National Capital Region Transportation Planning Board

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Technical Committee Item 6

MEMORANDUM

January 8, 2013

TO: Technical Committee

FROM: Gerald Miller

Director, Program Coordination

Department of Transportation Planning

SUBJECT: Preliminary Budget and Outline for FY 2014 Unified Planning Work

Program (UPWP)

A preliminary FY 2014 budget estimate for the UPWP, the work activity funding changes compared to FY 2013 levels, and an outline of the proposed work activities for FY 2014 are attached.

The budget for the FY 2014 UPWP basic work program is based upon MPO planning funding allocations provided by the three DOTs of FTA Section 5303 and FHWA Section 112 PL funding that is determined by the FY 2013 USDOT budget. Due to the current uncertainty regarding Congressional action on the final FY 2013 USDOT authorization and budget levels, we assume that the FY 2014 funding allocations to be provided by the DOTs will be at the current FY 2013 levels. The estimated funding is shown on the next page. In addition, the budget estimate assumes the level of unobligated funds from FY 2012 will be \$1,428,000, which is the same as from FY 2011.

The preliminary estimated total budget excluding carryover funds is \$12,019,900, which is the same as the current total FY 2013 budget as amended November 28, 2012. The **basic work program budget is \$10,388,800** without carryover funds, which is the same as the corresponding current FY 2013 budget level.

The **technical assistance program budget is \$1,631,100**, unchanged from the current FY 2013 budget level. Technical assistance program budgets are based upon percentages of the estimated FY 2014 funding allocations, which are unchanged from FY 2013.

ESTIMATED PRELIMINARY FUNDING FOR FY 2014 UPWP DRAFT 1/8/13						
	FTA	FHWA	New FY 2014	Current FY 2013		
DDOT						
New 2014	\$468,200	\$1,773,600	\$2,241,800	\$2,241,800		
Unob.2012						
MDOT						
New 2014	1,134,400	3,295,300	4,429,700	4,429,700		
Unob.2012						
VDOT						
New 2014	912,200	3,007,900	3,920,100	3,920,100		
Unob.2012						
TOTAL New 2014	2,514,800	8,076,700	\$10,591,600	\$10,591,600		
TOTAL Unob.2012			1,428,300	1,428,300		
FY 2014 Grand Total \$12,019,900			\$12,019,900			

Technical Assistance Totals:

- 1) For DC, MD, VA: 13.5% of total new allocation (\$302,600 + \$598,000 + \$529,200 = \$1,429,800)
- 2) For WMATA: 8% of total new FTA funding (\$2,514,800) = \$201,200
- Total Technical Assistance is **\$1,631,000 or 15.3** percent of total new funding of \$10,591,600 for FY 2014.

DRAFT TPB FY 2014 WORK PROGRAM FUNDING CHANGES FROM FY 2013

Work Activity	FY 2014	FY 2013	FY14-FY13	% Change
1. PLAN SUPPORT				
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	421,900	421,900	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	450,600	450,600	0	0
Subtotal	2,329,600	2,329,600	0	0
2. COORDINATION and PROGRAMS	, ,	, ,		
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	114,800	0	0
H. Freight Planning	150,000	150,000	0	0
I. MATOC Program Planning & Support	120,000	120,000	0	0
Subtotal	1,339,200	1,339,200	0	0
3. FORECASTING APPLICATIONS	.,000,200	.,000,200		
A. Air Quality Conformity	563,200	563,200	0	0
B. Mobile Emissions Analysis	640,100	640,100	0	0
C. Regional Studies	516,300	516,300	0	0
D. Coord Coop Forecasting & Transp Planning	806,800	806,800	0	0
Subtotal	2,526,400	2,526,400	0	0
4. DEVELOPMENT OF NETWORKS/MODELS	2,020,100	2,020,100	-	
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			0
5. TRAVEL MONITORING	_,,,,,,,,,	_,000,000	•	
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
Core Program Total (I to V)	10,388,800		0	0
6. TECHNICAL ASSISTANCE	10,000,000	10,000,000		-
A. District of Columbia	302,600	302,600	0	
B. Maryland	598,000	598,000	0	
C. Virginia	529,200	529,200	0	
D. WMATA	201,200	201,200	0	
Subtotal	1,631,000	1,631,000	0	
Total, Basic Program	12,019,800	12,019,800	0	0
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GRAND TOTAL	12,019,800	12,019,800	0	
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PROPOSED WORK ACTIVITIES FOR FY 2014

(July 1, 2013 to June 30, 2014)

1. PLAN SUPPORT

A. <u>UNIFIED PLANNING WORK PROGRAM</u> (\$70,700)

- UPWP will be developed to comply with the new metropolitan planning requirements in the Moving Ahead for Progress in the 21st Century (MAP-21) Act.
- 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: TPB Technical Committee

Products: UPWP for FY 2015, amendments to FY 2014 UPWP,

monthly progress reports and state invoice

information, federal grant materials

Schedule: Draft: January 2014 Final: March 2014

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

New Performance Management

MAP-21 calls for MPOs, states, and public transportation providers to establish and use a performance-based approach to transportation decision making to support seven national goals. The USDOT must establish performance measures related to seven areas by April 1, 2014. The states then have a year (April 1, 2015) to establish performance targets in support of those measures; and the MPO subsequently has 180 days (October 1,2015) to establish performance targets coordinated with those of the states and public transportation providers. After these targets are set, the CLRP and TIP are required to include a description of the performance measures and targets used in assessing the performance of the transportation system. The CLRP will also have to include a system performance report evaluating the condition and performance of the transportation system with respect to the established targets. The TIP is also required to include a description of the anticipated effect of the TIP toward achieving the performance targets set in the CLRP.

 Once the USDOT has established performance measures for the seven areas, TPB staff will coordinate with DDOT, MDOT and VDOT staff on their setting of the state performance targets in support of the measures. States may set different targets for urbanized and rural areas. TPB staff will coordinate with the DOT efforts to ensure consistent state measures that are relevant for the TPB planning area. TPB staff will also coordinate with the DOT staffs to develop the specific performance targets in relation to the applicable performance measures for the TPB planning area. Similarly, TPB staff will coordinate with WMATA and other public transportation providers on their setting of performance targets for USDOT established performance measures.

- The 2014 CLRP and new TIP will include a description of the performance measures and targets under development or to be used in assessing the performance of the transportation system. Once the targets are developed in coordination with the State DOTs and public transportation providers, the CLRP will also include a system performance report evaluating the condition and performance of the transportation system with respect to the established targets. The TIP also will include a description of the anticipated effect of the TIP toward achieving the performance targets set in the CLRP.
- The TIP will be updated every two years and amended each year. The FY 2013-2018 TIP and 2012 CLRP were approved in July 2012.
- Drafts of the 2013 CLRP and FY 2013-2018 TIP amendments will be prepared and reviewed between January and June 2013 with approval scheduled for July 2013.
- The draft 2014 CLRP and FY 2015-2020 TIP will be prepared and reviewed between January and May 2014 with approval scheduled for July 2014.
- Documentation of the current TIP will be enhanced with additional analysis as a part of the CLRP/TIP brochure and the CLRP web site.
- The guide to the TIP produced in early 2013 will be updated.
- Public access to TIP project data will be improved with an online searchable database.
- The geographic information system linked database of TIP and CLRP project data and air quality conformity information will be improved to facilitate updating and reporting.
- 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.
- Amendments and administrative modifications to the FY 2013-2018 TIP will be processed.

Oversight: TPB Technical Committee

Products: draft FY2015-2020 TIP

updated guide to the TIP

Schedule: July 2014

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

Under SAFETEA-LU, the last major update of the CLRP was approved on November 17 2010. As required by MAP-21, the next major update of the CLRP will be in 2014.

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The following work activities for the 2014 CLRP are proposed:

- Document the CLRP via the website and written materials, including:
- Document project submissions for 2014.
- A description of the performance measures and targets under development or to be used in assessing the performance of the transportation system. Once the targets are developed in coordination with the State DOT's, the CLRP will include a system performance report evaluating the condition and performance of the

transportation system with respect to the established targets. The TIP also will include a description of the anticipated effect of the TIP toward achieving the performance targets set in the CLRP.

- An overview of the relationship between the transportation strategies and improvements and the development framework shown in the regional activity centers map.
- Evaluate the plan for disproportionally high and adverse effects on low-income and minority population groups.
- The 2014 CLRP and FY 2015-2020 TIP will be prepared and reviewed between January and June 2014 with approval scheduled for July 2014.
- 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.

Environmental Consultation

- Continue to consult with the federal, state and local agencies responsible for natural resources, wildlife, land management environmental protection, conservation and historic preservation as necessary in the District of Columbia, Maryland and Virginia on the discussion of potential environmental mitigation activities.
- To compare the CLRP to natural and historic resources, maps of transportation and historic resources will be updated with the latest available GIS data from the District and the States and forwarded to federal, state and local agencies for comments.

Climate Change Adaption

 Continue to monitor local, state and national practices for potential applicability to the region.

Oversight: TPB Technical Committee

Products: draft 2014 CLRP and documentation

Schedule: July 2014

D. FINANCIAL PLAN (\$64,000)

- In Spring 2013, the financial analysis for the 2010 CLRP was reviewed to ensure that it conforms with MAP-21 requirements. The analysis of the financial resources for the 2010 CLRP which covered the years 2011 to 2040 was updated in consultation with the state and local DOTs and public transportation operators to produce a draft analysis for the 2014 CLRP which will cover 2015 to 2040.
- In Fall 2013, in consultation with the state and local DOTs and public transportation operators, the draft financial analysis will be finalized with the estimated revenues reasonably expected to be available used for preparing the draft 2014 CLRP.
- Update financial plan for FY 2015-2020 TIP.

Oversight: Technical Committee

Products: Financial analysis for the draft 2014 CLRP and FY

2015-2020 TIP

Schedule: January 2014

E. <u>PUBLIC PARTICIPATION</u> (\$421,900)

The Participation Plan which was adopted in December 2008 will guide all public involvement activities to support the development of the TIP, the CLRP, the Regional Transportation Priorities Plan, and all other TPB planning activities.

Work activities include:

- Support implementation of the TPB Participation Plan.
- Provide public outreach support for the implementation of the Regional
 Transportation Priorities Plan. Through a variety of public outreach activities,
 citizens will discuss the benefits, desirability and feasibility of potential projects and
 plan components.
- Develop and conduct workshops or events, as needed, 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.
- Develop new written materials, tools and visualization techniques 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.
- Effectively use technology, including social media and other web-based tools, to spread information about regional transportation planning and engage the public in planning discussions and activities.
- 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.
- Conduct regular 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 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 2014

Draft TIP for Public Comment: June 2014

G. ANNUAL REPORT (\$80,100)

This issue will describe the main activities completed in 2013.

- Produce the monthly newsletter TPB News.
- Write and distribute the TPB Weekly Report, a web-based newsletter featuring a short article every week on a single topic of interest in regional transportation.

Oversight: Transportation Planning Board

Product: Region magazine, TPB News and TPB Weekly

Report

Schedule: June 2014

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 2014:

- Fund at least six technical assistance planning projects at a level between \$20,000 and \$60,000 each. Fund at least one project for between \$80,000 and \$100,000 to perform project design to achieve 30% completion.
- Fund one pilot technical assistance project at up to \$80,000 to complete
 preliminary engineering and conceptual design work, enabling one previous
 TLC technical assistance planning project or other member jurisdiction
 planning project to move towards construction-readiness.
- Conduct the selection process for small capital improvement projects using funding suballocated to the Washington metropolitan region through the state DOTs from the new MAP-21 Transportation Alternatives Program (TAP). Coordinate program implementation with the state DOTs.
- Maintain and update the TLC Regional Clearinghouse and website

- Develop tools and activities to facilitate regional learning about TLC issues among TPB member jurisdictions through the Regional Peer Exchange Network. 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 opportunities and 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 2013-June 2014

I. <u>DTP MANAGEMENT</u> (\$450,600)

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. <u>CONGESTION MANAGEMENT PROCESS (CMP)</u> (\$205,000)

- Undertake activities to address the federal requirement for a regional Congestion Management Process component of the metropolitan transportation planning process. Include information from regional Travel Monitoring programs (see Section 5 of the UPWP) addressing congestion and reliability, 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.).
- Identify and assess strategies that address congestion, in coordination with MOITS, the Metropolitan Area Transportation Operations Coordination Program (see also Task 2.I), the Air Quality Conformity program (see also Task 3.A.), and the regional Commuter Connections Program (see <u>www.commuterconnections.org</u>).
- Analyze transportation systems condition data archives from private sector sources, especially the speed data archive from the I-95 Corridor Coalition/INRIX, Inc. Vehicle Probe Project.
- Address MAP-21 requirements related to the CMP, including:
 - Analyze data from the above sources to support the "congestion reduction", "System Reliability" and other relevant National Goals for Performance Management.
 - Develop regional congestion performance measures based on the available data; engage in the federal rulemaking process on performance measures for congestion reduction and system reliability.
 - Coordinate with member states on the establishment of congestion reduction and system reliability targets.
- 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;
 - O 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 will be produced FY2014 (last published in 2012).

 National Capital Region Congestion Report, released quarterly on the TPB website, reviewing recent information on congestion and reliability on the region's transportation system and featured CMP strategies, with a "dashboard" of key performance indicators.

Oversight: Management, Operations, and Intelligent

Transportation Systems (MOITS) Technical

Subcommittee

Products: Updated CMP portions of the CLRP; CMP

Documentation Form; National Capital Region Congestion Report; FY2014 CMP Technical Report; documentation as necessary supporting MAP-21 requirements of the CMP; summaries, outreach materials, and white paper(s) on technical issues as

needed; supporting data sets

Schedule: Monthly

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

- Regional transportation systems management and operations are vital
 considerations for metropolitan transportation planning, and have been
 emphasized in MAP-21. Under this work task, TPB will address these as well as
 coordination and collaborative enhancement of transportation technology and
 operations in the region, with a key focus on non-recurring congestion due to
 incidents or other day-to-day factors. The MOITS program includes planning
 activities to support the following major topics:
 - MAP-21: Address MAP-21 requirements related to MOITS, including:
 - Compile and analyze data to support the "system reliability" National Goal for Performance Management
 - Monitor federal rulemaking on performance measures for system reliability
 - Coordinate with member states on the establishment of system reliability targets
 - ITS Data: The collection/compilation, processing, warehousing, and sharing of transportation systems usage and condition data from Intelligent Transportation Systems (ITS) sources
 - Regional Transportation Management: Particularly in conjunction with the Metropolitan Area Transportation Operations Coordination (MATOC)

- Program (see also Task 2.I.); support the MOITS Technical Subcommittee in its long-range planning advisory role for the MATOC Program
- Multi-modal Coordination: Examination of traffic and transit management interactions in daily operations
- Coordination of day-to-day transportation operations planning with emergency preparedness 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, in conjunction with MATOC's ongoing development of a regional construction coordination system
- Intelligent Transportation Systems (ITS) Architecture: Maintain the regional ITS architecture in accordance with federal law and regulations
- Traffic Signals: Assist member agencies in the exchange and coordination of interjurisdictional traffic signal operations information and activities; examine traffic signal systems and operations from the regional perspective, including in conjunction with emergency planning needs
- Climate Change Adaptation: Monitor local and national practices regarding transportation operational procedures to adapt to climate change effects. Review the COG Regional Climate Adaption Plan to identify transportation operations-related climate change adaptation activities for the region's transportation agencies to consider
- MOITS Strategies: Analysis of strategies designed to reduce congestion, reduce emissions, and/or better utilize the existing transportation system.
- 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
- Provide staff support to the MOITS Policy Task Force, MOITS Technical Subcommittee, MOITS Regional ITS Architecture Subcommittee, and MOITS Traffic Signals Subcommittee.

Oversight: Management, Operations, and Intelligent

Transportation Systems (MOITS) Technical 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; documentation as necessary supporting MAP-21

requirements of MOITS planning

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.

MAP-21 requires the metropolitan planning to address the security of the transportation system for motorized and nonmotorized users.

Major topics to be addressed under this task 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
 - o 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: Management, Operations, and Intelligent

Transportation Systems (MOITS) Technical

Subcommittee

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; documentation as necessary supporting MAP-21 requirements of transportation

emergency preparedness planning

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. MAP-21 requires metropolitan planning to increase the safety of the transportation system for motorized and nonmotorized users. 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. Coordination will be maintained with the regional Street Smart pedestrian and bicycle safety outreach campaign. 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

- Address MAP-21 requirements related to the CMP, including:
 - Compile fatality and injury data to support the "safety" National Goal for Performance Management.
 - o Engage in the federal rulemaking on performance measures for safety.
 - Coordinate with member states on the establishment of safety targets.
- 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; documentation as necessary supporting MAP-21 requirements of transportation safety

planning

Schedule: Quarterly

E. <u>BICYCLE AND PEDESTRIAN PLANNING</u> (\$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.
- Complete a major update of the Regional Bicycle and Pedestrian Plan.
- 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.
- Monitor regional Complete Streets and Green Streets activities.

- Compile bicycle and pedestrian project recommendations for the 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 bikesharing system and associated marketing materials.
- 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

TIP; completion of a new regional bicycle and pedestrian plan; 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 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 2014 include the following:

- Continued refinement of a priority list of regional projects to improve bus transit services.
- Provide a forum for discussion of the development of the performance measures and selection of performance targets required under MAP-21, in order to coordinate with relevant providers of public transportation to ensure consistency to the maximum extent practicable.
- 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 MATOC Transit Task Force.
- 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. <u>HUMAN SERVICE TRANSPORTATION COORDINATION</u> (\$114,800)

Under the final USDOT planning requirements for SAFETEA-LU, a Coordinated Plan was required to guide funding decisions for 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). In 2009, the TPB adopted an Update to the Coordinated Human Service Transportation Plan for the National Capital Region ("Coordinated Plan"). The TPB became the designated recipient of the SAFETEA-LU's JARC and New Freedom programs in 2006 for the Washington

MAP-21 eliminated the JARC program and consolidated the New Freedom and the Section 5310 Elderly and Individuals with Disabilities Program into a new program "Section 5310 Enhanced Mobility of Seniors and Individuals with Disabilities". A Joint Designated Recipient arrangement between the TPB, the D.C. Department of Transportation (DDOT), the Maryland Transit Administration (MTA), and the Virginia Department of Rail and Public Transportation (DRPT) was finalized in FY2013. Under the Joint Designated Recipient arrangement, the TPB is responsible for the federally required Coordinated Plan, project solicitation and selection. DDOT, DRPT and MTA receive the funds directly from the FTA and administer the projects in their jurisdiction.

The TPB established the Human Service Transportation Coordination Task Force ("Task Force") to develop and help implement the Coordinated Plan which guided project selection for .JARC and New Freedom, and under MAP-21, and will guide project selection for the new Section 5310 Enhanced Mobility program. The Task Force is comprised of human service and transportation agency representatives from each TPB jurisdiction as well as consumers and private providers. 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 following work activities:
 - Review and update the Coordinated Plan as needed based on FTA guidance on MAP-21 for human service transportation coordination and the new Section 5310 Enhanced Mobility Program:
- The TPB will carry out the following activities as defined under the joint designated recipient arrangement between the TPB, DDOT, DRPT and MTA:
 - Finalize the regional application for the new Section 5310
 Enhanced Mobility Program in coordination with DDOT, DRTP and MTA;
 - Develop priority projects in preparation for the first solicitation for the Enhanced Mobility Program in the Washington DC-VA-MD Urbanized Area;
 - Conduct a project solicitation for the Enhanced Mobility Program; and
 - Convene a selection committee that will make grant funding recommendations for the Enhanced Mobility funding to the TPB in coordination with DDOT, DRTP and MTA.

 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: Updated Coordinated Plan, Project Priorities for 2014

Solicitation, and Project Recommendations for

Enhanced Mobility Funding

Schedule: June 2014

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 Subcommittee.
- Complete a new Regional Freight Plan.
- 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.
 - Continue following 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.
 - o Coordinate with federal, state, and local freight planning activities.
- Address MAP-21 requirements related to freight planning, including:
 - Analyze available freight movement data for the region including FHWA
 Freight Analysis Framework total tonnage and total value data for truck,
 rail, air cargo, and maritime movements in our region; this data may inform
 freight performance measures.
 - Monitor federal rulemaking on freight performance measures.
 - Coordinate with member states on the establishment of freight targets.

- Coordinate with TPB travel monitoring and forecasting activities on freight considerations.
- Examine truck safety issues.
- Develop ongoing freight component input to 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: New Regional Freight Plan; data compilation and

outreach materials as needed; white paper(s) on technical issues as needed; structured interviews and summarized results; documentation as necessary supporting MAP-21 requirements of freight planning

Schedule: Bimonthly

I. <u>METROPOLITAN AREA TRANSPORTATION OPERATIONS COORDINATION PROGRAM PLANNING</u> (\$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, funded outside the UPWP. The Metropolitan Area Transportation Operations Coordination (MATOC) Program'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. 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.

As a complement to the externally-funded operations activities of MATOC, this UPWP task is to provide ongoing TPB staff 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 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) Technical Subcommittee
- 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 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. <u>AIR QUALITY CONFORMITY</u> (\$563,200)

The FY2014 work program will include the following tasks:

- Completion of conformity analysis of the 2013 CLRP including addressing any emissions, mitigation needs, preparation of a final report to document procedures and results and to address comments and testimony received, and documenting and organizing all data files for use in subsequent regional and corridor/subarea planning studies.
- Preparation and execution of a work program for analysis of the 2014 CLRP & FY2015-20 TIP using the most up-to-date project inputs, planning assumptions, travel demand model, software and emissions factor model (MOVES); preparation of a draft report on the conformity assessment.
- TPB interagency and public consultation procedures; this includes funding for review and coordination work on the part of COG/DEP staff to reflect involvement by the Metropolitan Washington Air Quality Committee (MWAQC) in the public and interagency consultation process.
- Coordination of project solicitation, documentation, and emissions reduction analysis associated with CMAQ projects. Perform incidental air quality conformity reviews (non-systems level), as required throughout the year.
- Keeping abreast of federal requirements as they are updated throughout the year – on air quality conformity regulations and as guidance is issued; revision of work program elements as necessary.

Oversight: Technical Committee in consultation with

MWAQC committee

Products: Final report on 2013 CLRP Air Quality

Conformity Assessment; Work Program for 2015 CLRP & FY2015-20 TIP Conformity

Assessment

Schedule: June 2014

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

The FY2014 work program will include the following tasks:

- Development of input data for MOVES model runs for the 2014 CLRP & FY2015-20 TIP Air Quality Conformity Assessment, review and evaluation of MODEL outputs. Mobile emissions will also be developed for GHG pollutants using the MOVES model as deemed necessary in support of strategic planning scenarios as part of the TPB's Scenario Task Force activities and the COG Board's Climate, Energy, and Environment Policy Committee (CEEPC).
- Execution of sensitivity tests (as necessary) assessing the likely impacts of input data changes in MOVES model runs
- Measurement of the on road mobile emissions reductions attributable to current and future Transportation Emissions Reductions Measures (TERMs)
- Technical support to the Commuter Connections Program in support of developing implementation plans and evaluating current and future TERMs
- Funding for the COG Department of Environmental Programs (DEP) in support of its contributions towards provision of data from the state air agencies, and updates on federally-mandated issues related to mobile emissions as part of the annual air quality conformity determinations
- Response to requests for technical assistance by governmental entities and/or their consultants working on technical analyses or municipal transportation planning.
- Development of presentation material, rendering technical support and attendance of MWAQC and CEEPC meetings, policy discussions and public hearings.
- Monitoring of performance measures development associated with Air Quality as mandated by MAP-21

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 addressing

ozone and PM_{2.5} standards and climate change

requirements

Schedule: June 2014

C. REGIONAL STUDIES (\$516,300)

Regional Transportation Priorities Plan

In July 2011, the TPB approved a work scope and process for developing the TPB Regional Transportation Priorities Plan (RTPP). Development of the two-year plan began in July 1, 2011 in FY 2012 with completion anticipated by July 1, 2013, the beginning of FY 2014. Public involvement will be incorporated into each stage of the process. The priority planning process will use a set of performance measures to quantify progress toward regional goals and to identify the near and long term challenges and ten to fifteen potential actions or strategies needed to address them. The process includes three tasks:

Task 1: Reaffirm Regional Goals and Agree Upon Performance Measures

In January 2012, the final Interim Report on Task 1 was presented to the TPB. The report reaffirmed regional goals, and presented possible performance measures, challenges, and strategies for addressing regional challenges.

Five listening sessions with citizen groups and regional stakeholders were held in January and February 2012 to get feedback on the possible performance measures, goals challenges, and strategies for addressing regional challenges. Based upon this feedback from the listening sessions, simpler, less technical performance measures, challenges, and strategies were developed for use in a Citizens Forum on June 2. During the 5-hour forum, the RTPP materials were presented to a representative sample of the persons in region. The feedback from the forum provided lessons for effectively communicating with the broader public about regional challenges and obtaining useful feedback on transportation priorities.

Task 2: Determine Regional Challenges and Strategies to Address Them

In July 2012, the final Interim Report on Task 2 was presented to the TPB. This report documented the activities from January to June 2012 and presented a comprehensive and refined set of goals, challenges, and (near-term, ongoing, and long-term) strategies to be used in developing the plan. It also presented a proposed public involvement methodology to be utilized to obtain public input on the strategies for the plan.

Task 3: Develop Regional Priorities

In the first half of FY 2013, content was developed for inclusion in a web-based community engagement tool to survey a large representative sample of the public to obtain their assessments of the strategies. Statements of the regional transportation challenges were crafted together with clear descriptions of strategies for addressing them. For the on-going and long-term strategies, potential funding methods are part of the strategy. The web-based tool was developed and tested and content loaded. In the

second half of FY 2013, the web-based tool was utilized to survey a representative sample of about 600 persons to obtain their assessments about which strategies are the most feasible. In June 2014, the Interim Report on Task 3 on the ten to fifteen nearterm, ongoing, and long-term prioritized strategies will be prepared. The final report incorporating the three interim reports on the regional transportation priorities plan will be produced in early FY 2014.

In FY 2014, the following activities are proposed:

- For the highest prioritized near-term and on-going strategies, identify policy actions and potential projects to be incorporated into the 2014 CLRP. Assess project benefits and costs and identify existing funding sources for near-term implementation. For the unfunded on-going high priority strategies, identify detailed funding needs and develop specific funding proposals.
- For the highest prioritized long-term transportation and land use strategies, develop more details on new projects' costs and implementation phasing for comparison to the adopted CLRP baseline. Support a comprehensive assessment of regional benefits and costs using performance measures and proposed funding sources for long-term implementation.

Other FY 2014 activities include:

- Provision of staff support involving transportation for COG's FY 2014 Region Forward and Economy Forward regional planning and development efforts.
- Preparing project grant applications for promising US DOT grant opportunities, as approved by the TPB.

Oversight: TPB

Products: Final report on regional priorities plan- September 2013

Policy actions and potential projects to be incorporated

into the 2014 CLRP- December 2013

Report on comprehensive assessment of long-term

strategies – June 2014

Project grant applications for USDOT grant funding

programs as approved by TPB

- D. <u>COORDINATION OF COOPERATIVE FORECASTING AND TRANSPORTATION PLANNING PROCESSES</u> (\$806,800)
- Support 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) to update and refine the map of Regional Activity Centers and community investment typologies.
- Work with members of the Cooperative Forecasting Subcommittee to review and update the national and regional economic growth assumptions that are inputs into the top-down Cooperative Forecasting regional econometric model. Analyze changes in regional economic, demographic and housing trends drawing on the results from the Census American Communities Survey (ACS) and from other available federal, state, local data sources.
- Work with members of the Cooperative Forecasting Subcommittee to enhance and improve the quality of small area (TAZ-level) employment data. This effort will involve the tabulation and analysis of state ES-202 employment data files for DC, MD and VA and collaboration with the National Capital Planning Commission (NCPC) and the General Services Administration (GSA) to obtain site specific employment totals for federal employment sites in the region.
- 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 8.2 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 8.3 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 8.3 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 8.3 forecasts and the Cooperative Forecasting process.
- Develop and publish useful economic, demographic and housing-related

information products including the Regional Economic Monitoring Reports (REMS) reports, the annual "Commercial Development Indicators" and economic and demographic data tables to be included in the Region Forward Baseline analysis.

Oversight: Technical Committee

Products: Coordination of Land Use and Transportation

Planning in the Region, Review and Update of Regional Econometric Model, Update of Regional Planning Databases, Mapping of Updated Regional Activity Centers, Development and Distribution of

technical reports and information products.

Schedule: June 2014

4. DEVELOPMENT OF NETWORKS AND MODELS

A. <u>NETWORK DEVELOPMENT</u> (\$769,700)

This activity will involve the development of transportation network files which are primary inputs to the regional travel demand model and are used to reflect system improvements as specified in the evolving TIP and CLRP. During FY-2014, TPB staff will continue to develop network files that are compliant with the adopted Version 2.3 travel demand model (or its successor) to support regional and project planning needs. Staff will continue to serve network-related needs associated with long-term models development activities.

The following FY 2014 work activities are proposed:

- Update the TPB's base-year (2013) transit network to the most current operating conditions, in cooperation with the local transit providers in the Metropolitan Washington Region.
- Prepare base- and forecast-year highway and transit networks in accordance
 with the latest TIP and CLRP elements and in accordance with the Version 2.3
 travel demand model requirements. The future-year networks will be
 subsequently developed over the updated base-year network. Provide guidance
 in the development of network inputs to other technical staff members in the
 department.
- Support the development of networks for special regional planning studies, and for other developmental work in the Models Development program.
- Continue to support technical refinements in the models development, including a multi-year migration in the transit network building software, from TRNBUILD to Public Transport (PT).
- Support the ongoing analysis of newly collected INRIX speed data and traffic ground count data for the evaluation of the regional travel model performance. Network analysis may also include the review of federal functional facility-type designations that have been established as part of the 2010 CTPP.
- Respond to technical data requests associated with network-related information, including transit line files, station files, and shape files associated with features of the regional highway or transit network.
- Further refine the TPB's existing ArcGIS-based system which is used to facilitate network coding and network file management.

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. Technical documentation will be furnished.

Schedule: June 2014

B. <u>GIS TECHNICAL SUPPORT</u> (\$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 GIS-based transportation network management and editing tools.
- 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 of GIS procedures to develop and manage transportation

networks.

Schedule: June 2014

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

The Models Development activity functions to maintain and advance the TPB's travel forecasting methods and practices, which are critical to ongoing transportation planning work. Models development activities are formulated around the areas of data collection, short- and long-term models development, research, and maintenance. During FY 2014, staff will continue to support the application and refinement of the currently adopted Version 2.3 travel model to serve regional and project planning needs. Staff will also maintain a consultant-assisted effort to evaluate existing forecasting practices and to provide advisement on longer-term improvements. All staff-proposed improvements to the regional travel model will be implemented in consultation with the TPB Travel Forecasting Subcommittee (TFS).

The following FY 2014 work activities are proposed:

- Support the application of the Version 2.3 travel model for air quality planning
 work and other planning studies conducted by TPB staff. This will include the
 update of travel modeling inputs as necessary (external trips and other
 exogenous trip tables), investigating technical problems that might arise during
 the course of application, and documenting refinements to the model. Staff will
 also support local project planning work on an "as needed" basis.
- Continue the consultant-assisted effort to improve the TPB travel model and to conduct focused research on selected technical aspects of travel modeling in order to keep abreast of best practices.
- Staff will work with state and local transportation agencies in identify ways in which the regional model might be used to formulate performance-based measures as required in MAP-21.
- Continue the investigation of refinements to the Version 2.3 model, drawing from recommendations compiled from past consultant-generated reviews of the regional travel model. These refinements will focus most immediately on enhancements to the existing traffic assignment process, the mode choice model, including the use of the PT transit building platform for building transit networks. Staff will also continue efforts to reduce model computation times using distributed processing and high-end workstations.
- Continue with sensitivity testing with the Version 2.3 travel model, in consultation with the TFS.
- Supporting the integration of the travel demand model with the new EPA MOVES
 model for estimating mobile emissions. This work may involve the use of INRIX
 travel speed data as a way of refining speed-flow functions used to estimate
 hourly volumes and volume flows on network links.
- Continue the analysis of geographically focused household travel survey data

that TPB staff has collected during FY 2012. This will include a comparison of surveyed data against modeled data as a way of assessing model performance and reasonability.

- 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). Staff will also continue participation in the AMPO Travel Modeling Work Group, other 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).
- Staff will keep abreast of hardware and software needs and opportunities, including the potential use of "cloud computing" and the use of versioning software as an efficient way of tracking model code as it evolves with model refinements over time.
- Provide staff support for the TPB Travel Forecasting Subcommittee which is the forum charged with overseeing technical practices and improvements to the TPB travel forecasting process. This will include organizing meetings, preparing regular presentations, and coordinating with internal and external meeting participants on presentation items.

Oversight: Travel Forecasting Subcommittee

Products: Updated travel models; documentation of models

development activities; and recommendations for continued updating of the travel demand modeling

process, where applicable.

Schedule: June 2014

D. <u>SOFTWARE SUPPORT</u> (\$178,900)

The FY2014 work program will include the following tasks:

- Continued support on executing CUBE / TP+ runs and migration to CUBE / Voyager in running TPB travel demand forecasting applications.
- Continued support on MOVES emissions model runs and supporting software applications.
- Training of DTP staff in various applications of CUBE/ TP+, CUBE / Voyager and MOVES.
- Monitoring of the performance of DTP desktop and laptop microcomputer hardware

and software and make upgrades as appropriate.

- Coordination with the COG Office of Technology Programs and Services (OTPS) staff in this task and in applications under the Microsoft Windows operating system.
- Maintenance of the 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 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 2014

5. TRAVEL MONITORING

A. <u>CORDON COUNTS</u> (\$250,800)

- Process, tabulate and analyze the auto and transit count data collected in the spring 2013 Central Employment Area Cordon Count.
- Prepare a technical report summarizing the key findings from the 2013 Central Employment Area Cordon Count in relation to previous Central Employment Area Cordon Counts.
- Prepare a technical report appendix containing the detailed auto and transit count data for each 2013 Central Employment Area Cordon Count site.

Oversight: Travel Forecasting Subcommittee

Products: 2013 Central Employment Area Cordon Count

Technical Report and Appendix.

Schedule: June 2014

B. <u>CONGESTION MONITORING AND ANALYSIS</u> (\$350,000)

Congestion Monitoring supplies data for the Congestion Management Process (CMP - Item 2A) and Models Development (Item 4C). The program monitors congestion on both the freeway and the arterial highway systems, to understand both recurring and non-recurring congestion. Data collection methods include a combination of aerial surveys, field data collection, and/or data procured from private sources. Examples of emerging technologies include probe-based data and Bluetooth-based data. As part of three-year cycles since 1993, in spring 2014 an aerial survey of the region's freeway system will be conducted, results to be coordinated with other data sources under this task as well as the Congestion Management Process. Data collection methods and sources for both freeways and arterials will also be examined from the perspective of MAP-21 requirements, especially as related to the CMP.

Oversight: MOITS Technical Subcommittee

Products: Transportation systems monitoring data sets and

analysis reports from the aerial survey of the region's freeways; documentation as necessary supporting MAP-21 requirements of congestion monitoring and

analysis

Schedule: June 2014

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 2011-2013 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 2011-2013 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. Proposed focused geographic subareas for FY 2014 include (1) St Elizabeths/Anacostia (2) Fort Totten (3) Greenbelt (4) Kentlands (5) Tysons (6) Leesburg. The proposed geographic subareas will be reviewed and subject to refinement by the TPB Technical Committee and local jurisdiction planning staff.

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 2014

D. <u>REGIONAL TRANSPORTATION DATA CLEARINGHOUSE</u> (\$317,900)

- Update Clearinghouse data files with FY12-13 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.
- Enhance ArcGIS server-based application for distribution of 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 2014

6. TECHNICAL ASSISTANCE (\$1,699,000)

The funding level allocated to technical assistance is 15.3 percent of the total new FY 2013 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.