

## **ITEM 13- Information**

January 20, 2010

Review of Outline and Preliminary Budget for  
FY 2011 Unified Planning Work Program (UPWP)

### **Staff**

**Recommendation:** Receive briefing on the enclosed outline and preliminary budget for the Unified Planning Work Program (UPWP) for FY 2011 (July 1, 2010 through June 30, 2011).

**Issues:** None

**Background:** A complete draft of the FY 2011 UPWP will be presented to the Board for review at its February 17 meeting, and the final version will be presented for the Board's approval at its March 17 meeting. The TPB Technical Committee reviewed the outline and budget at its January 8, 2010 meeting.

## National Capital Region Transportation Planning Board

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### MEMORANDUM

January 13, 2010

**TO:** Transportation Planning Board

**FROM:** Gerald Miller  
Director, Program Coordination  
Department of Transportation Planning

**SUBJECT:** Preliminary Budget and Outline for FY 2011 Unified Planning Work Program (UPWP)

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A preliminary FY 2011 budget estimate for the UPWP, the work activity funding changes compared to FY 2010 levels, and an outline of the proposed work activities for FY 2011 are attached.

The budget for the FY 2011 UPWP basic work program is based upon MPO planning funding allocations provided by the three DOTs of FTA Section 5303 and FHWA PL funding that will be determined by the reauthorization of SAFETEA-LU. To date, I have made the assumption that the FY 2011 funding allocations to be provided by the DOTs will be the same as the current FY 2010 levels. The estimated funding is shown on the next page. In addition, the budget estimate assumes \$1,128,100 of unobligated funds from FY 2009 will be available, which is \$666,100 less than the unspent funds from FY 2008.

The preliminary estimated total budget excluding carryover funds is \$11,337,500, which is \$666,100 less than the current total FY 2010 budget as amended December 16. The **basic work program budget is \$9,764,800** without carryover funds, which is \$666,100 less than the corresponding current FY 2010 budget level of \$10,430,900.

The **technical assistance program budget is \$1,572,700**, unchanged from the current FY 2010 budget level. Technical assistance program budgets are based upon percentages of the estimated FY 2011 funding allocations which are unchanged from FY 2010.

**DRAFT**

<b>ESTIMATED PRELIMINARY FUNDING FOR FY 2011 UPWP</b>				1/13/10
	<b>FTA</b>	<b>FHWA</b>	<b>New FY 2011</b>	<b>Current FY 2010</b>
<b>DDOT</b>				
New 2011	\$441,100 (0%) <sup>a</sup>	\$1,870,100 (0%) <sup>a</sup>	\$2,311,200	\$2,311,200
Unob.2009	47,686	271,323	319,009	348,800
				\$2,660,000
<b>MDOT</b>				
New 2011	1,077,700 (0%) <sup>a</sup>	3,186,100 (0%) <sup>a</sup>	4,263,800	4,263,800
Unob.2009	75,922	375,544	451,466	729,100
				4,992,900
<b>VDOT</b>				
New 2011	911,900 (0%) <sup>a</sup>	2,722,500 (0) <sup>a</sup>	3,634,500	3,634,500
Unob.2009	78,291	279,505	357,796	716,200
				4,350,700
TOTAL New 2011	2,430,800	7,778,700	\$10,209,500	\$10,209,500
TOTAL Unob.2009	201,899	926,372	\$1,128,000	\$1,794,100
<b>FY 2011 Grand Total</b>			\$11,337,500	\$12,003,600

<sup>a</sup> Percent change from new FY 2010 funding

**Technical Assistance Totals:**

- 1) For DC, MD, VA: 13.5% of total new allocation (\$312,000 + \$575,500 + \$490,600 = \$1,378,200)
- 2) For WMATA: 8% of total new FTA funding = \$194,500 (\$2,430,900 for FY 2010)
- 3) Total Technical Assistance is \$1,572,700 or 15.4 percent of total new funding of \$10,209,500 for FY 2011.

## TPB FY 2011 WORK PROGRAM FUNDING CHANGES FROM FY 2010

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

## PROPOSED WORK ACTIVITIES FOR FY 2011

(July 1, 2010 to June 30, 2011)

### 1. PLAN SUPPORT

#### A. UNIFIED PLANNING WORK PROGRAM (\$70,700)

- UPWP will describe work elements and integration of program activities and responsibilities for all aspects of the work program.
- UPWP will discuss planning priorities and describe the transportation planning and related air quality planning activities over next 1-2 years.

**Oversight:** Technical Committee

**Products:** UPWP for FY 2012, amendments to FY 2011 UPWP, monthly progress reports and state invoice information, federal grant materials

**Schedule:** Draft: January 2011 Final: March 2011

#### B. TRANSPORTATION IMPROVEMENT PROGRAM (TIP) (\$240,600)

- The FY2011-2016 TIP and 2010 CLRP are scheduled to be adopted in October 2010, and the draft FY2012-2017 TIP and 2011 CLRP will be prepared and reviewed between January and June 2011.
- Enhance documentation of the FY 2011-2016 TIP with additional analysis as a part of the CLRP/TIP brochure and the CLRP web site.
- Improve public access to TIP project data with an online searchable database.
- The geographic information system-linked database TIP and CLRP project data and air quality conformity information will be improved to facilitate updating and reporting.
- Conduct a forum on the TIP when it is released for public comment in September 2010.
- Annual certification of compliance with regulations on providing transit services to persons with disabilities will be prepared.
- An annual listing of projects for which federal funds have been obligated in the preceding year will be prepared.
- Process amendments and administrative modifications to the FY 2010-2015 TIP.

**Draft January 13, 2010**

<b>Oversight:</b>	Technical Committee
<b>Products:</b>	Final FY2011-2016 TIP, administrative modifications and amendments to the FY 2010-2015 and FY 2011-2016 TIPs, draft FY 2012-2017 TIP
<b>Schedule:</b>	October 2010 and June 2011

C. CONSTRAINED LONG-RANGE TRANSPORTATION PLAN (CLRP) (\$588,400)

The long range transportation plan must be updated every four years as required by the final SAFETEA-LU planning regulations issued February 14, 2007. The major update of the CLRP will be completed in 2010.

The following work activities are proposed:

- Document project submissions for 2010 update which looks out to 2040.
- As a result of the additional public outreach activities around the 2010 CLRP, add a new element to the CLRP based on input received about public views on regional transportation priorities that go beyond what is funded in the CLRP
- 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.
- Continue to make plan information more visual, and utilize effective visualization technologies. Improve public access to the plan with informative maps and graphics for web and print media, and an online, searchable database
- 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 FY 2011-206 TIP and 2010 CLRP are scheduled to be adopted in October 2010 and the draft FY 2012-2017 TIP and 2011 CLRP will be prepared and reviewed between January and June 2011.
- Document the 2010 plan and draft 2011 update via the website and written

materials , including:

- Performance of the plan such as changes in transit trips, auto trips, vehicle miles of travel of travel, lane miles of congestion and accessibility to jobs.
- Relationship between the transportation strategies and improvements and the development framework shown in the regional activity centers map
- Evaluate the plan for disproportionately high and adverse effects on low-income and minority population groups.

**Oversight:** Technical Committee

**Products:** 2010 plan documentation and draft 2011 plan

**Schedule:** September 2010 and June 2011

D. FINANCIAL PLAN (\$64,000)

- Review the results of the financial analysis for the 2010 CLRP for the use in preparing the 2011 CLRP.
- Prepare financial plan for the FY 2012-2017 TIP.

**Oversight:** Technical Committee

**Products:** Financial inputs for draft 2011 CLRP and FY 2012-2017 TIP

**Schedule:** January and June 2011

E. PUBLIC PARTICIPATION (\$371,900)

The Participation Plan which was adopted in December 2008 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 implementation of the TPB Participation Plan.
- Develop and conduct workshops or events to engage the public and community leaders on key regional transportation issues, including challenges reflected in the CLRP and TIP.

- Ensure that the TPB’s website, publications and official documents are timely, thorough and user-friendly.

Conduct two or more sessions of the Community Leadership Institute, a two-day workshop designed to help community activists learn how to get more actively involved in transportation decision making in the Washington region.

- Provide staff support for the TPB Citizens Advisory Committee (CAC), including organizing monthly meetings and outreach sessions, and drafting written materials for the committee.
- Provide staff support for the TPB Access For All Advisory (AFA) Committee that includes leaders of low-income, minority and disabled community groups.
- Prepare AFA Committee report identifying priority projects, programs, services and issues that are important to community groups, such as providing better transit information for limited English speaking populations, improved transit services for people with disabilities, pedestrian and bike access and safety, and potential impacts of transit-oriented development and gentrification.
- Implement public involvement procedures, including public comment sessions at the beginning of each TPB meeting and official public comment periods prior to the adoption of key TPB documents.

**Oversight:** Transportation Planning Board

**Products:** TPB Participation Plan with a proactive public involvement process; CAC and AFA Committee Reports.

**Schedule:** Ongoing, with forums and meetings linked to preparation of the TIP and CLRP

F. PRIVATE ENTERPRISE PARTICIPATION (\$18,300)

- The Private Providers Task Force will be supported, and private provider involvement will be documented in the TIP. The bimonthly meetings of the TPB Regional Taxicab Regulators Task Force will also be supported.

**Oversight:** Transportation Planning Board

**Products:** Documentation on Private Provider Involvement

**Schedule:** Annual Public Transit Forum: May 2010



G. ANNUAL REPORT (\$80,100)

- This issue will describe the main activities completed in 2009, the 2009 plan and the 2010 update of the CLRP.
- Produce the monthly newsletter *TPB News*.

**Oversight:** Transportation Planning Board

**Product:** *Region* magazine

**Schedule:** June 2011

H. TRANSPORTATION/LAND USE CONNECTION (TLC) PROGRAM (\$395,000)

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.

The following activities are proposed for FY 2011:

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

**Oversight:** TPB Technical Committee

**Products:** Updated web-based clearinghouse, technical assistance provided by consultant teams to six localities, and implementation toolkit.

**Schedule:** Technical assistance: November 2010-June 2011

I. DTP MANAGEMENT (\$452,100)

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

**Oversight:** Transportation Planning Board

**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 and PROGRAMS

### A. CONGESTION MANAGEMENT PROCESS (CMP) (\$155,000)

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

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

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

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

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

**Oversight:** TPB Technical Committee, Travel Management Subcommittee, Management, Operations, and Intelligent Transportation Systems (MOITS)

## Technical Subcommittee

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

**Schedule:** Monthly

B. MANAGEMENT, OPERATIONS, AND INTELLIGENT TRANSPORTATION SYSTEMS (ITS) PLANNING (\$340,300)

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

- ITS Data: The collection/compilation, processing, warehousing, and sharing of transportation systems usage and condition data from Intelligent Transportation Systems (ITS) sources, particularly in conjunction with the University of Maryland's Regional Integrated Transportation Information System (RITIS)
- Regional Transportation Management: Regional traffic management planning and coordination activities, particularly in conjunction with the Metropolitan Area Transportation Operations Coordination (MATOC) Program (see also Task 2.I, which was established as a separate task from MOITS in FY2010); MATOC focuses on short-range planning issues for traffic management, and MOITS focuses on mid-to-long-range planning for traffic management
- Multi-modal Coordination: Examination of traffic and transit management interactions in daily operations
- Emergency Preparedness: Examination of technologies and operating procedures for daily operations that can provide a basis for emergency transportation operations, in conjunction with the COG Regional Emergency Support Function 1 – Emergency Transportation Committee (see also Task 2.C.)
- Traveler Information: Real-time traveler information made available to the public

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

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

**Products:** Agendas, minutes, summaries, outreach materials as needed; white paper(s) on technical issues as needed; revised regional ITS architecture; MOITS input to the CLRP as necessary; review and advice to MOITS planning activities around the region

**Schedule:** Monthly

### C. TRANSPORTATION EMERGENCY PREPAREDNESS PLANNING (\$75,400)

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

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

Major topics to be addressed include the following:

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

**Oversight:** TPB MOITS Policy Task Force and MOITS Technical Subcommittee; COG Regional Emergency Support

Function (RESF) #1 - Transportation Committee

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

**Schedule:** Monthly

D. TRANSPORTATION SAFETY PLANNING (\$100,000)

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

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

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

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

- Support of the Transportation Safety Subcommittee.
- Safety data compilation and analysis.
- Coordination on metropolitan transportation planning aspects of state, regional, and local safety efforts, and with transportation safety stakeholders.

- Coordination with other TPB committees on the integration of safety considerations.
- Maintenance of the safety element of region's long-range transportation plan.

**Oversight:** Transportation Safety Subcommittee

**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 (\$108,700)

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

- Advise the TPB, TPB Technical Committee, and other TPB committees on bicycle and pedestrian considerations in overall regional transportation planning.
- Maintain the Regional Bicycle and Pedestrian Plan and supporting Bicycle and Pedestrian Plan database on the TPB Web site for member agency and public access.
- Compile bicycle and pedestrian project recommendations for the FY2012-2017 Transportation Improvement Program (TIP).
- Coordinate with the annual "Street Smart" regional pedestrian and bicycle safety public outreach campaign (Street Smart is supported by funding outside the UPWP).
- Examine regional bicycle and pedestrian safety issues, their relationship with overall transportation safety, and ensure their consideration in the overall metropolitan transportation planning process, in coordination with task 2.D above.
- Examine bicycle and pedestrian systems usage data needs for bicycle and pedestrian planning, and ensure their consideration in the overall metropolitan transportation planning process.



- Provide the public with information on the status of bicycle and pedestrian facilities planning and construction in the Washington region.
- Coordinate and host one or more regional bicycle and pedestrian planning or design training, outreach, or professional development opportunities for member agency staffs or other stakeholders.
- Provide staff support to the Bicycle and Pedestrian Subcommittee, supporting the regional forum for coordination and information exchange among member agency bicycle and pedestrian planning staffs and other stakeholders.

**Oversight:** Regional Bicycle and Pedestrian Subcommittee

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

**Schedule:** Bimonthly

F. REGIONAL BUS PLANNING (\$100,000)

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

The major topics to be addressed included the following:

- Continued review and refinement of the recommendations of the Regional Bus Study completed in 2002, and development of a priority list of near term service implementation strategies for inclusion in annual operations budgets.
- Coordination and evaluation of CLRP and TIP proposals and amendments with regard to bus transit service plan implementation.
- Coordination and input definition for the TPB regional travel forecasting model.
- Technical advice and input regarding regional transportation and land use coordination, including the development of transit assumptions for TPB planning studies.
- Facilitation of technology transfer and information sharing, as it relates to regional, state and local bus transit services.
- Coordination with other regional committees regarding bus transit participation in

planning and training activities, including but not limited to the Regional Emergency Support Function (RESF) #1 at COG, and the associated regional transit operators group.

- Coordination with the TPB Management, Operations, and Intelligent Transportation Systems (MOITS) Policy Task Force and MOITS Technical Subcommittee regarding integrated planning for bus services and street operations.
- Coordination with the TPB Access for All Committee to enhance regional mobility for all populations.

**Oversight:** Regional Bus Subcommittee

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

**Schedule:** Monthly

#### G. HUMAN SERVICE TRANSPORTATION COORDINATION (\$111,000)

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

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

Proposed work activities include:

- Support the activities of the TPB Human Service Transportation Coordination Task Force which will oversee the work activities listed below;

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

**Oversight:** Transportation Planning Board

**Products:** Priorities for the 2011 JARC and New Freedom Solicitation

**Schedule:** June 2011

H. FREIGHT PLANNING (\$130,000)

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

- Support the Regional Freight Planning Subcommittee
- Maintain the Regional Freight Plan and supporting information on the TPB Web site for member agency and public access.
- Ensure consideration of freight planning issues in overall metropolitan transportation planning, including:
  - 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.

- Analyze available freight movement data for the region.
- Coordinate with TPB travel monitoring and forecasting activities on freight considerations.
- Examine truck safety issues.
- Develop the freight components of the 2011 update of the Constrained Long Range Plan (CLRP).
- 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. Publish a periodic e-newsletter on regional freight planning issues.

**Oversight:** TPB Freight Subcommittee

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

**Schedule:** Bimonthly

#### I. METROPOLITAN AREA TRANSPORTATION OPERATIONS COORDINATION PROGRAM PLANNING (\$120,000)

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

Following experiences from the 9/11 attacks and other major incidents, transportation officials from Maryland, Virginia, the District of Columbia, and the Washington Metropolitan Area Transit Authority (WMATA), in partnership with the TPB, created the Metropolitan Area Transportation Operations Coordination (MATOC) Program. MATOC's mission is to provide situational awareness of transportation operations in the National Capital Region (NCR) through the communication of consistent and reliable

information, especially during incidents. Timely, accurate information enables operating agencies and the traveling public to make effective and timely decisions. By integrating systems' technologies, improving procedures and planning, and making accurate and timely transportation information available to the public, regional transportation agencies are able to make travel smoother and safer.

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

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

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

- Committee Support: Provide administrative support of MATOC Steering Committee, Executive Committee, and subcommittee meetings, including preparation of agendas and summaries and tracking of action items.
- TPB Reports: Provide regular briefings to the TPB on MATOC Program progress.
- TPB Staff Participation: Provide input and advice to the MATOC Information Systems Subcommittee and Operations Subcommittee.
- Coordinate as necessary with the Management, Operations, and Intelligent Transportation Systems (MOITS) Policy Task Force and MOITS Technical Subcommittee; MATOC focuses on short-range planning issues for traffic management, and MOITS focuses on mid-to-long-range planning for traffic management.

- Outreach: Coordinate the work of MATOC with other organizations, for example, with public safety or emergency management groups and media representatives; prepare articles, presentations and brochures to convey MATOC concepts, plans, and accomplishments. Also coordinate with the COG Regional Emergency Support Function # 1 - Emergency Transportation Committee.
- Implementation Planning: Prepare implementation plans describing the work required to reach defined stages of MATOC operating capability, including expert input from MATOC subcommittees.
- Financial and Legal Analysis: Support discussion of the identification of funding sources, estimation of funding needs, as well as preparation of legal agreement materials that provide for the long term sustainability of MATOC.
- Performance Measurement: Support MATOC committee discussions of assessing progress against MATOC's defined goals and objectives.
- Risk Management: Identify and monitor major risks to progress and identify actions to be taken in order to avoid incurring risks or mitigating their consequences.
- Supporting Materials: Develop supporting or informational materials for the above activities as necessary.

**Oversight:** MATOC Steering Committee; MOITS Policy Task Force and Technical Subcommittee

**Products:** Agendas, minutes, summaries, and outreach materials as needed; white paper(s) on technical issues as needed; regular briefings and reports to the TPB, MATOC committees, and the MOITS Policy Task Force and Technical Subcommittee.

**Schedule** Monthly

### 3. FORECASTING APPLICATIONS

#### A. AIR QUALITY CONFORMITY (\$563,200)

- Complete conformity analysis of 2010 CLRP and FY 2011 - 2016 TIP, using latest travel demand and emissions models, to address 1-hour and 8-hour ozone, carbon monoxide and PM<sub>2.5</sub> requirements.
- Execute public and interagency consultation procedures including interaction with MWAQC and air quality agencies.
- Prepare and execute a work program for analysis of the 2011 CLRP update and the FY2012-2017 TIP.
- Coordinate emissions reduction analyses associated with new, as well as previously implemented, transportation emissions reduction measures (TERMs) and CMAQ-funded projects; work with programming agencies to develop and finalize additional TERMS, as needed.
- Perform incidental (non-systems level) air quality reviews of plan and TIP amendments, as required throughout the year.
- Perform incidental (non-systems level) reviews of hot spot analyses, as requested by implementing agencies, throughout the year.
- Provide funding to COG's Department of Environmental Programs (DEP) to support review and comment on conformity analysis.

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

**Products:** Final report on 2010 CLRP and FY 2011 - 2016 TIP Air Quality Conformity Assessment; Work Program for 2011 CLRP and FY2012 – 2017 TIP Conformity Assessment

**Schedule:** June 2011

#### B. MOBILE EMISSIONS ANALYSIS (\$640,100)

- Proceed with analysis of greenhouse gases (GHG), including evaluation of transportation emissions reduction strategies, emissions inventory refinements, and strategic planning, as part of the TPB's Scenario Task Force activities and the COG Board's Climate, Energy, and Environment Policy Committee (CEEPC).

- Refine, as needed, mobile source emissions inventories, and respond to follow-up work requests regarding control strategies, policy or implementation issues, associated with ozone and PM<sub>2.5</sub> SIPs.
- Analyze new transportation emissions reduction measures (TERM)s, as well as examine previous proposals, and evaluate their effectiveness and cost-effectiveness in reducing emissions for GHG, SIP and air quality conformity purposes.
- Participate in state, MWAQC and CEEPC technical and policy discussions, public forums and hearings.
- 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 and efforts to address climate change; (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 source categories; and (3) provision of assistance and review to TPB in development of emissions factors required for mobile source emissions inventories associated with GHG, air quality conformity and SIP planning.
- Continue testing of the Motor Vehicle Emissions Simulator (MOVES) model (EPA's 'next generation' emissions factor model, designed to replace the Mobile model which has been used for decades in SIP and air quality conformity analyses), and bring it into production for planning applications.
- Provide support to Commuter Connections staff in developing implementation plans for adopted TERMS, as well as for future TERMS to be adopted by the TPB.

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

**Products:** Reports on TERM evaluation and on greenhouse gas emissions reduction strategies; Updated mobile source emissions inventories / reports as required to address ozone and PM<sub>2.5</sub> standards and climate change requirements

**Schedule:** June 2011



C. REGIONAL STUDIES (\$315,800)

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 first half of FY 2009, the "CLRP Aspirations" transportation and land use scenario was developed drawing upon the individual strategies reflected in the RMAS scenarios and the variably-priced lane scenario study. In addition, the "What Would It Take" greenhouse gas reduction scenario was developed to assess what scales and combination of interventions would be necessary to achieve significant reductions in CO<sub>2</sub> emissions reductions by 2020 and 2030. In the second half of FY 2010, these scenarios were analyzed.

The following activities are proposed for FY 2011:

- 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.
- "Drill-down" to the community and project level within the CLRP Aspirations scenario to assess local level travel impacts and help identify where land use shifts are particularly crucial and transportation improvements may need to be focused.
- Based upon a review of the projects, land use forecasts and performance of the 2010 CLRP, revise and update the CLRP Aspirations scenario looking to 2040 to reflect an additional decade of growth.
- Review developments in strategies to reduce mobile CO<sub>2</sub> emissions in the three categories of the "What Would It Take" scenario and update the strategies and analyses and update the assessment of scales and combination of interventions that would be necessary to achieve significant reductions in CO<sub>2</sub> emissions reductions by 2020, 2030 and 2050.

**Oversight:** TPB Scenario Study Task Force

**Products:** Analysis of updated CLRP Aspirations

scenario reflecting public feedback and looking to 2040; update of the What would It Take scenario

**Schedule:** October 2010 - Conduct public outreach and prepare report

June 2011 - Analysis of updated CLRP Aspirations scenario and update of the What would It Take scenario

D. COORDINATION OF COOPERATIVE FORECASTING AND TRANSPORTATION PLANNING PROCESSES (\$726,800)

- Support the Metropolitan Development Policy Committee (MDPC) and the Planning Directors Technical Advisory Committee (PDTAC) in the coordination of local, state and federal planning activities and the integration of land use and transportation planning in the region.
- Work with the Planning Directors Technical Advisory Committee (PDTAC) and the Metropolitan Development Policy Committee (MDPC) to review the criteria for the designation of Regional Activity Centers and Clusters. Develop updated data for the designated Regional Activity Centers and Clusters using the Round 8.0 Transportation Analysis Zone (TAZ)-level growth forecasts for the new, smaller, more refined TAZs. Prepare a series of maps with associated data tables and text depicting and describing the designated Regional Activity Centers and Clusters.
- Work with the members of the Cooperative Forecasting Subcommittee, the region's Planning Directors, the Baltimore Metropolitan Council, the Tri-County Council for Southern Maryland, the George Washington Regional Planning Commission and the Planning Directors of Fauquier County- VA, Clarke County-VA and Jefferson County-WV to develop updates to the Round 8 Cooperative Forecasts by jurisdiction and reconcile these updated local jurisdiction forecasts with the regional econometric benchmark projections.
- Work with the Cooperative Forecasting Subcommittee and the region's Planning Directors to develop updated Round 8 Transportation Analysis Zone (TAZ)-level growth forecasts.
- Update and maintain Cooperative Forecasting land activity databases that are used as input into TPB travel demand-forecasting model. Prepare updated Round 8 TAZ-level population, household, and employment forecasts for both COG member and non-member jurisdictions in the TPB Modeled Area.

- Work with the Cooperative Forecasting Subcommittee and the region's Planning Directors to assess the effects of significant transportation system changes on the Cooperative Forecasting land activity forecasts. Document key land use and transportation assumptions used in making updates to the Cooperative Forecasting land activity forecasts
- Respond to public comments on updated Round 8 forecasts and the Cooperative Forecasting process.
- Develop and publish useful economic, demographic and housing-related information products including the monthly Regional Economic Monitoring Reports (REMS) reports and the annual "Economic Trends in Metropolitan Washington" and "Commercial Development Indicators" reports.

**Oversight:** Technical Committee

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

**Schedule:** June 2011

## 4. DEVELOPMENT OF NETWORKS AND MODELS

### A. NETWORK DEVELOPMENT (\$769,700)

- The network development program serves to update the transportation system inputs to the regional travel demand model. The network updates reflect on-going modifications to the TIP and the CLRP. The specific forecast years for which networks are prepared and the number of network scenarios produced are normally linked to the needs of regional air quality planning requirements (i.e., the Air Quality Conformity Determination). FY 2011 network development efforts will focus on the development of highway and transit networks supporting the Version 2.3 travel model on the newly formulated 3,722 TAZ system. This work will be undertaken using new GIS-based procedures for developing and managing the TPB's highway and transit networks (i.e., the TPBMAN). The primary activities will consist of:
  - Updating the TPB's base-year (2010) transit network: Staff will refresh the base year transit network files to reflect the most current operating conditions. Route and scheduling information will be solicited from state, local and private service providers. Much of this information will be obtained via the Internet or in some type of electronic form. Base year highway updates or refinements will also be implemented as necessary. Highway toll rates will also be updated will as necessary.
  - Establishing forecast networks: A series of forecast year highway and transit networks will be prepared as required by the Cube/Voyager software and the Version 2.3 model. The future networks will be modified in accordance with TIP and CLRP updates submitted by the TPB members. During FY 2011, highway and transit networks are envisioned to include the years 2012, 2020, 2030, and 2040.
  - Continue implementation of improved methods: There are several areas where network development can be better facilitated:
    - Linkages between the Transportation Data Clearinghouse (TDC) and the TPBMAN can be improved. For example, traffic counts residing in the TDC should be easily transferrable onto highway links in the TPBMAN database. This capability does not currently exist.
    - Updates to the base year transit network are accomplished with a combination of manual and automated updates. Opportunities for improving the automation of the updating process needs to be continued.
    - Opportunities for updating network attributes using information from other geo-referenced databases will need to be sought. TPB is

considering the use of proprietary observed speed data on freeway and arterial facilities throughout the region. This information will need to be joined to links in the highway network in order to be used in model calibration efforts. Further, as highway network links have been conflated to NAVTEQ centerline alignments during FY 2010, there may be opportunities to transfer NAVTEQ street attributes to link attributes in the TPB's regional network.

**Oversight:** Travel Forecasting Subcommittee

**Products:** Series of updated highway and transit networks compliant with the Version 2.2 Travel Model and documentation of network development activities; and recommendations for improving the network development process.

**Schedule:** June 2011

**B. GIS TECHNICAL SUPPORT (\$548,800)**

- Provide data and technical support to staff using the COG/TPB GIS for development and distribution of data and information developed by the TPB planning activities, including Regional Studies, the CLRP, the TIP, Congestion Monitoring and Analysis, Cooperative Forecasting, Regional Transportation Data Clearinghouse, Network and Models Development, and Bicycle Planning.
- Provide ongoing maintenance and support of enhanced GIS-based transportation network management and editing tools and TPBMAN geodatabase.
- Enhance GIS-based transportation network management and editing tools based on user experience gained from using the newly developed network editing tools developed in FY 2010.
- Enhance the COG/TPB GIS Spatial Data Library with updated transportation and non-transportation features as these data become available.
- Add additional transportation attribute data, land use features and imagery data to the COG/TPB GIS Spatial Data Library.
- Update GIS Spatial Data Library documentation, GIS User Guides and technical documentation of various GIS software applications as required.
- Create an intranet-based GIS Project Information Center that lists and describes DTP GIS databases and applications currently being developed, as well as those that are currently available.

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

**Oversight:** Technical Committee

**Products:** Updated GIS software, databases, User documentation, Training materials, Support and enhancement of GIS procedures to develop and manage transportation networks.

**Schedule:** June 2011

C. MODELS DEVELOPMENT (\$1,071,200)

During FY 2009, a nested-logit mode choice model and a revised truck model were incorporated into the Version 2.3 travel model on the 2,191-TAZ zone system. With the release of the 2007/2008 Household Travel Survey and the new 3,722-TAZ zone system, it was decided to re-calibrate and re-validate the Version 2.3 travel model on the new zone system. During FY 2010, this re-calibration process began, with the effort focusing on preparatory work needed to develop calibration files, including collection and cleaning of observed data, e.g., 2007 HTS, 2007 WMATA rail survey, 2008 bus survey, year-2007 traffic counts, year-2007 transit boardings and alightings. Other activities conducted in FY 2010 included: 1) beginning the calibration of the model; 2) getting familiar with the new geodatabase and application (TPBMAN) to edit and maintain travel model networks; and 3) obtaining observed travel time data on freeways (collected by INRIX) and performing initial analyses of the data. In FY 2011, work will continue in the areas of model calibration, validation, and testing, with the goal of having a re-calibrated, re-validated Version 2.3 travel model on the new zone system ready by November 2010. For FY 2011, the following work program elements will be undertaken in the areas of data collection, models development, and maintenance activities:

- Data collection, cleaning, and analysis: Support the analysis of INRIX-supplied travel speed data and use this information to support the Version 2.3 model calibration and validation. Recommendations from the TPB's scan of best modeling practice may include other data collection efforts for TPB staff to consider.

- Short-term models development: Support the Version 2.2 travel model as the TPB's production model until the Version 2.3 model is completed for production use. Complete the Version 2.3 travel development effort on the 3,700 zone area system. This will include:
  - The analysis and refinement of the networks produced by the new TPBMAN-based network development procedures
  - Model sensitivity testing with the Round 8.0 Cooperative Land Activity Forecasts.
  - The adaption of existing non-modeled travel markets (airport trips, external and through trips, visitor trips, etc.) to the 3,700 TAZ area system
  - Work toward combining the Version 2.3 model outputs with the EPA mandated MOVES model, in accordance with federal requirements.
  
- Maintenance activities: Promote guidance of the model application through information sharing, documentation, and training
  - Staff the Travel Forecasting Subcommittee (TFS)
  - Keep abreast of new developments in travel demand forecasting, both short-term developments (such as for trip-based, four-step models) and long-term developments (such as ABMs and airport choice and ground access mode choice models). Activities will include: 1) Managing and supporting the consultant contract to perform a scan of best modeling practice; 2) Continuing participation on a national MPO panel, the AMPO Travel Modeling Work Group, established to recommend practices in travel demand modeling; 3) Participating in relevant organizations and activities, such as the Transportation Research Board (TRB), the Travel Modeling Improvement Program (TMIP), the Federal Transit Administration (FTA) guidelines on modeling for New Starts, the Institute of Transportation Engineers (ITE), Citilabs and other vendors of travel demand forecasting software.
  - Support computer software and hardware used to do travel demand forecasting
  - Provide support for data requests

- Provide liaison to planning studies undertaken by TPB-member agencies

**Oversight:** Travel Forecasting Subcommittee

**Products:** Updated travel models; documentation of models development activities; and recommendations for continued updating of the travel demand modeling process.

**Schedule:** June 2011

D. SOFTWARE SUPPORT (\$ 178,900)

- Support execution of CUBE / TP+ software and migration to CUBE / Voyager in running TPB travel demand forecasting applications.
- Support execution of the Mobile6.2 Mobile Source Emissions Factor Model, the formal release version of EPA's Motor Vehicle Emissions Simulator (MOVES2010) model, and supporting software.
- Train DTP staff in application of CUBE/ TP+, CUBE / Voyager, Mobile6.2, MOVES2010, and supporting software.
- Monitor development and application of travel demand model sets in use in corridor studies and at other MPOs, including travel demand forecasting software packages operating under Microsoft Windows and other systems.
- Monitor the performance of DTP desktop and laptop microcomputer hardware and software and make upgrades as appropriate.
- Coordinate with the COG Office of Technology Programs and Services (OTPS) staff in this task and in applications under the Microsoft Windows operating system.
- Maintain the operation of data storage systems for the back-up, archiving and retrieval of primary regional and project planning data files.
- Support development and execution of applications of micro simulation software as appropriate.

**Oversight:** Technical Committee.

**Products:** Operational travel demand forecasting process plus operational Mobile6.2 and MOVES2010 Models; File transfer, storage and retrieval processes; DTP staff training in CUBE/ TP+, CUBE / Voyager, and MOVES2010 systems; and Microcomputer hardware to support CUBE/ TP+, CUBE / Voyager,



MOVES2010, and other operations.

**Schedule:** June 2011

## 5. TRAVEL MONITORING

### A. CORDON COUNTS (\$250,800)

- Data collection was completed for the Regional HOV Monitoring Project during FY2010
- During fall of FY2011, staff will process data collected during FY2010 and prepare a report documenting the procedures and results of this project.
- Report will include information on vehicle volumes by time of day, vehicle classification, auto occupancy, transit passenger volumes, and results of travel time runs.

**Oversight:** Travel Forecasting Subcommittee

**Products:** Report on the results of the Spring 2010 Regional HOV Monitoring Project

**Schedule:** January 2011

### B. CONGESTION MONITORING AND ANALYSIS (\$350,000)

- Conduct the final year in the three cycle of arterial highway travel time/speed data collection on the enhanced set of routes in the region during the off-peak and PM peak period. Analyze the data, and prepare a comprehensive report for all facilities in the three year cycle, documenting the findings including changes to the performance of the routes over time (seen in previous cycles of data collection).
- During Spring 2011, with consultant assistance, collect AM and PM peak period data on the freeway system using an aerial survey. The data analysis and findings will be published in FY 2012.

**Oversight:** Travel Forecasting Subcommittee

**Products:** FY 2011 Arterial Highway System Performance Report;  
Electronic files of Spring 2011 freeway survey data

**Schedule:** June 2011

C. TRAVEL SURVEYS AND ANALYSIS

Household Travel Survey (\$456,300)

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

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

**Oversight:** Travel Forecasting Subcommittee

**Product:** Household Travel Survey Analyses, Information Reports and Technical Memorandum, Maintenance of Travel Survey Data and Documentation.

**Schedule:** June 2011

D. REGIONAL TRANSPORTATION DATA CLEARINGHOUSE (\$317,900)

- Update Clearinghouse data files with FY09-10 highway and transit network data.
- Update Clearinghouse traffic volume data with AADT and AAWDT volume estimates, hourly directional traffic volume counts and vehicle classification counts received from state DOTs and participating local jurisdiction agencies.
- Update Clearinghouse transit ridership data with data received from WMATA, PRTC, VRE, MTA and local transit agencies including the Ride-On, The Bus,

ART, DASH and the Fairfax Connector.

- Add newly collected and processed freeway and arterial road speed and level of service (LOS) data to the Regional Transportation Data Clearinghouse network.
- Add updated Cooperative Forecasting data to the Clearinghouse by TAZ.
- Update Regional Clearinghouse user manuals and documentation.
- Create a web-based application to display Regional Transportation Clearinghouse highway link AADT and AAWDT traffic volumes on satellite/aerial photography imagery with zooming user interface.
- Create a prototype ArcGIS server-based application to distribute Regional Transportation Clearinghouse Data to TPB participating agencies via a lightweight web browser application.

**Oversight:** Technical Committee

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

**Schedule:** June 2011

## **6. TECHNICAL ASSISTANCE (\$1,572,700)**

The funding level allocated to technical assistance is 15 percent of the total new FY 2010 funding in the basic work program. The funding level for each state is 13.5 percent of the total new FTA and FHWA MPO planning funding provided by each state. The funding level for WMATA is 8 percent of the total new FTA funding. The specific activities and levels of effort are developed through consultation between each state and WMATA representatives and DTP staff.