ITEM 8 - Action
March 19, 2008

Approval of
FY 2009 Unified Planning Work Program (UPWP)

Staff Recommendation: Receive briefing on the final UPWP for FY 2009 (July 1, 2008 through June 30, 2009) and adopt Resolution R19-2008 to approve it.

Issues: None

Background: The TPB was briefed on the draft of the work program at the February 20 meeting and on the outline of the work program and budget at the January 16, 2008 meeting.

The draft FY 2009 UPWP was released for public comment at the Citizens Advisory Committee meeting on February 14. The Technical Committee reviewed the outline and budget on January 4 and reviewed the draft document on February 1. On March 7, the Technical Committee reviewed the proposed carryover activities and budgets from FY 2008 and recommended approval of the FY 2009 UPWP and the FY 2008 carryover activities and budgets by the TPB.

TPB R19-2008
March 19, 2008

NATIONAL CAPITAL REGION TRANSPORTATION PLANNING BOARD
777 NORTH CAPITOL STREET, N.E.
WASHINGTON, D.C. 20002-4201

RESOLUTION APPROVING THE FY 2009 UNIFIED PLANNING WORK PROGRAM FOR TRANSPORTATION PLANNING

WHEREAS, the Joint Planning Regulations issued February 14, 2007 by the Federal Transit Administration (FTA) and the Federal Highway Administration (FHWA) require a Unified Planning Work Program (UPWP) for Transportation Planning; and

WHEREAS, the Unified Planning Work Program is required as a basis and condition for all funding assistance for transportation planning to state, local and regional agencies by the FTA and FHWA; and

WHEREAS, the FY 2008 Unified Planning Work Program (UPWP) for Transportation Planning for the Washington Metropolitan Region was approved by the Transportation Planning Board (TPB) on March 21, 2007; and

WHEREAS, on February 14, 2008, the TPB released the draft FY 2009 UPWP for public comment; and

WHEREAS, the TPB Technical Committee reviewed the outline and budget on January 4, 2008, the draft document on February 1, and recommended approval by the TPB of the final draft FY 2009 UPWP at its meeting on March 4; and

WHEREAS, on March 19, 2008, the TPB adopted resolution R18-2008 which identifies certain projects for carryover funding from FY 2008 to FY 2009, and these projects and budgets will be incorporated into the final version of the FY 2009 UPWP;

NOW, THEREFORE, BE IT RESOLVED THAT the National Capital Region Transportation Planning Board approves the FY 2009 Unified Planning Work Program for Transportation Planning for the Metropolitan Washington Region.

NATIONAL CAPITAL REGION
TRANSPORTATION PLANNING BOARD

FY 2009

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

` DRAFT

March 19, 2008

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.

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I. INTRODUCTION

Purpose

The **FY 2009 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, 2008 through June 30, 2009. 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.

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*.

The Clean Air Act Amendments (CAAA) of 1990 require 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.

This document 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 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.

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.

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 Washington metropolitan 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, and 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 insure 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 state and local government public transportation operators for cooperatively carrying out 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

Figure 1
ORGANIZATIONS REPRESENTED ON

THE TPB AND/OR ITS TECHNICAL COMMITTEES

VIRGINIA

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

MARYLAND

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

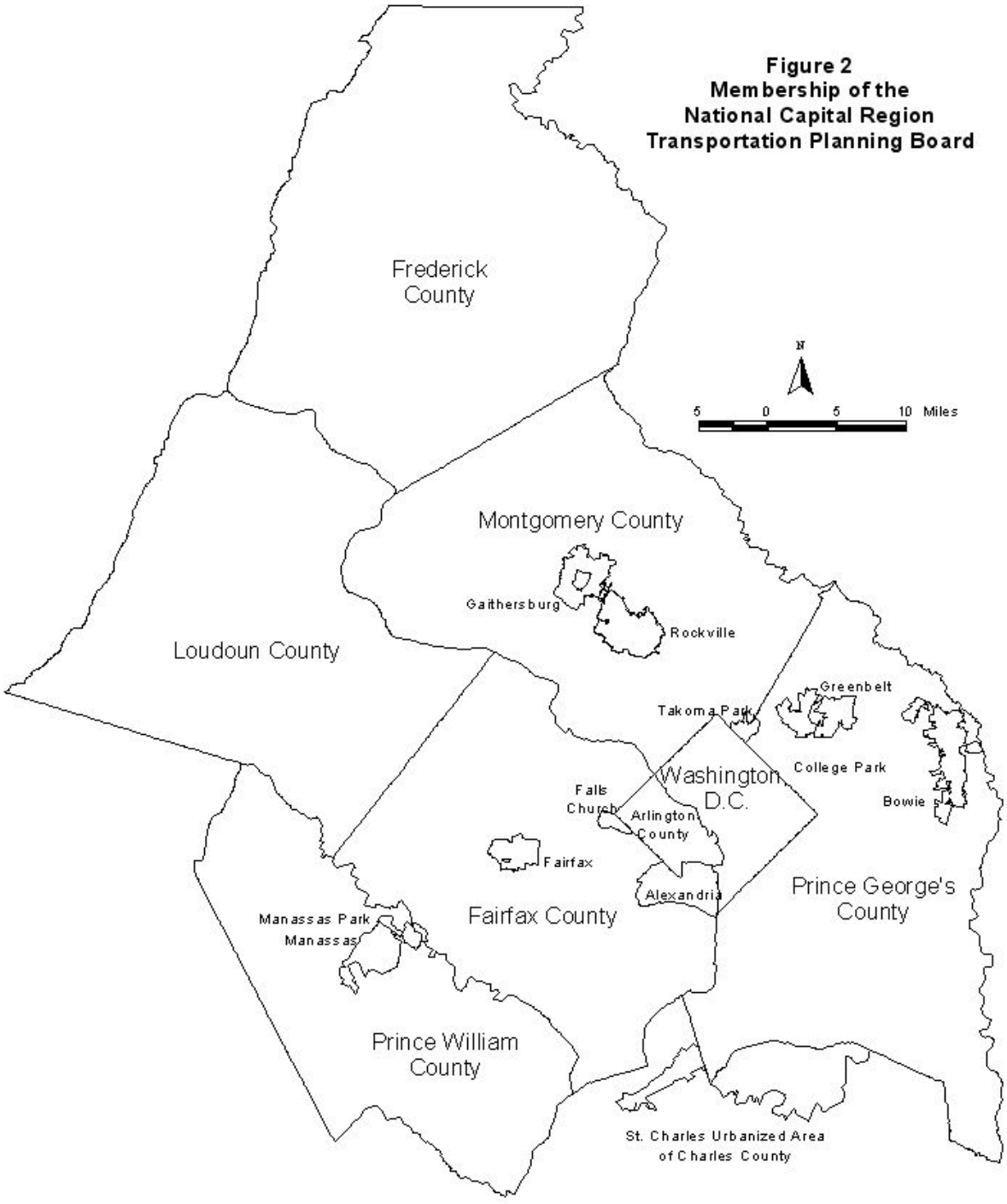
DISTRICT OF COLUMBIA

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

REGIONAL, FEDERAL AND PRIVATE SECTOR

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

Figure 2
Membership of the
National Capital Region
Transportation Planning Board



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 2009, 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 continued 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 3

TRANSPORTATION PLANNING AND PROGRAMMING RESPONSIBILITIES

Responsibility	Agencies
UPWP Development	TPB, DOTs, WMATA, Local `Govts
Planning Certification	TPB, DOTs
CLRP Development	
Transportation/Land-Use Planning	TPB, MDPC, Local Govts
Plan Inputs/Update	DOTs, WMATA, Local Govts, NVTA, PRTC, MWAA
Project Selection	TPB, DOTs, WMATA, and Local Govts
Air Quality Conformity	TPB, Fredericksburg Area MPO
Financial Plan	TPB, DOTs, WMATA
Congestion Management Process	TPB, DOTs, Local Govts,
Safety Element	TPB, DOTs, Local Govts,
Participation Plan	TPB
Freight Planning	TPB, DOTs, Local Govts.
TIP Development	
TIP Inputs	DOTs, WMATA, Local Govts, 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 Govts, 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 Govts

Figure 4
TRANSPORTATION PLANNING STUDIES
WITHIN THE WASHINGTON METROPOLITAN AREA 2008

Name	Primary Agencies	Schedule	Products
Regional			
Regional Mobility and Accessibility Scenario Study	TPB	2010	Outreach
Update of Long-Range	TPB, state DOTs, WMATA, local govts.	2008	CLRP
Regional ITS Architecture Update	TPB, state DOTs, WMATA, local govts.	2008	Report
Station Area Plans (multiple stations)	WMATA	on-going	Plans
Station Access Studies (multiple stations)	WMATA	on-going	Plans
Capital Needs Inventory & CIP Update	WMATA	2008	Plan
Ridership Forecasting and Market Analysis	WMATA	2008	Report
Metrobus Passenger Survey	WMATA	2008	Study
Bus Stop Improvement Standards	WMATA	2008	Report
MetroExtra Evaluation	WMATA	2008	Report
Bus Stop Needs Assessment	WMATA	2008	Report
Corridor Development Studies (16th St, Leesburg Pike, Viers Mill Rd.)	WMATA	2008	Studies
Priority Bus Corridors Plans	WMATA	on-going	Plans
Infill Station Assessment	WMATA	2008	Plans

Figure 4 **PLANNING STUDIES 2008** (Continued)

Name	Primary Agencies	Schedule	Products
MetroAccess Accessible Paths	WMATA	2008	Report
Virginia			
Idea 66: Spot Improvements (Inside the Beltway)	VDOT-NoVA	2008	NEPA
I-66 Corridor Study (Outside the Beltway)	VDOT	2011	NEPA
I-95/I-395 HOT Lane (PPTA)	VDOT	2008	NEPA
Capital Beltway Southside Mobility Study	VDOT	2008	Report
US 1 Location Study	VDOT, Local Jurisdictions	2008	EA
I 66 Corridor Transit Study	VDRPT	2008	Report
Tri-County Parkway	VDOT	2008	NEPA
Maryland			
Capital Beltway Study	MDOT, VDOT, Montgomery Prince George's Counties	2010	DEIS
I-270 Multi-Modal Corridor Study	MDOT/SHA, Montgomery & Frederick Counties	2010	PE/FEIS
Corridor Cities Transitway Study	MDOT/MTA	2008	AA/EA
Purple Line (Bethesda to Silver Spring/ Silver Spring to New Carrollton)	MDOT/MTA	2008	AA/DEIS
MD 5 Transportation	MDOT/SHA	2009	DEIS

Figure 4 **PLANNING STUDIES 2008** (Continued)

Name	Primary Agencies	Schedule	Products
Study(I-495 to US 301)			
US 301 Waldorf Study (US 301from T.B. to south of Waldorf)	MDOT/SHA	2010	DEIS
US 301 Governor Harry W. Nice Bridge	MD Transportation Authority	2009	EA
University of Maryland Connector	MDOT/SHA	2011	DEIS
MD 223 Study (Temple Hill Road to MD 5)	MDOT/SHA	2010	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	2010	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	2008	Report
District of Columbia Transit Alternatives Analysis (DCAA)	DDOT/WMATA	2008	Plan
Transportation Vision Plan Update	DDOT	2008	Report

Figure 4 **PLANNING STUDIES 2008** (Continued)

Name	Primary Agencies	Schedule	Products
Assessment of Efficiency in Parking Pricing and Procedures	DDOT	2008	Report
Neighborhood Transportation Planning Studies	DDOT	on-going	Studies
Traffic Calming Studies	DDOT	on-going	Reports
Parking Studies	DDOT	on-going	Reports
South Capitol Street (EIS)/AWI	DDOT	2008	EIS
Union Station Intermodal Transit Center Feasibility Study	DDOT	2008	Report
14th Street Streetscape Design & Transportation Study	DDOT	2008	Report
Washington Circle Pedestrian Safety	DDOT	2008	Design
Woodland Terrace Traffic Impact Study	DDOT	2008	Report
Fairlawn Traffic Impact Study	DDOT		2008 Report
Southern Avenue Streetscape and Traffic Impact Design	DDOT	2008	Study/Plan
Blagden Avenue Environmental Assessment	DDOT	2008	EA
Georgetown Transportation Study	DDOT	2008	Study
10th Street Pedestrian Connection Transportation Study	DDOT	2008	Study
15th Street NW Reconfiguration	DDOT	2008	Study

Figure 4 **PLANNING STUDIES 2008** (Continued)

Name	Primary Agencies	Schedule	Products
Analysis			
Congress Heights Concept and Design	DDOT	2008	Concept/Design
Great Streets Streetscape Design	DDOT	2008	Design
Glover Park Transportation Study	DDOT	2008	Study/Report

Total Proposed Funding by Federal Source for FY 2009

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 1-15.

The new FY 2009 funding level in Table 1 under the "FTA Section 5303" column is about the same as the FY 2008 level, and new funding under the "FHWA Section 112" column is also about the same as FY 2008.

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TABLE 1
FY 2009 TPB PROPOSED FUNDING BY FEDERAL STATE AND LOCAL SOURCES
(July 1, 2008 to June 30, 2009)

	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 2009	387,000	1,840,000		2,227,000
UNOBLIGATED FY 2007	36,341	197,249		233,590
CARRYOVER FY 2008				
SUBTOTAL	423,341	2,037,249		2,460,590
ALLOTMENTS PROVIDED BY MDOT				
NEW FY 2009	948,200	3,355,600		4,303,800
UNOBLIGATED FY 2007	117,930	421,484		539,414
CARRYOVER FY 2008				
SUBTOTAL	1,066,130	3,777,084		4,843,214
ALLOTMENTS PROVIDED BY VDOT				
NEW FY 2009	807,600	2,612,000		3,419,600
UNOBLIGATED FY 2007	70,729	213,319		284,048
CARRYOVER FY 2008				0
SUBTOTAL	878,329	2,825,319		3,703,648
TPB BASIC PROGRAM				
TOTAL NEW FY 2009	2,142,800	7,807,600		9,950,400
TOTAL UNOBLIGATED FY 2007	225,000	832,052		1,057,052
SUBTOTAL	2,367,800	8,639,652		11,007,452
TOTAL CARRYOVER FY 2008	0	0		0
TOTAL BASIC PROGRAM	2,367,800	8,639,652		11,007,452
GRAND TOTAL	**2,367,800**	**8,639,652**	**514,400**	**11,521,852**

"New FY2009 funds" refer to newly authorized funds for the FY2009 UPWP

"Unobligated FY2007 funds" refer to unexpended funds from the completed FY2007 UPWP

"Carryover FY2008 funds" are programmed from the FY2008 UPWP to complete specific work tasks in the FY 2009 UPWP

II. PROPOSED FY 2009 TPB WORK PROGRAM AND BUDGET

Program Structure

The FY 2009 work program comprises seven major work activities and follows the structure in the FY 2008 program to clearly address the final transportation planning requirements. 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. The relationship and interactions of the seven major work activities are shown in Figure 5 on page 2-3.

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.

As shown in the figure, **Coordination Planning** 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. **Continuous Airport System Planning (CASP)** utilizes the methods and data work activities for airport and airport-serving facilities in the region.

The second major activity, **Forecasting Applications** includes forecasting applications such as air quality conformity and regional studies to provide the substantive inputs for the policy products. As shown in the figure, **Development of Networks and Models** interact with **Travel Monitoring**, which provides empirical travel information from congestion monitoring and survey and analysis activities. Both products and methods activities provide input for the technical products.

The **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.

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 2-5. The TPB committee structure is shown in Figure 6 on page 2-7. The TPB committee or sub-committee responsible for the specific work activities listed in Table 2 are shown under the descriptions for each task starting on page 2-9. A detailed breakdown of staffing, consultant costs and other budgetary requirements is provided in Table 3 on page 2-6.

Funding for the TPB Basic Work Program is similar to the FY 2008 level, and the FY 2009 UPWP continues and expands the work activities in the FY 2009 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.

Figure 5

How FY2009 UPWP Work Items are Related

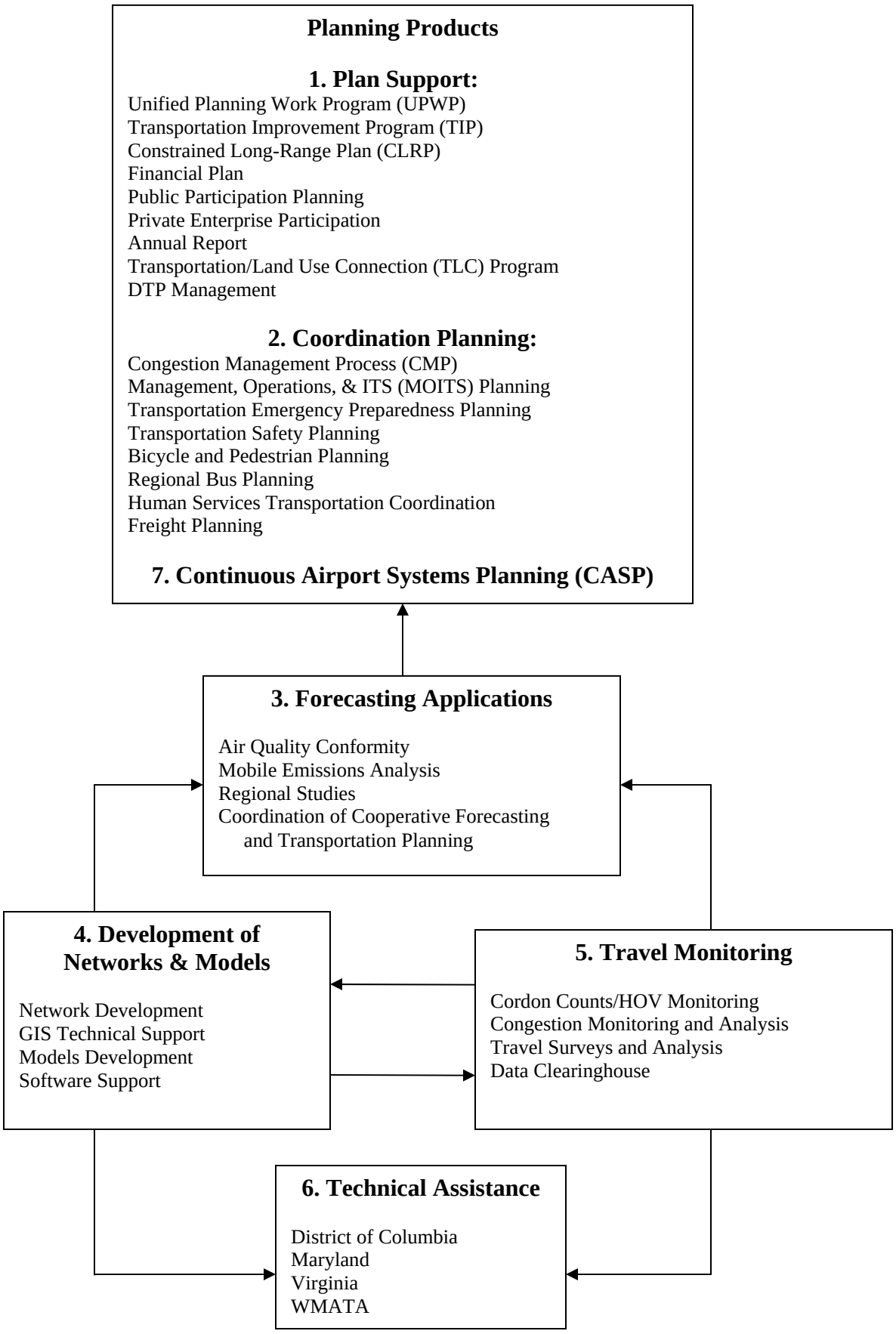

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TABLE 2
TPB FY 2009 WORK PROGRAM BY FUNDING SOURCES

WORK ACTIVITY	TOTAL COST	FTA/STATE/ LOCAL	FHWA/STATE LOCAL	OTHER FUND
1. PLAN SUPPORT				
A. Unified Planning Work Program (UPWP)	70,700	15,208	55,492	
B. Transp Improvement Program (TIP)	151,700	32,632	119,068	
C. Constrained Long-Range Plan	558,400	120,117	438,283	
D. Financial Plan	134,000	28,825	105,175	
E. Public Participation	323,900	69,674	254,226	
F. Private Enterprise Participation	18,300	18,300		
G. Annual Report	80,100	17,230	62,870	
H. Transportation/Land Use Connection Progr	355,000	76,364	278,636	
I. DTP Management	452,100	97,251	354,849	
Subtotal	2,144,200	475,600	1,668,600	
2. COORDINATION and PROGRAMS				
A. Congestion Management Process (CMP)	175,000	37,644	137,356	
B. Management, Operations, and ITS Planning	350,000	75,288	274,712	
C. Emergency Preparedness Planning	75,400	16,219	59,181	
D. Transportation Safety Planning	100,000	21,511	78,489	
E. Bicycle and Pedestrian Planning	108,700	23,382	85,318	
F. Regional Bus Planning	100,000	21,511	78,489	
G. Human Service Transportation Coordination	105,000	22,586	82,414	
H. Freight Planning	101,000	21,726	79,274	
Subtotal	1,115,100	239,868	875,232	
3. FORECASTING APPLICATIONS				
A. Air Quality Conformity	563,200	121,149	442,051	
B. Mobile Emissions Analysis	640,100	137,691	502,409	
C. Regional Studies	315,800	67,931	247,869	
D. Coord Coop Forecasting & Transp Planning	676,800	145,586	531,214	
Subtotal	2,195,900	472,357	1,723,543	
4. DEVELOPMENT OF NETWORKS/MODELS				
A. Network Development	769,700	165,569	604,131	
B. GIS Technical Support	498,800	107,296	391,504	
C. Models Development	1,071,200	230,425	840,775	
D. Software Support	178,900	38,483	140,417	
Subtotal	2,518,600	541,773	1,976,827	
5. TRAVEL MONITORING				
A. Cordon Counts	230,000	49,475	180,525	
B. Congestion Monitoring and Analysis	521,200	112,115	409,085	
C. Travel Surveys and Analysis				
Household Travel Survey	500,000	107,554	392,446	
D. Regional Trans Data Clearinghouse	267,900	57,628	210,272	
Subtotal	1,519,100	326,772	1,192,328	
Core Program Total (I to V)	9,492,900	2,056,370	7,436,530	
6. TECHNICAL ASSISTANCE				
A. District of Columbia	300,552	31,334	269,218	
B. Maryland	581,000	60,572	520,428	
C. Virginia	461,600	48,124	413,476	
D. WMATA	171,400	171,400		
Subtotal	1,514,552	311,430	1,203,122	
Total, Basic Program	11,007,452	2,367,800	8,639,652	
7. CONTINUOUS AIRPORT SYSTEM PLANNING				
A. Process Air Passenger Survey	190,000			190,000
B. Ground Access Forecast & Element Updates	274,400			274,400
C. Ground Access Travel Time Study	50,000			50,000
Subtotal	514,400			514,400
GRAND TOTAL	11,521,852	2,367,800	8,639,652	514,400

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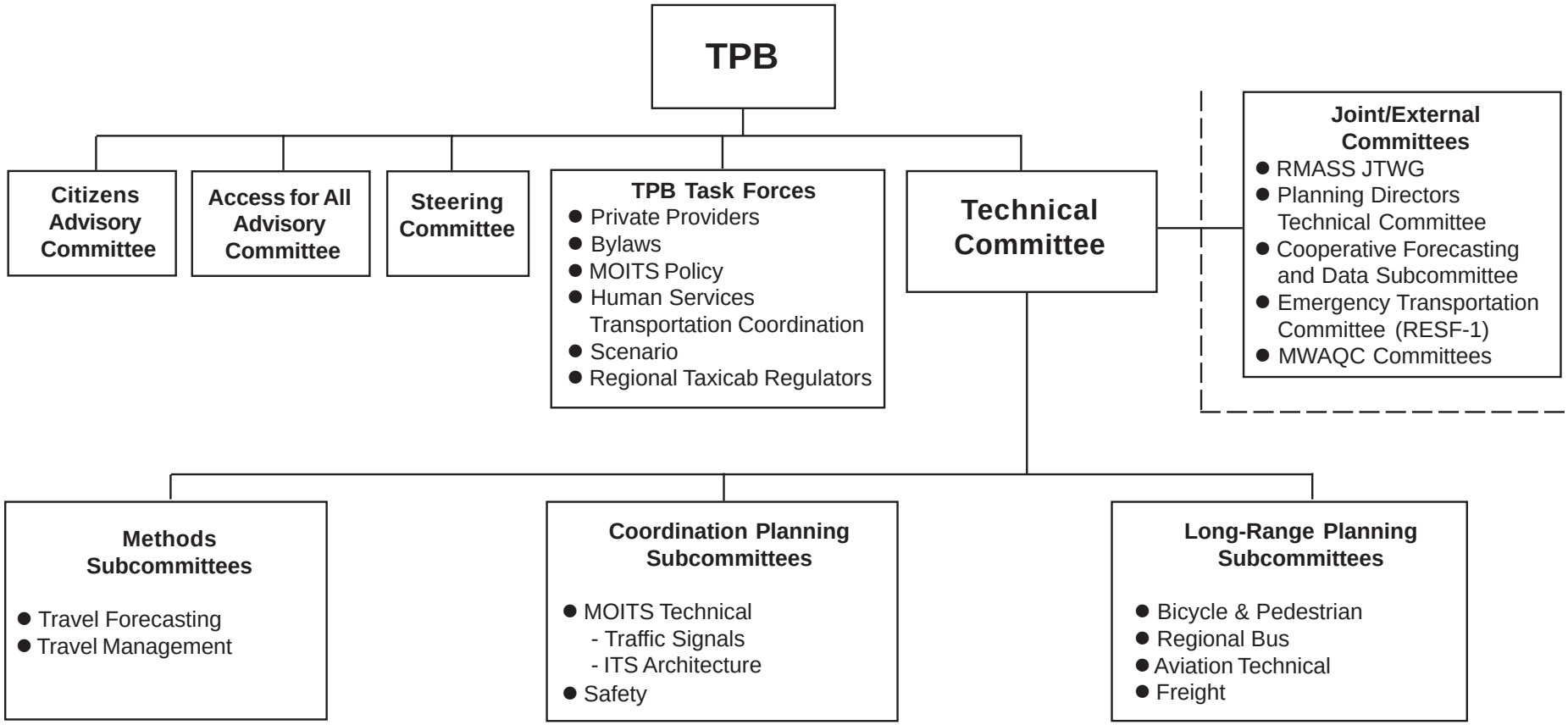
TABLE 3

TPB FY 2009 BUDGET AND WORK PROGRAM BY EXPENDITURE CATEGORY

WORK ACTIVITY	DIRECT SALARIES DTP STAFF	DIRECT SALARIES OTHER COG STAFF	M & A 26%	LEAVE BENEFITS 18%	FRINGE BENEFITS 20%	INDIRECT COSTS 36%	DATA & PC COSTS	CONSULTANT	DIRECT COSTS	TOTAL
1. PLANS SUPPORT										
A. Unified Planning Work Program	28,891	205	7,565	6,599	8,652	18,688	100	0	0	70,700
B. Transportation Improvement Program	59,578	2,859	16,234	14,161	18,566	40,103	200	0	0	151,700
C. Constrained Long-Range Plan	193,176	25,641	56,892	49,628	65,067	140,546	1,250	25,000	1,200	558,400
D. Financial Plan	55,225	0	14,358	12,525	16,422	35,471	0	0	0	134,000
E. Public Participation	111,852	10,920	31,921	27,845	36,507	78,856	0	25,000	1,000	323,900
F. Private Enterprise Participation	7,336	206	1,961	1,710	2,243	4,844	0	0	0	18,300
G. Annual Report	22,605	0	5,877	5,127	6,722	14,519	0	5,000	20,250	80,100
H. Transportation/Landuse Connection Program	55,637	0	14,466	12,618	16,544	35,735	0	220,000	0	355,000
I. DTP Management	74,350	25,631	25,995	22,676	29,730	64,218	0	10,000	199,500	452,100
Subtotal	**608,648**	**65,462**	**175,269**	**152,888**	**200,453**	**432,979**	**1,550**	**285,000**	**221,950**	**2,144,200**
2.COORDINATION PLANNING										
A. Congestion Management Process	72,122	0	18,752	16,357	21,446	46,324	0	0	0	175,000
B. Management, Operations, & ITS Planning	123,637	0	32,146	28,041	36,765	79,412	0	50,000	0	350,000
C. Trans. Emmergency/Security Planning	436	30,638	8,079	7,048	9,240	19,959	0	0	0	75,400
D. Transportation Safety Planning	30,909	0	8,036	7,010	9,191	19,853	0	25,000	0	100,000
E. Bicycle and Pedestrian Planning	33,670	0	8,754	7,636	10,012	21,626	0	27,000	0	108,700
F. Regional Bus Planning	31,212	10,000	10,715	9,347	12,255	26,471	0	0	0	100,000
G. Human Service Transportation Coordination	26,788	0	6,965	6,076	7,966	17,206	0	40,000	0	105,000
H. Freight Planning	27,200	0	7,072	6,169	8,088	17,471	0	35,000	0	101,000
Subtotal	**345,975**	**40,638**	**100,519**	**87,684**	**114,963**	**248,321**	**0**	**177,000**	**0**	**1,115,100**
3. FORECASTING APPLICATIONS										
A. Air Quality Conformity	199,241	21,171	57,307	49,989	65,542	141,570	15,080	0	13,300	563,200
B. Mobile Emissions Analysis	212,438	43,120	66,445	57,960	75,993	164,144	0	20,000	0	640,100
C. Regional Studies	66,140	51,900	30,691	26,772	35,100	75,817	25,481	0	3,899	315,800
D. Coordination Cooperative Forecasting and Transportation Planning	86,833	168,189	66,306	57,839	75,833	163,800	55,500	0	2,500	676,800
Subtotal	**564,652**	**284,380**	**220,748**	**192,560**	**252,468**	**545,331**	**96,061**	**20,000**	**19,699**	**2,195,900**
4. DEVELOPMENT OF NETWORKS/MODELS										
A. Network Development	305,466	0	79,421	69,280	90,833	196,200	0	25,000	3,500	769,700
B. GIS Technical Suport	176,224	0	45,818	39,968	52,402	113,188	49,500	0	21,700	498,800
C. Models Development	311,771	0	81,061	70,710	92,708	200,250	0	300,000	14,700	1,071,200
D. Software Support	70,015	0	18,204	15,879	20,820	44,971	0	0	9,011	178,900
Subtotal	**863,476**	**0**	**224,504**	**195,836**	**256,763**	**554,609**	**49,500**	**325,000**	**48,911**	**2,518,600**
5. TRAVEL MONITORING										
A. Cordon Counts	90,000	0	23,400	20,412	26,762	57,807	0	0	11,619	230,000
B. Congestion Monitoring and Analysis	185,332	0	48,186	42,033	55,110	119,038	0	71,500	0	521,200
C. Travel Surveys and Analysis										
Household Travel Survey	189,329	0	49,226	42,940	56,299	121,606	16,500	0	24,100	500,000
D. Regional Transportation Clearinghouse	110,408	0	28,706	25,041	32,831	70,915	0	0	0	267,900
Subtotal	**575,069**	**0**	**149,518**	**130,426**	**171,003**	**369,366**	**16,500**	**71,500**	**35,719**	**1,519,100**
Core Program Total (1 to 5)	**2,957,821**	**390,480**	**870,558**	**759,395**	**995,651**	**2,150,606**	**163,611**	**878,500**	**326,279**	**9,492,900**
6. TECHNICAL ASSISTANCE										
A. District of Columbia	123,865	0	32,205	28,092	36,832	79,558	0	0	0	300,552
B. Maryland	239,444	0	62,255	54,306	71,201	153,794	0	0	0	581,000
C. Virginia	135,424	0	35,210	30,714	40,270	86,982	0	0	133,000	461,600
D. WMATA	70,638	0	18,366	16,021	21,005	45,371	0	0	0	171,400
Subtotal	**569,370**	**0**	**148,036**	**129,133**	**169,308**	**365,705**	**0**	**0**	**133,000**	**1,514,552**
TOTAL BASIC PROGRAM	**3,527,191**	**390,480**	**1,018,594**	**888,528**	**1,164,959**	**2,516,311**	**163,611**	**878,500**	**459,279**	**11,007,452**
7. CONTINUOUS AIRPORT SYSTEM PLANNING										
A. Process Air Passenger Survey	78,303	0	20,359	17,759	23,284	50,294	0	0	0	190,000
B. Ground Access Forecast & Element Updates	113,087	0	29,403	25,648	33,627	72,635	0	0	0	274,400
C. Ground Access Travel Time Study	20,606	0	5,358	4,673	6,127	13,235	0	0	0	50,000
Subtotal	**211,996**	**0**	**55,119**	**48,081**	**63,039**	**136,165**	**0**	**0**	**0**	**514,400**
GRAND TOTAL	**3,739,187**	**390,480**	**1,073,713**	**936,608**	**1,227,998**	**2,652,475**	**163,611**	**878,500**	**459,279**	**11,521,852**

Figure 6
TPB Committee Structure



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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, the Federal Highway Administration (FHWA) and the Federal Transit Administration (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, the 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 2009 UPWP defined by this document details the planning activities to be accomplished between July 2008 and June 2009 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 2009, 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 2009, staff will prepare the FY 2010 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 2009, as a draft to the Technical Committee in February 2009 and as a final document for adoption by the Technical Committee and the TPB in March 2009. 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 2010, amendments to FY 2009 UPWP, monthly progress reports and state invoice information, federal grant materials
Schedule:	Draft: February 2009 Final: March 2009

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, the TIP and CLRP inputs and project descriptions will be accessible electronically through the Internet. The database application for 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.

The TIP Schedule and Project Selection

The FY 2009-14 TIP is scheduled to be adopted by the TPB in July 2008. In October 2008, TPB will issue a call for projects document requesting project or action input for the new TIP. 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.

The TPB will select in consultation with the states all transit, highway, congestion mitigation/air quality, and safety and enhancement projects (excluding those on the National Highway System (NHS) or the Bridge and Interstate Maintenance programs) undertaken within the Washington Transportation Management Area (TMA). The states will select in cooperation with the TPB all projects on the NHS or funded under the Bridge and Interstate Maintenance programs undertaken within the Washington TMA.

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. As described under Task I.F, a financial plan will be prepared to demonstrate how the TIP can be implemented, and indicate the sources of public, private and innovative funding.

During the year certain administrative modifications and amendments may be needed in the FY 2009-14 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 2008.

Oversight:	Technical Committee
Cost Estimate:	$151,700
Products:	Draft FY 2010-2015 TIP, amendments to FY 2009-2014 TIP; TIP projects with obligated federal funding in preceding year
Schedule:	Final TIP Draft for Public Comment: June 2009 TIP projects with obligated federal funding in preceding year: June 2009

C. CONSTRAINED LONG-RANGE TRANSPORTATION PLAN (CLRP)

The Financially Constrained Long-Range Transportation Plan (CLRP) must be updated at least every four years under SAFETEA-LU and is updated annually with amendments. These amendments generally adjust the phasing or other aspects of some of the projects or actions in the plan, include new projects with identified new funding sources, or change specific projects as new information on them became available. Updates that occur every four years include a financial analysis of transportation revenues expected to be available.

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. Future plan amendments will provide improved documentation via the website and written materials on how the plan addresses the SAFETEA-LU planning factors as reflected by the goals of the TPB Vision.

In January 2008, the TPB approved the 2007 CLRP and the FY 2008-20013 TIP, which meet the final planning regulations and are fully documented on the TPB web site. Work will continue to improve public materials about the plan during plan development and after plan approval so that the materials are more useful to a variety of audiences, less technical and easier for the public to understand. Work will continue to consult with the 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.

The CLRP will be documented in several ways and public materials will be provided during plan development and after plan approval. The TPB "long-range plan web page" (www.mwcog.org/clrp) will be utilized to document the CLRP by describing the process, related planning activities, the major projects, the performance of the plan and how the public can get involved. The website also makes CLRP related-process and technical documentation readily accessible Information on the plan, on the website and in hard copy, will continue to be improved so that the materials are more useful to a variety of audiences, less technical and easier for the public to understand. New materials may include regional transportation issue briefs, brochures, PowerPoint slide shows, and interactive web features such as a community Calendar showing public involvement opportunities and a searchable map or database of projects in the plan.

The 2008 CLRP

In October 2007, the TPB issued a "call for projects" document requesting projects, programs or strategies for inclusion in the 2008 CLRP. The 2008 CLRP will include a discussion of potential environmental mitigation strategies and continues the dialogue with natural resource and environmental agencies. Web-based visualization techniques will be utilized to show the major highway and transit projects in the 2008 CLRP.

Materials describing the draft 2008 CLRP were developed in the Spring of 2008. The materials included maps, major project descriptions, and analysis from the previous year's CLRP. The purpose of the materials would be to make recent information on the current plan more accessible to facilitate public comments on the update to the plan. Draft materials on the 2008 CLRP and interactive web-based maps will be prepared for review by the TPB Technical Committee, the TPB, and the public between February and Jne 2008. The TPB is scheduled to adopt the 2008 CLRP in July 2008.

The 2009 CLRP

In October 2008, TPB will issue a "call for projects" document requesting project, programs or strategies for inclusion in the 2009 CLRP. Draft materials describing the CLRP will be prepared for review by the TPB Technical Committee, the TPB, and the public between February and June 2009. The TPB is scheduled to adopt the 2009 CLRP in July 2009.

Oversight:	Technical Committee
Cost Estimate:	$558,400
Products:	Documentation of 2008 CLRP and draft amendments for 2009 CLRP on TPB plan webpage with interactive maps and related materials
Schedule:	2008 CLRP documentation - October 2008 Draft amendments for 2009 CLRP - June 2009

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 and plan for the 2006 CLRP update was completed in September 2006, including cost estimates for the new system expansion projects and revised cost estimates for system maintenance and rehabilitation. New revenue projections were also prepared. All cost and revenue estimates were in constant (2006) dollars through 2030. During FY 2008, the total expenditure and revenue estimates were revised to show year of expenditure dollars.

The project solicitation document for the 2008 CLRP requested that the implementing agencies review and revise the cost estimates for the system expansion projects. During FY 2009, a review and update will be made of the financial analysis and plan for the 2006 CLRP, including cost estimates in year of expenditure dollars for the new system expansion projects and revised cost estimates for system maintenance and rehabilitation. The revenue projections will also be reviewed and updated in year of expenditure dollars to reflect the new transportation revenue sources for Northern Virginia and Maryland that became law in 2007.

The Transportation Improvement Program

The preparation of the financial plan for the FY 2010-2015 TIP will be similar to that for the FY 2009-14 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.

Oversight:	Technical Committee
Cost Estimate:	$134,000
Products:	Updated financial plans for draft 2008 CLRP and FY 2010-2015 TIP
Schedule:	January, 2009

E. PUBLIC PARTICIPATION

The Participation Plan which was adopted in December 2007 will guide all public involvement activities to support the development of the new TIP and CLRP as well as all other TPB planning activities.

Work activities include:

- Support the TPB Participation Plan.
- Develop and conduct workshops or events to engage the public and community leaders on key regional transportation issues, These efforts will focus particularly on engaging community leaders who have not traditionally been involved in the regional transportation planning process.
- Conduct two or more Community Leadership Institute workshops.

- Gather input and comments from the public, including bicyclists, pedestrians and those with disabilities, and ensure input is available to decision makers.

- Provide staff support for the TPB Citizens Advisory Committee (CAC).

- Provide staff support for the TPB Access For All Advisory (AFA) Committee that contains 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.

Oversight:	Transportation Planning Board
Cost Estimate:	$323,900
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 plan 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. This contribution will be reflected in the minutes and mailouts for TPB meetings, and in documentation prepared by the Private Providers Task Force.

- 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 for every other month.

. Oversight: Transportation Planning Board

Cost Estimate: $18,300

Product: Documentation on Private Provider Involvement

Schedule: Annual Transit Forum - May 2009

Draft in TIP for Public Comment - June 2009

G. TPB ANNUAL REPORT AND TPB NEWS

Each year, DTP staff prepares a Transportation Special Report (The Region). This year's report will describe the main activities completed in 2008 and the 2008 CLRP.

About 3,000 copies of the report will be printed and distributed around the end of FY 2009. The monthly newsletter titled "TPB News" will also be produced

Oversight:	Transportation Planning Board
Cost Estimate:	$80,100
Products:	Region magazine, TPB News
Schedule:	June 2009

H. TRANSPORTATION/LAND USE CONNECTION (TLC) PROGRAM

This work activity strengthens the coordination between land use and transportation planning. Begun as a pilot in November 2006, the program established a clearinghouse to document national best practices as well as local and state experiences with land use and transportation coordination, and offers short-term technical assistance through consultant teams to local jurisdictions to advance their coordination activities. These activities make a positive impact on future transportation conditions in the Washington Region by helping communities locate housing and jobs closer together and promoting development closer to transit stations. This in turn helps the region address pressing issues like climate change through reducing vehicle miles traveled (VMT) and greenhouse gas emissions.

TPB staff will continue to provide the TPB and the Scenario Study Task Force with information about strategies used in other metropolitan areas to coordinate transportation and land-use planning and target transportation investment on the basis of regional goals. As the TLC Program grows and more planning projects are completed in more jurisdictions around the region, it may become appropriate to make identification of capital projects a more explicit priority of the TLC technical assistance projects, and seek the inclusion of these capital projects in the regional CLRP and TIP.

The following activities are proposed for FY 2009:

- Maintain and update the TLC Regional Clearinghouse and website
- Fund at least six technical assistance planning projects at a level of between $10,000 and $60,000 each, with consideration during project selection given to the local resources committed to the project.
- 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. These will be compiled at the

end of the technical assistance round into a single report that will be provided to the TPB.

- Prepare at least two implementation "toolkits" to address issues that have been identified as key to the success of local planning efforts and the implementation of regional goals, such as maintaining affordable housing in developing activity centers and addressing the different perspectives on density and congestion at the local and regional levels.

- Provide staff support for additional TLC Technical Assistance Projects to be conducted as part of the VDOT Multimodal Grant 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:	$355,000
Products:	Updated web-based clearinghouse, technical assistance provided by consultant teams to six localities, a summary report of technical assistance projects and implementation priorities, and two implementation issue toolkits.
Schedule:	Technical assistance: November 2008-June 2009 Implementation toolkits: March 2009

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 Congestion Management Process (CMP) is a systematic process that provides for safe and effective integrated management and operation of the multimodal transportation system. The process is based on a cooperatively developed metropolitan-wide strategy of new and existing transportation facilities.

Congestion is the level at which transportation performance is no longer acceptable due to traffic interference resulting in decreased speeds and increased travel times. As our region continues to experience dynamic economic and demographic growth, congestion remains a primary focus of the TPB.

The CMP requires a systematic approach. The TPB's CMP is part of the regional transportation plan and includes the following:

- Monitoring and Evaluating transportation system performance
- Defining and analyzing demand management and operational management strategies to address congestion
- Implementing and assessing strategies
- Compiling project-specific information on strategies that have been considered or implemented in congested corridors
- Proposed single-occupant vehicle (SOV) capacity-increasing projects must show that congestion management strategies have been considered. In addition, the regional transportation plan will consider the results of the CMP.

Under this work task, TPB will compile information and undertake analysis for development of the CMP components of the Constrained Long-Range Plan. Major topics to be addressed include the following:

- Identify alternative strategies for alleviating congestion and enhancing the mobility of persons and goods.
- Identify CMP performance measures, costs, benefits, and evaluation information.
- Compile and analyze information on transportation systems usage and congested locations.
- Examine the impact on congested locations of current and potential alternate strategies, and provide information on strategy prioritization.
- Compile information on CMP strategies considered by implementing agencies in conjunction with major SOV capacity-expanding projects.
- Update the CMP technical report in conjunction with the annual update of the CLRP.
- Coordinate CMP tasks with other UPWP and Commuter Connections Work Program tasks and advisory committees:

  - Coordinate with the Travel Management Subcommittee on identification and consideration of demand management and operational management strategies.
  - Coordinate with the Travel Forecasting Subcommittee on the monitoring of recurring congestion as well as on alternatives analysis.
  - Coordinate with the Commuter Connections Subcommittee on demand management considerations.
  - Coordinate with the MOITS Policy Task Force and MOITS Technical Subcommittee on non-recurring congestion and incident management considerations.
  - Coordinate with the Regional Transportation Data Clearinghouse.

- Keep abreast of national, state, regional, and local requirements and issues.

Oversight:	TPB Technical Committee
Cost Estimate:	$175,000
Products:	CMP Report; summaries, outreach materials, and white paper(s) on technical issues as needed; data sets
Schedule:	Quarterly

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. Major topics to be addressed include the following:

- Metropolitan Area Transportation Operations Coordination (MATOC) Program and Related Activities: Support member transportation agency efforts to strengthen regional coordination and communications on everyday conditions, management and major regional transportation incidents, particularly through the MATOC Program officially established in FY2007 under a SAFETEA-LU grant.

- Emergency Coordination: Facilitate links between everyday transportation operations planning and overall regional planning for emergencies, especially in coordination with the dedicated UPWP Emergency Preparedness Planning Task 2.C.

- Traveler Information: Coordinate enhancement of the collection, processing, and public delivery of real-time roadway and transit condition information, including potential regional Internet-based and "511" telephone information systems and the University of Maryland's Regional Integrated Transportation Information System (RITIS) project.

- Intelligent Transportation Systems (ITS) Architecture, and Transportation Technology Development and Application: 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 regional MOITS communications and technology project implementation; address regional ITS standards.

- Traffic Signals: Assist member agencies in the exchange and coordination of interjurisdictional traffic signal operations information and activities, including regional annual reporting of operations maintenance and improvement activities.

- Non-Recurring Congestion: Support regional efforts to monitor and analyze transportation systems conditions, particularly focusing on temporal variations from average conditions, congestion due to incidents, and other non-recurring congestion.

- Traffic and Transit: Coordination with the Regional Bus Planning Task 2.E. and the Regional Bus Subcommittee on planning and information exchange for traffic management, bus operations, and advanced technology.

- 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.

- National issues: Monitor national emerging MOITS activities for potential application in the region.

Oversight:	TPB MOITS Policy Task Forces and MOITS Technical Subcommittee
Cost Estimate:	$350,000
Products:	Agendas, minutes, summaries, outreach materials as needed; white paper(s) on technical issues as needed; revised regional ITS architecture; 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 will be 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 the MOITS Task Forces 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 regional Street Smart pedestrian and bicycle safety 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, including the Bicycle and Pedestrian Subcommittee, the Freight Subcommittee, and the Management, Operations, and Intelligent Transportation Systems (MOITS) Technical Subcommittee.
- Coordination with the regional Street Smart pedestrian and bicycle safety public awareness campaign program (see task 2.E).
- 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 adopted by the TPB in FY2007, 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 Web version of the Regional Bicycle and Pedestrian Plan. Update project listings in the Plan, reflecting project completions, changes in supporting local plans, and update project cost estimates. Maintain this database on the TPB Web site for member agency and public access.

- Compile bicycle and pedestrian project recommendations for the FY2010-2015 Transportation Improvement Program (TIP).

- Coordinate the annual "Street Smart" regional pedestrian and bicycle safety public outreach campaign:

    - Coordinate receipt of voluntary funding from member agencies and other interested parties and applicable federal transportation safety funds provided through the District of Columbia, Maryland, and

Virginia.

- Development of campaign materials in conjunction with a Street Smart advisory committee and consultants; apply lessons learned from previous campaigns.

- Coordinate implementation of the sixth annual campaign, funded with voluntary contributions, with a target date of April 2008.

- With the consultant, coordinate post-campaign reporting and evaluation.

- Transportation Safety: 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.

- Bicycle and Pedestrian Systems Usage Information: Examine regional 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.

- Monitor and provide advice on the implementation of regional bicycle and pedestrian programs, including the Employer Outreach for Bicycles Transportation Emissions Reduction Measure (TERM) 70b, implementation of bicycle and pedestrian components of the green space and circulation system projects developed under the Transportation and Community and Systems Preservation (TCSP) Pilot Program grant, and other programs as necessary.

- 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: "Street Smart" campaign and post-campaign report; compilation of bicycle and pedestrian facilities for the

FY2010-2015 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

Under this work task, TPB will provide opportunities for consideration, coordination, and collaborative enhancement of planning for bus transit services in the region. 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 mission of the Regional Bus Subcommittee is to provide a permanent process for the coordination of bus planning throughout the Washington region, and for incorporating regional bus plans into the CLRP and TIP. High quality bus service in the region depends upon successfully linking vehicles, services, stops and stations, running ways, operating facilities, maintenance shops, storage yards, and passenger and operating support systems to produce a service that is easy to use, provides rider information where and when needed, and facilitates intra- and inter-agency service transfers. Increased customer satisfaction can broaden the appeal of transit in the transportation market place and generate increased ridership. Considerable cooperation among the agencies responsible for bus service and transportation in the region is required to implement these high quality bus services, owing to the complex nature of transit service provision and transportation facility ownership in this multi-state region.

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:	TPB Regional Bus Subcommittee
Cost Estimate:	$100,000
Products:	Data compilation, reports on technical issues, and outreach materials as needed
Schedule:	Monthly

G. HUMAN SERVICE TRANSPORTATION COORDINATION PLANNING

In 2007 the TPB adopted the Human Service Transportation Coordination Plan for the Washington Region which includes priorities and projects 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 Individals (JARC, Section 5316); and 3) New Freedom Program for Persons with Disabilities (Section 5317).
The final planning regulations require that the CLRP and TIP shall consider the design and delivery of non-emergency transportation services.

Proposed work activities include:

- Under the guidance of the TPB Human Service Transportation Coordination Task Force, review how the coordination plan was utilized by applicants and grantees under the three FTA programs, and identify recommended plan changes and revisions. The Task Force will also guide work activities to help develop potential regional projects and help project sponsors identify the required match for JARC and New Freedom applications.

- Coordinate the activities of the task force with the TPB Access For All (AFA) Advisory Committee and the COG Human Services Committee to continue to involve leaders of low- income communities, minority communities and persons with disabilities.

- Provide follow-up to the TPB Independent Review of MetroAccess conducted in the Spring 2008 and discuss progress made on findings and recommendations

with the Task Force and AFA committee. Consultant assistance may be utilized.

Oversight:	Technical Committee and TPB Access For all Advisory Committee
Cost Estimate:	$105,000
Products:	An updated human service transportation coordination plan
Schedule:	June 2009

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. Major topics to be addressed include the following:

- Support the Regional Freight Planning Subcommittee.
- Ensure consideration of freight planning issues in overall metropolitan transportation planning, including:
  - Follow up on findings and recommendations from the FY2007 Regional Freight Planning Study.
  - 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.
  - Advise the TPB and other committees in general on regional freight planning considerations for overall metropolitan transportation planning.
  - Coordinate with federal, state, and local freight planning activities.
  - Coordinate with TPB travel monitoring and forecasting activities on freight considerations.
  - Examine truck safety issues.
  - Keep abreast of regional, state, and national freight planning issues.

- 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.

Oversight:	Regional Freight Planning Subcommittee
Cost Estimate:	$101,000

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

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 the March 10, 2006 FEDERAL REGISTER; in addition, federal guidance has also been published at various times by the EPA, FHWA and FTA.

A work program to analyze the 2008 constrained long range plan and the FY2009-14 TIP for air quality conformity consistent with these regulations has now been drafted for review and comment. This work program will address ozone, wintertime carbon monoxide, and fine particles (particulate matter, PM2.5) 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 FY2008, with the final report, response to comments, and adoption occurring in July 2008. Subsequent major activities in FY2009 will include development and execution of a work program for the conformity assessment of the 2009 CLRP and FY2010-15 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 FY2009 air quality conformity work program will include the following tasks.

1. Complete conformity analysis of the 2008 constrained long range plan and the FY2009-14 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 MWAQC's involvement in the public and interagency consultation process.

4. Prepare and execute a work program for analysis of the 2009 constrained long range plan and the FY2010-15 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 PM2.5 hotspot analyses and project level conformity assessments performed by implementing agencies.

6. Coordinate project solicitation, documentation, and emissions reduction analysis associated with CMAQ projects.

7. 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 Determination of 2008 CLRP and FY2009 -14 TIP; Preliminary materials on Air Quality Conformity Assessment of 2009 CLRP and FY2010-15 TIP.
Schedule:	June 2009

B. MOBILE EMISSIONS ANALYSIS

Following FY2007 activities to prepare an 8-hour ozone state air quality implementation plan (SIP), in FY2008 staff proceeded with activities to address the new requirements for fine particles (particulate matter 2.5 microns or less). A PM2.5 attainment plan, along with new mobile source emissions budgets, is on schedule for completion in Spring 2008. With continuing consultant assistance as needed, in FY2009 PM2.5 and 8-hour ozone planning activities will include follow-up activities necessary to analyze, refine and report on the mobile source emissions estimation, and transportation emissions reduction measures (TERM)s / processes associated with the PM2.5 and 8-hour ozone SIPs, and air quality conformity assessments.

2007 saw the COG Board's creation of the Climate Change Steering Committee. While

not originally envisioned as a work activity in FY2008, TPB staff nevertheless became involved in subsequent planning efforts, preparing and analyzing inventories of greenhouse gas emissions produced by mobile sources. This work resulted in the estimation of mobile source carbon dioxide (CO2) emissions inventories for base year 2002 and for 2010 and 2030 baseline forecast years, as well as forecast estimates under proposed control strategies. In FY2009 this work will be continued as an emphasis area, revisiting the emissions inventories under different input assumptions and for different control strategies.

Since 1996, air quality planning activities have included a 3 year update of vehicle fleet characteristics (vehicle type, age and fuel type) for the Washington area, as these Mobile model input data are key determinants of vehicle emissions rates. In 2005, following the receipt of registered vehicle data including vehicle identification number (VIN) from the District of Columbia, Maryland and Virginia, and the purchase of 'VIN Decode' software which enables reading the millions of vehicle records and tabulations of the required data, staff applied the software to profile the vehicle fleet and then prepared the required Mobile model input files. In FY2009 this process will be repeated to obtain an up to date summary of the vehicle fleet.

FY2009 work activities will include the following tasks: (1) update mobile source emissions inventories as needed for use in analysis of attainment of the 8-hour ozone and PM2.5 standards, and strategies 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) obtain motor vehicle registration data, read and tabulate VIN data, and prepare Mobile model input files; (5) participate in MWAQC technical and policy discussions to assist in development of the SIP, 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 for adopted, as well as future, TERMs adopted by the TPB.

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: Mobile source emissions inventories; TERMs report; Report on Washington area vehicle fleet as of July 1, 2008 and corresponding Mobile model input files.

Schedule: June 2009

C. REGIONAL STUDIES

Regional Mobility and Accessibility Scenario Study

In September 2007, the TPB Scenario Study Task Force was established to provide policy-level stewardship for this study and related TPB activities, including consideration of opportunities for integration of the study findings into TPB planning processes and initiatives. Under the guidance of the task force in the second half of FY 2008, two new scenarios are to be developed drawing upon the individual strategies reflected in the existing scenarios, including the variably-priced lane scenarios and/or additional strategies.

The following activities are proposed for FY 2009:

- Analyze the two new transportation and land use scenarios developed in the last half of FY 2008 using transportation-related indicators as well as quality-of-life indicators, against an updated baseline comprised of the Round 7.1 Cooperative Land-Use Forecasts and the latest approved 2030 CLRP.

- "Drill-down" to the community and project level within the new scenarios to assess local level travel impacts and help identify where land use shifts are particularly crucial and transportation improvements may need to be focused.

- Develop methods to better visualize and communicate the features and the impacts of the new transportation and land use scenarios and incorporate them into public outreach materials.

- Conduct public outreach designed to inform possible implementation of regional strategies.

- Prepare report on public feedback on the scenarios and recommendations for incorporating scenario planning activities into the regional planning process.

Oversight: TPB Scenario Study Task Force

Cost Estimate: $315,800

Products: Analysis of two new regional scenarios, analysis of local level impacts, enhanced visualization techniques and public outreach materials, report on public feedback on scenarios.

Schedule: December 2008 - Analyses of two new regional scenarios local level impacts, enhanced visualization techniques and public outreach materials
June 2009 - Conduct public outreach and prepare report.

D. COORDINATION OF COOPERATIVE FORECASTING AND TRANSPORTATION PLANNING PROCESSES

In FY2009, 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 metropolitan region. Staff will also continue to enhance planning databases and analytical tools to support regional planning goals and strategies. These enhancements will include the update of current employment and housing data, the update of the Transportation Analysis Zone (TAZ) structure and the update of the regional "Composite Map of Adopted Land Use Plans."

Staff will also continue to work with COG's Cooperative Forecasting Subcommittee and PDTAC to update and refine COG's Cooperative Forecasts of future land activity. Staff will work with these committees to ensure that regional transportation system assumptions are explicitly considered in the development of these updated land activity forecasts and that significant TIP and CLRP changes are assessed as part of the process to update COG's Cooperative Forecasts.

Staff will update and maintain Cooperative Forecasting land activity databases that are used as input into COG/TPB travel demand forecasting models. This work will include preparation of Round 7.2 population, household and employment forecasts for both COG member and non-member jurisdictions in the TPB modeled area and preparation of Cooperative Forecasting land activity data files for the 2191 Transportation Analysis Zone (TAZ) system. Staff will also work with the Cooperative Forecasting Subcommittee and PDTAC committees to document key land use and transportation assumptions made in updating the Round 7.2 Cooperative Forecasts. Staff will also respond to questions and information requests on the Round 7.2 forecasts and the Cooperative Forecasting process.

Staff will work with the Cooperative Forecasting Subcommittee to update the structure of the regional econometric model used to develop the top-down regional benchmark projections for the COG Cooperative Forecasting process. This updated structure would extend the geography for the econometric model from the 1983 MSA to the 2003 MSA

and switch the industry detail of this model from the old Standard Industrial Classification (SIC) to the new North American Standard Industrial Classification (NASIC) system. This updated model would then be used to provide new top-down regional Round 8.0 benchmark projections for the 2005 to 2040 time period in early FY 2010.

Concurrent with the update of the regional econometric model, staff will work with the Cooperative Forecasting Subcommittee, the Region's Planning Directors and members of the TPB Technical Committee to develop the needed land activity data for the new, smaller, more detailed Transportation Analysis Zones (TAZs) and Regional Activity Centers and Clusters developed in FY 2008. The goal of this effort would be to enable local jurisdictions to prepare bottom-up Round 8.0 forecasts for the new TAZ system in early FY 2008.

Staff will also develop and publish useful economic, demographic and housing-related information products to monitor regional growth trends and to support the technical underpinnings of the Cooperative Forecasting planning process. These information products will include the monthly Regional Economic Monitoring Reports (REMS), and the annual "Economic Trends" and "Commercial Development Indicators" reports.

Oversight:	TPB Technical Committee, Planning Directors Technical Advisory Committee.
Estimated Cost:	$676,800
Products:	Coordination of Land Use and Transportation Planning in the Region, Update of Regional Planning Databases, Development and Distribution information and technical reports.
Schedule:	June 2009

4. DEVELOPMENT OF NETWORKS AND MODELS

A. NETWORK DEVELOPMENT

FY2009 efforts will focus on the development of TP+ highway and transit networks that support the Version 2.3 model on the expanded cordon using information gathered electronically and/or in paper format. This process will make use of available information in COG's GIS and the Data Clearinghouse to facilitate development of networks supporting 1) air quality conformity analysis and 2) scenario testing as part of TPB regional studies.

Activities in FY2009 will begin with the compilation of the latest available transit route and schedule information (from the above sources) in the peak and off-peak formats required for the travel demand models. All traffic count data will be converted to AAWDT format for use in highway networks required for these models. A set of TP+ networks for highway and transit will be coded from this information depicting current year conditions.

Using these networks as a starting point, a series of FY2010-2015 TIP and Plan Conformity networks will be developed for the following analysis years: 2009, 2010, 2020, and 2030 and other years as specified in upcoming federal guidance. Tasks involved are as follows:

- receive and organize project inputs to the FY2010-2015 TIP and amended CLRP;
- code, edit, and finalize networks for highway, HOV, and transit;
- develop transit fare matrices consistent with these networks; and
- provide documentation and training in the development of these highway and transit networks.

Demands have been increasing on the network development program, from coding more complex transit networks to coding new high occupancy toll (HOT) lane facilities. To enhance network coding procedures and to better manage the myriad of highway and transit networks that need to be developed, a consultant was retained in FY2008 to upgrade current highway and transit network development processes. The consultant in FY2009 will assist staff in implementing recommendations for improving network coding efficiency and data quality/consistency.

Oversight: Travel Forecasting Subcommittee

Cost Estimate: $769,700

Products: Series of updated transportation networks by mode, including technical training and documentation

Schedule: June 2009

B. GIS TECHNICAL SUPPORT

In FY2009, staff will continue to provide on-going data maintenance and technical support to staff using the COG/TPB GIS for the development and display of data used in various TPB planning activities, including Regional Studies, the CLRP and TIP, Congestion Monitoring and Analysis, Cooperative Forecasting, Regional Transportation Data Clearinghouse, Network and Models Development, and Bicycle and Pedestrian Planning.

Staff will continue to enhance the methodology for seamless editing of regional highway and transit networks by implementing consultant recommendations resulting from the "Improving GIS-based Applications and Protocols to Develop and Manage Transportation Networks" study. Staff will also continue to implement a restructured and expanded Spatial Data Library that will include both transportation and non-transportation mapping features. Staff will also add new land use and transportation databases to this Spatial Data Library as these new databases become available.

Staff will continue to provide training on the use of GIS software applications and databases for transportation planning activities. Staff will also support continued access to COG/TPB GIS metadata, databases, and applications for state and local transportation planners. Staff will update COG/TPB GIS user documentation and training materials, as required.

Because GIS has become a key component of local, regional, and state transportation planning activities, staff will continue to coordinate its GIS efforts with state DOTs, WMATA, and the local governments through quarterly meetings of COG's GIS Committee and other activities. Staff will also work with local and state agency staff to facilitate GIS data sharing.

Staff will also continue to maintain and update COG/TPB GIS hardware and software as required. This will include upgrades to ArcGIS and related relational database management software necessary to support continued use of GIS applications by COG/TPB and local agency staff.

Oversight: Technical Committee

Estimated Cost: $498,800

Products: Updated GIS software, databases, User Documentation, Training materials

Schedule: June 2009

C. MODELS DEVELOPMENT

The Models Development program serves to improve the TPB's travel forecasting practice on a continuing basis. The program encompasses short-term improvements to the TPB's existing travel model which can be implemented quickly, as well as longer term improvements that may require several years to become operational. Specific travel modeling improvements are identified on the basis of recommendations that result from periodic travel model reviews, from special needs identified by the TPB, or from methodological advances emerging from the research community.

Having completed the development in FY2008 of the draft Version 2.3 travel demand model, incorporating a nested logit mode choice model and updated truck models, the FY2009 models development activities will focus on completing sensitivity testing of the new model prior to applying it in the conformity analysis of the FY2010-2015 TIP and 2009 Plan during 2009.

The TPB in recent years has maintained a task order consulting contract to perform a scan of best modeling practices across the U.S. TPB staff has found this type of arrangement to be especially valuable because it has informed us about the state of the practice and has also enabled the TPB to save staff resources that otherwise would have been spent doing our own independent research. Through competitive bidding, a new task order contract will be negotiated for FY2009.

The arrival of a completed Household Travel Survey during FY2009, together with on-board bus and rail surveys, offers a good opportunity to tune up current model applications at TPB, reflecting new information about travel patterns in the region. Staff will employ these data to construct calibration files for use in models development activities.

While useful to the current model applications, these new data also present an opportunity to begin exploring development of a new generation of travel demand models. Sometimes referred to as tour-based and/or activity-base modeling, these new approaches are beginning to come into advanced practice at some MPOs. During FY2009, a competitively-bid consultant contract will be initiated to begin assisting staff in the development of a new generation of travel demand models.

Air passenger travel in the Washington region is particularly complicated, given that area residents are served by three international airports. The airports are, of course, major traffic generators in the region. The dynamics underlying how individual airports are selected by travelers are difficult to forecast. Air passengers have a wide choice of public or private transportation options for getting to a selected airport. At present, simulated travel to and from the airports is based on travel patterns that have been

observed in air passenger surveys and projected growth based on FAA enplanement projections. In recent years, TPB has monitored airport modeling techniques developed at other locations in order to improve the way that ground travel to the airports is treated in the regional model. This monitoring will continue during FY2009. Additionally, the recently completed air passenger survey will be used to refresh the current airport travel demand forecasts.

The TPB has played a leadership role in establishing a national forum comprised of travel modelers from across the U.S., in cooperation with the Association of Metropolitan Planning Organizations (AMPO). The forum has served to promote understanding between modelers regarding the travel forecasting methods presently being implemented at MPO's. It has also been established to develop guidelines for defining acceptable standards of practice. The forum, now known as the AMPO Travel Modeling Working Group, meets twice a year and has been steadily gaining members over the past few years. This activity will continue during FY2009.

Staff will continue to review best practice in travel demand modeling through participation in the Transportation Research Board and literature reviews. Staff will provide documentation for all products from the models development program.

Oversight:	Travel Forecasting Subcommittee
Cost Estimate:	$1,071,200
Products:	Recommendations for continued updating of the travel demand modeling process, documentation of all activities
Schedule:	June 2009

D. SOFTWARE SUPPORT

This work element supports the maintenance of the TPB microcomputer-based travel demand forecasting model set as used in applications work and maintenance of the mobile source emissions factor model as used in air quality conformity and state implementation plan (SIP) work. Development and testing of revisions and upgrades to software currently in use and the testing of new software including micro simulation, text editor and scripting software, the demonstration version of EPA's motor vehicle emission simulator and data storage, retrieval and transfer systems for possible adoption are included in work done under this element. Training of TPB 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 and evaluates such software and systems through in-house testing on a demonstration basis or through acquisition as warranted.

Staff will incorporate Mobile6.2 PM2.5 emissions factor interface software and mobile source emissions postprocessor (developed under the Mobile Emissions Analysis project, Item (B) under II, Forecasting Applications) into DTP supported/maintained technical methods. Staff will flowchart and document the processes as elements of the department's technical methods, modify as needed in the future in response to changing requirements, and maintain through time.

Oversight:	TPB Technical Committee
Cost Estimate	$ 178,900
Products	Operational travel forecasting model set (current model set plus PM2.5 postprocessor) and new software selected/installed in FY 2009. Operational emissions factor model and postprocessor software interface, including PM2.5 capability. Operational data storage and retrieval systems. Operational data transfer systems to serve inside and outside users.
Schedule:	June, 2009

5. TRAVEL MONITORING

A. CORDON COUNTS

During FY2008, staff prepared a report entitled, "2007 Performance of Regional High-Occupancy Vehicle Facilities on Interstate Highways in the Washington Region: An Analysis of Passenger and Vehicle Volumes."

In the spring of FY2009, for the Central Employment Area Cordon Count, staff will collect all traffic data and will coordinate transit data collection among various transit providers in the region. Data collection will take place during the A.M. peak period (5 A.M. to 10 A.M.) inbound and the P.M. peak period (3 P.M. to 8 P.M.) outbound. Data collected will include vehicle volumes by time of day, vehicle classification and auto occupancy, and transit passenger volumes. Data will be edited, checked for reasonableness, and keyed for processing. The end product for this task will be data files ready to process in FY2010.

Oversight:	Travel Forecasting Subcommittee
Cost Estimate:	$230,000
Products:	Data files from the Spring 2009 Central Employment Area Cordon Count for processing to produce a report in FY2010
Schedule:	June 2009 (data files; report in FY2010)

B. CONGESTION MONITORING AND ANALYSIS

During FY 2008, staff completed the third year of the third cycle of arterial highway congestion monitoring on 365 miles of arterial highways. In FY 2008 staff developed an enhanced system of arterial highways that are to be monitored by adding additional routes to the existing National Highway System arterial highways. During FY 2009, staff will start the first year of the enhanced monitoring program and collect data using both volunteers and paid drivers. During Spring 2009, the data will be analyzed and a report on the findings of the FY 2009 survey will be prepared.

For the limited access highways in the region we perform an aerial survey to study the performance of the system during both peak period and off-peak periods. In FY 2008, vehicular density data were collected during the peak periods (am and pm peak). In FY 2009 the consultant will complete the data analysis, and prepare a DVD slide show of the findings. Staff will prepare a presentation based on the consultant report showing how weekday peak period congestion has changed over time in the region by comparing the Spring 2008 survey results with prior year surveys.

Figure 7

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 1of 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.

Oversight:	Travel Forecasting Subcommittee
Cost Estimate:	$ 521,200
Products:	Freeway System Peak Period Congestion Report - December 2008 Arterial Travel Time Report - June 2009
Schedule:	June 2009.

C. TRAVEL SURVEYS AND ANALYSIS

1. Household Travel Survey

In FY 2009, staff will complete the processing, editing, geocoding and tabulation of data for the TPB modeled area collected in the 2007 Household Travel Survey. This work will include the development and application of survey weighting factors to expand the survey results to regional household and population totals and the analysis of the non-respondent follow-up and the GPS vehicle add-on components of the 2007 Household Travel Survey to determine the need for any adjustment factors that may be required to account for non-respondent bias and/or under-reporting daily vehicle trips. Staff will coordinate these processing and factoring activities with Baltimore Metropolitan Council staff for data collected in the 2007 Household Travel Survey from households residing in Baltimore area jurisdictions .

Staff will also validate the 2007 Household Travel Survey results with the Census American Communities Survey (ACS), the 2007 WMATA Metrorail Passenger Survey, the Spring 2008 Regional On-Board Bus Survey, WMATA and local jurisdiction transit ridership statistics, HPMS estimates of vehicle travel and traffic volume data in the Regional Transportation Data Clearinghouse and with other available data sources. Staff will review the results of this validation with the Travel Forecasting Subcommittee.

Staff will also develop and apply trip linking procedures to the data collected in the 2007 Household Travel Survey and prepare a final factored survey trip file with technical documentation. Staff will also prepare a technical report documenting the results of the 2007 Household Travel Survey and the processing of the survey data.

Staff will also provide data files, user documentation and technical support to the users of the 2007 Household Travel Survey and other COG/TPB travel survey databases. This work will include special tabulations from these databases to support improvements in travel forecasting procedures and other COG/TPB transportation planning activities as required.

Oversight: Travel Forecasting Subcommittee

Estimated Cost: $500,000

Products: Geocoded and Edited Travel Survey Data, Final Factored Survey Trip File, Technical Report and Documentation

Schedule: June 2009

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.

In FY 2009 staff will continue and expand formal arrangements with local, state, WMATA, and other regional agencies to transfer data to and from the Regional Transportation Data Clearinghouse. Staff will also update Clearinghouse databases with FY 2007-FY 2008 highway and transit performance data, as they become available. This updated data will include AADT traffic volume estimates, hourly directional traffic volume and classification counts as well as transit ridership data received from WMATA, PRTC, VRE, MTA and local transit agencies including Ride-On, The Bus, ART, DASH and the Fairfax Connector systems. Additionally, staff will add updated Cooperative Forecasting data to the Clearinghouse by TAZ. Staff will also continue to develop the data infrastructure necessary to incorporate ITS data into the Clearinghouse and refine procedures for filling gaps where current data might not be available. Staff will also update the Regional Transportation Clearinghouse user manuals and documentation, as appropriate.

Once the Regional Clearinghouse database has been updated with FY07-08 data, staff will distribute updated Clearinghouse databases and documentation to TPB participating agencies.

Staff will also process and analyze additional traffic volume data collected for an enhanced Highway Performance Monitoring System (HPMS) sample for the metropolitan Washington region. Based on this analysis staff will prepare a report showing year-to-year changes in annual average weekday vehicle miles of travel and traffic volumes on major segments of the regional highway network.

Oversight: Travel Forecasting Subcommittee

Estimated Cost: $267,900

Products:	Updated Clearinghouse Databases and Documentation, Report on Change in Weekday Vehicle Miles of Travel
Schedule:	June 2009

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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 2009 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 FY2009 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

DDOT Traffic Counts

The purpose of this task is to perform continuous 48-hour traffic volume machine counts at approximately 200 locations citywide. The District will provide the exact locations for these counts. The counts performed under this project are in addition to those covered by the HPMS three year cycle count program, and are part of DDOT's annual traffic volume map. These counts will include quality control checking and tabulation and analysis of data collected in FY 2009.

Cost Estimate: $100,000

Product: Machine traffic counts

Schedule: June 2009

Bicycle Counts

The purpose of this project is to collect counts of bike traffic, along with certain related information, at a series of locations around the District of Columbia. This data will be used to measure bike traffic over time and to measure the effectiveness of new bike lanes and trails.

Cost Estimate: $38,000

Product: Bike Counts & Technical Report

Schedule: Data Collection - Spring 2009
Technical Report - June 2009

2009 Automobile Travel Time Survey

The purpose of this project is conduct travel time studies along seventeen major arterials in the District of Columbia during the evening rush hour period to gauge system performance in each corridor. This data will be used to compare with data collected from a similar study in 2002 to determine if conditions have improved or deteriorated in the survey corridors.

Cost Estimate: $80,000

Product: Technical Report

Schedule: Data Collection - Spring 2009
Technical Report - June 2009

$65,000 remains to be specified

TOTAL DISTRICT OF COLUMBIA COST ESTIMATE: $300,500

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: $20,000

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

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

Schedule: As developed with Maryland staff

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 address ongoing corridor / subarea studies, such as the 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: $111,000

Product: Subarea / corridor data

Managed Lanes

This project, initiated in FY2007, involves executing travel demand forecasts for managed lane facility operations in individual corridors, as well as for an integrated system of such lanes, throughout the Maryland portion of the Washington area. The current study is designed to identify candidate corridors / system design where the operation of managed travel lanes appears feasible and effective. The study will also test alternative project limits, cross-sections, and toll levels, for those corridors in the planning phase which appear as candidates for feasible and effective managed lane operations.

Cost Estimate: $50,000

Product: Technical reports

Schedule: June 2009

Traffic Impacts

This project is designed to assess on a comprehensive scale the transportation impacts of development, through the analysis of such development at the local, subarea, corridor and regional levels. Different methods and evaluation criteria may be employed at each level of analysis to appropriately consider such impacts, ranging from delay at intersections for localized studies, to travel modeling and aggregate systems level impacts for larger projects. Study elements will be detailed in conjunction with SHA staff.

Cost Estimate: $110,000

Product: Technical reports

Project Evaluation

Maryland SHA requires quantified results on system performance benefits in order to compare the relative merits of individual projects proposed for implementation or for use in refining the Maryland Highway Needs Inventory. Such results will assist in determining priorities among the projects to maximize the benefits of the transportation planning and programming process. Specific level of service, travel delay, and mobility criteria will be defined and estimated at the appropriate local, subarea, corridor and / or regional levels to enable a consistent assessment of specified projects.

Cost Estimate: $40,000

Product: Technical memo

Schedule: June 2009

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 demand 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: $45,000

Product: Technical memos

Schedule: June 2009

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. Staff will research benefit - cost analysis models such as the Surface Transportation Efficiency Model (STEAM) and life cycle investment models such as the statewide version of the Highway Economic Requirements System (HERS / ST), with a view towards application on a case study basis.

Cost Estimate: $50,000

Product: Technical reports

Schedule: June 2009

Monitoring Studies

This work effort is designed: (1) to provide SHA staff with information relating to the effectiveness of ongoing and planned regional congestion monitoring activities in the Maryland portion of the region, and (2) to examine the effectiveness of such programs, including the use of before and after studies (primarily through literature reviews and analysis of existing data rather than through new collection of primary data). TPB staff will periodically brief SHA staff to keep them informed of regional congestion monitoring activities and to discuss possible new initiatives in this area.

Cost Estimate: $50,000

Product: Technical reports

Schedule: June 2009

Transportation / Land Use Connection

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 pilot program in January 2007, the project was very well received. It was not only continued in FY2008, but both Maryland and Virginia supplemented the regional effort with additional funds. This project continues those efforts by similarly reserving such supplemental funds to be distributed in fiscal year 2009.

Cost Estimate: $80,000

Product: Grant awards, technical reports from contractors

Schedule: June 2009

TOTAL MARYLAND COST ESTIMATE: $581,000

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:

Product: scopes of work, progress reports

Schedule: on-going activity

Miscellaneous Services

A. This work element provides VDOT and VDRPT with the ability to undertake limited scope studies and or data gathering activities identified during its regional and sub-regional planning activity during fiscal year 2007.

B. 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, 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:

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 2009. The HOV corridors to be monitored are:

– I-95 from Triangle (Prince William County) to its interchange with the Capital Beltway at Springfield (Fairfax County);

– I-395 from the Capital Beltway to (and including) the 14th Street Bridge in the District of Columbia;

– I-66 from Gainesville (Prince William County) to the District of Columbia end of the Theodore Roosevelt Bridge; and

– Virginia Route 267 (Dulles Toll Road) from the Fairfax County / Loudoun County line to I-66 (including Dulles Connector and Dulles Access Road).

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 these 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 2009 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:	$ 300,000
Products:	Data files transmitted to VDOT
Schedule:	Fall counts completed by Nov. 30, 2008 Spring counts completed by June 15, 2009

<u>High Occupancy / Toll (HOT) Lane Traffic Analyses</u>

As requested by the Commonwealth, COG staff will perform traffic analyses of proposed I-95 / 395 HOT lane projects in order to assist decision-makers in evaluating the impacts of the proposed HOT lanes. The COG analysis will consider transit improvements (including commuter lots and expanded bus service).

Cost Estimate:	$ 48,000
Products:	Analysis results
Schedule:	Fall, 2008 or Spring, 2009

<u>Enhanced Commuter Corridor Count Program Continuation</u>

This work element will continue prior work under this task and provide an analysis for the outside-the-Beltway screenline in the I-66 corridor for the Northern Virginia Transportation Commission (NVTC). This additional data will provide statistically reliable information on modal use in the selected corridor that will be beneficial to planners and decision makers. Transit ridership data will be collected by NVTC, and provided to MWCOG for the analysis.

Cost Estimate: Data collection: $25,000

Schedule: Data collection in fall 2008, report writing in FY09 (after data collection completed)

Travel Forecast Model Refinements

Using results from the regional travel demand model and comparing the results with ground counts at two or three specific corridor segments of high interest (to be specified by VDOT), recommend refinements to the model to make it even more valuable to VDOT transportation planners and traffic forecasters in responding to location-specific feasibility questions from top VDOT management or local jurisdictions evaluating potential comprehensive plan changes.

Cost Estimate: $38,000

Product: study report with recommendations

Schedule: complete work by June 30, 2009

Data Mine State of the Commute 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, 2009

TOTAL VIRGINIA COST ESTIMATE: $ 461,600

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: $7,300

Schedule: on-going activity

Analyze Bus Passenger Survey Trip Origins and Destinations

Staff will tabulate the results of the spring 2008 Regional Bus Survey to analyze current bus ridership trip origin and destination patterns by jurisdiction and Transportation Analysis Zones (TAZ) for both commuting and non-commuting travel. This analysis will include, but may not be limited to, examining major modes of access to bus transit, transfers between bus routes, and transfers to and from other transit vehicles including Metrorail. Staff will document analysis findings in a detailed technical memorandum.

Cost Estimate: $50,000

Schedule: October 2008

Enhance Transit Network Coding

This project will enhance the efficiency and quality of regional transit network coding by TPB staff through integration with an upgraded GIS platform. Funding for this project will be used to continue consultant support for the improvement of transit network coding

and network database management procedures. This funding will supplement funding for continued consultant support for improved network development in the basic work program.

Cost Estimate: $50,000

Schedule: December 2008

Impact of Highway Congestion on WMATA Bus Operations

This project will study the impact of highway congestion on WMATA bus operations & fleet needs. This project will also identify potential improvements that could mitigate the adverse effects of this congestion on bus operations and reduce WMATA overall bus fleet needs and operating costs.

Cost Estimate: $53,900

Schedule: January 2009

TOTAL WMATA COST ESTIMATE: $171,400

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 Subcommittee. The elements of the multi-year CASP work program to be performed during FY 2009 are as follows:

Air Passenger Survey - Process Survey

The multi-year Air Passenger Survey began in FY 2008 with activities including data collection, data entry and summary reporting. During FY 2009, staff will geoprocess the local origin address collected in the Regional Air Passenger Survey and prepare a geographic analysis of local air passenger originations.

Cost Estimate: $190,000

Update Ground Access Forecast

This project will develop revised Ground Access Forecasts. During FY 2009, 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: $149,400

Ground Access Element Update

During FY2009, staff will commence work on the Ground Access Element Update. It is anticipated that half of the Ground Access Element Update will be completed during FY2009, with the remainder to be completed in the subsequent fiscal year. The Ground Access Element of the Regional Airport System Plan will be updated using results of the most recent Regional Air Passenger Surveys and Updated Ground Access Forecasts.

Cost Estimate: $125,000

Ground Access Travel Time Study

The Ground Access Travel Time Study Update will permit analysis of travel time trends to the three commercial airports, as well as analysis of any new transportation improvements. It is anticipated to be a multi-year, multi-phased project. FY 2009 activities for this study will include conducting necessary planning activities, including survey design, sample identification, and resource allocation, among others.

Cost Estimate: $50,000

TOTAL CASP COST ESTIMATE: $514,400

8. SERVICE/SPECIAL PROJECTS

In addition to the TPB basic work program in the UPWP and the Continuous Airport System Planning (CASP) program, 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.

IV. PROPOSED FY 2009 STATE TRANSPORTATION AGENCY STATE PLANNING AND RESEARCH PROGRAMS (SPR)

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District of Columbia Department of Transportation
SPR Program Element Supporting the Washington Area Work Program

Transportation System Planning Branch: Formulates plans and policies as they pertain to the development of transportation systems for the eight wards and develops multi-modal transportation solutions. Improve citywide transportation systems and services. Administer and coordinate transportation planning activities for citywide transportation system policies and programs.

Regional Planning Branch: Responsible for regional planning activities as they relate to the Metropolitan Washington Council of Governments (COG) while implementing the Unified Planning Work Program (UPWP). The UPWP for Transportation Planning in the Washington Metropolitan Region incorporates all federally assisted, state, regional and local transportation planning activities. Assists in developing long-range transportation plans and frameworks for regional planning activities.

Transportation Systems Policy Branch: Develops policies, plans and programs to encourage safe, efficient and accessible non-vehicular travel. Develops and promotes bicycle and pedestrian facilities and programs, as well as works with major employers to encourage non-vehicular methods of commuting.

Transportation Compliance Branch: Ensures the District is in compliance with all federal-aid requirements. Review for compliance of all environmental issues and provide environmental planning and coordination. Develop, implement and manage the State Planning Program. Serve as Liaison for Air Quality program at COG. Coordinates air quality initiatives and requirements with the District Department of the Environment.

Plan Review Branch: Reviews and comments on transportation impacts and site plans of proposed development projects (Board of Zoning Adjustment, Zoning Commission, Large Tract Review, Planned Unit Development, Environmental Impact Statements Forms, Street and Alley Closings) and streetscape review to make sure the site is functional and safe for the public and in proper compliance.

Asset Management Division: Responsible for the functional classification of local highway systems; mileage certification reporting; providing a stable framework for planning, financing, and executing long-range programs; implementing transportation system management policies and actions; finding optimum strategies for maintaining infrastructures in a serviceable condition while prioritizing and programming major assets including pavement, bridges, tunnels, and sign structures for capital improvement. Compile and maintain current highway system mileage, fuel consumption and financial statistics as an integral part of the local and federal planning process.

Traffic Safety Engineering Branch: Collects and processes data relative to the

movement of vehicles, persons, services and goods on city streets and highways to improve methods of highway safety needs. Such data includes annual daily traffic data, crash data and vehicle miles traveled. Calculate traffic volume data and produce the annual Traffic Volume Map.

Resource Management Branch: Develops the State Transportation Improvement Program that allows the District to maintain and improve the safety of all components of the transportation system. Budget, allocate, and optimize fiscal resources to meet Federal Highway-aid and District capital program investment priorities. Prepare and submit monthly and annual highway statistical data report to FHWA.

Metropolitan Planning: Describes the regional transportation planning and special technical assistance projects proposed to be undertaken July 1, 2007 through June 30, 2008 by COG/TPB staff in cooperation with state and local agencies and WMATA.

Program Funding: The FY 2009 SPR Program funding is under development. The FY 2008 SPR Program funding is $2,694,879 (Federal = $2,155,903 and District = $538,976).

Maryland Department of Transportation
State Highway Administration
State Planning and Research (SPR) Program Elements Supporting the Washington Area Work Program FY 2009

I. Systems and Programming

A. Programs

1. Preparation of the Annual Statewide Transportation Improvement Program
   - Prepare and submit an annual program for use of available federal funds in accordance with Title 23 U.S.C. and SAFETE-LU.
   - Coordinate the STIP with the regional TIPs, CTP and local jurisdiction's highway improvement programs

2 Preparation and development of the 6 year Consolidated Transportation Program
   - Develop the FY 2009-2014 CTP.
   - Coordinate with appropriate State and local planning staffs, MPOs and State, county and municipal elected officials.
   - Prepare presentation materials for the annual tour.

3 Local Government Liaison
   - Coordinate between all levels of Federal, State, and local governments to ensure that transportation plans are compatible per the 3-C process.
   - Notify review agencies and review other agency plans and programs, via the State Clearinghouse process.
   - Coordinate and review county and municipal master plans.
   - Assess transportation impacts of proposed major development.

4 Long Range Planning
   - Update the Highway Needs Inventory (HNI).
   - Evaluate long-term highway needs and investment levels for various program categories and sub-categories.
   - Review and provide input on updates to the statewide long range plan and Annual Attainment Report on Transportation System Performance.

II. Traffic

A. Traffic Monitoring Program
   - Monitor the characteristics of highway traffic.
   - Enhance procedures to collect, process and disseminate traffic data.
   - Ensure that the traffic monitoring system meets State needs and the requirements and guidelines of FHWA and AASHTO.
   - Study, and as appropriate, implement methods to improve the efficiency and effectiveness of traffic monitoring through statistical analysis.
   - Improve the monitoring of traffic on freeways, particularly in urban areas.
   - Ensure the collection of traffic volume, classification and weight data on SHRP monitoring sites.

III. Metropolitan Planning Organization Liaison

A. Urbanized Areas

- Work with the MPOs in modifying and adhering to their planning process.
- Work with the MPOs in the development of the UPWPs, CLRPs, TIPs, clean air conformity determinations, and management systems.

IV. Highway Statistics

A. Mileage

Federal System

- Develop new Federal Functional Classification and NHS maps and mileage tables for approval and distribution.
- Update and maintain statistical records summary tables.

B. State, County and Municipal Highway Systems

- Solicit receive and process reports from local jurisdictions regarding road improvements, mileage, etc.
- Collect, update and maintain data used for the Universe portion of the HPMS submission.
- Update and maintain the highway information databases to meet on-going state and federal requirements.
- Provide data used for the update of SHA's maps.

C. Highway Performance and Monitoring System

- Update the HPMS database including revisions to any data elements, maintain sample size requirements to accurately reflect system-wide conditions and submit an updated HPMS data file and related reports and data files.

V. Special Studies

A. Preliminary Studies

- Prepare engineering and feasibility studies.
- Develop preliminary purpose and need statements.
- Develop access control plans for selected primary highway corridors.
- Prepare interstate access point approval requests.

Federal	$3,580,058
State	$ 446,063
Total	$4,026,121

NOTE: The funding total is based on Maryland's statewide SPR program. MDOT/SHA does not sub-allocate SPR funds to the individual MPOs. In general terms, approximately 35 percent of this statewide total is attributed to the Washington Region or $1,409,142.

MDOT State Highway Administration FY 2009 State Planning & Research Program Elements Supporting the Washington Area Work Program	
Item	**Amount ($)**
I. Systems & Programming	
A. Annual STIP	$62,800
B. CTP	$773,240
C. Local Government Liaison	$282,005
D. Long Range Planning	$158,857
II. Traffic Monitoring Program	$1,237,657
III. MPO Liaison	$117,740
IV. Highway Statistics	$320,758
V. Urban Transportation Planning	
VI. Special Studies	$1,071,359
Total	**$4,026,121**
Federal (89%)	$3,580,058
State (11%)	$446,063
Statewide SPR Share for the Washington Region (35%)	**$1,409,142**

VIRGINIA DEPARTMENT OF TRANSPORTATION
SPR PROGRAM ELEMENTS, AND OTHER ELEMENTS SUPPORTING THE WASHINGTON AREA WORK PROGRAM

The following work program element descriptions identify the Virginia Department of Transportation (VDOT) transportation planning activities proposed for FY 2009, in support of the Unified Planning Work Program for the Metropolitan Washington Region.

VDOT's Transportation and Mobility Planning Division (TMPD), located in the VDOT Central Office, will provide statewide oversight, guidance and support for the Federally mandated Metropolitan Transportation Planning & Programming Process. TMPD will provide technical assistance to VDOT District Planning Managers, local jurisdictions, regional agencies and various divisions within VDOT, in the development of transportation planning documents for the MPO areas. TMPD will participate in special studies as requested.

I. METROPOLITAN PLANNING ($250, 000 requested)

The requested funds will partially cover the salary, travel, and other costs for the NoVA District Planner plus four NoVA District planning personnel directly engaged in MPO activities and support, including MPO-related meetings and preparation for these meetings.

II. SUB-REGIONAL PLANNING ($1,170,000 requested)

A. NOVA Planning Methodology Applications ($ 85,000 requested)

This is an on-going study begun in FY 07. This work will continue to enhance existing NOVA Planning tools, build on findings, methodology and recommendations developed during the Choke Point Mitigation / MOBI S study (completed in FY 06), explore congestion/ mobility topics and their application to the District's network, research and develop methodologies and database for solid planning input to the Chapter 527 process.

B. Analysis for Dulles Corridor Rapid Transit (DCRT) ($ 45,000 requested)

This continues efforts under the on-going project. Much of the analysis work envisioned in this study has been completed, including past congestion mitigation program coordination for the Dulles Rail project, and the remaining work is largely dependent on the schedule for DCRT project decisions, including Federal and local reviews. We plan to use available funding to study, identify and conduct preliminary evaluation and conceptual engineering of transportation network improvements (pedestrian, bike, roadway) to the VA 7 / 123 intersection vicinity, in order to develop projects for improvements in the area of influence of the DCRT project. Given the high cost of right-of-way in Tysons and limited accuracy of traditional planning R/W definitions, it is possible that preliminary survey work will be needed to determine availability of public R/W and hence effect on a project's feasibility.

C. Comparing Traffic Calming Methods on Shared Use Paths ($ 25,000 requested)

As more people use shared use paths for commuting, there are an increasing number of locations where fatalities occur at the intersection of major roads and major paths especially, where the topography encourages the bicyclist to ride at excessive speeds (such as on downhill grades). Traditional methods to treat high accident locations have included cutting trees to increase sight distance, addition of warning signs on the roadways, addition of advance warning signs on the paths, as well as stop signs and pavement markings. Unfortunately, these messages are often ignored by the bicyclists. As a result, many jurisdictions are trying to implement bicycle traffic calming measures, such as introducing curves in the path. While there is a lot of data on traffic calming procedures there does not appear to be any study data comparing the effectiveness of different methods.

This project proposes to identify 2 or 3 locations on a heavily used shared use path where site conditions can not be addressed by conventional methods. Once a location has been identified, we will collect baseline data on the average and maximum speeds achieved by the bicyclists. After baseline data is obtained, different traffic calming methods can be installed at the test location and evaluated for effectiveness.

D. Annual NRO Strategic Investment Program Plan ($400,000 requested)

Prior to the beginning of each fiscal year, Northern Region Operations' (NRO) Operations Planning and Programming (OPP) Section develops a Strategic Investment Program Plan (SIPP) to define the goals, activities, procedures and performance measures for the Region's work efforts for the forthcoming fiscal year. The SIPP must have a balanced budget (Funding Plan) prior to the start of the fiscal year. The Funding Plan, the Program Work Plan, and supporting documents form the Strategic Investment Program Plan and are used by the NRO's Section Managers and Project Managers to manage their projects and activities for the upcoming fiscal year. The purpose of this project is to fund consultant efforts to assist VDOT NRO staff in further establishing and refining the framework for a structured process for developing the FY 10 and future Strategic Investment Program Plans.

E. NRO ITS Architecture Maintenance and Use Support ($ 50,000 requested)

This continues work under last year's project, which was entitled "NOVA ITS Architecture Maintenance and Expansion". The NRO ITS Architecture provides a framework for planning interoperable ITS expansion throughout the region. Similar to other planning documents, the NRO ITS Architecture continuously evolves as the vision for regional transportation system management and operations. The funding requested for FY 09 will primarily be used to support the development and delivery of architecture training. Stakeholders will be educated on recent updates to the NRO ITS Architecture via this training. FY 09 funding will also be used for project architecture and concept of operations development.

F. Corridor Assessment on Capacity and Safety ($400,000 requested)

Traffic Engineering's Corridor & Capacity Assessment Program is a proactive approach for reviewing corridors and developing solutions for the enhancement and improvement of safety and operational needs. Changes such as geometric improvements, signing, drainage, and traffic control changes are made to help improve traffic flow and / or safety through the corridor with the operating budget. The requested funding will enable consultant support to in-house staff in reviewing the selected corridors and proposing geometric and / or operational improvements to enhance and improve safety and traffic operations. There are many expected improvements to be gained by implementing corridor safety and capacity improvements. Some of these benefits include improving safety and the environment, conserving fuel, saving time, and enhancing productivity.

G. NRO Strategic Program Plan Maintenance ($ 40,000 requested)

This continues work accomplished last year under a project entitled "NOVA Smart Travel Program Plan Update". The NRO Strategic Program Plan provides a compass for guiding the evolution of Northern Region Operations. As needs and priorities change, the NRO Strategic Program Plan must be updated and maintained. This project supports the required annual maintenance of the NRO Strategic Program Plan. As a result of this project, the updated NRO Strategic Program Plan will provide: a clear statement and description of NRO needs, vision, goals, and objectives, an operating concept, and the ability to develop and maintain consistency among several NRO planning documents. An updated plan will serve as a planning tool, management tool, and outreach tool.

H. Bicycle and Pedestrian Count Program ($ 45,000 requested)

Since July 2005 VDOT NoVA has conducted two research Bicycle and Pedestrian Count programs. The scope of this work is to continue this effort by performing additional counts at the same and / or different locations using experimental technology, which will enable us to accurately split the counts between the two modes (bicyclists and pedestrians). This information will be compared with the traditional human counting method. This project will also include developing methods to conduct volume counts. The methods used for volume counts will include human onsite counting, video counting, and new technologies such as infra-red, motion sensor, or other technologies found cost effective. These new technologies will be different from those used in the previous years and for the purpose of determining the most appropriate mechanism. The results of these counts are anticipated to be useful in creating a regional database which might eventually be converted into a GIS layer.

I. Pedestrian/ Bicycle Educational Campaign - Va. Law ($ 80,000 requested)

Northern Virginia continues to encounter serious problems in Pedestrian and Bicycle safety. The need to address conflicts between motorists / bicyclists / pedestrians and educate the users of the developing a multi modal transportation system is ever increasing. During the period of 2005-2007, the Virginia Department of Motor Vehicles, Virginia Office of Highway Safety, reported 74 pedestrians were killed in crashes in Northern Virginia alone. The purpose of this project is to continue with the

education/outreach plan previously developed through SPR, which promotes Virginia law (the Code of Virginia) and the responsibilities of pedestrians, bicyclists and motorists when using public roads, paths and sidewalks. The intent of the project is to reach the public throughout the NoVA region and for possible statewide distribution. Due to recent transportation bill introduction (HB 1270 and SB 644) by the Virginia General Assembly, this effort will be critical to provide timely education to the general public.

Public awareness and educational information will be developed and distributed, aimed at reaching a broad audience base and directed to improving pedestrian, bicycle and driver awareness and responsibilities Activities will reach a broad range of target audiences, including non-English speaking populations. The main piece of outreach will be a brochure but also may include companion pieces such as prints (such as bus placards, leaflets, brochures, promotional items), as well as public service announcements for radio and television to be produced and distributed.

J. Consultant Services (centrally funded and managed)

"On-call" consultant support, funded and managed by VDOT's Central Office, may be used as funding is available to undertake short term, limited scope studies identified during FY 2009. Since this consultant support is shared among the VDOT districts, there is no specific amount of funding that is allocated to NoVA District.

III. OTHER PLANNING WORK (State-only Funding)

A. State-wide Planning Grants (amount and approved grants to be determined)