

FY 2019 ADDENDUM
TO THE BALTIMORE REGION FY 2018-2019
UNIFIED PLANNING WORK PROGRAM
FOR TRANSPORTATION PLANNING

BRTB Vote on:
April 24, 2018

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

1500 Whetstone Way, Suite 300
Baltimore, MD 21230-4767

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The U.S. Department of Transportation, (the Federal Highway Administration, and the Federal Transit Administration) and the Maryland Department of Transportation contributed funding towards the preparation of the Addendum to the FY 2018-2019 Unified Planning Work Program.

FY 2019 ADDENDUM
TO THE BALTIMORE REGION FY 2018-2019
UNIFIED PLANNING WORK PROGRAM
FOR TRANSPORTATION PLANNING

The Honorable Catherine Pugh, Chair
Baltimore Regional Transportation Board

Todd R. Lang
Director Transportation Planning Baltimore Metropolitan Council

BRTB Vote:
April 24, 2018

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

Baltimore Metropolitan Council
1500 Whetstone Way, Suite 300
Baltimore, Maryland 21230-4767

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Voting Representative for Eligible Public Transit Operators

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Ms. Bihui Xu, Manager, Transportation Planning Service Division

* Denotes non-voting members

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INTRODUCTION

UNIFIED PLANNING WORK PROGRAM DEVELOPMENT PROCESS

The Fiscal Years (FY) 2018-2019 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, 2017 through June 30, 2019). It defines the regionally agreed upon planning priorities and the roles and responsibilities of the various participants in this process. This Addendum updates the FY 2019 budget and identifies several new work program items.

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).

It is through the FY 2018-2019 UPWP, as well as previous UPWP initiatives, that 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 November 2015, the BRTB approved *Maximize2040: A Performance-Based Transportation Plan*, the current long-range regional transportation plan that guides the region's short-term and long-term multimodal investments. The BRTB is now focusing on implementation of that Plan and 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 2019 transportation planning activities for the Baltimore region is \$7,517,700.

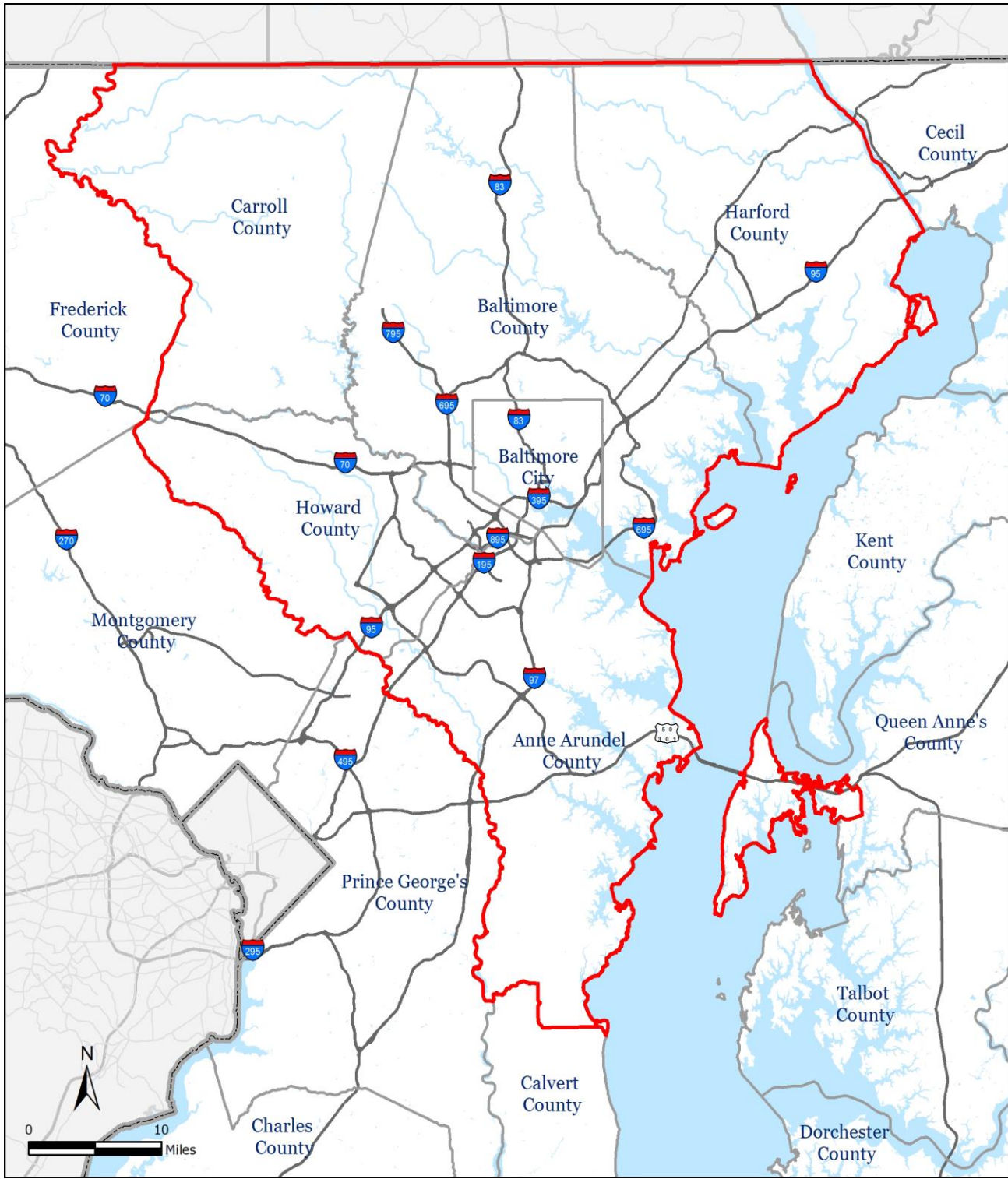
Developing this UPWP has relied on the continued cooperation among State (specifically transportation, air quality and planning agencies), local and regional entities. The FY 2018-2019 UPWP was prepared with the involvement of these organizations, acting through the BRTB and its subcommittee structure.

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).

FIGURE 1
THE BALTIMORE REGION



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" non-attainment area for the 8- hour ozone standard and a maintenance area for fine particulate matter (PM_{2.5}). The entire non- attainment 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 (P.L. 114-94), this Addendum to the FY 2018-2019 UPWP is being released to the public for a 30-day review and comment opportunity.

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. Federal agencies are expected to update these regulations to reflect key changes in MAP-21 from previous transportation legislation that include an increased focus on performance measures and relating these measures to prioritization of projects in key MPO documents.

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 endorsed *Maximize2040: A Performance-Based Transportation Plan*, the long-range transportation plan, in November 2015 (and as amended in August 2016 and March 2018). The factors that guided development of *Maximize2040* are listed in the Metropolitan Planning Regulations effective February 14, 2007.

As noted, following the enactment of the FAST Act, the U.S. DOT published updated Metropolitan Planning Regulations on May 27, 2016. These updated regulations continue and strengthen the emphasis on performance-based planning and programming.

Maximize2040 includes a set of overarching regional goals, specific implementation strategies that support these goals, and a series of performance measures and targets. These measures and targets are consistent with the performance-based approach to planning and programming set forth in MAP-21, the FAST Act, and corresponding regulations. These measures and targets help the BRTB and operating agencies gauge progress relative to regional goals and strategies.

A new set of performance measures and targets is being developed in preparation for the next long-range

transportation plan. Performance measures have been or are being developed for transit asset management, transit safety, roadway safety, roadway and bridge conditions, and system performance. Target selection is being coordinated with the State and public transportation providers to ensure consistency.

Out of the set of 25 federally mandated measures and targets, the BRTB has adopted 11 to date. These 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 (adopted in January 2018): (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.

The BRTB will adopt the remaining 14 measures and targets, in coordination with MDOT, by the November 2018 due date (or, in the case of transit safety, by a due date to be determined). The remaining measures and targets are:

- four measures to assess pavement condition: (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: (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 NHS under the National Highway Performance Program (expressed as Level of Travel Time Reliability (LOTTR): (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: percentage of interstate system mileage providing for reliable truck travel times (Truck Travel Time Reliability Index – TTTR)
- one measure to assess on-road mobile source emissions (applies to projects with CMAQ funding): total emissions reduction: 2-year and 4-year cumulative reported emission reductions of each criteria pollutant and applicable precursors (PM_{2.5}, PM₁₀, CO, VOC, and NO_x) for which the area is designated nonattainment or maintenance [*Note: the BRTB region is in nonattainment only with respect to ozone*]

- four transit safety measures (reported by mode): (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. *[Note that, as of the publication of this document, the final transit safety rule has not been published. Once the final rule has been published, transit agencies will have 1 year to set transit safety performance targets; MPOs will have 1 year + 180 days.]*

All of the measures and targets will be used to guide the Maryland Department of Transportation and metropolitan planning organizations in carrying out the requirements of the applicable FHWA and FTA laws and regulations, including the Highway Safety Improvement Program (HSIP).

All Transportation Improvement Programs (TIPs) that will be adopted after May 2019 will follow the performance-based approach described in the long-range transportation plan. These TIPs will 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 (MTA) and a Representative of Public Transportation (currently Harford 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. Harford 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. 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 redesignation of the BRTB and reauthorized in 2004 and amended in 2014, 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. The BRTB is in the process of reviewing the MOU and expects an update to incorporate recent changes in federal transportation law. 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.

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.

APPENDIX A

FY 2019 BUDGET DETAILS

BALTIMORE REGION UPWP
ADDENDUM TO THE FY 2018-2019 UNIFIED PLANNING WORK PROGRAM

Attachment 1A

FY 2019 UPWP BUDGET

SOURCES

	FHWA	FTA	MDOT	LOCAL	TOTAL
FY 19 Appropriations	\$3,566,370	\$1,254,940	\$621,000	\$882,540	\$6,324,850
FY 18 Carryover	\$970,391	\$225,384			\$1,195,775
FY 19 Funds Available	\$4,536,761	\$1,480,324	\$621,000	\$882,540	\$7,520,625

USES

BMC Staff	\$5,150,000
Consultants	\$1,060,000
 BMC Total	 \$6,210,000
 City of Annapolis	 \$21,800
Anne Arundel County	\$245,000
Baltimore City	\$409,800
Baltimore County	\$84,100
Carroll County	\$55,300
Harford County	\$85,700
Howard County	\$300,700
Queen Anne's County	\$105,300
 Local Total	 \$1,307,700
 TOTAL USES	 \$7,517,700

BALTIMORE REGION UPWP
ADDENDUM TO THE FY 2018-2019 UNIFIED PLANNING WORK PROGRAM

FY 2019 WORK PROGRAM BY TASK & FUND SOURCE
(\$)

	FHWA	FTA	MDOT	LOCAL	TOTAL
UPWP Management	552,714	180,086	76,500	106,700	916,000
Public Participation & Community Outreach	144,816	47,184	24,000	24,000	240,000
Professional Consultant Services	639,604	208,396	106,000	106,000	1,060,000
Long-Range Transportation Planning	93,527	30,473	15,500	15,500	155,000
Human Service Transportation Coordination	48,272	15,728	8,000	8,000	80,000
Congestion Management Process	105,595	34,405	17,500	17,500	175,000
Operations Planning	90,510	29,490	15,000	15,000	150,000
Safety Planning and Analysis	87,493	28,507	14,500	14,500	145,000
Bicycle and Pedestrian Planning	99,320	32,360	12,500	20,420	164,600
Freight Mobility Planning	87,493	28,507	14,500	14,500	145,000
Transit Planning and Ladders of Opportunity	153,867	50,133	25,500	25,500	255,000
Emergency Preparedness Planning	69,391	22,609	11,500	11,500	115,000
Transportation Equity Planning	63,357	20,643	10,500	10,500	105,000
Development Monitoring	153,867	50,133	25,500	25,500	255,000
Monitoring System Performance & Reliability	108,612	35,388	18,000	18,000	180,000
Databases and Travel Surveys	96,544	31,456	16,000	16,000	160,000
GIS Activities	224,223	73,057	35,500	38,820	371,600
Demographic and Socioeconomic Forecasting	328,732	107,108	25,000	83,960	544,800
Analysis of Regional Data and Trends	66,374	21,626	11,000	11,000	110,000
Technical Analysis in Support of State Initiatives	108,612	35,388	18,000	18,000	180,000
Current Simulation Tools	205,156	66,844	34,000	34,000	340,000
Expanding the Region's Toolset	181,020	58,980	30,000	30,000	300,000
Transportation Improvement Program	84,898	27,662	11,500	16,640	140,700
Environmental Planning	199,122	64,878	33,000	33,000	330,000
Air Quality Conformity Analysis	72,408	23,592	12,000	12,000	120,000
Subarea Analysis (Local)	470,652	153,348	0	156,000	780,000
Total	4,536,180	1,477,980	621,000	882,540	7,517,700

BALTIMORE REGION UPWP
FY 2018-2019 UNIFIED PLANNING WORK PROGRAM

FY 2019 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	765,000	15,000	18,800	18,800	18,800	21,000	18,800	18,800	21,000	\$916,000
Public Part. & Comm. Outreach	240,000									\$240,000
Professional Consultant Services	1,060,000									\$1,060,000
Long-Range Planning	155,000									\$155,000
Human Service Transportation Coordination	80,000									\$80,000
Congestion Management Process	175,000									\$175,000
Operations Planning	150,000									\$150,000
Safety Planning and Analysis	145,000									\$145,000
Bicycle and Pedestrian Planning	125,000	3,800	3,800	3,800	3,800	8,400	3,800	3,800	8,400	\$164,600
Freight Mobility Planning	145,000									\$145,000
Transit Planning & Ladders of Opportunity	255,000									\$255,000
Emergency Preparedness Planning	115,000									\$115,000
Transportation Equity Planning	105,000									\$105,000
Development Monitoring	255,000									\$255,000
Monitoring System Perform. & Reliability	180,000									\$180,000
Databases and Travel Surveys	160,000									\$160,000
GIS Activities	355,000	2,000	2,000	2,000	2,000	2,300	2,000	2,000	2,300	\$371,600
Demographic and Socioeconomic Forecasting	250,000		28,100	52,500	57,200	21,300	57,200	57,200	21,300	\$544,800
Analysis of Regional Data and Trends	110,000									\$110,000
Technical Analysis in Support of State/Local Initiatives	180,000									\$180,000
Current Simulation Tools	340,000									\$340,000
Expanding the Region's Toolset	300,000									\$300,000
Transportation Improvement Program	115,000	1,000	2,300	7,700	2,300	2,300	3,900	3,900	2,300	\$140,700
Environmental Planning	330,000									\$330,000
Air Quality Conformity Analysis	120,000									\$120,000
Anne Arundel County Subarea			190,000							\$190,000
Baltimore City Subarea				325,000						\$325,000
Howard County Subarea								215,000		\$215,000
Queen Anne's County Subarea									50,000	\$50,000
TOTAL	6,210,000	21,800	245,000	409,800	84,100	55,300	85,700	300,700	105,300	7,517,700

BALTIMORE REGION UPWP
FY 2018-2019 UNIFIED PLANNING WORK PROGRAM

**FY 2019 SUBAREA ANALYSIS - LOCALS
PROJECTS & FUND SOURCE**

WORK TASKS	FHWA	FTA	MDOT	LOCAL	TOTAL
Anne Arundel County Parole Town Center Transportation Master Plan (\$65,000) Feasibility Study for additional ramps along MD 100 (\$125,000)	\$114,646	\$37,354	\$0	\$38,000	\$190,000
Baltimore City Equity Planning for Targeted Transportation Options (\$325,000)	\$196,105	\$63,895	\$0	\$65,000	\$325,000
Howard County Columbia Gateway Transportation Improvement Strategy (\$150,000) Regional Mobile Application Fare Payment System (\$25,000) Implementation of RTA Transit Development Plan (\$40,000)	\$129,731	\$42,269	\$0	\$43,000	\$215,000
Queen Anne's County Kent Island Phase 2: Cox Creek Connector Road (\$50,000)	\$30,170	\$9,830	\$0	\$10,000	\$50,000
SUBAREA TOTALS	\$470,652	\$153,348	\$0	\$156,000	\$780,000

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APPENDIX B

LOCAL PARTICIPANTS: SUBAREA PROJECTS

ANNE ARUNDEL
BALTIMORE CITY
HOWARD COUNTY
QUEEN ANNE’S COUNTY

ANNE ARUNDEL SUBAREA

PROJECT: PAROLE TOWN CENTER TRANSPORTATION MASTER PLAN

PURPOSE: To a comprehensive assessment of the existing and future mobility needs in the Town Center area.

OBJECTIVES:

- Forecasting future traffic volumes and traffic patterns based on existing and future land uses as set forth in the Parole Town Center Master Plan
- Developing standards for roadway design elements such as cross-sections, on-street parking regulations, intersection traffic controls, traffic flows (one-way vs. two-way) and lane assignments;
- Identifying capital improvement project needs such as new roadways , intersection widening, new traffic signals, etc. to increase capacity, improve mobility and enhance safety
- Identifying and integrate multi-modal needs including pedestrians, bicycles and transit,
- Prioritizing improvements, considering construction costs, environmental impacts, and operational benefits
- Establishing policies to manage demand for travel in, out and through the Town Center, including parking

Recommendation: The 1994 *Parole Urban Design Concept Plan* as well as subsequent planning efforts recommended developing a multi-modal transit center in Parole. The Parole Town Center Master Plan Transportation Study is a comprehensive assessment of the existing and future mobility needs in the Town Center area. The goal of the transportation study is to develop a set of recommendations for existing and new roadways that can be implemented in a joint private and public sector partnership that will support a transit, pedestrian and bicycle-oriented Town Center.

- Regional access needs;
- Transit improvements

FY 2019 PERFORMANCE INDICATORS:

1. Develop a work program and RFP to select successful consultant to undertake the work program.
2. Develop feasibility options for locations, facilities and funding.
3. Host a public meeting to share information and receive feedback. Also, solicit feedback on proposals.
4. Prepare a final report with changes recommended by public, develop design and requirement metrics.

BALTIMORE REGION UPWP
ADDENDUM TO FY 2018-2019 UNIFIED PLANNING WORK

PRODUCTS/MILESTONES	SCHEDULE
Send out RFP and select a successful candidate.	1 st Quarter
Have consultant develop options for locations, facilities and funding.	2 nd Quarter
Hold a public hearing to present preliminary findings and to gather feedback.	3 rd Quarter
Complete planning study with recommendations for a development plan.	4 th Quarter

BUDGET: \$65,000

ANNE ARUNDEL SUBAREA

PROJECT: **FEASIBILITY STUDY FOR ADDITIONAL RAMPS ALONG MD 100**

PURPOSE: Explore the possibility of getting several ingress/egress ramps constructed off MD 100.

OBJECTIVES:

A worthwhile study as improved access to MD 100 would help to alleviate traffic volumes along MD 177 and support the proposed improvements are studies we have conducted along MD 177, Solley Road, Jumpers Hole Road, etc.

Recommendation: The need for this facility was affirmed in the in both the General Development Plan (2009) Chapter 9 and reiterated in the Corridor Growth Management Plan (2012) in the recommendations for MD 100 Corridor.

- Capacity Improvements
- Regional access needs;

FY 2019 PERFORMANCE INDICATORS:

1. Develop a work program and RFP to select successful consultant to undertake the work program.
2. Develop feasibility options for locations, facilities and funding.
3. Host a public meeting to share potential location and facility options. Also, solicit feedback on feasibility proposals.
4. Prepare a final report with changes recommended by public, develop design and requirement metrics.

PRODUCTS/MILESTONES	SCHEDULE
Send out RFP and select a successful candidate.	1 st Quarter
Have consultant develop options for facilities and funding.	2 nd Quarter
Hold a public hearing to present preliminary findings and to gather feedback on proposed locations and facilities	3 rd Quarter
Complete planning study with recommendations for a development plan	4 th Quarter

BUDGET: \$125,000

BALTIMORE CITY SUBAREA

PROJECT: EQUITY PLANNING FOR TARGETED TRANSPORTATION OPTIONS

PURPOSE: Recent growth in the region has helped fuel a resurgence in downtown Baltimore and continuing growth in areas such as Columbia, Fort Meade and BWI Airport, Aberdeen Proving Grounds and White Marsh. As it has grown, the region has become more racially and ethnically diverse and poverty is becoming less concentrated.

Employment in the region is concentrated in downtown Baltimore and suburban job centers. Outside the city center, the highest concentrations of jobs are forecasted to be in Owings Mills, Columbia, Towson, the I-83 corridor, the BWI area, around Fort Meade, Trade Point Atlantic, Port Covington, and near the Aberdeen Proving Ground. The region features a robust network of colleges and universities, world-class hospital systems, and proximity to the nation's capital which provides opportunities for a highly skilled and well-educated workforce. In addition, several middle-skill industries that have living-wage jobs that do not require postsecondary education are projected to grow in the coming years and at the same time, the aging of the workforce, a national trend, will lead to increased employment opportunities in a range of fields.

Geographically entrenched segregation by race and income isolates the poor from basic amenities and resources. This creates physical, cultural and psychological divides separating families from the amenities found in middle-income neighborhoods, including access to jobs, high-performing schools and the social networks that often help people find good jobs. Although the region's public transit system is extensive and has recently launched BaltimoreLink, it may not adequately serve suburban job centers, particularly during second and third shifts. This makes having access to a car an almost essential job qualification. Low-income families who cannot afford a car are often blocked from seeking many living-wage jobs due to long transit commute times and last mile transportation connections. A survey of unemployed and underemployed workers in Baltimore cited lack of transportation options as a fundamental challenge in finding full-time work.

This study is designed to partner with the surrounding counties to collaborate on comprehensive poverty reduction transportation strategies. The planning study will identify how to get people in underserved transportation areas to specific target employment centers and better understand the impact that mobility plays in outcomes for sustained full-time work. Building on what the Baltimore Region already knows that people living in neighborhoods with no cars continue to lack transportation options fundamental in finding sustained full-time work.

The goal of the study is to identify strategies and transportation modes for low cost, timely, dependable transportation options to connect people to jobs and to pilot these strategies.

FY 2019 PERFORMANCE OBJECTIVES:

1. Identify the work patterns (hours, shifts, transportation requirements) of the major employers in identified target job centers within and surrounding Baltimore City.
2. Identify existing real transportation barriers (public and private) of residents in the identified target people center within and surrounding Baltimore city.

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3. Identify existing transportation options within Baltimore City and surrounding Counties including locations, territories, costs, and account requirements.
4. Benchmark emerging transportation options either planned or piloted in the nation for applicability to the Baltimore region and better understand the impact that mobility plays in outcomes for sustained full-time work.
5. Building on existing mapping, modeling, and logistics of transportation options, identified poverty centers, and employment centers, map the known transportation systems available.
6. Identify gaps in transportation options and access between the identified people centers and job centers.
7. Develop low cost, timely, dependable recommendations to close the transportation gaps to sustained full-time work.
8. Create plan and final report.

PRODUCTS/MILESTONES	SCHEDULE
Identify the work patterns (hours, shifts, transportation requirements) of the major employers in identified target job centers within and surrounding Baltimore City. Identify existing real transportation barriers (public and private) of residents in the identified target people center within and surrounding Baltimore city.	1 st and 2 nd Quarter
Identify existing transportation options within Baltimore City and surrounding Counties including locations, territories, costs, and account requirements. Benchmark emerging transportation options either planned or piloted in the nation for applicability to the Baltimore region and better understand the impact that mobility plays in outcomes for sustained full-time work.	2 nd , 3 rd and 4 th Quarters
Building on existing mapping, modeling, and logistics of transportation options, identified poverty centers, and employment centers, map the known transportation systems available. Identify gaps in transportation options and access between the identified people centers and job centers.	3 rd and 4 th Quarter
Develop low cost, timely, dependable recommendations to close the transportation gaps to sustained full-time work. Create plan and final report.	4 th Quarter

PARTNERS: Baltimore City, MDOT, MTA, Baltimore County, Anne Arundel County, Howard County, Harford County, Cecil County, Consultant, BDC, BMC

BUDGET: \$325,000

HOWARD COUNTY SUBAREA

PROJECT: **COLUMBIA GATEWAY TRANSPORTATION IMPROVEMENTS IMPLEMENTATION STRATEGY**

PURPOSE: The Columbia Gateway complex with 8 million square feet of commercial and industrial space is important and critical driver of economic activity in Howard County, Anne Arundel County and the region and is starting to experience additional development pressure as restrictive covenants on properties expire. The project has also been targeted by Howard County to be repositioned as an Innovation District which would drive future economic development in the region and the state. The opportunity is currently at a competitive disadvantage due to internal circulation and external access challenges for all modes that limit Gateway's future success in a rapidly changing office market.

In 2012, SHA completed the US1/MD175 Feasibility Study Phase II study and this project will advance and refine recommendations from the study for road improvements, develop a local bicycle/pedestrian circulation and access plan leading to the development of an implementation and funding strategy to address these transportation challenges.

FY 2019 PERFORMANCE OBJECTIVES:

- Identify short and long-term access/circulation challenges and opportunities.
- Select shortlist of projects
- Refine projects and providing preliminary designs
- Form and advance a stakeholder group within the business community
- Develop an implementation strategy
- Develop a funding strategy, including exploring the development of a private/public partnership opportunities to fund improvements

PRODUCTS/MILESTONES	SCHEDULE
<ul style="list-style-type: none">• Forming and advancing a stakeholder group within the business community• Refine a Scope of Work and initiate collection of data	First quarter
<ul style="list-style-type: none">• Identifying short and long-term access/circulation challenges and opportunities.• Selecting shortlist of projects	Second quarter
<ul style="list-style-type: none">• Develop an implementation strategy• Refining projects and providing preliminary designs	Third quarter
<ul style="list-style-type: none">• Develop a funding strategy	Fourth quarter

PARTICIPANTS: Howard County, Consultant

BUDGET: **\$150,000**

HOWARD COUNTY SUBAREA

PROJECT: **REGIONAL MOBILE APPLICATION FARE PAYMENT SYSTEM**

PURPOSE: Many transit customers today would prefer to pay their transit fares via an electronic card or mobile app. However, the cost of joining the Maryland Transit Administration's (MTA) current payment system is prohibitive for most Locally Operated Transit Systems (LOTS) In addition, for systems with riders who transfer to either MTA or WMATA routes, it is preferable to use a fare payment mechanism that only coordinates with one of those systems.

Smaller transit systems around the country are beginning to move beyond an electronic fare payment card and directly to a phone-based mobile payment application, i.e. an App. The operations cost of these Apps is generally funded by the application developer with a small transaction payment when the App is used. This allows these services to be rolled out and operated with minimal operations and capital costs. In addition, there is minimal downside risk associated with these applications, since the fees are only paid when the service is used. The most recent statistics indicate that the market penetration of "smart phones" reached 77% of the US population, in 2016, in addition, 33% of US adults with incomes \$50,000 under use smartphones as their primary internet access.

FY 2019 PERFORMANCE OBJECTIVES:

- Research options available for fare payment apps
- Highlight any benefits and pitfalls the LOTS
- Work with BMC to develop a cooperative purchasing vehicle

PRODUCTS/MILESTONES	SCHEDULE
<ul style="list-style-type: none">• Work with LOTS to develop needs assessments	First quarter
<ul style="list-style-type: none">• Evaluate applications• Highlight any benefits and pitfalls the LOTS	Second quarter
<ul style="list-style-type: none">• Develop cooperative purchasing vehicle	Third/fourth quarter

PARTICIPANTS: Howard County, consultant

BUDGET: **\$25,000**

HOWARD COUNTY SUBAREA

PROJECT: **IMPLEMENTATION OF RTA TRANSIT DEVELOPMENT PLAN**

PURPOSE: Howard County and Anne Arundel Counties are currently in the process of finishing their five-year Transit Development Plans. Howard County, in particular, is planning a wholesale change to the RTA routes within the County, with almost every route undergoing major changes in routing and scheduling.

While the consultant has mapped these routes for planning purposes, to actually translate them to GTFS, with new routes, stops, and timetables, will be a very large effort. It is essential, however, not just for RTA operations, but also for trip planning done through Google Maps and TRIP. This project would support staff and/or contractor work to code the substantial changes necessary before the new plan can move forward. The County hopes to implement the bulk of these changes by the spring of 2019.

FY 2019 PERFORMANCE OBJECTIVES:

- Identify routes that will be implemented/changed
- Development of route turns, time points, stops and runs
- Route testing
- Route input and outputs for GTFS

PRODUCTS/MILESTONES	SCHEDULE
<ul style="list-style-type: none">Identify routes that will be implemented/changed	First quarter
<ul style="list-style-type: none">Development of route turns, time points, stops and runsRoute testingRoute input and outputs	Second quarter

PARTICIPANTS: Howard County

BUDGET: **\$40,000**

QUEEN ANNE'S COUNTY SUBAREA

PROJECT: KENT ISLAND TRANSPORTATION PLAN PHASED IMPLEMENTATION STUDY - COX CREEK CONNECTOR ROAD AND PEDESTRIAN IMPROVEMENTS

PURPOSE: Residents and visitors of Kent Island continue to experience increased traffic on the Island, particularly during the summer months when beach-bound vehicles increase along the US 50/301 Bay Bridge Corridor. Though Kent Island has experienced some growth due to new residential areas and retail and business-development, the majority of the congestion experienced on the Island is attributed to increasing traffic volumes on the Bay Bridge. This project is to take the concepts from the Kent Island Transportation Plan and refine them into preferred alternatives and initial design. The project will consider the viability of the Cox Creek Connector Road concept proposed to connect Chester and Stevensville on south side of Route 50/301 where a road/bridge linkage currently does not exist. The project will also, provide options for safe bicycle and pedestrian movements within the corridor.

The project will consider the existing conditions within the Route 50/301 corridor and study area to evaluate the right of way constraints, the options for potential improvements to cross Cox Creek, the proposed connections to existing road network and options for safe pedestrian connections.

The study will consider connections to the existing sidewalk and trail network and identify gaps in the system that need to be addressed comprehensively in the corridor. The study will seek alternatives for dedicated sidewalks or trails to safely move residents within the corridor. As Route 50/301 bisects Kent Island dividing the north Island from the south island, this study will consider how traffic and pedestrians could safely move parallel to Route 50/301 to connect to services and public facilities in Chester and Stevensville on the south side of Route 50/301.

The alternatives for vehicular improvements and pedestrian improvements will be considered comprehensively and an alternative will be selected to move forward with preliminary design.

PERFORMANCE OBJECTIVES:

1. Consider existing conditions and evaluate the available right of way in the corridor for improvements to Route 50/301 and the creation of the Cox Creek Connector Road.
2. Analyze the existing pedestrian and bicycle access for residents, identify gaps in access and identify necessary safety improvements.
3. Consider options for pedestrians and bicyclists to safely move in this portion of the corridor.
4. Make recommendations on the best alternatives for the alignment and construction of the connector road while providing improvements for safe pedestrian travel
5. Provide preliminary cost estimates and phasing of improvements.

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Products and Milestones	Schedule
Existing Conditions Analysis	1 st Quarter
Alternatives Analysis	2 nd Quarter
Select Alternative	2 nd Quarter
Refine Conceptual alignment & Design	3 rd & 4 th Quarter
Provide Cost Estimates and Phasing Plan	4 th Quarter

PARTICIPANTS: Queen Anne’s County, SHA, Consultant

BUDGET: \$50,000

APPENDIX C

NEW FOCUS AREAS WITHIN EXISTING TASKS

FOCUS AREA: DEMOGRAPHIC AND SOCIO-ECONOMIC HORIZON YEAR SCENARIO PLANNING

ADD TO TASK: Data Development and Analysis

PURPOSE: Expand knowledge and understanding of existing and forecasted regional demographic and socio-economic trends and their impact on travel behavior, choices, and patterns.

The BRTB relies on the forecasted concentration, location, and components of demographic and socio-economic data in the development of short and long range transportation plans in meeting regional resident's mobility and accessibility needs and the efficient movement of goods and services in supporting a regional economy.

BMC staff will analyze public and administrative data sets producing tables, graphs and summaries of demographic and socio-economic trends that have occurred. The demographics focus will be on changing age structure, household formation and structure, workforce characteristics, and other identified person/household changes. The socio-economic focus will be on changes in industries employment and occupations in terms of the number of jobs/persons and workers skill level/education attainment. The demographic and socio-economic 2006 to 2016 spatial change impact on commuting patterns, tempera and choice of mode will be summarized.

The region has developed a series of disaggregate micro simulation models (pOPTICS, PopGen, InSITE, DTALite and freight modeling system) designed to capture components of demographic and socio-economic change and their impact on travel behavior, choices, and patterns. The micro simulation tools are designed to support analyst in 1) varying and exploring horizon year input assumptions and 2) the ability to discover input assumptions in simulating and/or meeting a desired travel behavior, choices, and patterns.

Engage local planning partners using knowledge and understanding gained through trend analysis in a components of change scenario planning exercise. The endorsed Round 9 Cooperative Forecast projects a 13% growth in population and a 29% growth in employment between 2020 and 2045. The Cooperative Forecasting committee will be engaged to explore changes in the Baltimore region labor force commuter shed and/or shifts in population age structures in meeting labor force employment demands. The Technical Committee, using changes in labor force commuter shed and/or shifts in the components of the population, will be engaged to explore changes in travel behavior, choices, and patterns.

POTENTIAL PRODUCTS:

Demographic and Socio-economic trend analysis

Cooperative Forecast/Technical Committee Scenario Planning Exercise

FOCUS AREA: TRANSPORTATION MANAGEMENT OPERATION CORRIDOR ANALYSIS

ADD TO TASK: Data Development and Analysis

PURPOSE: Identify corridors suitable for Traffic Management Operations (TMO) strategies assessing 1) user accessibility and mobility changes, 2) system performance of Vehicle Hours of Congestion (delay), Vehicle Miles of Travel, and, queues, and 3) regional mobile source emissions.

The I-95 Express Toll Lanes (ETL) have been implemented and due to their success, Maximize2040 was amended to extend the north bound ETLs. Roadway pricing utilizing public and/or private funding has emerged as an option to increase roadway capacity in meeting regional performance goals.

The region has developed disaggregate micro-level travel analysis tools simulating each individual's daily activities and travel, including time of day, departure time, activity participation (time), mode, destination, joint travel of household members, and value of time and travel route (vehicle trajectories). The disaggregate tools are well suited to capture changes in person level activity and travel behavior and thus allowing us to measure user and system performance with the implementation of corridor TMO strategies.

Engage local planning partners in identifying corridors suitable for corridor TMO strategies. Develop a screening tool or decision tool to select the corridors using multiple criteria such as travel time index, performance measures at both corridor and system levels, travel demand changes, benefit measurements, and potential effectiveness of corridor TMO (pricing) strategies. Identify corridors for further analysis based on corridor screening tool or decision tool.

Conduct horizon year travel simulation for corridors identified for further analysis. Engage local planning partners in developing corridor input assumptions (system – number of lanes, limits, and connectivity to general purpose lanes and operation – price, vehicle/occupancy restrictions, and hours of operation). Simulate each individual's activities and travel using identified corridor input assumptions and measure changes in user accessibility and mobility and system performance measures.

POTENTIAL PRODUCTS:

Corridor Screening/Decision Tool

Input Generator for Corridor Analysis

Corridor scenario simulated DAP and travel routes and performance measures

FOCUS AREA: CHAPTER 30 SCORING/PRIORITY LETTER PROJECT ASSISTANCE

ADD TO TASK: Professional Consultant Services

PURPOSE: New State of Maryland statutory requirements were implemented in the 2017 legislative session directing the Maryland Department of Transportation to develop by January 1, 2018 a project-based scoring model for evaluating major highway and transit capacity projects over \$5 million in the Draft and Final CTP. The Law establishes nine goals and twenty-three measures in the law that each major transportation project shall be evaluated against in the project-based scoring model. Since State and Federal transportation sources together are firmly integrated and many projects are proposed on State roadways, the BRTB has included consultant service funding to assist local jurisdictions in the implementation of the Chapter 30 scoring system and in the development of project information for the Annual State Priority Letter process.

POTENTIAL TASKS:

- Develop scope and cost estimates for Regional Transportation Projects that are seeking State and Federal Transportation Funding per the requirements of Chapter 30 and Priority Letter process.

FOCUS AREA: ACCOMMODATING AND UTILIZING NEW OR EMERGING TRANSPORTATION TRENDS AND TECHNOLOGIES

ADD TO TASK: Professional Consultant Services

PURPOSE: Study and develop guidance on how to accommodate and utilize new or emerging transportation trends and technologies, e.g., ride-hailing, shared-mobility, transportation network companies (TNCs), electric vehicles, connected and autonomous vehicles, or combination of them to support regional and local transportation, growth, and environmental goals. There are mixed views about potential effects of these new/emerging transportation trends and technologies. In addition, increased use of these new technologies could have dramatic impacts of parking requirements and roadway footprint usage. Policy guidance will assist the region and local jurisdictions to accommodate and use the technologies to address current and future transportation issues.

POTENTIAL PRODUCT:

- Report detailing policy guidance to address new emerging transportation trends and technologies

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PROJECT: 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 BRTB. BMC will utilize transportation consultants to expand the activities funded in the UPWP and to provide services that are currently not available to the BRTB.

Consultants are typically utilized in various activities to enhance the decision-making ability of the region's transportation professionals and provide input to BMC staff.

In FY 2019, 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 potential activities:

INSITE Model Completion – Potential assistance during initial rollout of activity based travel demand model.

Travel Monitoring Program – Obtain portable and classified traffic and/or bicycle/pedestrian counts throughout the region for use in the travel demand model and for local traffic management purposes.

Chapter 30 Scoring/Priority Letter Project Assistance - • Develop scope and cost estimates for Regional Transportation Projects that are seeking State and Federal Transportation Funding per the requirements of Chapter 30 and Priority Letter process.

Accommodating and utilizing new or emerging transportation trends and technologies – Develop report detailing policy guidance to address new emerging transportation trends and technologies.

Training - Provide training to staff members of jurisdictions and partner agencies.

Household Travel Survey – complete Household Travel Survey.

PRODUCTS/MILESTONES	SCHEDULE
Consultant contracts	Throughout Fiscal Year
Memoranda/Reports	Throughout Fiscal Year

FY 2019 BUDGET: \$1,060,000

APPENDIX D

PUBLIC REVIEW PROCESS

PRESS RELEASE
PUBLIC COMMENTS – None Received



FOR IMMEDIATE RELEASE

CONTACT: Laura Van Wert, 410-732-9564

BRTB SEEKS PUBLIC COMMENTS FOR UPDATES TO THE FY 2019 BUDGET AND WORK PLAN

BALTIMORE, MD (February 21, 2018) – The Baltimore Regional Transportation Board (BRTB) seeks public comments on its proposed updated Budget & Work Program for Fiscal Year 2019 through Friday, **March 23, 2018**.

The BRTB is scheduled to vote on the proposed changes on Tuesday, April 24, 2018.

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

The UPWP includes both local and region-wide activities. The BRTB develops this list of regional transportation planning activities every two fiscal years. This addendum updates the funding tables for FY 2019 and identifies several new tasks.

The updated UPWP includes a total budget for FY 2019 of **\$7,517,700** that is funded through new allocations of federal transportation funding and projected carryover from FY 2018 to support the additional tasks as outlined below. New local and regional projects include:

- **Parole Town Center Transportation Master Plan** – Anne Arundel County will conduct a comprehensive assessment of the existing and future mobility needs in the Town Center area.
- **Columbia Gateway Transportation Improvement Implementation Strategy** – Howard County will conduct a study for the Columbia Gateway, the 8 million squared-feet complex of commercial and industrial space. The complex is an important and critical driver of economic activity in Howard and Anne Arundel counties, as well as the region. It is starting to experience additional development pressure as restrictive covenants on properties expire.
- **Kent Island Cox Creek Connector Study** – Residents and visitors of Kent Island continue to experience increased traffic on the island, particularly during the summer months when beach-bound vehicles increase along the US 50/301 Bay Bridge Corridor. The majority of the congestion experienced on the island is attributed to increasing traffic volumes on the Bay Bridge, although Kent Island has experienced some growth caused by new residential areas, and retail and business-development. This project is to

take the concepts from the Kent Island Transportation Plan and refine them into preferred alternatives and initial design.

The BRTB also proposes adding several new focus areas for BMC staff to pursue. They include:

- Assisting local jurisdictions in preparing project information for the Chapter 30 scoring and Priority Letter submittals;
- Studying and developing guidance on how to accommodate and utilize new or emerging transportation trends and technologies. Examples include: ride-hailing, shared-mobility, electric vehicles, connected and autonomous vehicles, or combination of them to support regional and local transportation, growth, and environmental goals;
- Performing forecasted population and employment scenario analysis. Current forecasts predict shifts in labor exchange between the Baltimore and Washington regions and greater reliance on labor force markets outside of the former. This analysis will explore how changing labor market locations impact planned transportation improvements and what shifts in the local labor market could take place.

Download updated budget tables and task descriptions for new subarea tasks in FY 2019 using the link below, or view a print copy by visiting the [Regional Information Center \(RIC\)](#) at BMC, located at 1500 Whetstone Way, Suite 300, Baltimore, MD 21230.

[Download the FY2019 UPWP](#)