

**NATIONAL CAPITAL REGION
TRANSPORTATION PLANNING BOARD**

FY 2013

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

EXCERPT

DRAFT

February 9, 2012

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Figure 6: Visual Representation of UPWP Work Activity Relationships

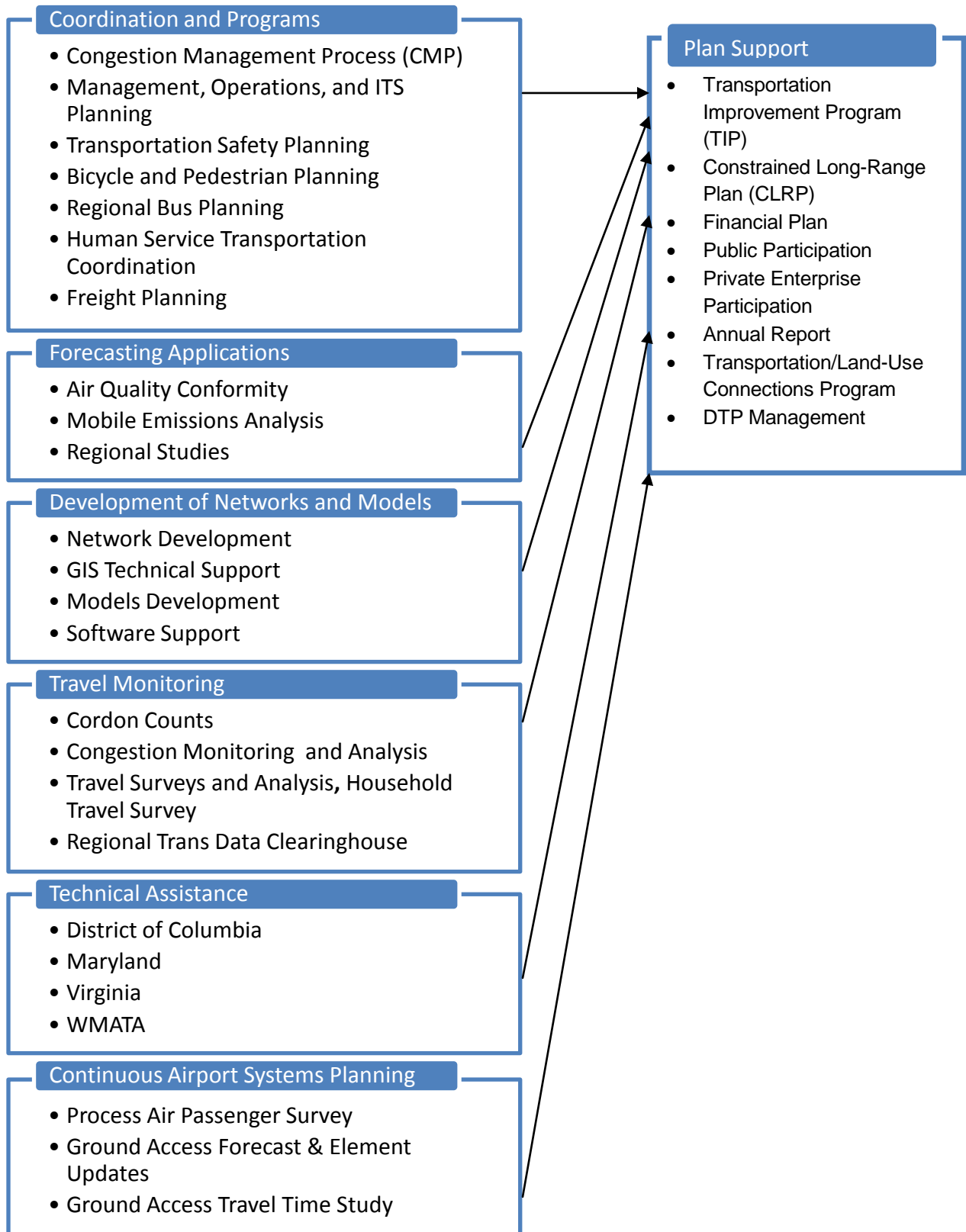
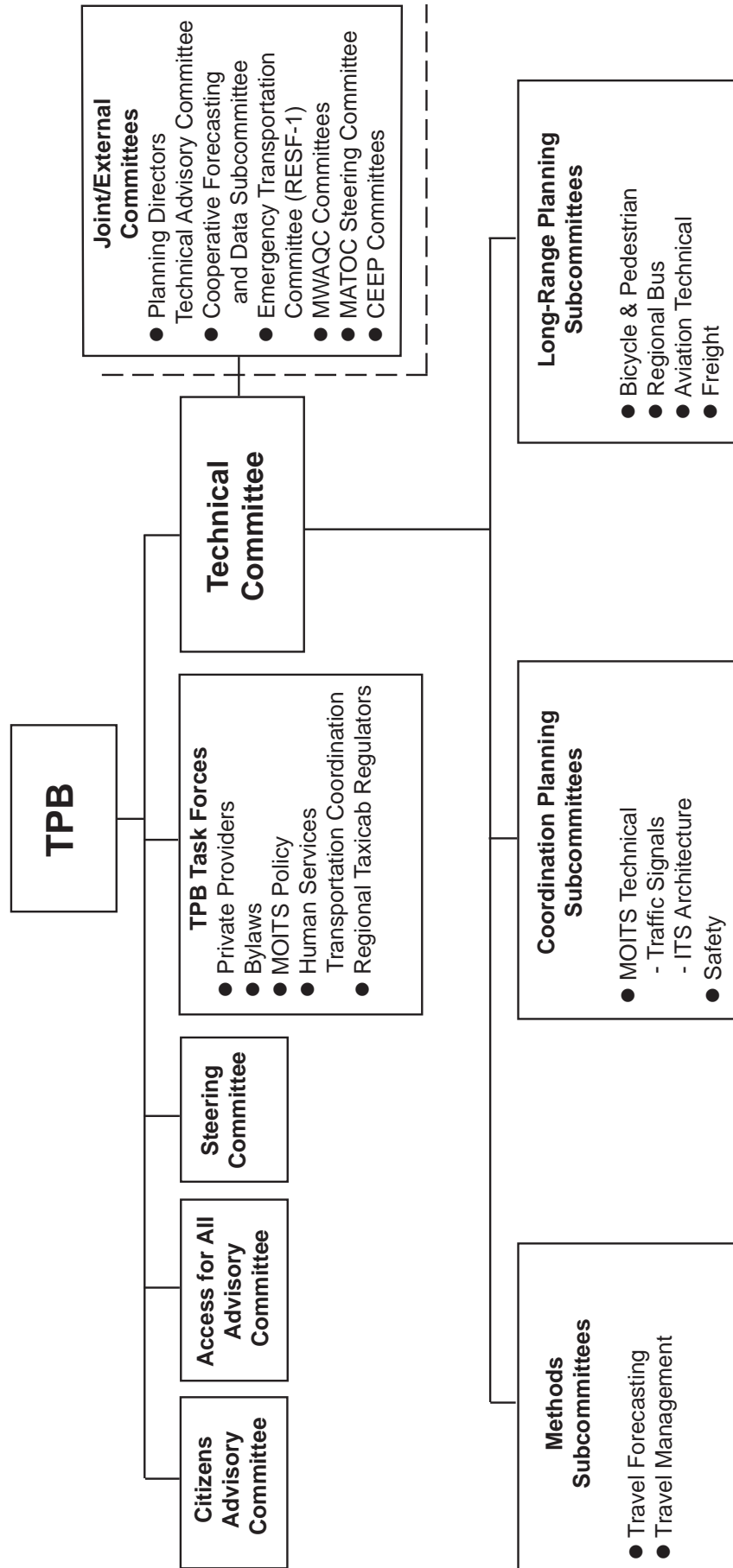


TABLE 2
TPB FY 2013 WORK PROGRAM BY FUNDING SOURCES

WORK ACTIVITY	TOTAL COST	FTA/STATE/ LOCAL	FHWA/STATE/ LOCAL	OTHER FUND
1. PLAN SUPPORT				
A. Unified Planning Work Program (UPWP)	70,700	14,945	55,755	
B. Transp Improvement Program (TIP)	240,600	50,860	189,740	
C. Constrained Long-Range Plan	588,400	124,380	464,020	
D. Financial Plan	64,000	13,529	50,471	
E. Public Participation	421,900	89,184	332,716	
F. Private Enterprise Participation	18,300	18,300		
G. Annual Report	80,100	16,932	63,168	
H. Transportation/Land Use Connection Progr	395,000	83,498	311,502	
I. DTP Management	452,100	95,568	356,532	
Subtotal	2,331,100	507,195	1,823,905	
2. COORDINATION and PROGRAMS				
A. Congestion Management Process (CMP)	205,000	43,334	161,666	
B. Management, Operations, and ITS Planning	340,300	71,935	268,365	
C. Emergency Preparedness Planning	75,400	15,939	59,461	
D. Transportation Safety Planning	125,000	26,423	98,577	
E. Bicycle and Pedestrian Planning	108,700	22,978	85,722	
F. Regional Bus Planning	100,000	21,139	78,861	
G. Human Service Transportation Coordination	114,800	24,267	90,533	
H. Freight Planning	150,000	31,708	118,292	
I. MATOC Program Planning Support	120,000	25,366	94,634	
Subtotal	1,339,200	283,089	1,056,111	
3. FORECASTING APPLICATIONS				
A. Air Quality Conformity	563,200	119,053	444,147	
B. Mobile Emissions Analysis	640,100	135,309	504,791	
C. Regional Studies	516,300	109,139	407,161	
D. Coord Coop Forecasting & Transp Planning	806,800	170,547	636,253	
Subtotal	2,526,400	534,047	1,992,353	
4. DEVELOPMENT OF NETWORKS/MODELS				
A. Network Development	769,700	162,704	606,996	
B. GIS Technical Support	548,800	116,009	432,791	
C. Models Development	1,071,200	226,437	844,763	
D. Software Support	178,900	37,817	141,083	
Subtotal	2,568,600	542,967	2,025,633	
5. TRAVEL MONITORING				
A. Cordon Counts	250,800	53,016	197,784	
B. Congestion Monitoring and Analysis	350,000	73,985	276,015	
C. Travel Surveys and Analysis				
Household Travel Survey	706,300	149,302	556,998	
D. Regional Trans Data Clearinghouse	317,900	67,200	250,700	
Subtotal	1,625,000	343,503	1,281,497	
Core Program Total (I to V)	10,390,300	2,210,801	8,179,499	
6. TECHNICAL ASSISTANCE				
A. District of Columbia	371,600	102,423	269,177	
B. Maryland	623,000	171,715	451,285	
C. Virginia	509,200	140,349	368,851	
D. WMATA	195,200	195,200		
Subtotal	1,699,000	609,687	1,089,313	
Total, Basic Program	12,089,300	2,820,488	9,268,812	
7. CONTINUOUS AIRPORT SYSTEM PLANNING				
A. Ground Access Element Update - Phase 1	180,800			180,800
B. Process 2011 Air Passenger Survey - Phase 2	115,000			115,000
C. Update Ground Access Forecasts - Phase 1	50,000			50,000
Subtotal	345,800			345,800
GRAND TOTAL	12,435,100	2,820,488	9,268,812	345,800

Figure 7
TPB Committee Structure



2. COORDINATION AND PROGRAMS

A. CONGESTION MANAGEMENT PROCESS (CMP)

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

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

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

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

- 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 www.commuterconnections.org).
- 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.

- 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
 - 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

Cost Estimate: \$205,000

Products: Updated CMP portions of the CLRP; CMP Documentation Form; National Capital Region Congestion Report; summaries, outreach materials, and white paper(s) on technical issues as needed; supporting data sets

Schedule: Monthly

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

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

- ITS Data: The collection/compilation, processing, warehousing, and sharing of transportation systems usage and condition data from Intelligent Transportation Systems (ITS) sources.
- Regional Transportation Management: Particularly in conjunction with the Metropolitan Area Transportation Operations Coordination (MATOC) Program (see also Task 2.I.); follow up on MOITS-related recommendations of the COG Incident Management and Response Action Plan developed in response to the disruptive January 26, 2011 snow storm.
- 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.
- Intelligent Transportation Systems (ITS) Architecture: Maintain the regional ITS architecture in accordance with federal law and regulations; support the MOITS ITS Architecture Subcommittee.
- Traffic Signals: Assist member agencies in the exchange and coordination of inter-jurisdictional traffic signal operations information and activities; support the MOITS Traffic Signals Subcommittee.
- 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
Cost Estimate:	\$340,300
Products:	Agendas, minutes, summaries, outreach materials as needed; white paper(s) on technical issues as needed; revised regional ITS architecture; MOITS input to the CLRP as necessary; review and advice to MOITS planning activities around the region
Schedule:	Monthly
Schedule:	Monthly

C. TRANSPORTATION EMERGENCY PREPAREDNESS PLANNING

Under this work task, TPB will provide support and coordination for the transportation sector's role in overall regional emergency preparedness planning, in conjunction with the Metropolitan Washington Council of Governments (COG) Board of Directors, the National Capital Region Emergency Preparedness Council, and other COG public safety committees and efforts. This task is the transportation planning component of a much larger regional emergency preparedness planning program primarily funded outside the UPWP by U.S. Department of Homeland Security and COG local funding. Here specialized needs for transportation sector involvement in Homeland Security-directed preparedness activities will be addressed. Efforts are advised by a Regional Emergency Support Function #1 - Transportation Committee in the COG public safety committee structure, with additional liaison and coordination with the TPB's Management, Operations, and Intelligent Transportation Systems (MOITS) Policy Task Force and MOITS Technical Subcommittee. Major topics to be addressed include the following:

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

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

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

Cost Estimate: \$75,400

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

Schedule: Monthly

D. TRANSPORTATION SAFETY PLANNING

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

Under this work task, TPB will provide opportunities for consideration, coordination, and collaboration planning for safety aspects of the region's transportation systems. Safety planning will be in coordination with the State Strategic Highway Safety Plan efforts of the District of Columbia, Maryland, and Virginia, as well as other state, regional, and local efforts. 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.
- Coordination on metropolitan transportation planning aspects of state, regional, and local safety efforts, and with transportation safety stakeholders.
- Coordination with other TPB committees on the integration of safety considerations.
- Maintenance of the safety element of region's long-range transportation plan.

Oversight:	Transportation Safety Subcommittee
Cost Estimate:	\$125,000
Products:	Safety element of the CLRP; summaries, outreach materials, and white paper(s) on technical issues as needed.
Schedule:	Quarterly

E. BICYCLE AND PEDESTRIAN PLANNING

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

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

I. METROPOLITAN AREA TRANSPORTATION OPERATIONS COORDINATION PROGRAM PLANNING

Under this work task, TPB will provide planning support for the Metropolitan Area Transportation Operations Coordination (MATOC) Program, in conjunction with the MATOC Steering Committee, subcommittees, and partner agencies. This task is the metropolitan transportation planning component of a larger set of MATOC Program activities, including operational and implementation activities, 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
Cost Estimate:	\$120,000
Products:	Agendas, minutes, summaries, and outreach materials as needed; white paper(s) on technical issues as needed; regular briefings and reports to the TPB, MATOC committees, and the MOITS Policy Task Force and Technical Subcommittee.
Schedule:	Monthly

5. TRAVEL MONITORING

A. CORDON COUNTS

~~Monitoring of the volume of period weekday travel entering the Central Employment Area of the region during the AM Peak Period and exiting the Central Employment Area during the PM Peak Period is performed on a 3 to 4 year cycle. In the spring of 2013, staff will collect traffic data and coordinate transit data collection among various transit providers for the 2013 Central Employment Area Cordon Count. Data collection in the inbound direction will take place during the AM peak period and data collection in the outbound direction will take place during the PM peak period. Data collected will include vehicle volumes by time of day, vehicle classification and auto occupancy, and transit passenger volumes. Data will be edited, checked for reasonableness, and readied for processing. The end product of this task will be data files ready to process in at the start of FY 2014.~~

Oversight:	Travel Forecasting Subcommittee
Estimated Cost:	\$250,800
Products:	Data Files from the Spring 2013 Central Area Cordon Count for processing to produce a report in FY 2014.
Schedule:	June 2013

B. CONGESTION MONITORING AND ANALYSIS

Congestion Monitoring supplies data for the Congestion Management Process (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. In FY2012, an analysis of data collection methods was undertaken in light of evolving technologies and needs. The combination of data collection and analysis to be undertaken in FY2013 will be in accordance with the results of the FY2012 methods study.

Oversight:	MOITS Technical Subcommittee
Cost Estimate:	\$350,000
Products:	Transportation systems monitoring data sets and analysis reports
Schedule:	June 2013