

BALTIMORE REGION
FY 2014 UNIFIED PLANNING WORK PROGRAM
FOR TRANSPORTATION PLANNING

APRIL 23, 2013

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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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 FY 2014 Unified Program Working Program.

**BALTIMORE REGION
FY 2014 UNIFIED PLANNING WORK PROGRAM
FOR TRANSPORTATION PLANNING**

**The Honorable David Craig
Chairman
Baltimore Regional Transportation Board**

**Todd R. Lang
Director
Transportation Planning
Baltimore Metropolitan Council**

April 23, 2013

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

**Baltimore Metropolitan Council
Offices @ McHenry Row
1500 Whetstone Way, Suite 300
Baltimore, Maryland 21230-4767**

BALTIMORE REGIONAL TRANSPORTATION BOARD
Members followed by Empowered Representatives

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Mr. Jon L. Arason, Director, Department of Planning & Zoning

The Honorable Laura Neuman, County Executive, Anne Arundel County
Mr. Harvey Gold, Senior Transportation Planner, Office of Planning & Zoning

The Honorable Stephanie Rawlings-Blake, Mayor, City of Baltimore
Mr. William Hwang, Deputy Director, Department of Transportation

The Honorable Kevin Kamenetz, County Executive, Baltimore County
Mr. Emery Hines, Manager of Transportation Planning, Department of Public Works

The Honorable Haven Shoemaker, Board of Commissioners, Carroll County
Mr. Philip Hager, Director, Department of Land Use, Planning & Development

The Honorable David R. Craig, County Executive, Harford County – BRTB Chair
Mr. Anthony McClune, Assistant Director, Department of Planning & Zoning

The Honorable Ken Ulman, County Executive, Howard County
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Ms. Diane Franks, Manager, Air Quality Planning Program

The Honorable Richard E. Hall, Secretary, Maryland Department of Planning *
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Mr. Ralign T. Wells, Administrator, Maryland Transit Administration *
Mr. Arnold "Pat" Keller, Deputy Chief Administrative Officer, Statewide Service Development

* Denotes non-voting members

**BALTIMORE REGIONAL TRANSPORTATION BOARD
RESOLUTION #13-21**

**ENDORISING THE FISCAL YEAR 2014
UNIFIED PLANNING WORK PROGRAM AND BUDGET**

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

WHEREAS, the Baltimore Regional Transportation Board was established to manage and provide direction to the Unified Planning Work Program; and

WHEREAS, Title 23 of the U.S. Code, as amended by the 1973 Federal Aid Highway Act, and Section 8 of the Urban Mass Transportation Act of 1964, as amended, provide funds to assist in the financing of studies and other transportation planning activities; and

WHEREAS, the 1990 Clean Air Act Amendments, the Americans with Disabilities Act, and the Moving Ahead for Progress in the 21st Century Act have established regulations and procedures which require a Metropolitan Planning Organization to develop plans and programs which will support: 1) the economic vitality of the metropolitan area; 2) increase the safety of the transportation system for motorized and non-motorized users; 3) increase security for transportation system users; 4) increase the accessibility and mobility options available to people and for freight; 5) protect and enhance the environment, promote energy conservation, improve quality of life, and promote consistency between transportation improvements and state and local planned growth and economic development patterns; 6) enhance the integration and connectivity of the transportation system, across and between modes; 7) promote efficient system management and operation; and 8) emphasize preservation of the existing transportation system; and

WHEREAS, consistent with the Final Rule for Metropolitan Transportation Planning, the Baltimore Regional Transportation Board provided a 30-day (February 15 to March 18, 2013) public participation opportunity during the preparation of the Unified Planning Work Program and Budget; and

WHEREAS, the Baltimore Regional Transportation Board has prepared a work program and budget for Fiscal Year 2014 in compliance with applicable federal programs and regulations; and

NOW, THEREFORE, BE IT RESOLVED that the Baltimore Regional Transportation Board endorses the Fiscal Year 2014 Unified Planning Work Program and Budget; approves its submission to the appropriate federal agencies; and authorizes the Baltimore Metropolitan Council to enter into contractual arrangements with the Maryland Department of Transportation and the local governmental recipients of federal metropolitan planning funds to carry out the work outlined in the Fiscal Year 2014 Unified Planning Work Program.

I HEREBY CERTIFY that the Baltimore Regional Transportation Board as the Metropolitan Planning Organization for the Baltimore region approved the aforementioned resolution at its April 23, 2013 meeting.

April 23, 2013

Date



Anthony McClune, Chairman
Baltimore Regional Transportation Board

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INTRODUCTION

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INTRODUCTION

Unified Planning Work Program Development Process

The Fiscal Year (FY) 2014 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. 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 necessary 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 2014 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 2011, the BRTB approved *Plan It 2035*, 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 this UPWP includes studies and programs to that end.

The UPWP is funded through an 80 percent planning grant provided by FHWA and FTA and a 20 percent match provided by 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 2014 transportation planning activities for the Baltimore region is \$6,606,080.

The UPWP is developed annually beginning in December and approved in March or April, and is the result of continued cooperation among State (specifically transportation, air quality and planning agencies), local and regional entities. The FY 2014 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. UPWP funds are also "passed through" to local jurisdiction members of the BRTB.

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, and Howard 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-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 with 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 non-attainment 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 Moving Ahead for Progress in the 21st Century Act (P.L. 112-141) (MAP-21), the FY 2014 UPWP was released to the public for a 30-day review and comment opportunity. Full public access, disclosure, and modification based on the reasonableness of the public response should expand the comprehensiveness and user-friendliness of the final FY 2014 UPWP. Information on the public review process including outreach as well as a summary of public comments and BRTB responses is included in Appendix C of this document.

Metropolitan Transportation Planning

Overview

The 1991 enactment of the Intermodal Surface Transportation Efficiency Act (ISTEA) and the 1998 federal transportation initiative known as the Transportation Equity Act for the 21st Century (TEA-21) established a new federal focus for transportation planning. The most recent federal transportation legislative program, MAP-21, was signed into law by President Obama on July 6, 2012—preserves the commitment to the metropolitan transportation planning process established in the previous noted federal initiatives. On February 14, 2007, the U.S. Department of Transportation (U.S. DOT) issued the latest regulations regarding metropolitan planning (based upon the previous legislation-Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users, or SAFETEA-LU, 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.

FIGURE 1
THE BALTIMORE REGION

**BALTIMORE REGION UPWP
FY 2014 UNIFIED PLANNING WORK PROGRAM**



Performance-based Approach

MAP-21 calls for metropolitan planning organizations, public transportation providers, and states to establish and use a performance-based approach to transportation decision making to support seven national goals. The U.S. DOT must establish performance measures related to seven goal areas for the federal-aid highway system by April, 2014. The goal areas include: safety, infrastructure, congestion reduction, system reliability, freight movement and economic vitality, environmental sustainability, and reduced project delivery delays. The goal areas for public transportation address transit safety and transit asset management.

The states then have a year (April 2015) to establish performance targets in support of those measures; and the MPOs subsequently has 180 days (October 2015) to establish performance targets coordinated with those of the states and public transportation providers. After these targets are set, the metropolitan transportation plan and the transportation improvement program (TIP) are required to include a description of the performance measures and targets used in assessing the performance of the transportation system. The metropolitan transportation plan will also have to include a system performance report evaluating the condition and performance of the transportation system with respect to the established targets. The TIP is also required to include a description of the anticipated effect of the TIP toward achieving the performance targets set in the plan.

Federal Planning Factors

MAP-21 requires each state to “carry out a statewide transportation planning process that provides for consideration and implementation of projects, strategies, and services that will—

1. support the economic vitality of the United States, the States, nonmetropolitan areas, and metropolitan areas, especially by enabling global competitiveness, productivity, and efficiency
2. increase the safety of the transportation system for motorized and non-motorized users
3. increase the security of the transportation system for motorized and non-motorized users
4. increase the accessibility and mobility of people and freight
5. protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns
6. enhance the integration and connectivity of the transportation system, across and between modes throughout the State, for people and freight
7. promote efficient system management and operation
8. emphasize the preservation of the existing transportation system.”

These planning factors provide a strategic framework that informs all of the metropolitan transportation planning activities as well as the regional UPWP tasks that the BRTB undertakes each year.

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 an 11-member policy board consisting of the cities of Annapolis and Baltimore; the counties of Anne Arundel, Baltimore, Carroll, Harford, and Howard; and MDOT, the Maryland Department of the Environment (MDE), the Maryland Department of Planning (MDP), and the Maryland Transit Administration (MTA). 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. 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. **Table 1** outlines the various parties responsible for the primary planning and programming activities 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 Baltimore MPO and develop an annual 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 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 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 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
MPO Certification	Formal MOA between BRTB, MDOT and 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

A network of committees and subcommittees was formulated to focus on specific technical and policy areas at the direction of the BRTB (**Figure 2**). 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 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, 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 non-federal 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. The Maryland Department of Planning provides a direct linkage between transportation planning decisions and statewide growth management and land planning strategies.

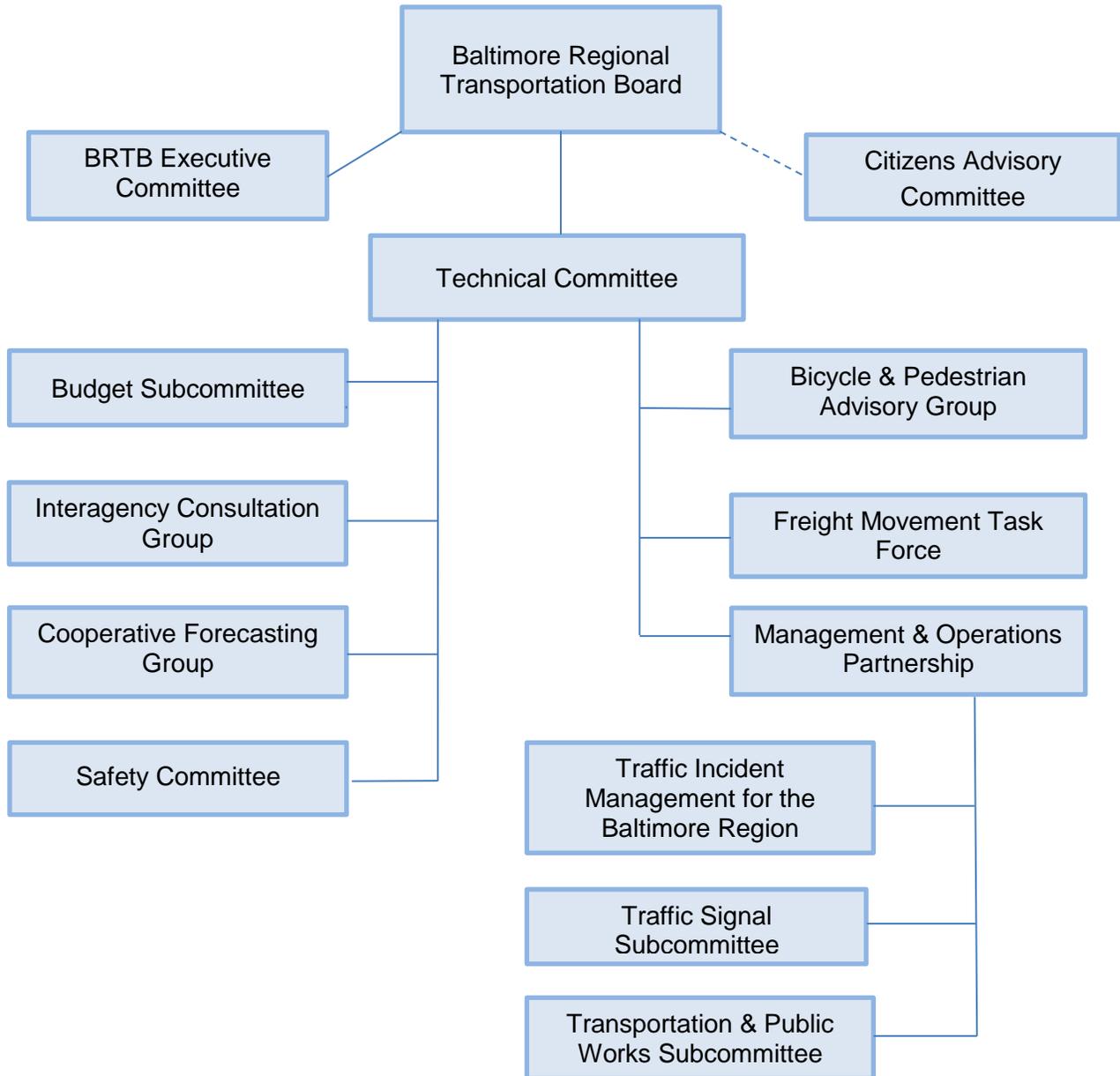
MTA operates a comprehensive transit system throughout the Baltimore and Washington metropolitan areas. The MTA works closely with the BRTB on planning new transit lines in the Baltimore region.

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.

FIGURE 2

BALTIMORE REGIONAL TRANSPORTATION BOARD
COMMITTEE STRUCTURE



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.

2012 Federal Certification Review

The most recent certification review took place from June 26-28, 2012. 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 highlighted several noteworthy practices in the BRTB planning process (e.g., development of a performance-based long-range transportation plan, definition and documentation of the regional Congestion Management Process (CMP), linkage of transportation planning with the National Environmental Policy Act (NEPA) requirements, incorporation of freight planning into the transportation planning process, etc.).

The team also identified areas in need of improvement. These include: (1) establishing performance targets, (2) including work completed and percentage of federal funds spent in biannual UPWP submittals, (3) improving the public involvement process (specifically, better explanation of projects’ linkage to the state Consolidated Transportation Program (CTP), increased engagement with low-income and minority residents, and better incorporation of social media into the decision making process), (4) improving the Title VI (Under the Civil Rights Act of 1964, no person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the of, or be subjected to discrimination under any program or activity receiving Federal financial assistance) program and documentation, (5) adopting state DBE program methodology, (6) increasing participation of locally operated transit system agencies in regional planning, (7) monitoring the effectiveness of CMP strategies, and (8) working with the MDE to develop mobile emission budgets and emission reduction strategies in anticipation of potential future 8-hour ozone or PM2.5 standards. The BRTB, with the support of the BMC staff, has begun to address the certification team’s recommendations.

Additional Planning Studies

See Appendix C of this document for more information on additional planning studies that are supported by state or local funding only and that will provide valuable information in support of the core regional planning efforts.

UPWP Priorities: Regional Transportation Goals / National Performance-Based Goals

The tasks delineated in the UPWP are linked to the region’s transportation goals, as adopted by the BRTB in developing *Plan It 2035*, the current long-range plan. These tasks are also driven by the national performance-based goals identified in MAP-21.

The region’s transportation goals as adopted in *Plan It 2035* are:

1. Improve Transportation System Safety
2. Preserve the Existing Infrastructure
3. Improve Accessibility
4. Increase Mobility
5. Preserve the Environment
6. Improve Transportation System Security
7. Promote Prosperity and Economic Opportunity
8. Foster Participation and Cooperation among All Stakeholder Groups

Chapter 4 of *Plan It 2035* provides additional information on these goals and their supporting strategies (see <http://www.baltometro.org/PlanIt2035/planit2035ch4.pdf>). These goals and strategies are the means by which the Baltimore region can make sound, responsible investments in transportation systems. They 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 assoc.)							
	1	2	3	4	5	6	7	8
UPWP Management								▪
Public Participation and Community Outreach	▪	▪	▪	▪	▪	▪	▪	✓
Professional Consultant Services (these could involve any or all goals, depending on scope)								
Long-Range Planning	✓	✓	✓	✓	✓	✓	✓	✓
Congestion Management Process				✓	▪			▪
Operations Planning	▪			✓		✓		▪
Safety Planning and Analysis	✓							▪
Travel Monitoring Program			▪	✓				
Bicycle and Pedestrian Planning	✓	▪	✓		▪			▪
Freight Mobility Planning	▪	▪		✓		▪	✓	▪

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UPWP Tasks	Regional Goals (✓ = primary association; ▪ = peripheral assoc.)							
	1	2	3	4	5	6	7	8
Transit Coordination	▪	▪	✓	▪		▪		▪
Human Service Transportation Coordination			✓	▪		▪		✓
Emergency Preparedness Planning				▪		✓		▪
Transportation Equity Planning			✓				▪	✓
Development Monitoring					▪		✓	
Cooperative Forecasting Process							✓	✓
US Census/American Community Survey Monitoring & Analysis							✓	
Geographic information Systems Activities	▪	▪	▪	▪	▪	▪	▪	▪
Database Maintenance	✓			✓				✓
Integrating Transportation and Land Use Planning		▪	✓		✓		✓	▪
Analysis of Trends and Policy Issues	✓		✓	✓	▪		▪	
Opportunity Planning			✓				▪	✓
Travel Demand Modeling			✓	✓			▪	
Transportation Improvement Program	✓	✓	✓	✓	✓	✓	✓	✓
Anne Arundel County: Subarea Analysis	✓			✓			▪	
Baltimore City: Subarea Analysis	✓		✓	✓			▪	
Baltimore County: Subarea Analysis			✓	✓	▪			
Howard County: Subarea Analysis	✓		✓	✓				
Technical Analysis in Support of State Initiatives			✓	✓				▪
Mobile Emissions Planning					✓			▪
Environmental Impact Mitigation					✓			▪
Air Quality Conformity Analysis					✓			▪

National Performance-Based Goals

MAP-21, in its emphasis on performance-based decision making and accountability, states that “it is in the interest of the United States to focus the Federal-aid highway program on the following national goals:

1. Safety: To achieve a significant reduction in traffic fatalities and serious injuries on all public roads.
2. Infrastructure Condition: To maintain the highway infrastructure asset system in a state of good repair.

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3. Congestion Reduction: To achieve a significant reduction in congestion on the National Highway System.
4. System Reliability: To improve the efficiency of the surface transportation system.
5. Freight Movement and Economic Vitality: To improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development.
6. Environmental Sustainability: To enhance the performance of the transportation system while protecting and enhancing the natural environment.
7. Reduced Project Delivery Delays: To reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies' work practices."

Table 3 below shows how the UPWP tasks relate to these national goals:

TABLE 3

UPWP Tasks	National Performance Goals (✓ = primary association; ▪ = periph. assoc.)						
	1	2	3	4	5	6	7
UPWP Management							▪
Public Participation and Community Outreach	▪	▪	▪	▪	▪	▪	▪
Professional Consultant Services (these could involve any or all goals, depending on scope)							
Long-Range Planning	✓	✓	✓	✓	✓	✓	▪
Congestion Management Process			✓	✓			
Operations Planning			✓	✓			▪
Safety Planning and Analysis	✓						
Travel Monitoring Program			✓	✓			
Bicycle and Pedestrian Planning	✓	▪	▪	✓		▪	▪
Freight Mobility Planning	▪	▪	▪	✓	✓		▪
Transit Coordination	▪	▪	✓	✓		▪	▪
Human Service Transportation Coordination				✓			▪
Emergency Preparedness Planning		✓		✓			▪
Transportation Equity Planning				▪	✓		
Development Monitoring					✓	✓	
Cooperative Forecasting Process					✓		
Census/American Community Survey Monitoring & Analysis					✓		

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UPWP Tasks	National Performance Goals (✓ = primary association; ▪ = periph. assoc.)						
	1	2	3	4	5	6	7
Geographic information Systems Activities	▪	▪	▪	▪	▪	▪	▪
Database Maintenance				▪			✓
Integrating Transportation and Land Use Planning			▪	▪	✓	✓	
Analysis of Trends and Policy Issues	✓		✓	✓		▪	
Opportunity Planning				✓	✓	▪	▪
Travel Demand Modeling				✓	▪		
Transportation Improvement Program	✓	✓	✓	✓	✓	✓	▪
Anne Arundel County: Subarea Analysis	✓		✓	✓			
Baltimore City: Subarea Analysis	✓				✓		
Baltimore County: Subarea Analysis			✓		✓	▪	
Howard County: Subarea Analysis	✓		✓	✓			
Technical Analysis in Support of State Initiatives	✓	▪	✓	✓	▪	▪	✓
Mobile Emissions Planning			▪	▪		✓	
Environmental Impact Mitigation						✓	▪
Air Quality Conformity Analysis						✓	

UPWP Priorities: Improving the Regional Process

The FY 2014 UPWP includes several priority work tasks whose ultimate objective is to improve the analytical and consensus building capabilities of the BRTB. The UPWP details the “prescriptive” planning activities that must be addressed—such as Public Participation, the Transportation Improvement Program, and a Congestion Management Process—to maintain a viable “3-C” planning process and meet federal certification requirements. The UPWP also describes the various tasks designed to better inform the decision-making process of the region’s long-range plan and the TIP as well as the technical and policy planning activities. This work plan has also been prepared to ensure efficient levels of support (financial and political) and create an atmosphere of trust and cooperation among the wide array of stakeholders to be tasked to assist in various work activities undertaken by the BRTB. In addition to the activities directly involving the BRTB, a number of major transportation-related studies are under way throughout the region detailed later in this Prospectus.

Improving Transportation Safety

One of the region’s guiding principles is to develop a transportation investment strategy that improves vehicular, bicycle, and pedestrian safety. BRTB members and BMC staff were actively involved in the development of the 2005-2010 and 2011-2015 Strategic Highway Safety Plans

(SHSPs) that have served as blueprints to reduce crashes, injuries, and fatalities for the traveling public.

In FY 2008 and 2009, the BRTB sponsored the creation of a regional safety media campaign that targeted distracted driving among young drivers in the metropolitan region. Since FY 2010, BMC in partnership with the Maryland Highway Safety Office (MHSO) has implemented the StreetSmart bicycle and pedestrian safety campaign to reduce the number of crashes and fatalities involving pedestrians and bicyclists in the region.

In FY 2014, BMC staff will continue to expand this public outreach initiative to incorporate other partnerships and communication opportunities. Throughout FY 2014, BMC staff will work with Community Traffic Safety Program (CTSP) coordinators as well as state and federal representatives to educate and train decision makers on system, driver and vehicle safety improvement strategies.

Improving the Travel Demand Model

The ability to understand existing and future travel patterns and behavior is essential to the transportation planning effort in the Baltimore region. An important element of these efforts is the BMC staff's maintenance of the Baltimore Region Travel Demand Model. The FY 2014 UPWP will continue to support efforts to enhance transportation planning methods and analysis capabilities as we focus on regional travel demand in an attempt to determine the existing transportation network's ability to meet regional mobility needs.

As quality of life needs and issues continue to be unpredictable, the influence is significant on regional travel behavior patterns. In an attempt to understand and plan, where possible, for the challenges imposed by the ever-changing marketplace, BMC staff will continue to dialogue with nearby colleagues at the National Capital Transportation Planning Board (TPB) and the Wilmington Area Planning Council (WILMAPCO). This will include preparing a comprehensive list of inter-state transportation problems and opportunities, both current and future, that limits or enhance the interchangeability of living in one metropolitan region and working in another.

As in previous work programs, the UPWP directs fiscal resources to upgrade the analytical tools and capacities of the BRTB and its technical support staff to meet public policy evaluation needs. This UPWP will continue to support BMC's traditional trip-based travel demand model (trip generation, trip distribution, mode choice, and trip assignment) and continue the phased transition to activity-based models. Staff have incorporated the 2010 Census Transportation Analysis Zones and spatially enhanced the transportation networks in preparation for a 2010 validation effort, taking advantage of Census Transportation Planning Package (CTPP) data with an expected release summer of 2013. A model update working group has developed a multi-year "blueprint" for developing and enhancing the region's technical tools. The plan's identified enhancements were shared with BRTB subcommittees, and an activity-based model was selected for development. A consultant team was retained to begin the multi-year project of designing,

estimating, calibrating, and validating a disaggregate travel model. The ability of the region's current and future technical modeling tools to replicate revealed behavior and provide analysis of regional policy questions is valuable to the BRTB for decision-making purposes.

Accounting for Socioeconomic Factors

A key part of understanding future travel patterns and behavior is the use of a solid socioeconomic dataset. Based on newly defined Urbanized Area Boundaries in the 2010 Census, BMC staff will work with state agencies and local planners in Queen Anne's County to ensure that the entire Baltimore Urbanized Area is recognized and considered in project planning. BMC staff will develop GIS and map resources that will assist urban area delineation and functional classification activities conducted by local and state agencies.

BMC staff will continue to work with the Cooperative Forecasting Group (CFG) in the Baltimore area and coordinate with the TPB and WILMAPCO to jointly develop forecasts based on the interaction of the regions. MDP is also a partner in this endeavor.

BMC staff, with the approval of the CFG, will develop new employment projections based on staff research on estimating and forecasting employment data so that there is a consistent employment forecast dataset and accompanying long-range employment assumptions. These new employment forecasts will become a part of a new Round 8-A Cooperative Forecasts. The Round 8-A Cooperative Forecasts for population, households, and employment will be completed in the coming year.

Addressing Air Quality Standards / Environmental Impact Mitigation

In an attempt to ensure timely attainment of air quality standards and protect public health, the BRTB continues to view clean air planning as a major priority. As a serious non-attainment area under the 8-hour ozone standard, the Baltimore region must complete additional requirements to show progress toward attainment or face federally-imposed penalty measures. EPA has issued a clean data determination for the Baltimore region as monitored data show the region complies with the federal fine particulate matter standard. The region has prepared a redesignation request and maintenance plan to submit to EPA. The 1990 amendments to the Clean Air Act mandated the implementation of specific state actions that reduce vehicular emissions through technological enhancements and expanded vehicle emissions inspection programs as measures to offset growth related to future vehicle emissions. Moreover, the BRTB is required by federal mandate to demonstrate that implementation of the region's proposed transportation plans and programs conform to the applicable State Implementation Plan (SIP).

Under a cooperative MOU between the Maryland Departments of the Environment and Transportation, the BRTB established the ICG in 1996 to assess the conformity requirement of the metropolitan transportation planning process and to evaluate the development of regional transportation plans and programs with the preparation of mobile source emission budgets included in the SIP. Included in *Plan It 2035* is a set of transportation-related control strategies

that are recommended for implementation by 2035 to sustain the objectives of the SIP. The BRTB will continue to evaluate potentially endorsable transportation control measures for the Baltimore non-attainment area, including a BRTB-sponsored initiative of a competitive selection process for Congestion Mitigation and Air Quality Improvement Program (CMAQ) projects in the Baltimore region.

Through the UPWP, the BRTB is reaffirming its support of Clean Air Partners, a non-profit, public-private partnership committed to improving air quality in the metropolitan Baltimore and Washington regions. The Partners raises public awareness of air quality issues and promotes voluntary actions by individuals and organizations to reduce emissions. More information on this partnership can be found in the section describing the Mobile Emissions Planning task.

In keeping with the environmental impact mitigation regulations for metropolitan planning, the BRTB will continue environmental coordination with local and state regulatory agencies and will use resource inventories and conservation plans to evaluate environmental resource indicators and performance measures in the implementation of *Plan It 2035*. *Plan It 2035* laid out additional strategies for achieving the goal of environmental preservation, one of which is investing in transportation programs and projects that reduce surface runoff and protect water resources. The implementation of this strategy will be one focus of environmental coordination activities.

Transportation Equity Planning

Related to the priority of public participation in the planning process, the issue of equity planning has gained heightened awareness in the transportation field. Equity is a general term that considers the distributive “fairness” of decisions, projects, and services. A subset of the issue is environmental justice, which considers how decisions specifically affect minority and low-income individuals. Since FY 2002, the BRTB has supported efforts to conduct technical assessment of projects and programs included in all plans and programs as to their ability to balance the region’s transportation network in relation to economic opportunities. More information on past and planned efforts can be found in the section describing the Transportation Equity Planning task.

Exploring the Land Use / Transportation Connection

The BRTB has also directed the BMC staff to continue work with the region’s local jurisdiction Planning Directors and various state agencies to explore alternative land-use configurations and scenarios that strengthen the coordination between land use and transportation while promoting transportation and air quality benefits. This activity utilizes the Production, Exchange and Consumption Allocation System (PECAS) model to assess land value, employment and other demographic variables based on changes in land use (consumption) and/or changes to the transportation network. BMC staff will continue to work to integrate PECAS output with various regional travel scenarios to assess a wide range of system performance measures. These outcomes will enhance efforts to evaluate the potential impact growth scenarios will have on various transportation investment strategies.

Integrating Regional Sustainable Planning Grant Work with Transportation Planning

The BRTB will continue to monitor and react to new initiatives through the Federal Partnership for Sustainable Communities—consisting of U.S. DOT, U.S. Department of Housing and Urban Development (HUD), and EPA. This will include exploring ways to further incorporate the six livability principles into the UPWP and to integrate sustainable community planning with transportation planning. This will include working with the BMC-led Consortium that received one of the Regional Sustainable Planning grants.

Improving System Operations / Congestion Management Process

Efforts to develop a comprehensive approach to transportation planning in the Baltimore region include opportunities to employ technology and enhanced coordination as a means of adding capacity to the region's transportation network. This work includes the continued support of various committees that focus on enhancing regional management and operations coordination in an attempt to improve safety while also improving overall system efficiency. Issues such as inter-jurisdictional signal coordination; traffic incident management; and roadway, bicycle, and pedestrian safety are major regional priorities.

Congestion management work tasks will also continue, as the region looks to detail strategies and solutions to congestion problems throughout the metropolitan area. As part of the ongoing effort to monitor the effectiveness of the regional CMP, BMC staff will continue to gather traffic counts and highway speeds/travel time data, under the Travel Monitoring Program. These internal datasets will be combined with outside sources, such as the Vehicle Probe Project Performance Measure Suite (I-95 Corridor Coalition/University of Maryland), to develop quarterly regional bottleneck reports. The final report will serve as a systematic guide for monitoring congestion that provides information on transportation system performance and identifies opportunities and alternatives for alleviating congestion and enhancing mobility.

New corridors will be selected based on performance measures and congestion density (including adjacent congested segments and/or intersections) and predominant travel patterns as well as group consensus and professional judgment. Data and performance measures along these corridors will be shared with state and local operators and BRTB subcommittees such as traffic signal, freight, and safety to coordinate improvements and programs.

Addressing Freight Needs

The UPWP also includes continued support toward the understanding of regional freight flows, corridors, and facilities. The BRTB will continue to widen its awareness and identification of freight movement issues through a planned regional freight-related database as well as through the activities of the regional Freight Movement Task Force. These efforts will build on various work tasks completed in previous years.

Work on the regional freight analysis task will be an important ongoing initiative. This analysis work is intended to help the region understand how the movement of freight contributes to overall economic well-being and to identify transportation improvements to promote continued economic development opportunities.

Addressing Regional Transportation Security Concerns

In light of the events of September 11, 2001, as well as requirements and policies established in SAFETEA-LU and reiterated in MAP-21, the BRTB, like many of its counterparts, has initiated a wide array of transportation security-related planning activities. Staff has participated in the Baltimore Urban Area Homeland Security Work Group (UAWG) since FY 2004. In addition, the BRTB supports the Transportation & Public Works Subcommittee, which brings local and state stakeholders together to address homeland security / emergency preparedness issues.

PROGRAM MANAGEMENT & COORDINATION

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PROJECT: 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 FY 2013 staff coordinated with local jurisdictions to collect products and billing information. Monthly Progress Reports and Invoices were submitted to MDOT. Agendas and minutes for the BRTB as well as all standing committees were made available to the public. The Executive Committee provided guidance on BRTB agendas as well as direction on TIP-related Administrative Modifications. In January the BRTB and the Technical Committee (TC) held a Retreat to plan for the upcoming UPWP work program and assess progress in the current year. A schedule was endorsed to complete the work program with an opportunity for the public to review.

In FY 2014, 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 quarterly progress reports. Included within this budget category are non-staff expenses that support transportation planning functions. Typical expenses include: 1) staff training and education, and 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; 7) fuel expenses to support the congestion monitoring program; and 8) annual computer maintenance agreements for BMC and local/state participants.

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 prepare the detailed tasks associated with the development of the FY 2014 UPWP grant application and associated contracts with the member agencies of BRTB. The FY 2015 UPWP and budget will be scheduled for approval in Spring, 2014.

FY 2014 PERFORMANCE OBJECTIVES:

1. Manage the multi-year program of UPWP initiatives.
2. Prepare and process monthly progress reports and invoices associated with the work performed under the UPWP for the local jurisdictions and BMC staff.
3. Prepare the FY 2014 UPWP grant application and associated contracts in conjunction with the BRTB and TC and pertinent federal, state, and local agencies.
4. Provide and participate in seminars, workshops, and classroom-type courses designed to develop technical skills and broader perspectives on transportation-related subjects.
5. 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 CFR Part 23.
6. Promote Federal Transit Administration's policy to encourage private enterprise participation in the planning and provision of transportation services.
7. Provide support activity to the BRTB, TC, Interagency Consultation Group, Citizens Advisory Committee, Bicycle & Pedestrian Advisory Group, Freight Movement Task Force, Cooperative Forecasting Group, etc., including the preparation of meeting notices, minutes, agendas, mailings, and reports on issues of special committee interest.
8. Coordinate UPWP funded planning initiatives with non-UPWP funded transportation planning efforts of state and local jurisdictions of the Baltimore region.

PRODUCTS/MILESTONES	SCHEDULE
Minutes, resolutions and special reports	Throughout Fiscal Year
Quarterly progress reports, invoices, and financial reports	Throughout Fiscal Year
FY 2014 UPWP amendments	Throughout Fiscal Year
FY 2015 UPWP and budget	3 rd Quarter
FY 2015 UPWP budget development and local contracts	4 th Quarter

BALTIMORE REGION UPWP
FY 2014 UNIFIED PLANNING WORK PROGRAM

PARTICIPANTS: Baltimore Metropolitan Council, City of Annapolis, Baltimore City, and Anne Arundel, Baltimore, Carroll, Harford, and Howard counties.

<u>BUDGET:</u>	Baltimore Metropolitan Council	\$565,000
	City of Annapolis	10,000
	Baltimore City	15,000
	Anne Arundel County	15,000
	Baltimore County	15,000
	Carroll County	15,000
	Harford County	15,000
	Howard County	<u>15,000</u>
	TOTAL	\$665,000
FHWA Share –	\$399,000	
FTA Share –	\$133,000	
MDOT Share –	\$56,500	
Local Share –	\$76,500	

PROJECT: PUBLIC PARTICIPATION AND COMMUNITY OUTREACH

PURPOSE: To allow both individuals and groups opportunities to participate in the regional transportation planning process. Public participation in the planning process is essential 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 FY 2013, staff informed and engaged the public in a variety of ways. A number of relevant performance measures include: over a dozen comment periods and public meetings at BMC and in communities throughout the region, over a dozen press releases were sent to a mailing list of over 600 subscribers, as well as local media outlets throughout the region, some 2 dozen e-newsletters were sent to e-mail list of over 7,500 contacts, and our social media reach has grown to over 1,500 followers on Facebook and Twitter.

In addition, staff has accomplishing the following: held monthly meetings of the CAC and two CAC subcommittees - Policy and Legislation and Public Involvement, initiated the first CAC Brown Bag event on the topic of aging, updated the *Public Involvement Plan (PIP)*, released a survey regarding public participation practices and collected responses online and at community outreach events in some low-income/minority communities, conducted outreach at events around the region, with support from the CAC, in an effort to reach a widespread audience, reached out to area organizations and interested parties throughout the year, worked with partners at U.S. DOT to develop and host training on Title VI and Environmental Justice for agency staff and members of the public, and also worked on site improvements, clean-up of outdated information, and worked with a consultant to update the site's content management system.

Throughout FY 2014, staff will continue to support efforts to incorporate greater public participation in the decision-making process. An array of strategies will be used to educate the public as well as solicit more participation in the regional transportation planning process. Ongoing efforts such as outreach to stakeholder groups, CAC meetings held throughout the region, and Brown Bag events will provide opportunities to garner citizen participation.

The Public Involvement Coordinator will also continue to work with other staff to expand outreach and engagement to low-income and minority communities. In addition, staff will

continue to coordinate on specific outreach campaigns such as Street Smart, Clean Commute Initiative, Bike to Work Day, and The Opportunity Collaborative.

FY 2014 PERFORMANCE OBJECTIVES:

1. Provide opportunity for public comment on agenda and report on comments and activities by Public Involvement Coordinator.
2. Public comment period and public meetings for the FY 2015 UPWP.
3. TIP and TIP Amendments - Public comment period and public meeting(s).
4. Updates to Public Participation Plan Limited English Proficiency Plan, and Title VI Plan (as needed).

PRODUCTS/MILESTONES	SCHEDULE
CAC Meetings	Monthly (or as needed)
Press releases	Throughout Fiscal Year
<i>B'More Involved</i> and other e-newsletters	Throughout Fiscal Year
Social Media Marketing and Web-based surveys	Throughout Fiscal Year
Conduct outreach and participation at events	Throughout Fiscal Year
Maintain website and, when possible, add new visualization tools	Throughout Fiscal Year

PARTICIPANT: Baltimore Metropolitan Council

BUDGET: \$150,000

FHWA Share – \$90,000
 FTA Share – \$30,000
 MDOT Share – \$15,000
 Local Share – \$15,000

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.

In recent years, consultants were utilized in various activities; these included: collection of traffic count data; review and application of the regional land use model; continued integration of environmental impact mitigation in the planning process; an update to the Access 2000 study; a study to assess freight impacts in a localized area; and an initial look at activity based modeling by assessing the development of synthetic population. Comments and recommendations from these consultants' activities enhance the decision-making ability of the region's transportation professionals and provide input to BMC staff.

During FY 2013, there were two contract extensions from FY 2013, including: an estimation of household and person level control variables for the Travel Demand Model and the Baltimore Region Evacuation Traffic Management Support Functions project. A new contract was signed for traffic counts. Additionally, another new contract was signed to allow for on-call services related to freight and transit planning activities.

In FY 2014, the continued use of consultant services will be employed. Consultant services will be used but not limited to the following activities:

Model Development – Utilize technical assistance to allow for improvements to the regional travel demand model.

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

Regional Transit Analysis – Follow-up studies to FY 2013 activities as directed by the BRTB.

Regional Freight Analysis – Follow-up studies to FY 2013 activities as directed by the BRTB.

FY 2014 PERFORMANCE OBJECTIVES:

1. Prepare "Requests for Proposals" as needed.
2. Participate in review of technical consultant proposals as needed.
3. Review and comment on products for consistency with project objectives.

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

PARTICIPANTS: Baltimore Metropolitan Council, Consultants

BUDGET: **\$745,000**

FHWA Share – \$447,000
FTA Share – \$149,000
MDOT Share – \$74,500
Local Share – \$74,500

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LONG-RANGE TRANSPORTATION PLANNING - SYSTEM LEVEL

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TASK: LONG-RANGE TRANSPORTATION PLANNING

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

FY 2013 Activities for *Plan It 2035* - BMC staff worked with staff from the Maryland Department of Transportation (MDOT), the Maryland State Highway Administration (SHA), and the Maryland Transit Administration (MTA) to gather data relative to the performance measures adopted in *Plan It 2035*, the region's current long-range transportation plan. This is in response to the BRTB's directive to BMC staff to provide an annual assessment of progress relative to these measures.

At the December 2013 BRTB meeting, BMC staff presented a progress report on these performance measures. BRTB members were provided with material comparing data from the baseline years shown in the plan to the most recent data provided by MDOT, SHA, and MTA. Staff pointed out some particular highlights, such as the reduction in highway fatalities for the region over the past two years, the reduction in the number of structurally deficient bridges, the increase in average weekday transit ridership, and ongoing evacuation planning efforts in each jurisdiction. Staff also reminded the members that the performance measure provisions of Moving Ahead for Progress in the 21st Century (MAP-21) will require states and metropolitan planning organizations (MPOs) to develop some additional measures and specific targets once the federal agencies have developed national performance standards for highway and transit systems.

Plan It 2035 is intended to set the region's transportation direction through policies and goals over at least the next 20 years (through the horizon year 2035). As part of this process, the BRTB identified future capital transportation system investments, including allocations for system operations, system preservation, and selected system expansion projects and programs.

FY 2014 Activities for *Plan It 2035* - During FY 2014, BMC staff will work with federal and state partner agencies to establish transportation system performance standards, measures, and targets for the region. This is to comply with provisions of MAP-21 requiring a performance-

based approach to transportation planning. The monitoring and documentation conducted through MDOT's annual attainment report process has provided a good baseline for these activities. Each year, MDOT's attainment report provides an update on progress relative to performance measures and targets with respect to systems and facilities for each mode. BMC staff anticipates that any additional changes required to comply with MAP-21 provisions will be minimal because of the attainment report processes and procedures.

As directed by the BRTB, and consistent with the process outlined in the preceding paragraph, staff will apply the established performance measures and targets to monitor system performance relative to the broad goals in *Plan It 2035*.

Another important FY 2014 activity directly related to *Plan It 2035* is the continuing public outreach effort. Staff wishes to make sure that *Plan It 2035* remains a living document after it has been published and approved. A good way to accomplish this is to continue to conduct outreach activities to inform and educate the public and other stakeholder groups about the goals, strategies, projects, and programs in *Plan It 2035*. These activities can include participating in public or stakeholder group events (e.g., speaking at a meeting), publishing articles in BMC or stakeholder group newsletters, holding open house meetings, etc.

A FY 2014 activity indirectly related to *Plan It 2035* is integrating the Plan's goals, strategies, projects, and programs into the activities identified under the regional transit analysis and regional freight analysis tasks. This will help ensure continuity between the general goals of the long-range plan and the specific objectives of the transit and freight analyses. It also will improve accountability as staff evaluates and devises ways in which transit- and freight-related objectives can follow through on the goals and strategies the BRTB adopted in *Plan It 2035*.

2015 Long-Range Transportation Plan – FY 2014 Activities - BMC staff will start the process of planning and organizing for the development of the next regional long-range transportation plan, which staff expects will be adopted in 2015. This will include preparing a list of next plan requirements and milestones and beginning the process of gathering information relative to these requirements. MAP-21 requirements will guide this development process, at least until the next reauthorization of the federal surface transportation law.

FY 2014 PERFORMANCE OBJECTIVES:

1. Work with federal and state partner agencies to establish performance standards, measures, and targets for the region in compliance with MAP-21 provisions.
2. Work with partner state agencies and jurisdictions to gather data relative to adopted system performance measures related to each of the *Plan It 2035* goals.
3. Report to the BRTB on system performance, using the performance measures identified in *Plan It 2035*.
4. Conduct outreach efforts to continue to inform and educate the public and other stakeholders about the goals, strategies, projects, and programs in *Plan It 2035*.
5. Apply *Plan It 2035*'s goals, strategies, projects, and programs to inform and guide the work under the regional transit analysis and regional freight analysis tasks.
6. Begin the process of developing the next (2015) regional long-range transportation plan.

PRODUCTS/MILESTONES	SCHEDULE
Work with partner agencies to establish system performance standards, measures, and targets in compliance with MAP-21	1 st Quarter
Gather data relative to these system performance measures and targets related to each of the <i>Plan It 2035</i> goals	1 st & 2 nd Quarters
Conduct outreach efforts to continue to inform and educate the public and other stakeholders about the goals, strategies, projects, and programs in <i>Plan It 2035</i>	Ongoing
Use <i>Plan It 2035</i> 's goals, strategies, projects, and programs to inform and guide the work under the regional transit analysis and regional freight analysis tasks	Ongoing
Prepare a list of requirements and milestones as the first step in developing the next (2015) long-range transportation plan. Begin gathering data relative to these requirements.	Ongoing

PARTICIPANTS: Baltimore Metropolitan Council, Maryland Department of Transportation, Maryland State Highway Administration, Maryland Transit Administration

BALTIMORE REGION UPWP
FY 2014 UNIFIED PLANNING WORK PROGRAM

BUDGET: **\$75,000**

FHWA Share \$45,000

FTA Share \$15,000

MDOT Share \$ 7,500

Local Share \$ 7,500

PROJECT: MONITORING & MANAGING THE TRANSPORTATION NETWORK

This project is divided into four task activities:

- Congestion Management Process
- Operations Planning
- Safety Planning & Analysis
- Travel Monitoring Program

TASK: CONGESTION MANAGEMENT PROCESS

PURPOSE: Study and analyze travel patterns to minimize congestion and enhance the ability of goods and people to move more effectively in the Baltimore region using a systematic, ongoing, and integrated process.

The Congestion Management Process (CMP) provides a flexible, rational system for addressing congestion challenges across modal lines, and at different geographic scales and time spans. It shares with other transportation systems management and operations concepts an objectives-driven, performance-based approach to metropolitan transportation planning, and represents the leading edge of systems management practice for urban areas.

During FY 2013, staff used the vehicle probe project (VPP) suite developed by University of Maryland CATT (Center for Advanced Transportation Technology) Lab to produce quarterly bottleneck reports that highlight the top ten bottlenecks in the region. Staff also worked to develop a geographic information system (GIS) database that overlays long range and transportation improvement program (TIP) projects along with priority letter projects from each jurisdiction to monitor the deployment of funds to mitigate congestion in the region. In January 2013, staff participated in a technology fair in Annapolis showcasing the CMP process to legislators.

FY 2014 CMP Activities include: Advancing the use of real-time operations data for planning purposes in coordination with the State Highway Administration (SHA) and University of Maryland. BMC, SHA, and other regional stakeholders will develop and utilize a common set of performance measures that rely on operations data.

Identifying key stakeholders and form a working group to conduct corridor studies. It is envisioned that this working group will meet on an as-needed basis and develop a framework

and guidelines for the FY 2014 update of the CMP. The group will identify new corridors for monitoring, analysis, examining and tracking improvements to the transportation system for effectiveness in impacting congestion.

The CMP will include continued coordination to better link planning and National Environmental Policy Act (NEPA)/environmental planning efforts as appropriate. As part of SHA's Interagency Review process for project planning, staff will continue to participate as a commenting agency offering recommendations on related project tasks and coordination with the regional transportation planning process.

Travel Monitoring Program

The Travel Monitoring Program (TMP) will support the CMP and provide data and analysis to the CMP advisory committee. Staff will work closely on developing data and analysis programs that support regional CMP activities.

Congested Corridor Analysis

In FY 2014, staff will work with SHA and local jurisdictions to identify potential corridors and/or sub-areas for detailed analysis. This will include evaluation of travel conditions in the sub-area as a result of residential and population growth, freight, safety, transit, or multi-modal activity. This continued monitoring process will enhance efforts to develop mitigation strategies in response to travel conditions.

FY 2014 PERFORMANCE OBJECTIVES:

1. Regional Congestion Status Report.
2. Working papers on data sources and performance measures.
3. Participate in SHA's Interagency Review process and Interagency Manager's meetings.

PRODUCTS/MILESTONES	SCHEDULE
2014 Congestion Management Annual Status Report	4 th Quarter
Congestion Trends Summary Fact Sheet	Quarterly
Participate in SHA's Interagency Review process	Throughout Fiscal Year

PARTICIPANTS: Baltimore Metropolitan Council, Maryland Department of Transportation, State Highway Administration, Maryland Transit Administration, Maryland Transportation Authority, FHWA, and Member Jurisdictions

BUDGET: **\$150,000**

FHWA Share –	\$90,000
FTA Share –	\$30,000
MDOT Share –	\$15,000
Local Share –	\$15,000

TASK: 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 management and operations (M&O) activities and implementation of new M&O activities.

This task is intended to integrate M&O projects and protocols into mainstream transportation planning and to foster continued development of M&O strategies and applications. Staff has been working on this effort for more than a decade and considerable progress has been made on identifying regional operational needs, creation of several M&O-related committees, and engaging non-traditional transportation stakeholders (i.e., police, fire, emergency management).

In FY 2013 the Traffic Signal Subcommittee met on a quarterly basis to discuss signal operations and ways to improve mobility and safety for all road users including pedestrians, bicyclists, and motorcycle riders. The subcommittee hosted the 6th Regional Traffic Signal Forum on November 7th, 2012, at the Maritime Institute. The forum was jointly held with the Intelligent Transportation Society of Maryland (ITS MD) and drew almost 200 attendees from the public and private sectors in the region. Staff will begin preparation for the next signal forum to be held in FY 2014 (April/May 2014). Local jurisdictions continue to deploy adaptive and other signal control systems using congestion mitigation and air quality (CMAQ) funds. The Signal Subcommittee will also coordinate with the congestion management process (CMP) and corridor analysis teams to identify potential projects that could be eligible for CMAQ and/or other types of funding.

In FY 2014, in addition to continued support of on-going M&O efforts (i.e., supporting operations committees, coordination with neighboring regions, and participation in the Maryland Statewide ITS Architecture work), staff will focus on identifying opportunities to integrate operations further into the transportation planning process, particularly through closer coordination with the regional Congestion Management Process. The recently passed MAP 21 legislation requires a focus on measuring system performance and using the results to focus improvement efforts on the most critical areas. M&O efforts, particularly in coordination with CMP activities, will help move the region toward this “objectives-driven, performance-based” planning. Staff will refer to U.S. DOT legislation and guidance as well as our past operations efforts (i.e., committee work, the *Baltimore Regional M&O Strategic Deployment Plan*) to direct our work to link operations to

the CMP, which will further integrate operations into the transportation planning process. The Congestion Management Process task in this UPWP provides additional details about these coordinated efforts, as well as how system performance measures will be used.

In an effort to get a better understanding of how operations projects are planned and implemented, staff will continue to identify additional stakeholders with whom to coordinate, such as SHA Districts.

In FY 2012, the Baltimore Regional Operations Coordination (B-ROC) Committee changed its name to Traffic Incident Management for the Baltimore Region (TIMBR) to stress that the focus is traffic incident management (TIM). The group will continue to meet bi-monthly to improve communication, coordination and cooperation needed for safe and efficient traffic incident management in the region. In FY 2012, the TIMBR Committee completed work on the Traffic Incident Management On-line Training Course; in FY 2013, staff worked to get the course posted its own web page (www.BaltimoreTIMCourse.org) as well as on the Maryland Institute for Emergency Medical Services Systems (MIEMSS) on-line training center web page. In FY 2014, BMC staff will support the TIMBR committee as it focuses on getting the message out about the importance of TIM to the region's responders. The TIMBR committee began to look at measuring TIM performance in FY 2013. These efforts will continue in FY 2014. The TIMBR Committee initiated the Funeral Procession Task Force in FY 2010. In FY 2011, it developed Guidelines for Funeral Processions as well as a Funeral Procession Contact List. BMC staff maintains the Contact List and distributes it quarterly with updates. In FY 2014, the Funeral Procession Task Force will monitor the implementation of the Funeral Procession Guidelines and evaluate if any revisions are needed. In FY 2012, the Escorted Motor Rides Task Force was initiated by the TIMBR Committee to address resource requests and coordination related to police escorted motorcycle rides. This Task Force submitted a request for opinion to the Maryland Attorney General in April 2012. Once a decision is received, the Task Force will continue its work of developing guidelines for escorted motor rides.

The Transportation & Public Works (T&PW) Committee pursues daily operations and public works topics as well as supports homeland security / emergency preparedness planning. (Refer to Emergency Preparedness Planning section for emergency preparedness activities). In previous years, the T&PW Committee has held several half-day forums to allow local and state public works and transportation representatives to share ideas and learn from each other. The

topics have covered daily operational activities such as street sweeping, tree trimming, snow plow operations, and roadside maintenance. The most recent forum, on the topic of snow plow operations, was held in FY 2013. The T&PW Committee will continue to identify additional topics for discussion at these regional forums, with the goal of holding one or two in FY 2014.

In late FY 2013, a Capability Maturity Model workshop was held in the region and attended by local, regional, and state M&O stakeholders. In FY 2014, staff will work with these stakeholders to implement action items from the workshop.

In April 2005, the State prepared the Maryland Statewide ITS Architecture that supersedes an earlier regional architecture. The Maryland Statewide ITS Architecture was updated in December 2009. All ITS planning activities and projects in the Baltimore region will be consistent with the Maryland Statewide ITS architecture. The *M&O Strategic Deployment Plan* provides recommendations for updates to the Maryland Statewide ITS Architecture for applicable high priority projects, and these will be included in the Maryland Statewide ITS Architecture as implementation proceeds. Additional updates will be provided to the State as they are warranted. Staff will work with U.S. DOT representatives to ensure all ITS initiatives are consistent with federal guidelines. Projects submitted to the TIP are identified as M&O initiatives and tracked.

BMC staff participate in various local and state operations groups (such as SHA's Mobility/Economy Key Performance Assessment Council, Maryland Traffic Engineers Council, etc.). A member of BMC staff is a member of the Transportation Research Board Regional Transportation Systems Management & Operations (RTSMO) Committee and its Planning for Operations Subcommittee. In addition, BMC staff is a co-chair of the RTSMO Regional Traffic Incident Management Subcommittee. BMC staff also actively participates on the Association of Metropolitan Planning Organizations Operations Work Group and in ITS Maryland. Participation in these groups facilitates staff development and learning about projects and lessons learned around the country.

FY 2014 PERFORMANCE OBJECTIVES:

1. Participate in and support the operations subcommittees.
2. Continue to identify funding opportunities for new M&O projects, expansion of existing M&O projects, and inclusion of M&O components in programmed/ planned projects.
3. Continue to implement recommendations in the M&O SDP.
4. Continue to ensure that ITS activities are consistent with U.S. DOT regulations and the Maryland Statewide ITS Architecture.
5. Advance the projects of the TIMBR Committee by working with agencies involved in operations to enhance operational coordination.
6. Hold an incident management conference if funding is available.
7. Initiate high priority signal coordination projects as identified by the Traffic Signal Subcommittee, as funding becomes available.
8. Hold one or two T&PW forums on topics of interest related to daily operations.
9. Coordinate with regional CMP activities.

PRODUCTS/MILESTONES	SCHEDULE
Subcommittee meeting minutes	Throughout Fiscal Year
Identify funds for M&O projects	Throughout Fiscal Year
Implement recommendations in the M&O SDP	Throughout Fiscal Year
Hold an incident management conference (if funding is available)	4 th Quarter
Hold T&PW forum(s)	2 nd & 4 th Quarter
Coordinate with regional CMP	Throughout Fiscal Year

PARTICIPANTS: Baltimore Metropolitan Council, City of Annapolis, Baltimore City, and Anne Arundel, Baltimore, Carroll, Harford, and Howard counties, Maryland Department of Transportation, State Highway Administration, Federal Highway Administration, Maryland Transit Administration, Maryland Transportation Authority, Maryland Aviation Administration, Maryland Port Administration, Maryland Motor Vehicle Administration, and other public and private partners.

BALTIMORE REGION UPWP
FY 2014 UNIFIED PLANNING WORK PROGRAM

<u>BUDGET:</u>	Baltimore Metropolitan Council	\$120,000
FHWA Share –	\$72,000	
FTA Share –	\$24,000	
MDOT Share –	\$12,000	
Local Share –	\$12,000	

TASK: SAFETY PLANNING AND ANALYSIS

PURPOSE: To develop a safety planning activity that produces a comprehensive, system wide, multi-modal, proactive process that integrates safety into transportation planning; and through partnerships with member organizations, the process can continue through programming, project development and implementation. The objective of this activity is to develop opportunities to reduce crashes, injuries, and fatalities as it relates to the region's transportation network.

One of the region's eight guiding principles is to improve safety. This principle requires the region to identify projects and programs that reduce the number of crashes and fatalities for motorists, transit users, bicyclists and pedestrians on our facilities. A key aspect of this task is addressing existing safety concerns, as well as incorporating safety into the planning process through partnerships and communications efforts.

In FY 2013, BMC continued the Street Smart pedestrian safety campaign that began in 2009 with funding support from the Maryland Highway Safety Office (MHSO). The FY 2013 campaign centered on Baltimore City yet included Baltimore and Anne Arundel Counties. Street teams were deployed along several high pedestrian crash corridors to distribute driver and pedestrian safety messages. The media element of the campaign included radio and television public service announcements, billboards, overhead banners, gas-pump toppers and online and social media outreach. The campaign now has a dedicated website - <http://bmorestreetsmart.com/>. In FY 2014, staff will expand the campaign to include Harford County and the Johns Hopkins Campus in Baltimore City.

Also in FY 2013, staff continued to play an active role in the state's Strategic Highway Safety Plan (SHSP) and the Motorcycle Safety Coalition. BMC staff co-chairs the Infrastructure Emphasis Area Team (EAT) and plays an active role on the Pedestrian EAT.

The BRTB and BMC staff continues to play an active role in the implementation of the state's 5-year (2011-2015) Strategic Highway Safety Plan (SHSP). The SHSP is a blueprint for reducing crashes, fatalities, and injuries across the state and the region BMC staff will work with the State Highway Administration on a corridor-based approach to safety programs.

The regional safety committee will identify safety needs and priorities for the region in FY 2014 and help implement safety programs such as Street Smart and other campaigns. BMC staff will continue to identify key stakeholders and partners to add to this committee in FY 2014. Staff will also work with Regional Traffic Safety Program coordinators to support data analysis and public outreach initiatives undertaken at the state, regional and local levels.

The issue of safety is also an aspect of many other initiatives undertaken in the UPWP. In freight planning, improving railroad grade crossing safety and commercial vehicle operational safety are issues under investigation. Bicycle and pedestrian planning activities include assessing the availability of sidewalks and safe access routes for pedestrians. Bicycle safety classes in conjunction with Bike-to-Work Day promotions are also being pursued. A major focus of Management and Operations planning is increasing the safety of victims, responders, and travelers at incident scenes.

FY 2014 PERFORMANCE OBJECTIVES:

1. Document and understand transportation safety issues across all travel modes in the Baltimore region.
2. Review and assess how safety is being addressed in the current planning process.
3. Identify and analyze crash data to become informed about safety issues.
4. Provide assistance with public information campaigns to raise awareness of transportation safety issues among all travel mode users.
5. Participate in various Safety Task Force activities to foster communication and regional collaboration among local and state safety stakeholders on transportation safety issues.
6. Coordinate with governmental agencies / local jurisdictions to implement strategic safety programs to reduce serious injuries and loss of lives.

PRODUCTS/MILESTONES	SCHEDULE
Collaborate with agencies on public safety issues	Throughout Fiscal Year
Regional Safety Committee Meetings	Quarterly
Assemble data and provide analysis	Throughout Fiscal Year

PARTICIPANTS: Baltimore Metropolitan Council, BRTB members, Maryland Highway Safety Office, transit operators, MD Motor Carrier Office, Non-motorized, and advocacy groups, Federal Highway Administration, and National Highway Traffic Safety Administration

BALTIMORE REGION UPWP
FY 2014 UNIFIED PLANNING WORK PROGRAM

<u>BUDGET:</u>	Baltimore Metropolitan Council	\$120,000
FHWA Share –	\$72,000	
FTA Share –	\$24,000	
MDOT Share –	\$12,000	
Local Share –	\$12,000	

TASK: TRAVEL MONITORING PROGRAM

PURPOSE: To monitor travel conditions throughout the Baltimore region for a multitude of planning needs such as inputs to the regional travel demand model, air quality data, the Congestion Management Process (CMP) and the long-range transportation plan (LRTP) process.

Transportation-related trends monitoring is of particular importance in the regional transportation planning process. Not only does such an activity provide data on travel changes, but it is also utilized in the validation of regional travel and land use models. The Travel Monitoring Program is not new to the UPWP. On an ongoing basis, count data from numerous information sources has been tabulated, reported and used in various applications by BMC, state and local staffs. Data ranging from Highway Performance Monitoring System (HPMS) counts, hourly traffic volumes, vehicle occupancy counts, vehicle mix, to level of service measurement are major components of the BMC regional data collection program. The BRTB would like to promote additional pedestrian and bicycle counting in the region. This effort will be coordinated through the Bicycle and Pedestrian Advisory Group.

Traffic Counts: In FY 2013, BMC staff instituted a Bicycle / Pedestrian Count Program. Counts were taken at the same sites where Activity Center data collection occurred. Staff will now be able to establish a baseline of bicycle and pedestrian counts at various locations in the region. In FY 2014 staff will explore development of a pedestrian and bicycle GIS data sharing method that addresses the establishment of a common data framework, for storing and sharing data among state and local governments.

In FY 2013, staff examined its screen line locations to better support its Travel Demand Model in preparation for the upcoming 2015 model validation. The Travel Monitoring Program includes the collection of counts at more than 600 locations, collected on a three-year cycle. In FY 2014 BMC will send out a Request For Proposal to enter into a multi-year contract with a vendor to perform traffic. Additionally, BMC staff will utilize the State Highway Administrations (SHA) traffic data intranet that includes a significant amount of regional count information, including trends. In FY 2013 traffic counts for the year 2012 were gathered from various sources and tabulated. In FY 2014, work will continue in collecting and tabulating traffic count data from multiple sources and loading it into a database for use in the travel demand model. Analysis of available hourly

traffic counts will help provide more detailed information for the travel model. Classification counts will be collected and reviewed to better update data files used in air quality modeling. Count data will be analyzed, shared with the Technical Committee, and documented.

Speed and Travel Time Collection: Since 1998, Global Positioning Systems (GPS) technology has been utilized to collect and analyze travel data to better evaluate transportation plans and programs. In FY 2013, BMC made use of Vehicle Probe Data from INRIX for all travel time collection. This third party GPS probe data has been made available by a grant from the I-95 Corridor Coalition through the University of Maryland's Center For Advanced Transportation Technology (CATT Lab) to monitor conditions on the region's freeways and incorporating it the regional CMP. The Vehicle Probe Project (VPP) allows staff to access real time and historical travel time and speed data throughout the region. In-house GPS data collection may be used to monitor the region's arterial network when applicable. Quarterly Reports showing the top 10 bottlenecks region wide were produced for the first time in FY 2013 and will continue to be utilized and developed throughout FY 2014. These reports will enable BMC staff to report more advanced congestion related performance measures such as Travel Time Index, Planning Time Index, and (in the future) Cost of Delay.

Activity Centers: In FY 2013 during the spring months of March to May, BMC staff conducted occupancy and classification data including transit bus passengers numbers at the five activity centers of Bel Air, BWI Airport, Westminster, White Marsh, and Woodlawn / Social Security. This data was collected during the morning peak travel time. Preferred data collection days are Tuesday - Friday mornings, weather permitting. For FY 2014, data collected in the same manner will occur at six activity centers of Annapolis; Columbia; Fort Meade; Hunt Valley; Owings Mills and Towson. This is the continuation of the regional activity data collection program that has been ongoing since 1987 that includes the 12 activity centers that are counted on a three-year cycle. Fiscal Years 2013, 2014 and 2015 complete the typical three-year cycle of data collection during the morning peak travel time done during the spring months at 107 total locations of all 12 activity centers. At the request of the BRTB, BMC staff will explore studies on special activity centers such as ports, airports or hospitals.

Trip Generation: Building off of prior efforts, the BRTB has requested that BMC staff review whether observed trip generation rates for certain land uses are consistent with the rates

published in the Institute of Transportation Engineers Trip Generation Manual. BMC staff will perform this work potentially with a consultant coordinating with Anne Arundel County staff.

In FY 2014, staff will initiate an analysis on trends in vehicle travel growth rates. State and local planners are responsible to review and evaluate developer-generated travel impact analyses, which identify existing and forecasted background traffic along with impacts of proposed development. This analysis will concentrate on the assumptions used to forecast background traffic by evaluating completed analysis comparing assumed growth projects compared with collected traffic counts. A cross class analysis will be performed to examine location and other characteristics that have contributed to differences in assumed traffic growth rates and traffic counts.

FY 2014 PERFORMANCE OBJECTIVES:

1. Collect and tabulate traffic counts to enhance the Baltimore region traffic database.
2. Utilize 3rd party GPS probe data to monitor conditions on freeways for use in the Congestion Management Process.
3. Produce summary tabulations of travel trends data from the regional travel database.
4. Obtain and process GPS data on arterial roads throughout the region.
5. Produce data products from several data sources to support the CMP.
6. Prepare activity center summary tables that show average auto occupancy and vehicle classification characteristics.

PRODUCTS/MILESTONES	SCHEDULE
Highway traffic counts, vehicle occupancy and vehicle mix data	Throughout Fiscal Year
Travel data products to support the CMP	Throughout Fiscal Year
Update Online Regional Traffic Count Database	4 th Quarter
Presentation and documentation materials	4 th Quarter
Activity Center Vehicle Occupancy/Classification summary	4 th Quarter
Pedestrian and Bicycle GIS database and sharing process	4 th Quarter

BALTIMORE REGION UPWP
FY 2014 UNIFIED PLANNING WORK PROGRAM

PARTICIPANTS: Baltimore Metropolitan Council

BUDGET: \$160,000

FHWA Share – \$96,000

FTA Share – \$32,000

MDOT Share – \$16,000

Local Share – \$16,000

PROJECT: INTERMODAL PLANNING

This project is divided into four task activities:

- Bicycle and Pedestrian Planning
- Freight Mobility Planning
- Transit Coordination
- Human Service Transportation Coordination

TASK: BICYCLE AND PEDESTRIAN PLANNING

PURPOSE: To strategically develop and implement a regional bicycle, pedestrian and greenways transportation plan that promotes opportunities for an integrated multi-modal transportation system.

Since the adoption of *Action Plan 2001: Bicycle, Pedestrian and Greenways Transportation Plan* in 2001, much progress has been made both nationally and locally in terms of bicycle and pedestrian planning and analysis as well as the routine accommodation of multiple user types in roadway facility design. In the past decade, every local member of the BRTB has completed a bicycle plan for at least part of its territory and most have completed pedestrian plans for all or part of their jurisdictions. In FY 2014, the Bicycle and Pedestrian Advisory Group (BPAG) will continue to support these developments at the local level, with more of a focus on implementation, technical assistance, and the sharing of research and best practices now that initial planning studies have been largely funded and completed.

The BPAG, with staff support, will continue to serve state and local transportation professionals by providing bicycle and pedestrian expertise in all phases of planning and implementation. In FY 2013, staff conducted field assessments with Harford County staff in support of the county's first Bicycle and Pedestrian Master Plan, served on the Project Management Team for Anne Arundel County's Pedestrian and Bicycle Master Plan, and provided support as requested to Howard County's Bicycle Master Plan. In FY 2012, the BPAG continued to perform regular comprehensive review of activities submitted for inclusion in the Transportation Improvement Program (TIP). This review identified activities which, either directly or indirectly, could influence conditions for bicycle and pedestrian access in the region. In FY 2014, the TIP review will again be conducted, and staff will continue to be available to support the technical needs of jurisdictions as they implement pedestrian and bicycle-related projects. The BRTB will also coordinate a pilot Walkability Workshop in Harford County, pursuant to their Bicycle and

Pedestrian Master Plan, and will work with other jurisdictions as requested to conduct Walkability Workshops and assessments utilizing our regional partnership to draw on a variety of expertise and experience.

Changes in federal transportation law, Moving Ahead for Progress in the 21st Century (MAP-21), have instituted several changes in the BRTB's routine bicycle and pedestrian planning activities. MAP-21 eliminated Safe Routes to School (SRTS) as a stand-alone program and changed the previous Transportation Enhancements Program to the Transportation Alternatives Program (TAP), which now includes SRTS projects as eligible expenditures. MAP-21 increased the role of metropolitan planning organizations in distributing these funds, mandating that Transportation Management Areas receive an allocation of TAP funds based on population and hold a competitive grant process to award these funds. In coordination with MDOT, the BRTB has agreed to hold one call for projects for the FY 2013 and 2014 funds in the spring of 2013. In 2014, the BRTB will remain involved in the monitoring of the awarded projects, and may need to hold a supplemental call for projects if all funds are not awarded in the initial call. Staff will also work with potential applicants, including local governments and school systems to provide education about the TAP and encourage participation.

Public education and encouragement programs, including Bike-to-Work Day and StreetSmart, continued to grow and raise the profile of pedestrian and bicycle transportation and safety in the region, and will be continue to grow and develop in FY 2014. Efforts will continue to ensure that bicycle and pedestrian education and encouragement, as well as improved facilities, are made accessible to travelers of all ages, incomes, backgrounds, and ability levels.

Another growing focus of BPAG and the region's bicycle and pedestrian planners has been the collection of data. BPAG will continue to work with BMC's Travel Analysis group, MDOT, and the State Highway Administration (SHA) on implementing bicycle and pedestrian counting and developing a shared database for bicycle and pedestrian data.

FY 2014 PERFORMANCE OBJECTIVES:

1. Work with MDOT to manage the Transportation Alternatives program for the region
2. Coordinate bicycle and pedestrian data collection and sharing efforts throughout the region
3. Conduct one or more Walkability Workshops with jurisdictions, beginning with a pilot in Harford County
4. Support the Bicycle and Pedestrian Advisory Group
5. Support local Bike to Work Day events in all jurisdictions
6. Support local needs with regard to the design of pedestrian and/or bicycle facilities, including compliance with the Americans with Disabilities Act and other federal laws, regulations, and guidelines
7. Disseminate information related to proven pedestrian and bicycle crash countermeasures and other current research in the bicycle and pedestrian field

PRODUCTS/MILESTONES	SCHEDULE
Staff Bicycle and Pedestrian Advisory Group	Bi-Monthly
Conduct pilot Walkability Workshop(s) in at least one location	Throughout Fiscal Year
Produce additional educational materials	Throughout Fiscal Year
Conduct TIP reviews	3 rd Quarter
Participate in regional pedestrian safety initiatives	Throughout Fiscal Year
Coordinate B2WD events	3 rd and 4 th Quarters

PARTICIPANTS: Baltimore Metropolitan Council, local jurisdictions, MDOT (SHA and MTA), MDE, MDP, DHMH, universities, and bicycle / pedestrian / greenways advocates

BALTIMORE REGION UPWP
FY 2014 UNIFIED PLANNING WORK PROGRAM

<u>BUDGET:</u>	Baltimore Metropolitan Council	\$80,000
	Baltimore City	3,810
	Anne Arundel County	3,810
	Baltimore County	3,810
	Carroll County	3,810
	Harford County	3,810
	Howard County	3,810
	City of Annapolis	<u>3,810</u>
	TOTAL	\$106,670
FHWA Share-	\$64,002	
FTA Share-	\$21,334	
MDOT Share-	\$ 8,000	
Local Share	\$13,334	

TASK: **FREIGHT MOBILITY PLANNING**

PURPOSE: To incorporate goods movement (freight transportation) into the regional transportation planning process.

The Baltimore region is Maryland’s leading goods movement center. Each year, more than 307 million tons of freight valued at nearly one trillion dollars move over Baltimore’s highway, rail, port, and airport facilities, serving domestic and international demand for a wide range of goods. While much of the freight-supporting infrastructure operates reliably, congestion on these facilities will continue to be a major challenge as personal vehicle traffic and freight traffic will grow significantly in the future. Between 2003 and 2030, freight on the region’s transportation system will nearly double, with significant percentage increases across the modes and the largest volume increase in truck tonnage. Recognizing this increasing demand on all modes, the region is proactively planning for the future to accommodate increased goods movement through a number of different planning activities—including operations (truck parking, travel demand management) and new capacity (e.g., I-95 Express Lanes). In partnership with the MDOT, the BMC is planning for the future of freight in the region. In addition to growth in domestic freight, international trade is projected to nearly double in volume between 1998 and 2020 and the resulting growth is likely to present challenges to U.S. ports and border gateways.

In FY 2013, the Freight Movement Task Force (FMTF) met quarterly to discuss various topics of regional significance such as the CSX Intermodal Transfer Facility, truck parking, performance measures and the new transportation legislation, freight flows across mega-regions (I-95 Corridor), etc. In addition, staff supported the newly formed Freight Regional Oversight Group (FROG) commissioned by the BRTB to develop freight projects for inclusion in long-range plans and other funding opportunities. In addition, staff continues to play an active role in the implementation of the State Highway Administration (SHA)/Maryland Transportation Authority (MdTA) Freight Implementation Plan and the Statewide Freight Plan.

The FMTF serves as an advisory committee to the BRTB. Its function is to provide a voice for public and private freight transportation stakeholders. The FMTF offers recommendations to the BRTB for consideration in the Transportation Improvement Program and Baltimore Regional Transportation Plan. The FMTF’s quarterly meetings provide valuable information exchange for the freight community and the public agencies serving their needs. The FY 2014 meetings will

provide an opportunity for the freight community to participate in the regional freight analysis to be developed in 2014. FMTF meetings afford the opportunity for public and private sector organizations to dialog and report updates on the status of studies or projects underway, etc. In addition to the information exchange, the FMTF and its subcommittees make decisions on the priorities for freight studies and recommendations regarding BMC staff activities.

In FY 2014, staff will continue efforts to incorporate the freight community's recommendations into the Baltimore regional transportation planning process. More specifically, staff activities will support:

- Regional freight analysis to prepare for growth into and out of the Port of Baltimore as a result of the expansion to the Panama Canal.
- Establish data on highway truck usage and growth rates by types of facilities
- Demand/Production Flows – apply FAF-3 data and other technical tools
- Regional Freight Performance measures – coordinate with CMP
- Developing freight corridors in the region with descriptions of freight facilities.
- Develop GIS information regarding regional warehousing facilities and distribution centers.
- the BRTB's Freight Movement Task Force (FMTF)
- *Maryland Moves: A Freight News Quarterly*
- Maintaining and updating a freight web page on the BMC website.
- Explore emissions from major activity centers
- Explore coordination of freight and local land use planning
- Coordinate the Freight Regional Oversight Group

In addition to supporting the FMTF, staff participate in other freight groups, contribute to MDOT studies, and develop freight transportation planning skills and community outreach. Staff works to integrate freight interests and needs from various groups into the overall transportation planning process and into specific areas such as Management and Operations. These groups include the Council of Supply Chain Management Professionals-Baltimore Chapter, Baltimore-Washington International Airport Development Council, Baltimore-Washington International Airport Partnership, Washington Council of Governments-Aviation Subcommittee, Maryland Motor Truck Association Committee Meetings, the I-95 Corridor Coalition-Intermodal Program Track Committee, and the Association of Metropolitan Planning Organizations.

FY 2014 PERFORMANCE OBJECTIVES:

1. Convene quarterly FMTF meetings and expand participation among Baltimore region freight stakeholders.
2. Work with the FMTF to conduct one or more studies relevant to regional freight movement issues.
3. Produce a quarterly snapshot on freight activity and information relevant to the freight community.
4. Continued participation in other freight groups.

PRODUCTS/MILESTONES	SCHEDULE
Convene Freight Movement Task Force meetings	Quarterly
Conduct one or more studies and prepare reports	Throughout Fiscal Year
Continue working with the I-95 Corridor Coalition	Throughout Fiscal Year
Pursue opportunities for reductions in freight emissions	3 rd & 4 th Quarters
<i>Maryland Moves: A Freight News Quarterly e-Newsletter</i>	Quarterly

PARTICIPANTS: Baltimore Metropolitan Council, MDOT, SHA, MdTA, Maryland Port Administration, Baltimore City, Carroll County, and Harford County

<u>BUDGET:</u>	Baltimore Metropolitan Council	\$120,000
	Baltimore City	10,000
	Carroll County	10,000
	Harford County	10,000
	TOTAL	\$150,000

FHWA Share –	\$90,000
FTA Share –	\$30,000
MDOT Share –	\$12,000
Local Share –	\$18,000

TASK: TRANSIT COORDINATION

PURPOSE: To develop recommendations and strategies to improve transit service in the Baltimore region, to improve transit access to employment and services, to promote economic development opportunities, and to reduce dependence on single-occupant vehicles.

FY 2013 Activities - In FY 2013, BMC staff worked with the Maryland Transit Administration (MTA) to monitor performance measures for gauging transit system effectiveness relative to the regional goal of improving mobility. BMC staff began regional transit analysis work with an ad hoc committee (GO-TRAN, Group Overseeing Transit Analysis). As directed by this committee, the work encompasses two phases: 1) (a) gathering information about current transit system users and user needs, system assets, service areas, service gaps, and barriers to coordination; (b) developing short-term, low-cost strategies to better serve existing transit system users, make the most efficient use of existing assets, expand service areas, fill service gaps, and remove barriers to coordination and 2) (a) evaluating potential transit corridors and types of transit that would best serve current and future transit system users; (b) developing long-term, cost-effective, fiscally constrained strategies to improve and expand service along these corridors.

During FY 2013, under Phase 1 BMC staff gathered information from other regions and national sources on (1) trip planning and wayfinding resources and (2) sample memoranda of understanding (MOUs) that the Baltimore region can consider adopting.

Phase 2 work involved gathering population and employment density data as part of the effort to identify corridors that are candidates for new or expanded transit service. Also included was the development of materials on the criteria and methodology the group can use to evaluate potential corridors. Staff conducted some preliminary analyses using these criteria for two selected corridors. Also, jurisdictions identified other corridors for potential expansion of existing transit service or introduction of new service.

Coordination with Transit Providers - Coordination continued with state, local and private transit operators as well as local jurisdictions and stakeholders to improve transit service performance and utilization. This included maintaining the working agreement with the MTA and locally operated transit agencies to ensure appropriate involvement in the regional transportation planning process. Also included was participation in planning of the proposed

Red Line to assist MTA and local jurisdictions and to maintain a regional focus in the planning process.

BMC staff prepared and distributed (on average once every two months) the On Transit e-newsletter. The intent of this newsletter is to inform regional transit stakeholders about transit-related news and developments of regional and national interest, transit-related publications and resources, and upcoming transit-related events.

Planned for FY 2014 - Depending on direction from the GO-TRAN committee, BMC staff expects to use consultant services to continue Phase 1 and Phase 2 work related to the regional transit analysis. Consultant services are expected to be solicited and applied on an as-needed task order basis.

Maintaining the working agreement with the MTA and locally operated transit agencies will continue to be a priority in FY 2014. Included in the working agreement is a Transit Work Group. This group met once in FY 2012 (to review transit projects proposed by the public). An objective for FY 2014 is to hold more frequent meetings to discuss regional transit needs and get a transit perspective on regional issues and concerns.

Continuing in FY 2014, participation in planning of the proposed Red Line will be ongoing as needed. BMC will assist MTA where possible in meeting the challenges of the highly competitive federal New Starts funding program.

From a general perspective, as well as from the perspective of the scope of the regional transit analysis, the BRTB will continue to (1) explore opportunities to engage transit users in the transit planning process and (2) coordinate with MTA and local transit agencies to foster and improve coordination and information-sharing. Staff will review local Transit Development Plans as they are updated to assess consistency of the plans with the goals and strategies in *Plan It 2035*, especially with respect to accessibility and mobility. Staff will coordinate quarterly reports from MTA to the Technical Committee, and will continue producing an electronic newsletter to inform transit planners and providers of new initiatives, funding opportunities, and changes to transit services in the region.

In accordance with the Federal Transit Administration's guidelines on Environmental Justice and equity (as promulgated in recent FTA circulars), the BRTB will continue to assess planning efforts to ensure that transit planning and programming activities are equitable and inclusive. In addition, staff will work with MTA and local transit systems to provide technical assistance or guidance for updating and developing Title VI documentation.

Staff expects to participate in meetings intended to be exchanges of transit ITS information. Representatives from the MTA, the Washington Metropolitan Area Transit Authority (WMATA), and locally operated transit systems from the Baltimore and Washington, DC, regions are other expected attendees. The tentative plan is to hold these transit ITS meetings 4-6 times throughout the year.

FY 2014 PERFORMANCE OBJECTIVES:

1. Complete regional transit analysis, Phase 1: information gathering; identification of current transit system users and user needs, system assets, service areas and service gaps, and barriers to coordination; and development of short-term, cost-effective strategies to improve service
2. Conduct detailed analyses of corridors considered for expansion of existing transit service and/or establishment of new service
3. Review recommendations of key state and local transit and comprehensive plans to ensure consistency in goals, priorities, and performance criteria.
4. Coordinate with MTA and local jurisdictions to develop a strategy for regional transit planning, including land development opportunities and priorities.
5. Foster dialogue and information sharing to better serve transit planners and operators in the region, possibly via electronic newsletter format.
6. Provide technical and procedural support to the Red Line planning process.
7. Participate in regional transit ITS meetings to share information and identify opportunities for collaboration.

BALTIMORE REGION UPWP
FY 2014 UNIFIED PLANNING WORK PROGRAM

PRODUCTS/MILESTONES	SCHEDULE
Regional transit analysis, Phase 1: trip planning and wayfinding resources, regional MOU template	Throughout fiscal year
Regional transit analysis, Phase 2: analysis of potential transit corridors	Throughout fiscal year
Review of state & local transit plans for consistency	Throughout fiscal year
Facilitate Transit Work Group meetings	Periodically
Produce Transit e-newsletters	Periodically
Provide Technical Assistance for Red Line Planning Process	Throughout fiscal year
Participate in regional transit ITS group meetings	Periodically

PARTICIPANTS: Baltimore Metropolitan Council, MTA, local transit agencies, Annapolis, Anne Arundel County, Baltimore County, Howard County, MDOT, Federal Transit Administration, Private Operators

<u>BUDGET:</u>	Baltimore Metropolitan Council	\$145,000
	City of Annapolis	5,000
	Anne Arundel County	10,000
	Baltimore County	10,000
	Howard County	<u>10,000</u>
	TOTAL	\$180,000

FHWA Share –	\$108,000
FTA Share –	\$ 36,000
MDOT Share –	\$ 14,500
Local Share –	\$ 21,500

TASK: HUMAN SERVICE TRANSPORTATION COORDINATION

PURPOSE: To address transportation needs of the elderly, individuals with disabilities, and low-income residents in conjunction with ongoing transit, paratransit, and community-based transportation planning activities.

With the passage of MAP-21, Federal funding for the previous human service transportation grant programs under the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) changed significantly. The Federal Transit Administration (FTA) Section 5317 program (New Freedom) has been rolled into the Section 5310 (Elderly Individuals and Individuals with Disabilities) program. Similarly, FTA Section 5316, the Job Access and Reverse Commute (JARC) program, has been eliminated as a stand-alone program and become an eligible expense under the Sections 5307 and 5311 programs, which provide capital assistance to urban and rural public transit systems. The BRTB will continue to work closely with the Maryland Transit Administration (MTA) to adapt to these changes and implement the reorganized programs. Additionally, as the overall federal funding available for human services transportation programs has been reduced while the demand for such services continues to grow rapidly with the aging population, BRTB staff will provide planning support to current and past human services transportation grant recipients in adapting to tightened financial conditions.

In FY 2013, staff worked with MTA to coordinate the FTA 5310, 5316, 5317 and Maryland Senior Rides programs and review and select applications. Passage of Moving Ahead for Progress in the 21st Century (MAP-21), resulted in significant changes to all of the FTA human services transportation grant programs and staff monitored those changes and provided input to MTA regarding upcoming changes. Staff also met with human services providers regarding their transportation programs, applications for grants, and strategies for coordinating transportation and land use and increasing opportunities for their clients to utilize active transportation and/or fixed-route transit service.

In FY 2014, staff will continue to participate in and provide coordination, outreach, and technical assistance to the Maryland Department of Disabilities, Maryland Department of Aging and local Aging Agencies, Maryland Research Consortium, local governments, and community organizations that seek to enhance and extend safe mobility for the region's rapidly growing

senior population. Barriers to coordination within the region have been evident and work will be done to assist in removing those barriers. BMC staff will seek opportunities to provide safe mobility, travel training, and outreach assistance to organizations that are working to improve travel options for senior citizens, persons with disabilities, and low-income individuals. Staff will participate with the MTA in the review and selection of grant applications for funding under the Maryland Senior Rides Program, and will work with MTA to implement MAP-21's human service transportation programs.

A continued focus for BMC's human services transportation planning activities in FY 2014 will be livability and the incorporation of active transportation into the menu of options available to seniors, persons with disabilities, and other transportation-disadvantaged populations. Research increasingly has demonstrated the benefits of physical activity for people of all ages, but older adults can receive particular physical and mental health benefits from exercise and time spent outdoors, and factors such as lack of accessible sidewalks and street crossings, land use decisions by human services agencies and senior housing developers, and fear of street crime or injury can keep seniors from receiving the exercise they need and maintaining the crucial independence of being able to run simple errands without relying on others. In preparation for the next update of the Coordinated Public Transportation and Human Services Transportation Plan, staff will collaborate with the Baltimore Sustainable Communities Consortium on plans to enhance transportation for low to moderate income workers and link that to affordable housing and workforce development efforts and will continue to conduct outreach to human services providers and the Maryland Coordinating Committee for Human Services Transportation regarding ways to reduce costs and enhance the lives of their clients by facilitating active transportation options, including pedestrian access to fixed-route transit.

FY 2014 PERFORMANCE OBJECTIVES:

1. Review grant requests for funding under FTA Section 5310 and the Maryland Senior Rides program.
2. Coordinate with MTA regarding the future of JARC projects under MAP-21.
3. Identify and explore solutions to barriers that presently limit the independent mobility of seniors, persons with disabilities, or low income workers, or the coordination of paratransit services in the region.
4. Assist candidate organizations that could help establish or expand community-based transportation and rideshare services, including active transportation encouragement programs for target populations.

5. Complete and present research on workforce transportation and housing costs, land use, active transportation, and human services transportation.

PRODUCTS/MILESTONES	SCHEDULE
Review applications for funding under the FTA 5310 program for BRTB consideration	3 rd & 4 th Quarters
Participate in meetings to assist with coordination of human services transportation and hold forum	Throughout Fiscal Year
Assist in reviewing applications for the Senior Rides program	3 rd & 4 th Quarters
Provide support to non-profit organizations in maximizing travel options for their elderly, disabled, or low income clients	Throughout Fiscal Year
Assist MTA and JARC recipients in the transition from SAFETEA-LU to MAP-21	1 st & 2 nd Quarters

PARTICIPANTS: Baltimore Metropolitan Council, MTA, local jurisdictions, human service and aging agencies, private non-profit and for profit organizations

BUDGET: **\$75,000**

FHWA Share –	\$45,000
FTA Share –	\$15,000
MDOT Share –	\$ 7,500
Local Share –	\$ 7,500

PROJECT: SYSTEM ACCESS PLANNING

This project is divided into two tasks:

- Emergency Preparedness Planning
- Transportation Equity Planning

TASK: EMERGENCY PREPAREDNESS PLANNING

PURPOSE: To increase the safety and security of the transportation system through enhanced coordination, communication, and cooperation of the region's emergency responders.

Prior to September 11, 2001, staff worked with emergency responders to enhance the region's traffic incident management program, which focuses on "typical" regional incidents (i.e., a crash that closes one or more travel lanes, a tornado, a small hazardous material spill, etc.). After that date, with the increased emphasis on security and evacuation planning, staff has also been involved in work to improve coordination, communication, and cooperation during "atypical" large-scale incidents (i.e., hurricanes, acts of terrorism, etc.). These planning efforts take an all-hazards approach.

Emergency planning work supports the BRTB as well as the Baltimore Urban Area Homeland Security Work Group (UAWG). The Transportation & Public Works Committee pursues daily operations and public works topics as well as supports homeland security / emergency preparedness planning. (Refer to the Operations Planning section for information about activities related to daily operations.) This Committee submits annual project funding requests to the UAWG. BMC staff has taken and will continue to take the lead in preparing the T&PW project proposal submissions to the UAWG.

Funded projects to date have focused on evacuation planning. One of the first projects funded, in FY 2010, was a tabletop exercise (TTX) focused on the transportation aspects of evacuation. Subsequent projects were identified as action items in the TTX After Action Report / Implementation Plan. For example, in FY 2012, UASI funds were secured and work began on the development of Evacuation Traffic Management Support documents for the region.

In FY 2013, documents were prepared for Baltimore City and Baltimore, Carroll, and Howard counties. Harford and Anne Arundel counties' documents were prepared in previous years using other funding. In FY 2014, work on this project will continue with the development of location-

specific documents for large areas such as the National Security Agency (NSA)/Ft. Meade, State Capital, Social Security, Prettyboy Dam, Baltimore stadium, as well as an update to the Anne Arundel County document, which was prepared in FY 2008. BMC staff acts as project manager on the homeland security-funded projects. In FY 2014, this committee will continue to provide input to the UAWG, oversee its projects and identify additional projects, as well as work to identify and discuss day-to-day operational issues.

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 and removal. In past years, this group held three disaster debris focused exercises to identify and resolve coordination issues, the most recent being in mid FY 2012. In late FY 2013, the Task Force held a Regional Disaster Debris Forum. In FY 2014, staff will work with the Task Force to continue to address action items identified in the After Action Report / Implementation Plan of the most recent debris TTX. In FY 2011, BMC staff compiled a list of Resolved Issues of the Task Force which is updated as the Task Force comes to agreement on regional issues. This group will continue to meet quarterly in FY 2014. BMC staff will continue to provide support to this Task Force and act as project manager for its projects. If additional UASI funds are allocated to the Task Force, staff will continue in the role of grant administrator.

Staff also supports other regional emergency preparedness planning efforts through an association with the UAWG and its other subcommittees. Specifically, staff continues to support the Baltimore Region Technology Committee which works to identify regional emergency-related technology issues that should be addressed as well as investigates potential technologies to use in the region. Staff also regularly attends the UAWG and Emergency Planner Subcommittee meetings to provide a transportation perspective on emergency preparedness planning.

FY 2014 PERFORMANCE OBJECTIVES:

1. Participate in and support emergency preparedness planning committees.
2. Address issues identified in the tabletop exercise focused on the transportation aspects of evacuation.
3. Address issues identified in the tabletop exercise focused on disaster debris response and recovery.
4. Work with emergency preparedness planning committees to identify other issues to pursue.

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PRODUCTS/MILESTONES	SCHEDULE
Committee meeting minutes	Throughout Fiscal Year
Address issues identified in the tabletop exercise focused on the transportation aspects of evacuation	Throughout Fiscal Year
Address issues identified in the Disaster Debris Tabletop Exercise 2011	Throughout Fiscal Year
Support the UAWG and its subcommittees as needed	Throughout Fiscal Year

PARTICIPANTS: Baltimore Metropolitan Council, City of Annapolis, Baltimore City, and Anne Arundel, Baltimore, Carroll, Harford, and Howard counties, Maryland Department of Transportation, State Highway Administration, Federal Highway Administration, Maryland Transit Administration, Maryland Transportation Authority, Maryland Aviation Administration, Maryland Port Administration, Maryland Emergency Management Agency, and other public and private partners.

BUDGET: Baltimore Metropolitan Council **\$80,000**

FHWA Share – \$48,000
 FTA Share – \$16,000
 MDOT Share – \$ 8,000
 Local Share – \$ 8,000

TASK: TRANSPORTATION EQUITY PLANNING

PURPOSE: To advance Title VI and environmental justice through a combination of public involvement and analysis of plans and programs. Effective and equitable transportation decision-making depends on understanding and properly addressing the unique needs of different socio-economic groups.

Environmental justice (EJ) is grounded in the practice of making sure that both benefits and burdens of transportation investments are shared as equitably as possible among all affected communities. Historically, low-income and minority communities have borne many negative effects of transportation projects and have gained few direct benefits. As a result, efforts to promote EJ in transportation focus on engaging these communities in transportation planning and investment decisions. With an awareness and active promotion of the principles of EJ in transportation decision making, practitioners can better mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations.

During FY 2013 staff attended several events sponsored by US DOT to understand issues related to a review of Executive Order 12898 (Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations) by all federal agencies. As a result of the review, the Federal Transit Administration (FTA) released Circular 4703.1 titled "Environmental Justice Policy Guidance for Federal Transit Administration Recipients" as well as Circular 4702.1B titled "Title VI Requirements and Guidelines for Federal Transit Administration Recipients". Similarly, a revised Federal highway Administration (FHWA) Order 6640.23 "FHWA Actions to Address Environmental Justice in Minority Populations and Low-Income Populations" was released and reaffirms the principles of Title VI and related statutes, National Environmental Policy Act (NEPA), 23 U.S.C. 109(h), and other Federal environmental laws, emphasizing the incorporation of those provisions with the environmental and transportation decision making processes. Following this the BRTB approached federal partners and initiated a request for updated training for members and the public. The training will be held in mid-2013.

Activities for FY 2014 revolve around three main components: 1) Enhance our analytical capabilities to ensure that the long-range transportation plan and the transportation improvement program (TIP) comply with Title VI and related federal requirements, 2) Identify

residential, employment, and transportation patterns of low-income and minority populations so that their needs can be identified and addressed, and the benefits and burdens of transportation investments can be fairly distributed, and 3) Evaluate and - where necessary - improve the public involvement processes to eliminate participation barriers and engage minority and low-income populations in transportation decision making.

FY 2014 PERFORMANCE OBJECTIVES:

1. Maintain system to document and send to federal agencies all required reports.
2. Continue to integrate data collection, mapping applications and analysis throughout the regional planning process.
3. Implement the Title VI, Disadvantaged Business Enterprise (DBE), EJ and Limited English Proficiency (LEP) plans.
4. Coordinate public involvement efforts between regional activities and those of local and state partners.

PRODUCTS/MILESTONES	SCHEDULE
Implement Title VI/LEP plans	Throughout Fiscal Year
Update all maps to reflect 2010 Census data	Throughout Fiscal Year
Expand outreach to low-income, minority, and LEP communities throughout planning process	Throughout Fiscal Year
Coordinate contacts for vulnerable populations with emergency management agencies	Throughout Fiscal Year
Submit Title VI and DBE reports	Throughout Fiscal Year

PARTICIPANTS: Baltimore Metropolitan Council

BUDGET: \$75,000

FHWA Share – \$45,000
 FTA Share – \$15,000
 MDOT Share – \$ 7,500
 Local Share – \$ 7,500

DATA DEVELOPMENT AND MODEL ENHANCEMENTS

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PROJECT: GENERAL DEVELOPMENT AND COMPREHENSIVE PLANNING

This project is divided into three task activities:

- Development Monitoring
- Cooperative Forecasting Process
- U.S. Census / American Community Survey Monitoring and Analysis

TASK: DEVELOPMENT MONITORING

PURPOSE: To track new land development patterns in the region, by type (residential, commercial, industrial, etc.), location and timing.

Development tracking is important to the transportation planning process to determine the placement of household and employment growth and associated impacts and demands on the region's transportation network. Ongoing contact with state and local agencies provides data needed for this activity. Since FY 2003, the *Building Permit Data System (BPDS)* at the BMC has been serving the region with various products and services: (1) statistical summary reports of planned building activity across the Baltimore region is compiled on a monthly basis from the building permits received and processed by BMC; (2) the reports include analysis of regional trends, supported by maps and charts highlighting notable development activity, as well as a comparison with the national trend during the reporting period; and (3) BPDS.online allows users to search the building permit files and to retrieve those items directly online through subscription.

During FY 2008, BMC staff developed pilot monitoring programs to report on mixed-use development programs and the number of residential units associated with such projects as well as the initiation of a program to track "green" environmentally oriented new construction authorizations. In FY 2009, BMC staff conducted the first full fiscal and calendar year of capturing and reporting on mixed-use and "green" permits. This activity was enhanced during FY 2011 and continues through FY 2014.

During FY 2012, BMC staff reviewed new development patterns in the region to determine their consistency with the objectives of Maryland's Smart Growth Initiatives and Priority Funding Areas as well as locally designated priority funding areas. Three principal monitoring activities were carried out: (1) compiled development announcements from regional/local media, local

economic development agencies, State Highway Administration (SHA) project reports, and other sources within the local planning/development community; (2) analyzed actual residential development relative to existing and proposed water and sewer service areas and created a report documenting development activity; and (3) prepared quarterly and special reports of construction plans derived from the BPDS. In FY 2012 and FY 2013, BMC staff made formal presentations on these construction monitoring activities to the Technical Committee.

In FY 2011, BMC staff beta-tested and piloted the implementation of software applications to automatically capture and integrate mixed-use and “green” permit data into our database. For FY 2014, BMC staff will continue implementation of software applications to post our mixed-use and “green” permit data into our reports on construction activity and post these results on our website.

FY 2014 PERFORMANCE OBJECTIVES:

1. Prepare monthly and quarterly reports of plans for new residential and non-residential development.
2. Prepare analyses of building permit activity by water and sewer service areas and priority funding areas.
3. Prepare residential growth “hot spots” report.
4. Continue to develop and implement applications for capturing and reporting special building permits.
5. Prepare semi-annual reports on “green” permits.

PRODUCTS/MILESTONES	SCHEDULE
Reports on residential/non-residential development plans	Monthly/Quarterly
Reports on “green” construction activity	Semi-Annual
Report on residential hot spots	3 rd Quarter
Analyses/Maps on residential building permit activity by water and sewer services areas and priority funding areas	4 th Quarter

PARTICIPANTS: Baltimore Metropolitan Council

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BUDGET: **\$210,000**

FHWA Share – \$126,000

FTA Share – \$ 42,000

MDOT Share – \$ 21,000

Local Share – \$ 21,000

TASK: COOPERATIVE FORECASTING PROCESS

PURPOSE: To generate socio-economic and demographic data through a process that reviews changes in local land development patterns as the result of changing local policies or new developments in the market. This data is a vital input to the regional travel demand forecasting process and the development of the Long Range Transportation Plan.

In FY 2014, this work element provides for maintaining a liaison with state and local demographers and economic development officials to monitor regionally significant development issues. Discussions will continue with the Metropolitan Washington Council of Governments (MWCOCG) and the Wilmington Area Planning Council (WILMAPCO) as bi-regional forecasts are prepared and updated. Periodic meetings between the Cooperative Forecasting Group (CFG) and its counterparts at the Metropolitan Washington Council of Governments and the Wilmington Area Planning Council are included in these activities.

An activity that emerged for FY 2007 was the development of estimates that were incorporated into new socio-economic projections based on the impacts of the Base Realignment and Closure (BRAC) 2005 Commission's decision for military installations and office space in the Baltimore region. The federal military's decisions to shift federal civilian and military personnel to new locations will profoundly affect population, housing, and employment forecasts. Each socio-economic forecast set developed by the BMC in conjunction with the CFG since FY 2007 has incorporated individual jurisdiction estimates and projections of BRAC activity from Round 7, Round 7-A, Round 7-B, and Round 7-C to the current Round 8. In FY 2014, BMC staff will continue to conduct research to determine the magnitude of these changes by geographic area. These findings will be incorporated into the Round 8-A Cooperative Forecasts.

In FY 2011, BMC staff purchased and processed the 2009 ES-202 file that is the basis for current year small area employment estimates. The processing and review of the 2009 ES-202 provided BMC and local jurisdiction staffs with the technical expertise to process the 2010 ES-202 file that BMC staff used for the long-range transportation plan and its validation of 2010 U.S. Census Bureau at-place employment estimates. The result of this FY 2011 activity was the creation of the 2009 Master Establishment File (MEF). BMC supported local jurisdiction efforts to develop employment estimates at the jurisdiction and small area level. It purchased the 2010 ES-202 in early FY 2012 and conducted processing, quality control and analysis of the file. This

work was necessary to continue the creation of a 2010 MEF scheduled for completion, after review by local planning agencies, completed in FY 2013.

In FY 2013, BMC staff, with the approval of the CFG, incorporated new employment projections based on its research on estimating and forecasting employment data to create a consistent employment forecast dataset and accompanying long-range employment assumptions. CFG will incorporate these new employment forecasts into its next Cooperative Forecast, Round 8-A. In addition, BMC will continue to provide technical assistance as requested by the BRTB.

A new activity in FY 2014 will be the work of the CFG with BMC staff to develop socioeconomic inputs that can be used in the Population Synthesizer (POPGEN) demographic model to aid BMC modelers in the development of an Activity-Based Transportation Model. New data will become available in FY 2014 that will enable BMC staff with the approval of the CFG to include base year 2010 U.S. Census Transportation Planning Package (CTPP) information into a new Round 8-A for use in travel demand modeling. An additional step will supplement new Round 8-A socioeconomic forecasts. BMC staff will provide technical assistance to the CFG to update long-term forecasts as a result of the implementation of the Sustainable Growth and Agricultural Preservation Act of 2012. The combination of CTPP data and the Sustainable Growth and Preservation Act will significantly change the Round 8 forecasts developed in FY 2013.

FY 2014 PERFORMANCE OBJECTIVES:

1. Update and document assumptions for 2010-2020 forecasts to account for new development announcements/ decisions through January 2014.
2. Document proceedings of Cooperative Forecasting Group meetings.
3. Create small area employment forecasts 2010 – 2040 by economic activity area for use in the BMC travel demand model.
4. Document comparisons between Round 8 and Round 8-A long-range population, household and employment forecasts required in the BMC travel demand model.
5. Coordinate joint meetings to continue discussions on bi-regional growth assumptions with the Baltimore, Washington, and Wilmington Area forecasting groups.
6. Provide small area residential and employment estimates and forecasts to local jurisdictions on request.
7. Continue data compilation, data development and technical assistance to BMC partners.
8. Coordinate meetings with local Planning Directors.

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PRODUCTS/MILESTONES	SCHEDULE
Incorporate U.S. Census Bureau CTPP data into base year Round 8-A estimates	1 st Quarter
Prepare and document updated short-term 2010-2020 forecasts of population and households	2 nd Quarter
Create 2010 – 2040 small area population and household forecasts - Round 8-A	2 nd Quarter
Prepare and document new regional and jurisdictional employment forecast methodologies	2 nd Quarter
Create 2010-2040 small area employment forecasts by the North American Industrial Classification System (NAICS) sector for use in the travel demand model	2 nd Quarter
Document proceedings of the CFG	Throughout Fiscal Year
Provide data to local jurisdictions upon request	Throughout Fiscal Year
Provide data compilation, data development and technical assistance to the BRTB	Throughout Fiscal Year

PARTICIPANTS: Baltimore Metropolitan Council, Maryland Department of Planning, City of Annapolis, Baltimore City, and Anne Arundel, Baltimore, Carroll, Harford, and Howard counties

<u>BUDGET:</u>	Baltimore Metropolitan Council	\$210,000
	Anne Arundel County	\$37,400
	Baltimore City	\$65,000
	Baltimore County	\$76,230
	Carroll County	\$38,115
	Harford County	\$76,230
	Howard County	<u>\$76,230</u>
	TOTAL	\$579,205

FHWA Share –	\$347,523
FTA Share –	\$115,841
MDOT Share –	\$ 21,000
Local Share –	\$ 94,841

TASK: US CENSUS/AMERICAN COMMUNITY SURVEY MONITORING & ANALYSIS

PURPOSE: To review, analyze and develop relevant (transportation) products from data released by the Department of Commerce, U.S. Bureau of the Census for use in the Baltimore region.

A system of Community Profiles, based on 2000 Census and 2000 Master Establishment File (MEF) data was implemented in FY 2003. BMC staff has updated Community Profiles with existing MEF data and data from the 2008 American Community Survey (ACS). FY 2014 will see updates of these profiles using new employment data by North American Industrial Classification System (NAICS) codes and the incorporation of population and travel behavior data from the 2012-2013 ACS and the 2010 MEF.

The U.S. Census Bureau released its first small area summaries of the ACS in late calendar 2010. The ACS has replaced the U.S. Census Bureau's decennial long-form questionnaire and provides small area data on an annual basis. Since these data are developed annually, the Census Bureau will conduct continuous quality control assessments because a very different sample of households is used as compared to previous census activities. In FY 2010, BMC staff analyzed and reported on the Census Bureau's 2006 - 2008 multi-year ACS product through presentations to the Technical Committee and the BRTB. In FY 2011, BMC staff conducted similar activities for data from the 2005 – 2009 ACS product. Presentations were made to these same groups highlighting results from the U.S. Census Summary File 1.

In FY 2013 BMC produced maps and community profiles from the ACS 2006-2010 data release. These were available online in the form of static maps as well as interactive maps with profiles. Additionally, in FY 2013 BMC supplied data and technical assistance in using these products to local jurisdictions in the Cooperative Forecasting Group and other organizations. In FY 2014 BMC plans to enhance the way demographic data is available online with expanded web maps and data profiles.

In FY 2014, BMC staff will continue their analysis on the usability and reliability of this annual census product by comparing it with existing census data and data from the five-year (2008-2012) ACS product by small area. An updated report will continue to highlight data problems and opportunities and will detail how these data should be used in travel demand forecasting.

Data from the ACS will also be compiled and analyzed to assist in Environmental Justice equity analyses as needed. In FY 2014, BMC staff will conduct analysis on the Census Transportation Planning Package (CTPP) and its utility for use in travel demand modeling.

FY 2014 PERFORMANCE OBJECTIVES:

1. Analyze ACS demographic and housing characteristics and procedures for using these data as inputs to the travel demand modeling process.
2. Use CTPP data tables to assist in updating of Limited English Proficiency/Title VI analyses.
3. Update Community Profile series, based upon 2008 – 2012 ACS five-year sample data and the 2008 – 2012 Public Use Microdata files.
4. Generate topic reports based on the 2008 – 2012 ACS file.
5. Improve access to Census and ACS data with interactive online maps and profiles.

PRODUCTS/MILESTONES	SCHEDULE
Analysis of quality, reliability, and usability of 2008 - 2012 American Community Survey data	3 rd Quarter
Publication of Community Profiles using 2008-2012 ACS data, 2008-2012 ACS Public Use Microdata Sample (PUMS) data and the 2010 MEF contingent upon the availability of data files	4 th Quarter
Provide analysis and create web-reports on housing, travel behavior, income, immigration, etc. based on analysis of the CTPP.	Throughout Fiscal Year
Improve access to Census and ACS data with interactive online maps and profiles.	Throughout Fiscal Year

PARTICIPANTS: Baltimore Metropolitan Council

BUDGET: \$120,000

FHWA Share – \$72,000
 FTA Share – \$24,000
 MDOT Share – \$12,000
 Local Share – \$12,000

PROJECT: DATA DEVELOPMENT

This project is divided into four tasks:

- GIS Activities
- Database Maintenance
- Integrating Transportation and Land Use Planning
- Analysis of Trends and Policy Issues

TASK: GIS ACTIVITIES

PURPOSE: To continue to develop and refine the BMC Geographic Information System (GIS) that will allow BMC staff to spatially organize, update, analyze, disseminate, and graphically depict demographic, socio-economic and travel information.

BMC staff provide ongoing GIS maintenance and technical support for various transportation planning activities including analysis for the Long Range Plan, the Transportation Improvement Program, traffic monitoring systems, freight movement, and the congestion management system. GIS will continue to be a beneficial tool in storing, managing, analyzing and mapping the large number of geospatial datasets that BMC will use in FY 2014. This process will again be used to generate internally and externally requested maps and to perform all spatial analysis contained in BMC reports and for requests from both inside and outside the agency. The BMC GIS will be responsible for managing the storage of all geospatial data used within the BMC. BMC will also maintain and develop GIS applications that will increase staff productivity with custom tools.

The completion of the GIS Strategic Plan in FY 2009 and implementation of Phase 1 of the three-phase plan during FY 2010 and FY 2011 enabled the GIS staff to provide technical assistance and enhanced GIS capabilities to internal and external users. The full implementation of Phase 1 GIS Strategic Plan activities defined and developed GIS Data Service Level Agreements and associated Data Stewards to shepherd these new activities. Additionally, during FY 2011 new BMC GIS Standards for Metadata and National Map Accuracy Standards were implemented. Other tasks that were completed include the launch of a GIS data warehouse, implementation of data security policies, software procurement and development, the implementation of a GIS data dictionary and archiving of GIS data. In FY 2014, the BMC GIS staff will review tasks completed in Phase 1, designate maintenance tasks for items which

require periodic update and draft standard operating procedures (SOP) documents for workflows.

In FY 2014, BMC staff will continue to coordinate with the Maryland State Geographic Information Coordinating Committee (MSGIC) particularly with its efforts to improve coordination among state and local agencies, reduce duplication of effort and increase data sharing. In FY 2006, BMC staff began serving on MSGIC and will continue participation on the committee in FY 2014. This task also involves BMC staff working closely with MSGIC to understand and address the needs of local and regional planning organizations when developing statewide GIS systems.

In order to more easily share data with partner agencies and to achieve more extensive use of GIS resources, BMC staff will continue work on completing Phase Two within BMC's GIS Strategic Plan using a cloud-based approach. Significant staff resources will be dedicated to completing Phase Two of the BMC GIS Strategic Plan in FY 2014 to heighten BMC's GIS capabilities in order to keep up with the increased demand for GIS both internally and externally.

BMC staff will in FY 2014 work with external partners such as the Maryland State Highway Administration and the Baltimore Region Geographic Information System Committee to help develop a statewide street network that will be used in federally mandated functional class identification per MAP-21. Additionally, BMC staff will begin to identify GIS resources for delineating the new Baltimore Urbanized Area as it stretches into Queen Anne's County and provide map products for the new area.

FY 2014 PERFORMANCE OBJECTIVES:

1. Provide ongoing GIS maintenance and technical support within BMC.
2. Coordinate GIS activities within the BMC.
3. Manage the storage of all geospatial data.
4. Maintain and develop GIS applications/tools using online GIS data tools.
5. Participate in MSGIC.
6. Complete Phase Two outlined in the BMC GIS Strategic Plan by using cloud-based solutions to complete various internal and external projects.
7. Maintain web accessible data feeds, update web mapping applications to assist in visualization and offer training to BMC staff who wish to create their own individual web maps using an online platform.

8. Develop map network and mapping products for functional class identification and new Baltimore Urbanized Area demarcation.

PRODUCTS/MILESTONES	SCHEDULE
Provide GIS maintenance and technical support within BMC	Throughout Fiscal Year
Manage Geospatial Data Storage	Throughout Fiscal Year
Maintain/Develop GIS Applications/Tools	Throughout Fiscal Year
Participate in MSGIC	Throughout Fiscal Year
Maintain/Update Master Network Database Application	Throughout Fiscal Year
Coordinate GIS activities within the BMC	Throughout Fiscal Year
Maps and Spatial Analysis	Throughout Fiscal Year
Complete Phase II from BMC GIS Strategic Plan through the use of cloud-based solutions and online tools.	Throughout Fiscal Year

PARTICIPANTS: Baltimore Metropolitan Council, Metropolitan Washington Council of Governments, Maryland Transit Administration, State Highway Administration, City of Annapolis, Baltimore City and Anne Arundel, Baltimore, Carroll, Harford and Howard counties

<u>BUDGET:</u>	Baltimore Metropolitan Council	\$220,000
	City of Annapolis	\$2,620
	Anne Arundel County	\$2,620
	Baltimore City	\$2,620
	Baltimore County	\$2,620
	Carroll County	\$2,620
	Harford County	\$2,620
	Howard County	<u>\$2,620</u>

TOTAL \$238,340

FHWA Share –	\$143,004
FTA Share –	\$ 47,668
MDOT Share –	\$ 22,000
Local Share –	\$ 25,668

TASK: DATABASE MAINTENANCE

PURPOSE: To develop, refine, and enhance BMC software applications and databases to facilitate the use of BMC data resources.

The Master Network Database is a repository that includes all travel model links for any future horizon year or potential modeling scenario. It has yielded several benefits: (1) the user can easily query year-specific or scenario-specific model networks for use in any given model run; (2) the user can store, manage and edit multiple links and/or multiple networks in a true geographic information system (GIS) environment; and (3) all model results are displayed on the spatially accurate Baltimore BaseMap.

In FY 2013 BMC made updates to the Master Network that enable transportation project and traffic count data to be consistent with underlying spatial layers. BMC staff developed Quality Control software tools to associate traffic points with links within the Master Network and developed additional software tools to synchronize Master Network editing simultaneously with other projects and layers. BMC staff also developed software to use the new 2010 Travel Analysis Zone (TAZ) layer with the updated Master Network. In FY 2014 BMC staff will continue to enhance the Master Network Database by conducting a review to ensure screenline traffic count locations are compatible with the spatially improved network data layers. In addition, staff will migrate the entire Master Network Database application from a file geodatabase structure to a spatial database engine (SDE) database structure.

The BMC Traffic Count Database is an online interactive database that allows users to view, print, and download detailed traffic count data, as well as a map of the location. In FY 2013 an evaluation of the application was performed to determine how best to improve its functionality. In FY 2014 the results of that evaluation will be used to refine the database and an effort to fix errors that have been encountered during normal operation of the application will be undertaken.

In addition to refining and maintaining our internal database tools, in FY 2014, BMC staff will focus on further developing a web-based interactive map application. The interactive map application that was developed in FY 2013 has been constructed within the ArcGIS Online environment and features several data layers. The primary goal was to develop a tool that will

support our congestion management process (CMP) but will also serve as a transportation planning tool for BMC staff, our member jurisdictions, MDOT's modes and the general public. In FY 2014 significant staff time will be required to continue updating and maintaining the data layers that are available on the map. The effort to meet with BMC staff, our member jurisdictions, MDOT's modes and the general public to ensure no duplication of effort occurs in the on-going development of the web-based interactive map will also continue in FY 2014.

FY 2014 PERFORMANCE OBJECTIVES:

1. Enhance the Master Network Database by conducting a review to ensure screenline traffic count locations are compatible with the spatially improved network data layers.
2. Migrate the entire Master Network Database application from a file geodatabase structure to a SDE database structure.
3. Work with BMC staff, MDOT's modes and our member jurisdictions to ensure no duplication of effort occurs in the development of the web-based interactive map and to maximize the value of the tool to its end-users.

PRODUCTS/MILESTONES	SCHEDULE
Compatible and spatially improved screenline traffic count data layer in the Master Network Database	Throughout Fiscal Year
Repaired Regional Traffic Count Database	4 th Quarter
Updated ArcGIS Online Web-based Interactive Map Application	Throughout Fiscal Year

PARTICIPANTS: Baltimore Metropolitan Council, Metropolitan Washington Council of Governments, Maryland Transit Administration, State Highway Administration, City of Annapolis, Baltimore City and Anne Arundel, Baltimore, Carroll, Harford and Howard counties

BUDGET: Baltimore Metropolitan Council **\$100,000**

FHWA Share – \$60,000
 FTA Share – \$20,000
 MDOT Share – \$10,000
 Local Share – \$10,000

TASK: INTEGRATING TRANSPORTATION AND LAND USE PLANNING

PURPOSE: To explore the relationship between the regional transportation network and land use development patterns.

As part of the FY 2008 development of the long-range transportation plan, *Transportation Outlook 2035*, public comment called for increased consideration of land use development patterns in planning for capital improvements to the transportation network. In response, the BRTB initiated research activities to further investigate the relationship between transportation and land use. Since then, lessons learned and tools developed have been applied to UPWP work activities such as *Imagine 2060*, *Plan it 2035* and will continue to be applied in FY 2014.

In FY 2013, staff further developed the econometric land use model to be compatible with the improved regional travel demand model. Then, staff utilized the models in tandem to support the work activities of a BRTB work group on regional transit initiatives.

BMC will apply, enhance and/or develop the technical tools needed to evaluate transportation and land use scenarios in support of UPWP work activities such as a regional transit/ transit-oriented design (TOD) analysis. Such tools could include the Baltimore Regional Travel Demand model, the Production, Exchange, Capacity, Allocation System (PECAS) model and/or the INDEX software suite. With calibration completed in FY 2011, the PECAS model in particular will allow for extensive evaluation of the influences of transportation on land use and vice versa. For all scenarios, applicable evaluation measures for transportation and land development characteristics as well as environmental, economic/freight and social measures would be determined, developed as required, and applied. The PECAS model may also be used to evaluate one or more regional “value pricing” scenarios.

The PECAS model will be utilized in support of Title VI, Limited English Proficiency (LEP) and Environmental Justice (EJ) planning activities, with model output to be explored for possible use as an indicator of relative economic health within vulnerable populations.

In addition, BMC will continue to both monitor and evaluate related policies and processes at the federal, state, regional and local levels, and coordinate regional transportation and land-use planning initiatives with the appropriate partners. General examples of policies and processes to

be monitored and evaluated could include: Implementation of the U.S. EPA plan for Chesapeake Bay watershed restoration plan through the development of Watershed Implementation Plans — WIPs; and evolution of state-wide growth management policies through the work of the Maryland General Assembly/Maryland Sustainable Growth Commission, and the Maryland Department of Planning through the implementation of the Maryland State Growth Plan — *PlanMaryland*.

FY 2014 PERFORMANCE OBJECTIVES:

1. Investigate and develop and apply technical tools as needed in support of UPWP work activities.
2. Support Title VI, LEP and EJ planning activities.
3. Coordinate with local and state land use planning partners.
4. Monitor federal, state, regional and local land use policies and planning activities.

PRODUCTS/MILESTONES	SCHEDULE
Support UPWP work activities.	Throughout
Support Title VI, LEP and EJ planning activities.	Throughout
Coordinate and monitor inter-related planning activities.	Throughout

PARTICIPANTS: Baltimore Metropolitan Council

BUDGET: \$130,000

FHWA Share – \$78,000
 FTA Share – \$26,000
 MDOT Share – \$13,000
 Local Share – \$13,000

TASK: ANALYSIS OF TRENDS AND POLICY ISSUES

PURPOSE: To identify regional travel trends and related policy issues, using existing BMC datasets and outside resources where available. In recent fiscal years, BMC has collected or compiled a number of datasets, including the 2007/2008 Household Travel Survey, the 2007 On-Board Transit Survey, the American Community Survey, and data on regional traffic conditions such as GPS-based floating car travel time data and traffic counts. The results from the 2010 Census are also available.

The analysis will be responsive to the mission of the BMC as it relates to trends and initiatives outside the agency. For example, there has been a movement in federal policy away from adding capacity to the transportation system, and toward management of the existing system. In this context, more and better data will increase understanding of regional travel conditions and lead to better decision making.

The results of the analysis will be communicated to local officials and the public. Products for FY 2013 included an update of the *Out and About Travel Guide*, and a monitoring report on selected regional traffic indicators. The *Guide* was repurposed as a survey of transportation providers serving elderly and disabled residents in the region. The survey results have been used to understand the range of services available as well as identifying gaps in service, including geographic, temporal, and trip purpose.

In FY 2014, research continues on two topics of importance to the region:

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 BRTB. BRTB policy goals and program initiatives are articulated in documents such as *Plan It 2035*, the region's long-range transportation plan.

The Regional Indicators task will be an opportunity to re-evaluate and consolidate data collection activity at BMC. It may encompass data on land use and economic development, the environment, the condition of transportation infrastructure, measures of access and mobility, transportation system safety and security, and other data as necessary. The Travel Indicators

task from FY 2013, which compiled transportation and demographic indicators, will provide a model.

Indicators will be selected for two different but complementary purposes: 1) Track major regional trends and, 2) Develop regional performance measures. Performance measures support decision making by providing feedback on regional transportation investments. It is understood that both priorities and performance measures can shift over time in response to experience. In addition to local and regional performance measures, performance measures fulfilling the general mandates of federal transportation legislation but modified to fit the unique characteristics of the Baltimore region will also be selected.

Major sub-tasks will be selection, analysis, synthesis, and dissemination of regional indicators. Staff will work with subject area specialists at BMC to develop indicators, while also drawing on best practices from other metropolitan planning organizations and subject area literature reviews. The final product will be a state of the region report. An important component will be the creation of a user-friendly data format to be supplemented by descriptive text.

The Aging of the Regional Population - The Baby Boomers are now moving into old age, setting off the first stage of what will be a demographic transformation of the Baltimore region. The most rapid change will occur over the next ten years, with the cumulative impact mounting for several decades beyond.

Transportation is central for the elderly to maintain their independence and, with it, the physical and emotional well-being that comes with leading an active and socially connected life. BMC had conducted previous studies to assist the six jurisdictions in the region to plan for increasing elderly travel needs. They included a 1999 study on activity patterns and travel characteristics of the Baltimore region elderly population, and a 2004 study on residential choices, which used data from the 2000 Census.

The release of the 2010 Census results has also provided an opportunity to improve upon and extend previous work. A new study could include, but would not be limited to, research tasks covering the following topics: 1) Activity patterns and travel characteristics of the elderly, 2) Distribution of transportation needs categories (low, moderate, high), 3) Barriers to elderly

travel, 4) Attitudes toward transit services; mix of service features and cost desired, 5) Declining driver skills and driver education, and 6) Driver cessation.

In addition, two issue papers will be published to highlight policy issues identified by the study. Details of the study will be determined following completion of a review of current studies, and consultation with stakeholders, including local governments and non-profit social service providers. Several research tasks could involve a survey. If those tasks are selected, BMC may contract with a consultant to design and conduct the survey.

FY 2014 PERFORMANCE OBJECTIVES:

1. Produce two (2) issue briefs.
2. Study of Travel Patterns of the Baltimore Region Elderly Population, or Longitudinal Driver Cessation Study, or other selected topic.
3. Identified set of regional performance measures.
4. Analysis/Synthesis of current data.
5. Identified set of regional indicators.
6. State of the Region report.

PRODUCTS/MILESTONES	SCHEDULE
Identified set of regional performance measures.	1 st Quarter
Analysis/Synthesis of current data - Issue Brief 1 (The Aging of the Regional Population)	2 nd Quarter
Identified set of regional indicators - Issue Brief 2 (The Aging of the Regional Population)	3 rd Quarter
State of the Region Report - To be determined following completion of review, and consultation with stakeholders, in fiscal year 2013.	4 th Quarter

PARTICIPANTS: Baltimore Metropolitan Council

BUDGET: \$60,000

FHWA Share – \$36,000
 FTA Share – \$12,000
 MDOT Share – \$ 6,000
 Local Share – \$ 6,000

TASK: OPPORTUNITY PLANNING

PURPOSE: To work with the Opportunity Collaborative on the development of a Regional Plan for Sustainable Development (RPSD)

The Opportunity Collaborative (“the Collaborative”, previously known as the Baltimore Sustainable Communities Initiative) is the consortium charged with developing Baltimore’s RPSD. This 25 member coalition includes six local governments, the metropolitan planning organization, three Maryland state agencies, two universities and local philanthropy and advocacy organizations. BMC serves as the lead applicant and fiscal agent for the Collaborative.

Over the course of the next several years, the Collaborative will develop a RPSD that links our region’s housing, transportation and workforce development plans and investments with specific focus on reducing regional disparities. Government, philanthropic and private sector partners will work together with community members to develop a practical plan to connect all of our citizens to a prosperous and sustainable future. The process of developing this plan will include extensive community education and engagement, citizen leadership development, real world demonstration projects and the writing of regional housing and workforce development plans. Central to the RPSD will be the development of a financial strategy for implementation to ensure that the recommendations of the planning process can be put into place and the positive lessons learned through demonstration projects can be widely replicated.

On June 16, 2009, the U.S. Department of Housing and Urban Development, U.S. Department of Transportation, and the U.S. Environmental Protection Agency formed the Partnership for Sustainable Communities to help communities nationwide improve access to affordable housing, increase transportation options, and lower transportation costs while protecting the environment. The partnership agencies incorporate six principles of livability into federal funding programs, policies, and future legislative proposals. The six Livability Principles are:

Provide more transportation choices - Develop safe, reliable, and economical transportation choices to decrease household transportation costs, reduce our nation’s dependence on foreign oil, improve air quality, reduce greenhouse gas emissions, and promote public health.

Promote equitable, affordable housing - Expand location- and energy-efficient housing choices for people of all ages, incomes, races, and ethnicities to increase mobility and lower the combined cost of housing and transportation.

Enhance economic competitiveness - Improve economic competitiveness through reliable and timely access to employment centers, educational opportunities, services and other basic needs by workers, as well as expanded business access to markets.

Support existing communities - Target federal funding toward existing communities—through strategies like transit-oriented, mixed-use development and land recycling—to increase community revitalization and the efficiency of public works investments and safeguard rural landscapes.

Coordinate and leverage federal policies and investment - Align federal policies and funding to remove barriers to collaboration, leverage funding, and increase the accountability and effectiveness of all levels of government to plan for future growth, including making smart energy choices such as locally generated renewable energy.

Value communities and neighborhoods - Enhance the unique characteristics of all communities by investing in healthy, safe, and walkable neighborhoods—rural, urban, or suburban.

The Opportunity Collaborative has added a seventh Livability Principle for our work here in Baltimore: **Protect the Chesapeake Bay** - Promote location efficient and low-impact development in the region.

The Regional Planning Grant program, an effort of the Partnership for Sustainable Communities encourages grantees to support regional planning efforts that integrate housing, land-use, economic and workforce development, transportation, and infrastructure investments in a manner that empowers regions to consider how all of these factors work together to create more jobs and economic opportunities. The program places a priority on partnerships, including the collaboration of arts and culture, philanthropy, and innovative ideas to the regional planning process.

FY 2014 PERFORMANCE OBJECTIVES:

1. Review Job Access Opportunities and Impediments.
2. Provide technical support to consultant teams working on Opportunity Mapping, Regional Housing Plan, Regional Workforce Development Plan, and RPSD for the Opportunity Collaborative.
3. Participate in Opportunity Collaborative meetings to represent the BRTB and incorporate *Plan It 2035* into the RPSD and other Opportunity Collaborative work products.

PRODUCTS/MILESTONES	SCHEDULE
Provide Technical Support	Throughout Fiscal Year
Participate in Opportunity Collaborative	Throughout Fiscal Year
Review Job Access Opportunities and Impediments	4th Quarter

PARTICIPANTS: Baltimore Metropolitan Council

BUDGET: \$60,000

FHWA Share - \$36,000
 FTA Share - \$12,000
 MDOT Share - \$6,000
 Local Share - \$6,000

PROJECT: TRAVEL DEMAND MODELING

PURPOSE: To develop, maintain and apply decision support tools to evaluate proposed policies measuring outcomes compared to adopted regional transportation mobility and accessibility goals and objectives.

Transportation decision making is supported through the development, maintenance, and application of technical tools designed to simulate current and future scenarios, capturing travel behavior response to regional policy initiatives in evaluating outcomes, and measuring effectiveness in achieving regional goals and objectives. Technical modeling support activity is divided among three areas - development, maintenance, and application. Development of new technical tools is in response to emerging and anticipated policy questions where existing tools have limited capabilities. Maintenance of existing tools provides for functionality and incorporation of current observed data sets, ensuring model replication of observed regional travel behavior. Application of existing tools supports regional planning initiatives and the technical analysis of plans and programs with State Implementation Plans (SIP) Mobile Source Emission Budgets.

FY 2013 accomplishments focused on continuing maintenance of the Trip-Based Model (TBM) with the finalization of Version 4.2. Additional work included incorporating the 2010 Transportation Analysis Zone (TAZ) structure within the transportation model supply network and linking to the Round 8 demographic forecast assumptions on location and concentration of households and employment. Also completed was the formation of a model update work group in the development of a multi-year model improvement and data collection plan. Finally, staff continued developing forecast and technical analysis capabilities in support of BRTB identified areas of focus, air quality conformity determination, and a Technical Committee (TC) initiative on a value pricing scenario.

Technical staff finalized the development of the Version 4.2 TBM. Model method, assumptions and validation results were documented to assist users in the transferability and use of the developed tool in support of state and local corridor studies. The enhancement of BMC-Population Synthesizer (POPGEN) used to synthesize a regional population in the development of two joint household distributions (households by size and income and households by workers and income) was investigated through consultant services in the estimation/forecasting of

additional small area marginal control variables - population by age category and worker occupancy type. Analysis of the model estimation and outcomes was documented to understand model usability and acceptability in regional travel forecasting.

A large part of a model maintenance effort is the continuing enhancement of the electronic representation of the supply side transportation networks. The spatial enhancement of the lower functional class highway links was completed finalizing the multi-year effort to spatial enhance all highway representative links. The spatial enhanced highway networks increases user's interpretation/understanding of simulation results and allows for more accurate and consistency in conducting spatial joins of the model highway network with other geo referenced databases. Incorporating the 2010 Census TAZ structure within the simulation network was completed. The number of TAZs in the Baltimore region increased from 1,151 to 1,378. The adoption of a new zone system required the review of zone centroid coding system that represents access points to the transportation network. The process of incorporating a new TAZ structure was replicated for the Washington region jurisdictions that are a part of the TBM region.

A model update work group consisting of local and state modeling experts was convened with the object to develop a multi-year model improvements/enhancements and data collection blueprint. The blueprint for prioritizing tasks was developed based on need and availability of current observed data. The work group's recommendations were presented to the TC and Cooperative Forecasting Group for their input and concurrence on prioritizing phase I, Development of an Activity Based Model (ABM). The work group issued a Request for Proposals (RFP), and after reviewing and ranking proposals negotiated a multi-year contract with options for renewal to implement phase I. With the consultant team on board, the work group has transitioned to the core of a ABM development oversight committee with representatives from local and state agencies, along with private sector representation from firms engaged in corridor model application within the region. A Peer Exchange application with the Federal Highway Administration (FHWA) Travel Model Improvement Program (TMIP) was developed and submitted. If approved, a Peer Exchange will convene in the fall of 2013.

The 2008 validated TBM was applied in support of the BRTB GO-TRAN analysis and the TC's investigation of value pricing. Working with GO-TRAN members a transit scenario was developed and tested for the 2035 horizon year. Model estimation and results were analyzed

creating maps, charts, and graphs of simulation results. Information of changes in transportation accessibility, location of employment opportunities, and work trip household travel patterns were developed and shared to develop understanding of model outcomes. An initial value pricing scenario was developed to support TC's study. The studies objective initiated the discussion on value pricing within the region and tested technical tools capability in simulating travel behavior response to pricing/managed lane scenarios. A series of graphs and charts were developed and documented interpreting simulation results.

Additional accomplishments in FY 2013 include: 1) Developed and implemented the ability to generate "on the fly" zone to zone turn prohibitor file resulting in trip loading on highway links for trips travel between neighboring zones, 2) Updated and evaluated new version of Cube software used in TBM execution, and 3) Analyzed Longitudinal Employer-Household Dynamics (LEHD) data in support of GO-TRAN with the following:

- Documented usability comparing LEHD and 2010 Census results
- Developed transit typology for station and block analysis (typology - nine cell lookup table measuring intensity of 2010 Census Population and 2010 LEHD Workers)
- Developed demographic characteristics graphs and charts of resident workers and employed workers
- Developed LEHD O-D flow matrices of workers travel into and out of study corridors and combined flow data with model estimates of mode choice

In FY 2014, BMC staff will implement the phase I - ABM of the region model development blueprint. A regional model oversight committee will be formed to assist with the management of the project, meeting annual to review completed tasks and review and approve proposed tasks for FY 2015. A national expert model Peer Panel will convene reviewing and commenting on the regional model development blue print and responding to project approach and work scope for phase I - ABM estimation and implementation. BMC staff, with consultant assistance, will identify, gather, compile and analyze national, regional, and local data sets for the estimation of discrete choice models. Staff will generate memos detailing process to compile the data and develop summaries of the observed data. It is anticipated that the consultant will initiate the continue refinement of BMC-POPGEN with the inclusion of methods and processes to estimate/generate additional small area control totals. BMC staff will review proposed

procedures and investigate future horizon year scenarios comparing BMC-POPGEN synthesized population with other state agency projections.

In FY 2014, BMC staff will continue the maintenance of the existing TBM (Version 4.2). The region continues to maintain the supply side networks using a customized geographic information system (GIS) application. A process of joining observed databases such as the State Highway Administration (SHA) center-line variables and traffic counts along with INRIX travel speeds estimates will be completed. Inclusion of observed travel information allows for the development of model inputs and the ability to compare model outcomes with observed data.

In FY 2014, BMC staff will make enhancements to the model region transit supply network with the inclusion of fixed rail transit within the Washington region. The adopted model employees a factoring procedure derived from Metropolitan Washington Council of Governments (MWCOC) estimated trip tables. Adding fixed Washington transit service will enhance transit scenarios under consideration connecting Baltimore region transit alternatives with Washington region destination employment opportunities. The fixed rail inclusion mode choice probabilities for Washington intra-regional travel will be validated against existing MWCOC estimates.

In FY 2014, BMC staff will incorporate the latest BMC-POPGEN code and link synthetic drawing process with latest Census 5 year Public Use Microdata Sample (PUMS). The current process draws observations from the 2000 PUMS data set. The base year (2010) synthesized household population will be used in developing the two TBM required joint household distributions. Staff will also perform a validation test using latest Census information comparing observed estimates of households by income, size and workers with existing small area marginal estimation models. The synthesized two joint distributions, households by income and workers and households by income and persons, will also be validated with observed Census information. A comparison of horizon year synthesized population developed from the 2000 and 2006-2010 PUMS data sets will be documented identifying changes and differences.

In FY 2014, BMC staff will complete a validation of the model for a new base year of 2010. Reliance on horizon year model estimations is dependent on the models ability to replicate current observed behavior. The 2008 calibrated model will be updated with the Round 8

demographic data to simulate 2010 conditions. The model outcomes will be compared with the wealth of data available for 2010. The region's traffic count database contains state, regional, and local vehicle counts of both volume, classification and hourly demand allowing for model comparison of time of day, vehicle class, and volume concentrations. The much anticipated 2010 Census Transportation Planning Package (CTPP) is scheduled for release in summer of 2013. The 2010 CTPP dataset is derived from the 2006-2010 American Community Survey (ACS) using the small area geography (TAZs). The CTPP data will provide validation data sets for household and population demographic characteristics and employed person characteristics at the work location. The CTPP data set contains usual mode used for work and time of departure. The revealed information will be used to validate Home-Based Work mode choice, work purpose trip distribution and work time of day splits. The INRIX probe vehicle travel speed database will be used to compare the results of simulated trip loading speed estimation. The simulated network speed is used to inform the trip distribution model spatial separation of productions and attractions. Consistency in observed and simulated travel speed will allow mode skims to accurately reflect the spatial separation in travel time between productions and attractions.

In FY 2014, BMC staff will provide technical assistance on the use and operation of the region's technical tools in the state and local sponsored corridor studies. With the continuing model enhancements and model validation efforts, BMC staff will provide the model updates on performance and capabilities at Technical Committee meetings. An ABM model oversight committee will be formed consisting of state and local modeling experts. Through participation, local knowledge on relevance to local planning studies will be gained as the region transitions towards a new modeling paradigm.

In FY 2014, BMC staff will continue the value pricing analysis building upon lessons learned from the initial study. Maryland continues to investigate legislative policies related to Public Private Partnerships (P3) to fund transportation improvements. Using the initial regional results, selected corridor(s) will be identified for more detailed analysis. The corridor study will simulate changes in household and employment accessibility and mobility that results through implementation of corridor pricing policy. A detailed approach will summarize trip purposes and identify areas that benefit from implementation. In addition to a corridor approach, BMC staff will initiate a research effort related to understand other innovative financing approaches such as

vehicle miles traveled (VMT) fees. Pilot programs from other areas will be explored identifying policy approaches and documented changes in behavior. An analysis of existing revealed vehicle travel behavior estimating fees from gas tax based on vehicle average mileage with fees from reported household vehicle travel will be developed. Charts, graphs and maps of differences in household travel fees will be reported.

In FY 2014, BMC staff will initiate an analysis of future horizon-year travel demand as a result of the Round 8 cooperative forecasts. In FY 2013, the BRTB adopted the Round 8 small area forecasts of households and employment. The latest planning assumptions incorporate recently adopted local land use policies and projects of demographic trends to the 2040 horizon year. Using the adopted forecasts and *Plan It 2035*, BMC staff will simulated horizon year demand. The analysis will identify projected trends in travel behavior - household trip generation, trip distribution patterns, choice of modes, and time of day, route choice, and congested links (hot spots). The analysis will assist the policy board in identifying additional transportation needs in the region.

In FY 2014, BMC staff will continue to support the BRTB freight and transit working groups. Staff will continue to support the initiatives in the analysis of current available data sets. Staff has supported GO-TRAN in evaluation of corridor LEHD data identifying corridor household workers and employed worker characteristics and using the TBM in evaluating horizon year travel responses to additional transit services. The support of FROG has been in the form of the analysis of the Commodity Flow Survey and investigation of freight prioritization methodology.

In FY 2014, BMC staff will consider expanding the travel model boundary area to include the entire 2010 Baltimore-Towson urbanized area. The Census Bureau, based on 2010 Census results, published new urbanized boundaries. The Baltimore-Towson urbanized area extends to the eastern shore to include a portion of Queen Anne's County. As recommended in the 2012 Certification Report, the area will be included in the planning process. Research on developing TAZ structure, developing transportation networks, and assembling/forecasting demographic data will be explored and documented.

In FY 2014, BMC staff will begin a discuss on expanding modeling capabilities in the area of micro simulation. Staff has focused their skill set on developing, maintaining, and applying

aggregate trip based models supporting the development of plans and programs. With the initiation of disaggregate modeling in FY 2014 and the eventual enhancements in with the simulation of route choice through the adoption of dynamic traffic assignment, staff will look for training and webinar opportunities to expand skill sets in micro simulation.

FY 2014 PERFORMANCE OBJECTIVES:

1. Initiation of ABM project, formation of a model oversight committee, documentation on ABM model design
2. Memos and presentations on Trip Based model enhancements
3. Memos and presentations on Trip Based model validation of 2010 observed conditions
4. Staff report on corridor Value Pricing analysis
5. Staff report on 2040 demographic and travel trends
6. Participate in meetings and analysis support of BRTB transit and freight planning

PRODUCTS/MILESTONES	SCHEDULE
ABM initiation, meeting minutes, data collection/analysis	Throughout Fiscal Year
Memos on TBM refinement	Throughout Fiscal Year
2010 TBM validation	4 th Quarter
Value pricing staff report	3 rd Quarter
Technical memo based on BRTB direction for analysis of identified areas of interest	Throughout Fiscal Year
2040 trends report	4 th Quarter
Memos/Presentation on the initiation of ABM	Throughout Fiscal Year

PARTICIPANT: Baltimore Metropolitan Council

BUDGET: \$565,000

FHWA Share – \$339,000
 FTA Share – \$113,000
 MDOT Share – \$ 56,500
 Local Share – \$ 56,500

SHORT-RANGE TRANSPORTATION PLANNING

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PROJECT: TRANSPORTATION IMPROVEMENT PROGRAM

PURPOSE: To assemble a comprehensive listing of requests for federal funds in support of state and local transportation investments planned over the next four-year period.

The BRTB adopts a Transportation Improvement Program (TIP) each year. The TIP documents the anticipated timing and costs for all regionally significant projects utilizing federal, state and local resources. In addition, the TIP must demonstrate its ability to conform to the State Implementation Plan (SIP) for air quality standards, and document private enterprise participation and financial capacity for each implementing agency. During development of the TIP, the public is afforded opportunities to review and comment on proposed projects during the public outreach phase. The public is encouraged to comment on the full documentation with information on the conformity determination and financial constraint.

A web-based software is used in the development of the TIP that enables jurisdictions and agencies to submit, view and edit their TIP projects online. The software also provides the public an opportunity to review and comment on the TIP projects online in a user-friendly format. Visitors to the TIP website can review draft projects with project status, project descriptions and justifications and find information about phases of the projects, funding amounts, and funding sources. Visitors will also view projects through an interactive mapping tool which includes an integrated public commenting tool. During FY 2013, a contract was signed that allowed for the BRTB to utilize a cloud-based TIP management program that allows for enhanced data entry for project sponsors, management of TIP amendments and use by the public for informational purposes.

Development of the 2014-2017 TIP will be completed by late FY 2013 with BRTB approval scheduled in early FY 2014. Amendments to the 2014-2017 TIP will be reviewed and coordinated with the region's conformity determination as appropriate. Development of the 4-year 2015-2018 TIP will occur mostly in FY 2014 and will include the preparation of draft documents and public involvement.

In keeping with current surface transportation legislation, a listing of projects with federally obligated funds from the previous year's TIP's annual element was published within ninety (90) days after the end of each fiscal year and be readily available for viewing online and will also be published in FY 2014.

FY 2014 PERFORMANCE OBJECTIVES:

1. Develop a detailed and financially realistic program of transportation projects that is consistent with the long-range transportation plan in conjunction with air quality standards and addresses environmental justice guidance.
2. Ensure opportunities for public input, review and comment.
3. Effectively communicate the process member jurisdictions have developed to submit projects for TIP approval. Review submitted projects for clarity, correctness, and fulfillment of federal requirements.
4. Amend the TIP as necessary. Improve the TIP change submittal process through improved web-based software and provide training to member jurisdictions.
5. Solicit and review proposed projects for the 2015-2018 TIP.
6. Track project implementation or delay from previous year's TIP for the annual listing of projects.
7. Use the TIP as a management tool for implementing the Long-Range Transportation Plan.

PRODUCTS/MILESTONES	SCHEDULE
New TIP software implementation and subsequent training	1 st Quarter
Draft 2015-2018 TIP	3 rd & 4 th Quarter
TIP public participation forums	4 th Quarter
Obligated Project Listing of federally funded projects	2 nd Quarter
TIP amendments and administrative modifications	Throughout Fiscal Year

BALTIMORE REGION UPWP
FY 2014 UNIFIED PLANNING WORK PROGRAM

PARTICIPANTS: Baltimore Metropolitan Council, Maryland Department of Transportation, State Highway Administration, Maryland Transit Administration, Maryland Transportation Authority, the City of Annapolis, Baltimore City and Anne Arundel, Baltimore, Carroll, Harford and Howard counties.

<u>BUDGET:</u>	Baltimore Metropolitan Council	\$65,000
	City of Annapolis	1,270
	Anne Arundel County	1,000
	Baltimore City	10,165
	Baltimore County	3,000
	Carroll County	1,270
	Harford County	5,080
	Howard County	<u>5,080</u>
	TOTAL	\$91,865

FHWA Share –	\$55,119
FTA Share –	\$18,373
MDOT Share –	\$ 6,500
Local Share –	\$11,873

PROJECT: SUBAREA ANALYSIS

This project is divided into 9 task activities to be completed by four jurisdictions:

Anne Arundel County

- Major Intersections and Important Facilities

Baltimore City

- Bicycle Master Plan Update
- Hanover Street Corridor Study
- MLK Jr. Blvd. Corridor Study
- Truck Route Safety Improvements

Baltimore County

- Bicycle Sharing Program Study
- Transit Oriented Development Policy Analysis

Howard County

- Pedestrian Facility Assessment, Part 2
- Bus Rapid Transit Assessment

TASK: ANNE ARUNDEL COUNTY MAJOR INTERSECTIONS AND IMPORTANT FACILITIES

PURPOSE: The Major Intersections and Important Facilities (MIIF) project will evaluate mobility and accessibility needs in seven unique travel corridors which fall below the volume and functional classification threshold of the prior Corridor Growth Management Plan study, but which have a disproportionate impact on the regional network.

The MIIF is the fourth and final component of the County's Transportation Functional Master Plan, a multi-year endeavor to update the Transportation element of the County General Development Plan. The study will integrate the findings and recommendations regarding the seven corridors with those of the three prior study components. The four components are:

- Corridor Growth Management Plan
- Pedestrian and Bicycle Master Plan Update
- Complete Streets Guidance
- Major Intersections and Important Facilities

FY 2014 PERFORMANCE OBJECTIVES:

1. Modify the Anne Arundel County travel demand model (AATrvM) as needed to evaluate the seven corridors.
2. Collect data as needed to refine the model in the study area.
3. Conduct a corridor level footprint assessment to determine ROW needs/impacts and a corridor level toolbox assessment of transportation system management/transportation demand management (TSM/TDM) options.
4. Conduct public outreach.
5. Integrate the four components into a comprehensive multimodal functional plan narrative for addressing future transportation needs.

PRODUCTS/MILESTONES	SCHEDULE
Collect and map existing condition data. Revise travel model transportation analysis zone structure and network detail.	1 st Quarter
Identify corridor level footprint and assess right-of-way impacts. Refine 2035 travel forecasts in the selected study areas. Recommend travel mode options by corridor.	2 nd Quarter
Conduct corridor level TSM/TDM assessment.	3 rd Quarter
Conduct public outreach events.	3 rd & 4 th Quarters
Integrate all four study components.	4 th Quarter
Produce Final Plan	4 th Quarter

PARTICIPANTS: Anne Arundel County, Consultant

BUDGET: \$350,000

TASK: BALTIMORE CITY BICYCLE MASTER PLAN UPDATE

PURPOSE: Update the City’s Bicycle Master Plan to create an integrated network of innovative bicycle facilities which encourages bicycling as a viable transportation option; enhance efforts to collect timely data on and analyze bicycle traffic, develop and implement marketing efforts to promote safe bicycling. Development of the bike plan update will include successes, lessons learned, and policy updates with a focus on local level planning for easier implementation. The City will also continue regional coordination of bicycle and pedestrian planning participation in the BRTB Pedestrian/Bicycle Task Force.

FY 2014 PERFORMANCE OBJECTIVES:

1. Draft Baltimore City Bicycle Master Plan update
2. Track data on and analyze bicycle traffic;
3. Develop marketing activities to promote safe bicycling
4. Develop traffic calming and pedestrian safety measures
5. Participate with other jurisdictions in the BRTB Bicycle and Pedestrian Task Force as that group works with BMC staff to develop implementation plans, etc.

PRODUCTS/MILESTONES	SCHEDULE
Bicycle Master Plan Implementation: <ul style="list-style-type: none"> • Review roadway design and construction plans for bicycle • Lane and safety improvements • Develop partnerships for installation of bicycle racks and shower/changing facilities • Install bicycle and pedestrian count technologies at appropriate locations • Provide training opportunities for City engineers, planners, and public works inspectors 	Throughout Fiscal Year
Track data on and analyze bicycle traffic	Throughout Fiscal Year
Develop marketing activities to promote safe bicycling	1 st Quarter
Develop complete streets principals	3 rd Quarter

PARTICIPANTS: Baltimore City DOT, Planning, Rec and Parks, Police, Mayor’s Bicycle Advisory Committee, Downtown Baltimore Family Alliance, Bikemore, Bike Maryland, BMC

BUDGET: \$75,000

TASK: BALTIMORE CITY HANOVER STREET CORRIDOR STUDY

PURPOSE: To identify traffic and safety issues on Hanover Street from I-95 to I-895 for improving truck access, pedestrian/bicycle accommodations, and safety. Hanover Street is a major freight and commuter traffic corridor in the Middle Branch Transportation Plan. The study will identify new recommendations for vehicular and pedestrian safety and will refine existing recommendations. The study will also identify design alternatives for the intersection of Hanover and Frankurst to redirect truck traffic southbound on Potee Street to I-895 as an alternative to Hanover Street.

FY 2014 PERFORMANCE OBJECTIVES:

1. Provide a comprehensive analysis of Traffic Operations and pedestrians safety along Hanover Street between I-95 and I-895.
2. Analyze pedestrian/bicycle/transit access
3. Assess current truck routes
4. Draft recommendations for truck access improvements, pedestrian/bike accommodations, and other traffic safety measures for corridor.

PRODUCTS/MILESTONES	SCHEDULE
Data collection, project scope, stakeholder communication	1 st Quarter and ongoing thereafter
Development of corridor recommendations	2 nd Quarter
Development of plans to improve truck access, traffic safety, and multi-modal access.	Beginning in 3 rd Quarter
Final Report	4 th Quarter

PARTICIPANTS: Baltimore City DOT, Consultant, MTA, MPA

BUDGET: \$100,000

TASK: BALTIMORE CITY MLK JR. BLVD CORRIDOR STUDY

PURPOSE: Martin Luther King (MLK) Jr. Blvd is a major gateway into the city from Howard, Anne Arundel, and Baltimore Counties and a primary access corridor for many city neighborhoods. With numerous traffic and pedestrian crashes during recent years and high traffic speeds, a comprehensive traffic study is needed to improve safety issues along the corridor. Perform traffic and safety analysis on MLK (entire length). The study will include an existing conditions analysis, future conditions analysis and conceptual recommendations to improve mobility, enhance the corridor for alternative transportation opportunities, create a highly visible gateway into the City, and reduce vehicular and pedestrian conflict points along the corridor.

The development of the University of Maryland Baltimore (UMB) Bio Park, the Red Line and the proposed State Center Transit-Oriented Development (TOD) will depend on the corridor along MLK Boulevard as one of the key components of the transportation network.

FY 2014 PERFORMANCE OBJECTIVES:

1. Assess potential future conditions, including future Red Line construction, UMB Biopark, and new residential and commercial development
2. Provide a comprehensive analysis along the MLK Jr Boulevard corridor and gateway which will include traffic operations and pedestrian safety.
3. Provide the groundwork for geometric improvements to transportation facilities including possible transit upgrades, pavement markings, traffic controls, sidewalks, Americans with Disabilities Act (ADA) ramps, medians, lighting and other elements.

PRODUCTS/MILESTONES	SCHEDULE
Data collection, project scope, stakeholder communication. Existing conditions analysis	1 st Quarter and ongoing thereafter
Development of corridor recommendations	2 nd Quarter
Development of corridor concept	3 rd Quarter
Complete report containing recommendations and concept design	4 th Quarter

PARTICIPANTS: Baltimore City DOT, Red Line, MTA, Department of Planning, Consultant, SHA, Anne Arundel, Howard, and Baltimore Counties, BMC.

BUDGET: \$100,000

TASK: BALTIMORE CITY TRUCK ROUTE SAFETY IMPROVEMENTS CURTIS AVENUE AND PENNINGTON AVENUE

PURPOSE: Perform geometric and safety analysis to convert Pennington Avenue and Curtis Avenue from the current one-way pair to two-way traffic on both corridors thereby designating Curtis Avenue as the truck route and allowing Pennington Avenue to be a residential corridor. The study boundaries are between Patapsco Avenue and Birch Street. The study will include analysis of conditions and future conditions; conceptual geometry recommendations to convert Curtis Avenue and Pennington Avenue to two-way traffic, improve mobility, enhance the corridor for alternative transportation opportunities, create a gateway into the City from Anne Arundel County, and reduce vehicular and pedestrian conflict points along the corridors.

The background: Curtis Avenue and Pennington Avenue in the Curtis Bay Community are one-way paired streets that are designated as Through Truck Routes that pass through the residential community connecting Hawkins Point and Anne Arundel County industrial activities. The proposed residential development of over 1,500 homes in Anne Arundel County provides a direct connection to Pennington Avenue. The added traffic mix of residential to existing commercial traffic complicates the current roadway network of through commercial trucks and passenger traffic.

FY 2014 PERFORMANCE OBJECTIVES:

1. Provide a comprehensive geometric safety analysis along the Curtis Avenue and Pennington Avenue between Patapsco Avenue and Birch Street.
2. Provide the groundwork for geometric improvements to transportation facilities including possible pavement markings, traffic controls, sidewalks, Americans with Disabilities Act (ADA) ramps, medians, lighting and other elements.

PRODUCTS/MILESTONES	SCHEDULE
Existing Conditions Analysis	1 st Quarter
Final Conditions Analysis	2 nd Quarter
Final Report and Recommendations	4 th Quarter

PARTICIPANTS: Baltimore City DOT, Baltimore City Dept. of Public Works, Planning, Consultant, Community Groups

BUDGET: \$125,000

TASK: **BALTIMORE COUNTY BICYCLE SHARING PROGRAM STUDY**

PURPOSE: This project studies the possibility of a bike sharing program in Baltimore County.

FY 2013 PERFORMANCE OBJECTIVES:

1. Provide an overview of the bike sharing concept
2. Analyze existing bike sharing programs
3. Determine areas where the program will be implemented
4. Create a plan with models of provision and infrastructure considerations
5. Estimate costs and funding
6. Successful programs illustration

PRODUCTS/MILESTONES	SCHEDULE
Concept, background study and area of implementation	1 st Quarter
Bike sharing plan	2 nd and 3 rd Quarters
Cost, funds and examples	4 th Quarter

PARTICIPANT: Baltimore County

BUDGET: **\$20,000**

TASK: BALTIMORE COUNTY TRANSIT-ORIENTED DEVELOPMENT POLICY ANALYSIS

PURPOSE: Provide transferable local framework and guidance for pursuing Transit Oriented Development (TOD) opportunities. Since the 1960's and under a number of different names local jurisdictions in the Baltimore region have discussed the importance of Transit Oriented Development. However, very little TOD development has actually occurred over nearly half a century. This project will focus on developing a transferable framework for implementing more successful TOD opportunities in both Baltimore County and the Baltimore Region in general. In addition to developing a transferable framework the project will develop TOD site concepts for several locations in Baltimore County.

FY 2014 PERFORMANCE OBJECTIVES:

1. Conduct national and regional TOD process reconnaissance.
2. Develop list of local fatal flaws and an opportunities framework.
3. Prepare necessary reports.

PRODUCTS/MILESTONES	SCHEDULE
Review and refine prior work program that contains reconnaissance on successful TOD activity and processes in Baltimore and other regions. Identify common successful elements.	1 st Quarter
Identify existing fatal flaws that have prohibited a more robust development of TOD opportunities in the Baltimore region	2 nd Quarter
Develop a TOD Opportunities framework	2 nd Quarter
Review and rank potential TOD opportunities	3 rd Quarter
Develop conceptual plans	3 rd Quarter
Draft and Final Report	4 th Quarter

PARTICIPANT: Baltimore County

BUDGET: \$60,000

TASK: HOWARD COUNTY PEDESTRIAN FACILITY ASSESSMENT, PART 2

PURPOSE: Comprehensively evaluate pedestrian facilities in Howard County. This project will assess deficiencies and gaps in continuity, including missing connections to local (parks, schools, etc.) and regional facilities, activity centers, and transit service in order to identify and prioritize potential corrective actions.

For FY 2014 the project will evaluate pedestrian accessibility for all bus stops and bus shelters in Howard County including compatibility with the Americans with Disabilities Act (ADA). The project will be coordinated with the regional effort to improve transit access and will develop a template that can be used through the region to access transit bus stops and bus shelters for ADA compatibility and pedestrian accessibility.

FY 2014 PERFORMANCE OBJECTIVES:

1. Review County reports/studies (e.g., Pedestrian Plan 2007, General Development Plan and small area master plans, latest travel forecast model trip table and mode share data; State and County capital projects, School Board sidewalk priority list, and efforts by other jurisdictions to identify, quantify and prioritize facility improvement needs.
2. Field survey and map all bus stops and bus shelters in Howard County. Identify all pedestrian connections and gaps. Assess compliance with ADA regulations. Develop initial ADA compliance measures and pedestrian facilities to bridge accessibility gaps.
3. Field survey and map pedestrian/bike facilities and facility gaps along arterial and collector roads in the County's urbanized area and suburban area and identify pedestrian/bike amenities (crosswalks, lighting, pedestrian signal phase, bike racks, etc.) as well as likely significant pedestrian/bike trip producers (residential enclaves) and attractors (schools, parks, libraries, shopping, etc.).
4. Conduct outreach through stakeholder meetings to identify community concerns and observations in order to identify and prioritize additional facility needs.
5. Develop methodologies for prioritizing facility improvement options and standardizing unit costing.
6. Identify and broadly rank (e.g., high, medium, low) site specific improvement options and cost estimates.
7. Develop a prototype list of recommendations for changes to existing development regulations and design standards to assist in implementation of the identified improvements.

REGIONAL JUSTIFICATION:

1. The project will be coordinated with the regional efforts to improve transit access and deal with suburban incomplete street patterns.
2. The project and will develop a template that can be used throughout the region to access transit bus stops and bus shelters for ADA compatibility and pedestrian accessibility.

PRODUCTS/MILESTONES	SCHEDULE
Conduct all field surveys and gap analysis	1 st and 2 nd Quarter
Conduct stakeholder meetings and outreach to the public.	1 st and 2 nd Quarter
Develop proposed gap projects and prioritization of projects.	3 rd Quarter
Strategies to implement the improvements from sources other than the capital budget	3 rd Quarter
Final mapping and reports in electronic and hardcopy formats for distribution to stakeholders and the public for reviews and final approval	4 th Quarter

PARTICIPANT: Howard County

BUDGET: \$96,000

TASK: BUS RAPID TRANSIT ASSESSMENT

PURPOSE: Comprehensively evaluate future bus rapid transit facilities in Howard County and their potential linkage to the Washington Region

This project will assess Bus Rapid Transit (BRT) Corridors proposed in the Howard County General Plan and their potential connections to the Washington region. A network of feeder buses, BRT stations and potential changes in land uses will be tested in conjunction with these BRT corridors. The potential cost effectiveness of these corridors will be evaluated and preliminary planning level site analysis performed.

FY 2014 PERFORMANCE OBJECTIVES:

1. Establish preliminary BRT corridors and perform testing and analysis for the year 2035 to determine the most likely candidates for further analysis.
2. Refine BRT corridors to include local feeder networks, potential park-and-rides, and increased pedestrian accessibility.
3. Conduct modal split analysis and preliminary cost analysis for the refined BRT corridors. Ascertain congestion reduction impacts on future transportation networks.
4. Determine most cost effective BRT solutions.
5. Develop an alternative land use scenario and test on selected BRT corridors and test transportation and potential land use impacts.
6. Select most cost effective and highest mobility accessibility combinations of BRT facilities and land use and provide final analysis.
7. Develop Final recommendations and next steps.

REGIONAL JUSTIFICATION:

1. The BRT analysis will provide guidance for other BRTB members on the efficacy of BRT and the corridors and types of land use it will best operate.
2. The BRT analysis will also provide an understanding of the potential type of congestion reductions that BRT will provide under different land use scenarios.

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PRODUCTS/MILESTONES	SCHEDULE
Establish and test preliminary BRT networks.	1 st Quarter
Develop refined BRT networks for testing. Develop potential land use scenarios for BRT corridors.	2 nd Quarter
Analyze and test BRT corridor concepts and potential BRT land use scenarios.	2 nd and 3 rd Quarter
Final recommendations and next steps for BRT networks.	4 th Quarter

PARTICIPANTS: Howard County, consultant

BUDGET: \$79,000

PROJECT: TECHNICAL ANALYSIS IN SUPPORT OF STATE INITIATIVES

PURPOSE: To provide special technical assistance to the modal administrations of MDOT and, at the request of MDOT, other state agencies (such as the Maryland Department of the Environment or the Maryland Department of Planning) in transportation planning activities related to the Baltimore region.

The BMC's staff involvement in MDOT efforts provides an opportunity to build regional considerations into statewide studies. The use of BMC-generated data also ensures the inclusion of regional growth and development goals and forecasts, as well as regional priorities for transportation improvements. BMC staff continues to assist MDOT/Maryland Transit Administration (MTA) by providing technical information related to the Red Line Transit Study, as well as provide travel demand model forecasts and analysis to the State Highway Administration (SHA) and the Maryland Transportation Authority (MdTA). Work activities would involve meetings with participating agencies to discuss proposed/new projects, development of monthly progress reports, budgetary reporting and technical quality control.

In FY 2013, BMC staff provided technical assistance to the SHA in expanding the capabilities of the Maryland Statewide Travel Model (MSTM) and analysis of model outcomes in understanding potential impacts of Transit Oriented Development (TOD). The region's toll choice model was integrated with the MSTM. The integration was completed in a way to ensure consistency between model outcomes with and without the use of the toll choice model. Staff is in discussion with SHA and MdTA on a corridor application of the enhanced MSTM model for FY 2013 and FY 2014. At the request of SHA, BMC staff developed a detailed analysis of model outcomes for two TAZs in the Owings Mills area containing the TOD development under construction. This analysis was performed to generate mode choice model results and to develop an understanding of potential outcomes due to changes in accessibility of land use to transit service. The analysis will assist SHA in identifying reasonable transit model shift assumptions for future TOD traffic impact studies.

BMC staff continued with the incorporation of the regional toll model into the MSTM. To support this, trip tables were obtained from the University of Maryland and preliminary base and future model simulations were developed. Changes in value of time and volume delay curves were

proposed for testing. On another project, staff continued to assist SHA in understanding model results related to TOD proposal in Owings Mills. Base and future year maps, graphs, and charts are being developed to understand potential mode choice changes.

In FY 2014, the BMC staff will provide technical assistance to MDOT in a variety of highway, transit and other modal systems studies. Collaboration includes project planning studies, feasibility/special studies, transportation performance measures, training/miscellaneous support and statewide transportation modeling support as follows:

Project Planning Studies - The work scope will account for technical support in travel demand modeling (primarily highway coding; also transit network coding) and alternative evaluations (model Measures of Effectiveness (MOE) output) of ongoing and upcoming project planning studies. Work activities also involve meeting with requesting agencies to discuss proposed projects, drafting and finalizing work statements and tasks, creating projects when authorized and progress reporting.

Feasibility/Special Studies - This work task will provide funding for technical support on feasibility/special studies as requested by MDOT and SHA. Work may include, however is not limited to supplementation of ongoing corridor/sub area analysis, land use-policy-network scenario testing, TOD and special generator analysis, regional toll sensitivity analysis testing, freight analysis (potential corridors include I-83, I-95 and I-70) and analysis of demographic data from the BMC synthetic population generation process.

Transportation Performance Measures - This work task overlaps the BRTB's planned effort to evaluate performance measures at the project, systems and sub area levels. SHA requires measurable results on system performance benefits to compare the relative merits of individual projects proposed for implementation or for use in refining and/or determining priorities amongst the Maryland Highway Needs Inventory and for long-range transportation plan scenario testing. Measures will be defined and estimated at the appropriate local, sub area, corridor and/or regional levels to enable a consistent assessment of specified projects and programs, however could include Levels of Service (LOS), Travel Time Delay, Vehicle Miles Traveled (VMT) and environmental/Green House Gas (GHG) emissions.

Training/Miscellaneous Technical Support - This work task accounts for coordination on periodic updates of the Baltimore Regional Travel Demand Model (Version 4.2 with new mode choice and toll model), model networks and land use files and future modeling procedures (Population Synthesizer (POPGEN) and PECAS Land Use modeling) to MDOT and SHA.

Statewide Transportation Modeling Support - This work task provides funding for MDOT, SHA, other models and BMC to collectively evaluate the MSTM output and to integrate future model enhancements and results from MSTM to the regional travel demand model. BMC will apply the MSTM freight and long-distance travel demand model components to its regional travel demand model and investigate the MSTM destination choice model. MDOT and SHA will investigate the population synthesizer POPGEN from the BMC travel demand model and initiate Phase II evaluation of the BMC Model's Tolling module integration into MSTM.

Carbon Neutral Corridor Analysis – This work task builds on work MDOT concluded in January 2011 for the US 40 Carbon Neutral Corridor Analysis. MDOT is looking to expand the program and review additional corridors in the Baltimore region. BMC will assist MDOT in this program in reviewing potential transportation and land use scenarios utilizing modeling techniques, GIS layers and with contacts with local planners.

FY 2014 PERFORMANCE OBJECTIVES:

1. Prepare technical work scopes and project budget prior to the commencement of work on the proposed technical study efforts.
2. Provide technical support upon request from MDOT to assist in specific project studies.
3. Perform miscellaneous technical studies and provide information at the request of MDOT and its modal administrations.

PRODUCTS/MILESTONES	SCHEDULE
Work scopes	Throughout Fiscal Year
Task reports/memoranda documenting technical studies	Throughout Fiscal Year

PARTICIPANTS: Baltimore Metropolitan Council, MDOT, SHA, MTA

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BUDGET: **\$200,000**

FHWA Share – \$120,000
FTA Share – \$ 40,000
MDOT Share – \$ 20,000
Local Share – \$ 20,000

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ENVIRONMENTAL PLANNING

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PROJECT: MOBILE EMISSIONS PLANNING

PURPOSE: To coordinate and facilitate the continuing relationship between planning for mobile emissions and transportation planning in the Baltimore region.

The Interagency Consultation Group (ICG) is the primary forum for the BRTB to initially address transportation-related air quality issues in the Baltimore region. The ICG assesses the conformity of air quality impacts of the TIP and long range plan to the State Implementation Plan. Also, the ICG is one of the mechanisms through which the Maryland Department of the Environment is able to consult with the BRTB and the Maryland Department of Transportation regarding development of the SIP. Members of the ICG include MDE, MDOT, and the BRTB. Other participants traditionally include interested stakeholders and federal partners, such as the U.S. Environmental Protection Agency (EPA), the Federal Highway Administration (FHWA), and the Federal Transit Administration (FTA). All meetings of the ICG are open to the public. Announcements of these meetings appear on the BMC website and are sent to interested parties.

During FY 2013, the ICG met to discuss issues related to regional air quality and transportation planning, specifically in relation to conformity of amendments to the FY 2012-2015 TIP, development of the Motor Vehicle Emission Simulator (MOVES) -based motor vehicle emission budgets for the PM2.5 maintenance SIP, state efforts to promote alternative vehicle use, the states planned update to clean vehicle regulations, analyses of emissions from the EPA MOVES model, and project-level air quality analyses. The ICG addressed regional air quality planning needs related to a number of TIP amendment resolutions, determining which projects are exempt and which are not exempt from the requirement to determine regional conformity. Those which were not exempt were determined to conform to State Implementation Plan requirements.

Staff prepared information for the Technical Committee (TC) to determine what project type focus areas there should be for the FY 2013 BRTB (Congestion Mitigation and Air Quality) CMAQ Competitive Selection Process. Staff, MDE, and MDOT met multiple times in person and by phone for coordination on SIP motor vehicle emission budget development, for both the

revised ozone State Implementation Plan (SIP) and the PM_{2.5} maintenance SIP. Staff began using EPA's MOVES emission model for future conformity determinations as required. A staff person participates as a member in the State's Air Quality Control Advisory Council meetings. BMC staff sent a letter to the National Weather Service in both the Sterling, VA and Mount Holly, NJ offices to comment on their decision to remove some information on their website regarding code orange air quality alert days. Staff shared news and information on environmental topics and events in August 2012 through the Environmental News Brief.

Also during FY 2013, regional partners oversaw a successful Clean Commute season. BMC staff supported Clean Air Partners and took part in several radio interviews. Staff played a key role on a number of the Partnership's committees, including Executive, Marketing, Social Media, and the Air Quality Action Team.

In FY 2014 the ICG will meet approximately bi-monthly to address air quality issues related to regional and state transportation planning. The ICG's responsibilities will continue to include, but are not limited to: coordinating stakeholder and agency issues throughout the transportation and air quality planning processes and relevant portions of the state implementation plan process; assessing potential strategies that enhance the region's efforts to reach attainment; updating model parameters and inputs; reviewing network analyses; reviewing and assessing emissions budgets; and resolving conflicts as they relate to transportation and air quality issues. (Technical inputs to the travel demand model are decided by the TC.) BMC staff supports the ICG by organizing meetings, researching and presenting on issues, conducting technical analyses, and providing support materials necessary to the activities of the group.

Similar to previous UPWPs, conformity of the transportation improvement program (TIP) and long-range transportation plan will be performed for SIP budgets for 8-hour ozone, annual fine particulate matter, and carbon monoxide. Relevant policy actions and initiatives at the federal and state levels will be examined and assessed to determine potential effects on the region's ability to comply with air quality goals and on future potential impacts to the regional transportation plan. Staff has invested significant time preparing for the transition to EPA's new motor vehicle emissions model, called MOVES. Conformity determinations that begin after March 2, 2013 are required to use this new model, and staff is prepared for this change.

In addition to supporting the ICG and conducting federally-required conformity determinations, staff will initiate a new 18-month work activity in coordination with MDOT and MDE, called “How Far Can We Get.” The intention behind the *How Far Can We Get* analysis is to develop a better understanding of regional air quality issues and to potentially be a guide for the next long range transportation plan. This analysis will include the following steps: 1) Develop an inventory of existing levels of carbon dioxide and criteria pollutant emissions for mobile sources in the region, then develop a future projection of these emissions; 2) Identify specific sources of emissions within the on-road mobile category; 3) Develop a database of potential emission reduction strategies (technology, fuel, and travel behavior) from existing local, state and national programs and regulations; 4) Select potential individual strategies tailored to Baltimore’s inventory results (technology, fuel, and travel behavior) listing existing reported range of effectiveness and cost-effectiveness; 5) Develop and test scenarios of combinations of strategies (technology, fuel, and travel behavior) to determine emission effects; and 6) Report on scenario effectiveness.

As in previous years, BMC staff will continue to support the bi-regional Clean Air Partners program and the work activities associated with the Clean Commute public awareness initiative. These programs, including “Air Quality Action Days,” educate the public on air pollution and its effects. When the Maryland Department of the Environment’s daily air quality forecast indicates a Code Orange or Red day, Clean Air Partners provides information to program participants and the media about voluntary actions they can take to both help reduce pollution and protect their health. During FY 2014, staff will continue to support the program through targeted outreach to major employers in the region, participation in Clean Air Partners committees, development of the annual work program, and organization of both inter- and intra-regional conferences. Additional activities include continued educational outreach to school-aged children, organization of Air Quality Action Days conferences, creation of new outreach material, and assistance with social media activities.

BMC staff will continue support of the Clean Commute Initiative, working with public and private stakeholders to maximize opportunities throughout the region to promote alternatives to driving alone to work. Outreach opportunities such as local festivals, special events, and Bike to Work Day allow staff the chance to meet with thousands of people throughout the region at the time when both vehicle miles of travel (VMT) and pollution levels begin to rise. This initiative has

events taking place from late April through late September, coinciding with the region's ozone season.

Staff will continue to disseminate information on these environmental topics to the BRTB and to interested stakeholders, both public and private sector. The primary mechanism for this communication is an e-newsletter entitled *Environmental News Brief*. This e-newsletter is distributed periodically throughout the year and highlights news regarding transportation-related environmental issues, primarily air quality, affecting the Baltimore region.

Pending funding availability, staff will assist the BRTB with implementation of a sixth competitive selection process for CMAQ Improvement projects in the Baltimore region. Staff will continue to track the progress of projects chosen in previous rounds of CMAQ project selection.

FY 2014 PERFORMANCE OBJECTIVES:

1. Convene meetings and support activities of the ICG.
2. Address options and available strategies and associated policy requirements in the development of the conformity analyses.
3. Coordinate with State air quality and transportation agencies on SIPs and comment on mobile source/transportation system issues and impacts.
4. Enhance public education through outreach opportunities, including distribution of the Environmental News Brief e-newsletter.
5. Provide regional support for Clean Air Partners and Clean Commute Month.
6. Provide staff support for the FY 2014 BRTB CMAQ competitive selection process. (Pending funding availability.)
7. Conduct the first 12 months of the 18-month *How Far Can We Get* analysis.

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PRODUCTS/MILESTONES	SCHEDULE
Support ICG meetings	Approx. Bi-Monthly
Monitor new air quality initiatives, policies, and guidance	Throughout Fiscal Year
Complete the first 12 months of the 18-month <i>How Far Can We Get</i> analysis.	Throughout Fiscal Year
Distribute <i>Environmental News Brief</i> e-newsletter	Periodically
Coordinate air quality action days outreach for Baltimore metropolitan area	Throughout Fiscal Year
Coordinate cooperative media campaign in Baltimore Media market	Throughout Fiscal Year
Provide staff support and planning for the FY 2014 BRTB CMAQ competitive selection process (Pending funding availability)	2 nd or 3 rd Quarter

PARTICIPANTS: Baltimore Metropolitan Council, BRTB members, and various private, non-profit, and advocacy groups.

BUDGET: **\$265,000**

FHWA Share – \$159,000
 FTA Share – \$ 53,000
 MDOT Share – \$ 26,500
 Local Share – \$ 26,500

PROJECT: ENVIRONMENTAL IMPACT MITIGATION

PURPOSE: To continue coordination 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. To evaluate the environmental performance measures as part of the long-range transportation plan (LRTP).

As a result of federal legislation, the Metropolitan Transportation Planning Rule was changed to include a requirement that metropolitan planning organizations (MPO) consult, as appropriate, with state and local agencies responsible for land use management, natural resources, environmental protection, conservation, and historic preservation during development of a long-range transportation plan. To do this, MPO's must compare transportation plans with available state conservation plans or maps and inventories of natural and historic resources. These comparisons help to inform a discussion of types of potential environmental impact mitigation activities and potential areas to carry out these activities, which must be included in long range transportation plans. This discussion is developed in consultation with federal and state wildlife and regulatory agencies.

During FY 2013 the BMC website was updated to include the latest LRTP transportation projects, overlaid with environmental and historic resources. Language was updated to reflect the latest environmental coordination activities for long transportation planning. BMC staff began exploring opportunities for climate change adaptation planning, after participating in a climate change adaptation planning event with the Delaware American Planning Association. Staff contacted local jurisdictions informally to determine if or how adaptation is incorporated into hazard mitigation planning.

Staff participated in an Interagency Managers Meeting, in which the State Highway Administration's (SHA's) approach to addressing total maximum daily load (TMDL) requirements was presented, in addition to the Native American Tribal consultation procedures of SHA and the US Army Corps of Engineers.

In FY 2012 staff evaluated feedback from the stakeholder forum which included local, state, and federal agencies dealing with natural and historical resource plans and inventories in the region. The purpose of this forum was to determine how to further integrate these plans and inventories

into the long range transportation planning process. Feedback from the forum helped to inform *Plan It 2035*. To continue to address coordination needs, in FY 2014 staff will continue participation in the SHA Interagency Review Meetings on major transportation projects as they go through the National Environmental Policy Act (NEPA) process. Staff will continue to educate BRTB committee/ subcommittee members on environmental requirements in transportation planning.

On December 31, 2010 EPA set limits on the amount of nutrients and sediment that can enter the Chesapeake Bay. In addition to setting these limits, known as TMDLs, EPA required the Bay watershed jurisdictions to develop statewide Watershed Implementation Plans (WIPs). In October 2012, MDE released an updated version of the Maryland Phase II WIP, including appendices with sections for each jurisdiction in the Baltimore region and the Maryland State Highway Administration. Staff will continue to research how the Chesapeake Bay TMDL and related Maryland WIP strategies will address storm water pollution from on-road transportation.

FY 2014 PERFORMANCE OBJECTIVES:

1. Coordinate with state and local natural and historical resource agencies and SHA to explore opportunities for integrating natural and historical resource plans and inventories into the long range transportation planning process.
2. Review any updates for website mapping of transportation projects with environmental and historical resources, as necessary.
3. Update website mapping of transportation projects and resources as need data becomes available
4. Research any changes to environmental requirements in transportation planning as necessary.
5. Continue to educate committees on environmental requirements in transportation planning.
6. Evaluate effects of the Maryland Phase II WIP on regional planning. Consider a tracking mechanism to document the conversion of pavement to pervious surfaces for transportation projects in the TIP.

BALTIMORE REGION UPWP
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PRODUCTS/MILESTONES	SCHEDULE
Update website mapping of transportation projects and resources as need data becomes available	Throughout Fiscal Year
Research any changes to environmental requirements in transportation planning as necessary	Throughout Fiscal Year
Educate committees on environmental requirements in transportation planning	Throughout Fiscal Year

PARTICIPANTS: Baltimore Metropolitan Council, Maryland Department of the Environment, Maryland Department of Natural Resources, Maryland State Highway Administration, member jurisdictions and other agencies as identified.

BUDGET: **\$50,000**

FHWA Share – \$30,000
FTA Share – \$10,000
MDOT Share – \$ 5,000
Local Share – \$ 5,000

PROJECT: AIR QUALITY CONFORMITY ANALYSIS

PURPOSE: To conduct a technical and public policy analysis of emissions associated with the TIP and long range plan. 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 has been designated "non-attainment." The BRTB is required to show that implementation of the Plan or TIP will not delay timely attainment of the NAAQS in the Baltimore region.

During FY 2013, staff, in coordination with the Maryland Departments of Environment and Transportation, 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 for consideration in the creation of mobile source emissions budgets for a PM_{2.5} Maintenance SIP. Horizon year MOVES inputs derived from local data were developed and reviewed. MDE methods for mobile source emission estimates were compared and contrasted with regional travel model estimates. The coordinated effort led to a discussion and agreement on mobile source emission budgets, which were then endorsed by the BRTB. An analysis of MOVES emission model sensitivity to source type age distribution was conducted. The study used MDE-developed age distributions developed from a 2008 and 2011 motor vehicle registration database. BMC staff completed an analysis of MOVES model results used in the development of the PM fine Maintenance SIP. Travel estimates and MOVES results developed from the trip based model were compared with the MDE-developed inventory approach. The analysis supported the Baltimore mobile source budget recommendation.

In FY 2014, the conformity determinations of the 2014-2017 TIP, the 2015-2018 TIP and *Plan It 2035* will be conducted using the MOVES model. This model will be used to estimate emissions of criteria air pollutants for PM_{2.5}, the 8-hour ozone, and the carbon monoxide NAAQS standards. Working through the Interagency Consultation Group (ICG) process and its

members, staff will conduct these conformity determinations using methodologies for 8-hour ozone, fine particulate matter, and carbon monoxide, which have been approved by EPA.

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 BMC and MDE staff.

In FY 2014 as part of the conformity process, staff will review local Capital Improvement Programs for individual measures and projects that could collectively achieve measurable emission reduction effects. Emission reduction strategies will be assessed for inclusion in the conformity determination, whether solely for informational purposes or for emission reduction credits.

FY 2014 PERFORMANCE OBJECTIVES:

1. Finalize report documenting the conformity analysis of the 2014-2017 TIP and *Plan It 2035*. This includes evaluation of the travel demand model for conformity horizon years.
2. Begin the conformity analysis of the 2015-2018 TIP. This includes evaluation of the travel demand model for conformity horizon years.
3. Perform and document conformity procedures and results of any amendments involving major capacity improvements.
4. Provide technical assistance to MDE as necessary.

PRODUCTS/MILESTONES	SCHEDULE
Finalize report documenting conformity of 2014-2017 TIP and <i>Plan It 2035</i>	1 st and 2 nd Quarters
Memos/presentations documenting new emissions modeling methodology & detailed vehicle emission inventory	Throughout Fiscal Year
Begin conformity analysis of the 2015-2018 TIP	3 rd & 4 th Quarters
Prepare technical memorandum on Plan and TIP amendments, if needed	Throughout Fiscal Year
Provide ongoing technical and policy support for the BRTB, ICG, and other parties interested in emission and congestion reduction measures	Throughout Fiscal Year

PARTICIPANTS: Baltimore Metropolitan Council, local jurisdictions, MDOT, MDE, and interested stakeholders

BUDGET: **\$80,000**

FHWA Share – \$48,000
FTA Share – \$16,000
MDOT Share – \$ 8,000
Local Share – \$ 8,000

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SPECIAL PROJECTS
FUNDED OUTSIDE THE UPWP

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PROJECT: TELEWORK

PURPOSE: To assist both public and private sector employers in the Baltimore region in establishing viable teleworking programs.

Continuing a long relationship with the Maryland Department of Transportation in efforts to encourage and support teleworking by area businesses, MDOT has a contract with BMC to conduct a teleworking awareness program for the Baltimore region.

The two agencies have improved upon the ***Teleworkbaltimore.com*** program. The premise of the program remains the same: direct employers in the Baltimore region to a branded website - ***Teleworkbaltimore.com***, where they are able to download materials needed to launch telework programs within their organizations. Before gaining access to the information, employers are asked to register with BMC for tracking purposes. In addition to the telework materials, registered businesses are able to ask questions as needs may arise. BMC assumes the primary role in responding to telework inquiries with the back-up assistance of a telework consultant retained by the Council. Registered participants will also receive periodic updates on topics related to teleworking. What is new is that a communications consultant will take the lead role in marketing the program, with guidance and assistance from both BMC and MDOT.

Since the program's launch in December 2009, 61 organizations and individuals have registered. Currently, there are three active telework programs that are direct results of ***Teleworkbaltimore.com*** efforts. BMC and MDOT renewed their agreement in December 2012, and the program will continue through December 2014.

Efforts will continue to focus on recruiting employers, through individual employer visits and outreach seminars. BMC will also promote telework with ads in business publications and through its Clean Commute Initiative. BMC staff will visit interested employers to help develop individualized pilot teleworking programs suitable to their employment sites. Employers will be asked to evaluate their programs at the end of the pilot. Information gathered through these evaluations will be used to encourage additional employers to participate or to develop ways to overcome any problems that may be identified. BMC will submit a final report to MDOT upon completion of the project.

FY 2014 PERFORMANCE OBJECTIVES:

1. Increase awareness of and interest in teleworking in the Baltimore region.
2. Encourage large and small Baltimore region employers to start or expand teleworking programs.

PRODUCTS/MILESTONES	SCHEDULE
Maintain, update, and promote TeleworkBaltimore.com website	Throughout Fiscal Year
Manage work of telework & communications consultants	Throughout Fiscal Year
Coordinate program activities with MDOT	Throughout Fiscal Year

PARTICIPANTS: BMC, MDOT, Consultant

BUDGET: **\$150,000** (December 2012 –December 2014)

FHWA Share – 0
FTA Share – 0
MDOT Share – \$150,000
Local Share – 0

PROJECT: STREET SMART

PURPOSE: To promote pedestrian and bicycle safety in the Baltimore region through public education and outreach.

Street Smart is an annual public education, awareness and behavioral change campaign, initially launched in the Baltimore area in the fall of 2009. The campaign emphasizes safety and obedience to existing laws by everyone who shares public streets and sidewalks – drivers, pedestrians, and cyclists alike.

The ***Street Smart*** campaign in the Baltimore region is coordinated by the BMC with support from the Maryland Highway Safety Office (MHSO), housed at the Motor Vehicle Administration (MVA). The FY 2013 campaign centered on Baltimore City but also included corridors in Baltimore and Anne Arundel counties. Street teams were deployed along several high pedestrian crash corridors to distribute driver and pedestrian safety messages. The media element of the campaign included radio and television public service announcements (PSA's), billboards, overhead banners, gas-pump toppers and online and social media outreach. The campaign now has a dedicated website – <http://bmorestreetsmart.com/>. In FY 2014, staff will expand the campaign to include Harford County and the Johns Hopkins Campus in Baltimore City.

The campaign uses the following types of messages directed at different audiences:

Drivers:

- Stop for pedestrians at crosswalks.
- Slow down and obey the posted speed limit.
- Yield to pedestrians and cyclists when turning.
- Look before opening your vehicle door.
- Allow 3 feet when passing a bicyclist.
- Look for pedestrians and bicyclists, and especially children, before backing up.

Pedestrians:

- Cross the street at marked crosswalks and intersections.
- Look left, right, and then left again before stepping into the street.
- Obey traffic signals.
- Use pedestrian pushbuttons when provided and begin crossing the street on "Walk."
- Make sure you can be seen after dark and in bad weather.
- Watch out for vehicles backing out of parking spaces and driveways.

Bicyclists:

- Obey all traffic signs and signals.

- Never ride against traffic.
- Use hand signals to let motorists know what you intend to do.
- Ride in a straight line to the right of traffic and about a car door width away from parked cars.
- Always wear a helmet. Helmets dramatically reduce the risk of head injury in a bicycle crash.
- Use front and rear lights at night and when visibility is poor.

FY 2014 PERFORMANCE OBJECTIVES:

1. Increase awareness of pedestrian safety among all road users.

PRODUCTS/MILESTONES	SCHEDULE
Deploy public education and outreach campaign	Spring/Summer
Coordinate program activities with safety stakeholders	Throughout Fiscal Year

PARTICIPANTS: BMC, MVA/MHSO, Consultant

BUDGET: **\$300,000** (October 1, 2013 – September 30, 2014)

FHWA Share – 0
FTA Share – 0
MHSO Share – \$300,000
Local Share – 0

APPENDIX A

FY 2014 BUDGET DETAILS

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FY 2014 UPWP BUDGET

SOURCES

	FHWA	FTA	MDOT	LOCAL	TOTAL
FY 13 Appropriations	\$3,422,118	\$1,288,130	\$499,500	\$821,716	\$6,031,464
Cumulative Carryover	\$649,168	\$217,693			\$866,860
FY 14 Funds Available	\$4,071,286	\$1,505,822	\$499,500	\$821,716	\$6,898,324

USES

BMC Staff	\$4,250,000
Consultants	\$745,000
BMC Total	\$4,995,000
City of Annapolis	\$22,700
Anne Arundel County	\$419,830
Baltimore City	\$506,595
Baltimore County	\$190,660
Carroll County	\$70,815
Harford County	\$112,740
Howard County	\$287,740
Local Total	\$1,611,080
TOTAL USES	\$6,606,080

BALTIMORE REGION UPWP
FY 2014 UNIFIED PLANNING WORK PROGRAM

FY 2014 WORK PROGRAM BY TASK & FUND SOURCE
(\$)

	FHWA	FTA	MDOT	LOCAL	TOTAL
Unified Planning Work Program	399,000	133,000	56,500	76,500	665,000
Public Participation	90,000	30,000	15,000	15,000	150,000
Consultant Services	447,000	149,000	74,500	74,500	745,000
Long Range Transportation Planning	45,000	15,000	7,500	7,500	75,000
Congestion Management Process	90,000	30,000	15,000	15,000	150,000
Operations Planning	72,000	24,000	12,000	12,000	120,000
Safety Planning & Analysis	72,000	24,000	12,000	12,000	120,000
Travel Monitoring Program	96,000	32,000	16,000	16,000	160,000
Bicycle & Pedestrian Planning	64,002	21,334	8,000	13,334	106,670
Freight Mobility Plan	90,000	30,000	12,000	18,000	150,000
Transit Planning	108,000	36,000	14,500	21,500	180,000
Human Service Transportation Coordination	45,000	15,000	7,500	7,500	75,000
Emergency Preparedness Planning	48,000	16,000	8,000	8,000	80,000
Transportation Equity Planning	45,000	15,000	7,500	7,500	75,000
Development Monitoring	126,000	42,000	21,000	21,000	210,000
Cooperative Forecasting Process	347,523	115,841	21,000	94,841	579,205
US Census/ACS Monitoring & Analysis	72,000	24,000	12,000	12,000	120,000
GIS Activities	143,004	47,668	22,000	25,668	238,340
Database Maintenance	60,000	20,000	10,000	10,000	100,000
Integrating Transportation & Land Use Planning	78,000	26,000	13,000	13,000	130,000
Analysis of Trends & Policy Issues	36,000	12,000	6,000	6,000	60,000
Opportunity Planning	36,000	12,000	6,000	6,000	60,000
Travel Demand Modeling	339,000	113,000	56,500	56,500	565,000
Transportation Improvement Program	55,119	18,373	6,500	11,873	91,865
Subarea Analysis Local (Local)	603,000	201,000	0	201,000	1,005,000
Technical Analysis for State Initiatives	120,000	40,000	20,000	20,000	200,000
Mobile Emissions Planning	159,000	53,000	26,500	26,500	265,000
Environmental Impact Mitigation	30,000	10,000	5,000	5,000	50,000
Air Quality Conformity Analysis	48,000	16,000	8,000	8,000	80,000
Total	3,963,648	1,321,216	499,500	821,716	6,606,080

BALTIMORE REGION UPWP
FY 2014 UNIFIED PLANNING WORK PROGRAM

FY 2014 FUNDING BY TASK AND PROJECT SPONSOR

WORK TASKS	BMC SHARE	ANNA POLIS SHARE	ANNE ARUNDEL COUNTY SHARE	BALTIMORE CITY SHARE	BALTIMORE COUNTY SHARE	CARROLL COUNTY SHARE	HARFORD COUNTY SHARE	HOWARD COUNTY SHARE	TOTAL
UPWP Management	565,000	10,000	15,000	15,000	15,000	15,000	15,000	15,000	\$665,000
Public Participation & Outreach	150,000								\$150,000
Professional Consultant Services	745,000								\$745,000
Long-Range Transportation Planning	75,000								\$75,000
Congestion Management Process	150,000								\$150,000
Operations Planning	120,000								\$120,000
Safety Planning & Analysis	120,000								\$120,000
Travel Monitoring Program	160,000								\$160,000
Bicycle and Pedestrian Planning	80,000	3,810	3,810	3,810	3,810	3,810	3,810	3,810	\$106,670
Freight Mobility Planning	120,000			10,000	10,000	10,000	10,000		\$150,000
Transit Coordination	145,000	5,000	10,000		10,000			10,000	\$180,000
Human Service Transportation Coordination	75,000								\$75,000
Emergency Preparedness Planning	80,000								\$80,000
Transportation Equity Planning	75,000								\$75,000
Development Monitoring	210,000								\$210,000
Cooperative Forecasting Process	210,000		37,400	65,000	76,230	38,115	76,230	76,230	\$579,205
Census/ ACS Monitoring & Analysis	120,000								\$120,000
GIS Activities	220,000	2,620	2,620	2,620	2,620	2,620	2,620	2,620	\$238,340
Database Maintenance	100,000								\$100,000
Transportation and Land Use Planning	130,000								\$130,000
Analysis of Trends & Policy Issues	60,000								\$60,000
Opportunity Planning	60,000								\$60,000
Travel Demand Modeling	565,000								\$565,000
Transportation Improvement Program	65,000	1,270	1,000	10,165	3,000	1,270	5,080	5,080	\$91,865
Anne Arundel Co: Subarea Analysis			350,000						\$350,000
Baltimore City: Subarea Analysis				400,000					\$400,000
Baltimore County: Subarea Analysis					80,000				\$80,000
Howard County: Subarea Analysis								175,000	\$175,000
Technical Analysis for State Initiatives	200,000								\$200,000
Mobile Emissions Planning	265,000								\$265,000
Environmental Impact Mitigation	50,000								\$50,000
Air Quality Conformity Analysis	80,000								\$80,000
TOTAL	4,995,000	22,700	419,830	506,595	190,660	70,815	112,740	287,740	6,606,080

**FY 2014 SUBAREA ANALYSIS - LOCALS
 PROJECTS & FUND SOURCE**

WORK TASKS	FHWA	FTA	MDOT	LOCAL	TOTAL
Anne Arundel County Major Intersections and Important Facilities (\$350,000)	\$210,000	\$70,000		\$70,000	\$350,000
Baltimore City Bicycle Master Plan Update (\$75,000) Hanover Street Corridor Study (\$100,000) MLK Jr.Blvd. Corridor Study (\$100,000) Truck Route Safety Improvements (\$125,000)	\$240,000	\$80,000		\$80,000	\$400,000
Baltimore County Bicycle Sharing Program Study (\$20,000) TOD Policy Analysis (\$60,000)	\$48,000	\$16,000		\$16,000	\$80,000
Howard County Pedestrian Facility Assessment, Part 2 (\$96,000) Bus Rapid Transit Assessment (\$79,000)	\$105,000	\$35,000		\$35,000	\$175,000

COMPARISON OF FY 2014 AND FY 2013 BUDGETS
(\$)

	<u>FY 2014</u>	<u>FY 2013</u>	<u>Change</u>
UPWP Management	665,000	613,340	51,660
Legislative Coordination	0	105,000	-105,000
Public Participation and Community Outreach	150,000	150,000	0
Professional Consultant Services	745,000	715,000	30,000
Long-Range Transportation Planning	75,000	75,000	0
Congestion Management Process	150,000	150,000	0
Operations Planning	120,000	120,000	0
Safety Planning and Analysis	120,000	120,000	0
Travel Monitoring Program	160,000	192,110	-32,110
Bicycle and Pedestrian Planning	106,670	106,670	0
Freight Mobility Planning	150,000	152,500	-2,500
Transit Coordination	180,000	177,500	2,500
Human Service Transportation Coordination	75,000	75,000	0
Emergency Preparedness Planning	80,000	100,000	-20,000
Transportation Equity Planning	75,000	75,000	0
Development Monitoring	210,000	210,000	0
Cooperative Forecasting Process	579,205	524,855	54,350
US Census/ACS Monitoring and Analysis	120,000	120,000	0
GIS Activities	238,340	220,000	18,340
Database Maintenance	100,000	100,000	0
Integrating Transportation & Land Use Planning	130,000	130,000	0
Analysis of Trends & Policy Issues	60,000	60,000	0
Opportunity Planning	60,000	0	60,000
Travel Demand Modeling	565,000	565,000	0
Transportation Improvement Program	91,865	91,865	0
Subarea Analysis Local	1,005,000	1,397,700	-392,700
Technical Analysis in Support of State Initiatives	200,000	200,000	0
Mobile Emissions Planning	265,000	265,000	0
Environmental Impact Mitigation	50,000	50,000	0
Air Quality Conformity Analysis	80,000	80,000	0
Total	6,606,080	6,941,540	-335,460

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APPENDIX B

LOCAL PARTICIPANTS

CORE & SUBAREA PROJECT

DESCRIPTIONS

CITY OF ANNAPOLIS

ANNE ARUNDEL COUNTY

BALTIMORE CITY

BALTIMORE COUNTY

CARROLL COUNTY

HARFORD COUNTY

HOWARD COUNTY

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**PROJECTS AND BUDGETS
CITY OF ANNAPOLIS**

(\$22,700)

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PROJECT: UPWP MANAGEMENT

PURPOSE: This task involves managing, coordinating, and guiding the various technical activities related to the UPWP and the regional transportation planning process. These work efforts are carried out through a variety of means including direct involvement in planning activities and support to the multi-disciplined and multi-agency committees essential to a coordinated process. These activities specifically include management of the current fiscal year work program and budget, preparation of detailed work programs, and preparation of quarterly progress reports.

FY 2014 PERFORMANCE OBJECTIVES:

1. Manage involvement for the City of Annapolis in the local and regional transportation planning process.
2. Prepare quarterly reports and invoices.
3. Prepare the FY 2015 UPWP grant application and associated contracts in conjunction with all pertinent federal, state, and local agencies.
4. As necessary, participate in seminars, workshops, and short courses designed to develop technical skills and broader perspectives on transportation-related subjects.

PRODUCTS/ MILESTONES	SCHEDULE
Quarterly progress reports, invoices, audit preparation and other financial reports for the FY 2014 UPWP	Throughout Fiscal Year
Budget amendments for FY 2014	As Necessary
City of Annapolis FY 2015 UPWP submittals	2nd Quarter
Completion of formal grant acceptance process for FY 2015	4th Quarter

PARTICIPANT: City of Annapolis

BUDGET: \$10,000

PROJECT: BICYCLE AND PEDESTRIAN PLANNING

PURPOSE: Provide local assistance in integrating bicycle and pedestrian considerations into the overall planning and programming processes of the state, regional and local jurisdictions.

The City of Annapolis will assist the Bicycle and Pedestrian Advisory Group in the identification of appropriate opportunities to integrate bicycle and pedestrian travel options within a regional framework. The City of Annapolis will examine opportunities to incorporate bicycle and pedestrian uses along local roads, greenways and other non-motorized corridors. Promotional and educational efforts will also be used to increase awareness for bicycle and pedestrian opportunities and to promote safety and accessibility for non-motorized travelers, including those with disabilities.

FY 2014 PERFORMANCE OBJECTIVES:

1. Support Bicycle/Pedestrian Advisory Group in reviewing regional opportunities, monitoring regional progress, and sharing best practices and lessons learned.
2. Ensure that adequate pedestrian and bicycle accommodations are included in proposed TIP projects, and that pedestrian and bicyclist safety are considered in all phases of design.
3. Enhance planning for greenways and trails, including compliance with relevant federal and state design standards.
4. Support regional pedestrian and bicycle safety education programs, and implement coordinated education and enforcement activities at the local level.

PRODUCTS/MILESTONES	SCHEDULE
Joint activity on work programs and other efforts related to the regional bicycle/pedestrian plan	Throughout Fiscal Year
Other studies and analyses to support regional efforts	Throughout Fiscal Year

PARTICIPANT: City of Annapolis

BUDGET: \$3,810

PROJECT: REGIONAL TRANSIT ANALYSIS – LOCAL INPUT

PURPOSE: To assist with the various technical activities in the efforts to undertake a regional analysis of transit services and networks.

As an outgrowth of the regional transit analysis task, GO-TRAN members and BMC staff will solicit information from local jurisdictions and locally operated transit service agencies about their current transit systems and services. This will help committee members and staff identify and evaluate short- and long-term opportunities to improve transit systems and services, including inter-jurisdictional and inter-agency coordination among these systems and services.

Throughout FY 2014, local government staff will assist BMC staff and consultants in efforts to access both local (and, to the extent possible and appropriate, private sector) data and expertise. Tasks will include meeting logistics, meeting attendance, and preparation/review of technical materials.

FY 2014 PERFORMANCE OBJECTIVES:

1. Identify appropriate data as requested, facilities, etc.
2. Review and comment on materials as presented.

PRODUCTS/MILESTONES	SCHEDULE
Identify data sets, locations, zoning as requested	Throughout Fiscal Year
Attend technical planning workshops	Throughout Fiscal Year

PARTICIPANT: City of Annapolis

BUDGET: \$5,000

PROJECT: REGIONAL GIS COORDINATION

PURPOSE: To coordinate and assist with the various technical and outreach activities in conjunction with the Baltimore Region Geographic Information Systems Committee

The Baltimore Region Geographic Information Systems Committee (BRGISC) was established in 2011. The BRGISC is staffed by the Baltimore Metropolitan Council and its membership consists of GIS managers of the Cities of Annapolis and Baltimore and the Counties of Anne Arundel, Baltimore, Carroll, Harford and Howard. The committee was formed to provide a forum for sharing communication among jurisdictions on national, state and local GIS applications and resources. The BRGISC has developed a data sharing protocol for delivering individual county/city level map resources among local governments.

The BRGISC meets bi-monthly to discuss topics that are pending with especially state and national agencies as well as utilities and private enterprises. The current work product underway is a Baltimore Metro Regional Routable Centerline and Address Point Project which with the approval of local GIS offices will allow BMC staff to access these data layers to geographic code transportation GIS data layers used in project planning and modeling. This data sharing protocol will allow various county agencies to share data across jurisdictional boundaries with comparable agencies.

FY 2014 PERFORMANCE OBJECTIVES:

1. Attend BRGISC Meetings.
2. Provide data and work efforts toward regional projects.
3. Review and comment on materials as presented.

PRODUCTS/MILESTONES	SCHEDULE
Attend BRGISC Meetings	Throughout Fiscal Year

PARTICIPANT: City of Annapolis

BUDGET: \$2,620

PROJECT: TRANSPORTATION IMPROVEMENT PROGRAM

PURPOSE: This project develops the annual component of the Transportation Improvement Program (TIP) for the City of Annapolis, revisions to the City’s component of the TIP and review and comment on the regional TIP. The task also includes review and comment regarding proposed TIP amendments during the fiscal year.

FY 2014 PERFORMANCE OBJECTIVES:

1. Develop the annual submission of the TIP including assessment of all federally funded projects for the City of Annapolis.
2. Review and comment on the Draft 2015-2018 TIP.
3. Revise and correct TIP submissions as needed.
4. Review and comment on all TIP amendments as submitted throughout the fiscal year.

PRODUCTS/MILESTONES	SCHEDULE
Review and comment on proposed TIP amendments	As Needed
Receive training for new TIP web-based software	1 st Quarter
Submit local TIP component of 2015-2018 document	3 rd Quarter
Revise local TIP component per comments and review draft TIP document	3 rd Quarter
Final revisions to FY 2015-2018 TIP	4 th Quarter

PARTICIPANT: City of Annapolis

BUDGET: \$1,270

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**PROJECTS AND BUDGETS
ANNE ARUNDEL COUNTY**

(\$419,830)

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PROJECT: UPWP MANAGEMENT

PURPOSE: This task involves managing, coordinating, and guiding the various technical activities related to the UPWP and the regional transportation planning process. These work efforts are carried out through a variety of means including direct involvement in planning activities and support to the multi-disciplined and multi-agency committees essential to a coordinated process. These activities specifically include management of the current fiscal year work program and budget, preparation of detailed work programs, and preparation of quarterly progress reports.

FY 2014 PERFORMANCE OBJECTIVES:

1. Manage involvement for Anne Arundel County in the local and regional transportation planning process.
2. Prepare quarterly reports and invoices.
3. Prepare the FY 2015 UPWP grant application and associated contracts in conjunction with all pertinent federal, state, and local agencies.
4. As necessary, participate in seminars, workshops, and short courses designed to develop technical skills and broader perspectives on transportation-related subjects.

PRODUCTS/ MILESTONES	SCHEDULE
Quarterly progress reports, invoices, audit preparation and other financial reports for the FY 2014 UPWP	Throughout Fiscal Year
Budget amendments for FY 2014	As Necessary
Anne Arundel County FY 2015 UPWP submittals	2nd Quarter
Completion of formal grant acceptance process for FY 2015	4th Quarter

PARTICIPANT: Anne Arundel County

BUDGET: \$15,000

PROJECT: BICYCLE AND PEDESTRIAN PLANNING

PURPOSE: Provide local assistance in integrating bicycle and pedestrian considerations into the overall planning and programming processes of the state, regional and local jurisdictions.

Anne Arundel County will assist the Bicycle and Pedestrian Advisory Group in the identification of appropriate opportunities to integrate bicycle and pedestrian travel options within a regional framework. The County will examine opportunities to incorporate bicycle and pedestrian uses along local roads, greenways and other non-motorized corridors. Promotional and educational efforts will also be used to increase awareness for bicycle and pedestrian opportunities and to promote safety and accessibility for non-motorized travelers, including those with disabilities.

FY 2014 PERFORMANCE OBJECTIVES:

1. Support Bicycle/Pedestrian Advisory Group in reviewing regional opportunities, monitoring regional progress, and sharing best practices and lessons learned.
2. Ensure that adequate pedestrian and bicycle accommodations are included in proposed TIP projects, and that pedestrian and bicyclist safety are considered in all phases of design.
3. Enhance planning for greenways and trails, including compliance with relevant federal and state design standards.
4. Support regional pedestrian and bicycle safety education programs, and implement coordinated education and enforcement activities at the local level.

PRODUCTS/MILESTONES	SCHEDULE
Joint activity on work programs and other efforts related to the regional bicycle/pedestrian plan	Throughout Fiscal Year
Other studies and analyses to support regional efforts	Throughout Fiscal Year

PARTICIPANT: Anne Arundel County

BUDGET: \$3,810

PROJECT: REGIONAL TRANSIT ANALYSIS – LOCAL INPUT

PURPOSE: To assist with the various technical activities in the efforts to undertake a regional analysis of transit services and networks.

As an outgrowth of the regional transit analysis task, GO-TRAN members and BMC staff will solicit information from local jurisdictions and locally operated transit service agencies about their current transit systems and services. This will help committee members and staff identify and evaluate short- and long-term opportunities to improve transit systems and services, including inter-jurisdictional and inter-agency coordination among these systems and services.

Throughout FY 2014, local government staff will assist BMC staff and consultants in efforts to access both local (and, to the extent possible and appropriate, private sector) data and expertise. Tasks will include meeting logistics, meeting attendance, and preparation/review of technical materials.

FY 2014 PERFORMANCE OBJECTIVES:

1. Identify appropriate data as requested, facilities, etc.
2. Review and comment on materials as presented.

PRODUCTS/MILESTONES	SCHEDULE
Identify data sets, locations, zoning as requested	Throughout Fiscal Year
Attend technical planning workshops	Throughout Fiscal Year

PARTICIPANT: Anne Arundel County

BUDGET: \$10,000

PROJECT: COOPERATIVE FORECASTING PROCESS

PURPOSE: To generate socio-economic and demographic data for the regional forecasting process. To provide technical input to the Cooperative Forecasting Group (CFG) that is responsible for reporting updates to changes in local land use patterns and associated developments in the region.

In FY 2007, the CFG developed population, household, and employment forecasts for each jurisdiction by small area for 2000 through 2035. These forecasts were used in the creation and testing of the 2011 Baltimore Region Long Range Transportation Plan. Local planning staffs will continue the development of these data during FY 2014 as part of Round 8-A Cooperative Forecasts, 2010 – 2040. They will report on their progress periodically to the CFG, the Technical Committee, and the BRTB.

FY 2014 PERFORMANCE OBJECTIVES:

1. Prepare updated socio-economic and demographic jurisdictional forecasts at the level of transportation analysis zones for 2010 – 2040.
2. Provide updates where necessary on major new developments or facilities that impact existing forecasts.
3. Prepare documentation on population, household and employment forecast methodologies.

PRODUCTS/MILESTONES	SCHEDULE
Review and report on forecasts for population, households and employment	2 nd Quarter
Document methodologies used to generate forecasts	3 rd Quarter
Provide updates on major new developments that affect existing forecasts	Throughout Fiscal Year

PARTICIPANT: Anne Arundel County

BUDGET: \$37,400

PROJECT: REGIONAL GIS COORDINATION

PURPOSE: To coordinate and assist with the various technical and outreach activities in conjunction with the Baltimore Region Geographic Information Systems Committee

The Baltimore Region Geographic Information Systems Committee (BRGISC) was established in 2011. The BRGISC is staffed by the Baltimore Metropolitan Council and its membership consists of GIS managers of the Cities of Annapolis and Baltimore and the Counties of Anne Arundel, Baltimore, Carroll, Harford and Howard. The committee was formed to provide a forum for sharing communication among jurisdictions on national, state and local GIS applications and resources. The BRGISC has developed a data sharing protocol for delivering individual county/city level map resources among local governments.

The BRGISC meets bi-monthly to discuss topics that are pending with especially state and national agencies as well as utilities and private enterprises. The current work product underway is a Baltimore Metro Regional Routable Centerline and Address Point Project which with the approval of local GIS offices will allow BMC staff to access these data layers to geographic code transportation GIS data layers used in project planning and modeling. This data sharing protocol will allow various county agencies to share data across jurisdictional boundaries with comparable agencies.

FY 2014 PERFORMANCE OBJECTIVES:

1. Attend BRGISC Meetings.
2. Provide data and work efforts toward regional projects.
3. Review and comment on materials as presented.

PRODUCTS/MILESTONES	SCHEDULE
Attend BRGISC Meetings	Throughout Fiscal Year

PARTICIPANT: Anne Arundel County

BUDGET: \$2,620

PROJECT: TRANSPORTATION IMPROVEMENT PROGRAM

PURPOSE: This project develops the annual component of the Transportation Improvement Program (TIP) for Anne Arundel County, revisions to the County's component of the TIP and review and comment on the regional TIP. The task also includes review and comment regarding proposed TIP amendments during the fiscal year.

FY 2014 PERFORMANCE OBJECTIVES:

1. Develop the annual submission of the TIP including assessment of all federally funded projects for Anne Arundel County.
2. Review and comment on the Draft 2015-2018 TIP.
3. Revise and correct TIP submissions as needed.
4. Review and comment on all TIP amendments as submitted throughout the fiscal year.

PRODUCTS/MILESTONES	SCHEDULE
Review and comment on proposed TIP amendments	As Needed
Receive training for new TIP web-based software	1 st Quarter
Submit local TIP component of 2015-2018 document	3 rd Quarter
Revise local TIP component per comments and review draft TIP document	3 rd Quarter
Final revisions to FY 2015-2018 TIP	4 th Quarter

PARTICIPANT: Anne Arundel County

BUDGET: \$1,000

PROJECT: SUBAREA ANALYSIS - ANNE ARUNDEL COUNTY**PART A: MAJOR INTERSECTIONS AND IMPORTANT FACILITIES**

PURPOSE: The Major Intersections and Important Facilities (MIIF) project will evaluate mobility and accessibility needs in seven unique travel corridors which fall below the volume and functional classification threshold of the prior Corridor Growth Management Plan study (CGMP), but which have a disproportionate impact on the regional network.

The MIIF is the fourth and final component of the County's Transportation Functional Master Plan, a multi-year endeavor to update the Transportation element of the County General Development Plan (GDP). The study will integrate the findings and recommendations regarding the seven corridors with those of the three prior study components. The four components are:

- Corridor Growth Management Plan (CGMP)
- Pedestrian and Bicycle Master Plan Update (PBMP)
- Complete Streets Guidance (CSG)
- Major Intersections and Important Facilities (MIIF)

FY 2014 PERFORMANCE OBJECTIVES:

1. Modify the Anne Arundel County travel demand model (AATrVM) as needed to evaluate the seven corridors.
2. Collect data as needed to refine the model in the study area.
3. Conduct a corridor level footprint assessment to determine ROW needs/impacts and a corridor level toolbox assessment of TSM/TDM options.
4. Conduct public outreach.
5. Integrate the four components into a comprehensive multimodal functional plan narrative for addressing future transportation needs.

PRODUCTS/MILESTONES	SCHEDULE
Collect and map existing condition data. Revise travel model TAZ structure and network detail.	1 st Quarter
Identify corridor level footprint and assess ROW impacts. Refine 2035 travel forecasts in the selected study areas. Recommend travel mode options by corridor.	2 nd Quarter
Conduct corridor level TSM/TDM assessment.	3 rd Quarter
Conduct public outreach events.	3 rd & 4 th Quarters
Integrate all four study components.	4 th Quarter
Produce Final Plan	4 th Quarter

PARTICIPANTS: Anne Arundel County, Consultant

BUDGET: \$350,000

PROJECTS AND BUDGETS
BALTIMORE CITY

(\$506,595)

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PROJECT: UPWP MANAGEMENT

PURPOSE: This task involves managing, coordinating, and guiding the various technical activities related to the UPWP and the regional transportation planning process. These work efforts are carried out through a variety of means including direct involvement in planning activities and support to the multi-disciplined and multi-agency committees essential to a coordinated process. These activities specifically include management of the current fiscal year work program and budget, preparation of detailed work programs, and preparation of quarterly progress reports.

FY 2014 PERFORMANCE OBJECTIVES:

1. Manage involvement for Baltimore City in the local and regional transportation planning process.
2. Prepare quarterly reports and invoices.
3. Prepare the FY 2015 UPWP grant application and associated contracts in conjunction with all pertinent federal, state, and local agencies.
4. As necessary, participate in seminars, workshops, and short courses designed to develop technical skills and broader perspectives on transportation-related subjects.

PRODUCTS/ MILESTONES	SCHEDULE
Quarterly progress reports, invoices, audit preparation and other financial reports for the FY 2014 UPWP	Throughout Fiscal Year
Budget amendments for FY 2014	As Necessary
Baltimore City FY 2015 UPWP submittals	2nd Quarter
Completion of formal grant acceptance process for FY 2015	4th Quarter

PARTICIPANT: Baltimore City

BUDGET: \$15,000

PROJECT: BICYCLE AND PEDESTRIAN PLANNING

PURPOSE: Provide local assistance in integrating bicycle and pedestrian considerations into the overall planning and programming processes of the state, regional and local jurisdictions.

Baltimore City will assist the Bicycle and Pedestrian Advisory Group in the identification of appropriate opportunities to integrate bicycle and pedestrian travel options within a regional framework. The City will examine opportunities to incorporate bicycle and pedestrian uses along local roads, greenways and other non-motorized corridors. Promotional and educational efforts will also be used to increase awareness for bicycle and pedestrian opportunities and to promote safety and accessibility for non-motorized travelers, including those with disabilities.

FY 2014 PERFORMANCE OBJECTIVES:

1. Support Bicycle/Pedestrian Advisory Group in reviewing regional opportunities, monitoring regional progress, and sharing best practices and lessons learned.
2. Ensure that adequate pedestrian and bicycle accommodations are included in proposed TIP projects, and that pedestrian and bicyclist safety are considered in all phases of design.
3. Enhance planning for greenways and trails, including compliance with relevant federal and state design standards.
4. Support regional pedestrian and bicycle safety education programs, and implement coordinated education and enforcement activities at the local level.

PRODUCTS/MILESTONES	SCHEDULE
Joint activity on work programs and other efforts related to the regional bicycle/pedestrian plan	Throughout Fiscal Year
Other studies and analyses to support regional efforts	Throughout Fiscal Year

PARTICIPANT: Baltimore City

BUDGET: \$3,810

PROJECT: REGIONAL FREIGHT ANALYSIS – LOCAL INPUT

PURPOSE: To coordinate and assist with the various technical and outreach activities in an effort to better understand and plan for improvements to the regional freight network.

As an outgrowth of the *Imagine 2060* process, establishing a vision for the Baltimore region, feedback from a range of stakeholders led the BRTB to undertake a regional freight analysis to understand the transportation network supporting the movement of goods through and within the region as well as identify regional priorities to maintain and enhance the system. In 2012, the BRTB commissioned a Freight Regional Oversight Group (FROG) to coordinate and oversee regional freight analysis. FROG is made up of local jurisdiction representatives and state agencies.

In FY 2014, it is anticipated that local participation will be stepped up to help provide input in support of FROG activities and other freight related activities. Tasks will include access to data, meeting logistics, attendance and preparation/review of technical materials.

FY 2014 PERFORMANCE OBJECTIVES:

1. Identify appropriate data as requested, facilities, etc.
2. Review and comment on materials as presented.

PRODUCTS/MILESTONES	SCHEDULE
Identify data sets, locations, zoning as requested	Throughout Fiscal Year
Attend technical planning workshops	Throughout Fiscal Year

PARTICIPANTS: Baltimore City

BUDGET: \$10,000

PROJECT: COOPERATIVE FORECASTING PROCESS

PURPOSE: To generate socio-economic and demographic data for the regional forecasting process. To provide technical input to the Cooperative Forecasting Group (CFG) that is responsible for reporting updates to changes in local land use patterns and associated developments in the region.

In FY 2007, the CFG developed population, household, and employment forecasts for each jurisdiction by small area for 2000 through 2035. These forecasts were used in the creation and testing of the 2011 Baltimore Region Long Range Transportation Plan. Local planning staffs will continue the development of these data during FY 2014 as part of Round 8-A Cooperative Forecasts, 2010 – 2040. They will report on their progress periodically to the CFG, the Technical Committee, and the BRTB.

FY 2014 PERFORMANCE OBJECTIVES:

1. Prepare updated socio-economic and demographic jurisdictional forecasts at the level of transportation analysis zones for 2010 – 2040.
2. Provide updates where necessary on major new developments or facilities that impact existing forecasts.
3. Prepare documentation on population, household and employment forecast methodologies.

PRODUCTS/MILESTONES	SCHEDULE
Review and report on forecasts for population, households and employment	2 nd Quarter
Document methodologies used to generate forecasts	3 rd Quarter
Provide updates on major new developments that affect existing forecasts	Throughout Fiscal Year

PARTICIPANT: Baltimore City

BUDGET: \$65,000

PROJECT: REGIONAL GIS COORDINATION

PURPOSE: To coordinate and assist with the various technical and outreach activities in conjunction with the Baltimore Region Geographic Information Systems Committee

The Baltimore Region Geographic Information Systems Committee (BRGISC) was established in 2011. The BRGISC is staffed by the Baltimore Metropolitan Council and its membership consists of GIS managers of the Cities of Annapolis and Baltimore and the Counties of Anne Arundel, Baltimore, Carroll, Harford and Howard. The committee was formed to provide a forum for sharing communication among jurisdictions on national, state and local GIS applications and resources. The BRGISC has developed a data sharing protocol for delivering individual county/city level map resources among local governments.

The BRGISC meets bi-monthly to discuss topics that are pending with especially state and national agencies as well as utilities and private enterprises. The current work product underway is a Baltimore Metro Regional Routable Centerline and Address Point Project which with the approval of local GIS offices will allow BMC staff to access these data layers to geographic code transportation GIS data layers used in project planning and modeling. This data sharing protocol will allow various county agencies to share data across jurisdictional boundaries with comparable agencies.

FY 2014 PERFORMANCE OBJECTIVES:

1. Attend BRGISC Meetings.
2. Provide data and work efforts toward regional projects.
3. Review and comment on materials as presented.

PRODUCTS/MILESTONES	SCHEDULE
Attend BRGISC Meetings	Throughout Fiscal Year

PARTICIPANT: Baltimore City

BUDGET: \$2,620

PROJECT: TRANSPORTATION IMPROVEMENT PROGRAM

PURPOSE: This project develops the annual component of the Transportation Improvement Program (TIP) for Baltimore City, revisions to the City’s component of the TIP and review and comment on the regional TIP. The task also includes review and comment regarding proposed TIP amendments during the fiscal year.

FY 2014 PERFORMANCE OBJECTIVES:

1. Develop the annual submission of the TIP including assessment of all federally funded projects for Baltimore City.
2. Review and comment on the Draft 2015-2018 TIP.
3. Revise and correct TIP submissions as needed.
4. Review and comment on all TIP amendments as submitted throughout the fiscal year.

PRODUCTS/MILESTONES	SCHEDULE
Review and comment on proposed TIP amendments	As Needed
Receive training for new TIP web-based software	1 st Quarter
Submit local TIP component of 2015-2018 document	3 rd Quarter
Revise local TIP component per comments and review draft TIP document	3 rd Quarter
Final revisions to FY 2015-2018 TIP	4 th Quarter

PARTICIPANT: Baltimore City

BUDGET: \$10,165

PROJECT: SUBAREA ANALYSIS – BALTIMORE CITY

PART A: BICYCLE MASTER PLAN UPDATE

PURPOSE: Update the City’s Bicycle Master Plan to create an integrated network of innovative bicycle facilities which encourages bicycling as a viable transportation option; enhance efforts to collect timely data on and analyze bicycle traffic, develop and implement marketing efforts to promote safe bicycling. Development of the bike plan update will include successes, lessons learned; policy updates and focus on local level planning for easier implementation. The City will also continue regional coordination of bicycle and pedestrian planning participation in the BRTB Pedestrian/Bicycle Task Force.

FY 2014 PERFORMANCE OBJECTIVES:

1. Draft Baltimore City Bicycle Master Plan update
2. Track data on and analyze bicycle traffic;
3. Develop marketing activities to promote safe bicycling
4. Develop traffic calming and pedestrian safety measures
5. Participate with other jurisdictions in the BRTB Bicycle and Pedestrian Task Force as that group works with BMC staff to develop implementation plans, etc.

PRODUCTS/MILESTONES	SCHEDULE
Bicycle Master Plan Implementation: <ul style="list-style-type: none"> • Review roadway design and construction plans for bicycle • Lane and safety improvements • Develop partnerships for installation of bicycle racks and shower/changing facilities • Install bicycle and pedestrian count technologies at appropriate locations • Provide training opportunities for City engineers, planners, and public works inspectors 	Throughout Fiscal Year
Track data on and analyze bicycle traffic	Throughout Fiscal Year
Develop marketing activities to promote safe bicycling	1 st Quarter
Develop complete streets principals	3 rd Quarter

BALTIMORE REGION UPWP
FY 2014 UNIFIED PLANNING WORK PROGRAM

PARTICIPANTS: Baltimore City DOT, Planning, Rec and Parks, Police, Mayor's Bicycle Advisory Committee, Downtown Baltimore Family Alliance, Bikemore, Bike Maryland, BMC

BUDGET: \$75,000

PART B: HANOVER STREET CORRIDOR STUDY

PURPOSE: To identify traffic and safety issues on Hanover Street from I-95 to I-895 for improving truck access, ped/bike accommodations, and safety. Hanover Street is a major freight and commuter traffic corridor in the Middle Branch Transportation Plan. The study will identify new recommendations for vehicular and pedestrian safety and will refine existing recommendations. The study will also identify design alternatives for the intersection of Hanover and Frankurst to redirect truck traffic southbound on Potee Street to I-895 as an alternative to Hanover Street.

FY 2014 PERFORMANCE OBJECTIVES:

1. Provide a comprehensive analysis of Traffic Operations and pedestrians safety along Hanover Street between I-95 and I-895.
2. Analyze pedestrian/bicycle/transit access
3. Assess current truck routes
4. Draft recommendations for truck access improvements, pedestrian/bike accommodations, and other traffic safety measures for corridor.

PRODUCTS/MILESTONES	SCHEDULE
Data collection, project scope, stakeholder communication	1 st Quarter and ongoing thereafter
Development of corridor recommendations	2 nd Quarter
Development of plans to improve truck access, traffic safety, and multi-modal access.	Beginning in 3 rd Quarter
Final Report	4 th Quarter

PARTICIPANTS: Baltimore City DOT, Consultant, MTA, MPA

BUDGET: \$100,000

PART C: MLK JR. BLVD CORRIDOR STUDY

PURPOSE: Martin Luther King Jr. Blvd is a major gateway into the city from Howard, Anne Arundel, and Baltimore Counties and a primary access corridor for many city neighborhoods. With numerous traffic and pedestrian crashes during recent years and high traffic speeds, a comprehensive traffic study is needed to improve safety issues along the corridor. Perform traffic and safety analysis on MLK (entire length). The study will include an existing conditions analysis, future conditions analysis and conceptual recommendations to improve mobility, enhance the corridor for alternative transportation opportunities, create a highly visible gateway into the City, and reduce vehicular and pedestrian conflict points along the corridor.

The development of the UMB Bio Park, the Red Line and the proposed State Center Transit-Oriented Development (TOD) will depend on the corridor along Martin Luther King Boulevard as one of the key components of the transportation network.

FY 2014 PERFORMANCE OBJECTIVES:

1. Assess potential future conditions, including future Red Line construction, UMB Biopark, and new residential and commercial development
2. Provide a comprehensive analysis along the MLK Jr Boulevard corridor and gateway which will include traffic operations and pedestrian safety.
3. Provide the groundwork for geometric improvements to transportation facilities including possible transit upgrades, pavement markings, traffic controls, sidewalks, ADA ramps, medians, lighting and other elements.

PRODUCTS/MILESTONES	SCHEDULE
Data collection, project scope, stakeholder communication. Existing conditions analysis	1 st Quarter and ongoing thereafter
Development of corridor recommendations	2 nd Quarter
Development of corridor concept	3 rd Quarter
Complete report containing recommendations and concept design	4 th Quarter

PARTICIPANTS: Baltimore City DOT, Red Line, MTA, Department of Planning, Consultant, SHA, Anne Arundel, Howard, and Baltimore Counties, BMC.

BUDGET: \$100,000

PART D: TRUCK ROUTE SAFETY IMPROVEMENTS CURTIS AVENUE AND PENNINGTON AVENUE

PURPOSE: Perform geometric and safety analysis to convert Pennington Avenue and Curtis Avenue from the current one-way pair to two-way traffic on both corridors thereby designating Curtis Avenue as the truck route and allowing Pennington Avenue to be a residential corridor. The study boundaries are between Patapsco Avenue and Birch Street.

The study will include analysis of conditions and future conditions; conceptual geometry recommendations to convert Curtis Avenue and Pennington Avenue to two-way traffic, improve mobility, enhance the corridor for alternative transportation opportunities, create a gateway into the City from Anne Arundel County, and reduce vehicular and pedestrian conflict points along the corridors.

The background: Curtis Avenue and Pennington Avenue in the Curtis Bay Community are one-way paired streets that are designated as Through Truck Routes that pass through the residential community connecting Hawkins Point and Anne Arundel County industrial activities. The proposed residential development of over 1500 homes in Anne Arundel County provides a direct connection to Pennington Avenue. The added traffic mix of residential to existing commercial traffic complicates the current roadway network of through commercial trucks and passenger traffic.

FY 2014 PERFORMANCE OBJECTIVES:

1. Provide a comprehensive geometric safety analysis along the Curtis Avenue and Pennington Avenue between Patapsco Avenue and Birch Street.
2. Provide the groundwork for geometric improvements to transportation facilities including possible pavement markings, traffic controls, sidewalks, ADA ramps, medians, lighting and other elements.

PRODUCTS/MILESTONES	SCHEDULE
Existing Conditions Analysis	1 st Quarter
Final Conditions Analysis	2 nd Quarter
Final Report and Recommendations	4 th Quarter

BALTIMORE REGION UPWP
FY 2014 UNIFIED PLANNING WORK PROGRAM

PARTICIPANTS: Baltimore City DOT, Baltimore City DPW, Planning, Consultant,
Community Groups

BUDGET: \$125,000

PROJECTS AND BUDGETS
BALTIMORE COUNTY

(\$190,660)

PROJECT: UPWP MANAGEMENT

PURPOSE: This task involves managing, coordinating, and guiding the various technical activities related to the UPWP and the regional transportation planning process. These work efforts are carried out through a variety of means including direct involvement in planning activities and support to the multi-disciplined and multi-agency committees essential to a coordinated process. These activities specifically include management of the current fiscal year work program and budget, preparation of detailed work programs, and preparation of quarterly progress reports.

FY 2014 PERFORMANCE OBJECTIVES:

1. Manage involvement for Baltimore County in the local and regional transportation planning process.
2. Prepare quarterly reports and invoices.
3. Prepare the FY 2015 UPWP grant application and associated contracts in conjunction with all pertinent federal, state, and local agencies.
4. As necessary, participate in seminars, workshops, and short courses designed to develop technical skills and broader perspectives on transportation-related subjects.

PRODUCTS/ MILESTONES	SCHEDULE
Quarterly progress reports, invoices, audit preparation and other financial reports for the FY 2014 UPWP	Throughout Fiscal Year
Budget amendments for FY 2014	As Necessary
Baltimore County FY 2015 UPWP submittals	2nd Quarter
Completion of formal grant acceptance process for FY 2015	4th Quarter

PARTICIPANT: Baltimore County

BUDGET: \$15,000

PROJECT: BICYCLE AND PEDESTRIAN PLANNING

PURPOSE: Provide local assistance in integrating bicycle and pedestrian considerations into the overall planning and programming processes of the state, regional and local jurisdictions.

Baltimore County will assist the Bicycle and Pedestrian Advisory Group in the identification of appropriate opportunities to integrate bicycle and pedestrian travel options within a regional framework. The County will examine opportunities to incorporate bicycle and pedestrian uses along local roads, greenways and other non-motorized corridors. Promotional and educational efforts will also be used to increase awareness for bicycle and pedestrian opportunities and to promote safety and accessibility for non-motorized travelers, including those with disabilities.

FY 2014 PERFORMANCE OBJECTIVES:

1. Support Bicycle/Pedestrian Advisory Group in reviewing regional opportunities, monitoring regional progress, and sharing best practices and lessons learned.
2. Ensure that adequate pedestrian and bicycle accommodations are included in proposed TIP projects, and that pedestrian and bicyclist safety are considered in all phases of design.
3. Enhance planning for greenways and trails, including compliance with relevant federal and state design standards.
4. Support regional pedestrian and bicycle safety education programs, and implement coordinated education and enforcement activities at the local level.

PRODUCTS/MILESTONES	SCHEDULE
Joint activity on work programs and other efforts related to the regional bicycle/pedestrian plan	Throughout Fiscal Year
Other studies and analyses to support regional efforts	Throughout Fiscal Year

PARTICIPANT: Baltimore County

BUDGET: \$3,810

PROJECT: REGIONAL TRANSIT ANALYSIS – LOCAL INPUT

PURPOSE: To assist with the various technical activities in the efforts to undertake a regional analysis of transit services and networks.

As an outgrowth of the regional transit analysis task, GO-TRAN members and BMC staff will solicit information from local jurisdictions and locally operated transit service agencies about their current transit systems and services. This will help committee members and staff identify and evaluate short- and long-term opportunities to improve transit systems and services, including inter-jurisdictional and inter-agency coordination among these systems and services.

Throughout FY 2014, local government staff will assist BMC staff and consultants in efforts to access both local (and, to the extent possible and appropriate, private sector) data and expertise. Tasks will include meeting logistics, meeting attendance, and preparation/review of technical materials.

FY 2014 PERFORMANCE OBJECTIVES:

1. Identify appropriate data as requested, facilities, etc.
2. Review and comment on materials as presented.

PRODUCTS/MILESTONES	SCHEDULE
Identify data sets, locations, zoning as requested	Throughout Fiscal Year
Attend technical planning workshops	Throughout Fiscal Year

PARTICIPANT: Baltimore County

BUDGET: \$10,000

PROJECT: COOPERATIVE FORECASTING PROCESS

PURPOSE: To generate socio-economic and demographic data for the regional forecasting process. To provide technical input to the Cooperative Forecasting Group (CFG) that is responsible for reporting updates to changes in local land use patterns and associated developments in the region.

In FY 2007, the CFG developed population, household, and employment forecasts for each jurisdiction by small area for 2000 through 2035. These forecasts were used in the creation and testing of the 2011 Baltimore Region Long Range Transportation Plan. Local planning staffs will continue the development of these data during FY 2014 as part of Round 8-A Cooperative Forecasts, 2010 – 2040. They will report on their progress periodically to the CFG, the Technical Committee, and the BRTB.

FY 2014 PERFORMANCE OBJECTIVES:

1. Prepare updated socio-economic and demographic jurisdictional forecasts at the level of transportation analysis zones for 2010 – 2040.
2. Provide updates where necessary on major new developments or facilities that impact existing forecasts.
3. Prepare documentation on population, household and employment forecast methodologies.

PRODUCTS/MILESTONES	SCHEDULE
Review and report on forecasts for population, households and employment	2 nd Quarter
Document methodologies used to generate forecasts	3 rd Quarter
Provide updates on major new developments that affect existing forecasts	Throughout Fiscal Year

PARTICIPANT: Baltimore County

BUDGET: \$76,230

PROJECT: REGIONAL GIS COORDINATION

PURPOSE: To coordinate and assist with the various technical and outreach activities in conjunction with the Baltimore Region Geographic Information Systems Committee

The Baltimore Region Geographic Information Systems Committee (BRGISC) was established in 2011. The BRGISC is staffed by the Baltimore Metropolitan Council and its membership consists of GIS managers of the Cities of Annapolis and Baltimore and the Counties of Anne Arundel, Baltimore, Carroll, Harford and Howard. The committee was formed to provide a forum for sharing communication among jurisdictions on national, state and local GIS applications and resources. The BRGISC has developed a data sharing protocol for delivering individual county/city level map resources among local governments.

The BRGISC meets bi-monthly to discuss topics that are pending with especially state and national agencies as well as utilities and private enterprises. The current work product underway is a Baltimore Metro Regional Routable Centerline and Address Point Project which with the approval of local GIS offices will allow BMC staff to access these data layers to geographic code transportation GIS data layers used in project planning and modeling. This data sharing protocol will allow various county agencies to share data across jurisdictional boundaries with comparable agencies.

FY 2014 PERFORMANCE OBJECTIVES:

1. Attend BRGISC Meetings.
2. Provide data and work efforts toward regional projects.
3. Review and comment on materials as presented.

PRODUCTS/MILESTONES	SCHEDULE
Attend BRGISC Meetings	Throughout Fiscal Year

PARTICIPANT: Baltimore County

BUDGET: \$2,620

PROJECT: TRANSPORTATION IMPROVEMENT PROGRAM

PURPOSE: This project develops the annual component of the Transportation Improvement Program (TIP) for Baltimore County, revisions to the County's component of the TIP and review and comment on the regional TIP. The task also includes review and comment regarding proposed TIP amendments during the fiscal year.

FY 2014 PERFORMANCE OBJECTIVES:

1. Develop the annual submission of the TIP including assessment of all federally funded projects for Baltimore County.
2. Review and comment on the Draft 2015-2018 TIP.
3. Revise and correct TIP submissions as needed.
4. Review and comment on all TIP amendments as submitted throughout the fiscal year.

PRODUCTS/MILESTONES	SCHEDULE
Review and comment on proposed TIP amendments	As Needed
Receive training for new TIP web-based software	1 st Quarter
Submit local TIP component of 2015-2018 document	3 rd Quarter
Revise local TIP component per comments and review draft TIP document	3 rd Quarter
Final revisions to FY 2015-2018 TIP	4 th Quarter

PARTICIPANT: Baltimore County

BUDGET: \$3,000

PROJECT: SUBAREA ANALYSIS - BALTIMORE COUNTY

PART A: BICYCLE SHARING PROGRAM STUDY

PURPOSE: This project studies the possibility of a bike sharing program in Baltimore County.

FY 2013 PERFORMANCE OBJECTIVES:

1. Provide an overview of the bike sharing concept
2. Analyze existing bike sharing programs
3. Determine areas where the program will be implemented
4. Create a plan with models of provision and infrastructure considerations
5. Estimate costs and funding
6. Successful programs illustration

PRODUCTS/MILESTONES	SCHEDULE
Concept, background study and area of implementation	1 st Quarter
Bike sharing plan	2 nd and 3 rd Quarters
Cost, funds and examples	4 th Quarter

PARTICIPANT: Baltimore County

BUDGET: \$20,000

PART B: TRANSIT-ORIENTED DEVELOPMENT POLICY ANALYSIS

PURPOSE: Provide transferable local framework and guidance for pursuing Transit Oriented Development (TOD) opportunities. Since the 1960’s and under a number of different names local jurisdictions in the Baltimore region have discussed the importance of Transit Oriented Development. However, very little TOD development has actually occurred over nearly half a century. This project will focus on developing a transferable framework for implementing more successful TOD opportunities in both Baltimore County and the Baltimore Region in general. In addition to developing a transferable framework the project will develop TOD site concepts for several locations in Baltimore County.

FY 2014 PERFORMANCE OBJECTIVES:

1. Conduct national and regional TOD process reconnaissance.
2. Conduct national and regional TOD process reconnaissance.
3. Prepare necessary reports.

PRODUCTS/MILESTONES	SCHEDULE
Review and refine prior work program that contains reconnaissance on successful TOD activity and processes in Baltimore and other regions. Identify common successful elements.	1 st Quarter
Identify existing fatal flaws that have prohibited a more robust development of TOD opportunities in the Baltimore Region	2 nd Quarter
Develop a TOD Opportunities framework	2 nd Quarter
Review and rank potential TOD opportunities	3 rd Quarter
Develop conceptual plans	3 rd Quarter
Draft and Final Report	4 th Quarter

PARTICIPANT: Baltimore County

BUDGET: \$60,000

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PROJECTS AND BUDGETS

CARROLL COUNTY

(\$70,815)

PROJECT: UPWP MANAGEMENT

PURPOSE: This task involves managing, coordinating, and guiding the various technical activities related to the UPWP and the regional transportation planning process. These work efforts are carried out through a variety of means including direct involvement in planning activities and support to the multi-disciplined and multi-agency committees essential to a coordinated process. These activities specifically include management of the current fiscal year work program and budget, preparation of detailed work programs, and preparation of quarterly progress reports.

FY 2014 PERFORMANCE OBJECTIVES:

1. Manage involvement for Carroll County in the local and regional transportation planning process.
2. Prepare quarterly reports and invoices.
3. Prepare the FY 2015 UPWP grant application and associated contracts in conjunction with all pertinent federal, state, and local agencies.
4. As necessary, participate in seminars, workshops, and short courses designed to develop technical skills and broader perspectives on transportation-related subjects.

PRODUCTS/ MILESTONES	SCHEDULE
Quarterly progress reports, invoices, audit preparation and other financial reports for the FY 2014 UPWP	Throughout Fiscal Year
Budget amendments for FY 2014	As Necessary
Carroll County FY 2015 UPWP submittals	2nd Quarter
Completion of formal grant acceptance process for FY 2015	4th Quarter

PARTICIPANT: Carroll County

BUDGET: \$15,000

PROJECT: BICYCLE AND PEDESTRIAN PLANNING

PURPOSE: Provide local assistance in integrating bicycle and pedestrian considerations into the overall planning and programming processes of the state, regional and local jurisdictions.

Carroll County will assist the Bicycle and Pedestrian Advisory Group in the identification of appropriate opportunities to integrate bicycle and pedestrian travel options within a regional framework. The County will examine opportunities to incorporate bicycle and pedestrian uses along local roads, greenways and other non-motorized corridors. Promotional and educational efforts will also be used to increase awareness for bicycle and pedestrian opportunities and to promote safety and accessibility for non-motorized travelers, including those with disabilities.

FY 2014 PERFORMANCE OBJECTIVES:

1. Support Bicycle/Pedestrian Advisory Group in reviewing regional opportunities, monitoring regional progress, and sharing best practices and lessons learned.
2. Ensure that adequate pedestrian and bicycle accommodations are included in proposed TIP projects, and that pedestrian and bicyclist safety are considered in all phases of design.
3. Enhance planning for greenways and trails, including compliance with relevant federal and state design standards.
4. Support regional pedestrian and bicycle safety education programs, and implement coordinated education and enforcement activities at the local level.

PRODUCTS/MILESTONES	SCHEDULE
Joint activity on work programs and other efforts related to the regional bicycle/pedestrian plan	Throughout Fiscal Year
Other studies and analyses to support regional efforts	Throughout Fiscal Year

PARTICIPANT: Carroll County

BUDGET: \$3,810

PROJECT: REGIONAL FREIGHT ANALYSIS – LOCAL INPUT

PURPOSE: To coordinate and assist with the various technical and outreach activities in an effort to better understand and plan for improvements to the regional freight network.

As an outgrowth of the *Imagine 2060* process, establishing a vision for the Baltimore region, feedback from a range of stakeholders led the BRTB to undertake a regional freight analysis to understand the transportation network supporting the movement of goods through and within the region as well as identify regional priorities to maintain and enhance the system. In 2012, the BRTB commissioned a Freight Regional Oversight Group (FROG) to coordinate and oversee regional freight analysis. FROG is made up of local jurisdiction representatives and state agencies.

In FY 2014, it is anticipated that local participation will be stepped up to help provide input in support of FROG activities and other freight related activities. Tasks will include access to data, meeting logistics, attendance and preparation/review of technical materials.

FY 2014 PERFORMANCE OBJECTIVES:

1. Identify appropriate data as requested, facilities, etc.
2. Review and comment on materials as presented.

PRODUCTS/MILESTONES	SCHEDULE
Identify data sets, locations, zoning as requested	Throughout Fiscal Year
Attend technical planning workshops	Throughout Fiscal Year

PARTICIPANT: Carroll County

BUDGET: \$10,000

PROJECT: COOPERATIVE FORECASTING PROCESS

PURPOSE: To generate socio-economic and demographic data for the regional forecasting process. To provide technical input to the Cooperative Forecasting Group (CFG) that is responsible for reporting updates to changes in local land use patterns and associated developments in the region.

In FY 2007, the CFG developed population, household, and employment forecasts for each jurisdiction by small area for 2000 through 2035. These forecasts were used in the creation and testing of the 2011 Baltimore Region Long Range Transportation Plan. Local planning staffs will continue the development of these data during FY 2014 as part of Round 8-A Cooperative Forecasts, 2010 – 2040. They will report on their progress periodically to the CFG, the Technical Committee, and the BRTB.

FY 2014 PERFORMANCE OBJECTIVES:

1. Prepare updated socio-economic and demographic jurisdictional forecasts at the level of transportation analysis zones for 2010 – 2040.
2. Provide updates where necessary on major new developments or facilities that impact existing forecasts.
3. Prepare documentation on population, household and employment forecast methodologies.

PRODUCTS/MILESTONES	SCHEDULE
Review and report on forecasts for population, households and employment	2 nd Quarter
Document methodologies used to generate forecasts	3 rd Quarter
Provide updates on major new developments that affect existing forecasts	Throughout Fiscal Year

PARTICIPANT: Carroll County

BUDGET: \$38,115

PROJECT: REGIONAL GIS COORDINATION

PURPOSE: To coordinate and assist with the various technical and outreach activities in conjunction with the Baltimore Region Geographic Information Systems Committee

The Baltimore Region Geographic Information Systems Committee (BRGISC) was established in 2011. The BRGISC is staffed by the Baltimore Metropolitan Council and its membership consists of GIS managers of the Cities of Annapolis and Baltimore and the Counties of Anne Arundel, Baltimore, Carroll, Harford and Howard. The committee was formed to provide a forum for sharing communication among jurisdictions on national, state and local GIS applications and resources. The BRGISC has developed a data sharing protocol for delivering individual county/city level map resources among local governments.

The BRGISC meets bi-monthly to discuss topics that are pending with especially state and national agencies as well as utilities and private enterprises. The current work product underway is a Baltimore Metro Regional Routable Centerline and Address Point Project which with the approval of local GIS offices will allow BMC staff to access these data layers to geographic code transportation GIS data layers used in project planning and modeling. This data sharing protocol will allow various county agencies to share data across jurisdictional boundaries with comparable agencies.

FY 2014 PERFORMANCE OBJECTIVES:

1. Attend BRGISC Meetings.
2. Provide data and work efforts toward regional projects.
3. Review and comment on materials as presented.

PRODUCTS/MILESTONES	SCHEDULE
Attend BRGISC Meetings	Throughout Fiscal Year

PARTICIPANT: Carroll County
BUDGET: \$2,620

PROJECT: TRANSPORTATION IMPROVEMENT PROGRAM

PURPOSE: This project develops the annual component of the Transportation Improvement Program (TIP) for Carroll County, revisions to the County’s component of the TIP and review and comment on the regional TIP. The task also includes review and comment regarding proposed TIP amendments during the fiscal year.

FY 2014 PERFORMANCE OBJECTIVES:

1. Develop the annual submission of the TIP including assessment of all federally funded projects for Carroll County.
2. Review and comment on the Draft 2015-2018 TIP.
3. Revise and correct TIP submissions as needed.
4. Review and comment on all TIP amendments as submitted throughout the fiscal year.

PRODUCTS/MILESTONES	SCHEDULE
Review and comment on proposed TIP amendments	As Needed
Receive training for new TIP web-based software	1 st Quarter
Submit local TIP component of 2015-2018 document	3 rd Quarter
Revise local TIP component per comments and review draft TIP document	3 rd Quarter
Final revisions to FY 2015-2018 TIP	4 th Quarter

PARTICIPANT: Carroll County

BUDGET: \$1,270

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**PROJECTS AND BUDGETS
HARFORD COUNTY**

(\$112,740)

PROJECT: UPWP MANAGEMENT

PURPOSE: This task involves managing, coordinating, and guiding the various technical activities related to the UPWP and the regional transportation planning process. These work efforts are carried out through a variety of means including direct involvement in planning activities and support to the multi-disciplined and multi-agency committees essential to a coordinated process. These activities specifically include management of the current fiscal year work program and budget, preparation of detailed work programs, and preparation of quarterly progress reports.

FY 2014 PERFORMANCE OBJECTIVES:

1. Manage involvement for Harford County in the local and regional transportation planning process.
2. Prepare quarterly reports and invoices.
3. Prepare the FY 2015 UPWP grant application and associated contracts in conjunction with all pertinent federal, state, and local agencies.
4. As necessary, participate in seminars, workshops, and short courses designed to develop technical skills and broader perspectives on transportation-related subjects.

PRODUCTS/ MILESTONES	SCHEDULE
Quarterly progress reports, invoices, audit preparation and other financial reports for the FY 2014 UPWP	Throughout Fiscal Year
Budget amendments for FY 2014	As Necessary
Harford County FY 2015 UPWP submittals	2nd Quarter
Completion of formal grant acceptance process for FY 2015	4th Quarter

PARTICIPANT: Harford County

BUDGET: \$15,000

PROJECT: BICYCLE AND PEDESTRIAN PLANNING

PURPOSE: Provide local assistance in integrating bicycle and pedestrian considerations into the overall planning and programming processes of the state, regional and local jurisdictions.

Harford County will assist the Bicycle and Pedestrian Advisory Group in the identification of appropriate opportunities to integrate bicycle and pedestrian travel options within a regional framework. The County will examine opportunities to incorporate bicycle and pedestrian uses along local roads, greenways and other non-motorized corridors. Promotional and educational efforts will also be used to increase awareness for bicycle and pedestrian opportunities and to promote safety and accessibility for non-motorized travelers, including those with disabilities.

FY 2014 PERFORMANCE OBJECTIVES:

1. Support Bicycle/Pedestrian Advisory Group in reviewing regional opportunities, monitoring regional progress, and sharing best practices and lessons learned.
2. Ensure that adequate pedestrian and bicycle accommodations are included in proposed TIP projects, and that pedestrian and bicyclist safety are considered in all phases of design.
3. Enhance planning for greenways and trails, including compliance with relevant federal and state design standards.
4. Support regional pedestrian and bicycle safety education programs, and implement coordinated education and enforcement activities at the local level.

PRODUCTS/MILESTONES	SCHEDULE
Joint activity on work programs and other efforts related to the regional bicycle/pedestrian plan	Throughout Fiscal Year
Other studies and analyses to support regional efforts	Throughout Fiscal Year

PARTICIPANT: Harford County

BUDGET: \$3,810

PROJECT: REGIONAL FREIGHT ANALYSIS – LOCAL INPUT

PURPOSE: To coordinate and assist with the various technical and outreach activities in an effort to better understand and plan for improvements to the regional freight network.

As an outgrowth of the *Imagine 2060* process, establishing a vision for the Baltimore region, feedback from a range of stakeholders led the BRTB to undertake a regional freight analysis to understand the transportation network supporting the movement of goods through and within the region as well as identify regional priorities to maintain and enhance the system. In 2012, the BRTB commissioned a Freight Regional Oversight Group (FROG) to coordinate and oversee regional freight analysis. FROG is made up of local jurisdiction representatives and state agencies.

In FY 2014, it is anticipated that local participation will be stepped up to help provide input in support of FROG activities and other freight related activities. Tasks will include access to data, meeting logistics, attendance and preparation/review of technical materials.

FY 2014 PERFORMANCE OBJECTIVES:

1. Identify appropriate data as requested, facilities, etc.
2. Review and comment on materials as presented.

PRODUCTS/MILESTONES	SCHEDULE
Identify data sets, locations, zoning as requested	Throughout Fiscal Year
Attend technical planning workshops	Throughout Fiscal Year

PARTICIPANT: Harford County

BUDGET: \$10,000

PROJECT: COOPERATIVE FORECASTING PROCESS

PURPOSE: To generate socio-economic and demographic data for the regional forecasting process. To provide technical input to the Cooperative Forecasting Group (CFG) that is responsible for reporting updates to changes in local land use patterns and associated developments in the region.

In FY 2007, the CFG developed population, household, and employment forecasts for each jurisdiction by small area for 2000 through 2035. These forecasts were used in the creation and testing of the 2011 Baltimore Region Long Range Transportation Plan. Local planning staffs will continue the development of these data during FY 2014 as part of Round 8-A Cooperative Forecasts, 2010 – 2040. They will report on their progress periodically to the CFG, the Technical Committee, and the BRTB.

FY 2014 PERFORMANCE OBJECTIVES:

1. Prepare updated socio-economic and demographic jurisdictional forecasts at the level of transportation analysis zones for 2010 – 2040.
2. Provide updates where necessary on major new developments or facilities that impact existing forecasts.
3. Prepare documentation on population, household and employment forecast methodologies.

PRODUCTS/MILESTONES	SCHEDULE
Review and report on forecasts for population, households and employment	2 nd Quarter
Document methodologies used to generate forecasts	3 rd Quarter
Provide updates on major new developments that affect existing forecasts	Throughout Fiscal Year

PARTICIPANT: Harford County

BUDGET: \$76,230

PROJECT: REGIONAL GIS COORDINATION

PURPOSE: To coordinate and assist with the various technical and outreach activities in conjunction with the Baltimore Region Geographic Information Systems Committee

The Baltimore Region Geographic Information Systems Committee (BRGISC) was established in 2011. The BRGISC is staffed by the Baltimore Metropolitan Council and its membership consists of GIS managers of the Cities of Annapolis and Baltimore and the Counties of Anne Arundel, Baltimore, Carroll, Harford and Howard. The committee was formed to provide a forum for sharing communication among jurisdictions on national, state and local GIS applications and resources. The BRGISC has developed a data sharing protocol for delivering individual county/city level map resources among local governments.

The BRGISC meets bi-monthly to discuss topics that are pending with especially state and national agencies as well as utilities and private enterprises. The current work product underway is a Baltimore Metro Regional Routable Centerline and Address Point Project which with the approval of local GIS offices will allow BMC staff to access these data layers to geographic code transportation GIS data layers used in project planning and modeling. This data sharing protocol will allow various county agencies to share data across jurisdictional boundaries with comparable agencies.

FY 2014 PERFORMANCE OBJECTIVES:

1. Attend BRGISC Meetings.
2. Provide data and work efforts toward regional projects.
3. Review and comment on materials as presented.

PRODUCTS/MILESTONES	SCHEDULE
Attend BRGISC Meetings	Throughout Fiscal Year

PARTICIPANT: Harford County

BUDGET: \$2,620

PROJECT: TRANSPORTATION IMPROVEMENT PROGRAM

PURPOSE: This project develops the annual component of the Transportation Improvement Program (TIP) for Harford County, revisions to the County’s component of the TIP and review and comment on the regional TIP. The task also includes review and comment regarding proposed TIP amendments during the fiscal year.

FY 2014 PERFORMANCE OBJECTIVES:

1. Develop the annual submission of the TIP including assessment of all federally funded projects for Harford County.
2. Review and comment on the Draft 2015-2018 TIP.
3. Revise and correct TIP submissions as needed.
4. Review and comment on all TIP amendments as submitted throughout the fiscal year.

PRODUCTS/MILESTONES	SCHEDULE
Review and comment on proposed TIP amendments	As Needed
Receive training for new TIP web-based software	1 st Quarter
Submit local TIP component of 2015-2018 document	3 rd Quarter
Revise local TIP component per comments and review draft TIP document	3 rd Quarter
Final revisions to FY 2015-2018 TIP	4 th Quarter

PARTICIPANT: Harford County

BUDGET: \$5,080

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**PROJECTS AND BUDGETS
HOWARD COUNTY**

(\$287,740)

PROJECT: UPWP MANAGEMENT

PURPOSE: This task involves managing, coordinating, and guiding the various technical activities related to the UPWP and the regional transportation planning process. These work efforts are carried out through a variety of means including direct involvement in planning activities and support to the multi-disciplined and multi-agency committees essential to a coordinated process. These activities specifically include management of the current fiscal year work program and budget, preparation of detailed work programs, and preparation of quarterly progress reports.

FY 2014 PERFORMANCE OBJECTIVES:

1. Manage involvement for Howard County in the local and regional transportation planning process.
2. Prepare quarterly reports and invoices.
3. Prepare the FY 2015 UPWP grant application and associated contracts in conjunction with all pertinent federal, state, and local agencies.
4. As necessary, participate in seminars, workshops, and short courses designed to develop technical skills and broader perspectives on transportation-related subjects.

PRODUCTS/ MILESTONES	SCHEDULE
Quarterly progress reports, invoices, audit preparation and other financial reports for the FY 2014 UPWP	Throughout Fiscal Year
Budget amendments for FY 2014	As Necessary
Howard County FY 2015 UPWP submittals	2nd Quarter
Completion of formal grant acceptance process for FY 2015	4th Quarter

PARTICIPANT: Howard County

BUDGET: \$15,000

PROJECT: BICYCLE AND PEDESTRIAN PLANNING

PURPOSE: Provide local assistance in integrating bicycle and pedestrian considerations into the overall planning and programming processes of the state, regional and local jurisdictions.

Howard County will assist the Bicycle and Pedestrian Advisory Group in the identification of appropriate opportunities to integrate bicycle and pedestrian travel options within a regional framework. The County will examine opportunities to incorporate bicycle and pedestrian uses along local roads, greenways and other non-motorized corridors. Promotional and educational efforts will also be used to increase awareness for bicycle and pedestrian opportunities and to promote safety and accessibility for non-motorized travelers, including those with disabilities.

FY 2014 PERFORMANCE OBJECTIVES:

1. Support Bicycle/Pedestrian Advisory Group in reviewing regional opportunities, monitoring regional progress, and sharing best practices and lessons learned.
2. Ensure that adequate pedestrian and bicycle accommodations are included in proposed TIP projects, and that pedestrian and bicyclist safety are considered in all phases of design.
3. Enhance planning for greenways and trails, including compliance with relevant federal and state design standards.
4. Support regional pedestrian and bicycle safety education programs, and implement coordinated education and enforcement activities at the local level.

PRODUCTS/MILESTONES	SCHEDULE
Joint activity on work programs and other efforts related to the regional bicycle/pedestrian plan	Throughout Fiscal Year
Other studies and analyses to support regional efforts	Throughout Fiscal Year

PARTICIPANT: Howard County

BUDGET: \$3,810

PROJECT: REGIONAL TRANSIT ANALYSIS – LOCAL INPUT

PURPOSE: To assist with the various technical activities in the efforts to undertake a regional analysis of transit services and networks.

As an outgrowth of the regional transit analysis task, GO-TRAN members and BMC staff will solicit information from local jurisdictions and locally operated transit service agencies about their current transit systems and services. This will help committee members and staff identify and evaluate short- and long-term opportunities to improve transit systems and services, including inter-jurisdictional and inter-agency coordination among these systems and services.

Throughout FY 2014, local government staff will assist BMC staff and consultants in efforts to access both local (and, to the extent possible and appropriate, private sector) data and expertise. Tasks will include meeting logistics, meeting attendance, and preparation/review of technical materials.

FY 2014 PERFORMANCE OBJECTIVES:

1. Identify appropriate data as requested, facilities, etc.
2. Review and comment on materials as presented.

PRODUCTS/MILESTONES	SCHEDULE
Identify data sets, locations, zoning as requested	Throughout Fiscal Year
Attend technical planning workshops	Throughout Fiscal Year

PARTICIPANT: Howard County

BUDGET: \$10,000

PROJECT: COOPERATIVE FORECASTING PROCESS

PURPOSE: To generate socio-economic and demographic data for the regional forecasting process. To provide technical input to the Cooperative Forecasting Group (CFG) that is responsible for reporting updates to changes in local land use patterns and associated developments in the region.

In FY 2007, the CFG developed population, household, and employment forecasts for each jurisdiction by small area for 2000 through 2035. These forecasts were used in the creation and testing of the 2011 Baltimore Region Long Range Transportation Plan. Local planning staffs will continue the development of these data during FY 2014 as part of Round 8-A Cooperative Forecasts, 2010 – 2040. They will report on their progress periodically to the CFG, the Technical Committee, and the BRTB.

FY 2014 PERFORMANCE OBJECTIVES:

1. Prepare updated socio-economic and demographic jurisdictional forecasts at the level of transportation analysis zones for 2010 – 2040.
2. Provide updates where necessary on major new developments or facilities that impact existing forecasts.
3. Prepare documentation on population, household and employment forecast methodologies.

PRODUCTS/MILESTONES	SCHEDULE
Review and report on forecasts for population, households and employment	2 nd Quarter
Document methodologies used to generate forecasts	3 rd Quarter
Provide updates on major new developments that affect existing forecasts	Throughout Fiscal Year

PARTICIPANT: Howard County

BUDGET: \$76,230

PROJECT: REGIONAL GIS COORDINATION

PURPOSE: To coordinate and assist with the various technical and outreach activities in conjunction with the Baltimore Region Geographic Information Systems Committee

The Baltimore Region Geographic Information Systems Committee (BRGISC) was established in 2011. The BRGISC is staffed by the Baltimore Metropolitan Council and its membership consists of GIS managers of the Cities of Annapolis and Baltimore and the Counties of Anne Arundel, Baltimore, Carroll, Harford and Howard. The committee was formed to provide a forum for sharing communication among jurisdictions on national, state and local GIS applications and resources. The BRGISC has developed a data sharing protocol for delivering individual county/city level map resources among local governments.

The BRGISC meets bi-monthly to discuss topics that are pending with especially state and national agencies as well as utilities and private enterprises. The current work product underway is a Baltimore Metro Regional Routable Centerline and Address Point Project which with the approval of local GIS offices will allow BMC staff to access these data layers to geographic code transportation GIS data layers used in project planning and modeling. This data sharing protocol will allow various county agencies to share data across jurisdictional boundaries with comparable agencies.

FY 2014 PERFORMANCE OBJECTIVES:

1. Attend BRGISC Meetings.
2. Provide data and work efforts toward regional projects.
3. Review and comment on materials as presented.

PRODUCTS/MILESTONES	SCHEDULE
Attend BRGISC Meetings	Throughout Fiscal Year

PARTICIPANT: Howard County

BUDGET: \$2,620

PROJECT: TRANSPORTATION IMPROVEMENT PROGRAM

PURPOSE: This project develops the annual component of the Transportation Improvement Program (TIP) for Howard County, revisions to the County's component of the TIP and review and comment on the regional TIP. The task also includes review and comment regarding proposed TIP amendments during the fiscal year.

FY 2014 PERFORMANCE OBJECTIVES:

1. Develop the annual submission of the TIP including assessment of all federally funded projects for Howard County.
2. Review and comment on the Draft 2015-2018 TIP.
3. Revise and correct TIP submissions as needed.
4. Review and comment on all TIP amendments as submitted throughout the fiscal year.

PRODUCTS/MILESTONES	SCHEDULE
Review and comment on proposed TIP amendments	As Needed
Receive training for new TIP web-based software	1 st Quarter
Submit local TIP component of 2015-2018 document	3 rd Quarter
Revise local TIP component per comments and review draft TIP document	3 rd Quarter
Final revisions to FY 2015-2018 TIP	4 th Quarter

PARTICIPANT: Howard County

BUDGET: \$5,080

PROJECT: **SUBAREA ANALYSIS - HOWARD COUNTY**

PART A: **PEDESTRIAN FACILITY ASSESSMENT, PART 2**

PURPOSE: Comprehensively evaluate pedestrian facilities in Howard County.

This project will assess deficiencies and gaps in continuity, including missing connections to local (parks, schools, etc.) and regional facilities, activity centers, and transit service in order to identify and prioritize potential corrective actions. For FY 2014 the project will evaluate pedestrian accessibility for all bus stops and bus shelters in Howard County including compatibility with the Americans with Disabilities Act. The project will be coordinated with the regional effort to improve transit access and will develop a template that can be used through the region to access transit bus stops and bus shelters for ADA compatibility and pedestrian accessibility.

FY 2014 PERFORMANCE OBJECTIVES:

1. Review County reports/studies (e.g., Pedestrian Plan 2007, GDP and small area master plans, latest travel forecast model trip table and mode share data; State and County capital projects, School Board sidewalk priority list, and efforts by other jurisdictions to identify, quantify and prioritize facility improvement needs.
2. Field survey and map all bus stops and bus shelters in Howard County. Identify all pedestrian connections and gaps. Assess compliance with ADA regulations. Develop initial ADA compliance measures and pedestrian facilities to bridge accessibility gaps.
3. Field survey and map pedestrian/bike facilities and facility gaps along arterial and collector roads in the County's urbanized area and suburban area and identify pedestrian/bike amenities (crosswalks, lighting, pedestrian signal phase, bike racks, etc.) as well as likely significant pedestrian/bike trip producers (residential enclaves) and attractors (schools, parks, libraries, shopping, etc.).
4. Conduct outreach through stakeholder meetings to identify community concerns and observations in order to identify and prioritize additional facility needs.
5. Develop methodologies for prioritizing facility improvement options and standardizing unit costing.
6. Identify and broadly rank (e.g., high, medium, low) site specific improvement options and cost estimates.
7. Develop a prototype list of recommendations for changes to existing development regulations and design standards to assist in implementation of the identified improvements.

REGIONAL JUSTIFICATION:

1. The project will be coordinated with the regional efforts to improve transit access and deal with suburban incomplete street patterns.
2. The project and will develop a template that can be used throughout the region to access transit bus stops and bus shelters for ADA compatibility and pedestrian accessibility.

PRODUCTS/MILESTONES	SCHEDULE
Conduct all field surveys and gap analysis	1 st and 2 nd Quarter
Conduct stakeholder meetings and outreach to the public.	1 st and 2 nd Quarter
Develop proposed gap projects and prioritization of projects.	3 rd Quarter
Strategies to implement the improvements from sources other than the capital budget	3 rd Quarter
Final mapping and reports in electronic and hardcopy formats for distribution to stakeholders and the public for reviews and final approval	4 th Quarter

PARTICIPANT: Howard County

BUDGET: \$96,000

PART B: **BUS RAPID TRANSIT ASSESSMENT**

PURPOSE: Comprehensively evaluate future bus rapid transit facilities in Howard County and their potential linkage to the Washington Region

This project will assess Bus Rapid Transit (BRT) Corridors proposed in the Howard County General Plan and their potential connections to the Washington Region. A network of feeder buses, BRT stations and potential changes in land uses will be tested in conjunction with these BRT corridors. The potential cost effectiveness of these corridors will be evaluated and preliminary planning level site analysis performed.

FY 2014 PERFORMANCE OBJECTIVES:

1. Establish preliminary BRT corridors and perform testing and analysis for the year 2035 to determine the most likely candidates for further analysis.
2. Refine BRT corridors to include local feeder networks, potential park-and-rides, and increased pedestrian accessibility.
3. Conduct modal split analysis and preliminary cost analysis for the refined BRT corridors. Ascertain congestion reduction impacts on future transportation networks.
4. Determine most cost effective BRT solutions.
5. Develop an alternative land use scenario and test on selected BRT corridors and test transportation and potential land use impacts.
6. Select most cost effective and highest mobility accessibility combinations of BRT facilities and land use and provide final analysis.
7. Develop Final recommendations and next steps.

REGIONAL JUSTIFICATION:

1. The BRT analysis will provide guidance for other BRTB members on the efficacy of BRT and the corridors and types of land use it will best operate.
2. The BRT analysis will also provide an understanding of the potential type of congestion reductions that BRT will provide under different land use scenarios.

PRODUCTS/MILESTONES	SCHEDULE
Establish and test preliminary BRT networks.	1 st Quarter
Develop refined BRT networks for testing. Develop potential land use scenarios for BRT corridors.	2 nd Quarter
Analyze and test BRT corridor concepts and potential BRT land use scenarios.	2 nd and 3 rd Quarter
Final recommendations and next steps for BRT networks.	4 th Quarter

PARTICIPANTS: Howard County, consultant

BUDGET: \$79,000

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APPENDIX C

ADDITIONAL PLANNING STUDIES

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Bicycle and Pedestrian Plan: The Maryland Department of Transportation (MDOT) is leading an update of the current Bicycle and Pedestrian Master Plan, which was adopted in 2002. The Bicycle and Pedestrian Master Plan establishes a 20-year vision to support cycling and walking as modes of transportation in Maryland. The Plan will provide guidance and investment strategies to support cycling and walking, both on-road and off-road, as part of Maryland's multimodal transportation network.

The Bicycle and Pedestrian Plan will be coordinated with the Maryland Transportation Plan, or "MTP," and other key statewide planning efforts. It will also address recently enacted federal transportation legislation, "Moving Ahead for Progress in the 21st Century."

MDOT plans to engage Maryland's citizens, governmental agencies, and interested organizations so that the Plan update process addresses the needs of all of Maryland's transportation stakeholders. A variety of methods will be used to gather public input, including public meetings, an online survey, and a project website. In addition, an Advisory Group including representatives of state agencies, Metropolitan Planning Organizations, local government as well as advocates and citizen representatives will be engaged throughout the planning process.

The Bicycle and Pedestrian Master Plan is being updated on the same schedule as the Maryland Transportation Plan, in accordance with State law. Both plans will be completed in January 2014.

2035 Maryland Transportation Plan: The Maryland Department of Transportation (MDOT) is currently preparing the 2035 Maryland Transportation Plan (MTP), the statewide long range transportation plan, which presents, Maryland's 20-year vision for transportation. As part of the plan's development, MDOT is engaging residents, businesses, governmental agencies, and other stakeholders so that the MTP's vision, goals, objectives and strategies reflect and respond to the needs of Maryland's citizens and businesses. The MTP is developed through extensive public outreach in order to:

- Outline overarching transportation goals and priorities
- Help define transportation decision-making within a larger context
- Guide policy and programming decisions throughout MDOT and its modal administrations

The 2035 MTP will be published in January 2014. By statute, the plan is updated every five years and is one component of the State Report on Transportation, which also includes the Consolidated Transportation Program (CTP) and the annual Attainment Report on Transportation System Performance (AR). Together, these documents set the course and the implementation steps for carrying-out the State's mission and vision for transportation.

I-795: Dolfield Interchange: The purpose of the I-795 at Dolfield Road Project Planning Study is to improve vehicular, pedestrian and bicycle accessibility along Dolfield and provide safety and capacity improvements along I-795 while supporting existing and planned development in the area. I-795 provides commuters in the area with access to points east and west, including Baltimore City and Westminster in Carroll County. The enhancements to I-795 and Dolfield would improve access, mobility, and safety for local, regional, and inter-regional traffic, including passenger and transit vehicles. Project Planning is fully funded with Baltimore County contributing \$625,000 and State Highway Administration is contributing \$1.875 million. Planning is ongoing and expected to be complete in Spring 2013.

MD 198: Laurel Fort Meade Road: A study to address capacity needs on MD 198 from MD 295 to MD 32 (2.66 miles). Bicycle and pedestrian access will be provided where appropriate. MD 198 is a key link to Fort Meade from points south and west. The area in and around Fort Meade will likely experience substantial growth as a result of BRAC. Project planning is underway and is expected to be completed in winter 2013-2014. Anne Arundel County is contributing up to \$4.5 million to fully fund the planning phase.

PLANNING STUDIES INITIATED BUT NOW ON HOLD:

I-70 (Baltimore National Pike): A study to address current and future capacity needs on I-70 between US 40 and MD 32 (7 miles). This project would ease increasing congestion and improve safety along this segment of I-70. Project planning was being conducted using State funding up until late fall 2008, when it was put on hold due to the economic downturn. The estimated total cost of the study is \$3.0 million.

APPENDIX D

PUBLIC REVIEW PROCESS

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FY 2014 UPWP

February 15 through March 18, 2013

www.baltometro.org/plans/annual-work-program-and-budget-fy-2014-upwp

Presentations Made

Presentations were made to the Technical Committee and the Citizens Advisory Committee. Both Committees provided comments/recommended changes that were reviewed and addressed.

Outreach, Public Notices, Advertisements

The following notices/advertisements were posted during this comment period

Notice in E-newsletters

Maryland Moves:

BRTB Welcomes Comments on Draft FY 2014 Budget & Work Program

Every year, the Baltimore Regional Transportation Board (BRTB) develops a work program and budget for the coming fiscal year (July 1, 2013 to June 30, 2014).

The draft UPWP includes both local and region-wide activities. A few highlights include:

- Evaluate mobility and accessibility needs in seven travel corridors throughout Anne Arundel County.
- Comprehensively evaluate the possibility for Bus Rapid Transit (BRT) in Howard County.
- Host a Walkability Workshop in Harford County.

The BRTB is currently welcoming comments on the draft FY 2014 budget and work program through Monday, March 18, 2013.

OPEN FOR
PUBLIC COMMENT

BRTB
FY 2014 Annual
Budget
& Work
Program

[>> View the Draft FY 2014 Work Program & Budget](#)

On Transit

BRTB Welcomes Comments on Draft FY 2014 Budget & Work Program!

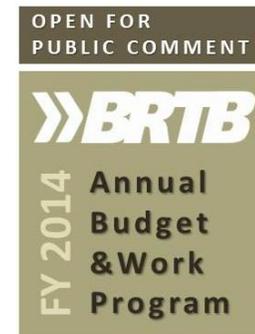
Every year, the Baltimore Regional Transportation Board (BRTB) develops a work program and budget for the coming fiscal year (July 1, 2013 to June 30, 2014).

The draft UPWP includes both local and region-wide activities.

A few highlights include:

- Evaluate mobility and accessibility needs in seven travel corridors throughout Anne Arundel County.
- Comprehensively evaluate the possibility for Bus Rapid Transit (BRT) in Howard County.
- Host a Walkability Workshop in Harford County.

The BRTB is currently welcoming comments on the draft FY 2014 budget and work program through **Monday, March 18, 2013**.



[>> View the Draft FY 2014 Work Program & Budget](#)

Flyer

A flyer for the BRTB Annual Budget & Work Program FY 2014. The top section has a dark green header with the BRTB logo and the text "Annual Budget & Work Program" and "FY 2014". To the left of the header is a vertical bar with the text "Comments Welcome through March 18". Below the header is a white box with text. The text includes: "Every year, the Baltimore Regional Transportation Board (BRTB) develops a work program and budget for the coming fiscal year (July 1, 2013 to June 30, 2014). The BRTB is currently welcoming comments on the draft FY 2014 UPWP." It then asks "What is in this Draft Work Program and Budget?" and describes the work program. It lists highlights of the draft UPWP, including evaluating mobility needs, identifying improvements, evaluating BRT, and host a walkability workshop. It provides contact information for downloading the draft UPWP and sharing comments. The comment period is from Friday, February 15 through Monday, March 18, 2013. Contact information for Regina Aris is provided at the bottom.

Public Meetings

No public meetings were held during this comment period.

Comments Received

No public comments were received during this time.

OPEN
FOR
PUBLIC
REVIEW



FY 2014

Annual Budget & Work Program

Comments Welcome through March 18

Every year, the Baltimore Regional Transportation Board (BRTB) develops a work program and budget for the coming fiscal year (July 1, 2013 to June 30, 2014). The BRTB is currently welcoming comments on the draft FY 2014 UPWP.

What is in this Draft Work Program and Budget?

The work program, called the UPWP, - Unified Planning Work Program for Transportation Planning - details projects, studies, and other activities to be completed by BRTB members, including: cities of Annapolis and Baltimore, counties of Anne Arundel, Baltimore, Carroll, Harford and Howard, the Maryland Departments of Planning, Environment, and Transportation, and the Maryland Transit Administration. This also includes funding for staff of the Baltimore Metropolitan Council (BMC) who do work on behalf of the BRTB.

The draft UPWP includes both local and region-wide activities. Highlights include:

- Evaluate mobility and accessibility needs in seven travel corridors throughout Anne Arundel County.
- Identify and recommend improvements related to traffic and safety issues in the Hanover Street and Martin Luther King Jr. Blvd corridors in Baltimore City.
- Comprehensively evaluate the possibility for Bus Rapid Transit (BRT) in Howard County.
- Host a Walkability Workshop in Harford County.
- Continue the transition of the trip-based travel model to an activity-based model.
- Collect occupancy and vehicle-type data in six activity centers: Annapolis, Columbia, Fort Meade, Hunt Valley, Owings Mills and Towson.

Download the draft FY 2014 UPWP at www.baltometro.org or view a print copy in the Regional Information Center at BMC (address below).

Share Your Comments

The public is invited to share their thoughts on the proposed regional transportation planning activities from **Friday, February 15 through Monday, March 18, 2013**.

Please send all comments in writing to: The Baltimore Regional Transportation Board, Offices @ McHenry Row, 1500 Whetstone Way, Suite 300, Baltimore, MD 21230; Fax: 410-732-8248; or E-mail: comments@baltometro.org.

Comments may also be shared in person during the Public Comment Opportunity at the following BRTB meetings at 9 a.m. on February 26, ~~March 26~~ or April 23 (tentative vote).

For more information, contact Regina Aris at raris@baltometro.org or 410-732-9572.

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APPENDIX E

LIST OF ACRONYMS

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ACRONYMS / ABBREVIATIONS

3-C	Continuing, Cooperative and Comprehensive
ABM	Activity Based Model
ACS	American Community Survey
ADA	Americans With Disabilities Act
BRTB	Baltimore Regional Transportation Board
BMC	Baltimore Metropolitan Council
BPAG	Bicycle & Pedestrian Advisory Group
BPDS	Building Permit Data System
BRAC	Base Realignment and Closure
B-ROC	Baltimore Regional Operations Coordination Committee
BRT	Bus Rapid Transit
BRTB	Baltimore Regional Transportation Board
CAA	Clean Air Act
CAC	Citizens Advisory Committee
CATT	Center for Advanced Transportation Technology
CBD	Central Business District
CFG	Cooperative Forecasting Group
CMAQ	Congestion Mitigation and Air Quality
CMP	Congestion Management Process
CSA	Combined Statistical Area
CTP	Consolidated Transportation Program
CTPP	Consolidated Transportation Planning Package
CTSP	Community Traffic Safety Program
DBE	Disadvantaged Business Enterprise
EAT	Emphasis Area Team
EPA	Environmental Protection Agency
ES-202	Employment Security Report 202
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
FY	Fiscal Year
FMTF	Freight Movement Task Force
GHG	Greenhouse Gases
GPS	Global Positioning System
HPMS	Highway Performance Monitoring System
HUD	Housing and Urban Development
ICG	Interagency Consultation Group
ITS	Intelligent Transportation Systems
ISTEA	Intermodal Surface Transportation Efficiency Act
ITS	Intelligent Transportation Systems

BALTIMORE REGION UPWP
FY 2014 UNIFIED PLANNING WORK PROGRAM

ITS MD	Intelligent Transportation Society of Maryland
JARC	Job Access and Reverse Commute
LEHD	Longitudinal Employer-Household Dynamics
LEP	Limited English Proficiency
LOS	Level of Service
LRTP	Long Range Transportation Plan
M&O	Management & Operations
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
MEF	Master Establishment File
MHSO	Maryland Highway Safety Office
MIEMSS	Maryland Institute for Emergency Medical Services Systems
MIIF	Major Intersections and Important Facilities
MLK	Martin Luther King
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
MOVES	Motor Vehicle Emission Simulator
MPA	Metropolitan Planning Area
MPO	Metropolitan Planning Organization
MSA	Metropolitan Statistical Area
MSGIC	Maryland State Geographic Information Committee
MSTM	Maryland Statewide Travel Model
MTA	Maryland Transit Administration
MWCOG	Metropolitan Washington Council of Governments
NAAQS	National Ambient Air Quality Standards
NAICS	North American Industrial Classification System
NEPA	National Environmental Policy Act
NHTSA	National Highway Traffic Safety Administration
NSA	National Security Agency
P ³	Public Private Partnership
PECAS	Production and Exchange Consumption Allocation System
PIP	Public Involvement Plan
PM _{2.5}	Fine Particulate Matter
POPGEN	(Synthetic) Population Generator
PUMS	Public Use Microdata Sample
RFP	Request for Proposals
RPSD	Regional Plan for Sustainable Development
RTSMO	Regional Transportation Systems Management & Operations
SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users

BALTIMORE REGION UPWP
FY 2014 UNIFIED PLANNING WORK PROGRAM

SDE	Spatial Database Engine
SHA	State Highway Administration
SHSP	Strategic Highway Safety Plan
SIP	State Implementation Plan
SOP	Standard Operating Procedures
SRTS	Safe Routes to School
STP	Surface Transportation Program
T&PW	Transportation & Public Works
TAP	Transportation Alternatives Program
TBM	Travel Based Model
TC	Technical committee
TEA-21	Transportation Equity Act for the 21 st Century
TIM	Traffic Incident Management
TIMBR	Traffic Incident Management (Committee) for the Baltimore Region
TIP	Transportation Improvement Program
TMA	Transportation Management Area
TMIP	Travel Model Improvement Program
TOD	Transit Oriented Development
TPB	Transportation Planning Board
TOD	Transit Oriented Development
TCM	Transportation Control Measure
TDM	Transportation Demand Management
TTX	Tabletop Exercise
UASI	Urban Area Security Initiative
UAWG	Urban Area Work Group
UMB	University of Maryland Baltimore
U.S. DOT	United States Department of Transportation
UPWP	Unified Planning Work Program
VMT	Vehicle Miles Traveled
VPP	Vehicle Probe Project
WILMAPCO	Wilmington Area Planning Council
WIP	Watershed Implementation Plan
WMATA	Washington Metropolitan Area Transit Authority