

BALTIMORE REGION
FY 2012 UNIFIED PLANNING WORK PROGRAM
FOR TRANSPORTATION PLANNING

APRIL 2011

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

The BRTB is staffed by the:



BALTIMORE METROPOLITAN COUNCIL

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

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FY 2012 UNIFIED PLANNING WORK PROGRAM
FOR TRANSPORTATION PLANNING**

**Kevin Kamenetz
Chairman
Baltimore Regional Transportation Board**

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

April 2011

**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**

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BALTIMORE REGIONAL TRANSPORTATION BOARD

Member

The Honorable Joshua J. Cohen
Mayor, City of Annapolis

The Honorable John R. Leopold
Anne Arundel County Executive

The Honorable Stephanie Rawlings-Blake
Mayor, City of Baltimore

The Honorable Kevin Kamenetz, Chairman
Baltimore County Executive

The Honorable Haven Shoemaker
Carroll County Board of Commissioners

The Honorable David R. Craig, Vice Chairman
Harford County Executive

The Honorable Ken Ulman
Howard County Executive

The Honorable Beverley K. Swaim-Staley
Secretary, Maryland Department
of Transportation

The Honorable Robert Summers, Ph.D.
Secretary, Maryland Department
of the Environment

The Honorable Richard E. Hall
Secretary, Maryland Department
of Planning

Administrator Ralign T. Wells
Maryland Transit Administration

Empowered Representative

Mr. Jon L. Arason

Mr. Harvey Gold

Mr. Jamie Kendrick

Mr. Emery Hines

Ms. Cindy Parr

Mr. Tony McClune

Mr. Ben Pickar

Mr. Don Halligan

Ms. Diane Franks

Mr. David Whitaker

Mr. Arnold "Pat" Keller

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BALTIMORE METROPOLITAN PLANNING ORGANIZATION

**BALTIMORE REGIONAL TRANSPORTATION BOARD
RESOLUTION #11-23**

ENDORING THE FISCAL YEAR 2012 UNIFIED PLANNING WORK PROGRAM AND BUDGET, APPROVING ITS SUBMISSION TO BOTH THE FEDERAL TRANSIT ADMINISTRATION AND FEDERAL HIGHWAY ADMINISTRATION, AS WELL AS AUTHORIZING THE BALTIMORE METROPOLITAN COUNCIL TO ENTER INTO CONTRACTUAL ARRANGEMENTS WITH THE MARYLAND DEPARTMENT OF TRANSPORTATION AND LOCAL JURISDICTIONS TO CARRY OUT THE WORK ACTIVITIES OUTLINED IN THE WORK PROGRAM

WHEREAS, the Baltimore Regional Transportation Board is the designated Metropolitan Planning Organization for the Baltimore region, encompassing the Baltimore Urbanized Area, and includes official representatives of the cities of Annapolis and Baltimore, the counties of Anne Arundel, Baltimore, Carroll, Harford, and Howard, and 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 Safe Accountable Flexible Efficient Transportation Equity Act – A Legacy for Users have established regulations and procedures which require a Metropolitan Planning Organization to develop plans and programs which will enhance personal mobility for all population groups, enhance quality of life, expedite goods movement, promote orderly growth, improve regional air quality, and protect the environment; and

WHEREAS, consistent with the Final Rule for Metropolitan Transportation Planning, the Baltimore Regional Transportation Board provided a 30-day (February 26 - March 26) public participation opportunity during the preparation of the Unified Planning Work Program; and

WHEREAS, the Baltimore Regional Transportation Board has prepared a work program and budget (Attachment 1) for Fiscal Year 2012 in compliance with applicable federal programs and regulations; and

NOW, THEREFORE, BE IT RESOLVED that the Baltimore Regional Transportation Board endorses the Fiscal Year 2012 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 2012 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 20, 2011 meeting.

April 20, 2011



Kevin Kamenetz, Chairman
Baltimore Regional Transportation Board

FY 2012 UPWP BUDGET

SOURCES

EXPECTED APPROPRIATIONS

		FHWA	FTA	State	Total
FY 12	Appropriations	\$3,703,095.00	\$1,130,662.00	\$604,220.00	\$5,437,977.00

CARRYOVER

FY 06	Appropriations	\$4,595,369.00	\$760,680.00	\$669,506.00	\$6,025,555.00
	Less Expenditures	\$2,601,960.94	\$469,270.00	\$372,862.25	\$3,444,093.19
	FY 06 C/O Balance	\$1,993,408.06	\$291,410.00	\$296,643.75	\$2,581,461.81
FY 07	Appropriations	\$3,263,981.00	\$934,539.00	\$524,815.00	\$4,723,335.00
	Less Expenditures	\$2,709,514.00	\$716,001.00	\$369,935.68	\$3,795,450.68
	FY 07C/O Balance	\$554,467.00	\$218,538.00	\$154,879.32	\$927,884.32
FY 08	Appropriations	\$3,350,798.00	\$994,476.00	\$543,159.50	\$4,888,433.50
	Less Expenditures	\$3,053,085.00	\$890,600.00	\$482,954.74	\$4,426,639.74
	FY 08 C/O Balance	\$297,713.00	\$103,876.00	\$60,204.76	\$461,793.76
FY 09	Appropriations	\$2,958,800.00	\$1,065,172.00	\$502,996.50	\$4,526,968.50
	Less Expenditures	\$2,868,402.00	\$1,023,184.00	\$395,792.34	\$4,287,378.34
	FY 09 C/O Balance	\$90,398.00	\$41,988.00	\$107,204.16	\$239,590.16
FY 10	Appropriations	\$3,181,425.00	\$1,130,324.00	\$538,968.50	\$4,850,717.50
	Less Expenditures	\$3,601,974.00	\$1,281,746.00	\$439,291.30	\$5,323,011.30
	FY 10 C/O Balance	-\$420,549.00	-\$151,422.00	\$99,677.20	-\$472,293.80
FY 11	Appropriations	\$3,703,095.00	\$1,130,662.00	\$604,220.00	\$5,437,977.00
	Less Expenditures	\$3,755,886.00	\$1,135,574.00	\$271,901.00	\$5,163,361.00
	FY 11 C/O Balance	-\$52,791.00	-\$4,912.00	\$332,319.00	\$274,616.00
	FY 06-11 C/O Balance	\$2,462,646.06	\$499,478.00	\$1,050,928.19	\$4,013,052.25
FY 2012 AVAILABLE FUNDS		\$6,165,741.06	\$1,630,140.00	\$1,655,148.19	\$9,451,029.25

USES

BMC Staff	\$4,250,000
Consultants	\$715,000
BMC Total	\$4,965,000
City of Annapolis	\$132,700
Anne Arundel County	\$435,080
Baltimore City	\$868,725
Baltimore County	\$229,430
Carroll County	\$70,815
Harford County	\$412,740
Howard County	\$445,440
State Highway Administration	\$32,110
Local Total	\$2,627,040
TOTAL USES	\$7,592,040

FY 2012 WORK PROGRAM

	FHWA	MDOT	FTA	LOCAL	TOTAL
Unified Planning Work Program	301,230	53,500	169,442	64,168	588,340
Legislative Coordination	53,760	4,000	30,240	17,000	105,000
Public Involvement	71,680	14,000	40,320	14,000	140,000
Consultant Services	366,080	71,500	205,920	71,500	715,000
Long Range Planning	89,600	17,500	50,400	17,500	175,000
Congestion Management	56,320	11,000	31,680	11,000	110,000
Operations Planning	61,440	12,000	34,560	12,000	120,000
Safety Planning & Analysis	48,640	9,500	27,360	9,500	95,000
Traffic Monitoring	98,360	16,000	55,328	22,422	192,110
Bicycle & Pedestrian Planning	39,255	5,000	22,081	10,334	76,670
Freight Analysis	98,560	19,250	55,440	19,250	192,500
Transit Planning	111,360	21,750	62,640	21,750	217,500
Human Service Coordination	25,600	5,000	14,400	5,000	50,000
Emergency Planning	61,440	12,000	34,560	12,000	120,000
Transportation Equity	20,480	4,000	11,520	4,000	40,000
Development Monitoring	112,640	22,000	63,360	22,000	220,000
Cooperative Forecasting	273,846	22,000	154,038	84,971	534,855
2010 Census	71,680	14,000	40,320	14,000	140,000
GIS Activities	112,640	22,000	63,360	22,000	220,000
Regional Database Integration	61,440	12,000	34,560	12,000	120,000
Transportation & Land Use	76,800	15,000	43,200	15,000	150,000
Analysis of Trends & Policy	30,720	6,000	17,280	6,000	60,000
Travel Demand Model	294,400	57,500	165,600	57,500	575,000
TIP	34,235	4,000	19,257	9,373	66,865
Subarea Analysis	25,600	5,000	14,400	5,000	50,000
City of Annapolis	56,320		31,680	22,000	110,000
Anne Arundel County	188,416		105,984	73,600	368,000
Baltimore City	395,520		222,480	154,500	772,500
Baltimore County	81,920		46,080	32,000	160,000
Harford County	153,600		86,400	60,000	300,000
Howard County	170,342		95,818	66,540	332,700
Technical Analysis for State	51,200	10,000	28,800	10,000	100,000
Mobile Emissions Planning	130,560	25,500	73,440	25,500	255,000
Environmental Mitigation	20,480	4,000	11,520	4,000	40,000
Air Quality Analysis	40,960	8,000	23,040	8,000	80,000
Total	3,887,124	503,000	2,186,508	1,015,408	7,592,040
Combined Federal (FHWA/FTA)	6,073,632				

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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	SHA SHARE	TOTAL
1 UPWP Management	535,000	7,620	7,620	7,620	7,620	7,620	7,620	7,620		\$588,340
2 Legislative Coordination	40,000	5,000	10,000	10,000	10,000	10,000	10,000	10,000		\$105,000
3 Public Part. & Comm. Outreach	140,000									\$140,000
4 Professional Consultant Services	715,000									\$715,000
5 Long-Range Planning	175,000									\$175,000
6 Congestion Management Process	110,000									\$110,000
7 Operations Planning	120,000									\$120,000
8 Safety Planning & Analysis	95,000									\$95,000
9 Regional Traffic Monitoring Program	160,000								32,110	\$192,110
10 Bicycle and Pedestrian Planning	50,000	3,810	3,810	3,810	3,810	3,810	3,810	3,810		\$76,670
11 Freight Mobility Planning	160,000	2,500	5,000	5,000	5,000	5,000	5,000	5,000		\$192,500
12 Transit Coordination	185,000	2,500	5,000	5,000	5,000	5,000	5,000	5,000		\$217,500
13 Human Service Transportation Coordination	50,000									\$50,000
14 Emergency Preparedness Planning	120,000									\$120,000
15 Transportation Equity Planning	40,000									\$40,000
16 Development Monitoring	220,000									\$220,000
17 Cooperative Forecasting Process	220,000		34,650	54,630	35,000	38,115	76,230	76,230		\$534,855
18 2010 Census & ACS	140,000									\$140,000
19 GIS Activities	220,000									\$220,000
20 Regional Database Integration	120,000									\$120,000
21 Transportation and Land Use Planning	150,000									\$150,000
22 Analysis of Trends & Policy Issues	60,000									\$60,000
23 Travel Demand Modeling	575,000									\$575,000
24 Transportation Improvement Program	40,000	1,270	1,000	10,165	3,000	1,270	5,080	5,080		\$66,865
25 Subarea Analysis	50,000									\$50,000
26 Annapolis: Subarea Analysis		110,000								\$110,000
27 Anne Arundel Co: Subarea Analysis			368,000							\$368,000
28 Baltimore City: Subarea Analysis				772,500						\$772,500
29 Baltimore County: Subarea Analysis					160,000					\$160,000
30 Harford County: Subarea Analysis							300,000			\$300,000
31 Howard County: Subarea Analysis								332,700		\$332,700
32 Technical Analysis for State Initiatives	100,000									\$100,000
33 Mobile Emissions Planning	255,000									\$255,000
34 Environmental Mitigation	40,000									\$40,000
35 Air Quality Conformity Analysis	80,000									\$80,000
TOTAL	4,965,000	132,700	435,080	868,725	229,430	70,815	412,740	445,440	32,110	\$7,592,040

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WORK TASKS	FHWA SHARE	MDOT SHARE	FTA SHARE	LOCAL SHARE	TOTAL
26. Annapolis Transit Planning (\$35,000) Wayfinding System (\$75,000)	\$56,320		\$31,680	\$22,000	\$110,000
27. Anne Arundel County Pedestrian/Bicycle Facility Assessment (\$283,000) Complete Streets Assessment (\$85,000)	\$188,416		\$105,984	\$73,600	\$368,000
28. Baltimore City Transportation Operations for Sustainability (\$135,000) Port Communities Impact Assessment (\$250,000) Economic Empowerment in Trans Projects (\$100,000) Reconnecting Bisected Communities (\$175,000) Bicycle Master Plan Update (\$112,500)	\$395,520		\$222,480	\$154,500	\$772,500
29. Baltimore County Model Analysis (\$135,000) Trip Generation Study (\$25,000)	\$81,920		\$46,080	\$32,000	\$160,000
30. Harford County MD 22 Study (\$300,000)	\$153,600		\$86,400	\$60,000	\$300,000
31. Howard County Focused Highway & Transit Forecasts (\$113,000) Transit Planning (\$10,700) Bicycle Plan (\$209,000)	\$170,342		\$95,818	\$66,540	\$332,700

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PROSPECTUS

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PROSPECTUS

The Prospectus is a detailed description of the organization and the cooperative and integrative concept involved in the preparation of the Fiscal Year 2012 Unified Planning Work Program (UPWP) for the Baltimore region. It defines the regionally agreed upon planning priorities and the roles and responsibilities of the various participants in the metropolitan planning process. The Prospectus complements the annual work program and provides a narrative that outlines the region's anticipated transportation agenda and linkage to the many planning issues facing the Baltimore metropolitan area.

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. The planning area is part of the 2000 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 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) is designated as a "moderate" non-attainment area for the 8-hour ozone standard and a nonattainment area for fine particulate matter (PM 2.5) by the U.S. Environmental Protection Agency (U.S. EPA). The entire non-attainment area is in the northern portion of the 2000 U.S. Census Bureau designated Washington-Baltimore-Northern Virginia, DC-MD-VA-WV Combined Statistical Area.

Unified Planning Work Program Development Process

The Unified Planning Work Program outlines the planning activities to be performed by all state, regional and local participants in the Baltimore metropolitan transportation planning 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).

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 (August 11, 2005) federal transportation legislative program coined SAFETEA-LU (Safe, Accountable, Flexible, Efficient Transportation Equity Act, a Legacy for Users) preserves the commitment to the metropolitan transportation planning process established in the previous noted federal initiatives (SAFETEA-LU has been extended through September 30, 2011). On February 14, 2007, U.S. Department of Transportation (FHWA/FTA) issued final regulations regarding metropolitan planning, specifically outlining the planning requirements associated with the metropolitan planning process, including the Transportation Improvement Program and the Long-Range Transportation Plan. The key changes in SAFETEA-LU from previous transportation legislation include the expansion of planning factors to address homeland security, broader based public participation/outreach efforts, long-range planning update frequency, air quality conformity timelines and inter-agency consultation and coordination.

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 and Title III, Section 5303 metropolitan planning funds. The total funding proposed for the FY 2012 transportation planning activities for the Baltimore region is \$7,592,040.

The UPWP is developed annually beginning in December and approved in March/April, and is the result of continued cooperation among State (specifically transportation, air quality and planning agencies), local and regional entities. The FY 2012 UPWP was prepared with the involvement of these organizations, acting through the metropolitan

planning organization (MPO) for the Baltimore region 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 Baltimore metropolitan area and, where appropriate, the modal administrations of the Maryland Department of Transportation for various project activities that support the regional transportation planning process.

In keeping with the proactive public involvement spirit of SAFETEA-LU, the FY 2012 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 2012 UPWP.

Metropolitan Transportation Planning - Roles & Responsibilities

The Baltimore Regional Transportation Board (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 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 the Maryland Department of Transportation, the Maryland Department of the Environment, the Maryland Department of Planning, and the Maryland Transit Administration (see Figure 1 for the geographic location of each participating local jurisdiction). 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 that serve the BRTB in an advisory capacity.

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FIGURE 1



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The mission of the Baltimore Regional Transportation Board is to serve as the metropolitan planning organization (MPO) acting as the regional transportation planning and policy making body for the Baltimore region. 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.

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. Figure 2 outlines the various parties responsible for the primary planning and programming activities in the Baltimore region.

Under the auspices of the BRTB exists a network of committees and subcommittees formulated to focus on specific technical and policy areas (see Figure 3). 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 challenges, land development and quality of life issues. The BRTB has formally established a Budget Subcommittee to annually review projects and work tasks included in the UPWP to ensure regional significance and quality control.

As noted previously, the BRTB is composed of representatives from 5 counties and Baltimore City (that also serve as the Board of Directors of the Baltimore Metropolitan Council), the City of Annapolis and 4 Maryland state agencies – Transportation, Environment, Planning, and Transit Administration. The local jurisdiction's and agency's representatives have been designated and empowered by their respective lead elected official or department secretary and serve as a means to integrate locally oriented policies and needs into a regionally-based agenda.

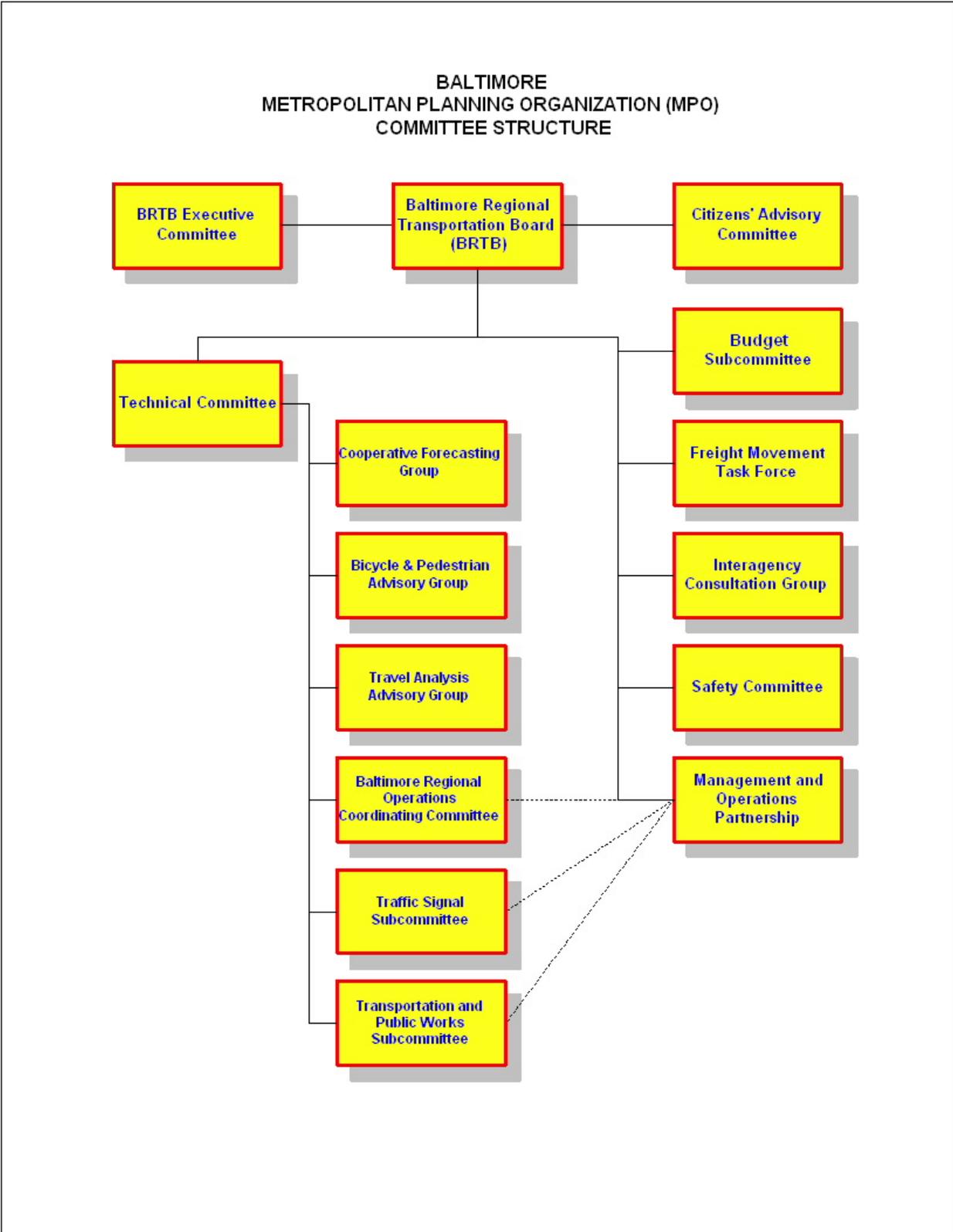
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FIGURE 2

Planning Responsibility	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 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 MPO, 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 MPO, 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 MPO, 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 MPO, 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

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FIGURE 3



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The Maryland Department of Transportation (MDOT), a multi-modal organization that includes the State Highway Administration, the Maryland Transit Administration (the statewide public transit operator), the Maryland Port Administration and the Maryland Aviation Administration, has a standing “Memoranda of Understanding” with the Baltimore Metropolitan Council (BMC) that delineates responsibilities in support of the regional transportation planning process. This agreement, initiated in 1992 with the re-designation of the Baltimore MPO 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 Baltimore MPO.

As the leading air quality agency, the Maryland Department of the Environment (MDE) is an active member in the MPO 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 also sits on the MPO, providing a direct linkage between transportation planning decisions and statewide growth management and land planning strategies. The Maryland Transit Administration (MTA) operates a comprehensive transit system throughout the Baltimore and Washington metropolitan areas. The MTA works closely with the MPO on the planning and operations of existing and new transit lines throughout the Baltimore region.

Federal Certification Review Process

On May 9, 1995, FHWA and FTA issued a joint “Certification Review” of the Baltimore MPO planning process and concluded that the planning process instituted by the BRTB addressed the requirements of the federal metropolitan planning regulations. A second certification review was conducted in March 1998 and finalized in December 1998 and a third certification review occurred on January 22-23 and February 20, 2001. The 2001 joint certification review team issued a formal finding that “the transportation planning process for Baltimore meets all of the requirements of TEA-21 and the October 28, 1993 Federal metropolitan planning regulations, 23 CFR Part 450, Subpart C.” Three years later, between March 15-17, 2004, a fourth joint federal certification review of the Baltimore MPO was conducted.

Most recently, a joint federal certification review of the Baltimore MPO’s planning process was conducted by representatives from the FHWA and FTA on June 23-25, 2008. In general, the federal team determined that the Baltimore MPO continues to conduct a “3-C” transportation planning process that satisfies the federal provisions governing metropolitan planning. Although the review team highlighted noteworthy practices in the BRTB planning process (i.e. data collection, air quality planning and public involvement), the team also identified areas in need of improvement. Specifically, the BRTB was asked to improve the current process in the following areas: (1) the link between project selection criteria of the region’s long-range transportation plan and the metropolitan Transportation Improvement Program (TIP); (2) disclosure and access to all project activities conducted under the region’s Congestion Management Process; (3) development of a Baltimore Metro Area ITS architecture; (4) UPWP management oversight; and (5) the development of a Title VI plan. To date the BRTB, with the support of the BMC staff have addressed many of the certification team’s recommendations.

Transportation Planning Priorities

The FY 2012 UPWP includes several priority work tasks whose ultimate objective is intended to improve the analytical and consensus building capabilities of the Baltimore MPO. The UPWP details the “prescriptive” planning activities that must be addressed such as Public Participation, the Transportation Improvement Program and a Congestion Management Process in order to maintain a viable “3-C” planning process and meet federal certification requirements. The UPWP also describes the various tasks required to meet the approval dates for the region’s next long-range plan and the TIPs as well as the technical and policy planning activities for subsequent years. 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 underway throughout the region detailed later in this Prospectus.

It is through the FY 2012 UPWP, as well as previous UPWP initiatives, that the MPO will address and support the short-term and long-range transportation planning priorities of the Baltimore metropolitan area. In November 2007, the BRTB approved *Transportation Outlook 2035*, a new long-range regional transportation plan that guides the region's short-term and long-term multimodal investments. This plan was subsequently amended in February 2009 to include an additional \$225 million in transit-supportive infrastructure improvements. In 2011, the BRTB initiated preparation of *Plan It 2035*, the next Long Range Transportation Plan for the Baltimore Region. This plan is scheduled for adoption by November, 2011.

As in previous work programs, the FY 2012 UPWP directs fiscal resources to upgrade the analytical tools and capacity of the MPO and its technical support staff to meet public policy evaluation needs. The FY 2012 UPWP will continue to support BMC's traditional 4-step travel demand model (trip generation, trip distribution, mode choice and trip assignment) and begin the phased transition to activity based models. The validation of the region's travel model with revealed data from the 2007/2008 Household Travel and 2007 On-Board Transit surveys has been completed. The initial phase, synthetic population generation, towards activity based models was completed in the 4th quarter of FY 2011. The region's modeling effort will continue to coordinate with the Red-Line modeling and the statewide model efforts looking to share data and refinement of modeling assumptions. The ability of the region's technical modeling tools to replicate revealed behavior and provide analytical analysis of regional policy questions are valuable inputs to the MPO's decision-making process.

In an attempt to assure timely attainment of air quality standards and protect public health, the Baltimore MPO continues to view clean-air planning as a major regional priority. As a moderate non-attainment area under the 8-hour ozone standard and a non-attainment area for the fine particulate matter (PM_{2.5}) standard, the Baltimore region must display progress toward attainment or face federally-imposed penalty measures. 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 MPO is required by

federal mandate to demonstrate that implementation of the region's proposed transportation plans and programs conform with the applicable State Implementation Plan (SIP).

Under a cooperative Memorandum of Understanding between the Maryland Departments of the Environment and Transportation, the MPO operationalized an Interagency Consultation Group 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, stationary, and area source emission budgets included in the SIP. Included in *Transportation Outlook 2035* is a set of transportation-related control strategies that are recommended for implementation by 2035 in order to sustain the objectives of the SIP. As the U.S. EPA has recently proposed strengthening the ozone standard, the MPO will continue in FY 2012 to conduct an in-depth reconnaissance into potentially endorsable transportation control measures for the Baltimore non-attainment area.

Assisting this effort is the FY 2011 MPO-sponsored initiative of a competitive selection process for Congestion Mitigation and Air Quality Improvement Program (CMAQ) projects in the Baltimore region. Working cooperatively with the Maryland Department of Transportation, the BRTB once again prioritized \$800,000 of CMAQ eligible projects in FY 2011 in order to promote the region's efforts to address transportation-related air quality emissions.

Through the FY 2012 UPWP, the MPO 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 Partnership stresses public education, and BMC staff will participate in various outreach events to raise awareness of air quality issues. Many of these activities are planned for Clean Commute Month (May) and include a region-wide Bike to Work Day.

In keeping with the environmental mitigation regulations for metropolitan planning, the BRTB will continue efforts originating in the development of Transportation Outlook 2035 (and furthered in the development of Plan It 2035) to work with local and state regulatory agencies to identify inventories and conservation plans for sensitive, natural and historic assets that may be impacted by transportation infrastructure investments. Environmental mitigation strategies must be considered in determining the total costs of implementing long-range transportation plans. With the EPA's December 2010 release of the Chesapeake Bay Total Maximum Daily Load

(TMDL) document, the MPO has reinvigorated their water-related planning activities, working to address water pollution issues related to transportation and future transportation investments.

Related to the priority of public participation in the Baltimore MPO 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. BMC staff worked with Morgan State University, Johns Hopkins School of Public Health, the Greater Baltimore Urban League and other community based entities to ascertain the linkage between transportation planning and environmental justice. Given the nature and scope of this activity, it is anticipated that staff will continue to be engaged throughout FY 2012. Furthermore, with a SAFETEA-LU focus on expanding transportation options, the Baltimore MPO will continue to work with the Maryland Transit Administration to implement the recently updated Human Service Transportation Plan for the Baltimore metropolitan area that coordinates services for the disabled and mobility challenged. The objective for FY 2012 is to continue the MPO’s involvement to promote a wide range of initiatives that facilitate the linkage between suburban employment opportunities and urban-based labor supplies as well as services for the elderly and the disabled.

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 will utilize 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. Throughout FY 2012, 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.

The MPO will continue to monitor and react to new initiatives through the Federal Partnership for Sustainable Communities between the US Department of Transportation (DOT), Department

of Housing and Urban Development (HUD) and the Environmental Protection Agency (EPA) including exploring ways to further incorporate the six livability principles into the MPO work program.

In an attempt to develop a comprehensive approach to transportation planning in the Baltimore metropolitan area, the BRTB has directed BMC staff to explore opportunities to employ technology as a means of adding capacity to the region's transportation network. The work for FY 2012 includes the implementation of various study recommendations that enhance regional management and operations coordination in an attempt to manage various incidents and improve overall system efficiency. Issues such as inter-jurisdictional signal coordination, incident management, roadway, and bicycle and pedestrian safety are major regional priorities.

In light of the events of September 11, 2001, and reiterated in SAFETEA-LU, the Baltimore MPO, like many of its counterparts, has initiated a wide array of transportation security-related planning activities. This work meshes with the new SAFETEA-LU planning factor to address security. During FY 2003, the BRTB commissioned a Transportation Emergency Preparedness Task Force whose primary responsibility was to work with the Maryland Emergency Management Agency (MEMA) to prepare an emergency regional evacuation plan. This report was completed and accepted in FY 2008; however, given the complexity of this issue, this planning activity continues into the foreseeable future.

One of the region's guiding principles is to develop a transportation investment strategy that improves vehicular, and bicycle and pedestrian safety. The BRTB and BMC staffs were actively involved in the development of the 2010 State Highway Safety Plan that serves as a blueprint to reduce crashes and fatalities of the traveling public. In FY 2008 and 2009, the BRTB sponsored the creation of a regional safety media campaign that targeted special interest groups and emphasis areas with the highest number of fatalities and injuries in the metropolitan region. In FY 2012, BMC staff will continue to expand this public outreach initiative to incorporate other partnerships and communication opportunities. Throughout FY 2012, BMC staff will work with local 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.

ADDITIONAL PLANNING STUDIES

NEW OR ONGOING PLANNING STUDIES:

BRAC

This encompasses planning efforts in anticipation of Base Realignment and Closure (BRAC) impacts surrounding both Aberdeen Proving Ground (APG) in Harford County and Fort George G. Meade (FGGM) in Anne Arundel County. Following through on the State of Maryland BRAC Action Plan, MDOT completed a BRAC Commuter Bus Study in 2008, analyzing routes serving APG and Fort Meade.

MDOT completed traffic studies at heavily impacted intersections near APG and FGGM, looking at intersection and other minor improvements to provide relief in the near term. Construction activities have commenced at top priority projects at US 40/MD 715 at APG, and at MD 175/Rockenbach Rd/Disney Rd at FGGM. Currently, MDOT is designing improvements for additional priority intersections identified in collaboration with BRAC stakeholders. Planning continues of the Central Maryland Transit Maintenance Facility, and long-term improvements to MD 175 and MD 198. Finally, MDOT is actively engaged in working with Maryland's BRAC-impacted installations to assist them in moving employees "the last mile" to the installation and points within it. The State is working with APG and FGGM to introduce Department of Defense-funded shuttle bus services to and from nearby MARC and Metro Stations, as well as other Transportation Demand Management solutions.

MDOT is partnering with Harford County, the City of Aberdeen, and APG on improvements to the Aberdeen MARC Station. This includes Planning, Design, and Construction for the Aberdeen MARC Station Parking Expansion project, which is currently in design, and anticipated to commence construction activities in 2011. Development of design concepts for a Multimodal Transit Center at the Aberdeen Station, which was designated by the state as a Transit Oriented Development priority site in 2010, is to continue in 2011. MDOT is also conducting planning for a MARC Storage and Maintenance Facility at the Edgewood Campus of Aberdeen Proving Ground, a project that will support future service expansions, as well as fully-funded improvements to the Edgewood MARC Station, scheduled to commence construction in the Spring of 2011.

I-795: Dolfield Interchange

The purpose of the I-795 at Dolfield Road Project Planning Study is to improve vehicular, pedestrian and bicycle accessibility 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 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 expected to be complete in Summer 2011.

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 Fall 2012. Anne Arundel County is contributing up to \$4.5 million to fully fund the planning phase.

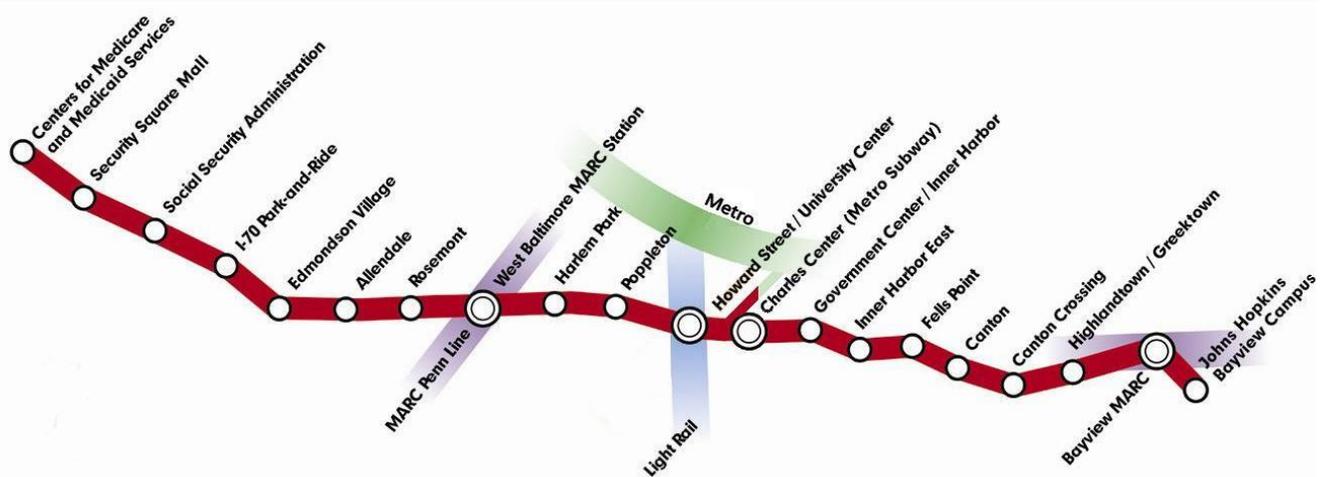
Red Line Transit Corridor Study

The Baltimore Red Line, first identified and prioritized in the 2002 Baltimore Region Rail System Plan, represents the highest priority corridor within the Baltimore region for transit improvements. The proposed Red Line is a 14-mile, east-west light rail transit (LRT) line that comprises Baltimore County's Woodlawn employment and commercial centers, including the Social Security Administration; residential areas of West Baltimore; the downtown Baltimore CBD, including the University of Maryland medical and academic centers; nearby tourist attractions; residential, retail and commercial points in Inner Harbor East, Fells Point and Canton; residential communities in the Highlandtown area; and employment and medical institutions at the Johns Hopkins Bayview campus in east Baltimore City. The system would provide enhanced mobility; help to reduce congestion; support economic development and community revitalization initiatives; and expand transportation alternatives in the region. Approximately 59,000 daily boardings are estimated.

The 20 proposed stations along the Red Line will provide improved connectivity with existing transit systems such as MARC at the West Baltimore Station and a future MARC station at

Bayview, light rail along Howard Street, and Metro at Charles Center, and with core and commuter bus routes. Commuter access will also be provided via park-and-ride facilities proposed at or near I-70, I-695, I-95 and/or I-895. The Red Line offers an expanded 21st century public transportation system in an already heavily traveled regional corridor, and will provide mobility benefits that are currently lacking in the region.

FTA Project Management Oversight Consultant (PMOC) coordination is underway as part of the formal FTA New Starts approval process to enter the Preliminary Engineering phase. Current activities include a FTA risk assessment that will review project scope, schedule, cost, and technical capacity; finalizing the real estate acquisition management plan; and development of a capital and operating financial plan. All submissions are subject to FOIA requests. Approval from FTA to begin Preliminary Engineering is expected May/June 2011. Preliminary Engineering and approval of the Final Environmental Impact Statement are scoped to be completed in Late 2012.



Statewide Freight Plan

The Maryland Statewide Freight Plan (SFP) was released in September 2009 and is moving into implementation. This is the first ever freight plan for Maryland and it provides a comprehensive overview of the State's current and long-range freight planning activities and investments. Additionally, the Statewide Freight Plan includes a Smart Growth element that makes it one of the first plans in the nation to address sprawl and land use. Tasks completed include a freight project needs inventory and set of corresponding policy initiatives. Outreach to public and private stakeholders across the State was done at the onset of the plan and at the

draft stage to identify freight system deficiencies and recommend solutions. The Freight Plan also includes a component to identify truck parking issues to address the continually increasing demand for spaces, and a modeling component developed in conjunction with the University of Maryland and SHA statewide modeling effort. The Freight Plan is designed to emphasize clear, achievable capital planning and implementation outputs that can be implemented within five-year and twenty-five year planning horizons. This effort was completed in September 2009 and was funded at a total cost of \$520,000 using State dollars.

The implementation of the Freight Plan began through internal research and strategy development, but officially “kicked-off” in March 2010. Three working groups of modal representatives were formed: policy development, project planning and data/performance measures. The groups are meeting regularly to identify a short and long term action plan. The project development group, for example, is working on grouping the freight plan projects by corridor, understanding the issues, challenges, environment in the corridors and working with modal organizations to identify options in the short-term (calendar year 2010).

In January 2011, FHWA provided their Peer 2 Peer program which focused on Freight Performance Measures. BRTB helped MDOT facilitate holding the workshop in which the MPO’s, MDOT’s modes and other key stakeholders came together and developed a performance measure plan for multimodal freight, the first ever for MDOT. This important event was an important milestone in freight plan implementation work that has been taking place all year and will help Maryland to participate in and shape federal requirements for freight performance measures.

Disaster Debris Tabletop Exercise 2011

The Transportation & Public Works Subcommittee received \$45,000 to plan, execute, and evaluate a tabletop exercise focused on coordination of disaster debris handling. This exercise will be held in mid FY 2012. The objectives for this exercise will be based on the results of the first regional Disaster Debris Tabletop Exercise held in October 2009.

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.

MARC Odenton Parking Expansion D & E

The project is on hold pending the outcome of the Transportation Public-Private Partnership Program (TP3) proposal evaluation.

I-95: Carroll-Camden Access Study

The purpose of this Interstate Access Point Approval (IAPA) study is to further evaluate alternatives that will improve access to, and facilitate the redevelopment of the Carroll Camden area, and also improve safety and operations along I-95 between Caton Avenue and Hanover Street. The results of this study will be used to begin discussions with the Federal Highway Administration (FHWA) regarding the appropriateness for IAPA, which would be developed as part of a NEPA study. The Maryland Transportation Authority (MdTA) began the IAPA study in January 2008 and will work closely with the City of Baltimore as the study proceeds. It is anticipated to be a 12-18 month study. The study is being fully funded by the MdTA, at a cost of \$563,000. Currently the team is waiting for a Traffic Impact Study for the proposed casino in Baltimore City.

Green Line Transit Corridor Study

Planning work initiated as the Green Line Corridor Transit Study, defined as a 17-mile extension of the existing Baltimore Metro service from its current terminus at Johns Hopkins Hospital to White Marsh. The segment of the Green Line from Johns Hopkins University Hospital to Morgan State University was selected as one of the top three priority projects to begin implementation of the Baltimore Regional Rail Plan.

The Green Line Alternatives Analysis Study Draft Environmental Impact, initiated in 2002, examined the area between Johns Hopkins Hospital and Morgan State University, including the neighborhoods of Middle East, Broadway East, South Clifton Park, Darley Park, Coldstream Homestead Montebello, Ednor Gardens-Lakeside, and Hillen. This study identified several

potential heavy rail transit (HRT), bus rapid transit (BRT), and light rail transit (LRT) alternatives for a roughly four-mile service extension. The study, placed on hold in 2004, outlined an approach that would have included: conceptual plan preparation; preliminary engineering and mode feasibility analysis; environmental screening; assessment of right of way issues; ridership potential; capital and annual operating costs; and extensive public involvement.

The project was restarted in November 2006, resuming work initiated in 2002. The work envisioned selection of a Locally Preferred Alternative (LPA), followed by a Draft Environmental Impact Statement (DEIS) and Preliminary Engineering/Final Environmental Impact Statement (PE/FEIS) phase to qualify for New Starts grant funding. Key restart activities included Preliminary Market Ridership Analysis, aerial mapping, project Web site implementation and continuous public outreach through a speakers' bureau. More than 100 people attended the first round of Public Open House meetings on the Green Line in early June 2008. Due to fiscal constraints and higher priority transportation projects, the Green Line Study has been placed on indefinite hold.

RECENTLY COMPLETED STUDIES:

BWI Marshall Master Plan Update

The Maryland Aviation Administration (MAA) has prepared a long range needs assessment and Master Plan Update to identify 2030 projections of air traffic activity and facility improvement needs at Baltimore Washington International Thurgood Marshall Airport (BWI). The study required in-depth evaluations of many factors, including future air service, runway and terminal capacities, and environmental and community impact considerations. The Master Plan was completed in June 2010. The Plan is currently under review by the Federal Aviation Administration.

I-95 Section 200: North of MD 43 to North of MD 22

Study to investigate improvements to address capacity and safety needs on I-95 from north of MD 43 to north of MD 22 (18 miles). The study examined options to improve access, mobility and safety for local, regional and inter-regional traffic, including passenger, freight, and transit vehicles. The Finding of No Significant Impact (FONSI) was signed by FHWA in January 2011. This study was fully funded for project planning at a cost of \$4.18 million by the Maryland

Transportation Authority which reflects a decrease of \$1.8 million due to reduction of the right-of-way budget.

Kirk Division Project Development

A study of community impacts from the operations at the existing Kirk Division facility resulted in beginning project development to reconfigure an expanded site to replace the 1940's era "legacy" facilities. This effort will address community air quality and noise concerns and improve Kirk Division's operating efficiency and the safety and security of the division and its employees. The project also includes the purchase (now in the final stages of condemnation proceedings) of a property across Kirk Ave. from the existing operations to improve operations and facilitate continued service during demolition and construction. No expansion of services from the Kirk Division is planned. Project planning was completed in Summer 2010. Project Design is currently underway.

US 50: John Hanson Highway

SHA had initiated a feasibility study to investigate options for alleviating congestion on US 50 from MD 70 to MD 2 (north), including the Severn River Bridge (1.7 miles). The approaches to the US 50 Severn River Bridge experience severe congestion, particularly the eastbound direction in the evening peak period. The feasibility study began in 2007 and was completed in March 2010. The total cost of the study was \$562,000 which was funded using State dollars.

Ft. Meade – Anne Arundel County Led Study

Anne Arundel County through the Fort Meade Growth Management Committee received approximately \$1 million in grant funding from Office of Economic Adjustment (OEA) of the US Department of Defense. There were three studies initiated: 1) Regional Housing Demand, 2) developing Transit/Rideshare information for a potential clearinghouse to support Fort Meade existing and BRAC related development, plus the Enhanced Use Lease project, and 3) a highway corridors study. All three studies are complete with some follow-up activity.

1) Regional Housing Impact: Study's results and conclusions are being used by the neighboring jurisdictions for consideration in land use planning. Completed in August 2008.

2) Transit/Rideshare Clearinghouse: Transit route planning and identification of rideshare/car and van pool strategies have been referred to MTA, Fort Meade, and the Regional Growth

Management Committee established by MOU among the jurisdictions around Fort Meade. Recommendations have been used to develop a Transportation Action Plan at Fort Meade. Completed in November 2008.

3) Highway Corridors: Follow on design is underway for three locations identified in the project requiring either signalization or geometric improvements. All of which are maintained by Anne Arundel County. Potential projects involving State maintained intersections have been referred to SHA and identified in County Construction Priority Letters to Secretary of MDOT. Intersections beyond the boundaries of Anne Arundel County have been referred to the local jurisdiction for coordination with MDOT and SHA. Completed in January 2009.

Traffic and Evacuation Model

The Transportation and Public Works Subcommittee of the BRTB began work on a traffic and evacuation model in FY 2008, initiated by an award of \$390,400 of FY 2007 Urban Area Security Initiative (UASI) funds. This initiative focuses on traffic flow in the event of an evacuation. The effort will result in a traffic modeling and simulation tool to assist with emergency traffic management as well as benefitting daily traffic management. The model will use static traffic data with real-time data incorporated as it becomes available. The T&PW Subcommittee was awarded \$110,000 of FY 2008 UASI funds to continue work on the model. These funds have been used to incorporate pedestrian and transit evacuation into the model. The model is being developed by the University of Maryland and builds on previous work performed for the Eastern Shore and National Capital Region. All allocated funds for the model have been used; the geographic scope and functionality of the model can be expanded if additional funding becomes available. In FY 2012, the model will be used to evaluate evacuation plans and scenarios, as well as special event planning such as the Baltimore Grand Prix.

Tabletop Exercise Focused on Transportation Aspects of Evacuation

The Transportation and Public Works Subcommittee of the BRTB received \$25,000 of FY 2008 UASI funds to conduct a tabletop exercise focused on transportation aspects of evacuation. This project also used \$21,500 of UPWP funds. The tabletop exercise, which was held in May 2010, evaluated local and state evacuation plans and evacuation coordination. The After Action Report / Implementation Plan from the tabletop will be used to identify other projects.

Transportation Planning Elements

Essential to the Baltimore MPO's transportation planning effort is the ability to understand existing and future travel patterns and behavior. The FY 2012 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. A key part of understanding future travel patterns and behavior is the use of a solid socioeconomic dataset. In FY 2001, BRTB staff was able to make use of the initial 2000 Census tabulations. Further information provided from the 2000 Census that specifically documented travel trends at the residence, workplace and as travel flows was contained in the 2000 Census Transportation Planning Package (CTPP). The 2000 Census data formed the base year of all forecast sets developed to date such as Round 5-D, Round 6 and 6-A, Rounds 7, 7-A, 7-B and the current Round 7-C. Census data and forecasts of population, housing, and employment were used to update the BMC Community Profiles that sit on the BMC web site.

All of the forecast sets developed in conjunction with the Cooperative Forecasting Group (CFG) were used in conformity determinations of Transportation Improvement Programs for 2006-2012, 2007-2012, 2009-2013, 2010-2013, and 2011-2014. Specifically, the adoption of Round 7 in FY 2008 was utilized in planning projects and activities associated with *Transportation Outlook 2035* which is the current long range transportation plan for the Baltimore region. In FY 2010, the BRTB adopted Round 7-C forecasts for use in the development of the 2012 Baltimore Region Long Range Transportation Plan, *Plan It 2035*, and its associated conformity determination for projects that are included in the Plan.

During FY 2012, BMC staff will continue to work with the Cooperative Forecasting Group in the Baltimore area and coordinate with the Metropolitan Washington Council of Governments' CFG to jointly develop forecasts based on the interaction of the two regions. The Maryland Department of Planning (MDP) is also a partner in this endeavor. During FY 2011, the BMC worked closely with local planning agencies to develop 2010 Census geographic boundaries such census tracts and census block groups. During that same period the BMC helped to promote participation in the 2010 Census in conjunction with the United States Bureau of the Census, the Maryland State Data Center and local governments. In FY 2011, BMC staff worked with local planning agencies to develop transportation analysis zones based on new census geography. BMC also tabulated and evaluated the first release of 2010 Census data. The

census data release enables staff to incorporate this new information into deliberations on projects and programs to be included in the next long range transportation plan, *Plan It 2035*.

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. FY 2009 and 2010 was a time for data cleaning, GIS verification, as well as the initial documentation and reporting of the data. In FY 2012, staff will focus on making the most of these resources by using them to analyze regional travel trends and related policy issues. Examples of these include: sustainability initiatives, the aging of the population, and the movement in federal policy away from adding capacity, and toward management of the existing system.

Essential to the region's transportation planning efforts is BMC staff's maintenance of the Baltimore Region Travel Demand Model. A continuing program of model enhancements has been carried out over the past several fiscal years to ensure that the MPO's modeling capabilities are in line with the "state of the practice". In FY 2012, BMC staff will develop training/support materials to assist regional partners with use of the validated technical tool and the completed phase I (synthetic population generation) transition to activity base modeling. The region's technical tools will also be used in support of the development of a regional transit and freight plan. Further refinement and understanding of model assumptions used in mode choice model will be evaluated to support technical analysis related to the development of a transit plan. Coordination with State Highway Administration in applying enhanced freight modeling procedures developed for the statewide model will boost technical capabilities in the support of a regional freight plan. The integration of EPA's mobile emission model MOVES with travel model output will continue in preparation for required conformity determination of plans and programs is conducted with EPA's new emission model beginning March 2012. The phased approach in the development of activity base model, building upon the completed phase I - synthetic population generation, will continue. The estimation of disaggregate models designed to simulate individual travel choices at the household level using previously collected reveal behavior will be initiated through the use of consultant services.

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 Congestion Management Process (CMP),

BMC staff will continue to gather traffic counts, highway speeds/travel time data, and perform an Aerial Traffic Congestion Study under the Regional Traffic Monitoring Program. These internal datasets will be combined with outside sources, such as safety and operations data from CHART and the I-95 Corridor Coalition to serve as the backbone for a comprehensive regional Congestion Management Process report. The final report will serve as a systematic guide for managing congestion that provides information on transportation system performance and on alternatives for alleviating congestion and enhancing mobility.

Also in FY 2012, staff will use federal policy requirements and guidelines for Transportation Management Areas (urbanized areas with a population greater than 200,000) to re-evaluate the CMP adopted for the region by the BRTB in 1997. This task, initiated in FY 2005, will re-assess potential congested links in consultation with state and local agencies to meet CMP guidelines. 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. In addition to the travel demand model, BMC staff will use micro-simulation tools such as CORSIM to analyze existing and proposed corridors to determine levels of congestion.

The FY 2012 UPWP also includes continued support toward the understanding of regional freight flows, corridors and facilities. Not only will the MPO widen its awareness and identification of freight movement issues through a planned regional freight-related database but also through the regional Task Force and various work tasks completed in previous years.

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, the BRTB continues to dialogue with our metropolitan planning organization colleagues in Washington, D.C. and Delaware to prepare a comprehensive list of inter-state transportation problems and opportunities, both current and future, that limit or enhance the interchangeability of living in one metropolitan region and working in another.

FIGURE 4

General Reporting Requirements	BRTB Response
A list of any active lawsuits or complaints naming the applicant which allege discrimination on the basis of race, color, or national origin with respect to service or other transit benefits.	None
A description of all pending applications for financial assistance, and all financial assistance currently provided by other federal agencies.	None
A summary of all civil rights compliance review activities conducted in the last 3 years.	None
A signed UMTA Civil Rights Assurance that all of the records and other information required under this circular have been or will be compiled, as appropriate, and maintained by the applicant, recipient, or sub-recipient.	Signed on August 23, 2005.
A signed standard DOT Title VI Assurance.	Signed on August 23, 2005.
Provide a written description of continuing planning efforts which are responsive to the requirements of Title VI to assure that transit planning and programming are nondiscriminatory.	The UPWP, TIP and LRP are all provided to the public for review and comment. MTA participates in the public meetings held on the TIP as part of their responsibility for 5307 funds.
Monitor the Title VI activities and/or programs of local transit system. In particular, the MPO is requested to provide documentation describing efforts to: identify minority communities that will be affected by proposed service changes, and provide technical assistance or guidance to local transportation providers in updating and developing Title VI information.	While MTA maintains ongoing activities with the public, the BRTB, through the UPWP is prepared to assist MTA in the evaluation of potential impacts. Several years ago, the BRTB provided a review of impacts overall and to minority communities of the initial Greater Baltimore Bus Initiative.
Provide a description of the methods used to inform minority communities of planning efforts relating to transit service and improvements.	The most timely method is an e-newsletter that is sent to all community association leaders, and interested citizens, called B'More Involved. This newsletter provides information on transportation meetings and hearings across the region. Additionally there is a printed newsletter and the BMC web site that provides information to the public.
Provide a written statement describing how minority groups or persons are afforded an opportunity to participate in local decision-making processes.	All committee meetings are open to the public, agendas and minutes are online and mailed upon request. Minority individuals are included on various committees and are generally represented by their local elected officials.
Provide a racial breakdown for transit-related nonelected boards, advisory councils or committees, and a description of efforts made to encourage the participation of minorities on such boards or committees.	Diverse representation on committees is encouraged. Minority members chair some committees and participate on others.

FY 2012 UPWP

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B. PUBLIC REVIEW PROCESS

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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.

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In FY 2012, the Baltimore Metropolitan Council (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 2013 UPWP grant application and associated contracts with the member agencies of the Baltimore Regional Transportation Board (BRTB). The FY 2013 UPWP and budget will be scheduled for approval in Spring, 2012.

FY 2012 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 2013 UPWP grant application and associated contracts in conjunction with the BRTB and Technical Committee 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, Technical Committee, Interagency Consultation Group, Travel Analysis Advisory 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.
9. Use the Internet for various transportation planning functions.

BALTIMORE REGION UPWP
FY 2012 UNIFIED PLANNING WORK PROGRAM

PRODUCTS/MILESTONES	SCHEDULE
Minutes, resolutions and special reports	Throughout Fiscal Year
Quarterly progress reports, invoices, and financial reports	Throughout Fiscal Year
FY 2012 UPWP amendments	Throughout Fiscal Year
FY 2013 UPWP and budget	3 rd Quarter
FY 2013 UPWP budget development and local contracts	4 th Quarter

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

<u>BUDGET:</u>	Baltimore Metropolitan Council	\$535,000
	City of Annapolis	7,620
	Baltimore City	7,620
	Anne Arundel County	7,620
	Baltimore County	7,620
	Carroll County	7,620
	Harford County	7,620
	Howard County	<u>7,620</u>

TOTAL \$588,340

FHWA Share –	\$301,230
FTA Share –	\$169,442
MDOT Share –	\$53,500
Local Share –	\$64,168

PROJECT: LEGISLATIVE COORDINATION

PURPOSE: To review targeted state and federal legislative initiatives and inform the BRTB of the potential impact these initiatives may have on the transportation system and related interests in the Baltimore region.

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This project includes the review and assessment of relevant transportation, environmental quality, and growth management legislation introduced during the year with specific emphasis on developments during sessions of the Maryland General Assembly and the United States Congress. Legislative status reports will be made available to the BRTB in a timely manner, and also placed online. A summary of the final disposition of legislation will be prepared following the Governor's bill signing sessions. As the new Federal surface transportation legislation is being developed, staff will track progress and advise members at critical junctures in the process. On September 30, 2009, SAFETEA-LU expired without new legislation in place. Congress has approved several continuing resolutions and extensions while the content of federal legislation is being crafted which will be monitored for its impact on metropolitan planning.

FY 2012 PERFORMANCE OBJECTIVES:

1. Review significant transportation, environmental quality, and growth management legislation introduced during the 2011 Maryland General Assembly.
2. Provide annotated legislative reports for BRTB members and the public.
3. Review and report on federal rulemaking activities that affect the interests of the region.
4. Track progress and issues related to the development of new surface transportation legislation.

BALTIMORE REGION UPWP
FY 2012 UNIFIED PLANNING WORK PROGRAM

PRODUCTS/MILESTONES	SCHEDULE
Review of federal legislative and policy initiatives	Throughout Fiscal Year
Review of other legislative-related activities as requested	Throughout Fiscal Year
Informational briefings and supporting documentation on the 2011 General Assembly	3 rd Quarter

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

<u>BUDGET:</u>	Baltimore Metropolitan Council	\$40,000
	City of Annapolis	5,000
	Baltimore City	10,000
	Anne Arundel County	10,000
	Baltimore County	10,000
	Carroll County	10,000
	Harford County	10,000
	Howard County	<u>10,000</u>
	TOTAL	\$105,000

FHWA Share –	\$53,760
FTA Share –	\$30,240
MDOT Share –	\$ 4,000
Local Share –	\$17,000

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.

-

Throughout FY 2012, staff will continue to support efforts to incorporate greater public participation in the decision-making process. A wide array of strategies will be used to educate the public as well as solicit more participation in the regional transportation planning process.

FY 2012 PERFORMANCE OBJECTIVES:

1. Work with the Citizens Advisory Committee (CAC) to reach out to populations who traditionally have not participated in the planning process, youth, transit dependent individuals, and people who do not typically utilize the internet to access public information or participate in civic life.
2. Explore opportunities to engage the public in new leadership and volunteer opportunities. For example, staff will explore volunteer training opportunities for CAC members and other volunteers to serve as outreach volunteers to educate the public at community events, fairs, festivals, etc. about the transportation planning process and/or to solicit public input.
3. Provide innovative opportunities for citizen input via the Internet, using visualization and crowdsourcing techniques, and other appropriate means.
4. Review and update (as needed) the Public Participation Plan, Limited English Proficiency (LEP) Plan, and Title VI Plan with CAC and public input.
5. Review, summarize and respond to comments received during all public comment periods.

6. Use various means of communication (newsletters, mailings, web site, e-newsletters, social media marketing, etc.) to educate and engage the public on the planning process, as well as promote key activities of the BRTB (for example, Bike to Work Day, safety campaigns, Clean Commute Month, etc.).
7. Provide staff support to the CAC and its various subcommittees.
8. Coordinate specific opportunities for public participation at key points in the metropolitan planning process (as seen in the table below).

In FY 2012, anticipated public participation opportunities include:

ACTIVITY	OPPORTUNITY	ANTICIPATED TIMELINE
<i>Plan It 2035</i> Long-Range Transportation Plan	CAC input and review	1 st and 2 nd Quarters
	Draft Plan – Public comment period; Public meeting(s)	1 st Quarter
	Final Plan – Public comment period; Public meeting(s)	2 nd Quarter
Updates to Public Participation Plan (PPP), Limited English Proficiency (LEP) Plan, and Title VI Plan as needed	CAC input and review	1 st Quarter
	Public comment period (45+ days); Public meeting(s) as appropriate	2 nd Quarter
FY 2012 – 2015 TIP	Public comment period; Public meeting(s) as appropriate	4 th Quarter
Air Quality Conformity Determination of Plan it 2035 & 2012-2015 TIP	Public comment period; Public meeting(s) as appropriate	4 th Quarter
TIP Amendments	Public comment period; Public meeting(s) as appropriate	As needed throughout the year
FY 2013 Unified Planning Work Program	Public comment period; Public meeting(s) as appropriate	2 nd and 3 rd Quarters
BRTB meetings	Regular comment opportunity; Report on comments and activities by Public Involvement Coordinator	Monthly
Federal Certification Review	Public input meeting	3 rd & 4 th Quarters

**BALTIMORE REGION UPWP
FY 2012 UNIFIED PLANNING WORK PROGRAM**

In FY 2012, anticipated products and milestones include:

PRODUCTS/MILESTONES	SCHEDULE
CAC Meetings	Monthly (or as needed)
<i>BRTB Notes</i> Newsletter	Bi-annually
<i>B'More Involved</i> and other e-newsletters	Throughout Fiscal Year
Social Media Marketing	Throughout Fiscal Year
Web-based surveys	Throughout Fiscal Year
Conduct outreach and participation events	Throughout Fiscal Year
Maintain web site and, when possible, add new visualization tools and opportunities for public comment and crowdsourcing	Throughout Fiscal Year
Support <i>Plan It 2035</i> planning process by supporting public involvement activities, coordinating outreach efforts, working with the BRTB to review and respond to public comments, etc.	Throughout Fiscal Year

PARTICIPANTS: Baltimore Metropolitan Council

BUDGET: **\$140,000**

FHWA Share – \$71,680
 FTA Share – \$40,320
 MDOT Share – \$14,000
 Local Share – \$14,000

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

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In FY 2011, 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 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.

In FY 2012, the continued use of consultant services will be employed. Consultant services will be used but not limited to the following activities:

Technical Oversight – Provide technical guidance on various tasks, including enhancement of the regional travel demand model.

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

Improve Evacuation Procedures – Activities that follow-up on a FY 2010 tabletop exercise.

Traffic 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 – Undertake an analysis of existing and planned service to maximize efficiencies and opportunities for connectivity.

Regional Freight Analysis – Conduct an analysis to identify critical freight improvements throughout the region and improvements that allow for better access to and from the Port of Baltimore.

FY 2012 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: Consultants **\$715,000**

FHWA Share – \$366,080
FTA Share – \$205,920
MDOT Share – \$71,500
Local Share – \$71,500

**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 produce the plan guiding long-term investments in the region's transportation systems.

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The Long Range Transportation Plan, known as *Plan It 2035*, will set the Baltimore region's transportation direction through policies and goals over at least the next twenty years (through the horizon year 2035) and will identify future capital transportation system investments. This effort will involve applying adopted goals, strategies, and objectives to plan for an integrated intermodal transportation system. Factors to be considered include air quality conformity and other environmental impact mitigation issues, improved performance in the safe and efficient movement of people and goods (including implementation of techniques and activities identified through a comprehensive Congestion Management Process), and opportunities to increase multimodal capacity, either through providing additional transportation alternatives or through improving system operations and efficiency. This effort also will consider and account for other factors that could affect the performance and maintenance of the transportation system (e.g., expected demographic changes over the next several decades, prospects for economic development and growth, policies and trends related to land use and responsible growth, the potential for climate change, concerns about public health, anticipated revenues, etc.).

During FY 2012, development of *Plan It 2035* also will continue to build on activities completed in FY 2011, including:

- Working with the Maryland Department of Transportation to estimate the amount of anticipated revenues available to fund *Plan It 2035* projects over the next several decades;
- Developing regional transportation goals and strategies, incorporating input from the agencies and jurisdictions, the public, and federal policy guidelines;

- Applying criteria based on the adopted goals and strategies to evaluate and rank (in coordination with the Maryland Department of Planning) the projects submitted for consideration by the agencies and jurisdictions;
- Working with the Maryland Department of Transportation to develop cost estimates for submitted projects;
- Using the results of the evaluation/ranking process to develop a list of recommended projects for review and approval by the BRTB;
- Mapping the approved list of projects as a means for agencies, jurisdictions, the public, and other interested parties to see the location and extent of anticipated investments;
- Accounting for the approved projects in the regional travel demand model;
- Determining any effects these projects may have on the region's air quality attainment status;
- Assessing the impact, positive or negative, on environmental justice communities in the region from the proposed projects;
- Coordinating the regional long-range planning process with state and environmental resource agencies, as mandated by federal law and policy; and
- Developing performance measures by which the BRTB can evaluate the effectiveness of implemented projects in addressing regional concerns and objectives.

To enable the region to anticipate and meet tomorrow's transportation challenges, the *Plan It 2035* effort will support and be informed by a collaborative dialogue among the federal and state governments, the region's jurisdictions, the public, and other stakeholders. The programs and projects to be included in *Plan It 2035* will have been influenced by input obtained from members of the public and other stakeholders on transportation-related values and preferences. In addition, *Plan It 2035* will be directed by recently adopted and updated federal policies regarding livability, sustainability, and accommodation of all surface transportation modes.

BMC staff will develop a draft *Plan It 2035* and Air Quality Conformity Determination for review by the public and other stakeholder groups, the technical committees, and the Baltimore Regional Transportation Board (BRTB). Once comments from the public, other stakeholders, committees, and the BRTB have been addressed and/or incorporated, staff will produce a final *Plan It 2035* and Air Quality Conformity Determination for approval by the BRTB. Once the BRTB has approved the documents, staff will submit the documents to the FHWA, FTA, and US EPA for approval.

FY 2012 PERFORMANCE OBJECTIVES:

1. Incorporate into *Plan It 2035* insights and recommendations gained through the process of coordinating transportation and environmental planning with state and local environmental resources agencies.
2. As needed, continue to work the Maryland Department of Transportation to refine cost estimates for approved projects.
3. As needed, continue to work with the Maryland Department of Transportation to refine estimates of anticipated revenue levels for *Plan It 2035* projects.
4. Complete travel demand modeling of the approved projects.
5. Complete air quality modeling of the approved projects.
6. Complete mapping of the approved projects.
7. Refine performance measures to be applied to help the region evaluate the effectiveness of implemented projects.
8. Produce draft *Plan It 2035* and Air Quality Conformity Determination.
9. Conduct outreach efforts to enable public and other stakeholder review of these draft documents.
10. Address and/or incorporate public and stakeholder comments to produce final *Plan It 2035* and Air Quality Conformity Determination.
11. Conduct outreach efforts to enable public and other stakeholder review of these final documents.
12. Submit final revised *Plan It 2035* and Air Quality Conformity Determination to the FHWA, FTA, and US EPA for review and approval.
13. Establish annual process to analyze and document performance measures.

BALTIMORE REGION UPWP
FY 2012 UNIFIED PLANNING WORK PROGRAM

PRODUCTS/MILESTONES	SCHEDULE
Draft <i>Plan It 2035</i> and Air Quality Conformity Determination	1st Quarter
Final <i>Plan It 2035</i> and Air Quality Conformity Determination	2nd Quarter
Submittal of final documents to FHWA, FTA, and US EPA	2nd Quarter
FHWA, FTA, and US EPA approval of documents	3rd Quarter
Develop template for annual performance monitoring	4 th Quarter

PARTICIPANTS: Baltimore Metropolitan Council

BUDGET: **\$175,000**

FHWA Share \$89,600
FTA Share \$50,400
MDOT Share \$17,500
Local Share \$17,500

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. In addition, staff will coordinate CMP efforts with regional operations planning efforts.

FY 2012 CMP Activities include:

Coordinate the update of the Long-Range Plan; key topics to be addressed include updating the Congestion Management Process and aligning the CMP with the regional long-range transportation plan that will be developed in 2012.

Advance the use of real-time operations data for planning purposes in coordination with 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.

Identify key stakeholders to include in the CMP Advisory Committee and work with the committee to conduct corridor studies. It is envisioned that this committee will meet on

an as-needed basis and develop a framework and guidelines for the FY 2012 update of the CMP. The Committee will identify new corridors for monitoring, analysis, examining and tracking improvements to the transportation system for effectiveness in impacting congestion.

Strengthen the Planning and NEPA/environmental element of the CMP - The CMP will include continued coordination to better link planning and NEPA/environmental planning efforts as appropriate. As part of the State Highway Administration'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 MPO planning process.

Travel Monitoring Program

The Travel Monitoring Program (TMP) will be an integral part of the CMP and will provide data and analysis support to the CMP advisory committee. The CMP and TMP teams will work closely to develop data and analysis programs that support regional CMP activities.

Congested Corridor Analysis

In FY 2011, staff identified several potential corridors to study in more detail to get a better understanding on the extent and duration of congestion, potential causes, and develop short-term operational strategies that could improve operational efficiency. In FY 2012, staff will focus on one or more regionally significant corridors 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 2012 PERFORMANCE OBJECTIVES:

1. Regional Congestion Status Report.
2. Corridor Technical Report.
3. Working papers on data sources and performance measures.

4. CMP Advisory Committee agendas, summaries, and other materials.
5. Participate in SHA's Interagency Review process and Interagency Manager's meetings.

PRODUCTS/MILESTONES	SCHEDULE
2012 Congestion Management Annual Status Report	4 th Quarter
2012 Congestion Management Corridor Technical Report	4 th Quarter
Congestion Trends Summary Fact Sheet	Quarterly
Participate in SHA's Interagency Review process and Interagency Managers Meetings	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: **\$110,000**

FHWA Share – \$56,320
 FTA Share – \$31,680
 MDOT Share – \$11,000
 Local Share – \$11,000

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 management and operations (M&O).

-

This activity 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, developing a robust committee structure, and engaging non-traditional transportation stakeholders (i.e., police, fire, emergency management).

In FY 2012, 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 greater opportunities to integrate operations further into the transportation planning process, particularly through closer coordination with the regional Congestion Management Process. The US DOT is moving toward measuring system performance and using the results to focus improvement efforts on the most critical areas in the short- and long-term (referred to “objectives-driven, performance-based planning”). Staff will refer to US DOT guidance and publications as well as our past operations efforts (i.e., committee work, the *Baltimore Regional M&O Strategic Development 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.

The Baltimore Regional Operations Coordination (B-ROC) Committee will continue to meet bi-monthly to improve communications, coordination and cooperation in traffic incident management in the region. In FY 2011, the B-ROC Committee completed work

on the Traffic Incident Management On-line Training Course. BMC staff will continue to work with the B-ROC Committee in FY 2012 to publicize the availability of this free resource for emergency responders. The B-ROC 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 2012, the Funeral Procession Task Force will continue to work with the region's police and fire chiefs to implement the Funeral Procession Guidelines.

The Traffic Signal Subcommittee, chaired by Anne Arundel County, will meet quarterly to coordinate regional signal issues and develop programs/projects to improve signal timing in the region. The Signal Subcommittee will also coordinate with the CMP and corridor analysis teams to identify potential projects that could be eligible for CMAQ and/or other types of funding.

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 2008. 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 US DOT representatives to ensure all ITS initiatives are consistent with federal guidelines. Projects submitted to the TIP are identified as ITS initiatives and tracked.

FY 2012 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.

TASK: SAFETY PLANNING & 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 seven 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.

The BRTB and staff continue to play an active role in the implementation of the state's 5-year (2006-2010) Strategic Highway Safety Plan. The SHSP is a blueprint for reducing crashes, fatalities, and injuries across the state and the region. In FY 2011, the state began efforts to develop the next SHSP by consolidating some of the emphasis areas and target groups to make the implementation more effective. BMC will continue to play an important role in the development and implementation of the next SHSP in the Baltimore region. BMC staff will work with SHA on a corridor-based approach to safety programs.

The regional safety committee will identify safety needs and priorities for the region in FY 2012 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 2012.

Staff will continue to work with the Maryland Highway Safety Office to assess the availability and usefulness of safety data for the regional process. A MAARS data mining tool developed in FY 2009 will be further enhanced to assist local traffic safety

stakeholders identify and take timely action at high accident locations. Staff will also work with Community 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 2012 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, FHWA, and NHTSA

BUDGET: Baltimore Metropolitan Council **\$95,000**

FHWA Share –	\$48,640
FTA Share –	\$27,360
MDOT Share –	\$ 9,500
Local Share –	\$ 9,500

TASK: TRAVEL MONITORING PROGRAM

PURPOSE: To monitor traffic 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 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 Regional Traffic 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. Counts of pedestrians and bike riders provide additional data for planning.

Traffic Counts: In FY 2011, BMC staff continued to conduct a comprehensive regional traffic count program for the Baltimore region. The Regional Traffic Monitoring Program includes the collection of counts at more than 600 locations, collected on a three-year cycle. Additionally, BMC staff has access to SHA's traffic data intranet that includes a significant amount of regional count information, including trends. Traffic counts for the year 2010 were gathered from various sources and tabulated.

In FY 2012, work will continue in collecting and tabulating traffic count data from multiple sources and putting 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.

GPS 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 2011, staff produced a milestone report on travel times and speeds from GPS data collection from 1998 – 2008. This report was presented to the Technical Committee and shared with the public via the BMC website and various social networking services. In FY 2012, staff will evaluate and process 3rd party GPS probe data being made available through the Regional Integrated Information Transportation System (RITIS) through the University of Maryland’s Center For Advanced Transportation Technology (CATT Lab) throughout FY 2012 with hopes of incorporating it the regional Congestion Management Process (CMP). In-house GPS data collection will be used for validation of the 3rd party data.

Activity Centers: In FY 2011 staff collected morning peak period (7-9 A.M.) vehicle occupancy and classification count information at six activity centers (Annapolis, Columbia, Fort Meade, Hunt Valley, Owings Mills and Towson). For FY 2012, the Baltimore City Central Business District will be collected. This is the continuation of the regional activity data collection program that has been ongoing since 1987 that includes 12 activity centers that are counted on a three-year cycle.

FY 2012 PERFORMANCE OBJECTIVES:

1. Collect and tabulate traffic counts to enhance the Baltimore region traffic database.
2. Evaluate 3rd party GPS probe data 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.
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
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**BALTIMORE REGION UPWP
FY 2012 UNIFIED PLANNING WORK PROGRAM**

Highway traffic counts, vehicle occupancy and vehicle mix data	Throughout Fiscal Year
Technical memoranda documenting data collection activities	Throughout Fiscal Year
Travel data products to support the CMP and Vision process	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

PARTICIPANTS: Baltimore Metropolitan Council and State Highway Administration

<u>BUDGET:</u>	Baltimore Metropolitan Council	\$160,000
	State Highway Administration	<u>32,110</u>
	TOTAL	\$192,110

FHWA Share –	\$98,360
FTA Share –	\$55,328
MDOT Share –	\$16,000
Local Share –	\$22,422

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.

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Since the adoption of *Action Plan 2001: Bicycle, Pedestrian and Greenways Transportation Plan* as part of the 2001 BRTP, work has been, and will continue to be, directed toward 12 action plan strategies in order to implement and continue to refine the Plan. The BRTB Bicycle and Pedestrian Advisory Group (BPAG) will continue to assist in this task. In FY 2011, the BPAG completed an update to the 2001 plan, and continued to move toward full implementation of the plan, as updated. In FY 2012, action items will continue to be performed to implement the plan and jurisdictions will be provided with additional resources to enhance public involvement and eligible funding opportunities.

BMC staff and the BPAG will continue to serve state and local transportation professionals by providing bicycle and pedestrian expertise in all phases of planning and implementation. In FY 2011, the BPAG performed its fifth comprehensive review of activities submitted for inclusion in the Transportation Improvement Program (TIP). The review identified activities which, either directly or indirectly, could influence conditions for bicycle and pedestrian access in the region. In FY 2012, the TIP review will again be conducted. BMC staff participated in the review process for the statewide distribution of Safe Routes to School (SRTS) funds. In FY 2012, BMC will continue to serve as

reviewer for SRTS funding proposals as well as a reviewer of Transportation Enhancement Program (TEP) funding proposals.

In FY 2011, the BPAG activities included educational outreach both to the membership of the BRTB, as well as to the region in general. In FY 2011, the BPAG conducted further research into topics paramount to its goal of improving bicycle and pedestrian access in the region. Work products included the Action Plan 2001 Update, a white paper on best practices in pedestrian connectivity, and the Access to Rail 2000 Update, all of which should be completed by the end of FY 2011. 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 continued in FY 2012.

In FY 2012, BPAG will focus on some smaller implementation items and on collecting data to support the further implementation of existing plans. Collection of survey data from Bike to Work Day participants will continue with increased efforts to organize and utilize the data to support transportation planning activities. BPAG will also coordinate with the Travel Analysis unit to incorporate bicycles and pedestrians into regional traffic counting activities and explore participation in the National Bicycle and Pedestrian Documentation Project. Other research topics will be identified pursuant to completion of the ongoing plan updates. BPAG will also participate in educational activities and outreach related to ADA accessibility and Transition Plans, and will help to educate and coordinate with the BRTB on this important topic.

FY 2012 PERFORMANCE OBJECTIVES:

1. Support the Bicycle and Pedestrian Advisory Group (BPAG).
2. Review project submittals to the TIP.
3. Review TEP proposals.
4. Review statewide SRTS proposals.
5. Manage regional B2WD event.
6. Increase participation in, and visibility of, Bike-to-Work Day.
7. Conduct region-wide outreach on ADA issues.

BALTIMORE REGION UPWP
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PRODUCTS/MILESTONES	SCHEDULE
Staff Bicycle and Pedestrian Advisory Group (BPAG)	Bi-Monthly
Hold educational workshop on ADA Issues	1 st Quarter
Produce additional educational materials to support B2WD	2 nd Quarter
Conduct TIP Review	3 rd Quarter
Conduct TEP Review	3 rd Quarter
Conduct SRTS Review	4 th Quarter
Manage B2WD event	3 rd & 4 th Quarters

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

<u>BUDGET:</u>	Baltimore Metropolitan Council	\$50,000
	Baltimore City	\$3,810
	Baltimore County	\$3,810
	Anne Arundel County	\$3,810
	Carroll County	\$3,810
	Harford County	\$3,810
	Howard County	\$3,810
	City of Annapolis	<u>\$3,810</u>
	TOTAL	\$76,670

FHWA Share –	\$39,255
FTA Share –	\$22,081
MDOT Share –	\$ 5,000
Local Share –	\$10,334

TASK: FREIGHT MOBILITY PLANNING

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

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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 Maryland Department of Transportation (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 2011, the BRTB and the FMTF initiated a study to evaluate rail served properties in proximity to the Port of Baltimore (Port) to understand land uses and capacity opportunities and to develop a generic database, potentially usable by all stakeholders, describing real estate properties that currently serve, or can potentially serve, Class One, shortline and switching freight railroads. Data will assist the stakeholders in understanding where the freight rail land uses are and where new capacity could be developed.

In FY 2010, the BRTB and the FMTF initiated a study in Carroll County to study truck

movements around the town of Union Bridge. The truck movement analysis included identifying existing and optimal routing on existing and future roadways (e.g. MD 77 extended) to and from the interstate system and through adjacent communities in Howard and Frederick Counties to Lehigh Cement, as well as trucking and equipment operations at the north end of Main Street.

The Port of Baltimore is expecting an increase in volume due to the 2014 opening of the expanded Panama Canal. In FY 2012, the BRTB and local members will engage in a regional freight analysis to prepare for growth into and out of the Port of Baltimore.

In FY 2012, staff will continue efforts to incorporate the freight community's recommendations into the Baltimore regional transportation planning process. More specifically, staff activities will support: (1) the BRTB's Freight Movement Task Force (FMTF); (2) freight evaluations and studies; (3) *Maryland Moves: A Freight Data Quarterly*; (4) *Maryland Moves: A Freight News Monthly*; and (5) continued involvement on regional freight-related issues. Some of the proposed activities include:

- Maintaining and updating a freight web page on the BMC web site.
- Developing freight corridors in the region with descriptions of freight facilities.
- Monitor supply and demand for over-night parking within the region in coordination with SHA.
- Develop GIS information regarding regional warehousing facilities and distribution centers.
- Provide input and support MDOT initiative to study benefits of developing a marine corridor in the region.

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 2012 meetings will provide an opportunity for the freight community to participate in the Vision and long-range plan to be developed in 2012. 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 (as commissioned) make decisions on the priorities for freight studies and recommendations regarding BMC staff activities.

The FMTF makes recommendations to the BRTB on potential freight studies to be carried out by consultants. Over the past several years, BMC consultants have been retained to survey traffic flow at intersections with high percentages of truck activity, assess conditions for truck parking along two major corridors and to develop a freight profile for the region.

In FY 2012, BMC staff will work with local governmental staff to develop appropriate projects, where possible, to address freight movement related issues.

Staff compiles freight data into a quarterly fact sheet that highlights freight movement activities in the Baltimore region. Data is collected for the Baltimore-Washington D.C. region's airports (Baltimore-Washington International Thurgood Marshall Airport, Dulles International Airport, and Reagan-Washington National Airport), railroads (Norfolk Southern, CSX, Canton, Maryland Midland, Patapsco & Back River), the Port of Baltimore, and trucking data is compiled from the region's toll facility truck counts. *Maryland Moves: A Freight Data Quarterly* is distributed at FMTF meetings, noted in *Maryland Moves: A Freight News Monthly*, and posted on the Web. On the first of each month, staff distributes an e-newsletter to the freight community and interested parties. The *Maryland Moves: A Freight News Monthly* includes information about FMTF meetings, other freight group meetings, and current events relevant to the freight community.

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 2012 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 and a monthly e-newsletter 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 Data Quarterly</i>	Quarterly
<i>Maryland Moves: A Freight News Monthly e-Newsletter</i>	Monthly

PARTICIPANTS: Baltimore Metropolitan Council, MDOT, SHA, MdTA, MPA, Local Jurisdictions

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<u>BUDGET:</u>	Baltimore Metropolitan Council	\$160,000
	City of Annapolis	2,500
	Baltimore City	5,000
	Anne Arundel County	5,000
	Baltimore County	5,000
	Carroll County	5,000
	Harford County	5,000
	Howard County	<u>5,000</u>
		\$192,500
FHWA Share –	\$98,560	
FTA Share –	\$55,440	
MDOT Share –	\$19,250	
Local Share –	\$19,250	

TASK: TRANSIT COORDINATION

PURPOSE: To develop recommendations and strategies to improve transit in the Baltimore region, to enhance quality of life for residents, to provide access to employment and services, to promote economic development opportunities, and to reduce dependence on single occupant vehicles.

In FY 2012, work with the Maryland Transit Administration (MTA), coordinate to ensure consistency between the regional transportation plan and project recommendations from major transit planning activities. An important step in this activity will be to ensure, to the extent possible, common objectives and priorities across these different plans, as well as the measures of performance which are used for gauging effectiveness.

Coordination will continue with state, local and private transit operators as well as local jurisdictions and stakeholders to improve transit service performance and utilization. Maintain the working agreement with the Maryland Transit Administration and the local area transit agencies to ensure appropriate involvement in the regional transportation planning process. Included in the working agreement is a Transit Work Group which will hold periodic meetings to discuss regional transit needs, the short and long range plans, and the financial component of planning documents.

Continuing in FY 2012, participation in planning of the proposed Red Line will be ongoing to assist MTA and local jurisdictions and ensure that a regional focus is considered and included in the planning process. BMC will assist MTA where possible in meeting the challenges of the highly-competitive federal New Starts funding program.

BMC staff or consultants will continue to explore opportunities to engage transit users in the transit planning process. Examples or areas to focus on may include projects such as the expanded transit oriented development (TOD) concept adjacent to the West Baltimore MARC Station or at several other locations throughout the region: Odenton and Parole Town Centers in Anne Arundel County, Savage MARC station in Howard County, State Center Metro station in Baltimore City, or Owings Mills Metro station in

Baltimore County, or potential transit components such as the West Street Transit Corridor (Annapolis), and Charles Street Corridor Trolley (Baltimore City) or other potential future transit lines.

The BRTB will continue to coordinate with MTA and local transit agencies to foster dialogue and information-sharing in order to better serve transit planners and operators in the region. Staff will review local Transit Development Plans as they are updated. 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, the BRTB will continue to assess planning efforts to assure that transit planning and programming are processed and implemented on a representative basis. In addition, staff will work with MTA and local transit systems to provide technical assistance or guidance for updating and developing Title VI documentation.

FY 2012 PERFORMANCE OBJECTIVES:

1. Review recommendations of key state and local transit and comprehensive plans to ensure consistency in goals, priorities, and performance criteria.
2. Coordinate with MTA and local jurisdictions to develop a strategy for regional transit planning, including land development opportunities and priorities.
3. Foster dialogue and information sharing to better serve transit planners and operators in the region, possibly via electronic newsletter format.
4. Provide technical and procedural support to the Red Line planning process.

BALTIMORE REGION UPWP
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PRODUCTS/MILESTONES	SCHEDULE
Review of state & local transit plans for consistency	Throughout Fiscal Year
Facilitate Transit Work Group meetings	Periodically
Produce Transit e-Update	Periodically
Provide Technical Assistance for Red Line Planning Process	Throughout Fiscal Year

PARTICIPANTS: Baltimore Metropolitan Council, MTA, local transit agencies, local jurisdictions, MDOT, Federal Transit Administration, Private Operators

<u>BUDGET:</u>	Baltimore Metropolitan Council	\$185,000
	City of Annapolis	2,500
	Baltimore City	5,000
	Anne Arundel County	5,000
	Baltimore County	5,000
	Carroll County	5,000
	Harford County	5,000
	Howard County	<u>5,000</u>
		\$217,500

FHWA Share –	\$111,360
FTA Share –	\$ 62,640
MDOT Share –	\$ 21,750
Local Share –	\$ 21,750

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.

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Several SAFETEA-LU initiatives support the ongoing human service transportation planning efforts of the MPO. For example, under SAFETEA-LU, the following programs are funded: Federal Transit Administration Section 5310 program (Elderly Individuals and Individuals with Disabilities), Federal Transit Administration Section 5316 program (Job Access and Reverse Commute), Federal Transit Administration Section 5317 program (New Freedom), and United We Ride program. These programs seek to coordinate federally-funded local transportation programs for the elderly, disabled, and lower-income individuals. Priorities to address SAFETEA-LU's human service transportation through involvement in state and local transportation coordinating committees, Section 5310, Section 5316, and Section 5317 grant reviews, and planning mobility options for the elderly and disabled will be pursued.

Efforts to address the job access needs of low-income individuals will continue in FY 2012 via continued implementation of the Baltimore Area Coordinated Public Transit - Human Services Transportation Plan. This Plan also includes Elderly Individuals and Individuals with Disabilities and New Freedom eligible projects and programs. Under the federal transportation program of SAFETEA-LU, this comprehensive service plan will maximize transportation services to the elderly, disabled and low income.

Applications for funding through the Elderly Individuals and Individuals with Disabilities, Job Access and Reverse Commute, and New Freedom grants will be presented to the MPO once staff has reviewed for compliance with the Baltimore Area Plan and the regional short and long range transportation plans. BMC staff will continue to review the goals of the Maryland Coordinating Committee for Human Service Transportation Five-Year Plan, including detailed comparative reviews of the coordination provisions of

regional grant applications. This BMC effort will ensure that regional applicants can successfully compete for funding in the annual statewide grant selection process and provide improved service coordination throughout the region.

Also, in FY 2012, staff will continue to participate in and provide coordination, outreach, and technical assistance to the Maryland Department of Disabilities, Maryland Department of Aging, Maryland Research Consortium, local governments, and community organizations that seek to enhance and extend safe mobility for the region's rapidly growing elderly population. Barriers to coordination within the region have been more evident and work will be done to assist in removing those barriers. As part of its efforts to support the New Freedom and United We Ride programs, BMC staff will seek opportunities to provide safe mobility, travel training, and outreach assistance to organizations that are working to improve travel options for the elderly, disabled, 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 provide support services to MTA related to SAFETEA-LU's human service transportation programs.

FY 2012 PERFORMANCE OBJECTIVES:

1. Review grant requests for funding under the Section 5310, the Section 5316 JARC, the Section 5317 New Freedom, and Maryland's Senior Rides program.
2. Identify and explore solutions to barriers that presently limit the coordination of paratransit services in the region.
3. Assist candidate organizations that could help establish or expand community-based transportation and rideshare services.
4. Maintain the Out & About Travel Guide web based interactive database.

PRODUCTS/MILESTONES	SCHEDULE
Review applications for funding under coordinated 5310, 5316, and 5317 programs for BRTB consideration	Throughout Fiscal Year
Participate in meetings to assist with coordination of human services transportation	Throughout Fiscal Year
Assist in reviewing applications for the Senior Rides program	3 rd & 4 th Quarters
Provide assistance in establishing community-based transportation programs and specialized rideshare services	Throughout Fiscal Year
Maintain Out & About Travel Guide Web	Throughout Fiscal Year

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

BUDGET: **\$50,000**

FHWA Share – \$25,600
 FTA Share – \$14,400
 MDOT Share – \$ 5,000
 Local Share – \$ 5,000

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.

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Prior to September 11, 2001, staff worked with emergency responders to enhance the region's 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.

In FY 2007, the Regional Protective Action Coordination Guidelines were completed as a BRTB activity, and an accompanying Agreement was signed. The Guidelines and Agreement provide a framework for regional coordination in the following areas: command and control; communications; public information and warning; evacuation; and shelter/reception. Work on the Guidelines and Agreement led to the identification of various follow-up tasks, some of which will be pursued in FY 2012, such as further coordination and planning for a large-scale evacuation and follow-up activities from the tabletop exercise that focused on the transportation aspects of evacuation held in FY 2010.

Emergency planning work supports the BRTB as well as the Baltimore Urban Area Homeland Security Work Group (UAWG). For example, the Transportation and Public Works Subcommittee pursues daily operations and public works topics as well as

supports homeland security / emergency preparedness planning. The subcommittee submits annual project funding requests to the UAWG. BMC staff has taken and will continue to take the lead in preparing the project proposal submissions for the UAWG. Funded projects to date have focused on evacuation planning. BMC staff acts as project manager on the homeland security-funded projects. In FY 2012, this committee will continue to provide input to the UAWG, as well as work to identify and discuss day-to-day operational issues.

The Disaster Debris Planning Task Force, which meets quarterly, addresses coordination issues related to disaster debris planning and removal. In past years, this group held two disaster debris focused exercises to identify and resolve coordination issues. Planning for a third exercise, funded through the UAWG, began in FY 2011; the exercise will be held in FY 2012. In FY 2011, BMC staff compiled a list of Resolved Issues of the Task Force. This list will continue to be updated in the future as the Task Force comes to agreement on regional issues. This group, which falls under the T&PW Subcommittee, will continue to meet in FY 2012. BMC staff will continue to provide support to this Task Force and act as project manager for its projects.

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 Group 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 2012 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. Hold a follow-up tabletop exercise focused on disaster debris response and recovery.

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
Hold Disaster Debris Tabletop Exercise	2 nd Quarter
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 **\$120,000**

FHWA Share – \$61,440
 FTA Share – \$34,560
 MDOT Share – \$12,000
 Local Share – \$12,000

TASK: **TRANSPORTATION EQUITY PLANNING**

PURPOSE: To incorporate principles of transportation equity and environmental justice into the regional transportation planning process and to work to address concerns raised by communities within the region (as applicable to the BRTB purview).

Transportation equity is a general term that considers the distributional effects or “fairness” of decisions in the area of transportation planning and investments. In the past, an environmental justice (EJ) focus has been on the location of facilities, such as landfills. Recently, more attention has been directed to the patterns of transportation investments and the delivery of services. Specifically, transportation equity focuses on a number of key areas and populations. This is emphasized in current federal transportation legislation, known as SAFETEA-LU. Specifically, SAFETEA-LU focuses on expanding transportation options in several ways: for people with disabilities (New Freedom), improving reverse access commuting (Job Access and Reverse Commute), and researching accessibility and identifying ways to make improvements (Transportation Equity Research Program). Transportation equity also looks at issues of aging and access to transportation by low-income, minority, and limited English proficient individuals and communities.

FY 2012 PERFORMANCE OBJECTIVES:

1. Review and integrate equity-related analysis and activities into regional planning efforts, as well as other opportunities where appropriate.
2. Collaborate with the Citizens Advisory Committee (CAC) to reach out to populations who traditionally have not participated in the planning process, youth, transit dependent individuals, and people who do not typically utilize the internet to access public information or participate in civic life.
3. Conduct Environmental Justice workshop(s) with members of the public.
4. Complete, with CAC and public input, a review and update the Limited English Proficiency (LEP) Plan – incorporating new data sources such as the 2010 census (work began in FY 2011).
5. Finalize, with CAC and public input, a Title VI plan (work began in FY 2011).

6. Utilize Census Data and American Community Survey Data to complete analysis and topic papers on aging, low-income, minority, Limited English Proficiency (LEP), and immigrant populations (work began in FY 2011).
7. Monitor the DBE Policy and provide periodic reviews of plan's effectiveness.

PRODUCTS/MILESTONES	SCHEDULE
Conduct Equity Analyses for <i>Plan It 2035</i>	1 st and 2 nd Quarters
Complete and distribute results of Equity Analyses and Topic Papers	1 st and 2 nd Quarters
Update Title VI/LEP plans	1 st and 2 nd Quarters
Conduct EJ/Transportation Equity Workshop(s)	2 nd and 3 rd Quarters
Collaborate with CAC to conduct outreach	Throughout Fiscal Year
Integrate and coordinate outreach to low-income, minority, and LEP communities throughout planning process	Throughout Fiscal Year
Monitor DBE plan	Throughout Fiscal Year

PARTICIPANTS: Baltimore Metropolitan Council

BUDGET: **\$40,000**

FHWA Share – \$20,480
 FTA Share – \$11,520
 MDOT Share – \$ 4,000
 Local Share – \$ 4,000

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**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
- 2010 Census and American Community Survey

TASK: DEVELOPMENT MONITORING

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

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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* at the Baltimore Metropolitan Council 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 continued and was enhanced during FY 2011.

During FY 2011, 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, SHA project reports, and other sources within the local planning/development community; (2) analyzed actual 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 Building Permit Data System. During FY 2010, BMC staff began the development of software applications to automatically identify and capture these data from the electronic files sent by local jurisdictions. In FY 2011, BMC staff made formal presentations on these new construction monitoring activities to the Technical Committee and the Baltimore Regional Sustainability 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 2012, BMC staff will continue implementation of software applications to post our mixed-use and "green" permit data into our pre-existing reports on construction activity and post these results on our web site.

FY 2012 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 development, beta-test software, and implement applications for capturing and reporting special building permits.
5. Prepare semi-annual reports on mixed-use and "green" permits.

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PRODUCTS/MILESTONES	SCHEDULE
Reports on residential/non-residential development plans	Monthly/Quarterly
Reports on mixed-use and “green” construction activity	Semi-Annual
Report on residential hot spots	2 nd Quarter
Analyses/Maps on building permit activity by water and sewer services areas and priority funding areas	1 st Quarter

PARTICIPANTS: Baltimore Metropolitan Council

BUDGET: \$220,000

FHWA Share – \$112,640
FTA Share – \$ 63,360
MDOT Share – \$ 22,000
Local Share – \$ 22,000

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.

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In FY 2012, this work element provides for maintaining a liaison with state and local demographers and economic development officials to monitor locally sensitive development issues. Discussions will continue with the Metropolitan Washington Council of Governments as bi-regional forecasts are prepared and updated. Periodic meetings between the Cooperative Forecasting Group (CFG) and its counterpart at the Metropolitan Washington Council of Governments 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 have a profound effect on population, housing, and employment forecasts. Each socio-economic forecast set developed by the BMC in conjunction with the Cooperative Forecasting Group since FY 2007 has incorporated individual jurisdiction estimates and projections of BRAC activity from Round 7 to the current Round 7-C. In FY 2012, BMC staff will continue to conduct research to determine the magnitude of these changes by geographic area and incorporate changes into the Round 8 Cooperative Forecasts as BRAC reaches its fully staffed military and civilian targets.

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 will be used for the long-range transportation plan and

as a 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). In order to support BMC and local jurisdiction efforts to develop employment estimates at the jurisdiction and small area level, BMC staff early in calendar 2011 purchased the 2010 ES-202 and conducted processing, quality control and analysis of the file in order to continue the creation of a 2010 Master Establishment File that will be completed in FY 2012 after review by local planning agencies.

In FY 2012, BMC staff, with the approval of the Cooperative Forecasting Group (CFG), will develop new employment projections based on our 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 Cooperative Forecasts. BMC will also continue to provide technical assistance initiated by the BRTB to the development of the 2011 Baltimore Region Long Range Transportation Plan.

FY 2012 PERFORMANCE OBJECTIVES:

1. Update and document assumptions for 2000-2011 forecasts to account for major new development announcements/ decisions through January 2012.
2. Document proceedings of Cooperative Forecasting Group meetings.
3. Update small area employment forecasts 2010 – 2035 by economic activity area for use in the BMC travel demand model.
4. Document forecast changes to long-range population, household and employment forecasts for 2000-2035 used in the BMC travel demand model.
5. Coordinate joint meetings to continue discussions on bi-regional growth assumptions with the Baltimore and Washington forecasting groups.
6. Provide small area residential and employment estimates and forecasts to local jurisdictions on request.

7. Prepare new regional and jurisdiction employment controls 2000-2035 with CFG, MWCOG, Maryland DLLR and MDP.
8. Continue data compilation, data development and technical assistance to BMC partners involved in the regional visioning activity and the Baltimore Region Long Range Transportation Plan.
9. Coordinate meetings with local Planning Directors.
10. Complete processing, incorporate local planning agency updates and re-tabulate 2010 employment estimates by small area based on the Maryland Department of Labor, Licensing, and Regulation's ES-202 file.

PRODUCTS/MILESTONES	SCHEDULE
Document proceedings of Cooperative Forecasting Group	Throughout Fiscal Year
Provide data to local jurisdictions upon request	Throughout Fiscal Year
Prepare and document updated short-term 2000-2011 forecasts of population and households	2 nd Quarter
Update 2000 – 2035 small area population and household forecasts submitted by local jurisdictions	2 nd Quarter
Prepare and document new regional and jurisdictional employment forecast methodologies	4 th Quarter
Update 2000-2035 small area employment forecasts by NAICS sector for use in the travel demand model	3rd Quarter
Provide data compilation, data development and technical assistance to the Baltimore Region Long-Range Transportation Plan	Throughout Fiscal Year
Complete 2010 MEF development by incorporating local planning agency quality control results and re-tabulate 2010 ES-202 file	4 th Quarter

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

BALTIMORE REGION UPWP
FY 2012 UNIFIED PLANNING WORK PROGRAM

<u>BUDGET:</u>	Baltimore Metropolitan Council	\$220,000
	Anne Arundel County	\$34,650
	Baltimore City	\$54,630
	Baltimore County	\$35,000
	Carroll County	\$38,115
	Harford County	\$76,230
	Howard County	<u>\$76,230</u>
	TOTAL	\$534,855

FHWA Share –	\$273,846
FTA Share –	\$154,038
MDOT Share –	\$ 22,000
Local Share –	\$ 84,971

TASK: 2010 CENSUS AND AMERICAN COMMUNITY SURVEY

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.

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A system of Community Profiles, based on 2000 Census and 2000 MEF data was implemented in FY 2003. In FY 2010, BMC staff updated Community Profiles with existing MEF data and data from the 2008 American Community Survey. FY 2012 will see updates of these profiles using new employment data by NAICS codes and the incorporation of population and travel behavior data from the 2010 American Community Survey, the 2010 Master Establishment File and the 2010 U.S. Census.

The U.S. Census Bureau released its first small area summaries of the American Community Survey (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 Baltimore Regional Transportation Board. In FY 2011, BMC staff conducted these same activities for data from the 2005 – 2009 ACS product. Late in FY 2011, presentations were made to these same groups highlighting results from the U.S. Census Summary File 1.

During FY 2010, the BMC provided the Maryland Department of Planning (MDP) and local planning agencies technical assistance in developing and implementing Census 2010 outreach activities and creating 2010 Census Complete Count Committees. Throughout FY 2010, BMC staff provided technical Assistance to local planning agencies and the U.S. Census Bureau Philadelphia Regional Office in delineating 2010 Census statistical geography at the census tract and block group level for its preliminary files and final review files.

In FY 2012, 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 (2006-2010) 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. During the third quarter of FY 2011, the U.S. Census Bureau released 2010 decennial census data from its PL 94-171 Redistricting data. BMC staff used these data to compare results between 100% decennial census data compilations versus ACS sample data by small area. BMC staff closely scrutinized these data and identified margins of error and/or discontinuities between 100% data and sample data.

The release of the PL 94-171 data provided BMC staff with its first view of approved U.S. Census Bureau small area geography. Based on this data release, BMC staff, along with local jurisdictions, will design new 2010 TAZ boundaries. During the 3rd quarter of FY 2011 the Census Bureau provided web-based training coordinated with FHWA and delivered software and Census 2010 data to create new transportation analysis zones (TAZ) and transportation analysis districts (TAD) for use by the bureau in creating the 2010 Census Transportation Planning Package (CTPP). It is anticipated that the Census Bureau will request TAZ boundaries for CTPP tabulations during the 1st quarter of FY 2012. BMC staff will assist in any follow-up activities by the U.S. Census Bureau, MDP or local jurisdictions on ensuring a complete count during FY 2012.

FY 2012 PERFORMANCE OBJECTIVES:

1. Analyze American Community Survey demographic and housing characteristics and procedures for using these data as inputs to the travel demand modeling process.
2. Update Community Profile series, based upon 2006 – 2010 ACS five-year sample data and the 2006 – 2010 Public Use Microdata files.

3. Develop 2010 TAZ boundaries based on accepted 2010 census geography released in the PL 94-171 file and data from Census 2010 using Census Bureau supplied software.
4. Generate topic reports based on the 2006 – 2010 ACS file and the release of the Census Summary File 1.

PRODUCTS/MILESTONES	SCHEDULE
Analysis of quality, reliability, and usability of 2006 - 2010 American Community Survey data	3 rd Quarter
Publication of Community Profiles using 2010 ACS data, 2010 ACS PUMS data and the 2010 Master Establishment File contingent upon the availability of data files	4 th Quarter
Develop 2010 TAZ boundaries based on approved 2010 census geography	1 st Quarter
Provide analysis and create web-reports on housing, travel behavior, income, immigration, etc. based on analysis of 2006 – 2010 ACS file and Summary File 1.	Throughout Fiscal Year

PARTICIPANTS: Baltimore Metropolitan Council

BUDGET: **\$140,000**

FHWA Share – \$71,680
 FTA Share – \$40,320
 MDOT Share – \$14,000
 Local Share – \$14,000

PROJECT: DATA DEVELOPMENT

This project is divided into four tasks:

- GIS Activities
- Regional Database Integration
- 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.

In FY 2011, BMC staff provided 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 2012. The BMC GIS will again be used to generate all 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. The BMC GIS will also maintain and develop GIS applications that will increase staff productivity with custom tools.

The completion of the BMC GIS Strategic Plan in FY 2009 and implementation of Phase 1 of the three-phase plan during FY 2010 and FY2011 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 established an internal GIS Steering Committee, 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 2012, 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 to act as the BMC liaison; staff will continue participation on the committee in FY 2012. 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 work on completing Phase Two within BMC's GIS Strategic Plan. Significant staff resources will be dedicated to completing Phase Two of the BMC GIS Strategic Plan in FY 2012 to heighten BMC's GIS capabilities in order to keep up with the increased demand for GIS both internally and externally.

FY 2012 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.
5. Participate in MSGIC.
6. Complete Phase Two outlined in the BMC GIS Strategic Plan.
7. Update web mapping applications to assist in visualization.

BALTIMORE REGION UPWP
FY 2012 UNIFIED PLANNING WORK PROGRAM

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 Two from BMC GIS Strategic Plan	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 **\$220,000**

FHWA Share – \$112,640
 FTA Share – \$ 63,360
 MDOT Share – \$ 22,000
 Local Share – \$ 22,000

TASK: REGIONAL DATABASE INTEGRATION

PURPOSE: To develop and refine 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 GIS environment; and (3) all model results are displayed on the spatially accurate Baltimore BaseMap. In FY 2009, staff launched the web interface of the new Traffic Count Database that replaced the Regional Traffic Count File. In FY 2011 enhancements were made to both databases including an improved user interface, enhanced linkages between the databases and a more secure framework.

In addition to refining and maintaining our internal database tools, in FY 2012, BMC staff will focus on the development of a web-based interactive map application. The interactive map application will be built on a Google Maps framework and will feature several data layers. The primary goal will be to develop a tool that will support our CMP (Congestion Management Process) but will also serve as a transportation planning tool for BMC staff, our member jurisdictions, MDOT's modes and the general public. Significant staff time will be required to create the application, then format, update and maintain the data layers that will be available on the map. Additional staff time will be dedicated to meet with and interview BMC staff, our member jurisdictions, MDOT's modes and the general public 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.

FY 2012 PERFORMANCE OBJECTIVES:

1. Refine and maintain the Master Network Database and the Traffic Count Database application.

2. 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
Refined Software and database interface from Master Network Database to Regional Traffic Count Database	4 th Quarter
Updated Master Network Database/Network Editor application	4 th Quarter
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 **\$120,000**

FHWA Share – \$61,440
 FTA Share – \$34,560
 MDOT Share – \$12,000
 Local Share – \$12,000

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, and conducted a multi-year, scenario-based investigation of the relationship between transportation performance and land use policies in the region.

In FY 2012, BMC will continue to assist in the development and evaluation of transportation and land use scenarios as requested. 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: development of the long range transportation plan, (LRTP) or other studies such as a regional transit plan and a regional freight-movement plan. Such tools could include the Baltimore Regional Travel Demand model, and the Production, Exchange, Capacity, Allocation System (PECAS) model and/or the INDEX software suite. With final 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. An example of a scenario planning activities to support LRTP development could include an evaluation of the variation in travel demand given the variation in the cost of travel over the 25-year LRTP planning horizon.

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.

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 US 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 development of the Maryland State Growth Plan — *PlanMaryland*.

FY 2012 PERFORMANCE OBJECTIVES:

1. Investigate and develop technical tools as needed.
2. Conduct scenario 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
Continue application of integrated transportation and land use model	Throughout Fiscal Year
Provide technical assistance in support of the LRP	1 st , 2 nd & 3 rd Quarters
Provide technical assistance in support of studies such as a regional transit plan	2 nd , 3 rd & 4 th Quarters

PARTICIPANTS: Baltimore Metropolitan Council

BUDGET: **\$150,000**

FHWA Share – \$76,800
FTA Share – \$43,200
MDOT Share – \$15,000
Local Share – \$15,000

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 Household Travel Survey is the primary resource for this task. The results from the 2010 Census will also be 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 fiscal year 2011 included an issue paper, "Commuters and Commuting in the Baltimore Region," and another issue paper, "Travel Differences by Age, Gender, and Lifecycle in the Baltimore Region," published in Spring 2011. Two other issue papers, titled "Travel and Energy Consumption" and "The Aging of the Regional Population and Its Effect on Travel," were also published in fiscal year 2011.

For fiscal year 2012, two topics have been suggested by the survey analysis to date:

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 conducted previous studies to assist the six jurisdictions in the region to plan for increasing elderly travel needs. They included a 1999 study on travel patterns, and a 2004 study on residential choices, of the Baltimore region elderly population.

The release of initial 2010 Census results in fiscal year 2011 will provide 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:

- Activity patterns and travel characteristics of the elderly.
- Distribution of transportation need categories (low, moderate, high).
- Spatial distribution, i.e. naturally occurring retirement communities.
- Barriers to elderly travel.
- Attitudes toward transit services; mix of service features and cost desired, and
- Declining driver skills and driver education.

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 previous studies, and consultation with stakeholders, including local governments and non-profit social service providers, in fiscal year 2011.

Several research tasks would involve a survey. If those tasks are selected, BMC may contract with a consultant to design and conduct the survey.

Travel Indicators

The American Community Survey (ACS) of the US Census Bureau collects data on revealed and observed travel behavior in major metropolitan areas. This task will make

use of national datasets like the ACS to expand the regional travel monitoring system of the BMC. Other Census Bureau datasets will also be used, including The American Fact Finder and the PUMS files.

Major sub-tasks will be selection, analysis, synthesis, and dissemination of travel indicators. The analysis will consist of direct indicators of travel and also demographic/household characteristics that influence travel indirectly, the latter serving as an additional monitoring tool. An important component will be the creation of a user-friendly data format to be supplemented by descriptive text.

The goal of this task is to improve understanding of travel conditions in the region and thereby inform policy discussions.

Travel indicators for consideration are as follows:

- Travel Estimates
 - Average Commute Time by Mode (Auto & transit)
 - Share of work force reported using transit
 - Share of work force reporting primary work location outside jurisdiction of residents
 - Share of work force reporting primary work location outside Baltimore region
 - Share for work force reporting a departure time before am peak (6:30 – 9:30)
- Demographic/Household Characteristics
 - Share of households with a member over 62
 - Share of households with no member less than 18
 - Share of population foreign born
 - Share of population with a bachelor's degree
 - Share of households that are renter occupied.
 - Median Age

Existing BMC regional data collection programs, such as those for traffic counts, employment center cordon observations, and GPS speed monitoring, will be reviewed to identify opportunities to complement the regional monitoring program. The Bureau of Labor Statistics American Time Use Survey and other national datasets will be reviewed for the same purpose.

FY 2012 PERFORMANCE OBJECTIVES:

1. Produce two (2) issue briefs.
2. Study of Residential Choices and/or Travel Patterns of the Baltimore Region Elderly Population Using 2010 Census Results.
3. Identified set of regional traffic indicators.
4. Development of data format.
5. Analysis/Synthesis of current ACS data.
6. Monitoring report.

PRODUCTS/MILESTONES	SCHEDULE
Identified set of regional traffic indicators.	1 st Quarter
Development of data format. Analysis/Synthesis of current ACS data. Issue Brief 1 (The Aging of the Regional Population)	2 nd Quarter
Monitoring Report Issue Brief 2 (The Aging of the Regional Population)	3 rd Quarter
Report: To be determined following completion of review in fiscal year 2011, "Update of Previous Studies on the Residential Choices and Travel Patterns of the Baltimore Region Elderly Population".	4 th Quarter

PARTICIPANTS: Baltimore Metropolitan Council

BUDGET: \$60,000

FHWA Share – \$30,720
FTA Share – \$17,280
MDOT Share – \$ 6,000
Local Share – \$ 6,000

PROJECT: TRAVEL DEMAND MODELING

PURPOSE: To provide, when appropriate, updated or improved elements to the regional travel demand model.

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Essential to the region's transportation planning efforts is the Baltimore Region Travel Demand Model maintained by the BMC staff. The model is a computerized application used to simulate existing and future travel patterns in the Baltimore metropolitan area. The model estimates person, vehicle, and transit travel throughout the Baltimore region and portions of the adjoining Washington region. A continuing program of model enhancements has been carried out over the past several fiscal years to ensure that the BMC and its member jurisdictions develop their modeling capabilities in line with the "state of the practice."

FY 2011 accomplishments focused on validating a new Version 4 model (the model replaced was termed Version 3.3.) with revealed behavior from the 2007/2008 Household Travel Survey and On-Board Transit Survey, converting the model operating software to Voyager (including the conversion of transit skimming to the Public Transport module of the software), incorporating a toll choice model enhancing the simulation sensitivity to managed and expressed toll lanes, and developing technical tools and evaluating draft scenarios in the preparation for the BRTB Vision process.

Model input for the horizon year 2008 consisting of demographic data, transportation networks, and counts was gathered and used to develop estimates of travel behavior and demand. Local and nation datasets of recent observed behavior were summarized and tabulated and compared to the 2008 model output. The new Version 4 model's ability to capture changes in observed behavior was evaluated, and it was found that the model successfully replicated 2008 observed behavior and was deemed an appropriated tool for regional planning.

In order to take advantage of advanced features of the modeling software, BMC staff completed a transition to Citilabs' latest release of CUBE Voyager. In addition to allowing for greater flexibility in manipulating input databases, the Voyager module Public Transport was adopted for transit skimming. The advance module provides the ability to better evaluate the effects of transit system configurations.

Additional model enhancements include incorporating the mode choice model developed for the MTA's Red Line study and adding a tolling component developed in FY 2010 by a consultant under contract to the BMC to the model to properly evaluate road pricing strategies being implemented in the model region. Both model additions were tested and found to improve reliability. A separate report was issued on the evaluation of the tolling model, while the mode choice model enhancements were documented in the validation report.

Additional accomplishments in FY 2011 include:

- Participating in the AMPO modeling technical work group;
- Participating in training in the use of the EPA's draft mobile emission model – MOVES;
- Obtaining 2008 classified traffic counts and providing linkage to the network in preparation for a new model validation ;
- Updating the commercial vehicle and truck model delta table;
- Updating the model coefficients used in estimating non-motorized travel based on observations from the 2007/2008 Household travel Survey;
- Evaluating the tolling choice model;
- Refining and developed MOVES and travel model interface to allow for the estimation of mobile source emissions using EPA's latest emission model;
- Continue support of local and state technical studies; and
- Analysis of the model's ability to the projected traffic trends and transportation challenges facing the region.

In FY 2012, BMC staff will continue to investigate ways to apply the model in new and creative ways. A continuing program of training on the use of the validated model and its application will be maintained. A special workshop will be held to acquaint member agencies with the new features and use of the model and provide training in the use of the newly-incorporated Voyager software. State and local government participants will review the highway network as BMC staff embarks on the annual TIP/Plan/Conformity analysis.

In FY 2012, BMC staff, working with Maryland Transit Administration (MTA), will consider enhanced mode choice modeling techniques in order to provide better results when specifically investigating transit alternatives. Other models and emerging techniques will be investigated, and new input factors will be considered.

In FY 2012, BMC staff will improve the spatial accuracy of the Master Highway Network, first focusing on Interstates and Freeways. The goal is to align roadway links and nodes more closely to real-world alignments. This will allow for matching of observed traffic data with the travel model links. In addition the staff will research alternate ways to model interchanges, in an effort to simplify the network, reduce the potential for coding errors, and improve model performance.

In FY 2012, BMC staff will add a Managed Toll Lane network to the Master Highway Network. The network will include projects under construction such as I-95 Express Toll Lanes northeast of Baltimore plus current and past proposals for toll lanes on highways in the Baltimore region. The goal is to create a seamless network of toll lanes within existing highways for testing purposes. This could become a transportation scenario in up-coming plans

In FY 2012, BMC staff will work with the State Highway Administration (SHA), investigating the freight component of the Maryland Statewide Travel Model (MSTM). BMC working with SHA staff will obtain and review the statewide freight model evaluating model required input data and examining model output. A document

summarizing the statewide freight model will be developed and identify opportunities to incorporate the forecasting output within the BMC regional model.

In FY 2012, BMC staff will begin testing and evaluating the newly developed synthetic population generator and demographic evolution model. Synthesized future demographic characteristics for individual geographies in the BMC model region will be analyzed for various scenarios. Finding will be documented and shared with both Cooperative Forecasting Group and Technical Committee to demonstrate the new capabilities.

In FY 2012, BMC staff will retain qualified consultant services through the use of a Request for Qualifications in the continued refinement of the technical tools. The enhancement will include recent advances in the principles of modeling individual travel choices, particularly in the framework of activity- and tour-based travel micro-simulation. This project will utilize end products from the developed synthetic population generator and demographic evolution model, Household Travel Survey 2007, and On-Board Travel Survey 2007. The time schedule for the completion of the project will extend beyond FY 2012.

In FY 2012, BMC staff will perform planning level network analysis on toll alternative scenarios that will provide a view of potential toll corridors and toll system. The analysis will focus on evaluating travel time difference between toll and non-tolled facility, traffic routing patterns and the potential users of the toll facility under various scenarios.

Progress will continue to be made in the software field as well. BMC staff will continue to monitor developments in the travel demand modeling software field to make certain that the transportation staff have the best tools available to ensure accurate modeling of travel in the region. Other modeling tools may also be examined for specialized applications.

FY 2012 PERFORMANCE OBJECTIVES:

1. Introduce the new Version 4 model to member agencies and conduct a workshop
2. Develop an Activity Based Model RFP
3. Document mode choice enhancements that could be incorporated
4. Make enhancements to the Master Network
5. Review statewide freight model
6. Evaluate of synthetic population generation
7. Document toll model scenarios

PRODUCTS/MILESTONES	SCHEDULE
Workshop on Version 4 Model	1 st Quarter
Activity Based Model RFP (Contingent on Consultant Funds)	1 st Quarter
Master Network Enhancements	2 nd Quarter
Technical Memorandum Based on BRTB Direction on Analysis of Identified Areas of Concern	Throughout Fiscal Year
Technical Memorandum on Synthetic Population Generation	4 th Quarter
Consultant Model Enhancements	Throughout Fiscal Year

PARTICIPANT: Baltimore Metropolitan Council

BUDGET: \$575,000

FHWA Share – \$294,400
 FTA Share – \$165,600
 MDOT Share – \$ 57,500
 Local Share – \$ 57,500

**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.

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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.

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 web site 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 can also view the maps associated with the projects online.

Development of the 2012-2015 TIP will be completed by late FY 2011 with BRTB approval scheduled in early FY 2012. Amendments to the 2011-2014 TIP will be reviewed and coordinated with the region's conformity determination as appropriate. Development of the 4-year 2012-2015 TIP will occur mostly in FY 2012 and will include the preparation of draft documents and public involvement.

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

FY 2012 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.
4. Amend the TIP as necessary.
5. Solicit and review proposed projects for the 2013-2016 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
Final 2012-2015 TIP documents	1 st Quarter
Draft 2013-2016 TIP	3 rd & 4 th Quarter
2013-2016 TIP public participation forums	4 th Quarter
Obligated Project Listing of federally funded projects	2 nd Quarter
TIP amendments, if applicable	Throughout Fiscal Year

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.

BALTIMORE REGION UPWP
FY 2012 UNIFIED PLANNING WORK PROGRAM

<u>BUDGET:</u>	Baltimore Metropolitan Council	\$40,000
	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	\$66,865

FHWA Share –	\$34,235
FTA Share –	\$19,257
MDOT Share –	\$ 4,000
Local Share –	\$ 9,373

PROJECT: SUBAREA ANALYSIS

PURPOSE: To provide BMC technical staff support of subarea transportation systems analysis efforts conducted by the local jurisdictions of the Baltimore region. Computer-based planning tools are particularly effective in sensitivity testing of alternative growth and transportation systems scenarios conducted by the member jurisdictions of the BRTB. While jurisdictions in the region are encouraged to perform subarea transportation systems analyses using state-of-the-art planning models, these efforts must be carried out in coordination with BMC activities.

This work is a critical first step toward integration of the regionally significant elements of local transportation plans within a regional framework. These studies provide for the development of highway and transit system projections and needs analyses, ultimately leading to updates of corridor and local area multi-modal transportation plans. In FY 2011, BMC staff continued to train the local and state agencies interested in applying the CUBE technology to their respective transportation planning activities. The results of local network studies will be used to further calibrate the regional model development efforts.

In FY 2012, BMC staff will continue to provide technical assistance and information resources to program participants. This will include BMC staff assistance in applying the CUBE software as well as running the regional travel demand model to help analyze a local concern with regional implications. Also, BMC staff will provide assistance in developing corridor analyses at a more localized level.

Local model coordination will continue with refinements to the existing technical tools conducting the travel demand impacts associated with BRAC. In FY 2009, BMC staff refined the zone structure and enhanced the transportation network in the area around Fort Meade. BMC staff will continue to provide technical assistance as the local jurisdictions apply the refined model.

FY 2012 PERFORMANCE OBJECTIVES:

1. Provide technical assistance and training to local jurisdictions.
2. Review and comment on projects produced by local participants.
3. Compile list of potential modifications, resulting from local initiatives, to regional travel simulation efforts.

PRODUCTS/MILESTONES	SCHEDULE
Enhanced computer network files	Throughout Fiscal Year
Memoranda documenting local assistance	Throughout Fiscal Year

PARTICIPANTS: Baltimore Metropolitan Council

BUDGET: **\$50,000**

FHWA Share – \$25,600
FTA Share – \$14,400
MDOT Share – \$ 5,000
Local Share – \$ 5,000

PROJECT: SUBAREA ANALYSIS: CITY OF ANNAPOLIS RESPONSIBILITIES

PART A: TRANSIT PLANNING

PURPOSE: This project evaluates the impacts of the City of Annapolis Transit System service including route and frequency of service modifications. This evaluation will allow the City to apply transit performance guidelines to identify cost and performance effectiveness of route modifications and expansion of service. Route analysis can also be applied to further refine the City’s mobility service and coordination with Maryland Transit Administration’s routes and schedules as well as other local jurisdictions.

Application of MTA transit standards will build upon Howard County’s 2010 project and will assist in testing the reasonableness of the standards for the Baltimore region. An analysis of transit routes in the City of Annapolis will emphasize regional connections with other transportation systems and modes including MTA, MARC, BWI Airport and commuter routes. Further refinement and potential expansion of routes and schedules will focus on achieving better regional coordination with adjacent systems.

FY 2012 PERFORMANCE INDICATORS:

1. Apply transit performance tools and measures to City of Annapolis transit routes and schedules.
2. Evaluate all current and potential City of Annapolis transit routes in regard to the state efficiency measures and regional connectivity.
3. Recommend changes to Annapolis Transit routes and schedules as needed to meet transit performance standards and increase system efficiency.
4. Implement recommended changes based on public feedback and available funding.

PRODUCTS/MILESTONES	SCHEDULE
Assemble FY 2011 performance data	1 st Quarter
Produce a report detailing the application of efficiency measures to Annapolis Transit and potential regional connections	2 nd and 3 rd Quarters
Prepare and implement recommended changes to routes and schedules as needed	4 th Quarter

PARTICIPANTS: City of Annapolis – DOT

BUDGET: \$35,000

PART B: EVALUATING EFFECTIVE AND INTERACTIVE PEDESTRIAN WAYFINDING SYSTEMS IN HISTORIC DISTRICTS

PURPOSE: The purpose of this project is twofold: 1) to study the effectiveness of wayfinding signs for pedestrians and bicyclists that are visible, interactive, and dynamic—yet appropriate for historic districts with selective sign guidelines and 2) to develop a model wayfinding system that can be used regionally, with initial implementation in Annapolis.

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From Chester, Virginia, to Quincy, Illinois, the issue of electronic and interactive signs has gripped planning commissions and city councils alike. Sign companies often claim that “[signs, screens and displays that are interactive, rather than static, are far more effective at capturing people’s attention and engaging them with your brand”. However, there has not been as much research to indicate that these signs can be used by public entities as wayfinding tools that can direct pedestrians and bicyclists to sites of interest and eliminate or reduce confusion for out-of-town visitors. Government jurisdictions need more assistance and guidance in selecting the most appropriate, and the most innovative, wayfinding signage options. Most importantly, jurisdictions need to craft a comprehensive wayfinding program that can make broad recommendations for future sign implementation.

There are many different types of interactive signs currently available, with a wide range of designs. These kinds of signs include interactive plasma displays; vehicle-activated signs; and solar and wind powered signs. There are also signs that integrate different technologies to coordinate real-time parking information. Because the cost of these signs can be considerable, it is crucial for jurisdictions with limited means to have the appropriate information to make the right decision about the kind of sign that will work best for the residents of and visitors to that jurisdiction.

The City of Annapolis is proposing this study in conformance with elements of its Comprehensive Plan calling for the creation of a cohesive program of placemaking and

wayfinding that not only identifies gateways, cultural districts, city landmarks, and public services, but influences travel behavior and promotes multi-modal travel options. The first performance indicator for this wayfinding system study would be an analysis and evaluation of the most effective type and location of signs, considering the purpose of the signs and considering the resources available. This would be a preliminary work program that would compile a comprehensive inventory of all wayfinding signage, supplementing the already existing geo-coded inventory of all traffic signs and signals. This effort would include the City's existing "You Are Here" signs, and the "Navigate Annapolis" signs installed in 2005. The program could include the compilation of other interpretive signs currently displayed in the City.

Traffic and pedestrian counts could help provide guidance for the most suitable location for different signs. The most effective number of signs would also need to be evaluated. Too many signs would be distracting and detract from the wayfinding purpose and potential of the signs. The ultimate goal would be to help effectively and dynamically welcome out-of-town visitors and to point them to places of interest and assist them in learning more about the cultural history of Annapolis.

The second performance indicator for the wayfinding system study would be to evaluate design options to ensure the compatibility of the signs in a historic district. It would be critically necessary to test a prototype sign to ensure that it is optimally placed and well-suited to its surroundings. Currently, there are discussions underway to plan for the placement of a prototype sign in the next nine months. This study could identify benchmarks by which the prototype sign could be evaluated. For example, performance could be measured by the number of times it is accessed by pedestrians. Before installation of a prototype sign, it would also be necessary for project staff to visit three model communities (in Maryland and Virginia) to view sites where wayfinding systems are already in place. Chestertown, Maryland, for example, has recently installed an interactive sign, and it would be invaluable to hear feedback from that jurisdiction's staff.

The best way to evaluate the effective number of signs, their design, and the success of the prototype sign would be with a public hearing, which is the third performance indicator for the study. This hearing, which could be advertised on the prototype sign itself, would give the public a chance to give feedback on the work program and on the design and placement of the prototype sign.

This signage study would enable the City of Annapolis to promote visitation to historic sites in Annapolis and throughout the region, publicize city events, identify community gateways, locate neighborhood businesses, and help visitors and residents more easily find their way to local destinations. This process, and the final report that would follow the public hearing, could be developed into a model program for other jurisdictions that are looking at electric and interactive signage.

FY 2012 PERFORMANCE INDICATORS:

1. Develop a work program to comprehensively plan guidelines for the types and locations of wayfinding signs. Include an inventory of existing signs.
2. Develop design options for signs and benchmarks for the evaluation of a prototype sign.
3. Have a public meeting to share potential designs and sign placement options. Also, solicit feedback on prototype sign.
4. Prepare a final report with changes recommended by public and develop a regional model for signage studies.

PRODUCTS/MILESTONES	SCHEDULE
Send out RFP and select a successful candidate	1 st Quarter
Have consultant review existing signage plans and begin field research into successful wayfinding programs; develop benchmarks for prototype sign performance	2 nd Quarter
Hold a public hearing to present preliminary findings and to gather feedback on prototype sign and wayfinding program	3 rd Quarter
Complete planning study with recommendations for a wayfinding system for jurisdiction	4 th Quarter

PARTICIPANTS: City of Annapolis, Consultant

BUDGET: \$75,000

TOTAL ANNAPOLIS SUBAREA BUDGET: \$110,000

FHWA Share –	\$56,320
FTA Share –	\$31,680
Local Share –	\$22,000

PROJECT: SUBAREA ANALYSIS: ANNE ARUNDEL COUNTY RESPONSIBILITIES

PART A: PEDESTRIAN/BICYCLE FACILITY ASSESSMENT

PURPOSE: Comprehensively evaluate pedestrian and bicycle facilities in Anne Arundel County.

This project will assess deficiencies and gaps in continuity, including missing connections to local (parks, schools, etc.) and regional facilities and activity centers in order to identify and prioritize potential corrective actions. The project will be coordinated with the regional effort to provide easier access to rail stations and is intended as a prototype that may be applied elsewhere in the Baltimore region.

FY 2012 PERFORMANCE OBJECTIVES:

1. Review County reports/studies (e.g. Pedestrian and Bicycle Master Plan 2003, GDP and small area master plans, latest travel forecast model trip table and mode share data; school Board sidewalk priority list, etc.) plus efforts by other jurisdictions to identify, quantify and prioritize facility improvement needs.
2. Field survey and map pedestrian/bike facilities and facility gaps along arterial and collector roads in the County's urbanized 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.)
3. Conduct outreach meetings to identify community concerns and observations in order to identify and prioritize additional facility needs.
4. Develop methodologies for prioritizing facility improvement options and standardizing unit costing.
5. Identify and broadly rank (e.g., hi, med, lo) site specific improvement options and cost estimates.
6. Develop a prototype list of recommendations for changes to existing development regulations and design standards to assist in implementation of the identified improvements.

PRODUCTS/MILESTONES	SCHEDULE
Map existing pedestrian & bicycle facilities, facility gaps and amenities	1 st & 2 nd Quarters
Prioritize list of pedestrian and bicycle improvements in Priority Improvement Corridors	3 rd Quarter
Develop strategies to implement the improvements from sources other than the capital budget	4 th Quarter

PARTICIPANTS: Anne Arundel County, Consultant

BUDGET: \$283,000

PART B: COMPLETE STREETS ASSESSMENT

PURPOSE: Evaluate the feasibility and applicability of Complete Streets (and/or Context Sensitive Design) techniques as a means of expanding regional travel capacity by utilizing available right of way more effectively while encouraging and facilitating alternative travel modes.

This initiative builds upon the Transportation Functional Master Plan (TFMP) analysis of regional corridors and connector roads conducted as part of the County's FY 2011 UPWP. It is intended as a prototype that may be applied elsewhere in the Baltimore region.

FY 2012 PERFORMANCE OBJECTIVES:

1. Research applicability of utilizing Complete Streets techniques and adopting Complete Streets regulations in Anne Arundel County.
2. Identify the most viable strategies and regulatory and implementing language that may be applied in the Anne Arundel County and other jurisdictions in the Baltimore region.
3. Select the most promising strategies and locations for potential implementation in the County.

PRODUCTS/MILESTONES	SCHEDULE
Research applicability of utilizing Complete Streets techniques and adopting Complete Streets regulations in Anne Arundel County	1 st & 2 nd Quarters
Identify the most viable strategies and regulatory and implementing language that may be applied in the Anne Arundel County and other jurisdictions in the Baltimore region	3 rd Quarter
Select the most promising strategies and locations for potential implementation in the County	4 th Quarter

PARTICIPANTS: Anne Arundel County, Consultant

BUDGET: \$85,000

TOTAL ANNE ARUNDEL COUNTY SUBAREA BUDGET: \$368,000

FHWA Share – \$188,416
 FTA Share – \$105,984
 Local Share – \$ 73,600

PROJECT: SUBAREA ANALYSIS: BALTIMORE CITY RESPONSIBILITIES
PART A: TRANSPORTATION OPERATIONS PLAN FOR SUSTAINABILITY

PURPOSE: The purpose of this project is to develop a “Transportation Operations Plan for Sustainability,” which begins with the inventory of current environmental management practices and the establishment of a “Sustainability Scorecard.” Among the items to be inventoried and analyzed are the energy efficiency of current facilities and major equipment, materials used in routine operations which could be used to improve water runoff quality, and disposal of materials on the principle of “reduce, reuse and recycle.” From the benchmarking, inventory and analysis, DOT will:

- Creation of environmental standard operating procedures manuals and pocket reference cards for personnel at SHA maintenance shops. This included procedures for stockpiling materials in an environmentally responsible manner.
- Environmental awareness training for all employees.
- Implement an environmental management system to track activities and compliance data.

Appropriately, sustainability in transportation including green technologies, energy efficiency, noise air, and water pollution reduction are being mandated at Federal, State, and Local levels. While this practice is increasingly being integrated into the physical construction of roads and bridges, lagging behind is sustainable operations practices a public works facilities, in the operations of highway maintenance equipment, and in other “internal” operational practices. In Fall 2008, SHA and MDOT signed an agreement with the EPA to perform voluntary self-audits/self disclosures for environmental compliance issues associated with facilities and to dedicate funds for remedial action. This was EPA’s first agreement with a state transportation agency, setting the bar for others to follow. Local governments should be in a position to follow suit.

FY 2012 PERFORMANCE OBJECTIVES:

1. Inventory of current environmental management practices and the establishment of a “Sustainability Scorecard.”
2. Create environmental standard operating procedures manuals and pocket reference cards for personnel at DOT maintenance shops. This includes procedures for stockpiling materials in an environmentally responsible manner.
3. Create an environmental awareness training program for all employees.

4. Implement an environmental management system to track activities and compliance data.

PRODUCTS/MILESTONES	SCHEDULE
Inventory of current environmental management practices and the establishment of a "Sustainability Scorecard"	1st Quarter
Create environmental standard operating procedures manuals and pocket reference cards for personnel at DOT maintenance shops. This includes procedures for stockpiling materials in an environmentally responsible manner	2nd Quarter
Create an environmental awareness training program for all employees	3rd Quarter
Implement an environmental management system to track activities and compliance data	4th Quarter

PARTICIPANTS: Baltimore City DOT, Baltimore City Legal Department, Other agencies, and BMC.

BUDGET: \$135,000

PART B: COMMERCIAL VEHICLE ENFORCEMENT/MONITORING/ROUTING TECHNOLOGIES AND FREIGHT COMMUNITY IMPACT ASSESSMENT & MANAGEMENT PLAN

PURPOSE: The purpose of this project is to develop a comprehensive approach to assess and manage freight movement while balancing livable communities throughout the city and into adjacent counties. The project consists of two parts:

1. Research commercial vehicle enforcement, monitoring and routing technologies for application in and around the City's freight distribution hubs. The project will identify existing technologies and evaluate their resource requirements and limitations for cost effective implementation in the Baltimore region; identify, emerging technologies that have the potential to reduce or overcome the resource requirements and limitations, develop a matrix for use in local jurisdiction planning for commercial vehicle enforcement and monitoring; and, research the legal obstacles for using technology for enforcement and monitoring and develop strategies for the removal of these obstacles. From this research, the City intends to develop a pilot project in Baltimore City to test commercial vehicle enforcement monitoring to evaluate the cost benefit and return on investment for regional implementation.

2. Establish baseline measurements of air quality, noise, vibration, light pollution, etc., in communities adjacent to Port facilities. From this baseline, a policy scan of best management practices (BMP's) can be applied to manage and mitigate priority impacts of stakeholders.

Freight movement in the Baltimore region is expected to increase exponentially over the next two decades (as measured in tons of cargo per year and number of truck transports per year). The Port of Baltimore is a major entry point for international freight into the east coast; this will be even more the case beginning in 2014 when the widened Panama Canal opens to super-freighters. Baltimore City is a 300 year-old city built on commerce and transportation and most individuals living in the City understand to some extent that they live in or near centers of freight activity; however, with the increase in freight movement, communities are increasingly looking to manage and mitigate the adverse impacts of freight movement on quality of life. Assessing and managing the impacts of freight projects will be

particularly important to City neighborhoods (and to a lesser extent, Baltimore and Anne Arundel communities) as the first mile of every truck trip to and from the Port of Baltimore occurs on City streets.

FY 2012 PERFORMANCE OBJECTIVES:

1. Identify existing technologies and evaluate their resource requirements and limitations for cost effective implementation
2. Identify emerging technologies and evaluate their resource requirements and limitations for cost effective implementation
3. Develop a matrix for use in local jurisdiction planning for commercial vehicle enforcement and monitoring.
4. Develop pilot project in Baltimore City to test commercial vehicle enforcement monitoring to evaluate the cost benefit and return on investment for regional implementation.
5. Conduct a policy scan for air quality, noise and vibration in major freight centers and jurisdictions.
6. Perform a technical air, noise, and vibration analysis in the SE portion of Baltimore City related to Port activities.
7. Report out on targeted stakeholder meetings regarding quality of life in freight centric communities, and perceptions of air, noise, and vibration issues related to freight.
8. Create a final plan with recommendations for community enhancements resulting from major freight activities and corridors.

**BALTIMORE REGION UPWP
FY 2012 UNIFIED PLANNING WORK PROGRAM**

PRODUCTS/MILESTONES	SCHEDULE
Identify existing and emerging technologies for commercial vehicle enforcement and monitoring. Conduct a policy scan for air quality, noise and vibration in major freight centers and jurisdictions.	1 st Quarter
Develop a matrix for use in local jurisdiction planning for commercial vehicle enforcement and monitoring. Perform a technical air, noise, and vibration analysis in the SE portion of Baltimore City related to Port activities.	2 nd Quarter
Develop pilot project in Baltimore City to test commercial vehicle enforcement monitoring to evaluate the cost benefit and return on investment. Report out on targeted stakeholder meetings regarding quality of life in freight centric communities, and perceptions of air, noise, and vibration issues related to freight.	2 nd & 3 rd Quarter
Final Report and recommendations	4 th Quarter

PARTICIPANTS: Baltimore City DOT, BMC, Maryland Port Administration, various City and State regulatory agencies, MDOT Office of Freight & Logistics, Consultant

BUDGET: **\$250,000**

PART C: ECONOMIC EMPOWERMENT IN TRANSPORTATION PROJECTS

PURPOSE: The purpose of this project is to research and benchmark best practices (BMP's) which increase access to jobs for residents of distressed communities through the design and construction of transportation projects. Benchmarking will include researching other jurisdictions that have successfully done overcome the barriers described above. In addition, project staff will interview and meet with contractors, contract administrators, workforce development officials and others to identify strategies which can be used to overcome the barriers. Create a toolkit for planning transportation projects that includes policy, procurement, incentives, encouragement, outreach, and measurement. Apply the toolkit to a pilot project to test the legal, theoretical, and practical application of the local hiring toolkit and measure the outcome of local hiring within the design and construction of the pilot project.

Transportation is at the very center of opportunity for jobs, not just by the mobility enabled as a result of new transportation projects but beginning with the very design and construction of those projects. There are several barriers to increasing economic opportunity including the lack of a clear career pipeline for skilled and semi-skilled positions and federally-imposed limitations on local hiring requirements. Recent experiences in Missouri, Minneapolis and elsewhere have demonstrated that these barriers can be reduced and that transportation projects can become economic empowerment opportunities in distressed communities. This approach is consistent with Title VI of the Civil Rights Act.

FY 2012 PERFORMANCE OBJECTIVES:

1. Benchmark existing local jurisdiction efforts in promoting training and hiring residents of distressed communities for design and construction of transportation projects.
2. Create a toolkit for planning transportation projects that includes policy, procurement, incentives, encouragement, outreach, and measurement.
3. Apply the toolkit to a pilot project to test the legal, theoretical, and practical application of the local hiring toolkit and measure the outcome of local hiring within the design and construction of the pilot project.

**BALTIMORE REGION UPWP
FY 2012 UNIFIED PLANNING WORK PROGRAM**

PRODUCTS/MILESTONES	SCHEDULE
Benchmark existing local jurisdiction efforts	1 st Quarter
Create a toolkit for planning transportation projects	2 nd Quarter
Apply the toolkit to a pilot project to test the legal, theoretical, and practical application	3 rd Quarter
Final Report	4 th Quarter

PARTICIPANTS: Baltimore City DOT, Baltimore City Legal Department, Other agencies, and BMC

BUDGET: **\$100,000**

PART D: RECONNECTING COMMUNITIES BISECTED BY 1950s-ERA HIGHWAY PLANNING & DESIGN

PURPOSE: In FY 2010, the Baltimore City Department of Transportation completed feasibility studies for two projects to reconnect communities (Harlem Park and Poppleton by I-70) separated by freeway construction of the 1960s/1970s. Additional connectivity gaps exist where interstates and local highways bisect communities, undermining community and economic development opportunities, and reducing safe pedestrian connectivity within and between communities.

This project will analyze connectivity concerns at the following locations: Central Baltimore near Penn Station (Charles Street over Jones Falls Expressway), I-83 interchange at Cold Spring Lane, MD 295 through Westport, and I-895 on Eastern Ave. Pedestrian connectivity improvements, bridge “flanking” options to allow for additional development, and transit access will be considered. The city intends to select one of these projects for future air rights development.

FY 2012 PERFORMANCE OBJECTIVES:

1. Confirm and scope candidates for study including:
 - a. Jones Falls Expressway at Charles Street
 - b. Interstate ramps at the I-83 interchange at Cold Spring Lane adjacent to light rail station
 - c. MD 295 through the Westport community
 - d. Viaduct over I-895 at Eastern Ave
2. Conduct legal analysis of air rights issues.
3. Conduct early project development analysis including structural engineering, geometric and traffic control issues, evaluate development potential, freight drop-off and parking issues, etc.

PRODUCTS/MILESTONES	SCHEDULE
Confirm and scope candidates for study	1 st Quarter
Conduct legal analysis of air rights issues	2 nd Quarter
Conduct early project development analysis	3 rd Quarter
Final Report and Recommendations	4 th Quarter

PARTICIPANTS: Baltimore City DOT, Planning, Office of Neighborhoods, Baltimore Development Corporation, Community Groups, Consultant, SHA/FHWA

BUDGET: \$175,000

PART E: BICYCLE MASTER PLAN DEVELOPMENT ANALYSIS FIVE YEAR MASTER PLAN REVIEW AND UPDATE

PURPOSE: The Bicycle Master Plan was developed in 2005 and after 5 years of planning initiatives, it is time to review the plan to see what gaps exist, additional planning is required, lessons learned, and where Baltimore City goes from here.

This project will analyze the City’s Bicycle Master Plan in order to evaluate an integrated network of bicycle lanes which encourages bicycling as a viable transportation and commuter option; enhance efforts to collect timely data on and analyze bicycle traffic, develop and implement marketing efforts to promote safe bicycling, and develop a toolkit for complete streets principals.

FY 2012 PERFORMANCE OBJECTIVES:

1. Track data on and analyze bicycle traffic on existing bike lanes and transportation corridors;
2. Develop marketing activities to promote commuter bicycling
3. Develop traffic calming and pedestrian safety measures to enhance bicycling safety
4. 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 5 year review	1 ST Quarter
Develop partnerships for bicycle amenities and locations for bicycle network enhancement	Throughout Fiscal Year
Evaluate trail feasibility and identify stakeholders	Throughout Fiscal Year
Install bicycle and pedestrian count technologies at appropriate locations to evaluate planning efforts	Throughout Fiscal Year
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 toolkit for complete streets principals	3 rd Quarter

PARTICIPANTS: Baltimore City DOT, Planning, Recreation and Parks, Police, Mayor’s Bicycle Advisory Committee

BUDGET: **\$112,500**

TOTAL BALTIMORE CITY SUBAREA BUDGET: **\$772,500**

FHWA Share – \$395,520
FTA Share – \$222,480
Local Share – \$154,500

PROJECT: SUBAREA ANALYSIS: BALTIMORE COUNTY RESPONSIBILITIES

PART A: MODEL ANALYSIS

PURPOSE: Plan refinement studies provide for the development of highway and transit systems usage projections and needs analyses, ultimately leading to updates of corridor and local area multi-modal transportation plans. Support of sub-area transportation systems analysis efforts is a critical first step toward integration of the regionally significant elements of local transportation plans within a regional framework.

Local jurisdictions of the region are encouraged to perform sub-area transportation systems analyses using state-of-the-art planning models. These efforts must be carried out in coordination with BMC model refinement activities. Microcomputer-based planning tools are particularly effective in sensitivity testing of alternative growth and transportation systems scenarios. The results of local sub-area refinement studies will be used to further calibrate the regional model development efforts and identify refinements needing local area improvements. The Baltimore County Subarea Analysis effort for FY 2012 will consist of two major initiatives: (1) conduct County-wide assessments of the No-Build Alternatives for key potential Master Plan improvements e.g., the Dolfield Boulevard/I-795 Interchange, Walther Boulevard/Gunview, Owings Mills Boulevard South, etc. and, (2) apply various TP+ reporting modules to enhance graphical and data analysis.

FY 2010 PERFORMANCE OBJECTIVES:

1. Conduct No-Build/Master Plan assessments study using TP+.
2. Enhance data analysis using various TP+ reporting modules.

PRODUCTS/MILESTONES	SCHEDULE
Electronic documentation of the various sensitivity runs; submit to BMC for review and comment	Throughout Fiscal Year
Memorandum documenting study results	4 TH Quarter

PARTICIPANTS: Baltimore County

BUDGET: \$135,000

PART B: TRIP GENERATION STUDY

PURPOSE: This task involves conducting a study to assess if the generalized trip generation rates for certain land uses in the ITE manual are representative of actual trip generation rates in Baltimore County.

The County has previously done a pilot study of residential trip generation rates in Baltimore County and determined that in certain instances the trip rates are significantly different from ITE rates. This study will identify communities that have limited egress and conduct cordon hose counts.

FY 2012 PERFORMANCE OBJECTIVES:

1. Conduct traffic counts.
2. Analyze data and produce final report.

PRODUCTS/MILESTONES	SCHEDULE
Conduct traffic counts	Throughout Fiscal Year
Analyze data and produce final report	4 th Quarter

PARTICIPANTS: Baltimore County

BUDGET: \$25,000

TOTAL BALTIMORE COUNTY SUBAREA BUDGET: \$160,000

FHWA Share – \$ 81,920
 FTA Share – \$ 46,080
 Local Share – \$ 32,000

PROJECT: SUBAREA ANALYSIS: HARFORD COUNTY RESPONSIBILITIES

PART A: MD 22 CORRIDOR STUDY

PURPOSE: Perform traffic and safety analysis on MD 22 (Churchville Road/Aberdeen Thruway) from MD 543 (Fountain Green Road to the Aberdeen Proving Ground), including impacts along the corridor associated with the Base Realignment and Closure (BRAC) process.

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The study will include: an existing conditions analysis, a no build analysis, a future conditions analysis based on several scenarios designated to address improved vehicular mobility and safety, improved transit, bicycle and pedestrian facilities along the corridor including the ability and benefits of providing dedicated bus lanes, dedicated bike lanes and sidewalks. In the vicinity of the Harford Community College and the HEAT Center the study will assess Complete Streets components. The study will include a look at providing alternate access to existing communities.

FY 2012 PERFORMANCE OBJECTIVES:

1. Provide a comprehensive traffic operations and safety analysis for the MD 22 corridor that builds on the 2008 MDOT Traffic and Intersection Improvement Studies for BRAC and the 2009 SHA MD 22 Study around Harford Community College.
2. Provide the groundwork for transportation systems management and operation improvements and geometric improvements to transportation facilities along the corridor and vicinity including possible transit upgrades, bike lanes, pavement markings, traffic controls, sidewalks, ADA ramps, lighting and other streetscaping and Complete Streets elements.

PRODUCTS/MILESTONES	SCHEDULE
Existing conditions analysis and simulation	1 st Quarter
Future conditions analysis and simulation	2 nd & 3 rd Quarters
Final report with recommendations	4 th Quarter

PARTICIPANTS: Harford County, BMC, MDOT, Consultant

BUDGET: \$300,000

TOTAL HARFORD COUNTY SUBAREA BUDGET: \$300,000

FHWA Share –	\$153,600
FTA Share –	\$ 86,400
Local Share –	\$ 60,000

PROJECT: SUBAREA ANALYSIS: HOWARD COUNTY RESPONSIBILITIES

PART A: FOCUSED HIGHWAY AND TRANSIT FORECASTS

PURPOSE: Based on the 2035 Baltimore Regional Transportation Plan assumptions, this is a multiyear task to develop baseline 2035 traffic forecasts for Howard County. The forecast results will provide a baseline of traffic forecasts and investigate the viability of various transit alternatives for the County's General Plan update given refinement of land use assumptions in response to growth at Fort Meade, and the County's evolution toward more complex mixed use development patterns. Integration with Anne Arundel County transportation model detail and corridor analysis will be explored to provide a more comprehensive regional analysis. Adjustments to the regional network, the regional zone structure and trip generation inputs will be pursued as needed to develop reliable transit highway simulations and facility level refinements. Modeling tasks will be done primarily by consultants using TP+ software, with advice and assistance from BMC as needed.

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- Validation of the BMC Model in Howard County will include emphasis on detailing the traffic simulation network and traffic analysis zones in Columbia Town Center, the MD 32 BRAC corridor from east of US 29 to the BW Parkway, the US 1 corridor in Howard County, and the MD 216 corridor and will provide additional testing and understanding of the performance of the revised BMC model chain.
- Modal split analysis for the MARC system and its impact on local and regional travel will be investigated.
- Methods and model codes used in testing the BMC model will be shared with all members of the Technical Committee in an effort to improve regional modeling efforts.
- Subarea analysis of individual corridors will provide refined facility level traffic forecasts that will provide base data for the regional Congestion Management Process (CMP).

FY 2012 PERFORMANCE OBJECTIVES:

1. Refine BMC validation for the Howard County validation transportation network with adjustments for traffic analysis zone splits, trip generation inputs, traffic speed, capacity and link detail as needed.
2. Based on refinements to the BMC validation as applied to the year 2035 regional network and the latest Cooperative Forecasts, work cooperatively with BMC to develop year 2035 traffic zone structure, trip generation inputs and a 2035 highway network. Consultants will work independently to develop trip generation related model inputs with BMC review.
3. Using a refined 2035 Howard County highway network and inputs, run regional model to produce 2035 simulated traffic in Howard County.
4. Develop a series of screenline refinements for potential transit concepts, arterial and major collector highway facilities and selected minor collector roads.

PRODUCTS/MILESTONES	SCHEDULE
Develop detailed validation and documentation for Howard County including network detailing for Columbia Downtown, the MD 32 BRAC corridor, and the MD 216 corridor	1 st & 2 nd Quarters
A year 2035 transportation network and related trip generation inputs based on refinements to the Howard County network and alternative land use including potential transit alternatives	2 nd & 3 rd Quarters
Year 2035 unrefined simulated traffic based on the refined BMC 2020 transportation network and revised 2008 transportation model and including the impact of MARC model split and cost benefit	3 rd Quarter
Refine traffic forecasts and document refinement process	4 th Quarter

PARTICIPANTS: Howard County, Consultants

BUDGET: \$113,000

PART B: TRANSIT PLANNING

PURPOSE: This project evaluates the Howard Transit system service performance including route and frequency of service modifications. This initiative will allow Howard County to apply transit performance guidelines to identify cost and performance effectiveness for fixed route and paratransit operations. Route analysis will also be applied to further refine Howard Transit coordination with CMRT and the Maryland Transit Administration's routes and schedules.

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- Application of MTA transit standards will assist in testing the reasonableness of the standards for the Baltimore region.
- Analysis of Howard Transit routes will emphasize regional connections with other transportation systems and modes including MTA, MARC Light Rail, CMRT and the BWI Airport.
- Refinement of routes and schedules will strive to achieve better regional coordination with Maryland Transit Administration's routes and schedules.

FY 2012 PERFORMANCE OBJECTIVES:

1. Apply transit performance tools Howard Transit routes and schedules.
2. Evaluate all Howard Transit bus routes relative to state efficiency measures.
3. Recommend changes to Howard Transit routes and schedules as needed to meet transit performance standards and increase system efficiency and as feasible based on public feedback and funding constraints.

PRODUCTS/MILESTONES	SCHEDULE
Assemble FY 2011/2012 performance data	1 st Quarter
Produce graphics and charts of the application of efficiency measures to Howard Transit	2 nd & 3 rd Quarters
Prepare revised route maps and schedules as needed	4 th Quarter

PARTICIPANTS: Howard County

BUDGET: \$10,700

PART C: BICYCLE PLAN

PURPOSE: To enhance and augment the Baltimore Regional Transportation Plan through the development of a Regionally-consistent Countywide Bike Plan focused on increasing local and regional bicycle mobility, accessibility and transportation efficiency. The Howard County Bike Plan will incorporate BRTB approved planning goals and strategies, and will be consistent with State of Maryland “Green Print” and “Growth Print” concepts to insure that regional as well as local bicycling policies and projects are incorporated in the Plan. Year 2012 activities will include Bicycle Level of Compatibility (BLOC) analysis, identification of road segments and pathways consistent with a cycling network, identification and prioritization of roads and other facilities where County bike projects are needed, and identification of policies and programs to support bicycle transportation. Connectivity with Regional Partners’ proposals as well as Major Activity Centers will be a priority. Design elements will incorporate as applicable, signal design, bicycle lanes, off-road facilities, signing and other location-specific solutions improve bicycle access county-wide.

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- Application of BRTB Long Range Plan Goals through “Green Print” and “Growth Print” concepts to further bicycle transportation and regional connectivity for bicycle planning.
- Refinement of BRTB bicycle planning to a sub-regional level giving more depth and detail to the regional bicycle network.
- Advancement and improved integration with SHA bicycle and pedestrian planning for on-going and future project planning.

FY 2012 PERFORMANCE OBJECTIVES:

1. In collaboration with the Howard County Departments of Public Works (DPW) and Department of Recreation and Parks (DRP), develop policies which will govern the development of a Bicycle Plan and network in Howard County.
2. Inventory County Minor Collectors and above for bicycle compatibility and correlate this inventory with the DPW and DRP maintenance/repair schedules, capital projects as well as private sector developments-in-progress to potentially garner cost effective bicycle improvements.
3. Develop an inventory of bicycle compatible facilities as well as those road segments and travel paths where improvements are needed. Incorporate Regional partners’ proposals and needs where pertinent. Map the needs analysis including categorization of types of needs.

4. Establish a Bicycle Advisory Group and conduct necessary public outreach activities to provide opportunities for citizen and stakeholder input throughout the planning process.
5. Based on the inventory, develop a project list, detailed maps, general assessments of right of way constraints and preliminary costs. Vet these with bicycle and community groups, the public at large, and stakeholder agencies at the State and local levels. Insure regional connectivity wherever possible.
6. Identify key bicycle design concepts and signage consistent with “complete street” concepts and develop design templates that can be used for future implementation of the bicycle network. Identify other needed policies and programs to support bicycle transportation.
7. Develop prioritization criteria consistent with local opportunities and policies, Regional criteria, and realistic funding expectations. Prioritize the project list.
8. Coordinate with consultant to develop preliminary cost estimates; general assessments of right of way constraints and environmental approval and other review for these locations needed for bicycle improvements.
9. Work with the consultant and local and regional bicycle stake holders to prepare project prioritization and “complete street” bicycle design recommendations into a final Bike Plan document. Develop review and approval process.

PRODUCTS/MILESTONES	SCHEDULE
Develop policies to guide development of the Bike Plan and implementation.	1 st Quarter
Inventory Minor Collectors and above for Bicycle compatibility and project potential.	1 st Quarter
Develop Countywide Bicycle Needs Analysis.	2 nd Quarter
Establish Bike Advisory Group and finalize Bike projects list. Prioritize. Develop complete street bike design concepts	2 nd & 3 rd Quarters
Complete stake holder review of Bike Projects in combination with bike design concepts.	3 rd Quarter
Develop Bike Plan document and final stake holders review	4 th Quarter
Distribution of Bike Plan to all local and regional stakeholders	4 th Quarter

PARTICIPANTS: Howard County agencies, Consultants

BUDGET: \$209,000

TOTAL HOWARD COUNTY SUBAREA BUDGET: \$332,700

FHWA Share –	\$170,342
FTA Share –	\$ 95,818
Local Share –	\$ 66,540

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.

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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. In FY 2008, BMC staff continued to assist MDOT/Maryland Transit Administration 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 and the Maryland Transportation Authority.

In FY 2012, 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 network coding) and alternative evaluations (model Measures of Effectiveness (MOE) output) of ongoing and upcoming project planning studies. Current project planning studies include, however are not limited to the MD 32 Corridor Study in Anne Arundel and Howard Counties, MD 198 in Anne Arundel County and 1-795 in Baltimore County. 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 MOOT and SHA. Work may include, however is not limited to supplementation of ongoing corridor/sub area analysis, land use-policy-network scenario testing, transit-oriented development (TOD) and special generator analysis, regional toll sensitivity analysis testing, freight analysis (potential corridors include 1-83, 1-95 and 1-70) 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 Constrained Long-Range Plan (CLRP) 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 Metropolitan Regional Travel Demand Model (Version 4 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 modals and BMC to collectively evaluate the Maryland Statewide Transportation Model (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.

FY 2012 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

BUDGET: **\$100,000**

FHWA Share – **\$51,200**
 FTA Share – **\$28,800**
 MDOT Share – **\$10,000**
 Local Share – **\$10,000**

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.

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The Interagency Consultation Group (ICG) is the primary MPO forum 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 web site and are sent to interested parties.

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 Technical Committee.) 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 TIP and 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. As a result of the requirement to prepare a conformity determination using MOVES, EPA's new motor vehicle emissions model, for conformity determinations beginning March 2012, staff will continue to prepare for the transition to the new model.

EPA is reconsidering its 2008 decision which set new national standards for ground-level ozone. Staff will coordinate with MDE to determine the impact of these new standards on the air quality attainment status of the region. Staff will also be working with MDE to determine the impact of the use of the MOVES model on the region's ability to demonstrate conformity.

As in previous years, BMC staff will continue to support the bi-regional Clean Air Partners program and the various work activities associated with Clean Commute Month. These programs strive to educate the public on air pollution and its effects. The most visible Clean Air Partners activity is the "Air Quality Action Days" program. When the Maryland Department of the Environment's daily air quality forecast indicates a Code Orange or Code Red day, Clean Air Partners provides information to program participants and the media. Through these announcements, people in the Baltimore region are advised about voluntary actions they can take to both help reduce pollution and protect their health. During FY 2012, BMC will continue to support the program through individually 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 survey activities.

BMC staff will continue support of Clean Commute Month, 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 VMT and pollution levels begin to rise. Originally, Clean Commute Month activities were confined to the month of May. However, the current initiative has events taking place from late April through late September, coinciding with the region's ozone season.

Staff will continue to attend meetings and events to examine recent developments in alternatively fueled vehicles (AFVs) and their impacts on reducing air pollution.

Staff will continue to disseminate information on these environmental topics to the MPO and to interested stakeholders, both public and private sector. The primary mechanism for this communication is an e-newsletter entitled Environmental News Brief started in October, 2000. This newsletter is distributed periodically throughout the year to a membership of approximately 600 people. The e-newsletter is geared toward a general audience with additional resources on topics where applicable. It highlights recent news regarding transportation-related environmental issues, primarily air quality, affecting the Baltimore region.

With a State law addressing climate change, and the potential for federal climate change legislation, staff will continue to evaluate the level of contribution of the region's transportation sector to greenhouse gas (GHG) emissions and educate the Board on how to address potential new requirements as they occur. Staff will continue to explore modeling capabilities needed to evaluate the emission reduction capacity of various GHG reduction measures. Staff will continue coordination with MDOT on the State's implementation plan for the transportation and land use measures in the Maryland Climate Action Plan. According to the Maryland Greenhouse Gas Reduction Act of 2009, the implementation plan is due to the governor by the end of 2012.

Pending funding availability, staff will assist the BRTB with implementation of a fourth competitive selection process for Congestion Mitigation and Air Quality Improvement projects in the Baltimore region. In FY 2007, the Maryland Department of Transportation agreed to give the BRTB authority to select \$1 million worth of CMAQ projects in FY 2008 and another \$1 million in FY 2009. MDOT agreed to authorize \$800,000 worth of

CMAQ projects in FY 2011. Staff will track the progress of these projects, along with assisting MDOT in creation of the annual CMAQ report for Maryland.

FY 2012 PERFORMANCE OBJECTIVES:

1. Convene meetings and support activities of the Interagency Consultation Group.
2. Address options and available strategies and associated policy requirements in the development of the conformity analysis for Plan It 2035 and the 2012-2015 TIP as well as the 2013-2016 TIP.
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 additional 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 2012 BRTB CMAQ competitive selection process. (Pending funding availability.)

PRODUCTS/MILESTONES	SCHEDULE
Support ICG meetings	Approx. Bi-Monthly
Monitor new air quality initiatives, policies, and guidance	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 2012 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: **\$255,000**

BALTIMORE REGION UPWP
FY 2012 UNIFIED PLANNING WORK PROGRAM

FHWA Share –	\$130,560
FTA Share –	\$ 73,440
MDOT Share –	\$ 25,500
Local Share –	\$ 25,500

PROJECT: ENVIRONMENTAL 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 LRTP.

As a result of SAFETEA-LU, the Metropolitan Transportation Planning Rule was changed to include a requirement that MPO's 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 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.

In FY 2012, staff will evaluate feedback from the stakeholder forum held in FY 2011 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 FY 2011 forum will likely continue to inform *Plan It 2035*. In FY 2012, staff will continue to evaluate environmental resource indicators/performance measurements as part of the LRTP.

EPA issued the final Total Maximum Daily Load (TMDL) for the Chesapeake Bay in December 2010. Staff will continue to research how the Chesapeake Bay TMDL and related Maryland Watershed Implementation Plan will address stormwater pollution from onroad transportation.

FY 2012 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. Evaluate opportunities for integrating feedback from the FY 2011 Forum.
2. Update web site mapping of transportation projects with environmental and historical resources, as necessary.
3. Evaluate environmental resource indicators/performance measurements as part of the regional planning process.
4. Evaluate affects of 2010 Chesapeake Bay TMDL and Maryland WIP on regional planning.

PRODUCTS/MILESTONES	SCHEDULE
Evaluate opportunities for integrating feedback from the stakeholder forum on linking resource planning to transportation planning	1 st & 2 nd Quarters
Evaluate environmental resource indicators/performance measurements as part of the regional planning process	1 st & 2 nd Quarters
Update web site mapping of transportation projects and resources	1 st & 2 nd Quarters
Research highway stormwater runoff inclusion in the 2010 Chesapeake Bay TMDL	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: **\$40,000**

FHWA Share – \$20,480
 FTA Share – \$11,520
 MDOT Share – \$ 4,000
 Local Share – \$ 4,000

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 federal law (Clean Air Act) 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 “nonattainment.” 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.

In FY 2012, conformity analyses of the 2012-2015 and 2013-2016 TIPs, and *Plan It 2035*, will use the applicable U.S. Environmental Protection Agency (EPA) emissions model to estimate emissions of fine particulate matter, 8-hour ozone, and carbon monoxide for conformity determination under the PM_{2.5} NAAQS, the 8-hour ozone NAAQS, and the carbon monoxide NAAQS. 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.

EPA has released the Motor Vehicle Emission Simulator (MOVES), which is replacing the Mobile 6.2 motor vehicle emissions model. Staff will continue to test the use of the MOVES model for regional emissions analysis. This includes the evaluation of a revised modeling methodology. The methodology interfaces the region’s travel demand model with the MOVES model. This interface will be a large part of the technical methodology used in future conformity determinations. On March 2, 2010, EPA established a two-year grace period before the MOVES2010 emissions model is required to be used in new regional emissions analyses for transportation conformity determinations.

Conformity determination processes that begin after this grace period will require the use of the MOVES model.

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 2012 PERFORMANCE OBJECTIVES:

1. Finalize report documenting the conformity analysis of the 2012-2015 TIP and *Plan It 2035*. This includes evaluation of the travel demand model for conformity horizon years.
2. Continue to develop and evaluate a revised Baltimore region mobile emission modeling methodology, interfacing the region's travel demand model with EPA's new MOVES model.
3. Begin the conformity analysis of the 2013-2016 TIP. This includes evaluation of the travel demand model for conformity horizon years.
4. Perform and document conformity procedures and results of any amendments involving major capacity improvements.
5. Provide technical assistance to MDE as necessary.

BALTIMORE REGION UPWP
FY 2012 UNIFIED PLANNING WORK PROGRAM

PRODUCTS/MILESTONES	SCHEDULE
Finalize report documenting conformity of 2012-2015 TIP and <i>Plan It 2035</i>	1 st and 2 nd Quarters
Prepare report documenting new emissions modeling methodology	2 nd Quarter
Begin conformity analysis of the 2013-2016 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 – \$40,960
FTA Share – \$23,040
MDOT Share – \$ 8,000
Local Share – \$ 8,000

SPECIAL PROJECTS
FUNDED OUTSIDE THE FY 2012 UPWP

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PROJECT: TELEWORKBALTIMORE.COM

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 launched a successor to the Telework Partnership with Employers (TPE) called ***TeleworkBaltimore.com***. The premise of the program is simple: direct employers in the Baltimore region to a branded web site - ***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. BMC is responsible for surveying registered participants. BMC also takes the lead role in marketing the program, with MDOT's guidance and assistance.

Since the program's launch in December 2009, 55 organizations and individuals have registered. Currently, there are three active telework programs that are direct results of ***Teleworkbaltimore.com*** efforts, and two more are pending. As of April 2011, just over \$47,000 remains and MDOT has renewed its agreement with BMC through March 2012.

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 Month 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 2012 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 web site	Throughout Fiscal Year
Manage work of telework consultant	Throughout Fiscal Year
Coordinate program activities with MDOT	Throughout Fiscal Year

PARTICIPANTS: BMC, MDOT, Consultant

BUDGET: \$47,000 (April 2011 – March 2012)

FHWA Share –	0
FTA Share –	0
MDOT Share –	\$47,000
Local Share –	0

FISCAL YEAR 2012

APPENDIX A

LOCAL/STATE UPWP PARTICIPANTS: DETAILED PROJECT DESCRIPTIONS

CITY OF ANNAPOLIS

ANNE ARUNDEL COUNTY

BALTIMORE CITY

BALTIMORE COUNTY

CARROLL COUNTY

HARFORD COUNTY

HOWARD COUNTY

STATE HIGHWAY ADMINISTRATION

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**UNIFIED PLANNING WORK PROGRAM
FOR TRANSPORTATION PLANNING**

FY 2012 PROJECTS AND BUDGETS

FOR

CITY OF ANNAPOLIS

(\$132,700)

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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 2012 PERFORMANCE OBJECTIVES:

1. Manage the City of Annapolis’ local and regional involvement in the transportation planning process.
2. Prepare quarterly reports and invoices.
3. Prepare the FY 2013 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 FY 2012 UPWP	Throughout Fiscal Year
Budget amendments for FY 2013	As Necessary
City of Annapolis FY 2013 UPWP submittals	2 nd Quarter
Completion of formal grant acceptance process for FY 2013	4 th Quarter

PARTICIPANTS: City of Annapolis

BUDGET: \$7,620

PROJECT: LEGISLATIVE COORDINATION AND ANALYSIS

PURPOSE: To review, analyze and respond to proposed federal or state legislation or changes in existing legislation related to transportation or air quality issues. The intent is to provide decision makers with background information and impacts that the proposal could have on the county, region and state.

FY 2012 PERFORMANCE OBJECTIVES:

1. Provide timely review and analysis of proposed legislation and changes to existing legislation related to transportation.
2. Prepare briefing memoranda for decision makers on the potential impacts of the proposed legislation.

PRODUCTS /MILESTONES	SCHEDULE
Provide timely analysis and policy implications on proposed state and federal legislation	Throughout Fiscal Year

PARTICIPANTS: City of Annapolis

BUDGET: \$5,000

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 county roads, greenways and other non-motorized corridors. Promotional and educational efforts will also be used to increase awareness for bicycle and pedestrian opportunities.

FY 2012 PERFORMANCE OBJECTIVES:

1. Assist in development of regional work plan for analysis of regional bicycle network.
2. Support Bicycle/Pedestrian Advisory Group in reviewing regional opportunities.
3. Support activities related to enhanced greenways planning, along with opportunities to include pedestrian and bicycle activities.
4. Work with local bicycle groups to encourage non-motorized transportation alternatives.

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

PARTICIPANTS: City of Annapolis

BUDGET: \$3,810

PROJECT: TRANSPORTATION IMPROVEMENT PROGRAM

PURPOSE: This project develops the City of Annapolis’ component of the annual Transportation Improvement Program (TIP), revisions to the City of Annapolis’ 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 2012 PERFORMANCE OBJECTIVES:

1. Develop the City of Annapolis’ annual submission to the TIP including assessment of all federally-funded projects.
2. Review and comment on the Draft 2013-2016 TIP.
3. Revise and correct TIP submission 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
Submit Local TIP component of 2013-2016 document	3 rd Quarter
Revise City of Annapolis local TIP component per comments and review draft TIP document	3 rd Quarter
Final revisions to 2013-2016 TIP	4 th Quarter

PARTICIPANTS: City of Annapolis

BUDGET: \$1,270

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.

Throughout FY 2012, local government staff will assist BMC staff and consultants in efforts to access both local data and expertise, including the private sector. Tasks will include meeting logistics, attendance and preparation/review of technical materials.

FY 2012 PERFORMANCE OBJECTIVES:

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

PRODUCTS/MILESTONES	SCHEDULE
Data and stakeholder identification	1 st and 2 nd Quarter
Identify data sets, locations, zoning as requested	Throughout Fiscal Year
Attend technical planning workshops	Throughout Fiscal Year

PARTICIPANTS: City of Annapolis

BUDGET: \$2,500

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 *Imagine 2060* process, establishing a vision for the Baltimore region, feedback from a range of stakeholders led the BRTB to an effort where the current system would be documented, followed by short- and long-term opportunities to pursue within the region.

Throughout FY 2012, local government staff will assist BMC staff and consultants in efforts to access both local data and expertise, including the private sector. Tasks will include meeting logistics, attendance and preparation/review of technical materials.

FY 2012 PERFORMANCE OBJECTIVES:

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

PRODUCTS/MILESTONES	SCHEDULE
Data and stakeholder identification	1 st and 2 nd Quarter
Identify data sets, locations, zoning as requested	Throughout Fiscal Year
Attend technical planning workshops	Throughout Fiscal Year

PARTICIPANTS: City of Annapolis

BUDGET: \$2,500

PROJECT: SUBAREA ANALYSIS: CITY OF ANNAPOLIS RESPONSIBILITIES

PART A: TRANSIT PLANNING

PURPOSE: This project evaluates the impacts of the City of Annapolis Transit System service including route and frequency of service modifications. This evaluation will allow the City to apply transit performance guidelines to identify cost and performance effectiveness of route modifications and expansion of service. Route analysis can also be applied to further refine the City’s mobility service and coordination with Maryland Transit Administration’s routes and schedules as well as other local jurisdictions.

Application of MTA transit standards will build upon Howard County’s 2010 project and will assist in testing the reasonableness of the standards for the Baltimore region. An analysis of transit routes in the City of Annapolis will emphasize regional connections with other transportation systems and modes including MTA, MARC, BWI Airport and commuter routes. Further refinement and potential expansion of routes and schedules will focus on achieving better regional coordination with adjacent systems.

FY 2012 PERFORMANCE INDICATORS:

1. Apply transit performance tools and measures to City of Annapolis transit routes and schedules.
2. Evaluate all current and potential City of Annapolis transit routes in regard to the state efficiency measures and regional connectivity.
3. Recommend changes to Annapolis Transit routes and schedules as needed to meet transit performance standards and increase system efficiency.
4. Implement recommended changes based on public feedback and available funding.

PRODUCTS/MILESTONES	SCHEDULE
Assemble FY 2011 performance data	1 st Quarter
Produce a report detailing the application of efficiency measures to Annapolis Transit and potential regional connections	2 nd and 3 rd Quarters
Prepare and implement recommended changes to routes and schedules as needed	4 th Quarter

PARTICIPANTS: City of Annapolis – DOT

BUDGET: \$35,000

PART B: EVALUATING EFFECTIVE AND INTERACTIVE PEDESTRIAN WAYFINDING SYSTEMS IN HISTORIC DISTRICTS

PURPOSE: The purpose of this project is twofold: 1) to study the effectiveness of wayfinding signs for pedestrians and bicyclists that are visible, interactive, and dynamic—yet appropriate for historic districts with selective sign guidelines and 2) to develop a model wayfinding system that can be used regionally, with initial implementation in Annapolis.

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From Chester, Virginia, to Quincy, Illinois, the issue of electronic and interactive signs has gripped planning commissions and city councils alike. Sign companies often claim that “[signs, screens and displays that are interactive, rather than static, are far more effective at capturing people’s attention and engaging them with your brand”. However, there has not been as much research to indicate that these signs can be used by public entities as wayfinding tools that can direct pedestrians and bicyclists to sites of interest and eliminate or reduce confusion for out-of-town visitors. Government jurisdictions need more assistance and guidance in selecting the most appropriate, and the most innovative, wayfinding signage options. Most importantly, jurisdictions need to craft a comprehensive wayfinding program that can make broad recommendations for future sign implementation.

There are many different types of interactive signs currently available, with a wide range of designs. These kinds of signs include interactive plasma displays; vehicle-activated signs; and solar and wind powered signs. There are also signs that integrate different technologies to coordinate real-time parking information. Because the cost of these signs can be considerable, it is crucial for jurisdictions with limited means to have the appropriate information to make the right decision about the kind of sign that will work best for the residents of and visitors to that jurisdiction.

The City of Annapolis is proposing this study in conformance with elements of its Comprehensive Plan calling for the creation of a cohesive program of placemaking and

wayfinding that not only identifies gateways, cultural districts, city landmarks, and public services, but influences travel behavior and promotes multi-modal travel options. The first performance indicator for this wayfinding system study would be an analysis and evaluation of the most effective type and location of signs, considering the purpose of the signs and considering the resources available. This would be a preliminary work program that would compile a comprehensive inventory of all wayfinding signage, supplementing the already existing geo-coded inventory of all traffic signs and signals. This effort would include the City's existing "You Are Here" signs, and the "Navigate Annapolis" signs installed in 2005. The program could include the compilation of other interpretive signs currently displayed in the City.

Traffic and pedestrian counts could help provide guidance for the most suitable location for different signs. The most effective number of signs would also need to be evaluated. Too many signs would be distracting and detract from the wayfinding purpose and potential of the signs. The ultimate goal would be to help effectively and dynamically welcome out-of-town visitors and to point them to places of interest and assist them in learning more about the cultural history of Annapolis.

The second performance indicator for the wayfinding system study would be to evaluate design options to ensure the compatibility of the signs in a historic district. It would be critically necessary to test a prototype sign to ensure that it is optimally placed and well-suited to its surroundings. Currently, there are discussions underway to plan for the placement of a prototype sign in the next nine months. This study could identify benchmarks by which the prototype sign could be evaluated. For example, performance could be measured by the number of times it is accessed by pedestrians. Before installation of a prototype sign, it would also be necessary for project staff to visit three model communities (in Maryland and Virginia) to view sites where wayfinding systems are already in place. Chestertown, Maryland, for example, has recently installed an interactive sign, and it would be invaluable to hear feedback from that jurisdiction's staff.

The best way to evaluate the effective number of signs, their design, and the success of the prototype sign would be with a public hearing, which is the third performance indicator for the study. This hearing, which could be advertised on the prototype sign itself, would give the public a chance to give feedback on the work program and on the design and placement of the prototype sign.

This signage study would enable the City of Annapolis to promote visitation to historic sites in Annapolis and throughout the region, publicize city events, identify community gateways, locate neighborhood businesses, and help visitors and residents more easily find their way to local destinations. This process, and the final report that would follow the public hearing, could be developed into a model program for other jurisdictions that are looking at electric and interactive signage.

FY 2012 PERFORMANCE INDICATORS:

1. Develop a work program to comprehensively plan guidelines for the types and locations of wayfinding signs. Include an inventory of existing signs.
2. Develop design options for signs and benchmarks for the evaluation of a prototype sign.
3. Have a public meeting to share potential designs and sign placement options. Also, solicit feedback on prototype sign.
4. Prepare a final report with changes recommended by public and develop a regional model for signage studies.

PRODUCTS/MILESTONES	SCHEDULE
Send out RFP and select a successful candidate	1 st Quarter
Have consultant review existing signage plans and begin field research into successful wayfinding programs; develop benchmarks for prototype sign performance	2 nd Quarter
Hold a public hearing to present preliminary findings and to gather feedback on prototype sign and wayfinding program	3 rd Quarter
Complete planning study with recommendations for a wayfinding system for jurisdiction	4 th Quarter

PARTICIPANTS: City of Annapolis, Consultant

BUDGET: \$75,000

**UNIFIED PLANNING WORK PROGRAM
FOR TRANSPORTATION PLANNING**

FY 2012 PROJECTS AND BUDGETS

FOR

ANNE ARUNDEL COUNTY

(\$435,080)

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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 2012 PERFORMANCE OBJECTIVES:

1. Manage Anne Arundel County’s local and regional involvement in the transportation planning process.
2. Prepare quarterly reports and invoices.
3. Prepare the FY 2013 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 FY 2012 UPWP	Throughout Fiscal Year
Budget amendments for FY 2013	As Necessary
Anne Arundel County FY 2013 UPWP submittals	2nd Quarter
Completion of formal grant acceptance process for FY 2013	4th Quarter

PARTICIPANTS: Anne Arundel County

BUDGET: \$7,620

PROJECT: LEGISLATIVE COORDINATION AND ANALYSIS

PURPOSE: To review, analyze and respond to proposed federal or state legislation or changes in existing legislation related to transportation or air quality issues. The intent is to provide decision makers with background information and impacts that the proposal could have on the county, region and state.

FY 2012 PERFORMANCE OBJECTIVES:

1. Provide timely review and analysis of proposed legislation and changes to existing legislation related to transportation.
2. Prepare briefing memoranda for decision makers on the potential impacts of the proposed legislation.

PRODUCTS /MILESTONES	SCHEDULE
Provide timely analysis and policy implications on proposed state and federal legislation	Throughout Fiscal Year

PARTICIPANTS: 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 2007 Baltimore Region Long Range Transportation Plan. Local planning staffs will continue the development of these data during FY 2012 as part of Round 8 Cooperative Forecasts, 2000 – 2035. They will report on their progress periodically to the CFG, the Technical Committee, and the BRTB.

During FY 2012, local planning staffs will work with BMC staff and the U.S. Census Bureau to review proposed statistical areas and assist in the development of 2012 transportation analyses zones.

Additionally, during FY 2012, local planning staffs will conduct quality control reviews and updates on the 2010 ES-202 and submit these changes to BMC staff to complete the development of the 2010 Master Establishment File (MEF).

FY 2012 PERFORMANCE OBJECTIVES:

1. Prepare updated socio-economic and demographic jurisdictional forecasts at the level of transportation analysis zones for 2000 – 2035.
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.
4. Assist BMC staff in the development of 2012 transportation analysis zones and their relationship with 2012 census statistical geography.
5. Conduct quality control review on the 2010 ES-202 file and return results to BMC staff.

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
Develop new 2012 transportation analysis zones based on census statistical geography	1 st Quarter
Conduct quality control review and update to 2010 ES-202 and submit results to BMC staff for inclusion in the 2010 MEF	4 th Quarter

PARTICIPANTS: Anne Arundel County

BUDGET: \$34,650

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. Anne Arundel County will examine opportunities to incorporate bicycle and pedestrian uses along county roads, greenways and other non-motorized corridors. Promotional and educational efforts will also be used to increase awareness for bicycle and pedestrian opportunities.

FY 2012 PERFORMANCE OBJECTIVES:

1. Assist in development of regional work plan for analysis of regional bicycle network.
2. Support Bicycle/Pedestrian Advisory Group in reviewing regional opportunities.
3. Support activities related to enhanced greenways planning, along with opportunities to include pedestrian and bicycle activities.
4. Work with local bicycle groups to encourage non-motorized transportation alternatives.

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

PARTICIPANTS: Anne Arundel County

BUDGET: \$3,810

PROJECT: TRANSPORTATION IMPROVEMENT PROGRAM

PURPOSE: This project develops Anne Arundel County’s component of the annual Transportation Improvement Program (TIP), revisions to Anne Arundel 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 2012 PERFORMANCE OBJECTIVES:

1. Develop Anne Arundel County’s annual submission to the TIP including assessment of all federally-funded projects.
2. Review and comment on the Draft 2013-2016 TIP.
3. Revise and correct TIP submission 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
Submit Local TIP component of 2013-2016 document	3 rd Quarter
Revise Anne Arundel County’s local TIP component per comments and review draft TIP document	3 rd Quarter
Final revisions to 2013-2016 TIP	4 th Quarter

PARTICIPANTS: Anne Arundel County

BUDGET: \$1,000

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.

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 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.

Throughout FY 2012, local government staff will assist BMC staff and consultants in efforts to access both local data and expertise, including the private sector. Tasks will include meeting logistics, attendance and preparation/review of technical materials.

FY 2012 PERFORMANCE OBJECTIVES:

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

PRODUCTS/MILESTONES	SCHEDULE
Data and stakeholder identification	1 st and 2 nd Quarter
Identify data sets, locations, zoning as requested	Throughout Fiscal Year
Attend technical planning workshops	Throughout Fiscal Year

PARTICIPANTS: Anne Arundel County

BUDGET: \$5,000

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 *Imagine 2060* process, establishing a vision for the Baltimore region, feedback from a range of stakeholders led the BRTB to an effort where the current system would be documented, followed by short- and long-term opportunities to pursue within the region.

Throughout FY 2012, local government staff will assist BMC staff and consultants in efforts to access both local data and expertise, including the private sector. Tasks will include meeting logistics, attendance and preparation/review of technical materials.

FY 2012 PERFORMANCE OBJECTIVES:

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

PRODUCTS/MILESTONES	SCHEDULE
Data and stakeholder identification	1 st and 2 nd Quarter
Identify data sets, locations, zoning as requested	Throughout Fiscal Year
Attend technical planning workshops	Throughout Fiscal Year

PARTICIPANTS: Anne Arundel County

BUDGET: \$5,000

PROJECT: SUBAREA ANALYSIS
PART A: PEDESTRIAN/BICYCLE FACILITY ASSESSMENT

PURPOSE: Comprehensively evaluate pedestrian and bicycle facilities in Anne Arundel County.

This project will assess deficiencies and gaps in continuity, including missing connections to local (parks, schools, etc.) and regional facilities and activity centers in order to identify and prioritize potential corrective actions. The project will be coordinated with the regional effort to provide easier access to rail stations and is intended as a prototype that may be applied elsewhere in the Baltimore region.

FY 2012 PERFORMANCE OBJECTIVES:

1. Review County reports/studies (e.g. Pedestrian and Bicycle Master Plan 2003, GDP and small area master plans, latest travel forecast model trip table and mode share data; school Board sidewalk priority list, etc.) plus efforts by other jurisdictions to identify, quantify and prioritize facility improvement needs.
2. Field survey and map pedestrian/bike facilities and facility gaps along arterial and collector roads in the County’s urbanized 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.)
3. Conduct outreach meetings to identify community concerns and observations in order to identify and prioritize additional facility needs.
4. Develop methodologies for prioritizing facility improvement options and standardizing unit costing.
5. Identify and broadly rank (e.g., hi, med, lo) site specific improvement options and cost estimates.
6. Develop a prototype list of recommendations for changes to existing development regulations and design standards to assist in implementation of the identified improvements.

PRODUCTS/MILESTONES	SCHEDULE
Map existing pedestrian & bicycle facilities, facility gaps and amenities	1 st & 2 nd Quarters
Prioritize list of pedestrian and bicycle improvements in Priority Improvement Corridors	3 rd Quarter
Develop strategies to implement the improvements from sources other than the capital budget	4 th Quarter

PARTICIPANTS: Anne Arundel County, Consultant

BUDGET: \$283,000

PART B: COMPLETE STREETS ASSESSMENT

PURPOSE: Evaluate the feasibility and applicability of Complete Streets (and/or Context Sensitive Design) techniques as a means of expanding regional travel capacity by utilizing available right of way more effectively while encouraging and facilitating alternative travel modes.

This initiative builds upon the Transportation Functional Master Plan (TFMP) analysis of regional corridors and connector roads conducted as part of the County’s FY 2011 UPWP. It is intended as a prototype that may be applied elsewhere in the Baltimore region.

FY 2012 PERFORMANCE OBJECTIVES:

1. Research applicability of utilizing Complete Streets techniques and adopting Complete Streets regulations in Anne Arundel County.
2. Identify the most viable strategies and regulatory and implementing language that may be applied in the Anne Arundel County and other jurisdictions in the Baltimore region.
3. Select the most promising strategies and locations for potential implementation in the County.

PRODUCTS/MILESTONES	SCHEDULE
Research applicability of utilizing Complete Streets techniques and adopting Complete Streets regulations in Anne Arundel County	1 st & 2 nd Quarters
Identify the most viable strategies and regulatory and implementing language that may be applied in the Anne Arundel County and other jurisdictions in the Baltimore region	3 rd Quarter
Select the most promising strategies and locations for potential implementation in the County	4 th Quarter

PARTICIPANTS: Anne Arundel County, Consultant

BUDGET: \$85,000

**UNIFIED PLANNING WORK PROGRAM
FOR TRANSPORTATION PLANNING**

FY 2012 PROJECTS AND BUDGETS

FOR

BALTIMORE CITY

(\$868,725)

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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 2012 PERFORMANCE OBJECTIVES:

1. Manage Baltimore City’s local and regional involvement in the transportation planning process.
2. Prepare quarterly reports and invoices.
3. Prepare the FY 2013 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 FY 2012 UPWP	Throughout Fiscal Year
Budget amendments for FY 2013	As Necessary
Baltimore City FY 2013 UPWP submittals	2nd Quarter
Completion of formal grant acceptance process for FY 2013	4th Quarter

PARTICIPANTS: Baltimore City

BUDGET: \$7,620

PROJECT: LEGISLATIVE COORDINATION AND ANALYSIS

PURPOSE: To review, analyze and respond to proposed federal or state legislation or changes in existing legislation related to transportation or air quality issues. The intent is to provide decision makers with background information and impacts that the proposal could have on the county, region and state.

FY 2012 PERFORMANCE OBJECTIVES:

1. Provide timely review and analysis of proposed legislation and changes to existing legislation related to transportation.
2. Prepare briefing memoranda for decision makers on the potential impacts of the proposed legislation.

PRODUCTS /MILESTONES	SCHEDULE
Provide timely analysis and policy implications on proposed state and federal legislation	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 2007 Baltimore Region Long Range Transportation Plan. Local planning staffs will continue the development of these data during FY 2012 as part of Round 8 Cooperative Forecasts, 2000 – 2035. They will report on their progress periodically to the CFG, the Technical Committee, and the BRTB.

During FY 2012, local planning staffs will work with BMC staff and the U.S. Census Bureau to review proposed statistical areas and assist in the development of 2012 transportation analyses zones.

Additionally, during FY 2012, local planning staffs will conduct quality control reviews and updates on the 2010 ES-202 and submit these changes to BMC staff to complete the development of the 2010 Master Establishment File (MEF).

FY 2012 PERFORMANCE OBJECTIVES:

1. Prepare updated socio-economic and demographic jurisdictional forecasts at the level of transportation analysis zones for 2000 – 2035.
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.
4. Assist BMC staff in the development of 2012 transportation analysis zones and their relationship with 2012 census statistical geography.
5. Conduct quality control review on the 2010 ES-202 file and return results to BMC staff.

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
Develop new 2012 transportation analysis zones based on census statistical geography	1 st Quarter
Conduct quality control review and update to 2010 ES-202 and submit results to BMC staff for inclusion in the 2010 MEF	4 th Quarter

PARTICIPANTS: Baltimore City

BUDGET: \$54,630

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. Baltimore City will examine opportunities to incorporate bicycle and pedestrian uses along county roads, greenways and other non-motorized corridors. Promotional and educational efforts will also be used to increase awareness for bicycle and pedestrian opportunities.

FY 2012 PERFORMANCE OBJECTIVES:

1. Assist in development of regional work plan for analysis of regional bicycle network.
2. Support Bicycle/Pedestrian Advisory Group in reviewing regional opportunities.
3. Support activities related to enhanced greenways planning, along with opportunities to include pedestrian and bicycle activities.
4. Work with local bicycle groups to encourage non-motorized transportation alternatives.

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

PARTICIPANTS: Baltimore City

BUDGET: \$3,810

PROJECT: TRANSPORTATION IMPROVEMENT PROGRAM

PURPOSE: This project develops Baltimore City’s component of the annual Transportation Improvement Program (TIP), revisions to Baltimore 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 2012 PERFORMANCE OBJECTIVES:

1. Develop Baltimore City’s annual submission to the TIP including assessment of all federally-funded projects.
2. Review and comment on the Draft 2013-2016 TIP.
3. Revise and correct TIP submission 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
Submit Local TIP component of 2013-2016 document	3rd Quarter
Revise Baltimore City’s local TIP component per comments and review draft TIP document	3rd Quarter
Final revisions to 2013-2016 TIP	4th Quarter

PARTICIPANTS: Baltimore City

BUDGET: \$10,165

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.

Throughout FY 2012, local government staff will assist BMC staff and consultants in efforts to access both local data and expertise, including the private sector. Tasks will include meeting logistics, attendance and preparation/review of technical materials.

FY 2012 PERFORMANCE OBJECTIVES:

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

PRODUCTS/MILESTONES	SCHEDULE
Data and stakeholder identification	1 st and 2 nd Quarter
Identify data sets, locations, zoning as requested	Throughout Fiscal Year
Attend technical planning workshops	Throughout Fiscal Year

PARTICIPANTS: Baltimore City

BUDGET: \$5,000

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 *Imagine 2060* process, establishing a vision for the Baltimore region, feedback from a range of stakeholders led the BRTB to an effort where the current system would be documented, followed by short- and long-term opportunities to pursue within the region.

Throughout FY 2012, local government staff will assist BMC staff and consultants in efforts to access both local data and expertise, including the private sector. Tasks will include meeting logistics, attendance and preparation/review of technical materials.

FY 2012 PERFORMANCE OBJECTIVES:

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

PRODUCTS/MILESTONES	SCHEDULE
Data and stakeholder identification	1 st and 2 nd Quarter
Identify data sets, locations, zoning as requested	Throughout Fiscal Year
Attend technical planning workshops	Throughout Fiscal Year

PARTICIPANTS: Baltimore City

BUDGET: \$5,000

PROJECT: SUBAREA ANALYSIS**PART A: TRANSPORTATION OPERATIONS PLAN FOR SUSTAINABILITY**

PURPOSE: The purpose of this project is to develop a “Transportation Operations Plan for Sustainability,” which begins with the inventory of current environmental management practices and the establishment of a “Sustainability Scorecard.” Among the items to be inventoried and analyzed are the energy efficiency of current facilities and major equipment, materials used in routine operations which could be used to improve water runoff quality, and disposal of materials on the principle of “reduce, reuse and recycle.” From the benchmarking, inventory and analysis, DOT will:

- Creation of environmental standard operating procedures manuals and pocket reference cards for personnel at SHA maintenance shops. This included procedures for stockpiling materials in an environmentally responsible manner.
- Environmental awareness training for all employees.
- Implement an environmental management system to track activities and compliance data.

Appropriately, sustainability in transportation including green technologies, energy efficiency, noise air, and water pollution reduction are being mandated at Federal, State, and Local levels. While this practice is increasingly being integrated into the physical construction of roads and bridges, lagging behind is sustainable operations practices a public works facilities, in the operations of highway maintenance equipment, and in other “internal” operational practices. In Fall 2008, SHA and MDOT signed an agreement with the EPA to perform voluntary self-audits/self disclosures for environmental compliance issues associated with facilities and to dedicate funds for remedial action. This was EPA’s first agreement with a state transportation agency, setting the bar for others to follow. Local governments should be in a position to follow suit.

FY 2012 PERFORMANCE OBJECTIVES:

1. Inventory of current environmental management practices and the establishment of a “Sustainability Scorecard.”
2. Create environmental standard operating procedures manuals and pocket reference cards for personnel at DOT maintenance shops. This includes procedures for stockpiling materials in an environmentally responsible manner.
3. Create an environmental awareness training program for all employees.
4. Implement an environmental management system to track activities and compliance data.

PRODUCTS/MILESTONES	SCHEDULE
Inventory of current environmental management practices and the establishment of a "Sustainability Scorecard"	1st Quarter
Create environmental standard operating procedures manuals and pocket reference cards for personnel at DOT maintenance shops. This includes procedures for stockpiling materials in an environmentally responsible manner	2nd Quarter
Create an environmental awareness training program for all employees	3rd Quarter
Implement an environmental management system to track activities and compliance data	4th Quarter

PARTICIPANTS: Baltimore City DOT, Baltimore City Legal Department, Other agencies, and BMC.

BUDGET: \$135,000

PART B: COMMERCIAL VEHICLE ENFORCEMENT/MONITORING/ROUTING TECHNOLOGIES AND FREIGHT COMMUNITY IMPACT ASSESSMENT & MANAGEMENT PLAN

PURPOSE: The purpose of this project is to develop a comprehensive approach to assess and manage freight movement while balancing livable communities throughout the city and into adjacent counties. The project consists of two parts:

1. Research commercial vehicle enforcement, monitoring and routing technologies for application in and around the City’s freight distribution hubs. The project will identify existing technologies and evaluate their resource requirements and limitations for cost effective implementation in the Baltimore region; identify, emerging technologies that have the potential to reduce or overcome the resource requirements and limitations, develop a matrix for use in local jurisdiction planning for commercial vehicle enforcement and monitoring; and, research the legal obstacles for using technology for enforcement and monitoring and develop strategies for the removal of these obstacles. From this research, the City intends to develop a pilot project in Baltimore City to test commercial vehicle enforcement monitoring to evaluate the cost benefit and return on investment for regional implementation.

2. Establish baseline measurements of air quality, noise, vibration, light pollution, etc., in communities adjacent to Port facilities. From this baseline, a policy scan of best management practices (BMP’s) can be applied to manage and mitigate priority impacts of stakeholders.

Freight movement in the Baltimore region is expected to increase exponentially over the next two decades (as measured in tons of cargo per year and number of truck transports per year). The Port of Baltimore is a major entry point for international freight into the east coast; this will be even more the case beginning in 2014 when the widened Panama Canal opens to super-freighters. Baltimore City is a 300 year-old city built on commerce and transportation and most individuals living in the City understand to some extent that they live in or near centers of freight activity; however, with the increase in freight movement, communities are increasingly looking to manage and mitigate the adverse impacts of freight movement on quality of life. Assessing and managing the impacts of freight projects will be

particularly important to City neighborhoods (and to a lesser extent, Baltimore and Anne Arundel communities) as the first mile of every truck trip to and from the Port of Baltimore occurs on City streets.

FY 2012 PERFORMANCE OBJECTIVES:

1. Identify existing technologies and evaluate their resource requirements and limitations for cost effective implementation
2. Identify emerging technologies and evaluate their resource requirements and limitations for cost effective implementation
3. Develop a matrix for use in local jurisdiction planning for commercial vehicle enforcement and monitoring.
4. Develop pilot project in Baltimore City to test commercial vehicle enforcement monitoring to evaluate the cost benefit and return on investment for regional implementation.
5. Conduct a policy scan for air quality, noise and vibration in major freight centers and jurisdictions.
6. Perform a technical air, noise, and vibration analysis in the SE portion of Baltimore City related to Port activities.
7. Report out on targeted stakeholder meetings regarding quality of life in freight centric communities, and perceptions of air, noise, and vibration issues related to freight.
8. Create a final plan with recommendations for community enhancements resulting from major freight activities and corridors.

PRODUCTS/MILESTONES	SCHEDULE
Identify existing and emerging technologies for commercial vehicle enforcement and monitoring. Conduct a policy scan for air quality, noise and vibration in major freight centers and jurisdictions.	1 st Quarter
Develop a matrix for use in local jurisdiction planning for commercial vehicle enforcement and monitoring. Perform a technical air, noise, and vibration analysis in the SE portion of Baltimore City related to Port activities.	2 nd Quarter
Develop pilot project in Baltimore City to test commercial vehicle enforcement monitoring to evaluate the cost benefit and return on investment. Report out on targeted stakeholder meetings regarding quality of life in freight centric communities, and perceptions of air, noise, and vibration issues related to freight.	2 nd & 3 rd Quarter
Final Report and recommendations	4 th Quarter

PARTICIPANTS: Baltimore City DOT, BMC, Maryland Port Administration, various City and State regulatory agencies, MDOT Office of Freight & Logistics, Consultant

BUDGET: \$250,000

PART C: ECONOMIC EMPOWERMENT IN TRANSPORTATION PROJECTS

PURPOSE: The purpose of this project is to research and benchmark best practices (BMP's) which increase access to jobs for residents of distressed communities through the design and construction of transportation projects. Benchmarking will include researching other jurisdictions that have successfully done overcome the barriers described above. In addition, project staff will interview and meet with contractors, contract administrators, workforce development officials and others to identify strategies which can be used to overcome the barriers. Create a toolkit for planning transportation projects that includes policy, procurement, incentives, encouragement, outreach, and measurement. Apply the toolkit to a pilot project to test the legal, theoretical, and practical application of the local hiring toolkit and measure the outcome of local hiring within the design and construction of the pilot project.

Transportation is at the very center of opportunity for jobs, not just by the mobility enabled as a result of new transportation projects but beginning with the very design and construction of those projects. There are several barriers to increasing economic opportunity including the lack of a clear career pipeline for skilled and semi-skilled positions and federally-imposed limitations on local hiring requirements. Recent experiences in Missouri, Minneapolis and elsewhere have demonstrated that these barriers can be reduced and that transportation projects can become economic empowerment opportunities in distressed communities. This approach is consistent with Title VI of the Civil Rights Act.

FY 2012 PERFORMANCE OBJECTIVES:

1. Benchmark existing local jurisdiction efforts in promoting training and hiring residents of distressed communities for design and construction of transportation projects.
2. Create a toolkit for planning transportation projects that includes policy, procurement, incentives, encouragement, outreach, and measurement.
3. Apply the toolkit to a pilot project to test the legal, theoretical, and practical application of the local hiring toolkit and measure the outcome of local hiring within the design and construction of the pilot project.

PRODUCTS/MILESTONES	SCHEDULE
Benchmark existing local jurisdiction efforts	1 st Quarter
Create a toolkit for planning transportation projects	2 nd Quarter
Apply the toolkit to a pilot project to test the legal, theoretical, and practical application	3 rd Quarter
Final Report	4 th Quarter

PARTICIPANTS: Baltimore City DOT, Baltimore City Legal Department, Other agencies, and BMC

BUDGET: \$100,000

PART D: RECONNECTING COMMUNITIES BISECTED BY 1950s-ERA HIGHWAY PLANNING & DESIGN

PURPOSE: In FY 2010, the Baltimore City Department of Transportation completed feasibility studies for two projects to reconnect communities (Harlem Park and Poppleton by I-70) separated by freeway construction of the 1960s/1970s. Additional connectivity gaps exist where interstates and local highways bisect communities, undermining community and economic development opportunities, and reducing safe pedestrian connectivity within and between communities.

This project will analyze connectivity concerns at the following locations: Central Baltimore near Penn Station (Charles Street over Jones Falls Expressway), I-83 interchange at Cold Spring Lane, MD 295 through Westport, and I-895 on Eastern Ave. Pedestrian connectivity improvements, bridge “flanking” options to allow for additional development, and transit access will be considered. The city intends to select one of these projects for future air rights development.

FY 2012 PERFORMANCE OBJECTIVES:

1. Confirm and scope candidates for study including:
 - a. Jones Falls Expressway at Charles Street
 - b. Interstate ramps at the I-83 interchange at Cold Spring Lane adjacent to light rail station
 - c. MD 295 through the Westport community
 - d. Viaduct over I-895 at Eastern Ave
2. Conduct legal analysis of air rights issues.
3. Conduct early project development analysis including structural engineering, geometric and traffic control issues, evaluate development potential, freight drop-off and parking issues, etc.

PRODUCTS/MILESTONES	SCHEDULE
Confirm and scope candidates for study	1 st Quarter
Conduct legal analysis of air rights issues	2 nd Quarter
Conduct early project development analysis	3 rd Quarter
Final Report and Recommendations	4 th Quarter

PARTICIPANTS: Baltimore City DOT, Planning, Office of Neighborhoods, Baltimore Development Corporation, Community Groups, Consultant, SHA/FHWA

BUDGET: \$175,000

PART E: BICYCLE MASTER PLAN DEVELOPMENT ANALYSIS FIVE YEAR MASTER PLAN REVIEW AND UPDATE

PURPOSE: The Bicycle Master Plan was developed in 2005 and after 5 years of planning initiatives, it is time to review the plan to see what gaps exist, additional planning is required, lessons learned, and where Baltimore City goes from here.

This project will analyze the City's Bicycle Master Plan in order to evaluate an integrated network of bicycle lanes which encourages bicycling as a viable transportation and commuter option; enhance efforts to collect timely data on and analyze bicycle traffic, develop and implement marketing efforts to promote safe bicycling, and develop a toolkit for complete streets principals.

FY 2012 PERFORMANCE OBJECTIVES:

1. Track data on and analyze bicycle traffic on existing bike lanes and transportation corridors;
2. Develop marketing activities to promote commuter bicycling
3. Develop traffic calming and pedestrian safety measures to enhance bicycling safety
4. 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 5 year review	1 ST Quarter
Develop partnerships for bicycle amenities and locations for bicycle network enhancement	Throughout Fiscal Year
Evaluate trail feasibility and identify stakeholders	Throughout Fiscal Year
Install bicycle and pedestrian count technologies at appropriate locations to evaluate planning efforts	Throughout Fiscal Year
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 toolkit for complete streets principals	3 rd Quarter

PARTICIPANTS: Baltimore City DOT, Planning, Recreation and Parks, Police, Mayor's Bicycle Advisory Committee

BUDGET: \$112,500

**UNIFIED PLANNING WORK PROGRAM
FOR TRANSPORTATION PLANNING
FY 2012 PROJECTS AND BUDGETS
FOR
BALTIMORE COUNTY
(\$229,430)**

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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 2012 PERFORMANCE OBJECTIVES:

1. Manage Baltimore County’s local and regional involvement in the transportation planning process.
2. Prepare quarterly reports and invoices.
3. Prepare the FY 2013 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 FY 2013 UPWP	Throughout Fiscal Year
Budget amendments for FY 2013	As Necessary
Baltimore County FY 2013 UPWP submittals	2 nd Quarter
Completion of formal grant acceptance process for FY 2013	4 th Quarter

PARTICIPANTS: Baltimore County

BUDGET: \$7,620

PROJECT: LEGISLATIVE COORDINATION AND ANALYSIS

PURPOSE: To review, analyze and respond to proposed federal or state legislation or changes in existing legislation related to transportation or air quality issues. The intent is to provide decision makers with background information and impacts that the proposal could have on the county, region and state.

FY 2012 PERFORMANCE OBJECTIVES:

1. Provide timely review and analysis of proposed legislation and changes to existing legislation related to transportation.
2. Prepare briefing memoranda for decision makers on the potential impacts of the proposed legislation.

PRODUCTS /MILESTONES	SCHEDULE
Provide timely analysis and policy implications on proposed state and federal legislation	Throughout Fiscal Year

PARTICIPANTS: 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 2007 Baltimore Region Long Range Transportation Plan. Local planning staffs will continue the development of these data during FY 2012 as part of Round 8 Cooperative Forecasts, 2000 – 2035. They will report on their progress periodically to the CFG, the Technical Committee, and the BRTB.

During FY 2012, local planning staffs will work with BMC staff and the U.S. Census Bureau to review proposed statistical areas and assist in the development of 2012 transportation analyses zones.

Additionally, during FY 2012, local planning staffs will conduct quality control reviews and updates on the 2010 ES-202 and submit these changes to BMC staff to complete the development of the 2010 Master Establishment File (MEF).

FY 2012 PERFORMANCE OBJECTIVES:

1. Prepare updated socio-economic and demographic jurisdictional forecasts at the level of transportation analysis zones for 2000 – 2035.
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.
4. Assist BMC staff in the development of 2012 transportation analysis zones and their relationship with 2012 census statistical geography.
5. Conduct quality control review on the 2010 ES-202 file and return results to BMC staff.

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
Develop new 2012 transportation analysis zones based on census statistical geography	1 st Quarter
Conduct quality control review and update to 2010 ES-202 and submit results to BMC staff for inclusion in the 2010 MEF	4 th Quarter

PARTICIPANTS: Baltimore County

BUDGET: \$35,000

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. Baltimore County will examine opportunities to incorporate bicycle and pedestrian uses along county roads, greenways and other non-motorized corridors. Promotional and educational efforts will also be used to increase awareness for bicycle and pedestrian opportunities.

FY 2012 PERFORMANCE OBJECTIVES:

1. Assist in development of regional work plan for analysis of regional bicycle network.
2. Support Bicycle/Pedestrian Advisory Group in reviewing regional opportunities.
3. Support activities related to enhanced greenways planning, along with opportunities to include pedestrian and bicycle activities.
4. Work with local bicycle groups to encourage non-motorized transportation alternatives.

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

PARTICIPANTS: Baltimore County

BUDGET: \$3,810

PROJECT: TRANSPORTATION IMPROVEMENT PROGRAM_

PURPOSE: This project develops Baltimore County’s component of the annual Transportation Improvement Program (TIP), revisions to Baltimore 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 2012 PERFORMANCE OBJECTIVES:

1. Develop Baltimore County’s annual submission to the TIP including assessment of all Federally-funded projects.
2. Review and comment on the Draft 2013-2016 TIP.
3. Revise and correct TIP submission 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
Submit Local TIP component of 2013-2016 document	3 rd Quarter
Revise Baltimore County local TIP component per comments and review draft TIP document	3 rd Quarter
Final revisions to 2013-2016 TIP	4 th Quarter

PARTICIPANTS: Baltimore County

BUDGET: \$3,000

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.

Throughout FY 2012, local government staff will assist BMC staff and consultants in efforts to access both local data and expertise, including the private sector. Tasks will include meeting logistics, attendance and preparation/review of technical materials.

FY 2012 PERFORMANCE OBJECTIVES:

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

PRODUCTS/MILESTONES	SCHEDULE
Data and stakeholder identification	1 st and 2 nd Quarter
Identify data sets, locations, zoning as requested	Throughout Fiscal Year
Attend technical planning workshops	Throughout Fiscal Year

PARTICIPANTS: Baltimore County

BUDGET: \$5,000

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 *Imagine 2060* process, establishing a vision for the Baltimore region, feedback from a range of stakeholders led the BRTB to an effort where the current system would be documented, followed by short- and long-term opportunities to pursue within the region.

Throughout FY 2012, local government staff will assist BMC staff and consultants in efforts to access both local data and expertise, including the private sector. Tasks will include meeting logistics, attendance and preparation/review of technical materials.

FY 2012 PERFORMANCE OBJECTIVES:

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

PRODUCTS/MILESTONES	SCHEDULE
Data and stakeholder identification	1 st and 2 nd Quarter
Identify data sets, locations, zoning as requested	Throughout Fiscal Year
Attend technical planning workshops	Throughout Fiscal Year

PARTICIPANTS: Baltimore County

BUDGET: \$5,000

PROJECT: SUBAREA ANALYSIS: BALTIMORE COUNTY RESPONSIBILITIES

PART A: MODEL ANALYSIS

PURPOSE: Plan refinement studies provide for the development of highway and transit systems usage projections and needs analyses, ultimately leading to updates of corridor and local area multi-modal transportation plans. Support of sub-area transportation systems analysis efforts is a critical first step toward integration of the regionally significant elements of local transportation plans within a regional framework.

Local jurisdictions of the region are encouraged to perform sub-area transportation systems analyses using state of-the-art planning models. These efforts must be carried out in coordination with BMC model refinement activities. Microcomputer-based planning tools are particularly effective in sensitivity testing of alternative growth and transportation systems scenarios. The results of local sub-area refinement studies will be used to further calibrate the regional model development efforts and identify refinements needing local area improvements. The Baltimore County Subarea Analysis effort for FY 2012 will consist of two major initiatives: (1) conduct County-wide assessments of the No-Build Alternatives for key potential Master Plan improvements e.g., the Dolfield Boulevard/I-795 Interchange, Walther Boulevard/Gunview, Owings Mills Boulevard South, etc. and, (2) apply various TP+ reporting modules to enhance graphical and data analysis.

FY 2010 PERFORMANCE OBJECTIVES:

1. Conduct No-Build/Master Plan assessments study using TP+.
2. Enhance data analysis using various TP+ reporting modules.

PRODUCTS/MILESTONES	SCHEDULE
Electronic documentation of the various sensitivity runs; submit to BMC for review and comment	Throughout Fiscal Year
Memorandum documenting study results	4 TH Quarter

PARTICIPANTS: Baltimore County

BUDGET: \$135,000

PART B: TRIP GENERATION STUDY

PURPOSE: This task involves conducting a study to assess if the generalized trip generation rates for certain land uses in the ITE manual are representative of actual trip generation rates in Baltimore County.

The County has previously done a pilot study of residential trip generation rates in Baltimore County and determined that in certain instances the trip rates are significantly different from ITE rates. This study will identify communities that have limited egress and conduct cordon hose counts.

FY 2012 PERFORMANCE OBJECTIVES:

1. Conduct traffic counts.
2. Analyze data and produce final report.

PRODUCTS/MILESTONES	SCHEDULE
Conduct traffic counts	Throughout Fiscal Year
Analyze data and produce final report	4 th Quarter

PARTICIPANTS: Baltimore County

BUDGET: \$25,000

**UNIFIED PLANNING WORK PROGRAM
FOR TRANSPORTATION PLANNING
FY 2012 PROJECTS AND BUDGETS
FOR
CARROLL COUNTY
(\$70,815)**

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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 2012 PERFORMANCE OBJECTIVES:

1. Manage Carroll County’s local and regional involvement in the transportation planning process.
2. Prepare quarterly reports and invoices.
3. Prepare the FY 2013 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 FY 2013 UPWP	Throughout Fiscal Year
Budget amendments for FY 2013	As Necessary
Carroll County FY 2013 UPWP submittals	2 nd Quarter
Completion of formal grant acceptance process for FY 2013	4 th Quarter

PARTICIPANTS: Carroll County

BUDGET: \$7,620

PROJECT: LEGISLATIVE COORDINATION AND ANALYSIS

PURPOSE: To review, analyze and respond to proposed federal or state legislation or changes in existing legislation related to transportation or air quality issues. The intent is to provide decision makers with background information and impacts that the proposal could have on the county, region and state.

FY 2012 PERFORMANCE OBJECTIVES:

1. Provide timely review and analysis of proposed legislation and changes to existing legislation related to transportation.
2. Prepare briefing memoranda for decision makers on the potential impacts of the proposed legislation.

PRODUCTS /MILESTONES	SCHEDULE
Provide timely analysis and policy implications on proposed state and federal legislation	Throughout Fiscal Year

PARTICIPANTS: 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 2007 Baltimore Region Long Range Transportation Plan. Local planning staffs will continue the development of these data during FY 2012 as part of Round 8 Cooperative Forecasts, 2000 – 2035. They will report on their progress periodically to the CFG, the Technical Committee, and the BRTB.

During FY 2012, local planning staffs will work with BMC staff and the U.S. Census Bureau to review proposed statistical areas and assist in the development of 2012 transportation analyses zones.

Additionally, during FY 2012, local planning staffs will conduct quality control reviews and updates on the 2010 ES-202 and submit these changes to BMC staff to complete the development of the 2010 Master Establishment File (MEF).

FY 2012 PERFORMANCE OBJECTIVES:

1. Prepare updated socio-economic and demographic jurisdictional forecasts at the level of transportation analysis zones for 2000 – 2035.
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.
4. Assist BMC staff in the development of 2012 transportation analysis zones and their relationship with 2012 census statistical geography.
5. Conduct quality control review on the 2010 ES-202 file and return results to BMC staff.

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
Develop new 2012 transportation analysis zones based on census statistical geography	1 st Quarter
Conduct quality control review and update to 2010 ES-202 and submit results to BMC staff for inclusion in the 2010 MEF	4 th Quarter

PARTICIPANTS: Carroll County

BUDGET: \$38,115

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. Carroll County will examine opportunities to incorporate bicycle and pedestrian uses along county roads, greenways and other non-motorized corridors. Promotional and educational efforts will also be used to increase awareness for bicycle and pedestrian opportunities.

FY 2012 PERFORMANCE OBJECTIVES:

1. Assist in development of regional work plan for analysis of regional bicycle network.
2. Support Bicycle/Pedestrian Advisory Group in reviewing regional opportunities.
3. Support activities related to enhanced greenways planning, along with opportunities to include pedestrian and bicycle activities.
4. Work with local bicycle groups to encourage non-motorized transportation alternatives.

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

PARTICIPANTS: Carroll County

BUDGET: \$3,810

PROJECT: TRANSPORTATION IMPROVEMENT PROGRAM

PURPOSE: This project develops Carroll County’s component of the annual Transportation Improvement Program (TIP), revisions to Carroll 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 2012 PERFORMANCE OBJECTIVES:

1. Develop Carroll County’s annual submission to the TIP including assessment of all federally-funded projects.
2. Review and comment on the Draft 2013-2016TIP.
3. Revise and correct TIP submission 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
Submit local TIP component of 2013-2016 document	3rd Quarter
Revise Carroll County local TIP component per comments and review draft TIP document	3rd Quarter
Final revisions to 2013-2016 TIP	4th Quarter

PARTICIPANTS: Carroll County

BUDGET: \$1,270

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.

Throughout FY 2012, local government staff will assist BMC staff and consultants in efforts to access both local data and expertise, including the private sector. Tasks will include meeting logistics, attendance and preparation/review of technical materials.

FY 2012 PERFORMANCE OBJECTIVES:

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

PRODUCTS/MILESTONES	SCHEDULE
Data and stakeholder identification	1 st and 2 nd Quarter
Identify data sets, locations, zoning as requested	Throughout Fiscal Year
Attend technical planning workshops	Throughout Fiscal Year

PARTICIPANTS: Carroll County

BUDGET: \$5,000

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 *Imagine 2060* process, establishing a vision for the Baltimore region, feedback from a range of stakeholders led the BRTB to an effort where the current system would be documented, followed by short- and long-term opportunities to pursue within the region.

Throughout FY 2012, local government staff will assist BMC staff and consultants in efforts to access both local data and expertise, including the private sector. Tasks will include meeting logistics, attendance and preparation/review of technical materials.

FY 2012 PERFORMANCE OBJECTIVES:

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

PRODUCTS/MILESTONES	SCHEDULE
Data and stakeholder identification	1 st and 2 nd Quarter
Identify data sets, locations, zoning as requested	Throughout Fiscal Year
Attend technical planning workshops	Throughout Fiscal Year

PARTICIPANTS: Carroll County

BUDGET: \$5,000

**UNIFIED PLANNING WORK PROGRAM
FOR TRANSPORTATION PLANNING**

FY 2012 PROJECTS AND BUDGETS

FOR

HARFORD COUNTY

(\$412,740)

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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 2012 PERFORMANCE OBJECTIVES:

1. Manage Harford County’s local and regional involvement in the transportation planning process.
2. Prepare quarterly reports and invoices.
3. Prepare the FY 2013 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 FY 2013 UPWP	Throughout Fiscal Year
Budget amendments for FY 2013	As Necessary
Harford County FY 2013 UPWP submittals	2 nd Quarter
Completion of formal grant acceptance process for FY 2013	4 th Quarter

PARTICIPANTS: Harford County

BUDGET: \$7,620

PROJECT: LEGISLATIVE COORDINATION AND ANALYSIS

PURPOSE: To review, analyze and respond to proposed federal or state legislation or changes in existing legislation related to transportation or air quality issues. The intent is to provide decision makers with background information and impacts that the proposal could have on the county, region and state.

FY 2012 PERFORMANCE OBJECTIVES:

- 1. Provide timely review and analysis of proposed legislation and changes to existing legislation related to transportation.
- 2. Prepare briefing memoranda for decision makers on the potential impacts of the proposed legislation.

PRODUCTS /MILESTONES	SCHEDULE
Provide timely analysis and policy implications on proposed state and federal legislation	Throughout Fiscal Year

PARTICIPANTS: 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 2007 Baltimore Region Long Range Transportation Plan. Local planning staffs will continue the development of these data during FY 2012 as part of Round 8 Cooperative Forecasts, 2000 – 2035. They will report on their progress periodically to the CFG, the Technical Committee, and the BRTB.

During FY 2012, local planning staffs will work with BMC staff and the U.S. Census Bureau to review proposed statistical areas and assist in the development of 2012 transportation analyses zones.

Additionally, during FY 2012, local planning staffs will conduct quality control reviews and updates on the 2010 ES-202 and submit these changes to BMC staff to complete the development of the 2010 Master Establishment File (MEF).

FY 2012 PERFORMANCE OBJECTIVES:

1. Prepare updated socio-economic and demographic jurisdictional forecasts at the level of transportation analysis zones for 2000 – 2035.
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.
4. Assist BMC staff in the development of 2012 transportation analysis zones and their relationship with 2012 census statistical geography.
5. Conduct quality control review on the 2010 ES-202 file and return results to BMC staff.

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
Develop new 2012 transportation analysis zones based on census statistical geography	1 st Quarter
Conduct quality control review and update to 2010 ES-202 and submit results to BMC staff for inclusion in the 2010 MEF	4 th Quarter

PARTICIPANTS: Harford County

BUDGET: \$76,230

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. Harford County will examine opportunities to incorporate bicycle and pedestrian uses along county roads, greenways and other non-motorized corridors. Promotional and educational efforts will also be used to increase awareness for bicycle and pedestrian opportunities.

FY 2012 PERFORMANCE OBJECTIVES:

1. Assist in development of regional work plan for analysis of regional bicycle network.
2. Support Bicycle/Pedestrian Advisory Group in reviewing regional opportunities.
3. Support activities related to enhanced greenways planning, along with opportunities to include pedestrian and bicycle activities.
4. Work with local bicycle groups to encourage non-motorized transportation alternatives.

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

PARTICIPANTS: Harford County

BUDGET: \$3,810

PROJECT: TRANSPORTATION IMPROVEMENT PROGRAM

PURPOSE: This project develops Harford County’s component of the annual Transportation Improvement Program (TIP), revisions to Harford 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 2012 PERFORMANCE OBJECTIVES:

1. Develop Harford County’s annual submission to the TIP including assessment of all federally-funded projects.
2. Review and comment on the Draft 2013-2016 TIP.
3. Revise and correct TIP submission 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
Submit local TIP component of 2013-2016 document	3rd Quarter
Revise Harford County local TIP component per comments and review draft TIP document	3rd Quarter
Final revisions to 2013-2016 TIP	4th Quarter

PARTICIPANTS: Harford County

BUDGET: \$5,080

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.

Throughout FY 2012, local government staff will assist BMC staff and consultants in efforts to access both local data and expertise, including the private sector. Tasks will include meeting logistics, attendance and preparation/review of technical materials.

FY 2012 PERFORMANCE OBJECTIVES:

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

PRODUCTS/MILESTONES	SCHEDULE
Data and stakeholder identification	1 st and 2 nd Quarter
Identify data sets, locations, zoning as requested	Throughout Fiscal Year
Attend technical planning workshops	Throughout Fiscal Year

PARTICIPANTS: Harford County

BUDGET: \$5,000

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 *Imagine 2060* process, establishing a vision for the Baltimore region, feedback from a range of stakeholders led the BRTB to an effort where the current system would be documented, followed by short- and long-term opportunities to pursue within the region.

Throughout FY 2012, local government staff will assist BMC staff and consultants in efforts to access both local data and expertise, including the private sector. Tasks will include meeting logistics, attendance and preparation/review of technical materials.

FY 2012 PERFORMANCE OBJECTIVES:

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

PRODUCTS/MILESTONES	SCHEDULE
Data and stakeholder identification	1 st and 2 nd Quarter
Identify data sets, locations, zoning as requested	Throughout Fiscal Year
Attend technical planning workshops	Throughout Fiscal Year

PARTICIPANTS: Harford County

BUDGET: \$5,000

PROJECT: SUBAREA ANALYSIS

PART A: MD 22 CORRIDOR STUDY

PURPOSE: Perform traffic and safety analysis on MD 22 (Churchville Road/Aberdeen Thruway) from MD 543 (Fountain Green Road to the Aberdeen Proving Ground), including impacts along the corridor associated with the Base Realignment and Closure (BRAC) process.

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The study will include: an existing conditions analysis, a no build analysis, a future conditions analysis based on several scenarios designated to address improved vehicular mobility and safety, improved transit, bicycle and pedestrian facilities along the corridor including the ability and benefits of providing dedicated bus lanes, dedicated bike lanes and sidewalks. In the vicinity of the Harford Community College and the HEAT Center the study will assess Complete Streets components. The study will include a look at providing alternate access to existing communities.

FY 2012 PERFORMANCE OBJECTIVES:

1. Provide a comprehensive traffic operations and safety analysis for the MD 22 corridor that builds on the 2008 MDOT Traffic and Intersection Improvement Studies for BRAC and the 2009 SHA MD 22 Study around Harford Community College.
2. Provide the groundwork for transportation systems management and operation improvements and geometric improvements to transportation facilities along the corridor and vicinity including possible transit upgrades, bike lanes, pavement markings, traffic controls, sidewalks, ADA ramps, lighting and other streetscaping and Complete Streets elements.

PRODUCTS/MILESTONES	SCHEDULE
Existing conditions analysis and simulation	1 st Quarter
Future conditions analysis and simulation	2 nd & 3 rd Quarters
Final report with recommendations	4 th Quarter

PARTICIPANTS: Harford County, BMC, MDOT, Consultant

BUDGET: \$300,000

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**UNIFIED PLANNING WORK PROGRAM
FOR TRANSPORTATION PLANNING
FY 2012 PROJECTS AND BUDGETS
FOR
HOWARD COUNTY**

(\$445,440)

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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 2012 PERFORMANCE OBJECTIVES:

1. Manage Howard County’s local and regional involvement in the transportation planning process.
2. Prepare quarterly reports and invoices.
3. Prepare the FY 2013 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 FY 2013 UPWP	Throughout Fiscal Year
Budget amendments for FY 2013	As Necessary
Howard County FY 2013 UPWP submittals	2 nd Quarter
Completion of formal grant acceptance process for FY 2013	4 th Quarter

PARTICIPANTS: Howard County

BUDGET: \$7,620

PROJECT: LEGISLATIVE COORDINATION AND ANALYSIS

PURPOSE: To review, analyze and respond to proposed federal or state legislation or changes in existing legislation related to transportation or air quality issues. The intent is to provide decision makers with background information and impacts that the proposal could have on the county, region and state.

FY 2012 PERFORMANCE OBJECTIVES:

1. Provide timely review and analysis of proposed legislation and changes to existing legislation related to transportation.
2. Prepare briefing memoranda for decision makers on the potential impacts of the proposed legislation.

PRODUCTS /MILESTONES	SCHEDULE
Provide timely analysis and policy implications on proposed state and federal legislation	Throughout Fiscal Year

PARTICIPANTS: 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 2007 Baltimore Region Long Range Transportation Plan. Local planning staffs will continue the development of these data during FY 2012 as part of Round 8 Cooperative Forecasts, 2000 – 2035. They will report on their progress periodically to the CFG, the Technical Committee, and the BRTB.

During FY 2012, local planning staffs will work with BMC staff and the U.S. Census Bureau to review proposed statistical areas and assist in the development of 2012 transportation analyses zones.

Additionally, during FY 2012, local planning staffs will conduct quality control reviews and updates on the 2010 ES-202 and submit these changes to BMC staff to complete the development of the 2010 Master Establishment File (MEF).

FY 2012 PERFORMANCE OBJECTIVES:

1. Prepare updated socio-economic and demographic jurisdictional forecasts at the level of transportation analysis zones for 2000 – 2035.
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.
4. Assist BMC staff in the development of 2012 transportation analysis zones and their relationship with 2012 census statistical geography.
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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
Develop new 2012 transportation analysis zones based on census statistical geography	1 st Quarter
Conduct quality control review and update to 2010 ES-202 and submit results to BMC staff for inclusion in the 2010 MEF	4 th Quarter

PARTICIPANTS: Howard County

BUDGET: \$76,230

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. Howard County will examine opportunities to incorporate bicycle and pedestrian uses along county roads, greenways and other non-motorized corridors. Promotional and educational efforts will also be used to increase awareness for bicycle and pedestrian opportunities.

FY 2012 PERFORMANCE OBJECTIVES:

1. Assist in development of regional work plan for analysis of regional bicycle network.
2. Support Bicycle/Pedestrian Advisory Group in reviewing regional opportunities.
3. Support activities related to enhanced greenways planning, along with opportunities to include pedestrian and bicycle activities.
4. Work with local bicycle groups to encourage non-motorized transportation alternatives.

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

PARTICIPANTS: Howard County

BUDGET: \$3,810

PROJECT: TRANSPORTATION IMPROVEMENT PROGRAM

PURPOSE: This project develops Howard County’s component of the annual Transportation Improvement Program (TIP), revisions to Howard 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 2012 PERFORMANCE OBJECTIVES:

1. Develop Howard County’s annual submission to the TIP including assessment of all federally-funded projects.
2. Review and comment on the Draft 2013-2016 TIP.
3. Revise and correct TIP submission 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
Submit local TIP component of 2013-2016 document	3rd Quarter
Revise Howard County local TIP component per comments and review draft TIP document	3rd Quarter
Final revisions to 2013-2016 TIP	4th Quarter

PARTICIPANTS: Howard County

BUDGET: 5,080

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.

Throughout FY 2012, local government staff will assist BMC staff and consultants in efforts to access both local data and expertise, including the private sector. Tasks will include meeting logistics, attendance and preparation/review of technical materials.

FY 2012 PERFORMANCE OBJECTIVES:

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

PRODUCTS/MILESTONES	SCHEDULE
Data and stakeholder identification	1 st and 2 nd Quarter
Identify data sets, locations, zoning as requested	Throughout Fiscal Year
Attend technical planning workshops	Throughout Fiscal Year

PARTICIPANTS: Howard County

BUDGET: \$5,000

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 *Imagine 2060* process, establishing a vision for the Baltimore region, feedback from a range of stakeholders led the BRTB to an effort where the current system would be documented, followed by short- and long-term opportunities to pursue within the region.

Throughout FY 2012, local government staff will assist BMC staff and consultants in efforts to access both local data and expertise, including the private sector. Tasks will include meeting logistics, attendance and preparation/review of technical materials.

FY 2012 PERFORMANCE OBJECTIVES:

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

PRODUCTS/MILESTONES	SCHEDULE
Data and stakeholder identification	1 st and 2 nd Quarter
Identify data sets, locations, zoning as requested	Throughout Fiscal Year
Attend technical planning workshops	Throughout Fiscal Year

PARTICIPANTS: Howard County

BUDGET: \$5,000

PROJECT: SUBAREA ANALYSIS

PART A: FOCUSED HIGHWAY AND TRANSIT FORECASTS

PURPOSE: Based on the 2035 Baltimore Regional Transportation Plan assumptions, this is a multiyear task to develop baseline 2035 traffic forecasts for Howard County. The forecast results will provide a baseline of traffic forecasts and investigate the viability of various transit alternatives for the County’s General Plan update given refinement of land use assumptions in response to growth at Fort Meade, and the County’s evolution toward more complex mixed use development patterns. Integration with Anne Arundel County transportation model detail and corridor analysis will be explored to provide a more comprehensive regional analysis. Adjustments to the regional network, the regional zone structure and trip generation inputs will be pursued as needed to develop reliable transit highway simulations and facility level refinements. Modeling tasks will be done primarily by consultants using TP+ software, with advice and assistance from BMC as needed.

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- Validation of the BMC Model in Howard County will include emphasis on detailing the traffic simulation network and traffic analysis zones in Columbia Town Center, the MD 32 BRAC corridor from east of US 29 to the BW Parkway, the US 1 corridor in Howard County, and the MD 216 corridor and will provide additional testing and understanding of the performance of the revised BMC model chain.
- Modal split analysis for the MARC system and its impact on local and regional travel will be investigated.
- Methods and model codes used in testing the BMC model will be shared with all members of the Technical Committee in an effort to improve regional modeling efforts.
- Subarea analysis of individual corridors will provide refined facility level traffic forecasts that will provide base data for the regional Congestion Management Process (CMP).

FY 2012 PERFORMANCE OBJECTIVES:

1. Refine BMC validation for the Howard County validation transportation network with adjustments for traffic analysis zone splits, trip generation inputs, traffic speed, capacity and link detail as needed.
2. Based on refinements to the BMC validation as applied to the year 2035 regional network and the latest Cooperative Forecasts, work cooperatively with BMC to develop year 2035 traffic zone structure, trip generation inputs and a 2035 highway network. Consultants will work independently to develop trip generation related model inputs with BMC review.
3. Using a refined 2035 Howard County highway network and inputs, run regional model to produce 2035 simulated traffic in Howard County.
4. Develop a series of screenline refinements for potential transit concepts, arterial and major collector highway facilities and selected minor collector roads.

PRODUCTS/MILESTONES	SCHEDULE
Develop detailed validation and documentation for Howard County including network detailing for Columbia Downtown, the MD 32 BRAC corridor, and the MD 216 corridor	1 st & 2 nd Quarters
A year 2035 transportation network and related trip generation inputs based on refinements to the Howard County network and alternative land use including potential transit alternatives	2 nd & 3 rd Quarters
Year 2035 unrefined simulated traffic based on the refined BMC 2020 transportation network and revised 2008 transportation model and including the impact of MARC model split and cost benefit	3 rd Quarter
Refine traffic forecasts and document refinement process	4 th Quarter

PARTICIPANTS: Howard County, Consultants

BUDGET: \$113,000

PART B: TRANSIT PLANNING

PURPOSE: This project evaluates the Howard Transit system service performance including route and frequency of service modifications. This initiative will allow Howard County to apply transit performance guidelines to identify cost and performance effectiveness for fixed route and paratransit operations. Route analysis will also be applied to further refine Howard Transit coordination with CMRT and the Maryland Transit Administration’s routes and schedules.

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1. Application of MTA transit standards will assist in testing the reasonableness of the standards for the Baltimore region.
2. Analysis of Howard Transit routes will emphasize regional connections with other transportation systems and modes including MTA, MARC Light Rail, CMRT and the BWI Airport.
3. Refinement of routes and schedules will strive to achieve better regional coordination with Maryland Transit Administration’s routes and schedules.

FY 2012 PERFORMANCE OBJECTIVES:

1. Apply transit performance tools Howard Transit routes and schedules.
2. Evaluate all Howard Transit bus routes relative to state efficiency measures.
3. Recommend changes to Howard Transit routes and schedules as needed to meet transit performance standards and increase system efficiency and as feasible based on public feedback and funding constraints.

PRODUCTS/MILESTONES	SCHEDULE
Assemble FY 2011/2012 performance data	1 st Quarter
Produce graphics and charts of the application of efficiency measures to Howard Transit	2 nd & 3 rd Quarters
Prepare revised route maps and schedules as needed	4 th Quarter

PARTICIPANTS: Howard County

BUDGET: \$10,700

PART C: BICYCLE PLAN

PURPOSE: To enhance and augment the Baltimore Regional Transportation Plan through the development of a Regionally-consistent Countywide Bike Plan focused on increasing local and regional bicycle mobility, accessibility and transportation efficiency. The Howard County Bike Plan will incorporate BRTB approved planning goals and strategies, and will be consistent with State of Maryland “Green Print” and “Growth Print” concepts to insure that regional as well as local bicycling policies and projects are incorporated in the Plan. Year 2012 activities will include Bicycle Level of Compatibility (BLOC) analysis, identification of road segments and pathways consistent with a cycling network, identification and prioritization of roads and other facilities where County bike projects are needed, and identification of policies and programs to support bicycle transportation. Connectivity with Regional Partners’ proposals as well as Major Activity Centers will be a priority. Design elements will incorporate as applicable, signal design, bicycle lanes, off-road facilities, signing and other location-specific solutions improve bicycle access county-wide.

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- Application of BRTB Long Range Plan Goals through “Green Print” and “Growth Print” concepts to further bicycle transportation and regional connectivity for bicycle planning.
- Refinement of BRTB bicycle planning to a sub-regional level giving more depth and detail to the regional bicycle network.
- Advancement and improved integration with SHA bicycle and pedestrian planning for on-going and future project planning.

FY 2012 PERFORMANCE OBJECTIVES:

1. In collaboration with the Howard County Departments of Public Works (DPW) and Department of Recreation and Parks (DRP), develop policies which will govern the development of a Bicycle Plan and network in Howard County.
2. Inventory County Minor Collectors and above for bicycle compatibility and correlate this inventory with the DPW and DRP maintenance/repair schedules, capital projects as well as private sector developments-in-progress to potentially garner cost effective bicycle improvements.
3. Develop an inventory of bicycle compatible facilities as well as those road segments and travel paths where improvements are needed. Incorporate Regional partners’

proposals and needs where pertinent. Map the needs analysis including categorization of types of needs.

4. Establish a Bicycle Advisory Group and conduct necessary public outreach activities to provide opportunities for citizen and stakeholder input throughout the planning process.
5. Based on the inventory, develop a project list, detailed maps, general assessments of right of way constraints and preliminary costs. Vet these with bicycle and community groups, the public at large, and stakeholder agencies at the State and local levels. Insure regional connectivity wherever possible.
6. Identify key bicycle design concepts and signage consistent with “complete street” concepts and develop design templates that can be used for future implementation of the bicycle network. Identify other needed policies and programs to support bicycle transportation.
7. Develop prioritization criteria consistent with local opportunities and policies, Regional criteria, and realistic funding expectations. Prioritize the project list.
8. Coordinate with consultant to develop preliminary cost estimates; general assessments of right of way constraints and environmental approval and other review for these locations needed for bicycle improvements.
9. Work with the consultant and local and regional bicycle stake holders to prepare project prioritization and “complete street” bicycle design recommendations into a final Bike Plan document. Develop review and approval process.

PRODUCTS/MILESTONES	SCHEDULE
Develop policies to guide development of the Bike Plan and implementation.	1 st Quarter
Inventory Minor Collectors and above for Bicycle compatibility and project potential.	1 st Quarter
Develop Countywide Bicycle Needs Analysis.	2 nd Quarter
Establish Bike Advisory Group and finalize Bike projects list. Prioritize. Develop complete street bike design concepts	2 nd & 3 rd Quarters
Complete stake holder review of Bike Projects in combination with bike design concepts.	3 rd Quarter
Develop Bike Plan document and final stake holders review	4 th Quarter
Distribution of Bike Plan to all local and regional stakeholders	4 th Quarter

PARTICIPANTS: Howard County agencies, Consultants

BUDGET: **\$209,000**

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**UNIFIED PLANNING WORK PROGRAM
FOR TRANSPORTATION PLANNING
FY 2012 PROJECTS AND BUDGETS
FOR
STATE HIGHWAY ADMINISTRATION

(\$32,110)**

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PROJECT: REGIONAL TRAFFIC COUNT COLLECTION PROGRAM

PURPOSE: To collect various types of traffic counts in support of regional planning tasks. The Maryland Department of Transportation – State Highway Administration – will collect vehicle mix data on selected roadways. This on-going effort will continue into FY 2012 for the State Highway Administration to perform traffic count data collection activities. In addition, they will work with BMC and the local governments to collect and analyze traffic count data. This effort will lead to improved estimates of vehicle-miles-of-travel (VMT) reported by the Highway Performance Monitoring System (HPMS). These data are integral for many planning activities.

FY 2012 PERFORMANCE OBJECTIVES:

1. Tabulate and document the collection of count and vehicle mix information.
2. Produce databases and reports of collected information.

PRODUCTS/MILESTONES	SCHEDULE
Highway traffic counts and vehicle mix data	Throughout Fiscal Year
Technical memoranda documenting data collection activities	Throughout Fiscal Year

PARTICIPANTS: State Highway Administration

BUDGET: \$32,110

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PUBLIC REVIEW PROCESS

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**FY 2012 UNIFIED PLANNING WORK PROGRAM (UPWP)
PUBLIC COMMENT PERIOD**

Tuesday, February 15 through Thursday, March 18, 2011

Comments Received

Two comments were received during the comment period. Copies of these comments follow.

Public Meetings

A public meeting was held on Wednesday, March 2, 2011 from 4:30 – 5:30 p.m. at the Baltimore Metropolitan Council. This meeting was attended by 3 individuals. A sign-in sheet follows, as does a summary of this meeting.

Outreach, Public Notices, Advertisements

The following notices / advertisements were posted during this comment period:

- Flyer
- Press release to local media, Public Information Officers, and BMC e-mail list
- BMC web site
- Posts on Facebook and Twitter pages (B'more Involved)

Several of these items are included on the following pages. A full compilation is available from the Public Involvement Coordinator.



Bicycling Advocates of Howard County Inc
10500 Little Patuxent Pkwy, Suite 700
Columbia, MD 21044

March 15, 2011

The Baltimore Regional Transportation Board
Attn: Kevin Kamenetz, Chairman
1500 Whetstone Way, Suite 300
Baltimore, MD 21230

Re: Annual Work Program and Budget - FY 2012 UPWP
Howard County Bicycle Plan

Dear Mr. Kamenetz:

I write to you on behalf of Bicycling Advocates of Howard County Inc. (BAHC) to support the application made by the Howard County Departments of Public Works (DPW) and Department of Recreation and Parks (DRP) for funding to develop policies which will govern the development of a Bicycle Plan and network in Howard County.

BAHC is a coalition of Howard County bicycle clubs and organizations which represents over 1,000 member bicyclists. We focus our energies on the following:

- Community Organizing
- Bicycle Transportation Advocacy
- Bicycle Safety Advocacy
- Bicycling Safety Education
- Legislative Education.

We have convened community forums with State and local government to discuss effective strategies for incorporating bicycling as part of the overall transportation system. We work closely with Howard County's Departments of Planning and Zoning and Public Works to improve bicycling conditions and plan for greater bicycle access. We have been advocates for the integration and use of non-motorized mobility (e.g., bicycling and walking), as a part of an effective transportation system in the redevelopment of Downtown Columbia and have testified before the Howard County Council on the need for a County-wide Bicycle/Pedestrian Accessibility Master Plan. We strongly support the DPW/DPC application for funding to develop a Bicycle Plan and network.

The need for County-wide, not merely local, planning brings us to support the DPW/DPC application for funding to develop a Bicycle Plan and network. We have testified before the Howard County Council on the need for a County-wide Bicycle/Pedestrian Accessibility Master Plan to address all parts of Howard County and

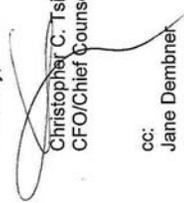
BAHC is a §501(c)(4) tax exempt organization

The Baltimore Regional Transportation Board
Page 2
March 15, 2011

to require that all development, both in Downtown and elsewhere address bicycling and pedestrian transportation facilities. Approving the DPW/DPC application for funding to develop a Bicycle Plan and network will help accomplish that goal.

We thank you for your consideration of this letter.

Sincerely,


Christopher C. Tsien
CFO/Chief Counsel

cc:
Jane Dembnet

BAHC is a §501(c)(4) tax exempt organization



10221 Winnequin Circle, Suite 100
Columbia, Maryland 21044-3410
410-715-3000, Fax 410-715-3042
www.columbiaassociation.com

March 18, 2011

Baltimore Regional Transportation Board
1500 Whetstone Way, Suite 300
Baltimore, MD 21230
Attention: Kevin Kamenetz, Chairman

RE: FY 2012 UPWP – Support of Funding for Howard County Bicycle Plan

Dear Mr. Kamenetz and Members of the Board:

I am writing to strongly support Howard County's request for funding for a Bicycle Plan as part of the FY 2012 Unified Planning Work Program for Transportation Planning (UPWP). I urge the BRTB to approve funding for this vital project.

Howard County is well-positioned to develop a Bicycle Plan and has been laying the foundation for this planning effort for some time. Some more recent related efforts include:

- The County has recently made changes to its zoning regulations and Design Manual to require more bicycle and pedestrian improvements in Downtown Columbia including instituting bicycle and pedestrian level of service standards.
- The County is working on guidelines for bicycle accessibility and needs assistance to complete this work and place it within a policy context.
- The County is just beginning its substantial update to the General Plan. The analysis done for the Bicycle Plan and the resulting policies and proposed network will also serve to inform the overall General Plan.
- The County is working collaboratively with community partners including Columbia Association to increase connectivity for pedestrians and cyclists in a number of ways including harnessing the existing off-road pathway system that exists in Columbia today.

What the County lacks is an overall master plan that sets the frame for investments and decision-making so that **safe and adequate connectivity for cyclists is not only what we hope for but something that becomes reality in the not-too-distant future**. With the cost of fuel rising, and the impacts of climate change increasing, now is the ideal time to plan for our future – a future with

increased mobility choices that reduce environmental impacts and promote healthy lifestyles for residents of all ages.

Thank you very much for your funding support for this important Bicycle Plan project.

Sincerely,

Phillip L. Nelson
President

cc: Ken Ullman, Howard County Executive
Marsha McLaughlin, Howard County, Director of Planning
Benjamin Pickar, Howard County, Department of Planning and Zoning, Transportation Planning Division
Jane Demoner, Columbia Association, Director of Planning



The Metropolitan Planning Organization for the Baltimore Region

MEETING: Kent Street Transit Plaza and Pedestrian Corridor # FY 2012 UPWP
 LOCATION: Baltimore Metropolitan Council DATE: 3/02/2011 TIME: 4:30 P.M.

NAME	ORGANIZATION	PHONE	E-MAIL
Michelle Rosenberg	CBO	410-336-6892	michelle.rosenberg@general.com
John Eberhard	MAA	410-992-9003	jeberhard2@gmail.com
Jane Dember	Columbia Associates	410-715-3107	JANE.DEMBER@COLUMBIASSOCIATES.COM



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MEMORANDUM

TO: Public Meetings File

FROM: Tyson Byrne

DATE: Tuesday, July 12, 2011

SUBJECT: March 2, 2011 TIP Amendment and FY 2012 UPWP Public Meeting

Tyson Byrne and Todd Lang from BMC staffed the public meeting held on Wednesday, March 2, 2011 from 4:00 pm – 5:30 pm. Three members of the CAC attended the meeting. They were Michele Rosenberg, John Eberhard, and Jane Dembner.

Tyson went through briefly the TIP process and a description of the Kent Street TIP Amendment to the 2011-2015 TIP. Michele asked if this project would connect Westport to the Gwynns Falls Trail. The Gwynns Falls Trail already goes through Westport and another grant will relocate the trail to the waterfront and over the CSX swing bridge. There were no other TIP questions.

Todd Lang then discussed the purpose of the Unified Planning Work Program. Jane Dembner commented that she and John Eberhard were there to comment on in favor of the bike plan for Howard County. They feel that it is a program that needs to be funded.

The meeting ended at 5:23 pm.

New Work Program to Address Transportation Planning Priorities Facing the Baltimore Region

Here's what we are planning to do to address transportation concerns in the Baltimore region



Every year, the Baltimore Regional Transportation Board (BRTB) develops a work program and budget. This program, called the UPWP - Unified Planning Work Program for Transportation Planning, identifies activities and an annual operating budget. Work activities include:

- Complete development of *Plan it 2035*, the long-range transportation plan
- Prepare analysis of 2010 Census data
- Conduct regional transit and freight analyses
- Continue to identify projects that improve air quality
- Conduct outreach for Clean Commuting options
- Expand capabilities with new methods for travel modeling

What do you think? Public Review and Comment

The public is invited to provide comments on the proposed activities through **March 17, 2011**. Copies of the draft UPWP are available at www.baltometro.org.

Share Your Thoughts

To share your thoughts and ideas, please submit all comments in writing to: The Baltimore Regional Transportation Board, 1500 Whetstone Way, Suite 300, Baltimore, MD 21230, fax: 410-732-8248, e-mail: comments@baltometro.org, or online: www.baltometro.org/bboard.

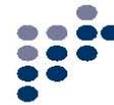
Comments may also be submitted in person at a public meeting on **Wednesday, March 2nd** between 4:30-5:30 p.m. or at the BRTB meetings on Tuesday, March 22 or Wednesday, April 20 at BMC (1500 Whetstone Way, Suite 300, Baltimore, MD 21230).

For more information: Call 410-732-0500 x1047 or e-mail comments@baltometro.org



BRTB
Baltimore Regional Transportation Board

WWW.BALTOMETRO.ORG





For Immediate Release
Contact: Barbara Herron, 410-732-9564

FY 2012 Unified Planning Work Program (UPWP) for Transportation Planning Open for Public Review

BALTIMORE (February 28, 2011) – Every year, the Baltimore Regional Transportation Board (BRTB) works with state agency partners and public transit agencies to develop a work program and budget for the coming fiscal year. The draft FY 2012 UPWP identifies activities to be completed by BMC staff, local governments and state agencies between July 1, 2011, and June 30, 2012.

The proposed activities for the coming fiscal year include:

- Complete development of Plan It 2035, the long-range transportation plan, with public input;
- Prepare analyses of 2010 Census data;
- Conduct regional transit and freight analyses;
- Continue to identify projects that improve air quality;
- Conduct outreach for Clean Commuting options;
- Expand capabilities with new methods for travel modeling;
- Evaluate the transportation needs of the elderly, individuals with disabilities and low-income residents; and
- Conduct bike planning efforts in three jurisdictions.

The draft UPWP is available in PDF format at www.baltometro.org. A print version is available at the Regional Information Center, located at the Baltimore Metropolitan Council, 1500 Whetstone Way, Suite 300, in the Locust Point area of Baltimore City.

The public is invited to share their thoughts on these proposed transportation planning activities through Thursday, March 18. A public meeting to receive comments will be held on Wednesday, March 2, at 4:30 p.m. in the BMC offices at the above address.

Comments may be submitted in writing to:

The Baltimore Regional Transportation Board
1500 Whetstone Way, Suite 300
Baltimore, MD 21230
Fax: 410-732-8248
E-mail: comments@baltometro.org
Web: www.baltometro.org/bboard

Comments may also be submitted in person at meetings of the BRTB on Tuesday, March 22, at 9 a.m. or Wednesday, April 20, at 4:30 p.m. Both meetings will be held at BMC. Mailed comments must be received no later than 3 days after the end of the comment period.

For more information, contact Monica Haines Benkhedda at mhainesbenkhedda@baltometro.org or 410-732-0500 x1047.

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The Baltimore Regional Transportation Board (BRTB) is the federally-recognized Metropolitan Planning Organization (MPO) for transportation in the Baltimore region. The Baltimore Metropolitan Council (BMC) staff provides technical and staff support to the BRTB. BMC is the organization of the region's elected executives who are committed to identifying regional interests and developing collaborative strategies, plans and programs which will improve the quality of life and economic vitality throughout the region.



Serving Anne Arundel, Baltimore, Carroll, Harford, and Howard Counties and the Cities of Annapolis and Baltimore.

COMMENTS WELCOME ON TRANSPORTATION IMPROVEMENTS

Annual Budget Focuses on Building Region's Future, While Federal Funding Helps Move Many Local Projects Forward

The Baltimore Regional Transportation Board is currently welcoming public feedback on three public review and comment periods. A summary of these are below, with full details available by clicking on the links provided.

**OPEN
FOR
PUBLIC
REVIEW**

Planning for our future - Draft FY 2012 Budget and Work Program

Every year, the Baltimore Regional Transportation Board (BRTB) develops a work program for the coming fiscal year called the UPWP - Unified Planning Work Program for Transportation Planning. This program outlines the ways our metropolitan area is planning to use federal transportation funds to address transportation planning priorities and concerns in the Baltimore region. Comments are welcome through Friday, March 18.

[>> View the Draft 2012 Budget and Work Program](#)



Additional Funding for Kent Street Transit Plaza and Pedestrian Corridor Project

Baltimore City has submitted a request for an amendment to the 2011-2014 Transportation Improvement Program for the Kent Street Transit Plaza and Pedestrian Corridor Project. The reason for the amendment is new funding. Comments are welcome through Friday, March 18.

[>> Learn more about this amendment](#)

Bridges for the future: \$7.9 Million Amendment to 2011-2014 TIP

Baltimore and Carroll Counties have submitted a request to amend the 2011-2014 Transportation Improvement Program for \$7.9 million worth of projects related to improving or repairing nine local bridges. The comment period is open through Monday, April 11, 2011.

[>> Find out more about these bridges](#)

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 **B'more Involved**
Public mtg tonight at 4:30p in #Baltimore: Regional Transportation Budget:
<http://ow.ly/45Rqt> and Transit & Ped Plaza <http://ow.ly/45S1b>

 **Annual Work Program and Budget - FY 2012 UPWP - Baltimore Regional Transportation Board**
www.baltometro.org
The Baltimore Regional Transportation Board is currently public comments on two items through Friday, March 18, 2011.

91 Impressions · 0% Feedback
 March 2 at 2:45pm via HootSuite · Like · Comment · Share

 **B'more Involved**
\$7.6 mil. to improve transportation in #Baltimore region. Here's our plan. What do you think? Public mtg Mar 2, 4:30p. <http://ow.ly/45R5T>

 **FY 2012 Unified Planning Work Program (UPWP) for Transportation Planning Open for Public Review**
campaign.r20.constantcontact.com

BALTIMORE (February 28, 2011) - Every year, the Baltimore Regional Transportation Board (BRTB) works with state agency partners and public transit agencies to develop a work program and budget for the coming fiscal year. The draft FY 2012 UPWP identifies activities to be completed by BMC staff, ...

108 Impressions · 0% Feedback
 March 1 at 10:15pm via HootSuite · Like · Comment · Share

 **B'more Involved**
View & comment on the BRTB's 2012 Planning Work Program & Budget! Open for review thru 3/18/11. <http://ow.ly/3YxOC> #baltimore #maryland

 **Annual Work Program and Budget - FY 2012 UPWP - Baltimore Metropolitan Council**
Baltimore Metropolitan Council, Baltimore Regional Transportation Board

79 Impressions · 0% Feedback
 February 17 at 8:00pm via HootSuite · Like · Comment · Share



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\$7.6 mil. to improve transportation in #Baltimore region. Here's our plan. What do you think? Public mtg Mar 2, 4:30p. <http://ow.ly/45R5T>
1 Mar

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Open for Public Review: FY 2012 Transportation Planning Work Program for Baltimore Region <http://conta.cc/i7JA4R> via #constantcontact
1 Mar

 **bmoreinvolved** B'more Involved
Public mtg tonight at 4:30p in #Baltimore: Regional Transportation Budget: <http://ow.ly/45Rqt> and Transit & Ped Plaza <http://ow.ly/45S1b>
2 Mar

 **bmoreinvolved** B'more Involved
View & comment on the BRTB's 2012 Planning Work Program & Budget! Open for review thru 3/18/11. <http://ow.ly/3YxOC> #baltimore #maryland
17 Feb