

**NATIONAL CAPITAL REGION
TRANSPORTATION PLANNING BOARD**

FY 2011

**UNIFIED PLANNING WORK PROGRAM
FOR TRANSPORTATION PLANNING
FOR THE
WASHINGTON METROPOLITAN REGION**

DRAFT

February 1, 2010

The preparation of this program was financially aided through grants from the District of Columbia Department of Transportation; Maryland Department of Transportation; Virginia Department of Transportation; U.S. Department of Transportation, Federal Highway Administration; and the U.S. Department of Transportation, Federal Transit Administration, under the Federal Transit Act.

TPB FY 2011 WORK PROGRAM FUNDING CHANGES FROM FY 2010

Work Activity	FY 2011	FY 2010	FY11-FY10	% Change
1. PLAN SUPPORT				
A. Unified Planning Work Program (UPWP)	70,700	70,700	0	0
B. Transp Improvement Program (TIP)	240,600	251,700	-11,100	-4
C. Constrained Long-Range Plan	588,400	638,400	-50,000	-8
D. Financial Plan	64,000	84,000	-20,000	-24
E. Public Participation	371,900	446,900	-75,000	-17
F. Private Enterprise Participation	18,300	18,300	0	0
G. Annual Report	80,100	80,100	0	0
H. Transportation/Land Use Connection Progr	395,000	395,000	0	0
I. DTP Management	452,100	452,100	0	0
Subtotal	2,281,100	2,437,200	-156,100	-6
2. COORDINATION and PROGRAMS				
A. Congestion Management Process (CMP)	155,000	155,000	0	0
B. Management, Operations, and ITS Planning	340,300	390,300	-50,000	-13
C. Emergency Preparedness Planning	75,400	75,400	0	0
D. Transportation Safety Planning	100,000	100,000	0	0
E. Bicycle and Pedestrian Planning	108,700	108,700	0	0
F. Regional Bus Planning	100,000	100,000	0	0
G. Human Service Transportation Coordination	114,800	114,800	0	0
H. Freight Planning	130,000	130,000	0	0
I. MATOC Program Planning & Support	120,000	120,000	0	0
Subtotal	1,244,200	1,294,200	-50,000	-4
3. FORECASTING APPLICATIONS				
A. Air Quality Conformity	563,200	563,200	0	0
B. Mobile Emissions Analysis	640,100	640,100	0	0
C. Regional Studies	365,800	615,800	-250,000	-41
D. Coord Coop Forecasting & Transp Planning	726,800	726,800	0	0
Subtotal	2,295,900	2,545,900	-250,000	-10
4. DEVELOPMENT OF NETWORKS/MODELS				
A. Network Development	769,700	769,700	0	0
B. GIS Technical Support	548,800	548,800	0	0
C. Models Development	1,071,200	1,071,200	0	0
D. Software Support	178,900	178,900	0	0
Subtotal	2,568,600	2,568,600	0	0
5. TRAVEL MONITORING				
A. Cordon Counts	250,800	460,800	-210,000	-46
B. Congestion Monitoring and Analysis	350,000	350,000	0	0
C. Travel Surveys and Analysis			0	
Household Travel Survey	456,300	456,300	0	0
D. Regional Trans Data Clearinghouse	317,900	317,900	0	0
Subtotal	1,375,000	1,585,000	-210,000	-13
Core Program Total (I to V)	9,764,800	10,430,900	-666,100	-6.4
6. TECHNICAL ASSISTANCE				
A. District of Columbia	312,100	312,100	0	
B. Maryland	575,500	575,500	0	
C. Virginia	490,600	490,600	0	
D. WMATA	194,500	194,500	0	
Subtotal	1,572,700	1,572,700	0	
Total, Basic Program	11,337,500	12,003,600	-666,100	-5.5
7. CONTINUOUS AIRPORT SYSTEM PLANNING				
GRAND TOTAL	11,337,500	12,003,600		

TABLE OF CONTENTS

I.	INTRODUCTION	
	Purpose	1
	Planning Requirements.....	1
	Regional Planning Goals	2
	Addressing Changing Priorities.....	3
	Responsibilities for Transportation Planning.....	4
II.	PROPOSED FY 2011 TPB WORK PROGRAM AND BUDGET	
	Program Structure	1
	Work Activity Budgets.....	2
III.	Major Work Activities	
	1. Plan Support.....	1
	2. Coordination Planning.....	14
	3. Forecasting Applications.....	27
	4. Development of Networks/ Models	34
	5. Travel Monitoring	39
	6. Technical Assistance	45
	District of Columbia	45
	Maryland	46
	Virginia	48
	WMATA.....	50
	7. Continuous Airport Systems Planning Program	51

IV.	Proposed FY 2011 State Transportation Agency State Planning and Research Programs (SPR)	1
	District of Columbia.....	3
	Maryland	6
	Virginia.....	9
V.	Appendix	1

LIST OF TABLES

1.	FY2011 TPB Proposed Funding by State and Local Sources.....	I -17
2.	TPB FY 2011 Work Program by Funding Sources	II - 7
3.	TPB FY 2011 Budget and Work Program by Expenditure Category	II - 8

LIST OF FIGURES

1.	Organizations Represented on the TPB and/or its Technical Committees.....	I -7
2.	Membership of the National Capital Region Transportation Planning Board	I -8
3.	Transportation Planning and Programming Responsibilities	I -9
4.	Transportation Planning Studies Within the Washington Metropolitan Area 2010.....	I -10
5.	Overview of Planning Products and Supporting Activities	II -4
6.	Visual Representation of UPWP Work Activity Relationships.....	II -5
7.	TPB Committee Structure.....	II -9
8.	Congestion Monitoring Schedule	III -40

I. INTRODUCTION

Purpose

The **FY 2010 Unified Planning Work Program (UPWP) for Transportation Planning for the Washington Metropolitan Region** incorporates in one document all federally assisted state, regional, and local transportation planning activities proposed to be undertaken in the region from July 1, 2009 through June 30, 2010. The UPWP provides a mechanism for the coordination of transportation planning activities in the region, and 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).

This work program describes all transportation planning activities utilizing federal funding, including Title I Section 112 metropolitan planning funds, Title III Section 5303 metropolitan planning funds, and Federal Aviation Administration Continuing Airport System Planning (CASP) funds. It identifies state and local matching dollars for these federal planning programs, as well as other closely related planning projects utilizing state and local funds.

Planning Requirements

The planning activities outlined in this work program respond to a variety of regulatory requirements. The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) and the Clean Air Act Amendments of 1990 (CAAA) created a number of new planning requirements. The Safe, Accountable, Flexible, and Efficient Transportation Equity Act - A Legacy for Users (SAFETEA-LU), which became law on August 11, 2005, reaffirms the structure of the metropolitan planning process, and increases federal financial support for it. Most of the modifications to the process are aimed at streamlining and strengthening the provisions included in ISTEA in 1991 and the Transportation Equity Act for 21st Century (TEA-21) of 1998. On February 14, 2007, the FHWA and FTA issued final regulations regarding metropolitan planning in response to SAFETEA-LU. This work program has been developed to comply with these regulations regarding metropolitan planning.

On September 21, 1994, the National Capital Region Transportation Planning Board (TPB) adopted the initial financially-constrained Long Range Transportation Plan for the National Capital Region (CLRP) as required by the final regulations. On September 30, 1996, FHWA and FTA issued a joint "Certification Review" of the TPB planning process and found that "the metropolitan planning process fully meets all the requirements of the October 28, 1993 Federal metropolitan planning regulations, 23 CFR Part 450, Subpart C." On July 15, 1998 the TPB approved the document: *1997 Update to the Financially Constrained Long Range Transportation Plan for the National Capital Region*, which summarizes the first three-year update to the 1994 plan. On January 19, 2000, FHWA and FTA presented their final Certification Report on the TPB planning process and found that "the metropolitan planning process fully meets all the requirements of the October 28, 1993 Federal metropolitan planning regulations, 23 CFR Part 450, Subpart C." On October 18, 2000 the TPB approved the *2000 Financially Constrained Long Range Transportation Plan for the National Capital*

Region, which is the second three-year update to the CLRP. On June 9, 2003, FHWA and FTA found that "the metropolitan planning process fully meets all the requirements of the October 28, 1993 Federal metropolitan planning regulations, 23 CFR Part 450, Subpart C." On December 17, 2003, the TPB approved the *2003 Financially Constrained Long Range Transportation Plan for the National Capital Region*, which is the third three-year update to the CLRP. On March 27, 2006, FHWA and FTA transmitted their final Certification Report on the TPB planning process which found that "the metropolitan planning process fully meets all the requirements of the Metropolitan Planning Rule at 23 CFR Part 450, Subpart C and 49 CFR Part 613." On October 18, 2006, the TPB approved the *2006 Financially Constrained Long Range Transportation Plan for the National Capital Region*, which is the fourth three-year update to the CLRP. On January 16, 2008, the TPB approved the *2007 Financially Constrained Long Range Transportation Plan for the National Capital Region*. On November 19, 2008, the TPB approved the *2008 Financially Constrained Long Range Transportation Plan for the National Capital Region*.

The Clean Air Act Amendments (CAAA) of 1990 requires that the transportation actions and projects in the CLRP and Transportation Improvement Program (TIP) support the attainment of federal health standards for ozone. The CLRP and TIP have to meet specific requirements as specified by the Environmental Protection Agency (EPA) regulations issued on November 24, 1993, with amendments on August 15, 1997 and supplemental guidance on May 14, 1999, regarding criteria and procedures for determining air quality conformity of transportation plans, programs and projects funded or approved by the FHWA and FTA. These conformity requirements are also addressed in this document.

Regional Planning Goals

In 1998, the TPB adopted a set of policy goals that have since served to guide its planning work program. These goals are:

- The Washington metropolitan region's transportation system will provide reasonable access at reasonable cost to everyone in the region.
- The Washington metropolitan region will develop, implement, and maintain an interconnected transportation system that enhances quality of life and promotes a strong and growing economy throughout the entire region, including a healthy regional core and dynamic regional activity centers with a mix of jobs, housing, services and recreation in a walkable environment.
- The Washington metropolitan region's transportation system will give priority to management, performance, maintenance, and safety of all modes and facilities.
- The Washington metropolitan region will use the best available technology to maximize system effectiveness.
- The Washington metropolitan region will plan and develop a transportation system that enhances and protects the region's natural environmental quality, cultural and historic resources, and communities.
- The Washington metropolitan region will achieve better inter- jurisdictional coordination of transportation and land use planning.

- The Washington metropolitan region will achieve enhanced funding mechanisms for regional and local transportation system priorities that cannot be implemented with current and forecasted federal, state, and local funding.
- The Washington metropolitan region will support options for international and inter-regional travel and commerce.

Known as the TPB Vision, these goals are broad in scope, and also encompass a variety of strategies and objectives. Together, these goals, strategies, and objectives provide a framework for setting out core principles for regional transportation planning.

Addressing Changing Planning Priorities

In addition to regulatory requirements and regional goals, every year, new factors emerge that influence the planning process and supporting activities that are outlined in this work program. One such factor includes federal policy initiatives that emphasize coordinating land use, transportation, and environmental planning. For example, on June 16, 2009, the United States Department of Transportation (DOT), Department of Housing and Urban Development (HUD), and the Environmental Protection Agency (EPA) announced an interagency partnership aimed at providing increased transportation options, improving access to affordable housing, and lowering transportation costs while protecting the environment in communities nationwide. This interagency partnership, commonly referred to as the “Livability Initiative,” coordinates federal transportation, housing, and environmental endeavors, and includes six basic tents:

- Provide more transportation choices
- Promote equitable, affordable housing
- Enhance economic competitiveness
- Support existing communities
- Coordinate and leveraging federal policies and investment
- Value communities and neighborhoods

A variety of recent legislative and executive initiatives compliment the formation of this interagency partnership. The FY2010 Consolidated Appropriations Act (Public Law 111-117), which was enacted on December 16, 2009, builds on the Livability Initiative by providing \$150 million to HUD for administering the Sustainable Communities Initiative, a series of grant programs that provide funding to improve regional planning efforts by integrating housing and transportation decisions, and by increasing capacity to improve land use and zoning. Additionally, upon the enactment of the American Recovery and Reinvestment Legislation on February 17, 2009, US DOT released a competitive discretionary grant program on June 17, 2009. This grant program, commonly referred to as TIGER, or Transportation Investment Generating Economic Recovery, was designed to make \$1.5 billion available for major capital investments in surface transportation infrastructure projects that will have a significant impact on the Nation, a metropolitan area, or a region. Furthermore, on December 8, 2009, the Federal Transit Administration (FTA) announced a notice of funding availability (NOFA) for the Livability Bus Program, a competitive discretionary program that funds capital bus projects which meet criteria outlined by the six tenets of the federal Livability Initiative. These

and other cross-cutting federal initiatives underscore a renewed national focus on coordinating transportation, land use, and environmental efforts in order to build more livable, sustainable communities, and have become influential in many TPB planning activities.

Many of the long-standing TPB planning activities to date are consistent with the federal policy premise outlined by the federal Livability Initiative. As a result, TPB can respond to these new federal initiatives based upon the work that it has been conducting for several years. As an example, on September 15, 2009, TPB submitted a proposal to the TIGER program for priority bus transit in the National Capital Region. As well, after the Livability Bus Program NOFA was released by FTA in December 2009, TPB was immediately prepared to work in conjunction with WMATA – the eligible federal direct recipient for the region –to compile an application for a Regional Bus Stop Improvement Program under the FTA Livability Bus Program. Because these policy initiatives are anticipated to persist into 2011 and beyond, the activities outlined in this work program are designed to continue responding to these federal initiatives.

Other factors that influence the activities in this work program are regional in scope. For instance, in conjunction with the relatively recent national emphasis on climate change, the TPB developed in 2008 “What Would It Take,” a greenhouse gas reduction scenario study. “What Would It Take” analyzes methods to reduce greenhouse gas emissions by 2030, and assesses how specific goals might be achieved through different combinations of interventions. Regional and federal factors that are non-regulatory may evolve from one year to the next, but are nonetheless influential in the planning activities that are conducted and described in this work program. Many of these factors cross multiple disciplines, and provide the TPB an opportunity to work with experts in other departments. The What Would It Take Scenario Study provided an opportunity for the TPB to work in collaboration with the COG Climate, Energy and Environment Policy Committee. TPB is also positioned to work with the COG Department of Housing and Community Planning on regional housing and land-use issues, as they relate to transportation.

As these factors continue to evolve, the UPWP is adjusted annually to focus on new and emerging priorities. This UPWP builds upon the previous UPWP, and is the result of close cooperation among the transportation agencies in the region. This UPWP was prepared with the involvement of these agencies, acting through the TPB, the TPB Technical Committee and its subcommittees. This UPWP details the planning activities that must be accomplished to address the annual planning requirements such as preparing the TIP and a Congestion Management System. It also describes the tasks required to meet the approval dates for the region's CLRP and the TIPs, and outlines the activities for the subsequent years.

Responsibilities for Transportation Planning

The National Capital Region Transportation Planning Board (TPB) is the organization responsible for conducting the continuing, cooperative, comprehensive (3-C) transportation planning process for the Metropolitan Washington Region in accordance with 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 TPB is the official Metropolitan Planning Organization (MPO) for

transportation planning for the Washington metropolitan region, designated by the Governors of Maryland and Virginia and the Mayor of the District of Columbia, under Section 134 of the Federal Aid Highway Act, and the Joint Planning regulations of FTA and FHWA.

The TPB is composed of representatives from the 19 cities and counties, including the District of Columbia, that are members of the Metropolitan Washington Council of Governments(COG), the City of Manassas, the St. Charles Urbanized Area of Charles County, the two state and the District transportation agencies, the Washington Metropolitan Area Transit Authority (WMATA), the Metropolitan Washington Airports Authority (MWAA), four federal agencies, the General Assemblies of Maryland and Virginia, and private transportation service providers. When matters of particular importance are before the TPB, a special voting procedure may be invoked that weights the votes of local jurisdiction members according to population.

Figure 1 lists the organizations represented on the TPB and its Technical Committees. Figure 2 shows the geographical location of each of the participating local jurisdictions. The TPB also serves as the transportation policy committee of COG. This relationship serves to ensure that transportation planning is integrated with comprehensive metropolitan planning and development, and is responsive to the needs of the local governments in the area.

Policy coordination of regional highway, transit, bicycle, pedestrian and intermodal planning is the responsibility of the TPB. This coordinated planning is supported by the three departments of transportation (DOTs), FTA, FHWA, and the member governments of COG. The TPB coordinates, reviews, and approves work programs for all proposed federally assisted technical studies as part of the UPWP. The relationship among land use, environmental and transportation planning for the area is established through the continuing, coordinated land-use, environmental and transportation planning work programs of COG and TPB. Policy coordination of land use and transportation planning is the responsibility of COG, through its Metropolitan Development Policy Committee (MDPC) and the Transportation Planning Board. COG's regional land use cooperative forecasts are consistent with the adopted regional Long Range Transportation Plan.

The chairman of the TPB and the state transportation directors are members of the Metropolitan Washington Air Quality Committee (MWAQC), which was formed under the authority of the governors of Maryland and Virginia, and the mayor of the District of Columbia to recommend the region's air quality plans. These recommendations will be forwarded to the governors and mayor for inclusion in the State Implementation Plans (SIPs) they submit to EPA.

In the Washington Metropolitan region, the roles and responsibilities involving the TPB, the three state DOTs, the local government transportation agencies, WMATA, and the local government public transportation operators for cooperatively carrying out state transportation planning and programming have been established over several years. As required under the final planning regulations, the TPB, the state DOTs and the public transportation operators have documented their transportation planning roles and responsibilities in the Washington Metropolitan Region in a Memorandum of Understanding (MOU) that was executed by all

parties on January 16, 2008. The MOU is included in the Appendix and the responsibilities for the primary planning and programming activities are indicated in Figure 3.

Also in the Appendix is an agreement involving the TPB and Charles and Calvert counties in Maryland regarding consistency and conformity of their plans, programs and projects is included in the UPWP. Also included is an agreement between the TPB and the Fredericksburg Area MPO (FAMPO) in Virginia which identifies the roles and responsibilities for cooperatively conducting the planning and programming process in the FAMPO portion of the Metropolitan Washington Urbanized Area.

During FY 2011, a regional planning priority will be to continue to focus on the coordination between land use and transportation planning and to strengthen the linkages between the CLRP development and the scenario planning results. The TPB public participation process and technical planning procedures will also continue to be strengthened. In addition to these activities directly involving the TPB, a number of corridor studies and other planning studies and programs are underway throughout the region (see Figure 4).

Figure 1

**ORGANIZATIONS REPRESENTED ON
THE TPB AND/OR ITS TECHNICAL COMMITTEES**

VIRGINIA

Arlington County	Northern Virginia Regional Commission
Fairfax County	Northern Virginia Transportation Commission
Loudoun County	Virginia Department of Transportation
Prince William County	Virginia Department of Rail and Public Transportation
City of Alexandria	Virginia Department of Aviation
City of Fairfax	Virginia General Assembly
City of Falls Church	Potomac and Rappahannock Transportation Commission
City of Manassas	
City of Manassas Park	
Northern Virginia Transportation Authority	

MARYLAND

Frederick County	City of Greenbelt
Montgomery County	City of Rockville
Prince George's County	City of Takoma Park
St. Charles Urbanized Area of Charles Co	The Maryland-National Capital Park and Planning Commission
City of Bowie	Maryland Department of Transportation
City of College Park	Maryland General Assembly
City of Frederick	
City of Gaithersburg	

DISTRICT OF COLUMBIA

D.C. Council
D.C. Department of Transportation
D.C. Office of Planning

REGIONAL, FEDERAL AND PRIVATE SECTOR

Washington Metropolitan Area Transit Authority
Private Transportation Service Providers
Metropolitan Washington Airports Authority
Federal Highway Administration
Federal Transit Administration
National Capital Planning Commission
National Park Service

Responsibilities for Transportation Planning

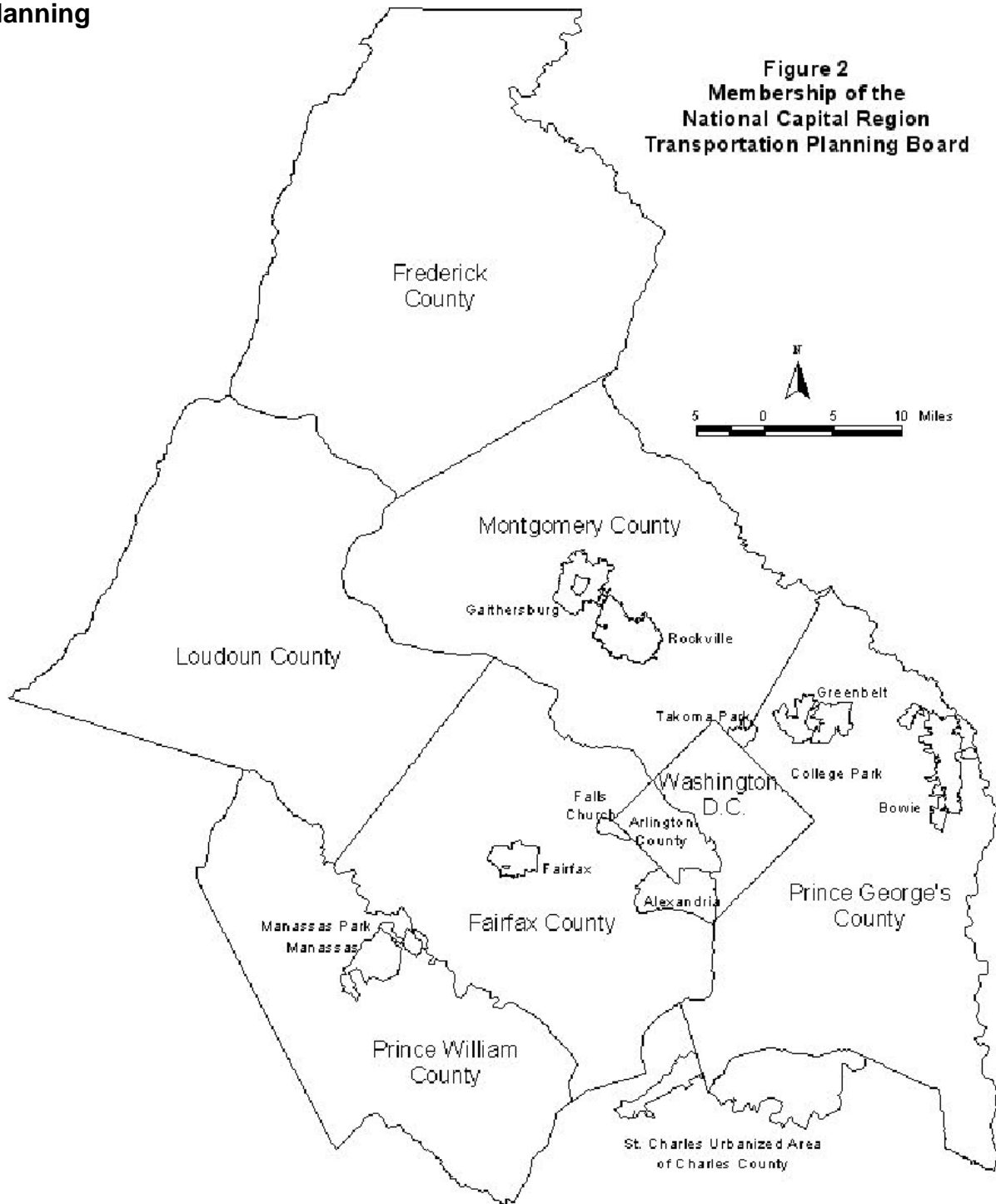


Figure 3

TRANSPORTATION PLANNING AND PROGRAMMING RESPONSIBILITIES

RESPONSIBILITY	AGENCIES
UPWP Development	TPB, DOTs, WMATA, Local Gov'ts
Planning Certification	TPB, DOTs
CLRP Development	
Transportation/Land-Use Planning	TPB, MDPC, Local Gov'ts
Plan Inputs/Update	DOTs, WMATA, Local Gov'ts, NVTA, PRTC,
MWAA	
Project Selection	TPB, DOTs, WMATA, and Local Gov'ts
Air Quality Conformity	TPB, Fredericksburg Area MPO
Financial Plan	TPB, DOTs, WMATA
Congestion Management Process	TPB, DOTs, Local Gov'ts,
Safety Element	TPB, DOTs, Local Gov'ts,
Participation Plan	TPB
Freight Planning	TPB, DOTs, Local Gov'ts.
TIP Development	
TIP Inputs	DOTs, WMATA, Local Gov'ts, NVTA, PRTC,
MWAA	
Project Selection	TPB, DOTs, WMATA
Air Quality Conformity	TPB, Fredericksburg Area MPO
Financial Plan	TPB, DOTs, WMATA, Local Govt., NVTA,
PRTC	
Human Service Transportation	
Coordination Planning	TPB, WMATA, human services agencies
Private Enterprise Participation	TPB, WMATA, Local Gov'ts, NVTC/PRTC
Public Involvement Plan	TPB
Listing of Projects with Federal	
Funding Obligations	TPB, DOTs, WMATA
Air Quality 2010 Attainment Plan	MWAQC, TPB, DOTs WMATA, state AQ agencies
Corridor Studies	DOTs, WMATA, TPB
Travel Demand Forecasting	TPB
Travel Monitoring	TPB, DOTs, WMATA, Local Gov'ts

Figure 4
TRANSPORTATION PLANNING STUDIES
WITHIN THE WASHINGTON METROPOLITAN AREA 2010

Name	Primary Agencies	Schedule	Products
Regional			
Regional Mobility and Accessibility Scenario Study	TPB	2010	Outreach
Update Constrained of Long-Range	TPB, state DOTs, WMATA, local govts.	2010	CLRP
Regional ITS Architecture Update	TPB, state DOTs, WMATA, local govts.	2010	Report
Station Area Plans (multiple stations)	WMATA	on-going	Plans
Station Access Studies (multiple stations)	WMATA	on-going	Plans
Union Station Metro Station Capacity Enhancement	WMATA	2010	Study
Bus Stop Improvement Standards & Needs Assessment	WMATA	2010	Report
Priority Corridor Dev. Plans (Viers Mill Rd. and NH Ave.)	WMATA	on-going	Plans
Bus Service Eval. Studies	WMATA	on-going	Studies
Bicycle and Pedestrian Facilities Plan	WMATA	2010	Report
Metrorail Real-Time Parking Feasibility Study	WMATA	2010	Report
Metro Long-Range Transit System Plan	WMATA	2010	Report
BRAC Bus Service Plans	WMATA	2010	Study
Interface of LRT & Streetcar Projects	WMATA	2011	Report

Figure 4 PLANNING STUDIES 2010 (Continued)

<u>Name</u>	<u>Primary Agencies</u>	<u>Schedule</u>	<u>Products</u>
Virginia			
I-66 Corridor (inside The Beltway)	VDOT	TBD	NEPA
I-66 Corridor Study (MTES) (Outside the Beltway)	VDOT	TBD	NEPA
Tri-County Parkway	VDOT	2010	FEIS
TransAction 2040	NVTA	2012	Report
VRE Extension to Gainesville	VRE	2012	PE/ EIS
Columbia Pike Multi-modal Transportation Study	Arlington Co.	TBD	Prelim. Des.
Columbia Pike Transit Initiative	WMATA, Arl., Fairfax	TBD	NEPA
I-95 / 395 BRT Study	VDOT / DRPT	2010	Report
Vanpool Incentive Design	MVTA / FAMPO	2010	Report
Maryland			
Capital Beltway Study	MDOT, VDOT, Montgomery & Prince George's Counties	2015	DEIS
I-270 Multi-Modal Corridor Study	MDOT/SHA, Montgomery & Frederick Counties	2010	PE/FEIS
Corridor Cities Transitway Study	MDOT/MTA	2010	AA/EA
Purple Line (Bethesda to Silver Spring/ Silver Spring to New Carrollton)	MDOT/MTA	2010	AA/DEIS
MD 5 Transportation Study(I-495 to US 301)	MDOT/SHA	2010	DEIS

Figure 4 PLANNING STUDIES 2010 (Continued)

<u>Name</u>	<u>Primary Agencies</u>	<u>Schedule</u>	<u>Products</u>
US 301 Waldorf Study (US 301 from T.B. to south of Waldorf)	MDOT/SHA	2010	DEIS
US 301 Governor Harry W. Nice Bridge	MD Transportation Authority	2010	EA/FONSI
MD 223 Study (Temple Hill Road to MD 5)	MDOT/SHA	2015	DEIS
MD 197 Study (MD 450 Relocated to Kenhill Drive)	MDOT/SHA	2010	DEIS
MD 97 Study (16th Street to the Capital Beltway)	MDOT/SHA	2015	DEIS
District of Columbia			
14th Street Bridge Feasibility Study	FHWA, DDOT, VDOT	on-going	EIS
Baltimore/Washington MAGLEV Deployment	DDOT, MDOT	on-going	EIS
White House Area Transportation Study	US DOT	2009	Report
District of Columbia Transit Alternatives Analysis (DCAA)	DDOT/WMATA	2009	Plan
South Capitol Street (EIS)/AWI	DDOT	2009	EIS
Citywide Parking Management Plan	DDOT	2009	Report
Washington Hospital Center Access & Area Development Study	DDOT	2009	Report
Mount Vernon Square Study	DDOT	2009	Report/Design

Figure 4 PLANNING STUDIES	2010 (Continued)		
<u>Name</u>	<u>Primary Agencies</u>	<u>Schedule</u>	<u>Products</u>
First Place and Galloway NE Redesign	DDOT	2009	Report/Design
C Street NE Lane Reduction Feasibility	DDOT	2009	Report/Design
NoMa Access Study and Transportation Management Plan	DDOT	2009	Report/Design
Fairlawn Traffic Calming and Management Plan	DDOT	2009	Report/Design
Citywide Transportation Demand Model	DDOT	2009	Travel Model
Transportation Vision Plan	DDOT	2009	Plan/Report
Randle Heights Transportation Audit	DDOT	on-going	Report
Lamond Riggs Transportation Audit	DDOT	on-going	Report
Mount Pleasant Transportation Study	DDOT	on-going	Report
15th Street NW Reconfiguration Study	DDOT	on-going	Report/Design
Great Streets Program	DDOT	on-going	Design/Construct
Glover Park Transportation Study	DDOT	on-going	Report/Design
North Capitol / Irving Street Cloverleaf Redesign Study	DDOT	on-going	Report/Design
10th Street Pedestrian Study	DDOT	on-going	Study/Report
Garfield-Canal Park Connector	DDOT	on-going	Design Project
Congress Heights Streetscape Concept Design	DDOT	on-going	Study/Report

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Total Proposed Funding by Federal Source for FY 2011

Proposed federal funding for the transportation planning activities in this UPWP relies upon five sources: FTA Section 5303, FHWA Section 112, FAA Continuous Airport System Planning (CASP), FHWA State Planning and Research (SPR) and special federal funding. The proposed funding amounts (including state and local matching funds) for the TPB work program are shown in Table 1 on page 1-17.

The new FY 2011 funding level in Table 1 under the "FTA Section 5303" column is the same as the FY 2010 level, and new funding under the "FHWA Section 112" column is the same as the FY 2010. The total FY 2011 budget for the Basic Program with unobligated funding from FY 2009 is about six percent less than the FY 2010 total.

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TABLE 1
FY 2011 TPB PROPOSED FUNDING BY FEDERAL STATE AND LOCAL SOURCES
(July 1, 2010 to June 30, 2011)

	FTA SECT 5303 80% FED & 20% STA/ LOC	FHWA SECT 112 80% FED & 20% STA/ LOC	FAA CASP 90% FED & 10% LOC	TOTALS
ALLOTMENTS PROVIDED BY DDOT				
NEW FY 2011	441,100	1,870,100		2,311,200
UNOBLIGATED FY 2009	47,686	271,323		319,009
SUBTOTAL	488,786	2,141,423		2,630,209
ALLOTMENTS PROVIDED BY MDOT				
NEW FY 2011	1,077,700	3,186,100		4,263,800
UNOBLIGATED FY 2009	75,922	375,544		451,466
SUBTOTAL	1,153,622	3,561,644		4,715,266
ALLOTMENTS PROVIDED BY VDOT				
NEW FY 2011	911,900	2,722,500		3,634,400
UNOBLIGATED FY 2009	78,291	279,505		357,796
SUBTOTAL	990,191	3,002,005		3,992,196
TPB BASIC PROGRAM				
TOTAL NEW FY 2011	2,430,700	7,778,700		10,209,400
TOTAL UNOBLIGATED FY 2009	201,899	926,372		1,128,271
SUBTOTAL	2,632,599	8,705,072		11,337,671
TOTAL BASIC PROGRAM				
	2,632,599	8,705,072		11,337,671
GRAND TOTAL				
	2,632,599	8,705,072	460,000	11,797,671

II. PROPOSED FY 2010 TPB WORK PROGRAM AND BUDGET

Program Structure

The TPB is responsible for the federally required planning process, serves as a forum for regional coordination, and provides technical resources for decision-making. The FY2011 work program presents the work activities that support the TPB responsibilities. This work program comprises seven major activities and follows the structure in the FY 2010 program to clearly address the final transportation planning requirements. These work activities include: (1) Plan Support; (2) Coordination and Programs; (3) Forecasting Applications; (4) Development of Networks/Models; (5) Travel Monitoring; (6) Technical Assistance; and (7) Continuous Airport System Planning. The tasks to be completed under each of the work activities are described in the following sections. The staff of the COG Department of Transportation Planning will carry out these activities, with the assistance of staff in other COG departments and supplementary consultant support.

The work program has been structured to clearly identify the specific work products to be developed, the linkages between them, and the TPB entity responsible for oversight of the products. Figures 5 and 6 on pages 4 and 5 illustrate the relationship between and among the TPB work activities.

The first major activity, **Plan Support** includes the preparation and coordination of the policy and planning products necessary for conducting an effective transportation planning process for the region. The UPWP, the transportation improvement program (TIP) and the financially-constrained long-range plan (CLRP) are required by federal law and regulations.

The second major activity, **Coordination and Programs**, includes related activities such as the regional congestion management process (CMP), safety planning, management, operations and technology, emergency preparedness, freight planning, regional bus planning, and bicycle and pedestrian planning. Public participation applies to all of the policy products. Human services transportation coordination planning addresses the new SAFETEA-LU requirement for coordination of the FTA programs for elderly persons and persons with disabilities, job access and reverse commute, and the new freedom program. The Transportation /Land Use Connection (TLC) Program became a permanent program in FY 2008 to improve the coordination between land use and transportation planning.

The third major activity, **Forecasting Applications**, includes forecasting applications such as air quality conformity and regional studies to provide the substantive inputs for the policy products.

The fourth major activity, **Development of Networks and Models** interacts with **Travel Monitoring**, the fifth major activity. Together, these activities provide empirical travel information from congestion monitoring and survey and analysis activities. Both products and methods activities provide input for the technical products.

The sixth major activity, **Technical Assistance**, activity responds to requests from state and local governments and transit operating agencies for applying TPB methods and data to support corridor, project, and sub-area transportation and land use studies related to regional transportation planning priorities.

Finally, the seventh major activity, **Continuous Airport System Planning (CASP)** utilizes the methods and data work activities for airport and airport-serving facilities in the region.

Work Activity Budgets

The proposed budget levels by funding source, which include FTA and FHWA funds together with state and local match, are shown in Table 2 on page 7. The TPB committee structure is shown in Figure 7 on page 9. The TPB committee or sub-committee responsible for the specific work activities listed in Table 2 are shown under the descriptions for each task in Section III. A detailed breakdown of staffing, consultant costs and other budgetary requirements is provided in Table 3 on page 8.

Funding for the TPB Basic Work Program is similar to the FY 2010 level, and the FY 2011 UPWP continues and expands the work activities in the FY 2010 UPWP. The structure and content of this work program are summarized as follows:

- **Under Section 1 - Plan Support**, most of the activities have been conducted on an annual basis in previous years. The Transportation /Land Use Connection (TLC) Program (item H) began as a pilot program in FY 2007 to improve the coordination between land use and transportation planning.
- **Under Section 2 - Coordination Planning**, some of the activities have been conducted on an annual basis in previous years. The new or revised activities are Congestion Management Process (CMP) (item A), Transportation Emergency Preparedness (item C), Transportation Safety Planning (item D), Regional Bus Planning (item F), Human Services Transportation Coordination Planning (item G), and Freight Planning (item H).
- **Under Section 3 - Forecasting Applications**, all of the activities have been conducted on an annual basis in previous years.
- **Under Section 4 - Development of Networks/Models**, all of the activities have been conducted on an annual basis in previous years.
- **Under Section 5 - Travel Monitoring**, all of the activities have been conducted on an annual basis in previous years.
- **Section 6 - Technical Assistance and Section 7 - Continuous Airport System Planning (CASP)** are conducted each year.

- **Section 8 - Service/Special Projects**, service work or special technical studies as specified in contracts between the transportation agencies and COG may be included in the UPWP. Services or special projects are authorized and funded separately by the transportation agencies.

Figure 5: Overview of Planning Products and Supporting Activities

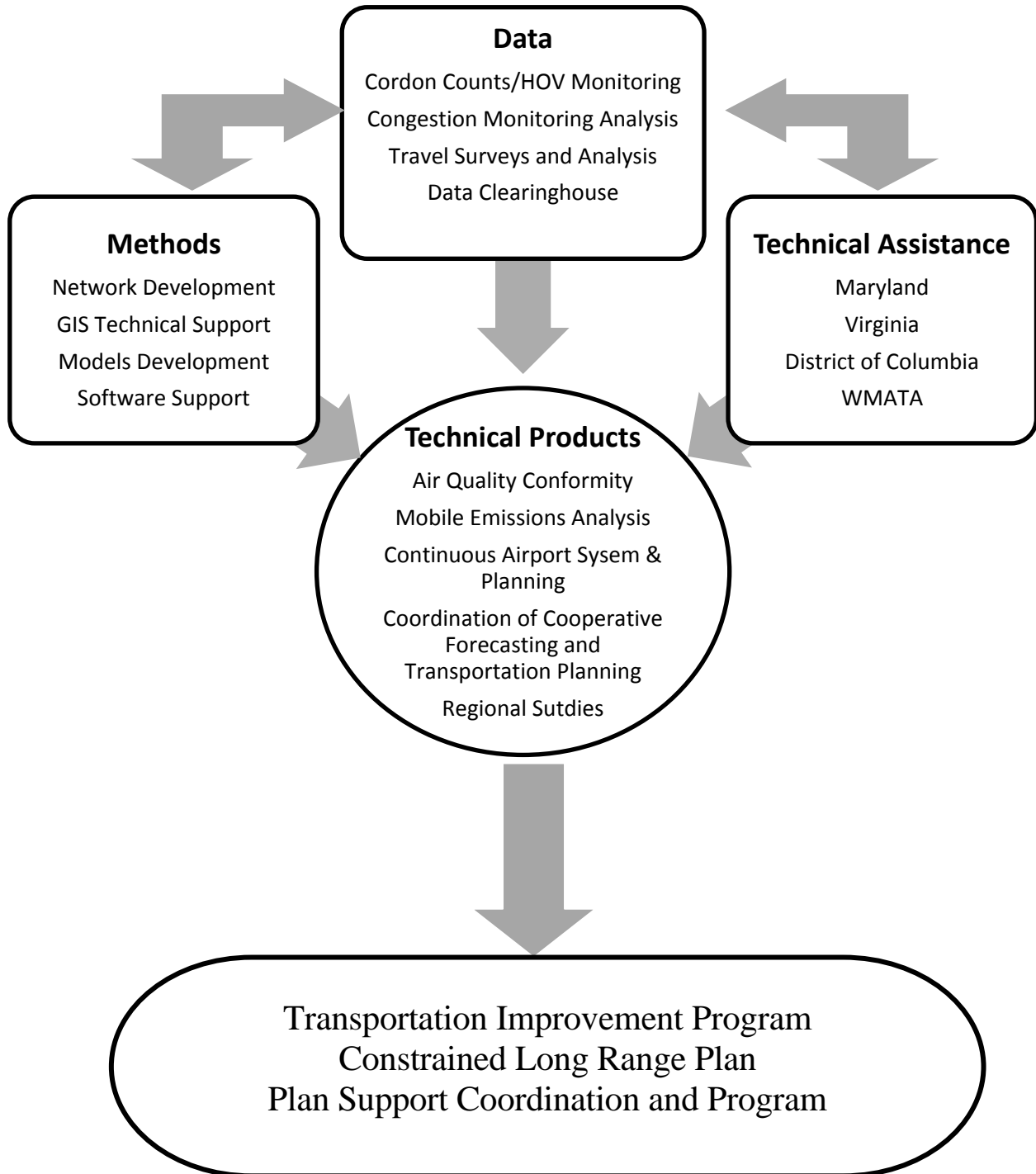
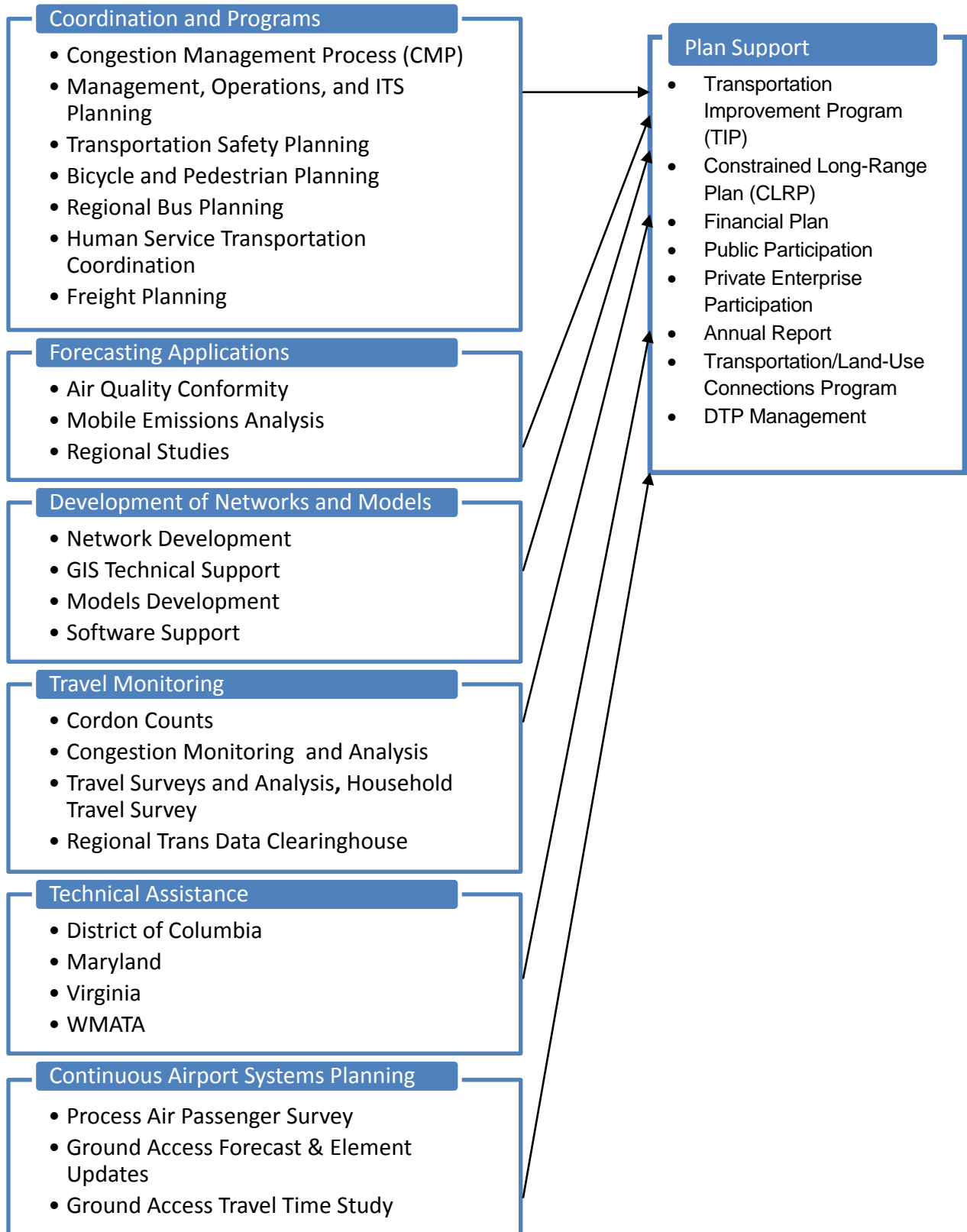


Figure 6: Visual Representation of UPWP Work Activity Relationships



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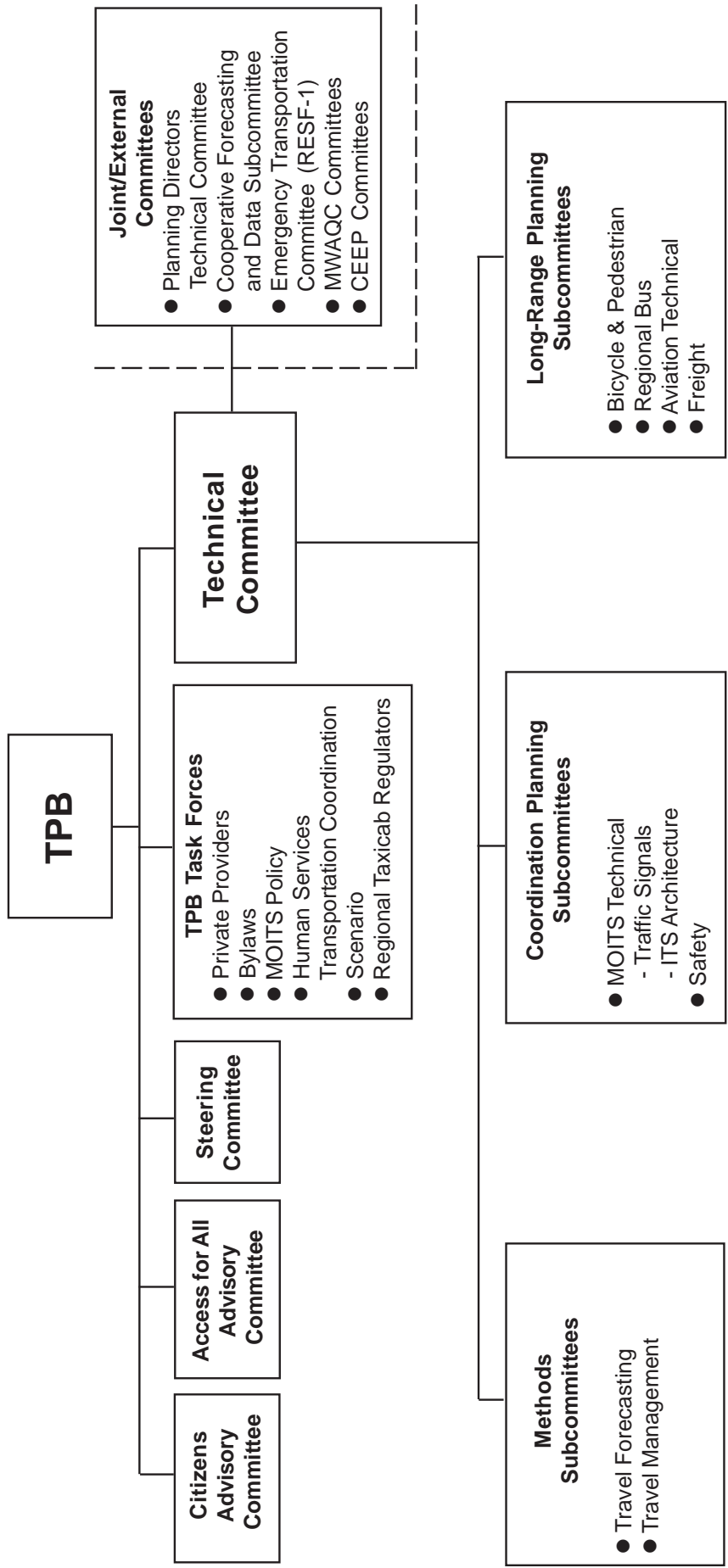
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TABLE 2
TPB FY 2011 WORK PROGRAM BY FUNDING SOURCES

WORK ACTIVITY	TOTAL COST	FTA/STATE/ LOCAL	FHWA/STATE/ LOCAL	OTHER FUND
1. PLAN SUPPORT				
A. Unified Planning Work Program (UPWP)	70,700	16,417	54,283	
B. Transp Improvement Program (TIP)	240,600	55,868	184,732	
C. Constrained Long-Range Plan	588,400	136,628	451,772	
D. Financial Plan	64,000	14,861	49,139	
E. Public Participation	371,900	86,356	285,544	
F. Private Enterprise Participation	18,300	18,300		
G. Annual Report	80,100	18,599	61,501	
H. Transportation/Land Use Connection Progr	395,000	91,720	303,280	
I. DTP Management	452,100	104,979	347,121	
Subtotal	2,281,100	543,728	1,737,372	
2. COORDINATION and PROGRAMS				
A. Congestion Management Process (CMP)	155,000	35,991	119,009	
B. Management, Operations, and ITS Planning	340,300	79,019	261,281	
C. Emergency Preparedness Planning	75,400	17,508	57,892	
D. Transportation Safety Planning	100,000	23,220	76,780	
E. Bicycle and Pedestrian Planning	108,700	25,240	83,460	
F. Regional Bus Planning	100,000	23,220	76,780	
G. Human Service Transportation Coordination	114,800	26,657	88,143	
H. Freight Planning	130,000	30,186	99,814	
I. MATOC Program Planning Support	120,000	27,864	92,136	
Subtotal	1,244,200	252,915	836,285	
3. FORECASTING APPLICATIONS				
A. Air Quality Conformity	563,200	130,777	432,423	
B. Mobile Emissions Analysis	640,100	148,633	491,467	
C. Regional Studies	365,800	84,940	280,860	
D. Coord Coop Forecasting & Transp Planning	726,800	168,765	558,035	
Subtotal	2,295,900	533,114	1,762,786	
4. DEVELOPMENT OF NETWORKS/MODELS				
A. Network Development	769,700	178,726	590,974	
B. GIS Technical Support	548,800	127,433	421,367	
C. Models Development	1,071,200	248,736	822,464	
D. Software Support	178,900	41,541	137,359	
Subtotal	2,568,600	596,436	1,972,164	
5. TRAVEL MONITORING				
A. Cordon Counts	250,800	58,236	192,564	
B. Congestion Monitoring and Analysis	350,000	81,271	268,729	
C. Travel Surveys and Analysis				
Household Travel Survey	456,300	105,954	350,346	
D. Regional Trans Data Clearinghouse	317,900	73,817	244,083	
Subtotal	1,375,000	319,279	1,055,721	
Core Program Total (I to V)	9,764,800	2,245,473	7,364,327	
6. TECHNICAL ASSISTANCE				
A. District of Columbia	312,100	43,621	268,479	
B. Maryland	575,500	80,436	495,064	
C. Virginia	490,600	68,569	422,031	
D. WMATA	194,500	194,500		
Subtotal	1,572,700	387,126	1,185,574	
Total, Basic Program	11,337,500	2,632,599	8,549,901	
7. CONTINUOUS AIRPORT SYSTEM PLANNING				
A. Process Air Passenger Survey	120,000			120,000
B. Ground Access Travel Time Study	175,000			175,000
C. Update Ground Access Forecast	165,000			165,000
Subtotal	460,000			460,000
GRAND TOTAL	11,797,500	2,632,599	8,549,901	460,000

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TABLE 3
TPB FY 2011 BUDGET AND WORK PROGRAM BY EXPENDITURE CATEGORY

WORK ACTIVITY	DIRECT SALARIES DTP STAFF	DIRECT SALARIES OTHER COG STAFF	M & A	LEAVE BENEFITS 19%	FRINGE BENEFITS 22%	INDIRECT COSTS 36%	DATA & PC COSTS	CONSULTANT	DIRECT COSTS	TOTAL
1. PLANS SUPPORT										
A. Unified Planning Work Program	28,378	0	7,378	6,794	9,361	18,688	100	0	0	70,700
B. Transportation Improvement Program	76,533	0	19,899	18,322	25,246	50,400	0	50,000	0	240,600
C. Constrained Long-Range Plan	210,480	15,000	58,625	53,980	74,379	148,487	1,250	25,000	1,200	588,400
D. Financial Plan	114,921	0	29,879	27,512	37,909	75,679	0	85,000	1,000	371,900
E. Public Participation	7,356	0	1,913	1,761	2,426	4,844	0	0	0	18,300
F. Private Enterprise Participation	22,048	0	5,732	5,278	7,273	14,519	0	5,000	20,250	80,100
G. Annual Report	42,206	0	10,974	27,794	13,922	27,794	0	290,000	0	395,000
H. Transportation/Landuse Connection Program	97,516	0	25,354	32,167	32,167	64,218	0	10,000	199,500	452,100
I. DTP Management	625,163	15,000	166,442	153,255	211,169	421,571	1,550	465,000	221,950	2,281,100
Subtotal										
2. COORDINATION PLANNING										
A. Congestion Management Process	62,304	0	16,199	14,916	20,552	41,029	0	0	0	155,000
B. Management, Operations, & ITS Planning	116,689	0	30,339	27,935	38,492	76,844	0	50,000	0	340,300
C. Trans. Emergency/Security Planning	0	30,308	7,880	7,256	9,998	19,959	0	0	0	75,400
D. Transportation Safety Planning	30,147	0	7,838	7,217	9,945	19,853	0	25,000	0	100,000
E. Bicycle and Pedestrian Planning	43,693	0	11,360	10,460	14,413	28,774	0	0	0	108,700
F. Regional Bus Planning	40,196	0	10,451	9,623	13,259	26,471	0	0	0	100,000
G. Human Service Transportation Coordination	46,145	0	11,998	11,047	15,222	30,388	0	0	0	114,800
H. Freight Planning	52,255	0	13,986	12,510	17,237	34,412	0	0	0	130,000
I. MATOC Program Planning & Support	24,118	0	6,271	5,774	7,956	15,882	0	60,000	0	120,000
Subtotal	415,547	30,308	115,922	106,738	147,073	293,612	0	135,000	0	1,244,200
3. FORECASTING APPLICATIONS										
A. Air Quality Conformity	201,357	17,792	56,979	52,464	72,290	144,318	0	0	18,000	563,200
B. Mobile Emissions Analysis	182,722	47,240	59,790	55,053	75,857	151,438	0	50,000	18,000	640,100
C. Regional Studies	59,210	51,900	28,889	26,600	36,652	73,170	25,481	60,000	3,899	365,800
D. Coordination Cooperative Forecasting and Transportation Planning	101,331	167,500	69,896	64,358	88,679	177,035	55,500	0	2,500	726,800
Subtotal	544,620	284,432	215,554	198,475	273,478	545,961	80,981	110,000	42,399	2,295,900
4. DEVELOPMENT OF NETWORKS/MODELS										
A. Network Development	297,933	0	77,463	71,325	98,279	196,200	0	25,000	3,500	769,700
B. GIS Technical Support	196,478	0	51,084	47,037	64,812	129,388	50,000	0	10,000	548,800
C. Models Development	243,789	0	63,385	58,363	80,418	160,544	0	450,000	14,700	1,071,200
D. Software Support	71,107	0	18,488	17,023	23,456	46,826	0	0	2,000	178,900
Subtotal	809,308	0	210,420	193,748	266,965	532,959	50,000	475,000	30,200	2,568,600
5. TRAVEL MONITORING										
A. Cordon Counts	62,907	0	16,356	15,060	20,751	41,426	0	0	94,300	250,800
B. Congestion Monitoring and Analysis	127,522	0	33,156	30,529	42,066	83,978	0	10,000	22,749	350,000
C. Travel Surveys and Analysis	167,095	0	43,445	40,003	55,119	110,038	16,500	0	24,100	456,300
Household Travel Survey	0	0	0	0	0	0	0	0	0	0
Supplemental Regional Bus Passenger Survey	0	0	0	0	0	0	0	0	0	0
D. Regional Transportation Clearinghouse	107,685	0	27,998	25,790	35,522	70,915	50,000	0	0	317,900
Subtotal	465,210	0	120,955	111,371	153,458	306,358	66,500	10,000	141,149	1,375,000
Core Program Total (1 to 5)	2,859,848	329,740	829,293	763,587	1,052,143	2,100,460	199,031	1,195,000	435,698	9,764,800
6. TECHNICAL ASSISTANCE										
A. District of Columbia	125,452	0	32,618	30,033	41,383	82,615	0	0	0	312,100
B. Maryland	231,328	0	60,145	55,360	76,308	152,338	0	0	0	575,500
C. Virginia	197,202	0	51,273	47,210	65,051	129,865	0	0	0	490,600
D. WMATA	78,181	0	20,327	18,717	25,790	51,485	0	0	0	194,500
Subtotal	632,164	0	164,363	151,340	208,531	416,303	0	0	0	1,572,700
TOTAL BASIC PROGRAM	3,492,012	329,740	993,655	914,927	1,260,674	2,516,763	199,031	1,195,000	435,698	11,337,500
7. CONTINUOUS AIRPORT SYSTEM PLANNING										
A. Process 2009 Air Passenger Survey	48,235	0	12,541	11,548	15,911	31,765	0	0	0	120,000
B. Ground Access Travel Time Study	70,343	0	18,289	16,840	23,204	46,324	0	0	0	175,000
C. Update Ground Access Forecast	66,324	0	17,244	15,878	21,878	43,676	0	0	0	165,000
Subtotal	184,902	0	48,075	44,266	60,993	121,765	0	0	0	460,000
8. SERVICE/SPECIAL PROJECTS										
GRAND TOTAL	3,676,914	329,740	1,041,730	959,193	1,321,667	2,638,528	199,031	1,195,000	435,698	11,797,500

Figure 7
TPB Committee Structure



III. MAJOR WORK ACTIVITIES

1. PLAN SUPPORT

A. THE UNIFIED PLANNING WORK PROGRAM (UPWP)

The Unified Planning Work Program (UPWP) for the Metropolitan Washington Region describes all transportation planning activities utilizing federal funding, including Title I Section 134 metropolitan planning funds, Title III Section 8 metropolitan planning funds, and Federal Aviation Administration Continuing Airport System Planning (CASP) funds. The UPWP identifies state and local matching dollars for these federal planning programs, as well as other closely related planning projects utilizing state and local funds.

The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) and the Clean Air Act Amendments of 1990 (CAAA) created a number of planning requirements. On October 28, 1993, FHWA and FTA issued final regulations regarding metropolitan planning. The Safe, Accountable, Flexible, and Efficient Transportation Equity Act - A Legacy for Users (SAFETEA-LU), which became law on August 11, 2005, reaffirms the structure of the metropolitan planning process, and increases federal financial support for it. On February 14, 2007, FHWA and FTA issued the final regulations regarding metropolitan planning in response to SAFETEA-LU. This work program has been developed to comply with these regulations.

In 1994, the TPB developed and adopted the first financially-constrained Long Range Transportation Plan for the National Capital Region (CLRP). In July 1997, the first three-year update of the CLRP was approved by the TPB, the second update was approved in October 2000, and the third update was approved in December 2003. The fourth update was approved by the TPB in October 2006. On January 16, 2008, the TPB approved the 2007 CLRP to comply with the final regulations issued on February 14, 2007.

The Environmental Protection Agency (EPA) issued regulations on November 24, 1993, followed with a succession of guidance documents, and on July 1, 2004 published the 8-hour ozone standard conformity guidance, which taken together provide criteria and procedures for determining air quality conformity of transportation plans, programs and projects funded or approved by the FHWA and FTA. These conformity requirements are addressed in this document. Under these regulations, the State Implementation Plans (SIP) for improving air quality for the region must be adopted by the states and submitted to EPA by specified dates.

The FY 2011 UPWP defined by this document details the planning activities to be accomplished between July 2010 and June 2011 to address the annual planning requirements such as preparing the Transportation Improvement Program, addressing federal environmental justice requirements, and assessing Air Quality Conformity. It

describes the tasks required to meet approval dates for the region's SIPs, and outlines the activities for the subsequent years.

In addition, this document describes the integration of program activities and responsibilities of the TPB Technical Committee and its subcommittees for various aspects of the work program. It provides an overview of the regional planning priorities and describes the major transportation planning and air quality planning studies being conducted throughout the region over the next two years.

During FY 2011, certain amendments may be necessary to reflect changes in planning priorities and inclusion of new planning projects. Under this task, Department of Transportation Planning (DTP) staff will identify and detail such amendments for consideration by the TPB as appropriate during the year.

In the second half of FY 2011, staff will prepare the FY 2012 UPWP. The document will incorporate suggestions from the federal funding agencies, state transportation agencies, transit operating agencies, local governments participating in TPB, and the public through the TPB's public involvement process. The new UPWP will be presented in outline to the TPB Technical Committee and the TPB in January 2011, as a draft to the Technical Committee in February 2011 and as a final document for adoption by the Technical Committee and the TPB in March 2011. The approved UPWP will be distributed to the TPB and the Technical Committee, and made available to the public on the TPB web site.

This task will also include the preparation of monthly progress reports for each of the state agencies administering the planning funding, and the preparation of all necessary federal grant submission materials.

Oversight:	Technical Committee
Cost Estimate:	\$70,700
Products:	UPWP for FY 2012, amendments to FY 2011 UPWP, monthly progress reports and state invoice information, federal grant materials
Schedule:	Draft: February 2011 Final: March 2011

B. THE TRANSPORTATION IMPROVEMENT PROGRAM (TIP)

The Transportation Improvement Program (TIP) for the Metropolitan Washington Area is a six year program of highway, transit, bicycle and pedestrian, congestion mitigation/air quality, safety and transportation enhancement projects. The TIP is updated each year and must be approved by the TPB and the governors of Maryland and Virginia and the

mayor of the District of Columbia. The TIP is required as a condition for all federal funding assistance for transportation improvements within the Washington Metropolitan Statistical Area.

TIP documentation will describe major projects from the previous TIP that were implemented and identify significant delays in the implementation of major projects. The air quality conformity report will describe progress in implementing transportation emission reduction measures (TERMs) required for improving air quality.

Citizens, affected public agencies, representatives of transportation agency employees, private providers of transportation, freight shippers, users of public transit, and all other interested parties will be given an opportunity to review and comment on the proposed TIP as described under the TPB's public participation plan which was adopted in December 2007. A public forum on the TIP development process will be conducted. To facilitate public review, project information from the TIP and CLRP will be made accessible through an online, searchable database. Visual representation of the projects will be enhanced with a GIS system for displaying projects. The database application for submitting TIP project data, CLRP projects, and air quality conformity data will continue to be improved to facilitate reviewing the TIP and CLRP information. Interactive means of sharing the information in the TIP and CLRP such as querying capabilities and specialized maps or graphs will be available. A brochure highlighting the CLRP/TIP projects and financial plan will be prepared.

The TIP Schedule and Project Selection

A draft of the FY2011-2016 TIP will be released for a 30-day public comment period September of 2010. A public forum on the FY 2011-2016 TIP will be held in conjunction with the release for public comment. The TPB is scheduled to adopt the 2010 CLRP and FY 2011-2016 TIP in October 2010.

Also in October 2010, the TPB will issue a call for projects document requesting project submissions and updates for the FY2012-2017 TIP and 2011 CLRP. Draft versions of the TIP will be prepared for review by the TPB Technical Committee, the TPB, and the public between January and May. This TIP will be prepared with the assistance of and in cooperation with the transportation implementing agencies in the region, including the state departments of transportation, the District of Columbia Department of Transportation, the National Park Service, the Washington Metropolitan Area Transit Authority (WMATA) and other public transit operators, and local government agencies.

Projects included in the TIP will be reviewed for consistency with the policies and facilities delineated in the adopted financially-constrained Long Range Transportation Plan (CLRP) for the region. Only projects, or phases of projects, that have full funding anticipated to be available within the time period contemplated for completion are

included in the TIP. A financial plan will be prepared to demonstrate how the TIP can be implemented, and indicate the sources of public, private and innovative funding. This financial plan will be expanded with additional analysis and visual aids such as graphs and charts in the printed FY 2011-2016 TIP, online documentation and an accompanying summary brochure for the CLRP and TIP. Additionally, the annual certification of compliance with regulations on providing transit services to persons with disabilities will be prepared.

During the year several administrative modifications and amendments will be needed in the FY 2011-2016 TIP to revise funding information or reflect changes in priorities or the introduction of new project elements. Such modifications and amendments will follow the procedures adopted by the TPB on January 16, 2008.

Annual Listing of TIP Projects that Have Federal Funding Obligated

SAFETEA-LU requires that the TPB must publish or otherwise make available an annual listing of projects, consistent with the categories in the TIP, for which federal funds have been obligated in the preceding year. With the assistance of and in cooperation with the transportation implementing agencies in the region, TPB will prepare a listing of projects for which federal funds have been obligated in FY 2010.

Oversight:	Technical Committee
Cost Estimate:	\$240,600
Products:	Final FY 2011-2016 TIP Draft FY 2012-2017 TIP TIP projects with obligated federal funding
Schedule:	October 2010 June 2011 June 2011

C. CONSTRAINED LONG-RANGE TRANSPORTATION PLAN (CLRP)

The Financially Constrained Long-Range Transportation Plan (CLRP) must be updated every four years as required by the final SAFETEA-LU planning regulations issued February 14, 2007. The CLRP is updated annually with amendments that include new projects or adjust the phasing or other aspects of some of the projects or actions in the plan, or change specific projects as new information on them becomes available. The last major update of the CLRP was in 2006, so the 2010 CLRP will meet the four year requirement by providing an expanded financial analysis of transportation revenues

expected to be available. In addition, the 2010 CLRP will extend the planning horizon for the metropolitan Washington region out to 2040.

The Transportation Vision which was adopted by the TPB in October 1998, contains a vision statement, long-range goals, objectives, and strategies to guide transportation planning and implementation in the region. It addresses the eight planning factors in SAFETEA-LU. The Vision is the TPB Policy Element of the CLRP. The CLRP website (www.mwcog.org/clrp) documents how the plan addresses the SAFETEA-LU planning factors as reflected by the goals of the TPB Vision.

In November 2008, the TPB issued its "Call for Projects" document requesting new and updated information on projects, programs and strategies for the 2009 CLRP. The draft updates were released for public comment in January, and in February, the TPB approved the project submissions for inclusion in the air quality conformity analysis of the CLRP and TIP. In May 2009, the Maryland Department of Transportation and the District of Columbia Department of Transportation requested that two additional projects be amended into the air quality conformity analysis for the 2009 CLRP. In June, the TPB approved the addition of the Purple Line in Maryland and the "Return to L'Enfant" project in the District of Columbia to the air quality analysis for the plan update. In July 2009, the TPB approved the 2009 CLRP and the FY 2010-2015 TIP as proposed in February without the Purple Line and "Return to L'Enfant" projects. In October, following a second air quality conformity analysis, the TPB approved the addition of the Purple Line and "Return to L'Enfant" projects into the 2009 CLRP.

The CLRP will be documented in several ways and public materials will be provided during plan development and after plan approval. The CLRP website will be utilized to document the plan update by describing the development process, related planning activities, major projects, performance of the plan and how the public can get involved. The website also makes CLRP-related process and technical documentation readily accessible. The TPB will continue to make the plan information more accessible and visual. Projects in the plan will be accessible through an online database that the public can easily search. Projects will be mapped using GIS where possible and displayed along with project descriptions and in an interactive map. These maps will also be used in printed media, such as the CLRP and TIP summary brochure. The TPB will also continue to improve the quality of public materials about the plan during its development and after approval so that the materials are more useful to a wide variety of audiences, using less technical jargon and more "public friendly" language.

The 2010 CLRP

In November 2009, the TPB issued a "Call for Projects" document requesting projects, programs or strategies for inclusion in the 2010 CLRP. Project updates were due in March 2010. Materials describing the draft 2010 CLRP were developed in the spring of

2010, including maps, major project descriptions, and analysis from the previous year's CLRP. Work on the Financial Plan update was completed in the spring of 2010. In preparing the plan, the TPB consulted with federal, state and local agencies responsible for natural resources, airport operations, freight movements, environmental protection, conservation and historic preservation in the District of Columbia, Maryland and Virginia.

Documentation of the plan will include an analysis of how the plan performs in regard to transit and auto trips made, vehicle miles of travel, lane miles of congestion and accessibility to jobs. The analysis will also examine the relationship between transportation improvements and strategies and the development framework show in the regional activity centers map. The CLRP will also be evaluated to see if low-income and minority populations are disproportionately impacted by adverse effects of improvements. In addition to the two standard public comment periods on the CLRP, the 2010 update will include significant additional outreach activities. This outreach will culminate in a new CLRP element based on input received about public views on regional transportation priorities that go beyond what is funded in the CLRP.

In September 2010, the 2010 update to the CLRP will be released for a final public comment period along with the FY 2011-2016 TIP and the accompanying air quality conformity analysis. The TPB is scheduled to adopt the 2010 CLRP in October 2010.

The 2011 CLRP

In October 2010, the TPB will issue its "Call for Projects" document again requesting new and updated information on projects, programs and strategies to be included in the 2011 CLRP update. Draft materials describing the CLRP will be prepared for review by the TPB Technical Committee, the TPB and the public between February and June 2011. The TPB is scheduled to adopt the 2011 CLRP in July 2011.

Oversight:	Technical Committee
Cost Estimate:	\$588,400
Products:	Documentation of the 2010 CLRP and draft 2011 CLRP on website with interactive maps, searchable database, accompanying summary brochure, and other printed materials
Schedule:	2010 CLRP documentation - October 2010 Draft 2011 CLRP – June 2011

D. FINANCIAL PLAN

As required under federal planning regulations, both the TIP and the CLRP must have a financial plan that demonstrates how they can be implemented and show the sources of funding expected to be made available to carry them out. A new financial analysis by the consultant and plan for the 2010 CLRP update is scheduled to be completed by June 2010, including new federal and state revenue projections, revised cost estimates for new system expansion projects, and revised cost estimates for system maintenance and rehabilitation. All revenue and cost estimates are in year of expenditure dollars as well as constant dollars through 2040. The 2010 financial plan will be updated by the implementing agencies as they prepare the inputs for the 2011 CLRP.

The Transportation Improvement Program

The preparation of the financial plan for the FY 2012-2017 TIP will be similar to that for the FY 2011-16 plan. Since SAFETEA-LU funding is apportioned to states, financial summaries for all TIP projects from agencies in the District of Columbia, Maryland and Virginia as well as WMATA and other transit agencies will be prepared. All projects submitted by these agencies will be grouped by the proposed SAFETEA-LU program funding categories under Surface Transportation (Title I) and Transit (Title III).

The funds programmed in the TIP for each state by SAFETEA-LU program category will be compared with the information provided by the states and transit operators on the estimated available Federal and State funds for the program period. The funds programmed in the TIP for each state by SAFETEA-LU program category in the first and second years will be compared with the trends of the annual funding programmed in previous TIPs and with the funding reported in the annual listings of TIP projects that have federal funding obligated. Comparisons that indicate significant changes from past trends will be reviewed with the implementing agency to clarify the change. Implementing agencies will ensure that only projects for which construction and operating funds can reasonably be expected to be available will be included in the TIP. In the case of new funding sources, strategies for ensuring their availability will be identified by the implementing agency and included in the TIP. The product will be a financial summary that focuses on the first two years of the six-year period of the TIP, and it will be incorporated as a main section of the TIP for review by the public and approval by the Technical Committee and the TPB. The TIP will also summarize funding that the implementing agencies have programmed specifically for bicycle and pedestrian projects and identify projects that include bicycle and/or pedestrian accommodations.

Oversight:	Technical Committee
Cost Estimate:	\$64,000
Products:	Financial inputs for draft 2011 CLRP and FY 2012-2017 TIP

Schedule: January and June 2011

E. PUBLIC PARTICIPATION

The TPB is scheduled to update the CLRP in September 2010. As part of the update process, public involvement activities conducted before the end of fiscal year 2010 have been designed to gather input from a wide variety of constituencies on questions related to transportation funding challenges. These FY2010 activities include research through a public opinion survey and focus groups. In addition, before the end of FY2010, the TPB will have held a high-profile forum, as requested by the TPB's Citizens Advisory Committee (CAC), designed to provide information and obtain input on regional transportation challenges and opportunities.

Following up on activities in FY2010, public participation tasks in FY2011 will include the following activities, which are designed to inform the development and documentation of the 2011 CLRP and TIP, and promote public education and involvement in transportation planning throughout the region:

- Support implementation of the TPB Participation Plan.
- Develop and conduct workshops or events to engage the public and community leaders on key regional transportation issues, including challenges reflected in the CLRP and TIP.
- Ensure that the TPB's website, publications and official documents are timely, thorough and user-friendly.
- Conduct two or more sessions of the Community Leadership Institute, a two-day workshop designed to help community activists learn how to get more actively involved in transportation decision making in the Washington region.
- Provide staff support for the TPB Citizens Advisory Committee (CAC), including organizing monthly meetings and outreach sessions, and drafting written materials for the committee.
- Provide staff support for the TPB Access For All Advisory (AFA) Committee that includes leaders of low-income, minority and disabled community groups.
- Prepare AFA Committee report identifying priority projects, programs, services and issues that are important to community groups, such as providing better transit information for limited English speaking populations, improved transit services for

people with disabilities, pedestrian and bike access and safety, and potential impacts of transit-oriented development and gentrification.

- Implement public involvement procedures, including public comment sessions at the beginning of each TPB meeting and official public comment periods prior to the adoption of key TPB documents.

Oversight:	Transportation Planning Board
Cost Estimate:	\$371,900
Products:	TPB Participation Plan with a proactive public involvement process Access for All report on projects, programs, services and issues important to low-income, minority and disabled communities.
Schedule:	On-going activity with forums and meetings linked to preparation of CLRP and TIP

F. PRIVATE ENTERPRISE PARTICIPATION

In June 1987, the TPB adopted its Private Enterprise Participation Policy and Procedures designed to afford maximum opportunity to private providers to participate in the development and provision of mass transportation services in the region. In April 1994, the Federal Transit Administration (FTA) rescinded its private participation guidance and changed the federal requirements regarding private enterprise participation. During FY 1995, the TPB reviewed its policy and revised it in light of the new requirements. Under this task, DTP staff will conduct the activities as specified in the policy adopted on July 19, 1995 by the TPB.

The following activities are anticipated:’

- The procedures for involving private transportation providers in urban mass transportation and the activities accomplished will be documented as a section of the Transportation Improvement Program (TIP).
- To facilitate early consultation, TPB will conduct an annual forum for key transit staff from the local jurisdictions and WMATA to meet with interested private providers to discuss in general terms their plans for major bus service changes and expansions.

- Private transit providers will be afforded the opportunity to present their views on the CLRP, the TIP, and the Unified Planning Work Program while these documents are in a draft stage.
- Support will be provided to the Private Providers Task Force. This group will be the vehicle through which the above tasks are accomplished, and will advise the TPB of the private provider perspective on transit service through its chairman, who is a non-voting member of the TPB. Minutes will be prepared for Task Force meetings, as well as other documentation as required.
- Through their representation on the TPB, private transit and taxicab providers will be encouraged to contribute to the shaping of policies and strategies for the CLRP that promote effective, competitive provision of transit services, particularly in growing suburban areas and activity centers.
- In July 2007, the TPB established the Taxicab Regulators Task Force to: 1) encourage close cooperation and sharing of information between municipal and county taxicab regulators in the National Capital region and to work to resolve common problems and 2) explore the possibility of developing standards to improve the quality of service for taxicab customers in their respective jurisdictions. TPB staff will support the task force meetings which are scheduled every quarter.

Oversight:	Transportation Planning Board
Cost Estimate:	\$18,300
Product:	Documentation on Private Provider Involvement
Schedule:	Annual Transit Forum - May 2011 Draft in TIP for Public Comment - June 2011

G. TPB ANNUAL REPORT AND TPB NEWS

TPB staff annually produces *The Region* magazine, which provides a non-technical review and analysis of transportation issues in the Washington region. Elected officials and citizens are the primary target audience of this magazine, which has an annual circulation of approximately 1,400 and is distributed throughout the year as the TPB's flagship publication.

The *TPB News* is produced monthly to provide a timely update on the activities of the TPB, including decisions made at the TPB's monthly meeting. The TPB News has a circulation of approximately 1,400 paper copies, and is also widely distributed via email.

Activities in FY 2011 will include:

1. Plan Support

- Write, edit and work with a graphic designer, who is procured on a contractual basis to produce the 2011 edition of *The Region*, which will describe TPB activities in 2010, including the 2010 update of the CLRP.
- Write and produce the monthly newsletter *TPB News*.

Oversight: Transportation Planning Board

Cost Estimate: \$80,100

Products: *Region* magazine, *TPB News*

Schedule: June 2011

H. TRANSPORTATION/LAND USE CONNECTION (TLC) PROGRAM

The TLC Program provides support to local governments in the Metropolitan Washington region as they work to improve transportation/ land use coordination at the community level. Through the program, the TPB provides its jurisdictions with consultant-provided, short-term technical assistance to catalyze or enhance planning efforts. Begun as a pilot in November 2006, the program also provides a clearinghouse to document national best practices, as well as local and state experiences with land use and transportation coordination. By the end of FY2010, 40 TLC technical assistance projects will have been completed. These projects include a range of subjects, including promoting “complete streets” improvements to ensure pedestrian and bicycle access to transit, identifying transportation and public realm improvements to facilitate transit-oriented development, and offering recommended changes in local government policies on issues such as urban road standards or parking policies.

The following activities are proposed for FY 2011:

- Maintain and update the TLC Regional Clearinghouse and website
- Fund at least six technical assistance planning projects at a level between \$20,000 and \$60,000 each.
- Work with local project leads and consultants to identify recommended implementation action steps in each planning project report, such as further study needs, more stakeholder collaboration, suggested land use or local policy changes, and transportation investment priorities.
- Provide staff support for TLC Technical Assistance Projects to be conducted as part of the MDOT Technical Assistance Program and for other projects where

additional funding is provided by state or local agencies. The proposed funding level assumes the cost of TPB staff administration of some additional technical assistance projects funded through outside sources; if the TPB were to receive significantly more funding support for such projects, this administrative allocation may need to be revisited at a future date.

Oversight:	TPB Technical Committee
Cost Estimate:	\$395,000
Products:	Updated web-based clearinghouse and technical assistance provided by consultant teams to six localities
Schedule:	November 2010-June 2011

I. DTP MANAGEMENT

This activity includes all department-wide management activities not attributable to specific project tasks in the DTP work program. Examples include the following:

- Supervision of the preparation, negotiation, and approval of the annual work program and budget, involving the State Transportation Agencies, the Technical Committee, the Steering Committee, and the TPB.
- Day-to-day monitoring of all work program activities and expenditures by task.
- Day-to-day management and allocation of all staff and financial resources to insure that tasks are completed on schedule and within budget.
- Preparation for and participation in regular meetings of the TPB, the Steering Committee, the Technical Committee, and the State Technical Working Group.
- Attendance at meetings of other agencies whose programs and activities relate to and impact the TPB work program, such as local government departments.
- Response to periodic requests from TPB members, federal agencies, Congressional offices, media, and others for information or data of a general transportation nature.
- Review of transportation proposals of regional importance submitted to TPB through the intergovernmental review process. Where significant regional impacts

are likely, staff will obtain Technical Committee and Board review and approval of comments prepared.

In addition to salaries, nominal amounts are earmarked for travel related to non project specific meetings attended by the senior staff, data processing for financial monitoring and analysis, and conferences such as FTA and FHWA seminars on federal regulations and financial management. These activities represent three to four percent of the total amount allocated for DTP Management.

Oversight:	Transportation Planning Board
Cost Estimate:	\$452,100
Products:	Materials for the meetings of the TPB, the Steering Committee, the Technical Committee, and the State Technical Working Group; responses to information requests from elected officials, federal agencies and media; and participation in external meetings related to TPB work program.
Schedule:	Ongoing throughout the year

2. COORDINATION PLANNING

A. CONGESTION MANAGEMENT PROCESS (CMP)

The regional Congestion Management Process (CMP) is a federally required component of the metropolitan transportation planning process. The CMP is to address the systematic management of traffic congestion and provision of information on transportation system performance. No single occupant vehicle (SOV) capacity expanding project can receive federal funds unless it is part of the regional CMP.

The CMP includes information from regional Travel Monitoring programs (see Section 5 of the UPWP) addressing recurring congestion, as well as information on non-recurring congestion as examined in the Management, Operations, and Intelligent Transportation Systems (MOITS) program (see also Task 2.B. below).

The CMP also considers strategies that address congestion. Information from transportation strategy analysis from the Air Quality Conformity program (see also Task 3.A.) is examined. Demand management strategies considered and implemented through the regional Commuter Connections Program (see www.commuterconnections.org) are important CMP components. Systems management, operations, and engineering strategies are examined in conjunction with the MOITS program.

Under this work task, TPB will compile information and undertake analysis for development on three major aspects of the regional CMP:

- CMP Components of the Constrained Long-Range Plan (CLRP), portions of the CLRP that specifically address CMP and its subtopics, in the form of interlinked web pages of the on-line CLRP, to be updated in conjunction with major updates of the CLRP;
- CMP Documentation Form Information addresses federally-required CMP considerations associated with individual major projects, to be included with overall project information submitted by implementing agencies to the annual Call for Projects for the CLRP and Transportation Improvement Program (TIP) (see also Task 1.C), and incorporated into the regional CMP; and
- A CMP Technical Report, published on an as-needed basis, compiling and summarizing the results of monitoring and technical analysis undertaken in support of the regional CMP. A major update of the CMP Technical Report was published in FY2010; and a subsequent updated report will be published in FY 2011.

Oversight: TPB Technical Committee, Travel Management

Subcommittee, Management, Operations, and
Intelligent Transportation Systems (MOITS) Technical
Subcommittee

Cost Estimate: \$155,000

Products: Updated CMP portions of the CLRP; 2011 CMP
Technical Report; summaries, outreach materials, and
white paper(s) on technical issues as needed;
supporting data sets

Schedule: Monthly

**B. MANAGEMENT, OPERATIONS, AND INTELLIGENT TRANSPORTATION
SYSTEMS (ITS) PLANNING**

Under this work task, TPB will provide opportunities for coordination and collaborative enhancement of transportation technology and operations in the region, advised by its Management, Operations, and Intelligent Transportation Systems (MOITS) Policy Task Force and MOITS Technical Subcommittee. A key focus of MOITS planning is the region's non-recurring congestion, due to incidents or other day-to-day factors. A MOITS Strategic Plan was completed in FY2010 and provided updated guidance and direction to the program. The MOITS program includes planning activities to support the following major topics:

- **ITS Data:** The collection/compilation, processing, warehousing, and sharing of transportation systems usage and condition data from Intelligent Transportation Systems (ITS) sources, particularly in conjunction with the University of Maryland's Regional Integrated Transportation Information System (RITIS)
- **Regional Transportation Management:** Regional traffic management planning and coordination activities, particularly in conjunction with the Metropolitan Area Transportation Operations Coordination (MATOC) Program (see also Task 2.I, which was established as a separate task from MOITS in FY2010); MATOC focuses on short-range planning issues for traffic management, and MOITS focuses on mid-to-long-range planning for traffic management
- **Multi-modal Coordination:** Examination of traffic and transit management interactions in daily operations
- **Emergency Preparedness:** Examination of technologies and operating procedures for daily operations that can provide a basis for emergency transportation

operations, in conjunction with the COG Regional Emergency Support Function 1 – Emergency Transportation Committee (see also Task 2.C.)

- Traveler Information: Real-time traveler information made available to the public
- Congestion Management Process: Technology and operations strategies to address non-recurring congestion aspects of the regional Congestion Management Process (see also Task 2.A.)
- Maintenance and Construction Coordination: Regional sharing of available maintenance and construction information for coordination purposes
- Intelligent Transportation Systems (ITS) Architecture: Maintain the regional ITS architecture in accordance with federal law and regulations; help provide coordination of the use of the regional ITS architecture as guidance to the region's MOITS-related projects
- Traffic Signals: Assist member agencies in the exchange and coordination of inter-jurisdictional traffic signal operations information and activities
- Member Agency Activities: Work as needed with the MOITS activities of the state and D.C. departments of transportation, the Washington Metropolitan Area Transit Authority, and other member agencies
- Coordinate with supra-regional management and operations activities of the Federal Highway Administration, the I-95 Corridor Coalition, and other relevant stakeholders; monitor national emerging MOITS activities for potential application in the region
- Provide staff support to the MOITS Policy Task Force, MOITS Technical Subcommittee, MOITS Regional ITS Architecture Subcommittee, and MOITS Traffic Signals Subcommittee, supporting these regional forums for coordination and information exchange among member agency staffs and other stakeholders.

Oversight: TPB MOITS Policy Task Force; MOITS Technical Subcommittee; MOITS Regional ITS Architecture Subcommittee; MOITS Traffic Signals Subcommittee

Cost Estimate: \$340,300

Products: Agendas, minutes, summaries, outreach materials as needed; white paper(s) on technical issues as needed; revised regional ITS architecture; MOITS input to the

CLRP as necessary; review and advice to MOITS
planning activities around the region

Schedule: Monthly

C. TRANSPORTATION EMERGENCY PREPAREDNESS PLANNING

Under this work task, TPB will provide support and coordination for the transportation sector's role in overall regional emergency preparedness planning, in conjunction with the Metropolitan Washington Council of Governments (COG) Board of Directors, the National Capital Region Emergency Preparedness Council, and other COG public safety committees and efforts. This task is the transportation planning component of a much larger regional emergency preparedness planning program primarily funded outside the UPWP by U.S. Department of Homeland Security and COG local funding.

Here specialized needs for transportation sector involvement in Homeland Security-directed preparedness activities will be addressed. Efforts are advised by a Regional Emergency Support Function #1 - Transportation Committee in the COG public safety committee structure, with additional liaison and coordination with the TPB's Management, Operations, and Intelligent Transportation Systems (MOITS) Policy Task Force and MOITS Technical Subcommittee.

Major topics to be addressed include the following:

- Liaison and coordination between emergency management and TPB, MOITS, and other transportation planning and operations activities.
- Planning for the role of transportation as a support agency to emergency management in catastrophic or declared emergencies, including:
 - Emergency coordination and response planning through the emergency management and Homeland Security Urban Area Security Initiative (UASI) processes.
 - Emergency communications, technical interoperability, and capabilities.
 - Public outreach for emergency preparedness.
 - Coordination with regional critical infrastructure protection and related security planning.
 - Emergency preparedness training and exercises.

- Conformance with U.S. Department of Homeland Security (DHS) directives and requirements.
- Applications for and management of UASI and other federal Homeland Security funding.

Oversight: TPB MOITS Policy Task Force and MOITS Technical Subcommittee; COG Regional Emergency Support Function (RESF) #1 - Transportation Committee

Cost Estimate: \$75,400

Products: Agendas, minutes, summaries, outreach materials as needed; white paper(s) on technical issues as needed; regular briefings and reports to TPB and MOITS as necessary; materials responding to DHS and UASI requirements

Schedule: Monthly

D. TRANSPORTATION SAFETY PLANNING

The Washington metropolitan area is a diverse and rapidly growing region, a major tourist destination, and a gateway for immigrants from all over the world. Growth has meant more people driving more miles and more people walking, especially in inner suburban areas where pedestrians were not common in years past. These and other factors, along with heightened awareness of the safety problem, have demonstrated the need for the regional transportation safety planning program.

Under this work task, TPB will provide opportunities for consideration, coordination, and collaboration planning for safety aspects of the region's transportation systems. Safety planning will be in coordination with the State Strategic Highway Safety Plan efforts of the District of Columbia, Maryland, and Virginia, as well as other state, regional, and local efforts. The Transportation Safety Subcommittee, formed in FY2008, will provide a forum for safety stakeholders to exchange information, coordinate on safety programs around the region, and provide safety input to the overall regional transportation planning process. The safety element of the regional Constrained Long-Range Plan will be updated as needed.

The regional Street Smart pedestrian and bicycle safety outreach campaign, separately funded through federal, state, and local grants and contributions, addresses safety needs by increasing public awareness of the risk and consequences of pedestrian and bicycle-involved motor vehicle crashes.

Major topics to be addressed in the Transportation Safety Planning task include the following:

- Support of the Transportation Safety Subcommittee.
- Safety data compilation and analysis.
- Coordination on metropolitan transportation planning aspects of state, regional, and local safety efforts, and with transportation safety stakeholders.
- Coordination with other TPB committees on the integration of safety considerations.
- Maintenance of the safety element of region's long-range transportation plan.

Oversight:	Transportation Safety Subcommittee
Cost Estimate:	\$100,000
Products:	Safety element of the CLRP; summaries, outreach materials, and white paper(s) on technical issues as needed.
Schedule:	Quarterly

E. BICYCLE AND PEDESTRIAN PLANNING

Under this work task, TPB will provide opportunities for consideration, coordination, and collaborative enhancement of planning for pedestrian and bicycle safety, facilities, and activities in the region, advised by its Bicycle and Pedestrian Subcommittee. An updated Regional Bicycle and Pedestrian Plan was completed in FY2010, and provides guidance for continued regional planning activities. Major topics to be addressed include the following:

- Advise the TPB, TPB Technical Committee, and other TPB committees on bicycle and pedestrian considerations in overall regional transportation planning.
- Maintain the Regional Bicycle and Pedestrian Plan and supporting Bicycle and Pedestrian Plan database on the TPB Web site for member agency and public access.

- Compile bicycle and pedestrian project recommendations for the FY2012-2017 Transportation Improvement Program (TIP).
- Coordinate with the annual "Street Smart" regional pedestrian and bicycle safety public outreach campaign (Street Smart is supported by funding outside the UPWP).
- Examine regional bicycle and pedestrian safety issues, their relationship with overall transportation safety, and ensure their consideration in the overall metropolitan transportation planning process, in coordination with task 2.D above.
- Examine bicycle and pedestrian systems usage data needs for bicycle and pedestrian planning, and ensure their consideration in the overall metropolitan transportation planning process.
- Provide the public with information on the status of bicycle and pedestrian facilities planning and construction in the Washington region.
- Coordinate and host one or more regional bicycle and pedestrian planning or design training, outreach, or professional development opportunities for member agency staffs or other stakeholders.
- Provide staff support to the Bicycle and Pedestrian Subcommittee, supporting the regional forum for coordination and information exchange among member agency bicycle and pedestrian planning staffs and other stakeholders.

Oversight: Regional Bicycle and Pedestrian Subcommittee

Cost Estimate: \$108,700

Products: Compilation of bicycle and pedestrian facilities for the FY 2012-2017 TIP; maintenance of the regional bicycle and pedestrian plan on the TPB Web Site; one or more regional outreach workshops; Subcommittee minutes, agendas, and supporting materials; white papers or other research and advisory materials as necessary

Schedule: Bimonthly

F. REGIONAL BUS PLANNING

This work activity will provide support to the Regional Bus Subcommittee for the coordination of bus planning throughout the Washington region, and for incorporating regional bus plans into the CLRP and TIP.

The major topics to be addressed included the following:

- Continued review and refinement of the recommendations of the Regional Bus Study completed in 2002, and development of a priority list of near term service implementation strategies for inclusion in annual operations budgets.
- Coordination and evaluation of CLRP and TIP proposals and amendments with regard to bus transit service plan implementation.
- Coordination and input definition for the TPB regional travel forecasting model.
- Technical advice and input regarding regional transportation and land use coordination, including the development of transit assumptions for TPB planning studies.
- Facilitation of technology transfer and information sharing, as it relates to regional, state and local bus transit services.
- Coordination with other regional committees regarding bus transit participation in planning and training activities, including but not limited to the Regional Emergency Support Function (RESF) #1 at COG, and the associated regional transit operators group.
- Coordination with the TPB Management, Operations, and Intelligent Transportation Systems (MOITS) Policy Task Force and MOITS Technical Subcommittee regarding integrated planning for bus services and street operations.
- Coordination with the TPB Access for All Committee to enhance regional mobility for all populations.

Oversight: Regional Bus Subcommittee

Cost Estimate: \$100,000

Products: Data compilation, reports on technical issues, and outreach materials

Schedule: Monthly

G. HUMAN SERVICE TRANSPORTATION COORDINATION

In 2007 the TPB adopted the Coordinated Human Service Transportation Plan for the National Capital Region ("Coordinated Plan") required under the final USDOT planning regulations to guide funding decisions for the following three FTA programs: 1) Formula Program for Elderly Persons and Persons with Disabilities (Section 5310); 2) Job Access and Reverse Commute for Low Income Individuals (JARC, Section 5316); and 3) New Freedom Program for Persons with Disabilities (Section 5317). The Coordinated Plan describes existing transportation services, unmet transportation needs, strategies to address those needs and priorities for implementation to better serve persons with disabilities, those with limited incomes and older adults. The TPB also serves as the designated recipient for the JARC and New Freedom programs for the Washington DC-VA-MD Urbanized Area. The final regulations also require that the CLRP and TIP shall consider the design and delivery of non-emergency transportation services.

The development and implementation of the Coordinated Plan is overseen by the Human Service Transportation Coordination Task Force. The TPB's Coordinated Plan was updated by the Task Force in 2009 to reflect current unmet transportation needs and was revised to reflect three years of experience with funding JARC and New Freedom projects.

Proposed work activities include:

- Support the activities of the TPB Human Service Transportation Coordination Task Force which will oversee the work activities listed below;
- Review lessons learned from previously funded JARC and New Freedom projects;
- Coordinate special meetings on issues such as Medicaid transportation, low-income transportation needs or MetroAccess as requested;
- Develop priority projects for the 2011 solicitation for JARC and New Freedom projects; and
- Coordinate the activities of the coordination task force with the TPB Access For All Advisory Committee and the Private Providers Task Force.

Oversight: TPB Human Service Transportation Coordination Task Force

Cost Estimate: \$114,800

Products: Priorities for the 20011 JARC and New Freedom Solicitation

Schedule: June 2011

H. FREIGHT PLANNING

Under this work task, TPB will provide opportunities for consideration, coordination, and collaborative enhancement of planning for freight movement, safety, facilities, and activities in the region. An updated Regional Freight Plan was completed in FY2010, and provides guidance for continued regional planning activities. Major topics to be addressed include the following:

- Support the Regional Freight Planning Subcommittee
- Maintain the Regional Freight Plan and supporting information on the TPB Web site for member agency and public access.
- Ensure consideration of freight planning issues in overall metropolitan transportation planning, including:
 - o Work proactively with the private sector for consideration of private sector freight issues. Identify topics of interest to private sector, often competing trucking and freight stakeholders.
 - o Advise the TPB and other committees in general on regional freight planning considerations for overall metropolitan transportation planning.
 - o Coordinate with federal, state, and local freight planning activities.
 - o Analyze available freight movement data for the region.
 - o Coordinate with TPB travel monitoring and forecasting activities on freight considerations.
 - o Examine truck safety issues.

- o Develop the freight components of the 2011 update of the Constrained Long Range Plan (CLRP).
- o Keep abreast of regional, state, and national freight planning issues.
- o Undertake data compilation and analysis on freight movement and freight facilities in the region. Undertake freight stakeholder outreach with representatives of the freight community, including carriers, shippers, and other stakeholders, to gain their input on regional freight movement, safety and other issues and to gauge their interest in state and MPO planning and programming processes. Publish a periodic e-newsletter on regional freight planning issues.

Oversight: TPB Freight Subcommittee

Cost Estimate: \$130,000

Products: Data compilation and outreach materials as needed; white paper(s) on technical issues as needed; structured interviews and summarized results

Schedule: Bimonthly

I. METROPOLITAN AREA TRANSPORTATION OPERATIONS COORDINATION PROGRAM PLANNING

Under this work task, TPB will provide planning support for the Metropolitan Area Transportation Operations Coordination (MATOC) Program, in conjunction with the MATOC Steering Committee, subcommittees, and partner agencies. This task is the metropolitan transportation planning component of a larger set of MATOC Program activities, including operational and implementation activities, primarily funded outside the UPWP.

Following experiences from the 9/11 attacks and other major incidents, transportation officials from Maryland, Virginia, the District of Columbia, and the Washington Metropolitan Area Transit Authority (WMATA), in partnership with the TPB, created the Metropolitan Area Transportation Operations Coordination (MATOC) Program. MATOC's mission is to provide situational awareness of transportation operations in the National Capital Region (NCR) through the communication of consistent and reliable information, especially during incidents. Timely, accurate information enables operating agencies and the traveling public to make effective and timely decisions. By integrating systems' technologies, improving procedures and planning, and making accurate and timely

transportation information available to the public, regional transportation agencies are able to make travel smoother and safer.

MATOC's information sharing is undertaken in large part through the Regional Integrated Transportation Information System (RITIS). RITIS is an automated system that compiles, formats, and shares real-time traffic and transit data among the region's transportation agencies. RITIS was developed on behalf of the region by the Center for Advanced Transportation Technology Laboratory at the University of Maryland. Data provided through RITIS is in daily use by the region's major transportation operations centers.

In FY 2009, MATOC transitioned from pre-implementation system development activities to initial phase real-time operations activities, and a dedicated MATOC facilitator was hired. In FY 2010, MATOC further transitioned toward full operations with MATOC personnel facilitating improvement of standard operating procedures, participating in regional coordination during incidents, and assisting with exercises and after-action reviews.

Historically, MATOC operational activities have been paid for by a dedicated grant from the SAFETEA-LU federal transportation legislation, and are anticipated to be funded with other operations-eligible sources in the future. As a complement to the externally-funded operations activities noted above, this UPWP task is to provide ongoing TPB staff and consultant planning assistance to the MATOC Program, as a part of the TPB's metropolitan transportation planning activities. Planning activities under this task include:

- Committee Support: Provide administrative support of MATOC Steering Committee, Executive Committee, and subcommittee meetings, including preparation of agendas and summaries and tracking of action items.
- TPB Reports: Provide regular briefings to the TPB on MATOC Program progress.
- TPB Staff Participation: Provide input and advice to the MATOC Information Systems Subcommittee and Operations Subcommittee.
- Coordinate as necessary with the Management, Operations, and Intelligent Transportation Systems (MOITS) Policy Task Force and MOITS Technical Subcommittee; MATOC focuses on short-range planning issues for traffic management, and MOITS focuses on mid-to-long-range planning for traffic management.
- Outreach: Coordinate the work of MATOC with other organizations, for example, with public safety or emergency management groups and media representatives; prepare articles, presentations and brochures to convey MATOC concepts, plans,

and accomplishments. Also coordinate with the COG Regional Emergency Support Function # 1 - Emergency Transportation Committee.

- **Implementation Planning:** Prepare implementation plans describing the work required to reach defined stages of MATOC operating capability, including expert input from MATOC subcommittees.
- **Financial and Legal Analysis:** Support discussion of the identification of funding sources, estimation of funding needs, as well as preparation of legal agreement materials that provide for the long term sustainability of MATOC.
- **Performance Measurement:** Support MATOC committee discussions of assessing progress against MATOC's defined goals and objectives.
- **Risk Management:** Identify and monitor major risks to progress and identify actions to be taken in order to avoid incurring risks or mitigating their consequences.
- **Supporting Materials:** Develop supporting or informational materials for the above activities as necessary.

Oversight:	MATOC Steering Committee; MOITS Policy Task Force and Technical Subcommittee
Cost Estimate:	\$120,000
Products:	Agendas, minutes, summaries, and outreach materials as needed; white paper(s) on technical issues as needed; regular briefings and reports to the TPB, MATOC committees, and the MOITS Policy Task Force and Technical Subcommittee.
Schedule	Monthly

3. FORECASTING APPLICATIONS

A. AIR QUALITY CONFORMITY

This work area is designed to ensure that TPB plans, programs and projects meet air quality requirements. The 1990 Clean Air Act Amendments require the performance of detailed technical analysis at the systems level to assess conformity of transportation plans and programs. Procedures and definitions for conducting the analysis, originally issued as EPA regulations in the November 24, 1993 *Federal Register*, were subsequently amended and issued, most recently in a January 2008 EPA publication; in addition, federal guidance has also been published at various times by the EPA, FHWA and FTA.

A work program to analyze the 2010 Constrained Long Range Plan (CLRP) and the FY2011-16 Transportation Improvement Program (TIP) for air quality conformity consistent with these regulations is now being developed. This work program will address ozone, wintertime carbon monoxide, and fine particles (particulate matter, PM_{2.5}) requirements, including differing geographical boundaries, inventory time periods, and evaluation criteria by pollutant. The current schedule for adoption of the updated plan and TIP calls for most of the work activity to be performed in FY2010, with the final report, response to comments, adoption by the TPB and subsequent transmittals occurring in October 2010. Subsequent major activities in FY2011 will include development and execution of a work program for the conformity assessment of the 2011 CLRP and FY2012 -17 TIP.

TPB procedures to address interagency and public consultation requirements, also originally specified in the November 1993 regulations, were formally adopted by the Board in September 1994. The current version of the consultation procedures, amended to reflect additional requirements in August 15, 1997 regulations, was adopted by the TPB in May 1998. These procedures address preparation of the annual UPWP and TIP and any updates to the regional plan or programs. The procedures involve timely announcement of upcoming TPB activities relating to conformity and distribution of relevant material for consultation purposes.

The FY2011 air quality conformity work program will include the following tasks.

1. Complete conformity analysis of the 2010 constrained long range plan and the FY2011-16 TIP, including addressing any emissions mitigation needs, preparing a final report to document procedures and results and to address comments and testimony received, and documenting and organizing all data files for use in subsequent regional and corridor / subarea planning studies.

2. Keep abreast of federal requirements as updated air quality conformity regulations and guidance are issued, and revise work program elements as necessary.
3. Execute TPB interagency and public consultation procedures; this includes funding for review and coordination work on the part of COG/DEP staff to reflect involvement by the Metropolitan Washington Air Quality Committee (MWAQC) in the public and interagency consultation process.
4. Prepare and execute a work program for analysis of the 2011 constrained long range plan and the FY2012 - 17 TIP, using updated project inputs, planning assumptions, travel demand model, software, and emissions factor model, as each update is incorporated into the transportation and air quality planning process; prepare a draft report on the conformity assessment.
5. Review and comment on PM_{2.5} hotspot analyses and project level conformity assessments performed by implementing agencies.
6. Coordinate project solicitation, documentation, and emissions reduction analysis associated with CMAQ projects. Perform incidental air quality conformity reviews (non-systems level), as required throughout the year.

Oversight: Technical Committee and Travel Management Subcommittee, in consultation with MWAQC committees

Cost Estimate: \$563,200

Products: Final report on Air Quality Conformity Assessment of 2010 CLRP and FY2011 - 16 TIP; Preliminary materials on Air Quality Conformity Assessment of 2011 CLRP and FY2012 -17 TIP.

Schedule: June 2011

B. MOBILE EMISSIONS ANALYSIS

Past activities included preparation of mobile source emissions inventories and emissions reduction analyses for the region's 8-hour ozone state air quality implementation plan (SIP) and the fine particles (particulate matter 2.5 microns or less) SIP, both of which have been submitted on schedule to EPA in recent fiscal years. With continuing consultant assistance as needed, in FY2011 planning activities will include follow-up activities necessary to analyze, refine and report on mobile source emissions estimation,

and transportation emissions reduction measure (TERM)s / processes associated with the PM_{2.5} and 8-hour ozone SIPs, and air quality conformity assessments.

In the area of Climate Change planning, TPB staff will continue planning efforts to prepare and analyze mobile source inventories of greenhouse gas emissions, as well as to evaluate the effectiveness and cost-effectiveness of control strategies to reduce these emissions. In FY2011 this work will be continued as an emphasis area, revisiting emissions estimation under different input assumptions and for different control strategies.

In December 2009 EPA released the production version of its new emissions factor model, the Motor Vehicle Emissions Simulator, or MOVES model. Staff will continue to develop new required inputs, test and apply this model in FY2010, and finalize the new model inputs and modeling approach in FY2011. Following a two year 'grace period' after the model's official release (publication in the *Federal Register*), MOVES will be the required emissions factor simulation package for all subsequent air quality conformity and SIP planning activities.

FY2011 work activities will include the following tasks: (1) update mobile source emissions inventories and control strategy analysis as needed for use in attainment of the 8-hour ozone and PM_{2.5} standards, and for control of greenhouse gas emissions; (2) translate data inventories into EPA format where required; (3) analyze new transportation emissions reduction measures and other mobile source control strategies; (4) test and apply the final production version of EPA's new MOVES model and prepare all appropriate model inputs for use in SIP and air quality conformity analyses; (5) participate in MWAQC technical and policy discussions to assist in updates to the ozone and PM_{2.5} SIPs, including work with TPB and MWAQC committees in development of mobile source emissions budgets; and (6) provide support to Commuter Connections staff in developing implementation plans and performing evaluations of TERMS already adopted by the TPB, as well as in analyzing future TERMS.

For the above work elements, in conjunction with DTP staff and in consultation with the TPB, provide funding to COG's Department of Environmental Programs for the following activities: (1) provision of data, progress reports and written reports in response to TPB requests relating to air quality work activities; (2) provision of timely updates to the TPB and its committees on the status of emissions and emissions reduction research / implementation strategies associated with all emissions source categories; and (3) provision of assistance to TPB in development / review of emissions factors required for mobile source emissions inventories associated with air quality conformity and SIP planning.

Oversight:	Technical Committee and Travel Management Subcommittee, in consultation with MWAQC committees
Cost Estimate:	\$640,100
Products:	Updated mobile source emissions inventories for criteria pollutants and for greenhouse gases; TERMS report; MOVES model inputs, operating procedures and outputs.
Schedule:	June 2011

C. REGIONAL STUDIES

Activities Prior to and During FY 2010

(1) CLRP Aspirations Scenario

In September 2007, the TPB Scenario Task Force was established to provide policy-level stewardship for the Regional Mobility and Accessibility Scenario (RMAS) Study and related TPB activities, including consideration of opportunities for integration of the study findings into TPB planning processes and initiatives. The "CLRP Aspirations" Scenario was developed during FY 2009 under the guidance of the TPB Scenario Task Force. It is an integrated land use and transportation scenario for 2030 building on the key results of the five TPB scenarios analyzed earlier under the RMAS Study. It includes a regional high-quality bus rapid (BRT) network operating on an extensive network of variably priced lanes. In FY 2010, this scenario was analyzed, updated and documented.

(2) What Would It Take? Scenario

In FY 2009, the "What Would It Take?" Scenario was developed to assess three types of strategies: increasing fuel efficiency, reducing the carbon-intensity of fuel, and improving travel efficiency, as well as combinations of strategies that would be necessary to achieve significant reductions in CO₂ emissions reductions by 2020 and 2030. In FY 2010, this scenario was analyzed and documented. In FY 2011, further work to analyze strategies and combinations to reduce mobile CO₂ emissions will continue under the 3. B. Mobile Emissions Analysis work activity.

(3) TIGER Grant Application and Follow-on Activities

Through an extensive process of regional coordination and collaboration, a regional package of priority bus corridors and other related projects was developed for inclusion in

the regional TIGER grant application submitted to the USDOT in September 2009. Following on from this TIGER grant application, and the TPB's Regional Priority Bus Conference held in June 2009, consultant work was initiated in Spring 2010 to develop a set of implementation guidelines for prioritizing bus transit on arterials in the Washington region. These guidelines are scheduled to be completed in Fall 2010.

In Spring 2010, work began to build on the TIGER grant application process to develop a regional network of priority bus corridors on arterial roadways with phases for 3- and 5-year implementation beginning in 2010. This regional network will expand the initial network submitted for the TIGER grant to include additional state, local and transit operator priorities. The network of priority bus corridors will be developed through inter-agency coordination and will focus on complementing the Metrorail system, drawing from the WMATA Priority Corridor Network (PCN) and the CLRP Aspirations Scenario's regional network of rapid/express bus on managed lanes. The costs and benefits of implementing the 3- and 5-year phases of the regional priority corridor network will be assessed using the methodology developed for the TIGER grant application. Maps and advanced visualizations of this regional arterial priority corridor network will be developed to assist in communicating the benefits of the regional system to decision-makers, the public and developers.

Activities Proposed for FY 2011

The following activities are proposed for FY 2011:

- Based upon a review of the projects, land use forecasts and performance of the 2010 CLRP, revise and update the CLRP Aspirations scenario looking to 2040 to reflect an additional decade of growth.
- Complete the development of Implementation Guidelines for Prioritizing Bus Transit on Arterials in the Washington region
- Complete development of Regional Arterial Corridor Network with 3- and 5-year phases, including visualization and cost/benefit analysis

Oversight: TPB Scenario Study Task Force

Cost Estimate: \$315,800

Products: Analysis of updated CLRP Aspirations scenario reflecting public feedback and looking to 2040

Implementation Guidelines for Prioritizing Bus Transit on Arterials in the Washington region (Work began in FY 2010.)

Regional Arterial Corridor Network with 3- and 5-year phases (Work began in FY 2010.)

Schedule: June 2011 - Analysis of updated CLRP Aspirations scenario

Fall 2010 - Implementation Guidelines for Prioritizing Bus Transit on Arterials in the Washington region,

Fall 2010 - Regional Arterial Corridor Network with 3- and 5-year phases

D. COORDINATION OF COOPERATIVE FORECASTING AND TRANSPORTATION PLANNING PROCESSES

Under this work activity staff will support the Metropolitan Development Policy Committee (MDPC) and the Planning Directors Technical Advisory Committee (PDTAC) in the coordination of local, state and federal planning activities and the integration of land use and transportation planning in the region.

The following work activities are proposed for FY 2011:

- Work with the Planning Directors Technical Advisory Committee (PDTAC) and the Metropolitan Development Policy Committee (MDPC) to review the criteria for the designation of Regional Activity Centers and Clusters. Develop updated data for the designated Regional Activity Centers and Clusters using the Round 8.0 Transportation Analysis Zone (TAZ)-level growth forecasts for the new, smaller, more refined TAZs. Prepare a series of maps with associated data tables and text depicting and describing the designated Regional Activity Centers and Clusters.
- Work with the members of the Cooperative Forecasting Subcommittee, the region's Planning Directors, the Baltimore Metropolitan Council, the Tri-County Council for Southern Maryland, the George Washington Regional Planning Commission and the Planning Directors of Fauquier County- VA, Clarke County-VA and Jefferson County-WV to develop updates to the Round 8 Cooperative Forecasts by jurisdiction and reconcile these updated local jurisdiction forecasts with the regional econometric benchmark projections.

- Work with the Cooperative Forecasting Subcommittee and the region's Planning Directors to develop updated Round 8 Transportation Analysis Zone (TAZ)-level growth forecasts.
- Update and maintain Cooperative Forecasting land activity databases that are used as input into TPB travel demand-forecasting model and air quality conformity analyses. Prepare updated Round 8 TAZ-level population, household, and employment forecasts for both COG member and non-member jurisdictions in the TPB Modeled Area.
- Work with the Cooperative Forecasting Subcommittee and the region's Planning Directors to assess the effects of significant transportation system changes on the Cooperative Forecasting land activity forecasts. Document key land use and transportation assumptions used in making updates to the Cooperative Forecasting land activity forecasts
- Respond to public comments on updated Round 8 forecasts and the Cooperative Forecasting process.
- Develop and publish useful economic, demographic and housing-related information products including the monthly Regional Economic Monitoring Reports (REMS) reports and the annual "Economic Trends in Metropolitan Washington" and "Commercial Development Indicators" reports.

Oversight: Technical Committee

Estimated Cost: \$726,800

Products: Coordination of Land Use and Transportation Planning in the Region, Update of Regional Planning Databases, Mapping of Updated Regional Activity Centers, Development and Distribution information and technical reports.

Schedule: June 2011

4. DEVELOPMENT OF NETWORKS AND MODELS

A. NETWORK DEVELOPMENT

Network development supports the updating of transportation system inputs to the regional travel demand model as the TIP (and possibly the CLRP) evolves each year. The specific forecast years for which networks are prepared are normally linked to the needs of regional air quality planning requirements (i.e., the Air Quality Conformity Determination). During FY 2010, base- and future-year highway and transit networks were developed over a more detailed (3,722) TAZ system using a newly implemented GIS-based network management system known as the TPBMAN. The networks developed in FY 2010 will support a new travel model known as the Version 2.3 model which currently remains in development.

During FY 2011, network development activities will include the update of the TPB's base-year (2010) transit network to reflect the most current operating conditions. Updates will be made using the most recent route and scheduling information obtained from state, local and private service providers in the region. Base-year highway refinements will also be considered, include the possible addition of new highway network links and/or the refinement of existing highway link attributes, including lanes, facility type designations, and highway toll rates.

A series of forecast-year highway and transit networks will be prepared to support the needs of the TPB's air quality planning. The networks will be developed in accordance with TIP and CLRP updates submitted by the TPB members, and will comply with the requirements of Cube/Voyager software and of the Version 2.3 model. During FY 2011, highway and transit networks will include the years 2012, 2020, 2030, and 2040. This work will be implemented using the newly developed TPBMAN.

There are several areas where network development can be enhanced or better facilitated. During FY 2011 staff will explore ways to more seamlessly combine traffic counts residing in the Regional Transportation Data Clearinghouse (RTDC) to the highway network. Staff will explore ways to improve methods for updating the base-year transit network. Existing methods involve a combination of automated and manual procedures that are not well standardized. Finally, staff will investigate ways to link network attributes in the regional highway network to similar attributes of other databases. TPB is considering the use of proprietary observed speed data on freeway and arterial facilities throughout the region. This information will need to be joined to links in the highway network in order to be used in model calibration efforts. Further, as highway network links have been conflated to NAVTEQ centerline alignments during FY 2010, staff will investigate opportunities to transfer NAVTEQ-based street attributes to link attributes in the TPB's regional network.

Oversight:	Travel Forecasting Subcommittee
Cost Estimate:	\$769,700
Products:	Series of updated highway and transit networks compliant with the Version 2.3 Travel Model and documentation of network development activities; and recommendations for improving the network development process.
Schedule:	June 2011

B. GIS TECHNICAL SUPPORT

Under this work activity staff will provide Geographic Information System (GIS) data and technical support to users of the COG/TPB GIS for many important TPB planning activities, including Regional Studies, the CLRP, the TIP, Congestion Monitoring and Analysis, Cooperative Forecasting, Regional Transportation Data Clearinghouse, Network and Models Development, and Bicycle Planning.

The following work activities are proposed for FY 2011:

- Provide ongoing maintenance and support of enhanced GIS-based transportation network management and editing tools and TPBMAN geodatabase.
- Enhance GIS-based transportation network management and editing tools based on user experience gained from using the newly developed network editing tools developed in FY 2010.
- Enhance the COG/TPB GIS Spatial Data Library with updated transportation and non-transportation features as these data become available.
- Add additional transportation attribute data, land use features and imagery data to the COG/TPB GIS Spatial Data Library.
- Update GIS Spatial Data Library documentation, GIS User Guides and technical documentation of various GIS software applications as required.
- Create an intranet-based GIS Project Information Center that lists and describes DTP GIS databases and applications currently being developed, as well as those that are currently available.

- Train staff on use of GIS databases for transportation planning.
- Continue to coordinate the regional GIS activities with state DOTs, WMATA, and the local governments through COG's GIS Committee and subcommittees.
- Maintain and update COG/TPB's GIS-related hardware and software.
- Respond to request for COG/TPB GIS metadata, databases, and applications.

Oversight:	Technical Committee
Estimated Cost:	\$548,800
Products:	Updated GIS software, databases, User documentation, Training materials, Support and enhancement of GIS procedures to develop and manage transportation networks.
Schedule:	June 2011

C. MODELS DEVELOPMENT

The Models Development program functions to improve the TPB's travel demand forecasting practice on a continuing basis. The program encompasses short-term improvements to the TPB's existing travel model which can be implemented in short order, as well as longer term improvements that may require several years to become operational. Improvements to the TPB's travel modeling methods are identified on the basis of recommendations from periodic reviews, from special needs identified by the TPB, or from advances emerging from the research community. The Models Development unit supports the TPB's currently adopted regional travel forecasting process model known as the Version 2.2 model. The unit has more recently been working on the development of more refined model as Version 2.3.

During FY 2009, a nested-logit mode choice model and a revised truck model were incorporated into the Version 2.3 travel model on the 2,191-Transportation Analysis Zone (TAZ) system. With the release of the 2007/2008 Household Travel Survey and the new 3,722-TAZ zone system, it was decided to re-calibrate and re-validate the Version 2.3 travel model on the new zone system. This re-calibration process began during FY 2010, with effort focusing on preparatory work needed to develop calibration files, including collection and cleaning of observed data, including the 2007 Household Travel Survey and the 2007 Metrorail Passenger Survey. Other activities conducted in FY 2010

4. Development of Networks and Models

included the use of new geodatabase and application (TPBMAN) to edit and maintain travel model networks, the development of network building and network processing routines to support the Version 2.3 model, and obtaining observed travel time data on freeways (collected by INRIX) for use in examining model performance.

In FY 2011, the Models Development team will complete the calibration, validation, and testing of the Version 2.3 travel on the 3,722 TAZ system by the late fall (ca. November 2010). As part of the validation work, staff will utilize a sample of INRIX-supplied travel speed data with which to compare modeling results. After November 2010, staff will begin toward combining the Version 2.3 model outputs with the EPA mandated MOVES mobile emissions model, in accordance with federal requirements.

The Models Development unit will also support maintenance activities which will promote consensus on modeling issues such as staffing support of the Travel Forecasting Subcommittee (TFS). The TFS provides direct oversight to the TPB's development activities and serves as the primary forum for local transportation agencies and consultants to discuss travel modeling needs and improvements.

Research and information sharing activities are necessary to ensure that the best practices are recognized and to keep TPB staff abreast of emerging models development areas. In recent years, TPB has retained a consultant to perform a scan of best modeling practice across the U.S. and to provide focused research on technical areas relating to travel modeling practice. This consultant-assisted effort will be maintained during FY 2011. The TPB has played a leadership role in the establishment of a national technical committee comprised of MPO modeling practitioners across the U.S. in cooperation with the Association of Metropolitan Planning Organizations (AMPO). The committee, known as the AMPO Travel Modeling Work Group, has been established to promote information sharing regarding travel forecasting methods being used in practice and to develop guidelines for acceptable practice. TPB will continue its participation with the AMPO committee during FY 2011. Finally, TPB staff will continue to participating in relevant organizations and activities that promote understanding regarding best practices, such as the Transportation Research Board (TRB), the Travel Modeling Improvement Program (TMIP), the Federal Transit Administration (FTA) guidelines on modeling for New Starts, the Institute of Transportation Engineers (ITE), Citilabs and other vendors of travel demand forecasting software.

Oversight: Travel Forecasting Subcommittee

Cost Estimate: \$1,071,200

Products: Updated travel models; documentation of models development activities; and recommendations for

continued updating of the travel demand modeling process.

Schedule: June 2011

D. SOFTWARE SUPPORT

This work element supports the maintenance of the COG/TPB microcomputer-based travel demand forecasting model set as used in applications work, and maintenance of the mobile source emissions factor model including the emissions factor interface and post-processor as used in air quality conformity and state implementation plan (SIP) work. Activities performed under this element include: (1) development and testing of revisions and upgrades to software currently in use, (2) tests of new software including micro simulation, text editor and scripting software, the production version of EPA's motor vehicle emission simulator, and (3) data storage, retrieval and transfer systems for possible adoption. Training of DTP staff in use of models and adopted systems is also included in this element.

Staff monitors the development of microcomputer hardware and other microcomputer-based transportation software as well as data storage, retrieval and transfer systems. Staff evaluates such software and systems through in-house testing on a demonstration basis or through acquisition as warranted.

Oversight: TPB Technical Committee

Cost Estimate: \$178,900

Products: Operational travel forecasting model set and new software selected / installed in FY 2011; Operational emissions factor models and post-processor interface; Operational data storage and retrieval systems; Operational data transfer systems to serve inside and outside users

Schedule: June 2011

5. TRAVEL MONITORING

A.. CORDON COUNTS

This work element supports the maintenance of the COG/TPB microcomputer-based travel demand forecasting model set as used in applications work, and maintenance of the mobile source emissions factor model including the emissions factor interface and post-processor as used in air quality conformity and state implementation plan (SIP) work. Activities performed under this element include: (1) development and testing of revisions and upgrades to software currently in use, (2) tests of new software including micro simulation, text editor and scripting software, the production version of EPA’s motor vehicle emission simulator, and (3) data storage, retrieval and transfer systems for possible adoption. Training of DTP staff in use of models and adopted systems is also included in this element.

Staff monitors the development of microcomputer hardware and other microcomputer-based transportation software as well as data storage, retrieval and transfer systems. Staff evaluates such software and systems through in-house testing on a demonstration basis or through acquisition as warranted.

Oversight:	TPB Technical Committee
Cost Estimate:	\$178,900
Products:	Operational travel forecasting model set and new software selected / installed in FY 2011; Operational emissions factor models and post-processor interface; Operational data storage and retrieval systems; Operational data transfer systems to serve inside and outside users
Schedule:	June 2011

B. CONGESTION MONITORING AND ANALYSIS

This program addresses monitoring efforts on both the freeway system and the arterial highway system. For all freeways and limited access highways in the region, aerial surveys are conducted on a periodic basis to monitor the performance of the system during: 1) peak periods, and 2) midday during the week, and on weekends. AM and PM peak period vehicular density data on the freeway / limited access facilities will be collected during Spring 2011. Data analysis and the final report will be completed in the

following fiscal year. This survey is conducted every three years; it will be the seventh such survey in a series dating back to 1993.

Performance of the arterial highway system is monitored each year through the conduct of travel time/speed runs on a sample of arterial roadways, primarily from the National Highway System. This system was enhanced in FY 2009 from 363 to 430 miles of arterial highways in the region. Each year approximately one third of the sample roadways are monitored; data are collected and are subsequently analyzed and reported by the end of the fiscal year. In FY 2011, the third and final year of the enhanced system of routes will be completed. Staff will compare results with 2005 and 2008 findings, and will report changes to the system through time.

Oversight: Travel Forecasting Subcommittee

Estimated Cost: \$ 350,000

Products: Electronic Files of Spring 2011 Freeway Survey Data
FY 2011 Arterial Highway System Performance Report

Schedule: June 2011

Figure 8

Congestion Monitoring Work Program

Activity	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012
Freeway peak period congestion					
Freeway off-peak congestion					
Arterial highway congestion- Enhanced	Yr 1 of 3	Yr 2 of 3	Yr 3 of 3	Yr 1 of 3	Yr 2 of 3

Note: Freeway peak congestion monitoring is on a 3 year interval and off-peak monitoring is on a 6 year interval.

C. TRAVEL SURVEYS AND ANALYSIS

Household Travel Survey

In FY 2010, a public release version of the 2007/2008 Regional Household Travel Survey

data was produced for use in several important TPB planning activities and for use by TPB participating agencies in their transportation planning activities. Staff provided household travel survey data to TPB participating agencies and their contractors for various planning studies and answered their specific questions about the household travel survey data. Staff also provided these users with additional technical documentation and assistance in the use and analysis of these survey data files. Under this work item in FY 2011, staff will continue to support users of 2007/2008 Regional Household Travel Survey. Further, it is proposed that new household travel survey data be collected from 1,200 to 2,400 households in focused geographic subareas of the region to permit more intensive analysis of specific growth and transportation issues. This proposed additional data collection is in response to the need expressed by local jurisdiction users of the household travel survey to have additional household samples in smaller geographic subareas to analyze specific aspects of daily travel behavior in these smaller geographic areas.

The following work activities are proposed for FY 2011:

- Provide data, documentation, and technical support to users of 2007/2008 Regional Household Travel Survey. Update of survey data files and user documentation as required.
- Continue to mine data collected in the 2007/2008 Regional Household Travel Survey to support analysis of regional growth and transportation issues of topical interest to the members of the TPB. Prepare information reports on various aspects of daily household and vehicle travel in the TPB modeled area.
- Collect household travel survey data for 1,200 households in three focused geographic subareas of the region for more intensive analysis of specific growth and transportation issues. Examples of focused geographic subarea could include Metrorail station areas of a specific type, highway corridors with recent or planned major improvements, proposed light rail study area, or regional activity centers of with specific characteristics. **If an additional \$250,000 becomes available, the sample size for the household travel survey can be doubled to 2,400 households).**

Oversight: Travel Forecasting Subcommittee

Estimated Cost: \$456,300
(Note: If an additional \$250,000 becomes available for additional household travel survey data collection, the total budget for this work item would increase to \$706,300)

Product: Maintenance of Travel Survey Data and Documentation, Household Travel Survey Analyses, Information Reports and Technical Memorandum, Travel Survey Data Files for Additional Households

Schedule: June 2011

D. REGIONAL TRANSPORTATION DATA CLEARINGHOUSE

Efficient access to a comprehensive data set containing current and historic data on the characteristics and performance of the region's transportation system is vitally important for transportation planning, air quality analysis, models development, congestion management and project evaluations. Under this work item state will continue to work with local, state, WMATA and other regional agencies to transfer data to and from the Regional Transportation Data Clearinghouse and to update the Data Clearinghouse with updated highway and transit performance data as these data become available.

The following work activities are proposed for FY 2011:

- Update Clearinghouse data files with FY09-10 highway and transit network data.
- Update Clearinghouse traffic volume data with AADT and AAWDT volume estimates, hourly directional traffic volume counts and vehicle classification counts received from state DOTs and participating local jurisdiction agencies.
- Update Clearinghouse transit ridership data with data received from WMATA, PRTC, VRE, MTA and local transit agencies including the Ride-On, The Bus, ART, DASH and the Fairfax Connector.
- Add newly collected and processed freeway and arterial road speed and level of service (LOS) data to the Regional Transportation Data Clearinghouse network.
- Add updated Cooperative Forecasting data to the Clearinghouse by TAZ.
- Update Regional Clearinghouse user manuals and documentation.
- Create a web-based application to display Regional Transportation Clearinghouse highway link AADT and AAWDT traffic volumes on satellite/aerial photography imagery with zooming user interface.
- Create a prototype ArcGIS server-based application to distribute Regional Transportation Clearinghouse Data to TPB participating agencies via a lightweight web browser application.

Oversight: Technical Committee

Estimated Cost: \$317,900

Product: Updated Clearinghouse Database and Documentation; Web Interface to Access Clearinghouse Data

Schedule: June 2011

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6. TECHNICAL ASSISTANCE

The TPB work program responds to requests for technical assistance from the state and local governments and transit operating agencies. This activity takes the form of individual technical projects in which the tools, techniques, and databases developed through the TPB program are utilized to support corridor, project, and sub-area transportation and land use studies related to regional transportation planning priorities. The funding level allocated to technical assistance is an agreed upon percentage of the total new FY 2011 funding in the basic work program. The funding level for each state is an agreed upon percentage of the total new FTA and FHWA planning funding passed through each state. The funding level for WMATA is an agreed upon percentage of the total new FTA funding. The specific activities and levels of effort are developed through consultation between the state and WMATA representatives and TPB staff.

Technical assistance projects anticipated in FY 2011 are described below. Total funds allocated to the District of Columbia, Maryland, Virginia, and WMATA for technical assistance are shown in Table 2. Work on each project is directed by staff from the respective state DOT or WMATA and is conducted by TPB staff or consultants as noted.

A. DISTRICT OF COLUMBIA

Program Development, Data Requests and Miscellaneous Services

This project is established to account for staff time spent in developing scopes of work for requested projects and in administering the resulting work program throughout the year. Work activities involve meeting with DDOT staff to discuss proposed projects, drafting and finalizing work statements and tasks, creating project accounts when authorized, and progress reporting throughout the projects.

Additionally, this project establishes an account to address requests from DDOT which are too small or too short-lived to warrant separate scopes of work. Requests may include staff time to participate in technical review committees and task forces and execution of small technical studies.

Cost Estimate:	\$17,500
Product:	specific scopes of work
Schedule:	on-going activity

The program for FY 2011 remains to be specified.

TOTAL DISTRICT OF COLUMBIA COST ESTIMATE: \$312,300

B. MARYLAND

Program Development

This project is set up to account for staff time spent in developing detailed scopes of work for requested projects and in administering and reporting on the resulting work program throughout the year. Work activities involve meeting with requesting agencies to discuss proposed projects, drafting and finalizing work statements and tasks, creating projects when authorized, and progress reporting throughout the project schedule.

Cost Estimate: \$25,000

Product: Detailed scopes of work as needed, progress reports.

Schedule: On-going activity

Miscellaneous Services

The miscellaneous account is a mechanism established to address requests from MDOT, SHA, MTA, MdTA and local jurisdictions, which are too small or too short-lived to warrant separate work scopes. Authorizations to execute specific tasks are usually given by email or fax; this is particularly useful for quick turnaround. Past work has included requests for electronic data files, hard copy, or plots from any of the planning work activities at COG. Other requests have included participation in technical review committees and task forces and execution of small technical studies.

Cost Estimate: \$50,500

Schedule: On-going activity

MDOT Training / Technical Support

As part of technical assistance work activities in previous years staff installed the regional travel demand modeling process in the offices of SHA's Travel Forecasting Section. Staff has subsequently worked with SHA in executing alternatives at the regional level and has provided staff training to both SHA and MTA staff members.

As part of these work activities, staff updates the transportation networks, land activity data files and travel demand models in SHA's offices to reflect the latest regional data files and modeling procedures. Staff will continue to work with SHA and MTA staff to apply these

modeling procedures and to provide specific project assistance as requested under categories of: project planning, feasibility studies in selected corridors, and other planning studies. Staff also reviews and provides comment on milestone documentation reports, e.g., draft environmental impact statements, alternatives retained for detailed study, for various project planning studies in Maryland.

Cost Estimate: \$25,000
Product: Technical memos
Schedule: On-going activity

SHA – Western Mobility / Capital Beltway Studies

This project area represents system level forecasting work which is performed in support of ongoing SHA project planning activities. In recent years, COG staff developed and analyzed travel forecasts for various alternatives in each of these corridors. These activities will be continued within this category on a specific request basis, as tasks are received.

Cost Estimate: \$75,000
Product: Subarea / corridor data
Schedule: June 2011

MTA – Corridor Cities Transitway / Purple Line Transit Studies

FY2010 activities in this area included the air quality conformity assessment of the Purple Line as an element of the 2009 CLRP. Many of the other activities on the two project planning studies have been conducted by consultants to the Maryland MTA. This project is designed to continue overall support to MTA and to provide technical support to MTA's consultants, including application of the primary travel demand models (assistance with development of model inputs, execution and evaluation of model outputs), incorporation of new transit analysis at the corridor level, and evaluation of results.

Cost Estimate: \$50,000
Product: Subarea / corridor data
Schedule: June 2011

Project Planning / Feasibility Studies

This project provides funding throughout the fiscal year as needed to support the above listed project planning / feasibility study activities, and to continue specific research activities begun in FY2008, such as analysis of truck travel. Work efforts may supplement ongoing corridor / subarea studies, such as the above-listed Capital Beltway and I-270, as well as the initiation of new planning studies, ranging from major new corridor analyses to the development of travel demand forecasts for individual facilities. Additional project authorizations may occur throughout the fiscal year as priorities dictate.

Cost Estimate: \$100,000
Product: Facility / Subarea / Corridor data
Schedule: June 2011

Statewide Travel Demand Model

This project is designed to assist SHA and their consultants in their development of, and evaluation of results from, a statewide travel model. The model is being developed in order to analyze travel at a macroscopic level, i.e., statewide / multiple states, with a view to assessing impacts in Maryland of alternative growth scenarios and other forecast assumptions.

Cost Estimate: \$50,000
Product: Technical memos
Schedule: June 2011

Development / Refinement of Technical Methods

Consistent with related project evaluation work in the technical assistance area, this project addresses selected topics from a list of possible research areas advanced by SHA. Previous research included review of benefit - cost analysis models such as the Surface Transportation Efficiency Model (STEAM), life cycle investment models such as the statewide version of the Highway Economic Requirements System (HERS / ST), and sensitivity tests of the regional travel demand model as applied in corridor analyses.

Cost Estimate: \$75,000
Product: Technical reports

Schedule: June 2011

Transportation / Land Use Connection Program

The Transportation / Land Use Connections (TLC) program is an effort to provide technical assistance to local governments in the Washington region in order to facilitate integrating land use and transportation planning at the community level. Begun as a 6 month regional pilot program in January 2007, the project was very well received. It was not only continued in subsequent years, but Maryland supplemented the regional effort with additional funds. This project continues those efforts by similarly reserving such supplemental funds to be distributed in fiscal year 2011.

Cost Estimate: \$100,000

Product: Grant awards, technical reports from contractors

Schedule: June 2011

TOTAL MARYLAND COST ESTIMATE: \$575,500

C. VIRGINIA

Program Development

This project is established to account for TPB staff time spent in developing scopes of work for requested projects and for administering the resultant work program throughout the year.

Work activities will involve meeting with VDOT and VDR&PT staff to discuss projects, draft and finalize work statements and tasks, create project accounts when authorized, and report progress on projects throughout the year.

Cost Estimate: \$8,000

Product: scopes of work, progress reports

Schedule: on-going activity

Miscellaneous Services

This work element provides VDOT and DRPT with the ability to undertake limited scope studies and / or data gathering activities identified during their FY 2011 regional and sub-regional planning activities. The miscellaneous services account is also a mechanism established to address requests that are too small or too short-lived to warrant separate work scopes. Authorizations to execute specific tasks are usually given by fax; this is particularly useful for quick turnaround. Work items include: requests for hard copy documents, plots, tape, or diskettes of data from any of the planning work activities at COG, participation in technical review committees and tasks forces, and execution of small technical studies.

Cost Estimate: \$20,000

Product: scopes of work, documents, plots

Schedule: on-going activity

Northern Virginia HOV Facilities Monitoring and Data Collection

VDOT desires a monitoring program of the limited access high-occupancy vehicle (HOV) facilities in Northern Virginia during the fall of fiscal year 2011. The HOV corridors to be monitored will be coordinated with COG.

Project Planning / Feasibility Studies

This project provides funding throughout the fiscal year as needed to support the above listed project planning / feasibility study activities, and to continue specific research activities begun in FY2008, such as analysis of truck travel. Work efforts may supplement ongoing corridor / subarea studies, such as the above-listed Capital Beltway and I-270, as well as the initiation of new planning studies, ranging from major new corridor analyses to the development of travel demand forecasts for individual facilities. Additional project authorizations may occur throughout the fiscal year as priorities dictate.

Cost Estimate:	\$100,000
Product:	Facility / Subarea / Corridor data
Schedule:	June 2011

Statewide Travel Demand Model

This project is designed to assist SHA and their consultants in their development of, and evaluation of results from, a statewide travel model. The model is being developed in order to analyze travel at a macroscopic level, i.e., statewide / multiple states, with a view to assessing impacts in Maryland of alternative growth scenarios and other forecast assumptions.

Cost Estimate:	\$50,000
Product:	Technical memos
Schedule:	June 2011

Development / Refinement of Technical Methods

Consistent with related project evaluation work in the technical assistance area, this project addresses selected topics from a list of possible research areas advanced by SHA. Previous research included review of benefit - cost analysis models such as the Surface Transportation Efficiency Model (STEAM), life cycle investment models such as the statewide version of the Highway Economic Requirements System (HERS / ST), and sensitivity tests of the regional travel demand model as applied in corridor analyses.

Cost Estimate:	\$75,000
Product:	Technical reports

Schedule: June 2011

Transportation / Land Use Connection Program

The Transportation / Land Use Connections (TLC) program is an effort to provide technical assistance to local governments in the Washington region in order to facilitate integrating land use and transportation planning at the community level. Begun as a 6 month regional pilot program in January 2007, the project was very well received. It was not only continued in subsequent years, but Maryland supplemented the regional effort with additional funds. This project continues those efforts by similarly reserving such supplemental funds to be distributed in fiscal year 2011.

Cost Estimate: \$100,000

Product: Grant awards, technical reports from contractors

Schedule: June 2011

TOTAL MARYLAND COST ESTIMATE: \$575,500

C. VIRGINIA

Program Development

This project is established to account for TPB staff time spent in developing scopes of work for requested projects and for administering the resultant work program throughout the year.

Work activities will involve meeting with VDOT and VDR&PT staff to discuss projects, draft and finalize work statements and tasks, create project accounts when authorized, and report progress on projects throughout the year.

Cost Estimate: \$8,000

Product: scopes of work, progress reports

Schedule: on-going activity

Miscellaneous Services

This work element provides VDOT and DRPT with the ability to undertake limited scope studies and / or data gathering activities identified during their FY 2011 regional and sub-regional planning activities. The miscellaneous services account is also a mechanism established to address requests that are too small or too short-lived to warrant separate work scopes. Authorizations to execute specific tasks are usually given by fax; this is particularly useful for quick turnaround. Work items include: requests for hard copy documents, plots, tape, or diskettes of data from any of the planning work activities at COG, participation in technical review committees and tasks forces, and execution of small technical studies.

Cost Estimate: \$20,000

Product: scopes of work, documents, plots

Schedule: on-going activity

Northern Virginia HOV Facilities Monitoring and Data Collection

VDOT desires a monitoring program of the limited access high-occupancy vehicle (HOV) facilities in Northern Virginia during the fall of fiscal year 2011. The HOV corridors to be monitored will be coordinated with COG.

Monitoring will consist of the following data collection projects:

- Peak direction occupancy and classification counts (from 5 AM to 10 AM inbound and 3 PM to 8 PM outbound) at a set of stations along the selected facilities. These stations will include the major count locations as specified by VDOT.
- Off-peak direction traffic volume and classification counts during the peak period (same as above) at selected locations to be performed in the spring of 2011 in Northern Virginia.
- Staff will continue to research travel time runs using GPS technology in Northern Virginia.

Data will be transmitted to VDOT after field data collection work, editing, and reasonableness checking have been completed. Preliminary data will be transmitted to VDOT within one week of the count so that a timely determination can be made regarding the need for a re-count.

Cost Estimate:	\$ 275,000
Products:	Data files transmitted to VDOT
Schedule:	Fall counts completed by Nov. 30, 2010 Spring counts completed by June 15, 2011

Travel Forecast Model ("B-node model") Support

Support the development and testing of local jurisdiction travel forecast models by overlaying COG's regional model network over the local networks to identify the resulting centroid connectors to code, and then code the centroid connectors. VDOT will compare model results with observed ground counts.

Cost Estimate:	\$20,000
Product:	study report with recommendations
Schedule:	complete work by June 30, 2011

Data Mining of the 2007 / 2008 Household Travel Survey

Conduct in-depth analysis of the "State of the Commute" survey for the Northern

Virginia jurisdictions. Gather input from the local TDM programs to provide data/reports for their specific needs, provide additional cross-tabs not provided by the MWCOG reports such as comprehensive demographic analysis, local jurisdictional and regional trend analysis, and recommendations on how to improve local northern Virginia programs as well as the regional Commuter Connections program and products.

Cost Estimate: \$ 50,000
Product: Analysis results and reports
Schedule: June 2011

NoVA Bike / Pedestrian Count Program

Perform bicycle and pedestrian traffic data collection at up to 50 locations identified by VDOT throughout Northern Va. using the latest traffic counting technology (based on analysis work conducted in FY10) and preparation of a summary report. The 12-hour bicycle and pedestrian counts at designated locations will be separate spreadsheets showing pedestrian and bicycle crossings in 15-minute intervals for all counted locations (and DVDs showing the video recording of the trail / intersection activity if such technology is used). Any unusual incidents or pedestrian / bicycle behavior will be noted with times on a separate sheet. The counts shall be performed in the spring and early summer, but not earlier than mid March. Data will be transmitted to VDOT after field data collection work, editing, and reasonableness checking have been completed. Preliminary data will be transmitted to VDOT within one week of the count so that a timely determination can be made regarding the need for a re-count.

Cost Estimate: \$ 60,000
Product: Data files and GIS map
Schedule: June 30, 2011

TransAction 2040 Plan Support

The Northern Virginia Transportation Authority (NVTA) is updating its regional long range transportation plan (TransAction 2030). While consultant support to local jurisdiction technical staff will be available, there may be specific tasks on which COG staff support may be sought. Examples of such tasks are attending product output meetings with the consultant team and the TransAction 2040 Subcommittee, attending public workshops, providing input on draft documents, and providing modeling support

(primarily regarding the TPB regional conformity model). These tasks will be coordinated with COG staff as they are identified.

Cost Estimate: \$ 50,000

Product: Technical support as requested

Schedule: Completion by June 30, 2011

TOTAL VIRGINIA COST ESTIMATE: \$490,600

D. WMATA

Program Development

This project is established to account for DTP staff time spent in developing scopes of work for requested projects and for administering the resultant work program throughout the year. Work activities will involve meeting with WMATA staff to discuss projects, drafting and finalizing work statements and tasks, creating project accounts when authorized, and reporting progress on projects throughout the year. In addition, this project will provide staff with resources to attend required meetings at WMATA.

Cost Estimate: \$10,000

Schedule: on-going activity

Miscellaneous Services

This miscellaneous account is a mechanism established to address requests which are too small or too short-lived to warrant separate work scopes. Past work has included requests for hard copy, plots, tape, or diskettes of data from any of the planning work activities at COG.

Cost Estimate: \$7,600

Schedule: on-going activity

Cost Estimate: \$100,000

Schedule: Final report November 30, 2009

Schedule: June 2010

The program for FY 2011 remains to be specified.

TOTAL WMATA COST ESTIMATE: \$194,500

7. CONTINUOUS AIRPORT SYSTEM PLANNING PROGRAM

The purpose of the CASP program is to provide a regional process that supports the planning, development and operation of airport and airport-serving facilities in a systematic framework for the Washington-Baltimore Region. Oversight of the program is the responsibility of the TPB Aviation Technical Subcommittee. The elements of the multi-year CASP work program to be performed during FY 2011 are as follows:

Process 2009 Air Passenger Survey

The processing of the data collected in the 2009 Regional Air Passenger Survey will continue for this project, which will began in FY2010 and will conclude FY2011. Specific tasks will include data entry and editing, geocoding of the survey data to small area transportation analysis zones, data expansion, data tabulation, and data analysis. All analysis and findings will be documented in A technical report containing general findings and geographic findings.

Cost Estimate: \$120,000

Ground Access Travel Time Study

The Ground Access Travel Time Study Update will entail analysis of travel time trends to the three commercial airports, as well as analysis of any new transportation improvements. It is a two-year, multi-phased project, which began FY2010 with initial project planning, and will conclude during FY2011 with data collection, analysis and documentation

Cost Estimate: \$175,000

Update Ground Access Forecast

This project will develop revised Ground Access Forecasts. During FY2011, staff will develop new forecasts of ground access trips from all local area aviation analysis zones to each of the region's three commercial airports by time of day and major mode of travel used to reach the airport. These forecasts will be used as inputs for the update of the TPB's Constrained Long Range Plan (CLRP) and will serve as the basis for revising the Ground Access Element of the Regional Airport System Plan.

Cost Estimate: \$165,000

TOTAL CASP COST ESTIMATE: \$460,000