

# National Capital Region Transportation Planning Board

777 North Capitol Street, N.E., Suite 300, Washington, D.C. 20002-4290 (202) 962-3310 Fax: (202) 962-3202

**Item 4**

## **M E M O R A N D U M**

January 6, 2011

**TO:** Technical Committee

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

**SUBJECT:** Preliminary Budget and Outline for FY 2012 Unified Planning Work Program (UPWP)

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A preliminary FY 2012 budget estimate for the UPWP, the work activity funding changes compared to FY 2011 levels, and an outline of the proposed work activities for FY 2012 are attached.

The budget for the FY 2012 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 Federal FY 2011 USDOT budget. In late December, Congress approved a continuation of the USDOT budget levels in SAFETEA-LU to March 4, 2011. To date, I have made the assumption that the FY 2012 funding allocations to be provided by the DOTs will be the same as the current FY 2011 levels. The estimated funding is shown on the next page. In addition, the budget estimate assumes the level of unobligated funds from FY 2010 will be \$1,120,700 the same as the unspent funds from FY 2009.

The preliminary estimated total budget excluding carryover funds is \$12,060,500, which is the same as the current total FY 2011 budget as amended December 15, 2010. The **basic work program budget is \$10,390,300** without carryover funds, which is the same as the corresponding current FY 2011 budget level.

The **technical assistance program budget is \$1,670,200**, unchanged from the current FY 2011 budget level. Technical assistance program budgets are based upon percentages of the estimated FY 2012 funding allocations which are unchanged from FY 2011.

<b>ESTIMATED PRELIMINARY FUNDING FOR FY 2012 UPWP DRAFT 1/6/11</b>				
	<b>FTA</b>	<b>FHWA</b>	<b>New FY 2012</b>	<b>Current FY 2011</b>
<b>DDOT</b>				
New 2012	\$441,100 (0%) <sup>a</sup>	\$1,899,800 (0%) <sup>a</sup>	\$2,340,900	\$2,340,900
Unob.2010				
<b>MDOT</b>				
New 2012	1,077,700 (0%) <sup>a</sup>	3,708,500 (0%) <sup>a</sup>	4,786,200	4,786,200
Unob.2010				
<b>VDOT</b>				
New 2012	912,200 (0%) <sup>a</sup>	2,900,400 (0%) <sup>a</sup>	3,812,600	3,812,600
Unob.2010				
TOTAL New 2012	2,431,100	8,508,700	\$10,939,800	\$10,939,800
TOTAL Unob.2010			\$1,120,700	\$1,120,700
<b>FY 2011 Grand Total</b>			\$12,060,500	\$12,060,500

<sup>a</sup> Percent change from new FY 2011 funding

**Technical Assistance Totals:**

- 1) For DC, MD, VA: 13.5% of total new allocation (\$316,000 + \$646,100 + \$513,600 = \$1,475,700)
- 2) For WMATA: 8% of total new FTA funding (\$2,430,900) = \$194,500
- 3) Total Technical Assistance is **\$1,670,200 or 15.3** percent of total new funding of \$10,939,800 for FY 2012.

## TPB FY 2012 WORK PROGRAM FUNDING CHANGES FROM FY 2011

Work Activity	FY 2012	FY 2011	FY12-FY11	% 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	240,600	0	0
C. Constrained Long-Range Plan	588,400	588,400	0	0
D. Financial Plan	64,000	64,000	0	0
E. Public Participation	371,900	371,900	0	0
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	2,281,100	0	0
<b>2. COORDINATION and PROGRAMS</b>				
A. Congestion Management Process (CMP)	205,000	205,000	0	0
B. Management, Operations, and ITS Planning	340,300	340,300	0	0
C. Emergency Preparedness Planning	75,400	75,400	0	0
D. Transportation Safety Planning	125,000	125,000	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	194,800	-80,000	-41
H. Freight Planning	150,000	150,000	0	0
I. MATOC Program Planning & Support	120,000	120,000	0	0
Subtotal	1,339,200	1,419,200	-80,000	-6
<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	566,300	566,300	0	0
D. Coord Coop Forecasting & Transp Planning	806,800	726,800	80,000	11
Subtotal	2,576,400	2,496,400	80,000	3
<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	250,800	0	0
B. Congestion Monitoring and Analysis	350,000	350,000	0	0
C. Travel Surveys and Analysis			0	
Household Travel Survey	706,300	706,300	0	0
D. Regional Trans Data Clearinghouse	317,900	317,900	0	0
Subtotal	1,625,000	1,625,000	0	0
<b>Core Program Total (I to V)</b>	<b>10,390,300</b>	<b>10,390,300</b>	0	0
<b>6. TECHNICAL ASSISTANCE</b>				
A. District of Columbia	316,000	316,000	0	
B. Maryland	646,100	646,100	0	
C. Virginia	513,600	513,600	0	
D. WMATA	194,500	194,500	0	
Subtotal	<b>1,670,200</b>	<b>1,670,200</b>	0	
<b>Total, Basic Program</b>	<b>12,060,500</b>	<b>12,060,500</b>	0	0
<b>7. CONTINUOUS AIRPORT SYSTEM PLANNING</b>				
<b>GRAND TOTAL</b>	<b>12,060,500</b>	<b>12,060,500</b>		

## PROPOSED WORK ACTIVITIES FOR FY 2012

(July 1, 2011 to June 30, 2012)

### 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 2013, amendments to FY 2012 UPWP, monthly progress reports and state invoice information, federal grant materials

**Schedule:** Draft: January 2012 Final: March 2012

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

- The FY2011-2016 TIP and 2010 CLRP were adopted in November 2010
- The TIP will be updated every two years and amended each year. The draft FY2011-2016 TIP amendments and 2011 CLRP will be prepared and reviewed between January and October 2011 with approval scheduled for November 2011.
- Drafts of the FY2013-2018 TIP and the 2012 CLRP will be prepared and reviewed between January and October 2012 with approval scheduled for November 2012.
- Enhance documentation of the current 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 plan and TIP amendments when they are released for public comment in October 2011.

- 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 2011-2016 TIP.

**Oversight:** Technical Committee

**Products:** FY2011-2016 TIP amendments, administrative modifications to the FY2011-2016 TIP,

**Schedule:** October 2011

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

As required by the final SAFETEA-LU planning regulations issued February 14, 2007, the major update of the CLRP was approved in 2010.

The following work activities for the 2011 CLRP are proposed:

- Document project submissions for 2011.
- 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
- Document the CLRP 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.

- The draft 2011 CLRP and FY2011-2016 TIP amendments will be prepared and reviewed between January and October 2011 with approval scheduled for November 2011.
- The draft 2012 CLRP and new FY2013-2016 TIP will be prepared and reviewed between January and October 2012 with approval scheduled for November 2012.

***Environmental Consultation***

- 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.
- Building on these on-going consultation efforts, explore what products and outcomes would be the most useful to facilitate the further integration of natural resource, land use, historic and cultural resource considerations into the long-range transportation planning process. Work activities include:
  - The creation an on-going forum for environmental and transportation planning coordination such as an Environmental Consultation Subcommittee or Task Force. Membership could include representatives from Environmental Resource agencies, State and D.C. Departments of Transportation (DOT's), local transportation agencies, jurisdictional land use planning agencies, and historic and cultural resource agencies. Meetings could be held quarterly;
  - Research new and/or innovative mitigation strategies and use this information to develop mitigation toolkit for DOT's and environmental resource agencies highlighting best practices in the region and beyond;
  - Continued development of regional natural and historic resource mapping, including areas for potential restoration that can be used to guide advanced mitigation efforts;

**Oversight:** Technical Committee

**Products:** draft 2011 plan and documentation  
Environmental Mitigation Toolkit

**Schedule:** October 2011 and February 2012  
June 2012

D. FINANCIAL PLAN (\$64,000)

- Review the results of the financial analysis for the 2010 CLRP for the use in preparing the draft 2012 CLRP.
- Update financial plan for the draft FY2013-2018 TIP.

**Oversight:** Technical Committee

**Products:** Financial inputs for draft 2012 CLRP and FY2013-2018 TIP

**Schedule:** January and June 2012

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.
- Development new material and tools to better explain to the public how the planning process works at the local, regional and state levels.
- Conduct at least one session 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 memo to the TPB with comments on the CLRP related to 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. Quarterly meetings, as requested by the Chair 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 2012  
Draft in TIP for Public Comment: June 2012

G. ANNUAL REPORT (\$80,100)

- This issue will describe the main activities completed in 2011 and the 2011 CLRP.
- Produce the monthly newsletter *TPB News*.

**Oversight:** Transportation Planning Board

**Product:** *Region* magazine and TPB News

**Schedule:** June 2012

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 2012:

- 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.
- Develop tools and activities to facilitate regional learning about TLC issues among TPB member jurisdictions.
- Organize at least one regional meeting to facilitate an exchange of information about lessons-learned from past TLC projects.
- 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: September 2011-June 2012

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) (\$205,000)

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). Additionally, this task includes procurement and analysis of transportation systems condition data archives from private sector sources. A major source of this information is the speed data archive from the I-95 Corridor Coalition/INRIX, Inc. Vehicle Probe Project. As an affiliate member of the I-95 Corridor Coalition, TPB has gratis access to data archives on certain roadways in the region covered under the Coalition's Vehicle Probe Project. TPB also has gratis access to data from supplementary, expanded roadway coverage beyond the limited Coalition coverage, funded by the Maryland and Virginia Departments of Transportation. TPB will also undertake supplementary data purchases of private sector data for coverage (geographic and/or temporal) not otherwise available through the gratis sources.

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 four 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. An updated CMP Technical Report was published in FY2011; and a subsequent updated report will be published in FY 2012.
- A CMP Web page, updated on a periodic basis, will review recent information on congestion and incidents on the region's transportation system, with a "dashboard" of key performance indicators (subject to the availability of data).

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

**Products:** Updated CMP portions of the CLRP; 2012 CMP Technical Report; CMP Web page; 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 2.1, 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 (\$125,000)

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. Follow up on recommendations from the regional transportation safety data analysis tool scoping study completed in FY2011.
- 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; safety data tool technical analysis; 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.
- Provide the TPB an annual report on progress on implementing projects from the Regional Bicycle and Pedestrian Plan. Provide the public with information on the

status of bicycle and pedestrian facilities planning and construction in the Washington region.

- Compile bicycle and pedestrian project recommendations for the FY2013-2018 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).
- Advise on the implementation and potential expansion of the regional bike-sharing system, as well as advise on the marketing materials developed in FY 2011 aimed at developers for their consideration in the development approval process.
- 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.
- 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 2013-2018 TIP; maintenance of the regional bicycle and pedestrian plan on the TPB Web Site; annual progress report on projects from the Regional Bicycle and Pedestrian Plan; 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 Regional Bus Subcommittee is a forum for local and commuter bus, rail transit, and commuter rail operators and other agencies involved in bus operation and connecting transit services. The Subcommittee focuses on bus planning as well as regional transit issues, such as data sharing and technical projects.

The major topics to be addressed in FY 2012 include the following:

- Continued development of a priority list of regional projects to improve bus transit services.
- Development and publication of useful operations, customer, and financial data on regional bus services for TPB and public utilization.
- Coordination and evaluation of CLRP and TIP proposals and amendments with regard to bus transit service plan implementation.
- Provide 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, including for Bus Rapid Transit (BRT) projects, customer information, and other common issues.
- 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 (RTOG).
- 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 (AFA) 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 (\$114,800)

In 2009 the TPB adopted an Update to the Coordinated Human Service Transportation Plan for the National Capital Region ("Coordinated Plan"). A Coordinated Plan is required under the final USDOT planning regulations to guide funding decisions for the following three Federal Transit Administration (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 Coordinated Plan also establishes selection criteria for the competitive selection of JARC and New Freedom projects. The final regulations also require that the CLRP and TIP shall consider the design and delivery of non-emergency transportation services. The TPB became the designated recipient of the FTA's JARC and New Freedom programs in 2006 for the Washington DC-VA-MD Urbanized Area; each program provides approximately \$1 million in Federal funds annually to the Washington region. The goals of these programs are to improve transportation services for low-income individuals and people with disabilities.

The TPB established the Human Service Transportation Coordination Task Force ("Task Force") to develop and help implement the Coordinated Plan which must guide annual JARC and New Freedom project selections. The Task Force is comprised of human service and transportation agency representatives from each TPB jurisdiction as well as consumers and private providers. Each year, the Task Force establishes priorities for the annual solicitations and assists with outreach.

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 20012 JARC and New Freedom Solicitation

**Schedule:** June 2012

H. FREIGHT PLANNING (\$150,000)

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.
  - Follow up on recommendations from the Regional Freight Forum held in FY2011.
  - 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 2012 update of the Constrained Long Range Plan (CLRP). Compile a list of highlighted freight project recommendations for the FY2013-2018 Transportation Improvement Program (TIP).

- 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 local jurisdictions as well as 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:** Compilation of highlighted freight project recommendations for the FY 2013-2018 TIP; 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 operations are hosted and staffed by the Center for Advanced Transportation

Technology (CATT) at the University of Maryland. 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 CATT. Data provided through RITIS is in daily use by the region's major transportation operations centers.

MATOC operational activities are paid for by operations-eligible sources provided to CATT through the state departments of transportation and other sources. 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 2011 CLRP and FY 2011 - 2016 TIP amendments, 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 2012 CLRP update and the FY2013-2018 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 2011 CLRP and FY 2011 - 2016 TIP amendments Air Quality Conformity Assessment; Work Program for 2012 CLRP and FY2013 – 2018 TIP Conformity Assessment

**Schedule:** June 2012

#### 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 2012

C. REGIONAL STUDIES (\$566,300)

Regional Transportation Priorities Plan

In September 2010, the TPB Regional Priorities Plan Scoping Task Force was established to determine a scope and process for developing a regional transportation priorities plan that will enhance the implementation of regional priorities. The task force met in October and December 2010 and in February and April 2011. The TPB will approve the scope and process for developing the plan and the outline for a regional priorities plan document. It is anticipated that the task force will guide the plan development process which is scheduled for a two-year period, beginning in July 1, 2011 in FY 2012 with completion by July 1, 2013 the beginning of FY 2014.

By the end of FY 2011, the 2010 CLRP baseline will be compared to the TPB Vision goals to identify major regional challenges and an initial review of current regional priorities will be completed .

The following activities are proposed for FY 2012:

- Provide staff support for the TPB Regional Priorities Plan Task Force.
- Identify regional priorities for the future in 10-year increments based upon meeting the major regional challenges.
- Specify and evaluate with respect to the Vision goals an initial land use/transportation scenario that incorporates the identified priorities.
- Using the 2.3 Travel Demand model, analyze the benefits and costs of the scenario relative to the Vision goals.
- Specify and evaluate a variation or variations on this scenario that might improve its performance or increase its feasibility.
- Conduct outreach and public involvement activities to support the development of the new transportation priorities plan.
- Provide staff support for COG's FY 2012 Region Forward regional planning efforts.

**Oversight:** TPB Regional Priorities Plan Task Force

**Products:** Documentation of major regional challenges and regional priorities; comprehensive benefit/cost analysis of initial scenario

**Schedule:** Documentation of challenges - September 2011  
Documentation of regional priorities - November 2011  
Benefit/cost analysis of initial scenario and variations -  
June 2012

D. COORDINATION OF COOPERATIVE FORECASTING AND  
TRANSPORTATION PLANNING PROCESSES (\$806,800)

- 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 develop and map updated Regional Activity Centers and Clusters (Complete Communities) using the Round 8 Transportation Analysis Zone (TAZ)-level growth forecasts. Prepare maps and associated data tables for these updated Regional Activity Centers and Clusters (Complete Communities).
- **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 update 2010 base year TAZ-level household and population estimates using the results of the 2010 Decennial Census.**
- **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 update and enhance COG's regional employment base file for 2010. This effort will include working with federal, state and local agencies to obtain the best available small area employment data (TAZ-level) for the metropolitan Washington region. It will also include the examination and likely procurement of employment data from a private sector data provider.**
- 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 2012

## 4. DEVELOPMENT OF NETWORKS AND MODELS

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

Network development addresses the updating of transportation system inputs to the regional travel demand model to reflect regionally significant highway and transit elements in the CLRP as well as the six-year Transportation Improvement Program. The number of forecast year networks is subject to the requirements of air quality planning, i.e., the Air Quality Conformity Determination. During FY-2012, a new regional travel demand model (Version 2.3) will be used along with updated networks that have been revised over a more detailed (3,722) zone system. Consequently, network coding procedures and requirements have been revised to accommodate the new model. To facilitate network coding and management, a GIS system has been in development for the past several years. Refinements to the system will be ongoing during FY-2012.

- Update the TPB's base year (2011) transit network to the most current operating conditions in cooperation with the local transit providers in the Washington, D.C. region. These updates will be incorporated into forecast year networks developed subsequently.
- Prepare base and forecast year highway and transit networks in accordance with the latest TIP and CLRP elements and in accordance with Version 2.3 model requirements.
- In consultation with TPB's GIS and Models Development staff, further refine the TPB's existing GIS system which is used to facilitate network coding and network file management. The refinements will consist of: 1) documenting the existing database and network coding procedures that are currently being used, 2) implementing improvements to the database software, where feasible, on an "as needed" basis, and 3) investigating opportunities to merge data from other geographically referenced data onto the regional highway links (for example, bus routing data from local transit providers or INRIX highway speed data) in order to improve network accuracy or to aid in ongoing model validation activities

**Oversight:**

Travel Forecasting Subcommittee

**Products:**

A series of highway and transit networks reflecting the latest TIP and Plan and compliant with the Version 2.3 travel model, with documentation. Technical documentation describing the TPB's existing GIS-based network coding practices and procedures.

**Schedule:**

June 2012

**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.
- 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.
- Maintain and update 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 2012

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

During FY 2011, TPB staff culminated a two-year effort to calibrate the Version 2.3 travel model on the newly developed 3,722-TAZ area system using the 2007/08 COG/TPB Household Travel Survey and several other data sources. During FY-2012, models development activities will include the ongoing refinement of the Version 2.3 model in cooperation with the TPB's Travel Forecasting Subcommittee (TFS). The refinement will include possible updates to existing modeling steps, procedures to facilitate the development of modeling inputs, and the collection and analysis of new data. Staff will also support the application of Version 2.3 for regularly scheduled regional air quality planning purposes. This support will include training in the use of the Version 2.3 travel model. The models development program will include the services of a consultant for conducting focused research on modeling practices across the U.S., and to provide advice on specific modeling methods. For FY 2012, the following work program elements will be undertaken in the areas of data collection, models development, and maintenance activities:

- Depending on the findings from the scan of best modeling practice, there may be new data collection efforts that need to be planned or carried out. Examples could include: 1) Continued analysis of travel time data on freeways (from INRIX), with possible use in model calibration and validation; 2) Gathering data about special markets in the region to adjust trip rates in the model.
- Continue with sensitivity testing with the Version 2.3 model and possibly implement ongoing refinements to the Version 2.3 mode in cooperation with the TFS. Support the production use of the Version 2.3 model for regional studies and possibly for project planning needs.
- Continue the ongoing use of INRIX highway speed data for informing parametric changes to the Version 2.3 model.
- Supporting the integration of the travel demand model with the new EPA MOVES model for estimating mobile emissions.
- Investigate the development of an airport model that includes a mode choice model component. The existing airport access forecasting process addresses auto driver travel only.
- Investigate the availability of data that could potentially be used for modeling a home-based university and/or home-based school trip purpose.
- Begin an evaluation of the exogenously generated visitor/tourist auto driver trip data, to see if the data fully account for trips made by visitors within the region. If enhanced funding were to become available, begin planning a visitor travel survey and a special events survey, for use in developing a visitor model and a special events model.

- Representation of fares in the model: Consider developing an explicit representation of transit fares by provider and mode.
- Investigate statistically estimating the time and cost coefficients used in the mode choice model.
- Consider establishing an explicit relationship between bus speed and highway speed.
- Maintenance activities: Promoting 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
  - Training users in the use of the Version 2.3 travel model
  - Provide support for data requests

<b>Oversight:</b>	Travel Forecasting Subcommittee
<b>Products:</b>	Updated travel models; documentation of models development activities; and recommendations for continued updating of the travel demand modeling process.
<b>Schedule:</b>	June 2012

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 2012

## 5. TRAVEL MONITORING

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

- In the spring of 2012 staff will conduct the Central Employment Area Cordon Count.

**Oversight:** Travel Forecasting Subcommittee

**Products:** Data Files from the Spring 2012 Central Employment Area Cordon Count for processing to produce a report in FY 2013

**Schedule:** June 2012 (Data Files; Report in FY 2013)

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

- Analyze and publish the AM and PM peak period data on the freeway system from the aerial survey conducted in FY2011.
- Undertake travel time/speed data collection and/or compilation, as well as data analysis, covering arterial highways in the region, using the best cost-effective combination of technologies and means available.
- Coordinate freeway and arterial congestion monitoring and analysis with the Congestion Management Process (Item 2.A.).

**Oversight:** Travel Forecasting Subcommittee; Management, Operations, and Intelligent Transportation Systems Technical Subcommittee

**Products:** Arterial Highway System Performance Report; Aerial freeway survey data report

**Schedule:** June 2012

### C. TRAVEL SURVEYS AND ANALYSIS

#### Household Travel Survey (\$706,300)

- Provide data, documentation, and technical support to users of 2007/2008 Regional Household Travel Survey and 2011 Geographically-Focused Household Travel Surveys. Update user documentation as required.

- Continue to process and mine data collected in the 2007/2008 Regional Household Travel Survey and 2011 Geographically-Focused Household Travel Surveys 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 region.
- Collect household travel survey data for 2,400 households in six 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.

**Oversight:** Travel Forecasting Subcommittee

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

**Schedule:** June 2012

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

- Update Clearinghouse data files with FY10-11 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.
- Display Clearinghouse volume, speed and LOS data on a web-based application that utilizes satellite/aerial photography imagery with zooming user interface.

- Filed test an 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 2012

## **6. TECHNICAL ASSISTANCE (\$1,670,200)**

The funding level allocated to technical assistance is 15 percent of the total new FY 2012 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.