



NATIONAL CAPITAL REGION

TRANSPORTATION PLANNING BOARD

TPB Technical Committee Item 3

MEMORANDUM

March 6, 2015

TO: TPB Technical Committee

FROM: Kanti Srikanth
Director, Department of Transportation Planning

SUBJECT: FY 2015 UPWP Amendments to Include Revised Work Statements and Budgets

Attached are pages excerpted from the current FY 2015 UPWP indicating changes to the work statements and/or budgets for the following:

- 1.E. Public Participation: Carryover \$25,000, to provide additional funding to conduct an evaluation of the current public involvement process as recommended during the October 2014 Federal planning certification review.
- 2.B. Management, Operations, and Intelligent Transportation Systems (ITS) Planning: Carryover \$75,000, which is available due to the delay of issuance of MAP-21 federal performance measurement requirements at the national level regarding operations, as well as delay in beginning an update of the Regional ITS Architecture, providing additional time to coordinate with stakeholders.
- 2.F Regional Bus Planning: Carryover \$50,000, which is available due to staff unavailability, to 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.
- 5.B. Congestion Monitoring and Analysis: Carryover \$25,000 to complete follow-up staff analysis to the One-Second Time-Lapsed Aerial Photography pilot study of the triennial freeway congestion monitoring data collection project completed in FY 2015.
- 5.C. Travel Surveys and Analysis: Carryover \$925,000, which will be used to collect household travel survey data from 2,400 households in the fall of 2015 rather than in the spring.
- 6. Technical Assistance
 - District of Columbia: Carry over \$67,060 for one project to FY 2016.
 - Maryland: Amend five project scopes and budgets and carry over \$199,843 to FY 2016.

- Virginia: Amend four project budgets, and carry over \$308,000 to FY 2016.
- WMATA: Carry over \$54,483 to FY 2016.

The total FY 2015 funding to be carried over is: \$1,691,386 (\$1,100,000 in the basic work program and \$629,386 in technical assistance funds).

Deletions are shown in ~~strikeout~~ and additions in **bold**.

PROPOSED AMENDMENTS TO THE FY 2015 UPWP

1.E. PUBLIC PARTICIPATION

The Participation Plan which was updated in the spring of 2014 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 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.

- ~~Initiate an evaluation of the current public involvement process as recommended during the recent Federal planning certification review. It is anticipated that a consultant will be utilized and additional funding will be identified for this activity in the FY 2016 UPWP.~~

Oversight:	Transportation Planning Board
Cost Estimate:	\$434,700 \$31,360 revision to FY 2015 budget \$466,060 total \$441,060 total
Products:	TPB Participation Plan with a proactive public involvement process; CAC and AFA Committee Report
Schedule:	On-going, with forums and meetings linked to preparation of CLRP and TIP

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

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:
 - **Monitor upcoming needs regarding compiling and analyzing** data to support the “system reliability” National Goal for Performance Management
 - Coordinate with member states on 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, including addressing federal Section 1201 requirements on making real-time incident data available
- 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 regional construction coordination system
- Intelligent Transportation Systems (ITS) Architecture: ~~Update~~ **Begin development, to be completed in FY2016, of an updated version of 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. Coordinate with COG Regional Climate Adaption Plan activities 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: \$350,500
\$50,000 carryover from FY 2014
\$3,550 revision to FY 2015 budget
~~\$404,050 total~~ **\$329,500 total**

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

2.F. REGIONAL BUS PLANNING

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 2015 include the following:

- Evaluate federal rulemaking for the performance provisions of MAP-21, specifically transit safety and transit state of good repair, including changes in the metropolitan planning process in regard to performance-based project programming and planning.
- 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, including a priority list of regional projects to improve bus transit services.
- Coordination and evaluation of CLRP and TIP proposals and amendments with regard to bus transit service plan implementation and capital projects for bus facilities and running way improvements.
- 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

Cost Estimate: \$160,000
 \$50,000 carryover from FY 2014
 \$1,600 revision to FY 2015 budget
~~\$211,600 total~~ **\$161,600 total**

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

Schedule: Monthly

5. B. CONGESTION MONITORING AND ANALYSIS

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 2014 (**spanning portions of both FY2014 and FY2015**) an aerial survey of the region's freeway system (**including a one-second time-lapsed aerial photography pilot test component**) will be conducted. 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

Cost Estimate: \$360,500
 \$80,000 carryover from FY 2014
 \$3,600 revision to FY 2015 budget
~~\$444,100 total~~ **\$419,100 total**

Products: ~~Transportation~~ **Draft 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 2015

5. C. TRAVEL SURVEYS AND ANALYSIS

Household Travel Survey

In FY 2012-2013, the 2007/2008 Regional Household Travel Survey data was supplemented with collection of household travel survey data from 4800 households in 14 focused geographic subareas of the region. This additional household travel survey data collection was in response to the need expressed by local jurisdiction users of the household travel survey to have additional household samples in smaller geographic subareas to analyze specific aspects of daily travel behavior in these smaller geographic areas. In FY 2015, staff will continue to support users of TPB household travel survey data, update user documentation and provide technical assistance to the users of these survey data and collect additional household travel survey data.

The following work activities are proposed for FY 2015:

- Provide data, documentation, and technical support to users of 2007/2008 Regional Household Travel Survey and the Geographically-Focused Household Surveys conducted in 2011-2013. Update of survey data files and user documentation as required.
- Continue to mine data collected in the 2007/2008 Regional Household Travel Survey the Geographically-Focused Household Surveys conducted in 2011-2013 support analysis of regional growth and transportation issues of topical interest to the members of the TPB. Prepare information reports on various aspects of daily household and vehicle travel in the TPB modeled area.
- Collect household travel survey data for 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 2013 include: (1) Federal Center/Southwest/Navy Yard in DC (2) H Street Corridor NE in DC (3) Silver Spring in Montgomery County (4) US 1/Green Line in Prince George's County (6) City of Fairfax and (6) City of Manassas. The proposed geographic subareas will be reviewed and subject to refinement by the TPB Technical Committee and local jurisdiction planning staff.
- Update vehicle flows and commuter rail ridership across the external cordon for the TPB modeled area with data from third party vehicle trip data providers and commuter rail operators.
- The pre-test and data collection for the methodologically enhanced activity-based region-wide household survey will not begin until funding for the full survey can be identified. It is currently estimated that between \$2.1 and \$2.6 million in funding will be needed to collect survey data from approximately 10,000 households in the TPB modeled area.
- ~~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

Estimated Cost: \$727,500
\$800,000 carryover from FY 2014
\$7,300 revision to FY 2015 budget
~~\$ 1,534,800 total~~ **\$609,800 total**

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 2015

6. TECHNICAL ASSISTANCE

A. DISTRICT OF COLUMBIA

4. Other Tasks Yet To Be Defined

Cost Estimate: ~~\$67,060~~ 0

TOTAL DISTRICT OF COLUMBIA COST ESTIMATE: \$360,470
\$19,833 carryover FY 2014
\$1,757 revision to FY 2015
~~\$382,060 total~~ **\$315,000 total**

B. MARYLAND

2. Project Planning Studies

This work task will account for DTP staff time associated with the development of scopes of work for requested project. The work scope will account for technical support in travel demand modeling and alternative evaluations of ongoing and upcoming project planning studies. Work activities will also involve meeting with requesting agencies to discuss proposed projects, drafting and finalizing work statements and tasks, creating projects when authorized, attending project team meetings and progress reporting

Cost Estimate: \$100,000

\$80,000 carryover from FY 2014
~~\$180,000 total~~ **\$130,000 total**

Schedule: On-going activity

3. Feasibility/Special Studies

This work task will provide funding to support technical support on feasibility/special studies as requested by MDOT, SHA and other agencies. Work may include but not limited to technical support in ongoing corridor/subarea studies, initiation of new studies ranging from major new corridor analyses to the development of travel demand forecasts for individual facilities and scenario analyses. Project authorizations may occur throughout the fiscal year as priorities dictate to address transportation planning initiatives and strategic goals of MDOT, SHA and other agencies.

Cost Estimate: ~~\$200,000~~ **\$150,000**

Schedule: On-going activity

4. Transportation Performance Measures

This work task will provide funding to support technical support on assessing the performance of the transportation network by assessing the congestion levels of freeway and arterial segments in accordance with MAP-21 mandates. In addition, accessibility and connectivity issues at a subarea level of analysis may be assessed as well as network bottlenecks. Finally, operational assessments of the area network may be conducted in support of planning studies.

Cost Estimate: \$100,000
\$50,000 carryover from FY 2014
~~\$150,000 total~~ **\$100,000 total**

Schedule: On-going activity

7. Human Services Transportation Study Follow-on and Support

In FY2013 a human service transportation coordination study identified alternate service delivery models and funding mechanisms for the regional MetroAccess paratransit service, with a focus on Suburban Maryland. The study identified potential human service transportation coordination models and recommended an action plan for a pilot project with non-profit agencies serving people with developmental disabilities in Suburban Maryland. The study was jointly funded under the FY2013 UPWP Maryland and WMATA Technical Assistance work elements and was facilitated by the TPB staff. In FY2014, TPB staff will provide follow-up to the study, including additional work with MDOT, MTA, non-profit agencies, and private transportation providers to assist with implementation of

the action plan. Additional work could include research, data collection, and stakeholder meetings to advance the action plan, and assessing existing MetroAccess alternatives in Suburban Maryland to support high quality and cost efficient transportation for people with disabilities.

Cost Estimate: ~~\$40,000~~ **\$20,000**

Schedule: June 2015

8. Other Tasks yet to be defined

Other tasks are anticipated but not yet defined. This project is established to account for TPB staff time spent in responding to requests for technical assistance by MDOT, SHA, other modal agencies and jurisdictions whose scope of work or characteristics do not conform to the other work tasks of the Maryland Technical Assistance Program. Work under this project will be performed upon authorization by MDOT, SHA and/or other modal agencies and jurisdictions.

Cost Estimate: \$6,043
 \$10,024 carryover from FY 2014
 \$13,776 revision to FY 2015
 ~~\$29,843 total~~ **\$0 total**

TOTAL MARYLAND COST ESTIMATE: \$646,043
 \$270,024 carryover from FY 2014
 \$13,776 revision to FY 2015
 ~~\$929,843 total~~ **\$730,000 total**

C. VIRGINIA

1. Data/Documentation Processing

This work element accounts for DTP staff time associated with the administration of this Technical Assistance work program throughout the year. Work activities would involve meetings with participating agencies to discuss proposed/new projects, development of monthly progress reports, budgetary reporting and technical quality control. This work task also includes staff time to process requests for data/documents from Northern Virginia as advised by VDOT throughout the year.

Cost Estimate: \$15,000
 \$8,000 carryover from FY 2014
 ~~\$23,000 total~~ **\$5,000 total**

Product: Data, documentation, scopes of work, progress reports

2. Travel Monitoring and Survey

This program will establish a continuous travel monitoring program for major commuting routes in Northern Virginia, with a goal of sampling each route on a 2-3 year cycle.

Collected data and analysis may include volume and occupancy data, travel time data, and other information. The program will also include collection of bicycle and pedestrian data at various locations throughout Northern Virginia, as identified by VDOT.

Cost Estimate:	\$200,000 \$160,000
Products:	Program management plan, data and analysis, technical memorandum
Schedule:	On-going activity

3. Travel Demand Modeling

This project is designed to assist VDOT in the development of, and the evaluation of results from the regional transportation travel demand model, as adapted for its use by VDOT.

Specific tasks undertaken will be identified throughout the year and are likely to include: developing forecasts and/or extracting specific information from the regional model forecasts for specific scenarios/options evolving out of ongoing studies and/or project planning efforts; and assistance with documentation, training and customization of the regional travel demand forecasting model for the Northern Virginia sub-area per VDOT's requirements.

Cost Estimate:	\$109,195 \$59,972 carryover from FY 2014 \$169,167 total \$119,167 total
Products:	Customized travel demand model, technical memoranda.
Schedule:	On-going activity

4. Regional and Sub-regional Studies

This project provides support for technical analysis for planning studies throughout the year as identified and requested VDOT and/or VDRPT. Work may include but not be limited to technical support in ongoing corridor/subarea studies, and initiation of new studies ranging from major new corridor analyses to the development of travel demand forecasts for individual facilities. The Commonwealth requires VDOT to review and comment on the technical reports for a variety of local development proposals. Such reports are referred to as "Section 527 reports." Tasks undertaken under this work element could involve staff assisting VDOT in the review and/or analysis of such Section 527 reports. Staff may also assist VDOT in its work on a system-wide evaluation designed to provide information relating to the effectiveness of ongoing and planned projects and programs aimed at addressing the congestion and mobility challenges in Northern Virginia. This evaluation could be examined in terms of level of service, delay, and other mobility criteria, which will be defined and estimated at the appropriate local, subarea, corridor and / or regional levels to enable a consistent assessment of specified projects/programs.

Cost Estimate: \$240,000
\$256,119 carryover from FY 2014
-\$37,832 revision to FY 2015 budget
~~\$458,287 total~~ **\$238,287 total**

Products: Travel demand modeling and technical analysis in support of Northern Virginia regional and sub-regional planning studies

Schedule: On-going activity

TOTAL VIRGINIA COST ESTIMATE: \$564,195
\$324,091 carryover from FY 2014
-\$37,832 revision to FY 2015 budget
~~\$850,454 total~~ **\$542,454 total**

D. WMATA

4. Other Tasks to be Defined

Other tasks anticipated but not yet defined

Cost Estimate: ~~\$54,483~~ **\$0**

TOTAL WMATA COST ESTIMATE: \$222,895
\$26,700 carryover from FY 2014
\$4,905 revision to FY 2015 budget
~~\$254,483 total~~ **\$200,000**