ 190,000
U.S. 40 - Aberdeen to Havre de Grace	\$60,480	\$19,520	\$10,000	\$10,000	\$ 100,000
NHTS Add-On Data	\$90,720	\$29,280	\$15,000	\$15,000	\$ 150,000
FOCUS AREA TOTALS	\$1,496,880	\$483,120	\$247,500	\$247,500	\$2,475,000

FY 2023 UPWP BUDGET

SOURCES

	FHWA	FTA	MDOT	LOCAL	TOTAL
FY 2023 Appropriations	\$3,738,126	\$1,300,295	\$629,000	\$629,000	\$6,296,421
FY 2022 Carryover					\$0
FY 2023 Funds Available	\$3,738,126	\$1,300,295	\$629,000	\$629,000	\$6,296,421

USES

BMC Staff	\$5,850,000
Consultants	\$440,000
 BMC Total	 \$6,290,000
 City of Annapolis	 \$0
Anne Arundel County	\$0
Baltimore City	\$0
Baltimore County	\$0
Carroll County	\$0
Harford County	\$0
Howard County	\$0
Queen Anne's County	\$0
 Local Total	 \$0
 TOTAL USES	 \$6,290,000

BALTIMORE REGION UPWP
FY 2022-2023 UNIFIED PLANNING WORK PROGRAM

FY 2023 WORK PROGRAM BY TASK & FUND SOURCE
(\$)

	FHWA	FTA	MDOT	LOCAL	TOTAL
UPWP Management	525,690	182,310	88,500	88,500	885,000
Professional Consultant Services	261,360	90,640	44,000	44,000	440,000
Technical Analysis for State and Local Initiatives	106,920	37,080	18,000	18,000	180,000
Long-Range Transportation Planning	95,040	32,960	16,000	16,000	160,000
Transportation Improvement Program	86,130	29,870	14,500	14,500	145,000
Public Participation and Community Outreach	154,440	53,560	26,000	26,000	260,000
Transportation Equity Planning	68,310	23,690	11,500	11,500	115,000
GIS Activities	231,660	80,340	39,000	39,000	390,000
Demographic and Socioeconomic Forecasting	160,380	55,620	27,000	27,000	270,000
Development Monitoring	166,320	57,680	28,000	28,000	280,000
Analysis of Regional Data and Trends	178,200	61,800	30,000	30,000	300,000
Maintenance of Current Simulation Tools	207,900	72,100	35,000	35,000	350,000
Simulation Tools: Applications and Analysis	178,200	61,800	30,000	30,000	300,000
Safety Planning and Analysis	106,920	37,080	18,000	18,000	180,000
TSMO Planning	112,860	39,140	19,000	19,000	190,000
Emergency Preparedness Planning	89,100	30,900	15,000	15,000	150,000
System Performance: Monitoring and Adapting	234,630	81,370	39,500	39,500	395,000
Freight Mobility Planning	98,010	33,990	16,500	16,500	165,000
Bicycle and Pedestrian Planning	92,070	31,930	15,500	15,500	155,000
Transit and Human Service Planning	297,000	103,000	50,000	50,000	500,000
Environmental Planning	207,900	72,100	35,000	35,000	350,000
Air Quality Conformity Analysis	77,220	26,780	13,000	13,000	130,000
Total	3,736,260	1,295,740	629,000	629,000	6,290,000

The total budget column reflects a combination of funds for BMC tasks as described throughout the main body of the document, as well as funds for local jurisdictions as described in Appendix B.

BALTIMORE REGION UPWP
FY 2022-2023 UNIFIED PLANNING WORK PROGRAM

FY 2023 FUNDING BY TASK AND PROJECT SPONSOR

WORK TASKS	BMC SHARE	ANNAPOLIS SHARE	ANNE ARUNDEL COUNTY SHARE	BALTIMORE CITY SHARE	BALTIMORE COUNTY SHARE	CARROLL COUNTY SHARE	HARFORD COUNTY SHARE	HOWARD COUNTY SHARE	QUEEN ANNE'S COUNTY SHARE	TOTAL
UPWP Management	885,000									\$885,000
Professional Consultant Services	440,000	0	0	0	0	0	0	0	0	\$440,000
Technical Analysis for State and Local Initiatives	180,000									\$180,000
Long-Range Transportation Planning	160,000									\$160,000
Transportation Improvement Program	145,000									\$145,000
Public Participation and Community Outreach	260,000									\$260,000
Transportation Equity Planning	115,000									\$115,000
GIS Activities	390,000									\$390,000
Demographic and Socioeconomic Forecasting	270,000									\$270,000
Development Monitoring	280,000									\$280,000
Analysis of Regional Data and Trends	300,000									\$300,000
Maintenance of Current Simulation Tools	350,000									\$350,000
Simulation Tools: Applications and Analysis	300,000									\$300,000
Safety Planning and Analysis	180,000									\$180,000
TSMO Planning	190,000									\$190,000
Emergency Preparedness Planning	150,000									\$150,000
System Performance: Monitoring and Adapting	395,000									\$395,000
Freight Mobility Planning	165,000									\$165,000
Bicycle and Pedestrian Planning	155,000									\$155,000
Transit and Human Service Planning	500,000									\$500,000
Environmental Planning	350,000									\$350,000
Air Quality Conformity Analysis	130,000									\$130,000
TOTAL	6,290,000	0	0	0	0	0	0	0	0	6,290,000

CHART DEPICTING PARTICIPANTS WITH EACH TASK

FY 2022-2023 WORK PROGRAM PARTICIPANTS

	Baltimore Metropolitan Council	Anne Arundel County	Baltimore County	Baltimore City	Carroll County	Harford County	Howard County	Queen Anne's County	MDOT and Modes	MD Dept. of Planning	MD Dept. of Environment	Public & Private Stakeholders	Consultant Support
Program Management & Coordination													
UPWP Management	x	x	x	x	x	x	x	x	x	x	o		x
Professional Consultant Services	x	x	x	x	x	x	x	x	x	x	o		x
Technical Analysis in Support of State and Local Initiative	x									o			
Planning Context													
Long-Range Transportation Planning	x	o	o	o	o	o	o	o	o	o	o	o	o
Transportation Improvement Program	x	x	x	x	x	x	x	x	x	o			o
Promoting Inclusiveness & Cooperation													
Public Participation and Community Outreach	x	o	o	o	o	o	o	o	o	o	o	o	o
Transportation Equity Planning	x	o	o	o	o	o	o	o	o	o			o
Gathering & Analyzing Data													
GIS Activities	x	x	x	x	x	x	x	x	x		o		
Demographic and Socioeconomic Forecasting	x		x	x	x	x	x	x	x		o		
Development Monitoring	x	o	o	o	o	o	o	o	o				
Analysis of Regional Data and Trends	x												
Maintenance of Current Simulation Tools	x									o			
Simulation Tools: Applications and Analysis	x									o			
Safety & Security													
Safety Planning and Analysis	x	o	o	o	o	o	o	o	o	o			o
Operations Planning	x	o	o	o	o	o	o	o	o	o			o
Emergency Preparedness Planning	x									o			
Mobility, Accessibility & Connectivity													
System Performance: Monitoring & Adapting	x				o					o			
Freight Mobility Planning	x									o			o
Bicycle and Pedestrian Planning	x	x	x	x	x	x	x	x	x	o	o	o	o
Transit and Human Service Transportation Planning	x									o			o
Protecting Current & Future Resources													
Environmental Planning	x									o		o	o
Air Quality Conformity Analysis	x									o		o	o

o = helps to coordinate activity

APPENDIX B
FOCUS AREAS

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PROJECT: TRANSPORTATION AND LAND USE CONNECTION GRANTS

PURPOSE: Provide short-term consultant services to local jurisdictions for small planning projects that either improve access to existing communities and regional generators of economic activity or promote mixed-use, walkable communities and that support a variety of transportation alternatives. This is directly related to several strategies the BRTB adopted in developing the regional long-range transportation plan. These strategies provide a clear direction for additional planning in this area as well as the basis for moving forward with programming and implementation of relevant improvements.

Funding under this task could cover a range of activities, including, but not limited to:

- Identifying locations or corridors where transportation infrastructure can be improved to enable better access to established communities and regional generators of economic activity (e.g., activity hubs and freight corridors).
- Identifying locations or corridors where transportation infrastructure can be improved to promote walking and biking and enable more efficient multimodal connections.
- Identifying enhancements to existing transit services, or identifying opportunities for new transit services, to improve individuals' access to such essential destinations as hospitals, grocery stores, major job centers, and colleges or universities. Besides promoting alternatives to driving, these kinds of activities directly support efforts to address Environmental Justice concerns identified in the regional long-range transportation plan.
- Establishing and operating a Peer Exchange Network that (1) encourages the sharing of best practices related to transportation and land use connections and (2) supports the BRTB's project selection role under the federal Transportation Alternatives set-aside.

An essential part of each of the activities that relate to infrastructure improvements and transit service improvements will be identifying potential funding sources for the eventual design and implementation of these improvements.

Potential products include:

- Plans for improving transportation infrastructure that improves access to established communities and regional generators of economic activity,
- Plans for transit service improvements, including the consideration of expanded geographic coverage and expanded hours of operation,
- Planning for and coordination of improved inter-agency or inter-jurisdictional transit services (e.g., fare coordination, coordination of routes and hours of operation), or
- Planning and coordination to support transit-oriented development.

PARTICIPANTS: BMC, local jurisdictions (TBD), consultants

FY 2022 BUDGET: \$100,000

PROJECT: PATAPSCO REGIONAL GREENWAY: PLANNING ADVANCEMENT OF THIRD SEGMENT

PURPOSE: To advance the planning of a segment of the Patapsco Regional Greenway to include all steps necessary to complete what is known as thirty percent design.

In 2018, the BRTB endorsed The Patapsco Regional Greenway Concept Plan. The Patapsco Regional Greenway extends along a 35-mile corridor from Sykesville in Carroll County to the Inner Harbor in Baltimore City. Patapsco Valley State Park has a natural surface trail system that connects natural and historically significant features. Additional paved trails were created on abandoned railroad corridors, which provide a relatively flat walking or bicycling experience in an otherwise very steep area. As the region's trail systems developed, connecting the entire Patapsco Valley with other trails started to become a reality. This will support the increasing demand to walk and bike for recreation as well as transportation.

Keeping the area of the trail section in mind, segments are beginning to move forward into the design phase. In FY 2022 an additional segment from the Guinness Open Gate Brewery to the Southwest Area Park has been identified to enter design.

This project would assess the following items:

- Documentation of existing conditions,
- Investigate alignment(s),
- Opportunities, challenges and design considerations,
- Public outreach opportunities,
- Preferred alignment selection,
- Topographic survey, geotechnical investigation, environmental survey, and utility investigations,
- Preliminary design documents, and
- Continued design recommendations.

PARTICIPANTS: BMC, MDOT SHA, jurisdictions/municipalities

FY 2022 BUDGET: \$325,000 (Consultant)

PROJECT: IMPLEMENTATION OF REGIONAL TRANSIT PLAN – CONTINUATION OF CORRIDOR ANALYSIS

PURPOSE: The purpose of this UPWP task is to begin the corridor feasibility study phase of corridors emerging from the Central Maryland Regional Transit Plan process. This task will potentially include an early screening of the corridors against the Federal Transit Administration (FTA) Capital Investment Grant (CIG) criteria to indicate the potential competitiveness of the corridors for federal funding and against identified and appropriate public-private partnership (P3) feasibility screening models as they might exist to determine competitiveness and viability.

The Maryland Metro/Transit Funding Act, passed by the Maryland State Legislature in 2018, required MDOT MTA to initiate a Regional Transit Plan for Central Maryland that defined public transportation goals over a 25 year period. The Act required MDOT MTA to complete the Plan by October 2020 working with the Central Maryland Regional Transit Plan Commission and the public. The Plan has generated 30 “Potential Regional Transit Corridors” that were defined through a collaborative process with the Commission members, including local jurisdictions. These corridors were identified as having a need for additional transit assets because they demonstrated transit demand that justifies infrastructure, service and/or technology improvements and have regional significance, often providing connectivity between jurisdictions. The corridor identification did not include defining specific routes, service patterns, alignments, levels of service, potential stations or transit mode of travel. The Corridors were subjected to a series of Evaluation Measures including:

- Does this corridor address a current or future transit gap?
- How many existing jobs are accessible to the corridor?
- How many future jobs are accessible to the corridor?
- Is land use/zoning transit-supportive?
- Is the corridor within a growth area?
- Is the corridor in existing plans?
- How many transit routes can you transfer to?
- Does corridor improve on existing service?
- Number of residents accessible to the corridor?
- Percentage of minority population within the corridor?
- Percentage of low-income population within the corridor?
- Percentage of zero car ownership within the corridor?
- Percentage of seniors within the corridor?
- Percentage of people with disabilities within the corridor?
- Does corridor serve areas with long commuting times?

Based upon these criteria, corridors were identified as having either an early, mid-term or long-term opportunities. The Plan indicated that further refinement would be investigated during the corridor feasibility study phase, and final interventions would be selected based on final mode and alignment selection, cost-benefit analysis, and local jurisdiction support.

Funding under this task could cover a range of activities, including, but not limited to working

with BRTB members, MDOT MTA and local transit providers in defining and evaluating preliminary alternatives for a number of the corridors identified in the RFP. Analysis may include routes, service patterns, alignments, levels of service, potential modes and system requirements. Evaluation could include elements from the FTA Capital Investment Grant program and/or a P3 screening mechanism.

PARTICIPANTS:

Annapolis	\$15,000
Anne Arundel County	\$15,000
Baltimore City	\$15,000
Baltimore County	\$15,000
Carroll County	\$15,000
Harford County	\$15,000
Howard County	\$15,000
Queen Anne's County	\$15,000
Consultant	\$300,000

FY 2022 BUDGET: **\$420,000**

PROJECT: REGIONAL TRAFFIC IMPACT STUDY GUIDELINES: PHASE 2

PURPOSE: The purpose of a Traffic Impact Study (TIS) is to review impacts of a proposed development on the surrounding transportation network. The Maryland Department of Transportation State Highway Administration (MDOT SHA) and many local jurisdictions in the Baltimore region have traffic impact study guidelines or requirements, some governed by their local Adequate Public Facilities Ordinances (APFO). This effort will build on the FY 2020 UPWP products from Phase 1.

- The FY 2020 Final Suggested Best Practices report recommends keeping Level of Service (LOS) as the standard pass-fail metric, but to include reporting on delay (and queueing, where necessary) – delay is generally better-understood by the public than LOS. In this next phase of the study, develop a suggested approach/methodology that can be used by local jurisdictions and MDOT/SHA to clearly convey the impacts of new development.
- Making safety analyses a key consideration of all TIS's and coordination with state and local Strategic Highway Safety Plans.
- Controlling speeds and de-prioritizing vehicular throughput for safer mobility for all users of the roadway network – pedestrians, cyclists, freight, as well as passenger vehicles.
- Use of multi-modal performance metrics and multi-modal analyses. Use of metrics such as travel time reliability to assess impacts of development.
- Addressing impacts of multiple proposed developments, especially in a dense urban area, on the highway network beyond the immediate vicinity of each development.
- Balancing the needs of more housing and business with less traffic while maintaining safety and mobility.
- Need for post-development audit – thresholds, mitigation measures, factors not considered at the time of TIS development that may have an impact on study area.
- Need for different TIS requirements based on area type, level of existing development, transit and multi-modal availability, etc.

The study will include staff participation from each jurisdiction to understand current practices and to review potential improvements. Potential products could include: developing a template of proposed recommendations that can be used by the state and local jurisdictions in revising their TIS guidelines and APFO requirements.

PARTICIPANTS:

City of Annapolis	\$5,000
Anne Arundel County	\$5,000
Baltimore City	\$5,000
Baltimore County	\$5,000
Carroll County	\$5,000
Harford County	\$5,000
Howard County	\$5,000
Queen Anne's County	\$5,000
Consultant	\$70,000

FY 2022 BUDGET: **\$110,000**

PROJECT: PLANNING PROCESS REVIEW

PURPOSE: Each jurisdiction has a different process for submitting, reviewing and approving land development proposals and permits. Local regulations differ regarding how to treat subdivisions and site development. In addition, each process includes a varying degree of review by different boards and commissions and public input processes. This task will include a review of Baltimore region land development processes and procedures with specific focus on transportation issues.

The study will include interviews with local jurisdictional transportation/plan review staff to document their current processes. The study will document:

- Current thresholds for development review processes (number of lots, minor vs. major subdivisions, etc.)
- Development review processes from notification of application to final plan approval including permits processes.
- Required community notification/input processes.
- Documentation of processes or project status on jurisdictional websites and/or brochures.
- Boards and/or Commissions and their role in the process.
- Waiver processes focusing on transportation items.
- Software used by jurisdictions in the planning process including in the permit process.
- Monitoring of the life-cycle of a permit from application through certificate of occupancy.
- Comparison of review and permit fees.

Potential products include: Summary of research of existing practices. Best practices for local jurisdictional plan review staff, and recommended improvements to processes.

PARTICIPANTS:

City of Annapolis	\$15,000
Anne Arundel County	\$15,000
Baltimore City	\$15,000
Baltimore County	\$15,000
Carroll County	\$15,000
Harford County	\$15,000
Howard County	\$15,000
Queen Anne's County	\$15,000
Consultant	\$180,000

FY 2022 BUDGET: **\$300,000**

PROJECT: ONLINE CRASH DATA DASHBOARD

PURPOSE: To improve accessibility and use of traffic crash data for problem identification and project evaluation throughout the region.

In 2019, the Baltimore region accounted for 46% of the state's vehicle miles travelled, 45% of the licensed drivers, and 46% of the population. However, the region also accounted for 52% of all traffic crashes in the state, 51% of the injury crashes, and 39% of the fatal crashes. The region has experienced declines in fatalities and serious injuries in recent years and has been working to develop local Strategic Highway Safety Plans (SHSP) in each member jurisdiction to further improve safety.

Any change effort must be data-driven and evaluated for effectiveness to maximize potential for success. Traffic crashes are the primary metric for understanding trends and safety issues on our roadways; however, those data are not typically available online in an interactive query tool. The Maryland State Police (MSP), as the data custodian, post quarterly data files to the Maryland Open Portal website; while that is a good source for more timely data, it is not ideal to build plans, evaluate programs, or allocate funding due to it being a spreadsheet of raw data that must be analyzed.

Several states, municipalities, and Metropolitan Planning Organizations (MPOs) have developed online data dashboards or other visualization tools to better support data analysis. The Denver Regional Council of Governments' (DRCOG) online visualization tool includes historical trend data and allows users to build graphics from a crash dataset. Providing such information online empowers partners to better understand and utilize a data-driven approach and promotes ongoing trend analyses.

Maryland is in a process of developing an online query system for crash report data and the Prince George's County Department of Public Works and Transportation has developed an online analysis tool for the Vision Zero Plan. A similar visualization of those data would support regional partners in any analytical efforts. There have been efforts to develop jurisdictional crash data factsheets and all local SHSPs are data-driven. Those efforts are more static, whereas this tool would be dynamic and allow users to investigate any unique needs or interests.

Developing an online data dashboard will expand the use of data-driven approaches, evaluations, and research in the region. The dashboard may also include a module illustrating the federal traffic safety performance measures (TPM1). Ultimately, it may be expanded to include other data sources or performance measures to support transportation initiatives, the Transportation Improvement Program (TIP), and the Long-Range Transportation Plan (LRTP).

PARTICIPANTS: BMC, MDOT, local jurisdictions, consultants

FY 2022 BUDGET: \$150,000

PROJECT: JURISDICTIONAL ONLINE TRANSPORTATION DASHBOARDS

PURPOSE: The purpose of this UPWP task is to develop individual jurisdiction transportation data dashboards modeled after the BMC Regional Recovery Dashboard

In June 2020, The Baltimore Metropolitan Council (“BMC”) launched its Baltimore Regional Recovery Dashboard to help policymakers understand and track the impacts of COVID-19 on the seven county metropolitan area. Hosted on BMC’s website, the dashboard features data from across the organization’s areas of focus, including transportation, unemployment claims and impacted industries. The dashboard utilizes Tableau, a data visualization tool, to provide information in an interactive format.

This task seeks to develop jurisdictional specific dashboards hosted on separate web pages so that individuals can view all of the various data topics for their jurisdiction in one location. The dashboards will expand upon the information presented in the Regional Recover Dashboard and can include information gathered from the Transportation Data Books Fiscal Year 2018 Unified Planning Work Program Project.

PARTICIPANTS:

Annapolis	\$15,000
Anne Arundel County	\$15,000
Baltimore City	\$15,000
Baltimore County	\$15,000
Carroll County	\$15,000
Harford County	\$15,000
Howard County	\$15,000
Queen Anne’s County	\$15,000
Consultant	\$150,000

FY 2022 BUDGET: **\$270,000**

PROJECT: CLIMATE CHANGE RESOURCE GUIDE: TRAINING AND NEXT STEPS

PURPOSE: This is a follow-on task from work begun in FY 2021 on a *Resource Guide: Planning, Designing, Operating, and Maintaining Local Infrastructure in a Changing Climate*.

At the start of this project, there were several potential next steps identified:

- Resource Guide Training Program
 - Develop a short (one- to two-hour) training program for DPW/DOT agency heads, managers, and supervisors that provides a summary of the Resource Guide and how to use the included Toolkit. The program should be developed to present in person or virtually.
 - Conduct the course four to six times.
- Resource Guide Implementation Assistance
 - In addition, local jurisdictions may benefit from more focused support to help integrate the Guide and Toolkit into jurisdiction/agency decision-making so its use is not dependent only on individuals' trained/knowledgeable/supportive.
 - This could also include working with jurisdictions to identify significant adaptation/resilience retrofits that could be incorporated during recovery from a major weather event (i.e., hurricanes, flooding, etc.). It would be beneficial to have this list prepared before an event occurs so that when rebuilding after an event, there are existing recommendations to rebuild more cost-effectively given projected conditions.
- Detailed Mapping
 - When the Resource Guide is completed, the project Steering Committee will identify additional useful mapping capabilities that would support local DPW/DOTs and enhance the use of the Resource Guide.

As work on the Climate Change Resource Guide proceeds, staff will continue to identify other beneficial next steps and refine the tasks defined above.

PARTICIPANTS: BMC, MDOT, local jurisdictions

FY 2022 BUDGET: \$60,000 (consultants)

PROJECT: TRANSPORTATION ISSUES IN HISTORICAL TOWN CENTERS

PURPOSE: The Baltimore region includes a number of small historic town centers that have developed with significant geographic constraints and experience challenges with parking management, wayfinding and multimodal access, which unless resolved, continue to impact their safety and economic viability. The purpose of this project is to develop model multimodal transportation studies for two areas in the region.

Funding under this task could cover a range of activities, including, but not limited to:

- Developing parking management strategies to address information on parking infrastructure, parking demand and supply, parking lot access and signage and fee structures.
- Developing parking management strategies during a major infrastructure event that impacts access.
- Developing strategies to address multimodal access and safety by identifying locations and approaches to improve access via non-automotive modes, including transit and safety.
- Identify wayfinding strategies to enhance access and visibility of businesses and historic sites to sustain their economic viability.
- Identifying potential funding sources for implementation.

POTENTIAL PRODUCTS:

- Parking management strategy and implementation guidelines.
- Implementation plans for multimodal improvements.
- Wayfinding design and implementation guidance.
- Model guidelines and best practices

PARTICIPANTS: BMC, local jurisdictions (TBD), consultants

FY 2022 BUDGET: \$170,000 Consultant(s)
 \$20,000 Local jurisdictions

TOTAL BUDGET: **\$190,000**

PROJECT: U.S. 40 MULTIMODAL CORRIDOR

PURPOSE: U.S. 40 is a principal arterial divided highway, running east-west the entire length of Harford County and paralleling I-95. The land use context of U.S. 40 has changed from a vibrant highway commercial corridor to areas of diminished commercial importance along a critical highway. An integrated land use vision for the corridor is necessary. This includes a coordinated implementation strategy for safer bike lanes and pedestrian access within the corridor. Such a vision is a large project scope and may be best accomplished through interjurisdictional coordination of comprehensive plans. Since U.S. 40 is within identified priority funding areas in Baltimore, Harford, and Cecil Counties, ideal future land uses in the region consist of a variety of uses, including higher density and affordable residential and creative mixed-use communities. The comprehensive plans of Baltimore County, Harford County, and Cecil County as well as the Cities of Aberdeen and Havre de Grace all support mixed-use and transit-oriented development and redevelopment in the U.S. 40 corridor. This concept is supported by the Baltimore Regional Plan for Sustainable Development (2015) where U.S. 40 in Harford County is identified as an RPSD Corridor. This corridor is a segment of the Washington-Rochambeau Revolutionary Route, a federally designated national historic trail.

Mixed-use communities thrive when there are cohesive links to transit and uninterrupted bicycle and pedestrian connections. The most successful examples of mixed-use communities have access to signature long-distance bicycle and pedestrian connections. U.S. 40 is not presently such a facility. Sidewalks are disconnected and, presently, there is a combination of stenciled bike lanes and bike route postings without any dedicated bike facility. As part of MDOT's identified Bike Spine Network, it would be advantageous to plan for making multimodal improvements that connect the region's Transit Oriented Development (TOD) hubs. While the land use vision is present in local comprehensive plans, the UPWP process will facilitate concurrent local planning with multimodal transportation planning studies that articulate a holistic approach to transportation planning along key corridors such as U.S. 40.

This study will focus upon how U.S. 40 may better support redevelopment into a linear mixed-use corridor with an uninterrupted signature bicycle and pedestrian facility in Harford County, with the potential for connections to the Martin Airport MARC station in Baltimore County and the Perryville MARC station in Cecil County. The study will both provide insights for the corridor and focus examples for the five-mile section from the Aberdeen Train Station to the Hatem Bridge. This aligns the project with the draft county priority letter and builds upon our partnership with the City of Aberdeen and City of Havre de Grace.

Cecil County is subject to the UPWP prepared by WILMAPCO, the study will reference the planning of this adjacent MPO and any feedback they may offer. The East Coast Greenway (ECG) route follows part of this corridor into Cecil County and the Lower Susquehanna Heritage Greenway (LSHG) is chartered for part of this corridor. These groups are included as advisors to the project.

FY 2022 PERFORMANCE OBJECTIVES:

- Evaluate options for separation of bicycle facilities from vehicular traffic on U.S. 40.
- Develop a concept for a cohesive facility that serves both bicycle and walking modes of travel.
- Map and identify the relationship between the concept and other modes of travel such as rail, bus, and roadways.
- Model impacts of the concept on transportation networks.
- Provide conceptual designs to guide local development review of private projects or the preparation of grants or capital projects focus examples between Aberdeen and Havre de Grace.
- Develop implementation strategy, including cost estimates per mile depending upon context.
- Develop the conceptual designs to address the following existing circumstances:
 - Transit stops, stations, and connections
 - Bike lanes
 - Pavement markings in segments and through intersections
 - Traffic controls, to include safe, signalized pedestrian crossings
 - Sidewalks, as appropriate in community areas (regional nodes)
 - ADA access
 - Lighting and other street appurtenances
 - Streetscaping, livable streets elements, and history elements, where appropriate
 - Variations in right-of-way transitions between counties and municipalities
- Provide a strategy for long-term maintenance of a road-separated facility that incorporates the code and policies of agencies responsible for the road.
- Outline wayfinding and facility branding strategies.

PRODUCTS/MILESTONES	SCHEDULE
Develop and finalize scope of work	
Initiate Study and prepare existing conditions analysis	1 st Quarter
Future Conditions Analysis and modeling	2 nd Quarter
Develop draft report	3 rd Quarter
Final report with recommendations	4 th Quarter

PLAN PARTICIPANTS: Harford County, BMC, MDOT SHA, City of Havre de Grace, City of Aberdeen, Consultant

ADVISORY PARTICIPANTS: Baltimore County, Cecil County, WILMAPCO, Maryland Transportation Authority, East Coast Greenway Alliance, Lower Susquehanna Heritage Greenway, Inc., Aberdeen Proving Ground DPW

BUDGET: \$100,000

APPENDIX C
PUBLIC REVIEW PROCESS

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Thank you for subscribing to B'More Involved! B'more Involved promotes civic engagement in local and regional transportation, planning, environmental justice, and equity. This important information - also posted on Facebook and Twitter - is a great way for you to learn more, stay up-to-date on important events and news, and, of course, let you know how you can B'More Involved!



BRTB SEEKS PUBLIC COMMENTS

FY 2022 - 2023
BUDGET & WORK PLAN

OPEN FOR COMMENT **THROUGH MARCH 11, 2021**

COMMENTS SOUGHT ON BRTB BUDGET AND WORK PLAN THROUGH MARCH 11

The Baltimore Regional Transportation Board (BRTB) welcomes comments on its draft Budget & Work Program for Fiscal Years 2020-2021 through **Thursday, March 11, 2021**.

The BRTB's Budget & Work Program is known as the [Unified Planning Work Program \(UPWP\)](#) for Transportation Planning. It is a federal requirement that details projects, studies and other activities to be completed by BRTB members and staff of the Baltimore Metropolitan Council (BMC.)

The BRTB develops this list of regional transportation planning activities every two fiscal years. This UPWP includes a budget for FY 2022 of \$9,000,000 and an estimated FY 2023 budget of \$6,290,000.

To learn more about the UPWP and the proposed updated budget and projects, please [view a recorded presentation](#), read a list of [Frequently Asked Questions](#), or download the draft [FY 2022-2023 UPWP](#)

Those wishing to share their thoughts can comment by email at comments@baltometro.org, by fax at 410-732-8248, or via twitter @BaltoMetroCo, @BmoreInvolved or #BRTBListens.

[Download the draft Budget and Work Plan](#)



**BALTIMORE
METROPOLITAN
COUNCIL**

FOR IMMEDIATE RELEASE
CONTACT: Clara Blue
Communications Associate
(410) 732-9564

BRTB SEEKS PUBLIC COMMENTS ON UPDATED BUDGET & WORK PROGRAM (UPWP) FOR FY 2022-2023

BALTIMORE, MD (Tuesday, February 9, 2021) – The Baltimore Regional Transportation Board (BRTB) seeks public comments on its draft updated Budget & Work Program, or Unified Planning Work Program (UPWP), for Transportation Planning for Fiscal Years 2022-2023 through **Thursday, March 11, 2021**.

A [recorded presentation](#) is available with more information about the UPWP and the proposed updated budget and projects, as well as a document outlining [frequently asked questions](#). Comments can be submitted using the [online comment form](#), by email to: comments@baltometro.org or Twitter [@BaltoMetroCo](#), [@BmoreInvolved](#), or #BRTBlistens.

What is the UPWP?

The BRTB's Budget & Work Program is known as the [Unified Planning Work Program \(UPWP\)](#) for Transportation Planning. It is a federal requirement that details projects, studies and other activities to be completed by BRTB members and staff of the Baltimore Metropolitan Council (BMC).

The BRTB develops this list of regional transportation planning activities every two fiscal years. This UPWP includes a budget for FY 2022 of \$9,000,000 and an estimated FY 2023 budget of \$6,290,000. UPWP funds support staff for regional planning activities with some consultant assistance. New projects for FY 2022 include:

- **Patapsco Regional Greenway** – Funds consultant services to advance the design and planning for a segment of the Patapsco Regional Greenway, the proposed 30-mile trail from Sykesville in Carroll County to Baltimore's Inner Harbor. Segment: Guinness Open Gate Brewery to the Southwest Area Park.
- **Corridor Analysis to support Implementation of the Central Maryland Regional Transit Plan** – to begin the corridor feasibility study phase by defining and evaluating preliminary alternatives for a number of the corridors identified in the RTP. Analysis may include routes, service patterns, alignments, levels of service, potential modes and system requirements. Evaluation could include elements from the FTA Capital Investment Grant program and/or a P3 screening

The BRTB is scheduled to vote on the final Budget & Work Program on Friday, April 16.

View the draft [FY 2022-2023 UPWP](#) or a list of [Frequently Asked Questions](#)

###

The Baltimore Metropolitan Council (BMC) works collaboratively with the chief elected officials in the region to create initiatives to improve the quality of life and economic vitality. BMC, as the Baltimore region's council of governments, hosts the Baltimore Regional Transportation Board (BRTB), the federal metropolitan planning organization (MPO), and supports local government by coordinating efforts in a range of policy areas including emergency preparedness, housing, cooperative purchasing, environmental planning and workforce development.

BMC's Board of Directors includes the executives of Anne Arundel, Baltimore, Harford and Howard counties, the mayor of the City of Baltimore, a member of the Carroll County and Queen Anne's County boards of commissioners, a member of the Maryland State Senate, a member of the Maryland House of Delegates, and a gubernatorial appointee from the private sector.





Public Comments <comments@baltometro.org>

UPWP

1 message

Bari Klein -MDH-

To: comments@baltometro.org

Thu, Mar 11, 2021 at 3:51 PM

I am writing in support of *Controlling speeds and de-prioritizing vehicular throughput for safer mobility for all users of the roadway network – pedestrians, cyclists, freight, as well as passenger vehicles in the Regional Traffic Impact Study Guidelines: Phase 2*. As roadway development continues to solely prioritize vehicular traffic, it leaves little to no safe space for other road users. With rising rates of obesity and chronic disease related to sedentary lifestyles, creating a community in which residents are unable to safely move around through any other means other than vehicular transportation only exacerbated the problem. Lower traffic volumes during Covid 19 saw an increase in pedestrian and bicycle road use. The desire for alternative means of transportation, in particular in rural counties such as Harford, is there, but the existing infrastructure does not support it.

In addition, I would also like to support the proposed *U.S. 40 LAND USE AND TRANSPORTATION STUDY* that will traverse Harford County. Route 40 is ironically one of the only designated Bike Routes in Harford County, but, as the UPWP so accurately pointed out, it is far from cycle friendly, and it is rare for even confident cyclists to travel that route. Developing *separate bicycle facilities from vehicular traffic on U.S. 40, and developing a concept for a cohesive facility that serves both bicycle and walking modes of travel* provides a safe means of non-vehicular transportation along a roadway that transects some of the neediest neighborhoods in the county. This addresses equity issues of access to jobs and services, as many low-income individuals struggle to own and maintain vehicles. As Route 40 is currently being developed as a tech corridor with increased job opportunities, and many warehouses/distribution centers have been constructed in Aberdeen and on the Perryman Peninsula, it is imperative that there is multimodal access to these jobs, especially since local public transportation options are limited.

Finally, increased safe bike/ped facilities along Route 40 will also allow for increased opportunity for people to enjoy one of the greatest assets of Harford County, the Chesapeake Bay. It will connect the Aberdeen train station to the surrounding communities benefiting both travelers and locals, as well as provide linkages to area amenities such as the City of Havre de Grace, the proposed Science Center at Waters Edge, and the Anita Leight Environmental Center.

Bari Klein

Executive Director

Healthy Harford, Inc.

520 Upper Chesapeake Drive

Klein Ambulatory Care Center, Suite 405

Bel Air, MD 21014

443.640.7699 (cell # as I am working remotely)

www.healthyharford.org

If you have a mental health or addiction concern, please call **1.800.NEXT.STEP** to reach the Klein Family Harford Crisis Center, open 24/7, 802 Baltimore Pike, Bel Air, MD (near the Harford Mall).



City of Havre de Grace

711 PENNINGTON AVENUE, HAVRE DE GRACE, MARYLAND 21078
WWW.HAVREDEGRACEMD.COM

410- 939-1800
410- 575-7043

March 10, 2021

Baltimore Regional Transportation Board
c/o Baltimore Metropolitan Council
1500 Whetstone Way, Suite 300
Baltimore, Maryland 21230-4767

Dear Members of the Baltimore Regional Transportation Board:

Thank you for including the US 40 Land Use and Transportation Study in the draft Unified Planning Work Program (UPWP) FY 2022-2023 (Appendix B – Focus Areas, pp. 105 and 106). The goal of this project is to reimagine US 40 as a corridor that supports mixed-used development with transit and bike improvements, potentially spanning multiple jurisdictions. US 40 in this region is located between busy I-95 and the Northeast Corridor for Amtrak and the MARC/Penn Line, with designated transit-oriented development hubs. Full access for commercial properties, employment centers, and connecting local roads make US 40 a highly interactive place with great potential for new development in communities along the corridor while at the same time providing safe non-motorized transportation options.

This study builds on corridor planning concepts developed in the Baltimore Regional Plan for Sustainable Development (2015) and the Regional Transit Plan (2020), both recent Baltimore Metropolitan Council (BMC) projects that identify corridors for optimizing development and redevelopment based around multimodal transportation. Built in the late 1930's as a dual highway with a generous right-of-way, US 40 is identified as part of the MDOT SHA Bike Spine Network from Cecil County, through Harford and Baltimore Counties, and into Baltimore City. This study offers an excellent opportunity to take the long-view of how US 40 can have a greater value as a multimodal transportation corridor with safe bikeway options, serving the communities along it.

Thank you so much for your consideration of this project and many thanks to BMC staff for their support.

Sincerely,

Dianne Klair, Planner
City of Havre de Grace



Public Comments <comments@baltometro.org>

Carroll County connectivity

2 messages

David Highfield

Thu, Feb 11, 2021 at 12:18 PM

To: Monica Haines Benkhedda <comments@baltometro.org>

Monica,
I would like to see some form of mass transit connecting Carroll County with Baltimore City - Camden Yards, Penn Station, BWI Rail Station and airport. Extending Metro on 795 to Finksburg, MD would be a beginning.
David Highfield
Westminster



March 10, 2021

Re: Comments Baltimore Region FY 2022-2023 UPWP for Transportation Planning

Dear Baltimore Metropolitan Council's Baltimore Regional Transportation Board,

The Greater Washington Partnership is a civic alliance of the region's leading employers and entrepreneurs committed to making the Capital Region—from Baltimore to Richmond—one of the world's best places to live, work, and build a business. We look forward to continuing to partner with the Baltimore Metropolitan Council (BMC) to advance shared priorities around transit-oriented development, expansion of the regional trail network, and bus and transit prioritization; solutions the Partnership advocated for in our [Blueprint for Regional Mobility](#).

The Partnership offers the following comments for BMC to consider as the Baltimore Regional Transportation Board finalizes the FY 2023-2023 Unified Planning Work Program (UPWP):

Bicycle and Pedestrian Planning: As part of the bicycle and pedestrian planning program, BMC should expand its Regional Bicycle Facilities map to include planned trail investments and then identify priority gaps and projects, such as the Baltimore Greenway Trails, to create a seamless regional trail network. The Metropolitan Washington Council of Governments, in partnership with the Capital Trails Coalition, has identified and prioritized a network of 900 miles of trail that would provide safe, multimodal access for residents across the Washington metropolitan area, which could serve as a guide for similar efforts in the Baltimore metropolitan area.

Implementation of Regional Transit Plan – Continuation of Corridor Analysis: The current draft of the UPWP does not suggest what the end-product of this effort will be. Working in partnership with the MTA and local jurisdictions, the Partnership believes BMC should suggest the preferred mode for a few or all eleven of the early opportunity corridors identified in the Central Maryland Regional Transit Plan and outline preferred service patterns and levels of service based on the mode.

Transportation Issues in Historical Town Centers: The focus of this element is on parking management. While the draft does mention developing strategies to address multimodal access, including transit, we believe that transit access should be a more central component of this work program. Many of Maryland's historical town centers developed around a rail station and could benefit from short-term strategies to increase first/last mile access to today's transit stations as well as long-term strategies to connect/reconnect the street grid network and allow for more mixed-use density near transit stations.

Baltimore Region Transit Governance and Funding Study: The current draft of the UPWP does not identify next steps from BMC's ongoing Transit Governance and Funding Study that will wrap up later this year. We encourage BMC and the project team to identify a next step or action item that can build on the study to further advance the regional conversation about transit governance and funding.

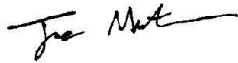


GREATER WASHINGTON PARTNERSHIP
1200 17th St NW, Suite 550
Washington, DC 20036

greaterwashingtonpartnership.org
202.765.2024
info@greaterwashingtonpartnership.org

The Greater Washington Partnership would like to thank BRTB Board Chair the Honorable Stephen Wantz, Executive Director Michael Kelly, Director of Transportation Planning Todd Lang, and the entire board for their leadership in advancing transportation priorities that can make Baltimore and the Capital Region one of the best places to live, work, and build a business.

Sincerely,



Joe McAndrew
Vice President, Transportation
Greater Washington Partnership



GREATER WASHINGTON PARTNERSHIP
1200 17th St NW, Suite 550
Washington, DC 20036

greaterwashingtonpartnership.org
202.765.2024
info@greaterwashingtonpartnership.org



Public Comments <comments@baltometro.org>

Suggestion for UPWP Project

1 message

Jon Korin

Wed, Mar 17, 2021 at 9:28 AM

To: comments@baltometro.org

Cc: Tanya Asman <trasma00@aacounty.org>, Regina Aris <raris@baltometro.org>

Please consider the following for a BMC UPWP project:

Bike/Ped Grant Pursuit and Execution - Study of Past Performance, Best Practices and Improvement Recommendations

Some of our Maryland jurisdictions have struggled to apply for and win bike/ped grants, especially from federal programs such as TAP, RTP, SRTS, BUILD and CMAQ. Others have successfully secured grants but have faced challenges with bureaucratic processes, regulatory compliance, inter-agency coordination and schedule management. This project would do an analysis of past grant application and execution performance, assess performance, identify deficiencies and make recommendations for improving and streamlining the processes and assistance for grant application and execution. A look at best practices in other states or other regions of Maryland should be included. The results will be to make Maryland agencies more effective at securing grants and completing projects so we can bring more federal funding into Maryland and realize the public benefits of completed projects sooner. This is especially important as more federal funding for bike/ped projects is likely to become available under the new administration. There are several federal bills in the works.

This project aligns well with the BMC BPAG goal focused on Grant Performance.

I would be happy to discuss this further if that is helpful.

Thank you,

Jon Korin

Chair, Anne Arundel County Bicycle Advisory Commission

President, **Bicycle Advocates for Annapolis & Anne Arundel County ("BikeAAA")**

A 501c3 non-profit promoting safe cycling for transportation, recreation & fitness

president@bikeaaa.org

www.bikeaaa.org

www.annearundeltrailnetwork.org

www.facebook.com/groups/bikeaaa

www.lifeline100.com for the Oct. 3, 2021 Bicycle Event





March 10, 2021

The Baltimore Regional Transportation Board
Attn: Public Involvement Coordinator
1500 Whetstone Way, Suite 300
Baltimore, MD 21230

RE: Advisory Participant Comments: Baltimore Regional Transportation Board (BTRB) FY 2022-2023 Unified Plan Working Plan (UPWP)

Members of the Baltimore Regional Transportation Board:

Thank you for the opportunity to review and provide comments on BRTB's FY 2022-2023 UPWP and to serve in an advisory role for the U.S. 40 Land Use and Transportation Study.

The Lower Susquehanna Heritage Greenway, Inc. (LSHG) is a non-profit organization that administers a Maryland State Certified Heritage Area. The LSHG was created to serve as a conservation strategy to protect environmentally sensitive areas along Upper Bay by developing 38 miles of continuous public trails to connect Harford and Cecil Counties' three waterfront communities of Havre de Grace, Perryville, and Port Deposit. The purpose of this connection is to create not only physical linkages for enhanced visitation and economic growth but also provide a mechanism to connect the area's cultural and natural offerings. To date, over 23 miles have been completed. Several additional trail segments are currently in the planning and development phases.

COMMENTS

General: In support of regional trail development goals and to further trail development progress, the LSHG would like to work with Baltimore Metropolitan Council, WILMAPCO, and the local jurisdictions to develop a regional Greenway project that could be included in the UPWP at a later date.

Page 102, Jurisdictional Online Transportation Dashboards: Does this look at the impacts on the tourism industry and the supporting hospitality industries?

Lower Susquehanna Heritage Greenway, Inc.
4948 Conowingo Road • Darlington, MD 21034
410-457-2482 • info@upperbaytrails.com • www.upperbaytrails.com

Page 104, U.S. 40 Land Use and Transportation Study: The LSHG supports the revised language as proposed by Harford County, and we request that this project support and enhance the Washington-Rochambeau Revolutionary Route National Historic Trail initiative within the corridor.

Should you have questions, need additional information, and for future correspondence with the LSHG, please contact me at:

Lower Susquehanna Heritage Greenway, Inc.
4948 Conowingo Road
Darlington, Maryland 21034
410-457-2482
brigitte@upperbaytrails.com

Sincerely,



Brigitte C. Carty
Executive Director

cc: Mr. Alex Rawls, Harford County Department of Planning & Zoning

TO: comments@baltometro.org

Date: 22 Feb 2021

RE: Comments on Unified Planning Work Program for Transportation Planning ([UPWP](#))

Dear Members of the BRTB,

Thank you very much for the opportunity to comment on the updates to the UPWP for FY 2022-23. As a resident of Baltimore City for the past 30 years, I appreciate the work you do and would like to urge you increase the blend of multimodal transportation options in the City of Baltimore. My interest lies in transportation alternatives by bicycle and I know that this represents a mere fraction of the entire budget, although it is very much appreciated; if the Bicycle and Pedestrian Planning Task is budgeted at \$155,000 out of \$9M this represents about 0.01%. The use of bicycles should be promoted for many reasons, primarily physical exercise and health but also as an efficient means to reduce dependency on vehicles with combustion engines. To reduce carbon dioxide is a measurable benefit to society and, as we find ourselves in an EPA “moderate” non-attainment area for the 8- hour ozone standard and a maintenance area for fine particulate matter (PM2.5), a legal requirement. Planning for safe, functional bicycle infrastructure can also be a cost-efficient use of Transportation Trust Fund (TTF) dollars to provide feasible options. Therefore, it should feature more prominently in any performance-based transportation plan to guide the region’s short-term and long-term multimodal investments.

As a specific comment, I ask that the Bicycle and Pedestrian group work more closely with the Environmental Planning group, which has double the budget at \$350K and a stated responsibility “to work with local jurisdictions to explore implementation potential for emission reduction projects.” (p. 87). One example to promote healthy activity is shown by the “Tour Dem Parks, Hon!” annual event, which traverses a sixty (60) mile route around the City through public parks – see the route map [here](#). What about a permanent designated park route that features e-bikes? This could be accompanied by a smart phone app that is able to distinguish healthier routes and guide a cyclist to avoid pollution based on air quality data - see the app [here](#).

E-Bikes can be incentivized by developing an urban electric bicycle rebate program. This has worked for promoting electric lawn mowers in the City, and solar panels throughout the state by the Maryland Energy Administration’s Residential Clean Energy Rebate Program – see the program [here](#). That program is funded by the Strategic Energy Investment Fund which funds initiatives benefiting low-to-moderate income Maryland residents. E-bikes can help those residents get to work or get to the MARC commuter train in order to get to work. E-bikes are not just expensive baubles; they are pragmatic work vehicles too. To see a tried and tested local government model for a \$500 E-bike rebate program, click [here](#).

General comments are:

1. The UPWP needs more specifics: what projects will get done on what timeline? While the BRTB endorsed The Patapsco Regional Greenway Concept Plan, what is the status and timeline to complete it, e.g., the Third Segment –Guinness North toward Baltimore City? I am aware that about 12.3 miles out of the 40 miles are constructed but this work must have a higher profile. Are there any other projects that improve individuals’ access to such essential destinations as hospitals, grocery stores, major job centers, and colleges or universities? These projects are essential as more people during the pandemic exercise outside, travel individually to avoid congested public transit and seek new experiences that promote mental health.

BALTIMORE REGION UPWP
FY 2022-2023 UNIFIED PLANNING WORK PROGRAM

TO: comments@baltometro.org

Date: 22 Feb 2021

RE: Comments on Unified Planning Work Program for Transportation Planning ([UPWP](#))

2. The UPWP forecasts a seemingly drastic drop in consulting services from 2022 at 3.1M to 2023 at 440K → 86% decrease. What is the impact to the scheduled work and implementation schedule on a per project basis?

3. If funding decreases occur, what will the impact be to Baltimore City and what plans are being made to mitigate the impact? According to the FY 2021 [ADDENDUM](#) 1) Baltimore's public transportation system has not kept pace with repair and service needs as identified in the recent MDOT MTA Capital Needs Assessment, and, 2) Baltimore's transportation system is governed and operated by MDOT MTA, not locally administered or authorized in full. Yet Baltimore must score relatively high in such things as corridor assessments compared to other jurisdictions when number of residents, percentage of minority population, low-income population, percentage of zero car ownership, percentage of seniors and disabled, etc. are considered. Therefore, I would urge emphasis in the UPWP to distinguish Baltimore City and make specific planning goals and contingencies accordingly.

In closing, again, thank you for your attention to these important planning efforts. In my view, it is essential to support planning and coordination to support transit-oriented development and smart growth coordination in 2022-23. I urge you to create seamless intermodal and intersystem connections. Besides promoting alternatives to driving, these kinds of activities directly support efforts to address Environmental Justice concerns identified in the regional long-range transportation plan.

Paul Emmart

FY 2022 – 2023 UPWP			
1	<ul style="list-style-type: none"> I would like to see some form of mass transit connecting Carroll County with Baltimore City - Camden Yards, Penn Station, BWI Rail Station and airport. Extending Metro on 795 to Finksburg, MD would be a beginning. 	David Highfield	<ul style="list-style-type: none"> 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. Since we last communicated with you, the County did complete the process of updating their Transit Development Plan (TDP), which outlines public transportation improvements in the County over the next five years. We have included a link to the document so that you can read what improvements are planned.
2	<ul style="list-style-type: none"> The LSHG is in support of regional trail development goals and further trail development progress. The LSHG would like to work with BMC, WILMAPCO, and local jurisdictions to develop a regional Greenway project that could be included in the UPWP at a later date. 	Brigitte Carty Lower Susquehanna Heritage Greenway, Inc.	<ul style="list-style-type: none"> Our Bicycle and Pedestrian Advisory Group has already brought up this topic at a meeting. BMC staff have started to look into how we might consider approaching a project that spans jurisdictional, and MPO, boundaries with the MDOT State Highway Administration. As we learn more we will reach out to your organization and the Wilmington Area Planning Council.
2a	<ul style="list-style-type: none"> Does the Dashboard task look at the impacts on the tourism industry and the supporting hospitality industries? 	Brigitte Carty LSHG	<ul style="list-style-type: none"> This information is currently included in the Baltimore Regional Recovery Dashboard on the BMC website. A lot of good data on the tourism/hospitality industries is included in the existing Quarterly Census of Employment & Wages (QCEW) on our website. There are visualizations depicting monthly employment by industry and jurisdiction (located here). Below are a few examples referencing the specific visualization tabs:

		<p>1) Employment by 2-digit NAICS: This tab summarizes employment in broad industry groups. You can select your jurisdiction of interest (including the region and all counties). Tourism/Hospitality is a bit obscured here, but relevant 2-digit industries include 72 - Accommodation and Food Services and 71 - Arts, entertainment, and recreation. You could also look at 48 (Transportation and Warehousing)</p> <p>2) Percent Change: 2-Digit Across Jurisdiction: This tab also summarizes 2-digit data, but allows the user to display the % change in employment for any industry of interest for a user selected time period. You can display data for any combination of jurisdictions you would like. For example, from April 2019 to April 2020 employment losses in Arts, Entertainment, and Recreation ranged from 80.5% in Harford County to nearly 53% in Baltimore City. This is useful if you're interested in employment changes in one industry.</p> <p>3) Percent Change: Jurisdiction across 2-digit Industries: This tab also displays percent changes in employment, but does so for all industries in one user selected jurisdiction. This is useful if you're interested in employment changes in just one jurisdiction.</p> <p>4 - 6) These tabs are probably the most useful for tourism/hospitality, as they highlight employment levels and changes in 4-digit NAICS industries. These are more specific industry groups such as performing arts companies, spectator sports, museums, restaurants, and traveler accommodation. I would again recommend focusing on industries starting with "72" (accommodation and food services) and "71" (Arts,</p>
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			<p>Entertainment, and Recreation). You could also look at a few in "48" (Transportation and Warehousing).</p> <p>One thing to note is that some data is suppressed in the QCEW to avoid identification of individual businesses. This is more of an issue at smaller levels of geography and with more specific industries (i.e. there is more suppression for 4-digit industries than for 2-digit).</p>
2b	<ul style="list-style-type: none"> The LSHG supports the revised language for the U.S. 40 Land Use and Transportation Study as proposed by Harford County. We request that this project support and enhance the Washington-Rochambeau Revolutionary Route National Historic Trail initiative within the corridor. 	<p>Brigitte Carty LSHG</p>	<ul style="list-style-type: none"> The final UPWP will be modified to include consideration of the National Historic Trail initiative in the write-up.
3	<ul style="list-style-type: none"> The UPWP needs more specifics: what projects will get done on what timeline? Are there any other projects that improve individuals' access to such essential destinations...? 	<p>Paul Emmart</p>	<ul style="list-style-type: none"> The UPWP has been supporting 30 percent design for one PRG segment each year for three years running. It is likely that additional segments, or segments of other networks will be identified for funding by the members beyond that. <ul style="list-style-type: none"> PRG: Elkridge to Guinness has completed 30% design. PRG: Sykesville to McKeldin has initiated 30% design, expected to be complete by December 2021. PRG: Guinness to Southwest Area Park is proposed, if approved will begin 30% design in July or August 2021. There are also numerous projects in the Transportation Improvement Program in either planning or construction that address access to essential destinations. Here is a sampling: <ul style="list-style-type: none"> MD 175: Disney Road to Reece Road Additional travel lanes as well as the provision of bicycle and pedestrian facilities.

			<ul style="list-style-type: none"> ○ Parole Transportation Center This facility will serve existing local and regional bus service, but will also be designed as an intermodal hub with possible future connectivity to modes such as bikeshare, carshare, and ridehailing services. ○ MD 140: Painters Mill Road to Owings Mills Boulevard - Phase 2 The addition of turn lanes and added width for bicycle compatibility. ○ Greenway Middle Branch: Phase 2 A 0.8 mile trail between the Inner Harbor trail/cycle track and the Middle Branch Trail. ○ Towson Circulator A new fare-free bus system in Towson. ○ Bush Street Bike Facility A 0.6 mile on-street cycle track between Washington Boulevard and Russell Street.
3a	<ul style="list-style-type: none"> • The UPWP forecasts a seemingly drastic drop in consulting services from 2022 at 3.1M to 2023 at 440K → 86% decrease. What is the impact to the scheduled work and implementation schedule on a per project basis? If funding decreases occur, what will the impact be to Baltimore City and what plans are being made to mitigate the impact? 	Paul Emmart	<ul style="list-style-type: none"> • As mentioned in the budget section of the UPWP, we are not able to forecast what amount will be approved by U.S. DOT for FY 2023. The \$440,000 is a reasonable base and if there are carryover funds or a higher level of federal appropriations then that amount will increase. Funds are generally not directed to individual jurisdictions so there should not be a negative impact on Baltimore City.
3b	<ul style="list-style-type: none"> • The Bicycle and Pedestrian Planning Task is budgeted at \$155,000 out of \$9M this represents about 0.01% • The use of bicycles should be promoted for many reasons, primarily physical exercise and health but also as an efficient means to reduce dependency on vehicles with combustion engines. 	Paul Emmart	<ul style="list-style-type: none"> • That amount is intended to represent the cost of a position to support that activity. • We agree with you and mention those benefits is our outreach on a routine basis.

BALTIMORE REGION UPWP
FY 2022-2023 UNIFIED PLANNING WORK PROGRAM

	<ul style="list-style-type: none"> I ask that the Bicycle and Pedestrian group work more closely with the Environmental Planning group, which has double the budget. E-Bikes can be incentivized by developing an urban electric bicycle rebate program. 		<ul style="list-style-type: none"> Those teams actually do work together and the air quality planner is actively leading work for our Bike to Work Week activities scheduled for May 17-23. This is not something we have been involved with but can discuss with members to see if they might pursue this.
4	<ul style="list-style-type: none"> Please consider the following for a BMC UPWP project: Bike/Ped Grant Pursuit and Execution - Study of Past Performance, Best Practices and Improvement Recommendations. 	<p>Jon Korin</p> <p>Chair, Anne Arundel County Bicycle Advisory Commission</p> <p>President, Bicycle Advocates for Annapolis & Anne Arundel County</p>	<ul style="list-style-type: none"> This suggestion is worthy of further discussion. BMC staff will work with BRTB members to further explore the specific issues each member may be experiencing. A work plan can be developed that responds to the issues identified. If resources beyond BMC staff are needed then a request will be submitted for the FY 2023 UPWP.
5	<ul style="list-style-type: none"> BMC should expand its Regional Bicycle Facilities map to include planned trail investments and then identify priority gaps and projects, such as the Baltimore Greenway Trails, to create a seamless regional trail network. 	<p>Joe McAndrew</p> <p>Greater Washington Partnership</p>	<ul style="list-style-type: none"> BMC supports an internal map with the layers you are suggesting that is used by BMC and its members for planning purposes. There was a discussion and a decision was made to post online only what is currently built. The Bicycle and Pedestrian Advisory Group does actively discuss and plan for a seamless regional trail network.
5a	<ul style="list-style-type: none"> The current draft of the UPWP does not suggest what the end-product of the Regional Transit Plan – Continuation of Corridor Analysis effort will be. 	<p>Joe McAndrew</p> <p>GWP</p>	<ul style="list-style-type: none"> Final scoping for this project is underway with the BRTB Technical Committee. As indicated in the UPWP, analysis may include preliminary routes, service patterns, alignments, levels of service, potential modes and system requirements. Evaluation could also include elements from the FTA Capital Investment Grant program and/or a P3 screening mechanism.

BALTIMORE REGION UPWP
FY 2022-2023 UNIFIED PLANNING WORK PROGRAM

5b	<ul style="list-style-type: none"> The focus of Transportation Issues in Historical Town Centers is on parking management. While the draft does mention developing strategies to address multimodal access, including transit, we believe that transit access should be a more central component of this work program. 	Joe McAndrew GWP	<ul style="list-style-type: none"> Multimodal transportation into and through Ellicott City is part of the program for this project. However, for this project we will be folding in work undertaken by county staff to develop conceptual transit routes that link Ellicott City to Catonsville.
5c	<ul style="list-style-type: none"> The UPWP does not identify next steps from the BRTB's ongoing Transit Governance and Funding Study 	Joe McAndrew GWP	<ul style="list-style-type: none"> The scope for the existing study includes providing a "roadmap for potential implementation" of the various potential options. As the BRTB does not have statutory authority to implement many of these changes, recommendations are designed to provide potential guidance to the Governor, General Assembly and the local governments. If follow-up work is identified by the BRTB members it could be included in the FY 2023 UPWP.
6	<ul style="list-style-type: none"> Thank you for including the US 40 Land Use and Transportation Study in the draft Unified Planning Work Program. 	Dianne Klair City of Havre de Grace	<ul style="list-style-type: none"> We appreciate your support for this activity and welcome your participation in the study once it launches.
6a	<ul style="list-style-type: none"> Built in the late 1930's as a dual highway with a generous ROW, US 40 is identified as part of the MDOT SHA Bike Spine Network from Cecil County, through Harford and Baltimore Counties, and into Baltimore City. This study offers an excellent opportunity to take the long-view of how US 40 can have a greater value as a multimodal transportation corridor with safe bikeway options, serving the communities along it. 	Dianne Klair City of Havre de Grace	<ul style="list-style-type: none"> That is the premise of why the jurisdictions are pursuing this project. MDOT SHA will be involved as well as they own and maintain this facility.
7	<ul style="list-style-type: none"> I am in support of controlling speeds and de-prioritizing vehicular throughput for safer 	Bari Klein Healthy	<ul style="list-style-type: none"> Your concern is one of the reasons that Phase 2 is being pursued for the Traffic Impact Study guidelines.

	mobility for all users of the roadway network – pedestrians, cyclists, freight, as well as passenger vehicles in the Regional Traffic Impact Study Guidelines: Phase 2.	Harford, Inc.	
7a	<ul style="list-style-type: none">I also support the proposed U.S. 40 Land Use and Transportation Study that will traverse Harford County. Route 40 is ironically one of the only designated Bike Routes in Harford County, but, as the UPWP so accurately pointed out, it is far from cycle friendly, and it is rare for even confident cyclists to travel that route.	Bari Klein Healthy Harford, Inc.	<ul style="list-style-type: none">We appreciate your support for this activity and welcome your participation in the study once it launches.

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APPENDIX D
LIST OF ACRONYMS

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LIST OF ACRONYMS

ACRONYMS / ABBREVIATIONS	
3-C	Continuing, Cooperative and Comprehensive
ABM	Activity Based Model
ACS	American Community Survey
ADA	Americans With Disabilities Act
APFO	Adequate Public Facilities Ordinance
BRTBMC	Baltimore Metropolitan Council
BPAG	Bicycle & Pedestrian Advisory Group
BPDS	Building Permit Data System
BRGISC	Baltimore Region Geographic Information Systems Committee
BRSS	Baltimore Region Safety Subcommittee
BRTB	Baltimore Regional Transportation Board
CAA	Clean Air Act
CATT	Center for Advanced Transportation Technology
CFG	Cooperative Forecasting Group
CFR	Code of Federal Regulations
CHART	Coordinated Highways Action Response Team
CMAQ	Congestion Mitigation and Air Quality
CMP	Congestion Management Process
DBE	Disadvantaged Business Enterprise
DOT	Department of Transportation
DTS	Data Transfer Solutions LLC
EAT	Emphasis Area Team
EPA	Environmental Protection Agency
EJ	Environmental Justice
EMS	Emergency Medical Services
FAST Act	Fixing America's Surface Transportation
FHWA	Federal Highway Administration
FMTF	Freight Movement Task Force
FTA	Federal Transit Administration
FY	Fiscal Year
GIS	Geographic Information System
ICG	Interagency Consultation Group
InSITE	Initiative to Simulate Individual Travel Events
ITS	Intelligent Transportation Systems
JARC	Job Access and Reverse Commute
LOS	Level of Service

BALTIMORE REGION UPWP
FY 2022-2023 UNIFIED PLANNING WORK PROGRAM

LOTS	Locally Operated Transit Service
L RTP	Long-Range Transportation Plan
MAP-21	Moving Ahead for Progress in the 21st Century
MDE	Maryland Department of the Environment
MDOT	Maryland Department of Transportation
MDP	Maryland Department of Planning
MDTA	Maryland Transportation Authority
MHSO	Maryland Highway Safety Office
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
MOVES	Motor Vehicle Emission Simulator
MDOT MPA	Maryland Port Administration
MPA	Metropolitan Planning Area
MPO	Metropolitan Planning Organization
MSGIC	Maryland State Geographic Information Committee
MSTM	Maryland Statewide Travel Model
MDOT MTA	Maryland Transit Administration
MSP	Maryland State Police
MWCOG	Metropolitan Washington Council of Governments
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NHS	National Highway System
NHTS	National Household Travel Survey
OD	Origin Destination
PAC	Public Advisory Committee
PDA	Probe Data Analytics
PM1	Performance Measures for safety
PM2	Performance Measures for bridge and pavement
PM3	Performance Measures for system performance, freight, and air quality
PopGen	(Synthetic) Population Generator
PM _{2.5}	Fine Particulate Matter
RFP	Request for Proposals
MDOT SHA	State Highway Administration
SHRP	Strategic Highway Research Program
SHSP	Strategic Highway Safety Plan
SIP	State Implementation Plan
TAMP	Transportation or Transit Asset Management Plan
TAZ	Transportation Analysis Zone
TBM	Travel Based Model

BALTIMORE REGION UPWP
FY 2022-2023 UNIFIED PLANNING WORK PROGRAM

TC	Technical Committee
TIM	Traffic Incident Management
TIMBR	Traffic Incident Management (Committee) for the Baltimore Region
TIP	Transportation Improvement Program
TMA	Transportation Management Area
TOD	Time of Day
TPA	TradePoint Atlantic
T&PW	Transportation & Public Works Committee
TRCC	Traffic Records Coordinating Committee
TSMO	Transportation Systems Management & Operations
UASI	Urban Area Security Initiative
UAWG	Urban Area Work Group
UPWP	Unified Planning Work Program
U.S. DOT	United States Department of Transportation
VMT	Vehicle Miles Traveled
VPI	Vulnerable Population Index
WILMAPCO	Wilmington Area Planning Council