

UNIFIED PLANNING WORK PROGRAM FY 2017

Unified Planning Work Program (UPWP) for Transportation Planning for the
Washington Metropolitan Region for FY 2017

March 2016

Amended, March 29, 2017

Technical Corrections, June 2, 2017



National Capital Region
Transportation Planning Board

Unified Planning Work Program (UPWP): FY 2017

Adopted on March 16, 2016

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ABOUT THE TPB

The National Capital Region Transportation Planning Board (TPB) is the federally designated metropolitan planning organization (MPO) for metropolitan Washington. It is responsible for developing and carrying out a continuing, cooperative, and comprehensive transportation planning process in the metropolitan area. Members of the TPB include representatives of the transportation agencies of the states of Maryland and Virginia and the District of Columbia, 22 local governments, the Washington Metropolitan Area Transit Authority, the Maryland and Virginia General Assemblies, and nonvoting members from the Metropolitan Washington Airports Authority and federal agencies. The TPB is staffed by the Department of Transportation Planning at the Metropolitan Washington Council of Governments (COG).

ACCOMMODATIONS

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TABLE OF CONTENTS

I. INTRODUCTION	1
Purpose	1
Planning Requirements	1
THE CLEAN AIR ACT	2
TITLE VI AND ENVIRONMENTAL JUSTICE: ENSURING NON-DISCRIMINATION	2
MAP-21 and FAST Requirements for Performance-Based Planning and Programming	2
Regional Planning Goals	3
Responsibilities for Transportation Planning	4
FY 2017 Regional Planning Priorities	5
TRANSITION TO PERFORMANCE-BASED PROGRAMMING AND PLANNING	5
REGIONAL APPROACH TO TRANSPORTATION PLANNING	5
LADDERS OF OPPORTUNITY: ACCESS TO ESSENTIAL SERVICES	6
FAST Metropolitan Planning Provisions	6
TOTAL PROPOSED FUNDING BY FEDERAL SOURCE FOR FY 2017	8
II. PROPOSED FY 2017 TPB WORK PROGRAM AND BUDGET	17
Program Structure	17
Work Activity Budgets	18
III. MAJOR WORK ACTIVITIES	24
Long-Range Transportation Planning	25
CONSTRAINED LONG-RANGE TRANSPORTATION PLAN (CLRP)	25
PLAN OF UNFUNDED REGIONAL PRIORITY PROJECTS	26
PREPARATION FOR THE 2018 LONG-RANGE PLAN	27
Performance-Based Planning and Programming	29
PERFORMANCE-BASED PLANNING	29
TRANSPORTATION IMPROVEMENT PROGRAM (TIP)	30
Mobile Emissions Planning	33
AIR QUALITY CONFORMITY	33
MOBILE EMISSIONS ANALYSIS	34
Planning Programs	35
CONGESTION MANAGEMENT PROCESS	35
SYSTEMS PERFORMANCE, OPERATIONS AND TECHNOLOGY PLANNING	36
TRANSPORTATION EMERGENCY PREPAREDNESS PLANNING	37
TRANSPORTATION SAFETY PLANNING	38
BICYCLE AND PEDESTRIAN PLANNING	39
REGIONAL PUBLIC TRANSPORTATION PLANNING	40
FREIGHT PLANNING	42
METROPOLITAN AREA TRANSPORTATION OPERATIONS COORDINATION PROGRAM PLANNING	43
Travel Forecasting	45

NETWORK DEVELOPMENT	45
MODELS DEVELOPMENT AND SUPPORT	45
Travel Monitoring and Data Programs	47
HOUSEHOLD TRAVEL SURVEY	47
TRAVEL MONITORING COUNTS/STUDIES	48
REGIONAL TRANSPORTATION DATA CLEARINGHOUSE	49
GIS DATA	49
Cooperative Forecasting and Transportation Planning Coordination	51
Public Participation and Human Service Transportation Coordination	52
PUBLIC PARTICIPATION	53
COMMUNICATIONS	54
HUMAN SERVICE TRANSPORTATION COORDINATION	54
Transportation Alternatives and Land Use Connection (TLC) Programs	55
TPB Support and Management	57
TRANSPORTATION PLANNING BOARD (TPB) SUPPORT AND MANAGEMENT	57
UNIFIED PLANNING WORK PROGRAM (UPWP)	58
Technical Assistance	59
DISTRICT OF COLUMBIA	61
MARYLAND	63
VIRGINIA	65
WMATA	67
Continuous Airport System Planning Program	69
PROCESS 2015 AIR PASSENGER SURVEY - PHASE 2	69
GROUND ACCESS FORECAST AND GROUND ACCESS ELEMENT UPDATE	69
IV. PROPOSED FY 2017 STATE TRANSPORTATION AGENCY STATE PLANNING AND RESEARCH PROGRAMS (SPR)	71
District of Columbia	73
Maryland	75
Virginia	77
V. APPENDIX	81

LIST OF FIGURES

FIGURE 1. FAST Provisions for Consideration in Future UPWPs by Work Activity	7
FIGURE 2. Organizations Represented on the TPB and/or its Technical Committees	8
FIGURE 3. Membership of the National Capital Region Transportation Planning Board	9
FIGURE 4. Transportation Planning and Programming Responsibilities	10
FIGURE 5. Transportation Planning Studies within the Washington Metropolitan Area 2016	11
FIGURE 6. Overview of Planning Products and Supporting Processes	19
FIGURE 7. Major Components of UPWP Work Activities	20
FIGURE 8. TPB Committee Structure	22

LIST OF TABLES

TABLE 1. FY 2017 TPB Proposed Funding by Federal, State, and Local Sources	16
TABLE 2. TPB FY 2017 Work Program by Funding Source	21
TABLE 3. TPB FY 2017 Budget and Work Program Activity by Expenditure Category	23

I. INTRODUCTION

Purpose

The **FY 2017 Unified Planning Work Program (UPWP) for Transportation Planning for the Washington Metropolitan Region** incorporates in one document all federally assisted state, regional, and local transportation planning activities proposed to be undertaken in the region from July 1, 2016 through June 30, 2017. The UPWP provides a mechanism for the coordination of transportation planning activities conducted by the National Capital Region Transportation Planning Board (TPB), and is required as a basis and condition for all federal funding assistance for transportation planning by the joint planning regulations of the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA). The Metropolitan Washington Council of Governments (COG) serves as the administrative agent for the TPB. The TPB is staffed by COG's Department of Transportation Planning. COG provides the administrative functions necessary to meet federal fiducial and other regulatory requirements required in order to receive FHWA and FTA funds.

This work program describes all transportation planning activities utilizing federal funding, including Title I Section 112 metropolitan planning funds, Title III Section 5303 metropolitan planning funds, and Federal Aviation Administration Continuing Airport System Planning (CASP) funds. The work program identifies state and local matching dollars for these federal planning programs, as well as other closely related planning projects utilizing state and local funds.

Planning Requirements

The planning activities outlined in this work program respond to a variety of regulatory requirements. The Safe, Accountable, Flexible, and Efficient Transportation Equity Act—A Legacy for Users (SAFETEA-LU) of 2005 defines the structure of the metropolitan planning process. On February 14, 2007, the FHWA and FTA issued final regulations regarding metropolitan planning in response to SAFETEA-LU. The Moving Ahead for Progress in the 21st Century (MAP-21) Act of 2012, made some important modifications to the metropolitan planning process, primarily requiring metropolitan planning organizations (MPOs) to establish and use a performance-based approach to transportation decision making and development of transportation plans. The Fixing America's Surface Transportation (FAST) Act became law on December 4, 2015 and continued this approach. This work program has been developed to comply with the MAP-21 requirements regarding metropolitan planning essentially as presented in the proposed metropolitan planning rule published June 2, 2014. However, this FY2017 work program also provides for consideration of metropolitan planning provisions under FAST, as described at the end of this section.

On October 15, 2014, the TPB approved the 2014 Financially Constrained Long Range Transportation Plan (CLRP) for the National Capital Region. In January 2015, FHWA and FTA found that the 2014 CLRP and FY 2015-2020 Transportation Improvement Program (TIP) conform to the region's State Implementation Plans.

In June 2015, the FHWA and FTA jointly certified that the TPB's planning process complies with metropolitan planning regulations and issued a certification report. On October 28 and 29, 2014, FHWA and FTA conducted a certification review of the metropolitan planning process in the Washington, DC-VA-MD Transportation Management Area (TMA) which is the responsibility of the TPB

and the Fredericksburg Metropolitan Area Metropolitan Planning Organization (FAMPO). While the recommendations from the certification report were addressed in FY 2016, improvements and enhancements identified in the report continue to be integrated into the TPB's ongoing planning process.

THE CLEAN AIR ACT

The Clean Air Act Amendments (CAAA) of 1990 requires that the transportation actions and projects in the CLRP and Transportation Improvement Program (TIP) support the attainment of federal health standards for ozone. The CLRP and TIP have to meet specific requirements as specified by the Environmental Protection Agency (EPA) regulations issued on November 24, 1993, with amendments on August 15, 1997 and supplemental guidance on May 14, 1999, regarding criteria and procedures for determining air quality conformity of transportation plans, programs and projects funded or approved by the FHWA and FTA. These conformity requirements are also addressed in this document.

TITLE VI AND ENVIRONMENTAL JUSTICE: ENSURING NON-DISCRIMINATION

It has been the long-standing policy of both COG and TPB to actively ensure nondiscrimination under Title VI of the Civil Rights Act of 1964. Title VI states that “no person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance”. Executive Order 12898, issued February 11, 1994, requires that the TPB identify and address, as appropriate, disproportionately high or adverse effects of its programs, policies, and activities on minority populations and low-income populations. While COG, as the TPB's administrative agent, has the primary responsibility for meeting Title VI requirements, ensuring non-discrimination is an underlying tenant that permeates this work program. The TPB has a two-pronged approach to ensuring nondiscrimination: 1) analysis of the long-range plan for disproportionately adverse impacts, and 2) engaging traditionally transportation disadvantaged-populations in the planning process. The specific tasks related to Title VI analysis is under Activity 1: Long Range Planning and engaging transportation disadvantaged-populations, primarily through the Access for All Advisory Committee, is found in Activity 8: Public Participation. COG's Title VI Plan (including the Language Assistance Plan), the Title VI notice to the public, and complaint procedures can be found at www.mwcog.org/nondiscrimination.

MAP-21 and FAST Requirements for Performance-Based Planning and Programming

MAP-21 and FAST call for metropolitan planning organizations, public transportation providers and states **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 goal areas for the federal-aid highway system. The goal areas include: safety, infrastructure, congestion reduction, system reliability, freight movement and economic vitality, environmental sustainability, and reduced project delivery delays. Additional goal areas for public transportation address transit safety and transit asset management.

Once the performance measures are finalized, the states and public transportation providers will have up to a year to establish performance targets in support of those measures; and the MPO subsequently has 180 days to establish performance targets coordinated with those of the states and public transportation providers. After these targets are set, the metropolitan transportation plan and the transportation improvement program (TIP) are required to include a description of the

performance measures and targets used in assessing the performance of the transportation system. The metropolitan transportation plan 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 plan.

Regional Planning Goals

In 1998, the TPB adopted a set of policy goals that have since served to guide its planning work program. These goals are:

- The Washington metropolitan region's transportation system will provide reasonable access at reasonable cost to everyone in the region.
- The Washington metropolitan region will develop, implement, and maintain an interconnected transportation system that enhances quality of life and promotes a strong and growing economy throughout the entire region, including a healthy regional core and dynamic regional activity centers with a mix of jobs, housing, services and recreation in a walkable environment.
- The Washington metropolitan region's transportation system will give priority to management, performance, maintenance, and safety of all modes and facilities.
- The Washington metropolitan region will use the best available technology to maximize system effectiveness.
- The Washington metropolitan region will plan and develop a transportation system that enhances and protects the region's natural environmental quality, cultural and historic resources, and communities.
- The Washington metropolitan region will achieve better inter-jurisdictional coordination of transportation and land use planning.
- The Washington metropolitan region will achieve enhanced funding mechanisms for regional and local transportation system priorities that cannot be implemented with current and forecasted federal, state, and local funding.
- The Washington metropolitan region will support options for international and inter-regional travel and commerce.

Known as the TPB Vision, these goals are broad in scope, and also encompass a variety of strategies and objectives. Together, these goals, strategies, and objectives provide a framework for setting out core principles for regional transportation planning. MAP-21 requires the planning process to consider projects and strategies that address eight planning factors. These eight planning factors are encompassed by the TPB Vision's policy goals and are considered when developing the CLRP. Each planning factor is included in one or more of the TPB Vision goals, objectives and strategies, except for security, which is implicitly addressed in the TPB Vision.

On January 15, 2014, after a three-year process, the TPB approved the Regional Transportation Priorities Plan (RTPP) for the National Capital Region. The Priorities Plan developed a comprehensive set of regional transportation goals and challenges, and then identified three regional priorities that local, state, and regional agencies should consider when developing projects. In FY 2017, the Priorities Plan will influence policy actions, funding strategies and potential projects considered for potential incorporation into the CLRP.

Responsibilities for Transportation Planning

The National Capital Region Transportation Planning Board (TPB) is the organization responsible for conducting the continuing, cooperative, comprehensive (3-C) transportation planning process for the Metropolitan Washington Region. The TPB is the official Metropolitan Planning Organization (MPO) for transportation planning for the Washington metropolitan region, designated by the Governors of Maryland and Virginia and the Mayor of the District of Columbia.

The TPB is composed of representatives from the 20 cities and counties, including the District of Columbia, that are members of the Metropolitan Washington Council of Governments (COG), the two state and the District transportation agencies, the Washington Metropolitan Area Transit Authority (WMATA), the Metropolitan Washington Airports Authority (MWAA), four federal agencies, the General Assemblies of Maryland and Virginia, and private transportation service providers. When matters of particular importance are before the TPB, a special voting procedure may be invoked that weights the votes of local jurisdiction members according to population.

Figure 2 lists the organizations represented on the TPB and its Technical Committees. Figure 3 shows the geographical location of each of the participating local jurisdictions. The TPB also serves as the transportation policy committee of COG. This relationship serves to ensure that transportation planning is integrated with comprehensive metropolitan planning and development, and is responsive to the needs of the local governments in the area.

Policy coordination of regional highway, transit, bicycle, pedestrian and intermodal planning is the responsibility of the TPB. This coordinated planning is supported by the three state departments of transportation (DOTs), FTA, FHWA, and the member governments of COG. The TPB coordinates, reviews, and approves work programs for all proposed federally assisted technical studies as part of the UPWP. The relationship among land use, environmental and transportation planning for the area is established through the continuing coordinated land-use, environmental and transportation planning work programs of COG and TPB. Policy coordination of land use and transportation planning is the responsibility of COG, which formed the Region Forward Coalition in 2010 to foster collaboration in these areas, and the Transportation Planning Board. COG's regional land use cooperative forecasts are consistent with the adopted regional Long Range Transportation Plan.

The chairman of the TPB and the state transportation directors are members of the Metropolitan Washington Air Quality Committee (MWAQC), which was formed under the authority of the governors of Maryland and Virginia and the mayor of the District of Columbia to recommend the region's air quality plans. These recommendations are forwarded to the governors and mayor for inclusion in the State Implementation Plans (SIPs) they submit to EPA.

In the Washington Metropolitan region, the roles and responsibilities involving the TPB, the three state DOTs, the local government transportation agencies, WMATA, and the local government public transportation operators for cooperatively carrying out state transportation planning and programming have been established over several years. As required under the final planning regulations, the TPB, the state DOTs and the public transportation operators have documented their transportation planning roles and responsibilities in the Washington Metropolitan Region in a Memorandum of Understanding (MOU) that was executed by all parties on January 16, 2008. The 2008 MOU will be reviewed in FY2017 and changes identified for updating the MOU following the promulgation of FAST planning regulations. The MOU is included in the Appendix and the responsibilities for the primary planning and programming activities are indicated in Figure 4.

With regards to coordination with other MPOs near the TPB's planning area, there are two agreements in place that lay out responsibilities for planning, programming and air quality conformity

analysis, both of these agreements can be found in the Appendix. In Virginia, the TPB has an agreement with the Fredericksburg Area MPO (FAMPO) from 2004 in which FAMPO assumes responsibility for meeting the transportation management area (TMA) planning and programming requirements within the Washington, DC-VA-MD Urbanized Area portion of Stafford County and producing the required planning documents for the TPB's current planning cycle. This agreement was reviewed in 2012 by both FAMPO and TPB staff, and it was mutually agreed that no changes were necessary. In Maryland, the TPB formalized an agreement between the TPB, the Calvert-St. Mary's Metropolitan Planning Organization (C-SMMPO) and Calvert County, MD regarding the conformity analysis of transportation plans, programs, and projects in Calvert County. Calvert County is in the Washington, DC-MD-VA 8-Hour Ozone Nonattainment area, and is also a member of the new southern Maryland MPO. The agreement between the three parties was signed in January 2016.

FY 2017 Regional Planning Priorities

In March 2015, the USDOT issued **planning emphasis areas** for MPO's to consider in Unified Planning Work Programs. The three areas are 1) MAP-21 Implementation: Transition to Performance-based Planning and Programming; 2) Regional coordination of transportation planning beyond traditional boundaries; and 3) Ladders of Opportunity. This section provides a summary of how the work activities in this UPWP addresses these three priority areas.

TRANSITION TO PERFORMANCE-BASED PROGRAMMING AND PLANNING

An overview of the transition to performance-based programming and planning was provided earlier in this Introduction. This transition is an articulated priority of the TPB as demonstrated in Activity 2 "Performance-Based Planning and Programming" in this UPWP. Efforts will continue to address establishing performance measures and targets in coordination with the three state DOTs, WMATA and the local government public transportation operators in accordance with the MAP-21 and FAST planning regulations and performance management requirements for MPOs. With the completion in January 2014 of the three-year process to develop the RTPP, the focus has turned to assessing what policy actions, funding strategies and potential projects are proposed for inclusion in the CLRP.

Focusing on the TPB's desire to improve the performance outcomes of the CLRP, an unconstrained long range plan (LRP) will be developed during FY 2017. The LRP will include a limited set of regionally significant unfunded multi-modal priority projects that the region broadly supports and which are expected to improve upon the performance of the transportation system included in the CLRP. This work will be designed to be integrated into the next quadrennial update of the TPB's long-range plan in 2018.

REGIONAL APPROACH TO TRANSPORTATION PLANNING

As a multi-state MPO, the TPB fully embraces the need for regional cooperation and coordination across state and agency boundaries. Each work activity in this UPWP reflects regional coordination between jurisdictions and agencies in D.C., Virginia and Maryland, notably in the development of performance measures and targets, the unfunded regional priority projects, MATOC, congestion management, safety, public transportation, and freight. As stated earlier, the TPB will review the 2008 planning agreement with the State DOT's and WMATA after FAST planning regulations are issued. The TPB coordinates with MPO's near to its planning area, such as with FAMPO, the Calvert-St. Mary's Metropolitan Planning Organization (C-SMMPO) and Baltimore Regional Transportation Board (BRTB). With regards to air quality conformity analysis, transportation projects and land use forecasts from these other MPO's are reflected in the technical analysis. Formal agreements on the

coordination and consultation processes for transportation planning exist with FAMPO and C-SMMPO, as described above under “Responsibilities for Transportation Planning”.

The Transportation-Land Use Connections (TLC) program continues to improve the coordination between land use and transportation planning in the region. The Public Transportation Subcommittee plays a key role in fostering cooperation and coordination among the many public transit providers in the region. COG has been designated by the Governor of Maryland, the Governor of Virginia and the Mayor of the District of Columbia to coordinate with the State DOT’s in the development of an agency to oversee Metrorail safety, as required under MAP-21.

LADDERS OF OPPORTUNITY: ACCESS TO ESSENTIAL SERVICES

The TPB has identified connectivity gaps in accessing essential services for older adults, people with disabilities and those with low-incomes in its Coordinated Human Service Transportation Plan, adopted by the TPB in November 2014. These unmet transportation needs are used to develop priorities for FTA’s Enhanced Mobility of Seniors and Individuals with Disabilities grant program. COG serves as the designated recipient for this program in the Washington DC-VA-MD Urbanized Area and the TPB solicits and selects the projects; these projects provide key access to essential services such as health care, education, employment and recreation.

In FY2016, an expanded analysis of the Constrained Long Range Transportation Plan (CLRP) identified potentially vulnerable populations and examined access to employment, hospitals and educational institutions by these populations. The TPB’s efforts to develop a list of unfunded regional priority projects will include the consideration of infrastructure needs that improve connectivity to essential services for traditionally-disadvantaged populations. The TPB’s Bicycle and Pedestrian plan identifies improvements and policies to encourage more walking and biking. The Access for All Advisory Committee provides input to the TPB on projects, programs and services that are important to low-income individuals, minority communities, and persons with disabilities.

FAST Metropolitan Planning Provisions

The Fixing America’s Surface Transportation (FAST) Act became law on December 4, 2015 and includes some changes to metropolitan transportation planning. For Metropolitan Planning Organization’s (MPOs), such as the TPB, the most significant change continues to be the MAP-21 performance-based planning requirements which FAST retains. However, this UPWP will provide for an ongoing review of the metropolitan planning provisions and USDOT guidance related to FAST with a consideration of what additional work activities may be called for. The TPB will need more guidance on how MPOs should implement the provisions. As the new USDOT planning regulations are released, the UPWP will integrate such new work activities. The TPB will work with the state DOTs, public transit providers and other stakeholders to identify any specific changes or amendments that will be necessary to address them. Figure 1 below provides an overview of FAST’s major changes to metropolitan planning provisions that will likely need to be integrated into the next UPWP organized by work activity; note that this is not an exhaustive list of all of the changes called for in FAST.

Figure 1

FAST Provisions for Consideration in Future UPWPs by Work Activity

UPWP Work Activity	FAST Provisions for Consideration in Future UPWPs
Long-Range Planning (Activity 1)	<ul style="list-style-type: none"> • The TIP and Plan will need to identify and consider “intermodal facilities that support intercity transportation, including intercity buses and intercity bus facilities, and commuter vanpool providers”; • A ninth planning factor is added: system resiliency and reliability and reduce or mitigate storm water impacts on surface transportation; • Capital investments in the Plan should include strategies to reduce vulnerability due to natural disasters; and • In addition to other consultation, MPOs will be encouraged to consult with State agencies that plan for tourism and natural disaster risk reduction.
Performance-Based Planning and Programming (Activity 2)	<ul style="list-style-type: none"> • The definition of travel demand reduction is expanded to include intercity bus operators and employer-based commuting programs; and •
Planning Programs (Activity 4)	<ul style="list-style-type: none"> • The Congestion Management Process (CMP) requirement is retained, but a Congestion Management Plan is optional; and • If the Congestion Management Plan is continued, it shall include projects and strategies to reduce congestion and improve connections between low-income households and jobs.
Public Participation (Activity 8)	<ul style="list-style-type: none"> • Interested parties also include public ports, intercity bus operators, and commuter vanpool providers.
Transportation and Land Use Connection Programs (Activity 9)	<ul style="list-style-type: none"> • The Transportation Alternatives Program (TAP) is repealed but virtually the same program will be under the Surface Transportation Block Grant Program (STBGB) ; and • MPO involvement with the selection of STBGB projects as a portion of the State allocation is retained and for some of this funding, there will be additional eligible activities.

Figure 2

Organizations Represented on the TPB and/or Its Technical Committees

VIRGINIA

Arlington County	City of Manassas Park
Fairfax County	Northern Virginia Transportation Authority
Loudoun County	Northern Virginia Regional Commission
Fauquier County	Northern Virginia Transportation Commission
Prince William County	Virginia Department of Transportation
City of Alexandria	Virginia Department of Rail and Public Transportation
City of Fairfax	Virginia Department of Aviation
City of Falls Church	Virginia General Assembly
City of Manassas	Potomac and Rappahannock Transportation Commission

MARYLAND

Frederick County	City of Greenbelt
Montgomery County	City of Rockville
Prince George's County	City of Takoma Park
City of Bowie	Maryland-National Capital Park and Planning Commission
City of College Park	Maryland Department of Transportation
City of Frederick	Maryland General Assembly
City of Gaithersburg	

DISTRICT OF COLUMBIA

DC Council
DC Department of Transportation
DC Office of Planning

REGIONAL, FEDERAL, AND PRIVATE SECTOR

Washington Area Metropolitan Transit Authority
Private Transportation Service Providers
Metropolitan Washington Airports Authority
Federal Highway Administration
Federal Transit Administration
National Capital Planning Commission
National Park Service

Figure 3
Membership of the National Capital Region Transportation Planning Board

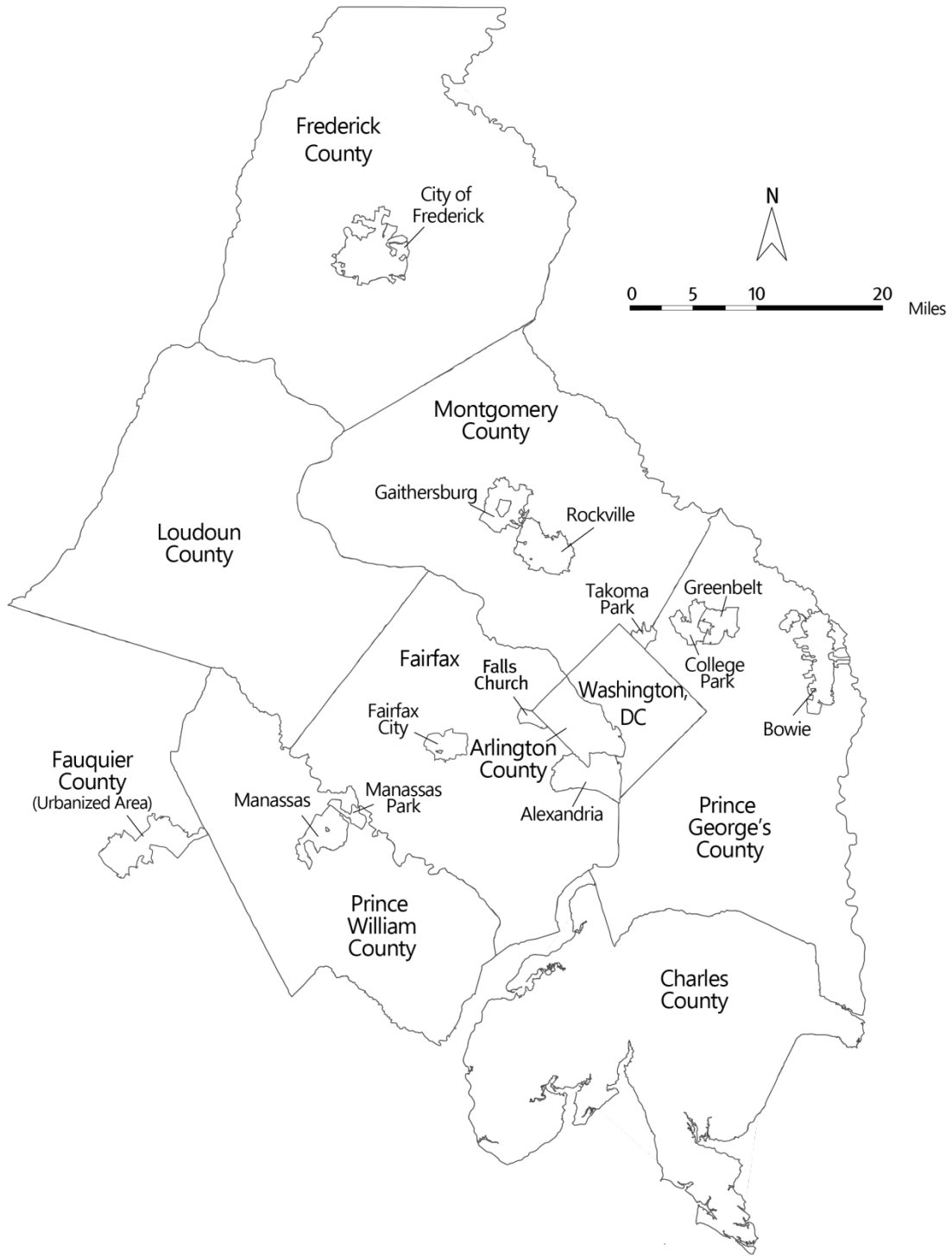


Figure 4

Transportation Planning and Programming Responsibilities

RESPONSIBILITY	AGENCIES
UPWP Development	TPB, DOTs, WMATA, Local Governments
Planning Certification	TPB, DOTs
Performance-Based Planning	TPB, DOTs, WMATA, Public Transportation Providers
CLRP Development	
Transportation/Land-Use Planning	TPB, MDPC, Local Governments
Plan Inputs/Update	DOTs, WMATA, Local Governments, NVTA, PRTC, FAMPO
Project Selection	TPB, DOTs, WMATA, Local Governments
Air Quality Conformity	TPB, FAMPO
Financial Plan	TPB, DOTs, WMATA, Local Governments
Congestion Management Process	TPB, DOTs, Local Governments, FAMPO
Safety Element	TPB, DOTs, Local Governments
Participation Plan	TPB
Freight Plan	TPB, DOTs, Local Governments
TIP Development	
TIP Inputs	DOTs, WMATA, Local Governments, NVTA, PRTC
Project Selection	TPB, DOTs, WMATA
Air Quality Conformity	TPB, FAMPO
Financial Plan	TPB, DOTs, WMATA, Local Governments, NVTA, PRTC
Human Service Transportation Coordination Planning	TPB, WMATA, Human Service Agencies
Private Enterprise Participation	TPB, WMATA, Local Governments, NVTC, PRTC
Public Involvement Plan	TPB
Projects Fed Funding	TPB, DOTs, WMATA
Air Quality 2010 Attainment Plan	MWAQC, TPB, DOTs
CO2 Mobile Emissions Reduction	WMATA, State Air Quality Agencies
Climate Change Adaptation	TPB, DOTs, WMATA, Local Governments
Corridor Studies	DOTs, WMATA, TPB
Travel Demand Forecasting	TPB
Travel Monitoring	TPB, DOTs, WMATA, Local Governments

Figure 5

Transportation Planning Studies within the Washington Metropolitan Area 2016

STUDY	PRIMARY AGENCIES	SCHEDULE	PRODUCTS
Regional			
Amendments to the Constrained Long-Range Plan	TPB, DOTs, WMATA, Local Governments	2016	CLRP
Station Area Plans (multiple stations)	WMATA	On-going	Plans
Station Access Studies (multiple stations)	WMATA	On-going	Plans
Station Capacity Studies	WMATA	On-going	Plans
Priority Corridor Performance Evaluation (multiple corridors)	WMATA	On-going	Plans
Bus Service Evaluation Studies	WMATA	On-going	Studies
Metrobus Recalibration 2.0 – Short-Term Actions	WMATA	2016	Plans
Policy Alternatives to the 2040 RTSP Build Network	WMATA	2016	Report
Expansion Guidelines	WMATA	2016	Report
Late-Night Bus Service	WMATA	2016	Studies
Vienna and Franconia-Springfield Station Study	WMATA	2016	Studies
Metrobus Emerging Corridor Studies	WMATA	On-going	Report
Orange/Blue/Silver Corridor Junction Study	WMATA	2016	Report
Metro Operating Cost Model Update	WMATA	2016	Application/ Model
Metrorail Station Area Strategic Investment Plan	WMATA	2016	Report/ Application Model

Figure 5 (continued)

Transportation Planning Studies within the Washington Metropolitan Area 2016 (continued)

STUDY	PRIMARY AGENCIES	SCHEDULE	PRODUCTS
Virginia – Planning Studies			
I-66 Tier 2 EIS (Outside the Beltway)	VDOT	2016	FEIS
I-66 Environmental Study (Inside the Beltway)	VDOT	2016	CE Report
Significant Projects Ratings Study (HB 599) – Round 2	VDOT	2016	Ratings
VA Rte. 28 Study	VDOT	2015	Improvement Options
Fairfax County Pkwy Study – Phase 1	VDOT, Fairfax County	2016	Near-Term Operational Improvements
VRE Gainesville-Haymarket Extension Study and NEPA	VRE	2017	NEPA Document
NOVA Bike and Pedestrian Trails	VDOT	2016	Report Update
Route 7 Transit Alternatives Analysis Study – Phase 2	NVTC	2016	Identify referred mode, alignment, termini, and funding
I-395/95 Transit/TDM Study	VDRPT	2016	Report
I-395 Environmental Study	VDOT	2016	Draft EA
TransAction Update	NVTA	2017	Report
<u>Transit Oriented Development Planning for the Richmond Highway Corridor</u>	<u>Fairfax County</u>	<u>2018</u>	<u>Report</u>
Maryland – Planning Studies			
I-95/I-495 Capital Beltway Study (American Legion Bridge to Woodrow Wilson Bridge)	MDOT/SHA, MTA, Montgomery and Frederick Counties	On-hold	DEIS
I-270/US 15 Multimodal Corridor Study (I-370, North of Biggs Ford Road)	MDOT/SHA, Montgomery County	On-hold	FEIS
I-495/I-270 West Side Study (Potomac River to I-370)	MDOT/SHA	TBD	TBD

Figure 5 (continued)

Transportation Planning Studies within the Washington Metropolitan Area 2016 (continued)

STUDY	PRIMARY AGENCIES	SCHEDULE	PRODUCTS
Maryland – Planning Studies (continued)			
MD 3 Widening/Upgrade Study (US 50 to MD 32)	MDOT/SHA	On-hold	DEIS
MD 5 Transportation Study (I-95/I-495 to US 301)	MDOT/SHA	2016	DEIS
MD 28/MD 198 Corridor Study (MD 97 to I-95)	MDOT/SHA	2017	TBD
MD 97 Montgomery Hills Study (MD 390 to MD 192)	MDOT/SHA	2016	TBD
MD 97 Bus Rapid Transit Study (MD 586 to MD 108)	MDOT/SHA, Montgomery County	Cancelled	n/a
MD 223 Corridor Study (Steed Road to MD 4)	MDOT/SHA, Prince George’s County	2016	Report
MD 355 Bus Rapid Transit Study (MD 410/MD 187 to Clarksburg)	MDOT/SHA/MTA, Montgomery and Frederick Counties	2016	Report
MD 586 Bus Rapid Transit Study (MD 97 to MD 355)	MDOT/SHA/MTA, Montgomery County	2016	TBD
US 29 Bus Rapid Transit Study (MD 410 to MD 198)	MDOT/SHA/MTA, Montgomery County	2016	Report
US 301 South Corridor Transportation Study (I-595/US 50 to Potomac River)	MDOT/SHA, Charles County	On-hold	TBD
US 301 Waldorf Study (TB to South of Waldorf)	MDOT/SHA, Charles County	2018	Feasibility Study
US 50 Feasibility Study (DC Line to Capital Beltway)	MDOT/SHA, Prince George’s County	2016	Feasibility Study

Figure 5 (continued)

Transportation Planning Studies within the Washington Metropolitan Area 2016 (continued)

STUDY	PRIMARY AGENCIES	SCHEDULE	PRODUCTS
District of Columbia – Planning Studies			
14th Street Bridge Feasibility Study	FHWA, DDOT, VDOT	On-going	EIS
South Capitol Street (EIS)/AWI	DDOT	On-going	EIS
First Place and Galloway NE Redesign (Fort Totten Metrorail Station)	DDOT, WMATA	On-going	Report/Design
Managed Lane Study	DDOT	2015	NEPA
DC Streetcar – Union Station to Georgetown	DDOT, FTA, FHWA	2015	NEPA
DC Streetcar – Benning Rd Ext Environmental	DDOT, FTA, FHWA	2015	EA
DC Streetcar – M Street Ext Environmental	DDOT, FTA, FHWA	2015	EA
Long Bridge Study	DDOT, FRA	2015	Study
Long Bridge Environmental	DDOT, FRA	2015	NEPA
C Street NE Implementation Study	DDOT	2015	Study
North South Corridor Study	DDOT	2015	Study
State Rail Plan	DDOT	2015	Plan
Florida Avenue NE Study	DDOT	2015	Study
16th Street NW Transit Priority	DDOT	2015	Study
East End Bike Lane Study	DDOT	2015	Study
Florida Avenue NE Study	DDOT	2015	Study
East-West Crosstown Study	DDOT	2015	Study
<u>Section 5304 Transit Asset Management Study</u>	<u>DDOT</u>	<u>2017</u>	<u>Study</u>

TOTAL FUNDING BY FEDERAL SOURCE FOR FY 2017

Federal funding for the transportation planning activities in this UPWP relies upon five sources: FTA Section 5303, FHWA Section 112, FAA Continuous Airport System Planning (CASP), FHWA State Planning and Research (SPR) and special federal funding. The funding amounts (including state and local matching funds) for the TPB work program are shown in Table 1 on page 15. These funding amounts are estimated from information received from DDOT, MDOT, VDOT, VDRPT and the FAA.

Table 1

TABLE 1
FY 2017 UPWP - PROPOSED AMENDED FUNDING BY SOURCE

March 9, 2017

Corrected: June 2, 2017

	FTA SECT 5303 80% FED & 20% STA/ LOC	FHWA SECT 112 80% FED & 20% STA/ LOC	TOTALS	
ALLOTMENTS PROVIDED BY DDOT				(\$560,683)
NEW FY 2017	\$429,341	\$1,780,834	\$2,210,175	(537,248)
UNOBLIGATED FY 2015	\$68,477	\$279,993	\$348,470	
CARRYOVER FY 2016	\$79,400	\$318,784	\$398,184	
SUBTOTAL	\$577,218	\$2,379,611	\$2,956,829	
ALLOTMENTS PROVIDED BY MDOT				(\$1,329,637)
NEW FY 2017	\$949,260	\$2,722,567	\$3,671,828	(1,326,453)
UNOBLIGATED FY 2015	\$194,173	\$538,451	\$732,624	
CARRYOVER FY 2016	\$257,977	\$742,683	\$1,000,660	
SUBTOTAL	\$1,401,410	\$4,003,701	\$5,405,112	
ALLOTMENTS PROVIDED BY VDRPT & VDOT				(\$913,220)
NEW FY 2017	\$811,935	\$2,326,288	\$3,138,222	(839,838)
UNOBLIGATED FY 2015	\$147,559	\$522,208	\$669,767	
CARRYOVER FY 2016	\$190,056	\$575,638	\$765,694	
SUBTOTAL	\$1,149,550	\$3,424,133	\$4,573,683	
TPB BASIC PROGRAM				
TOTAL NEW FY 2017	\$2,190,536	\$6,829,689	\$9,020,225	
TOTAL UNOBLIGATED FY 2015	\$410,209	\$1,340,652	\$1,750,861	
SUBTOTAL	\$2,600,745	\$8,170,340	\$10,771,085	
TOTAL CARRYOVER FY 2016	\$527,433	\$1,637,105	\$2,164,538	
TOTAL BASIC PROGRAM	\$3,128,178	\$9,807,445	\$12,935,623	(\$2,703,540)
FAA - CASP PROGRAM			\$250,000	
GRAND TOTAL	\$3,128,178	\$9,807,445	\$13,185,623	(\$2,703,540)

New FY2017 funds are newly authorized funds for the FY2017 UPWP

Unobligated FY2015 funds are unexpended funds from the completed FY2015 UPWP

Carryover FY2016 funds are programmed from the FY2016 UPWP to complete specific work tasks in the FY2016 UPWP

II. FY 2017 TPB WORK PROGRAM AND BUDGET

Program Structure

The TPB is responsible for the federally required planning process, serves as a forum for regional coordination, and provides technical resources for decision-making. This work program presents the work activities that support the TPB responsibilities. The structure of this work program has been reorganized from that in the FY 2016 program which showed more than 35 work activities with budgets and now comprises major activities. The tasks to be completed under each of the activities are described in the following sections. The staff of the COG Department of Transportation Planning will carry out these activities, with the assistance of staff in other COG departments and supplementary consultant support.

The work program identifies the major work products to be developed, the linkages between them, and the TPB entity responsible for oversight of the products. Figures 6 and 7 on pages 19-20 illustrate the relationship between and among the TPB work activities.

The **first four major activities** support the coordination, preparation and documentation of the policy and planning products required by federal law and regulations.

The first activity, **Long Range Transportation Planning**, includes a performance analysis of the FY 2016 financially-constrained long-range plan (CLRP) and initial preparation for the financial analysis of the quadrennial update of the CLRP in 2018. It also includes developing an unconstrained long range plan which identifies a subset of currently unfunded regionally significant projects that would improve the performance of the region's transportation system.

The second major activity, **Performance-Based Planning**, includes establishing a performance-based planning framework for regional transportation decision-making and coordinating the development of measures and targets to be incorporated into performance-based planning for the CLRP and TIP. It also includes supporting the FY 2017-2022 TIP by updating the projects and programs in it and processing any administrative modifications and amendments.

The third major activity, **Mobile Emissions Planning**, includes developing input data and running the mobile emissions (MOVES) model and completing the air quality conformity analysis for the 2016 CLRP and FY 2017-2022 TIP.

The fourth major activity, **Planning Programs**, encompasses a number of activities that ensure inclusion of specific aspects in the metropolitan transportation planning process:

- Regional congestion management process (CMP);
- Systems performance, operations and technology (SPOT) planning;
- Emergency preparedness;
- Safety;
- Freight planning;
- Bicycle and pedestrian planning;
- Public transportation planning, and
- Planning support for the Metropolitan Area Transportation Operations Coordination (MATOC) Program.

The fifth major activity, **Travel Forecasting**, includes developing the highway and transit networks in support of the long range planning activities and maintaining and improving the TPB's travel demand model and forecasting methods.

The sixth major activity, **Travel Monitoring and Data Programs**, provides empirical travel information from traffic counts, high occupancy vehicle (HOV) monitoring, and household survey and analysis activities. The data programs include GIS technical support for all planning activities and the regional transportation data clearinghouse.

The seventh major activity, **Coordination of Cooperative Forecasting and Transportation Planning**, coordinates local, state and federal planning activities in order to integrate land use and transportation planning in the region.

The eighth major activity, **Public Participation and Human Service Transportation Coordination**, includes all public involvement activities; outreach activities to low-income, older adults, minorities, and persons with disabilities; and communication activities to support of the development of the CLRP, TIP, and all other TPB activities. It also maintains the coordinated human service transportation plan for the region supports the MPO role in the FTA Section 5310 Enhanced Mobility program for elderly persons and persons with disabilities.

The ninth major activity, **the Transportation Alternatives and Land-Use Connections Program**, strengthens the integration of land use and transportation planning by offering short-term consultant technical assistance to local jurisdictions to advance their planning activities and incorporates the MPO role in the MAP-21 Transportation Alternatives Program.

The tenth major activity, **TPB Support and Management**, includes the staff and administrative management to provide support for the meetings of TPB, its committees and special work groups and the development and administration of the annual UPWP.

The eleventh major activity, **Technical Assistance**, activity responds to requests from state and local governments and transit operating agencies for applying TPB methods and data to support corridor, project, and sub-area transportation and land use studies related to regional transportation planning priorities.

Finally, the twelfth major activity, **Continuous Airport System Planning (CASP)** utilizes the methods and data work activities for airport and airport-serving facilities in the region.

Work Activity Budgets

In this FY 2017 UPWP approximately 35 work activities that have been conducted on an annual basis in previous years have been integrated and regrouped into 11 major activities. Funding for the TPB Basic Work Program is similar to the FY 2016 level.

The budget levels for the 11 activities by funding source, which include FTA and FHWA funds together with state and local match, are shown in Table 1 on page 15. The TPB committee structure is shown in Figure 8 on page 22. The TPB committee or sub-committee responsible for the activities listed in Figure 7 are shown under the descriptions for each task starting on page 25. A detailed breakdown of staffing, consultant costs and other budgetary requirements is provided in Table 3 on page 23.

Figure 6
Overview of Planning Products and Supporting Processes

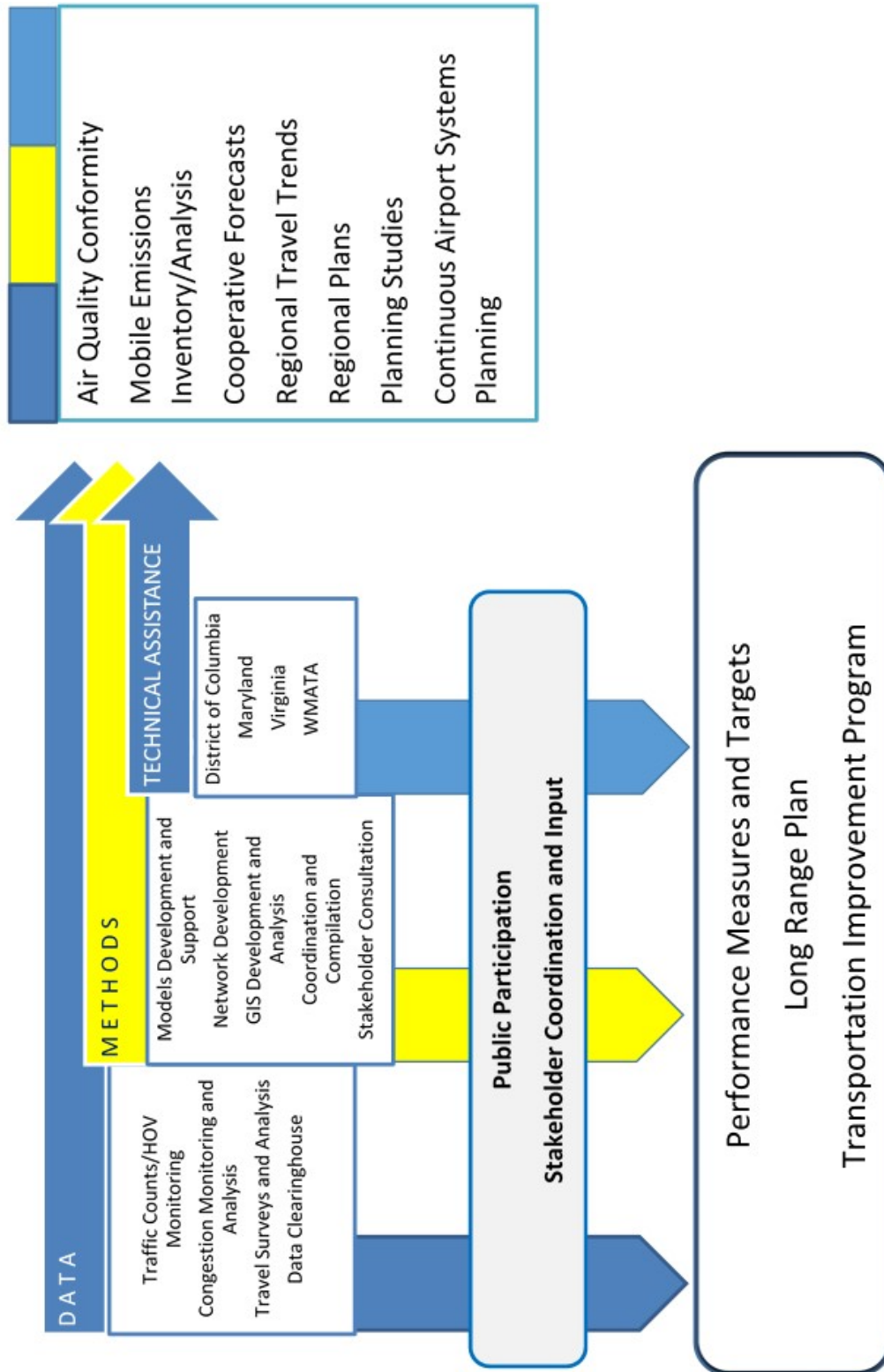


Figure 7
Major Components of UPWP Work Activities



March 9, 2017

Corrected: June 2, 2017

TABLE 2
FY 2017 UPWP - PROPOSED AMENDED WORK PROGRAM BUDGETS BY SOURCE

WORK ACTIVITY	TOTAL COST	FTA/STATE /LOCAL	FHWA/STATE /LOCAL	OTHER FUND
CORE PROGRAMS				
1. Long-Range Planning	\$1,104,800	\$269,479	\$835,321	
2. Performance-Based Planning and Programming	\$469,145	\$114,432	\$354,713	
3. Mobile Emissions Planning	\$1,598,800	\$389,974	\$1,208,826	
4. Planning Programs	\$1,564,200	\$381,534	\$1,182,666	
5. Travel Forecasting	\$2,266,800	\$552,910	\$1,713,890	
6. Travel Monitoring and Data Programs	\$1,961,573	\$478,460	\$1,483,113	
7. Cooperative Forecasting and Transportation Planning Coordination	\$760,000	\$185,376	\$574,624	
8. Public Participation and Human Transportation Service Coordination	\$830,200	\$202,499	\$627,701	
9. Transportation Alternatives and Land Use Connection Programs	\$422,700	\$103,103	\$319,597	
10. TPB Support and Management	\$825,785	\$201,422	\$624,363	
Core Program Total	\$11,804,003	\$2,879,190	\$8,924,813	
TECHNICAL ASSISTANCE				
A. District of Columbia	\$245,000	\$196,059	\$48,941	
B. Maryland	\$317,000	\$253,677	\$63,323	
C. Virginia	\$420,000	\$336,102	\$83,898	
D. WMATA	\$149,620	\$149,620	\$0	
Technical Assistance Program Total	\$1,131,620	\$935,458	\$196,162	
Total, Basic Program	\$12,935,623	\$3,814,648	\$9,120,975	
CONTINUOUS AIRPORT SYSTEM PLANNING				
A. Process 2015 Air Passenger Survey - Phase 2	\$125,000			\$125,000
B. Ground Access Forecast and Element Update	\$125,000			\$125,000
Continuous Airport System Planning Total	\$250,000			\$250,000
GRAND TOTAL UPWP	\$13,185,623	\$3,814,648	\$9,120,975	\$250,000
				(\$2,703,540)

Figure 8
TPB Committee Structure

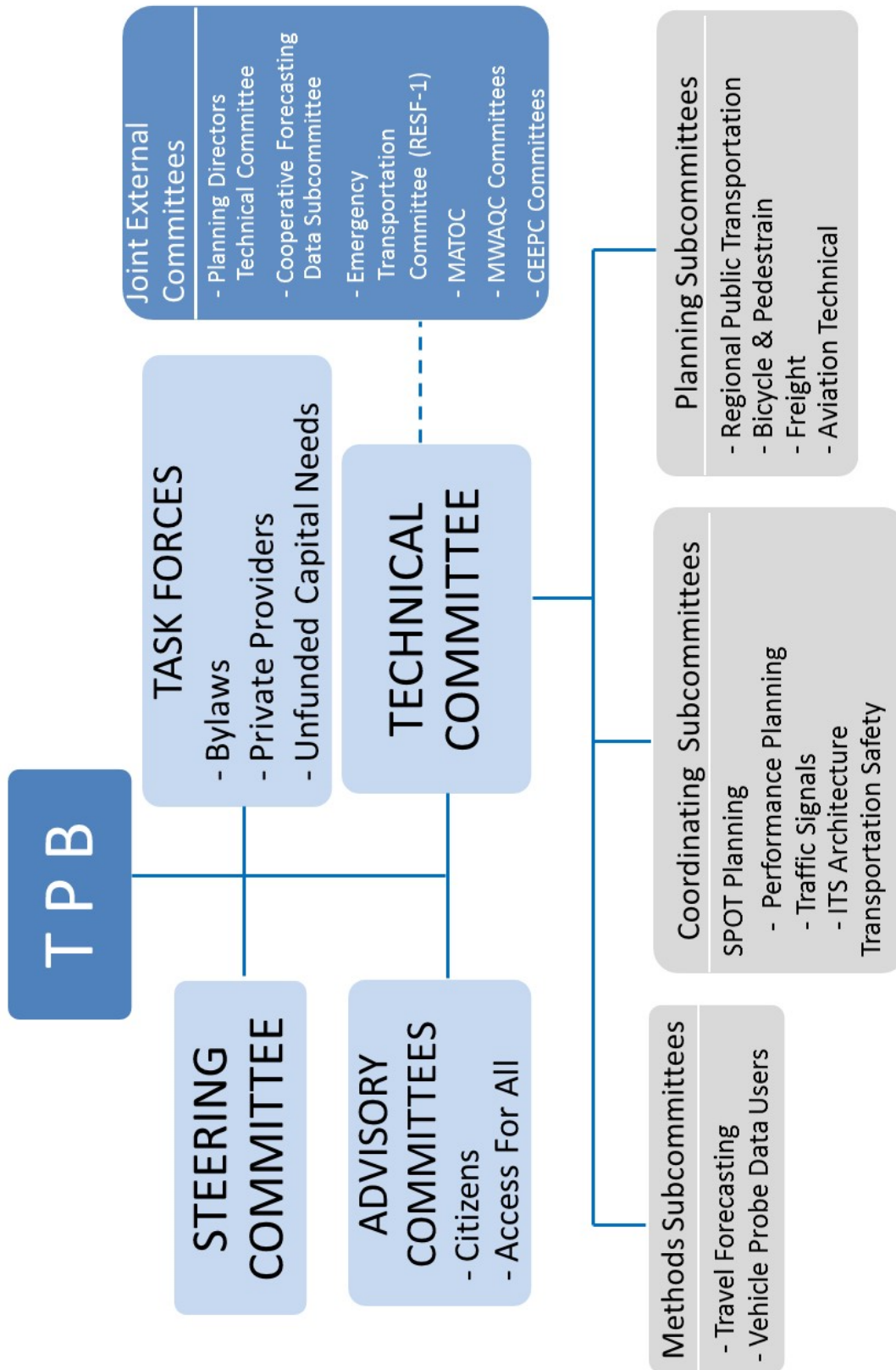


Table 3 TPB FY 2017 Budget and Work Program Activity by Expenditure Category

TABLE 3 FY 2017 UPWP - PROPOSED AMENDED BUDGET FOR WORK PROGRAM ACTIVITY BY EXPENDITURE CATEGORY											March 8, 2017
											Updated 3/9/17
Work Activity	Direct Salaries DTP Staff	Direct Salaries Other COG Staff	M&A 22%	Leave Benefits 20%	Fringe Benefits 25%	Indirect Costs 31%	Data & PC	Consultant	Direct Costs	TOTAL	
CORE PROGRAMS											
1. Long-Range Planning	413,550	30,000	96,827	110,723	163,752	255,049	3,000	25,000	6,900	1,104,800	
2. Performance-Based Planning and Programming	183,218	0	39,996	45,737	67,641	105,353	1,200	25,000	1,000	469,145	(\$50,000)
3. Mobile Emissions Planning	575,642	71,711	141,317	161,599	238,993	372,239	4,000	0	33,300	1,598,800	
4. Planning Programs	615,558	4,517	135,362	154,789	228,922	356,553	1,000	0	67,499	1,564,200	(\$150,000)
5. Travel Forecasting	775,746	0	169,345	193,649	286,393	446,067	1,000	325,000	69,600	2,266,800	
6. Travel Monitoring and Data Programs	484,592	0	105,787	120,969	178,904	278,649	45,000	559,373	188,300	1,961,573	(\$1,525,627)
7. Cooperative Forecasting and Transportation Planning Coordination	106,589	184,440	63,532	72,649	107,443	167,347	2,500	0	55,500	760,000	(\$100,000)
8. Public Participation and Human Transportation Service Coordination	263,232	0	57,464	65,711	97,181	151,363	2,000	90,000	103,250	830,200	
9. Transportation Alternatives and Land Use Connection Programs	46,601	20,000	14,539	16,626	24,588	38,297	1,000	260,000	1,050	422,700	
10. TPB Support and Management	250,561	0	54,697	62,547	92,503	144,077	1,000	10,000	210,400	825,785	
Core Program Total	3,715,287	310,668	878,866	1,004,998	1,486,320	2,314,992	61,700	1,294,373	736,799	11,804,003	(\$1,825,627)
TECHNICAL ASSISTANCE											
A. District of Columbia	78,610	0	17,161	19,623	29,022	45,202	0	19,882	35,500	245,000	(\$105,118)
B. Maryland	71,306	0	15,566	17,800	26,325	41,002	0	70,000	75,000	317,000	(\$498,367)
C. Virginia	132,663	0	28,960	33,117	48,977	76,283	0	30,000	70,000	420,000	(\$251,428)
D. WMATA	7,927	0	1,730	1,979	2,926	4,558	0	130,000	500	149,620	(\$23,000)
Technical Assistance Program Total	290,506	0	63,417	72,519	107,250	167,046	0	249,882	181,000	1,131,620	(\$877,913)
Total Basic Program	4,005,793	310,668	942,284	1,077,517	1,593,570	2,482,037	61,700	1,544,255	917,799	12,935,623	
CONTINUOUS AIRPORT SYSTEM PLANNING PROGRAM (CASP)	100,098	0	21,851	24,987	36,955	57,558	1,000	0	7,550	250,000	
GRAND TOTAL	4,105,891	310,668	964,135	1,102,504	1,630,525	2,539,596	62,700	1,544,255	925,349	13,185,623	(\$2,703,540)

III. MAJOR WORK ACTIVITIES

Long-Range Transportation Planning

Long-range planning activities in FY 2017 will include finalization and approval of the 2016 CLRP Amendment and the development of a Plan of Unfunded Regional Priority Projects. Activities will also include preparation for the development of the 2018 quadrennial update of the TPB's long-range plan, which will include a "Constrained Element" that meets federal requirements (serving essentially the same purpose as the current CLRP) and an unfunded element reflecting regional aspirations.

Unlike previous years, an annual amendment to the CLRP will not be developed in FY 2017. The staff capacity that would have been used to compile and analyze such an amendment will instead be devoted to developing the Plan of Unfunded Regional Priority Projects, which will provide essential components for the 2018 long-range plan.

OVERSIGHT

Technical Committee

MAJOR PRODUCTS

- **2016 CLRP Amendment, including plan documentation, performance analysis, environmental justice analysis, and financial analysis**
- **Plan of Unfunded Regional Priority Projects**
- **Call for Projects for the 2018 Long-Range Plan**

TOTAL COST ESTIMATE

\$1,104,800

CONSTRAINED LONG-RANGE TRANSPORTATION PLAN (CLRP)

The CLRP is currently the TPB's official long-range transportation plan, developed and approved to meet federal metropolitan planning requirements. It includes all "regionally significant" projects that the TPB realistically anticipates can be funded and implemented by 2040. When the plan undergoes major amendments, it must be analyzed to ensure that it meets federal requirements.

The TPB initiated the 2016 CLRP Amendment development process in December 2015 with the Call for Projects. The Amendment, along with the FY 2017-2022 TIP, will be finalized in the summer and fall of 2016. Approval is scheduled for October 2016.

Finalization and approval of the 2016 CLRP Amendment will include the following activities:

- **Documentation:** The CLRP Amendment will be documented via the website and written materials. Public materials about the plan will be released during plan development and after plan approval. Materials will be designed to be useful to a variety of audiences, less technical, and easier for the public to understand. In addition, public information will effectively utilize visualization technologies. Public access to the plan will include informative maps and graphics for web and print media, and an online, searchable database.

Analysis: A variety of analysis products related to the 2016 CLRP Amendment will be developed and presented in the fall of 2016. The performance analysis of the 2016 CLRP Amendment will detail how well the future transportation system laid out in the plan is expected to meet the needs of area travelers in 2040. The analysis uses forecasts of future population and job growth patterns along with the system of roadways and transit planned in the CLRP to predict future changes in travel patterns and travel conditions. In addition to examining changes in daily travel patterns, the analysis will examine changes in congestion on area roadways and on the Metro system, as well as changes

in the job accessibility by highway and transit. The performance analysis will also include the findings of the Air Quality Conformity Analysis of the 2016 CLRP Amendment and a forecast of future greenhouse gas emissions under the plan. A qualitative assessment will also be conducted to of how well the three overarching priorities identified in the Regional Transportation Priorities Plan (RTPP) are being met by the transportation system laid out in the 2016 CLRP Amendment.

- **Title VI and Environmental Justice Analysis:** A separate Title VI analysis will evaluate the plan for disproportionately high and adverse effects on low-income and minority population groups; this analysis will build upon the FY2016 work for a more robust analysis that takes into consideration specific concentrations of low-income and minority population groups, areas of potentially vulnerable populations, and additional measures of benefits and burdens for the CLRP, per the 2014 FWA and FTA planning certification recommendation.
- **Environmental Consultation:** For past updates, staff consulted with federal, state and local agencies responsible for natural resources, wildlife, land management environmental protection, conservation and historic preservation on environmental considerations in relation to spatial location of long-range plan improvements and potential environmental mitigation activities. During the 2016 CLRP Amendment development, staff will review previous consultation efforts to determine if any updates or revisions are necessary.
- **Financial Planning:** As required under federal planning regulations, both the TIP and the CLRP must have a financial plan that demonstrates how they can be implemented and shows the sources of funding expected to be made available to carry them out. The last major financial analysis for the CLRP was conducted in 2014. Staff will ensure this financial information is updated for the 2016 CLRP Amendment.

PLAN OF UNFUNDED REGIONAL PRIORITY PROJECTS

A range of planning activities will be conducted throughout FY 2017 to develop a Plan of Unfunded Regional Priority Projects. These activities will include analysis and outreach. The plan will identify a limited number of specific priority projects and make a persuasive case for their implementation. These projects will be selected to address key deficiencies in the current Constrained Long-Range Plan and to support implementation of regional policies, as articulated in the Regional Transportation Priorities Plan. The Plan of Unfunded Regional Priority Projects will be developed for inclusion in the TPB's long-range plan update in 2018.

The process for developing the Plan of Unfunded Regional Priority Projects, which will begin in the spring of 2016 but continue throughout FY 2017, will include the following steps:

- **Agree Upon Objectives and Identify Deficiencies in the CLRP:** Planning activities will elaborate upon the following broad objectives: Alleviate deficiencies in the CLRP (e.g., relieve congestion, improve access); Promote system efficiency (use strategies from the RTPP); Support emissions reductions (use VMT reduction strategies in the MSWG work); Serve economically disadvantaged communities (coordinate efforts with the TPB's Environmental Justice analysis)
- **Define Criteria for Project Selection:** Based upon input received from the Unfunded Needs Capital Working Group, the project team will develop a draft list of criteria for selecting projects that meet key objectives. The agreed-upon selection process may use: 1) analysis (e.g., using the Congestion Management Process [CMP] to identify projects to alleviate bottlenecks); 2) professional judgment (including consultation with the staff of TPB members), and 3) outreach to stakeholders and to the wider public to obtain input on preferences and project viability. The working group will discuss and refine the draft criteria

and selection process. The project team will seek input from the TPB's member jurisdictions on the draft criteria. Outreach may also include discussions with stakeholder groups and with the public.

- **Select an Initial List of Projects for Analysis and Discussion:** The project team will develop a draft list of projects selected to meet key criteria. Road and transit projects will be selected from the TPB's extensive Inventory of Unfunded Projects. Pedestrian and bicycle projects/priorities will be identified through a separate but integrated process that will be conducted under the guidance of the TPB's Bicycle and Pedestrian Subcommittee. The draft list will be extensively discussed—by the working group and with the TPB's members. It will also be the subject of a range of public outreach activities.
- **Analyze the Initial Draft of List of Projects:** Using the regional travel demand model, staff will conduct performance analysis of the list of projects, which will be packaged as a scenario. The measures for this study will be comparable to the analysis conducted for the CLRP. In addition to using the TPB's travel demand models, the project team may determine to use other methods of analysis, including methods aimed at identifying the impacts of pedestrian and bicycle improvements.
- **Refine the Unfunded Priority Projects List:** The project team, with direction from the Working Group, will use a combination of quantitative and qualitative measures to refine and finalize the list of priority projects. Evaluation at this stage will include consideration of: 1) effectiveness (based in part on the analysis in the earlier steps), 2) feasibility and readiness (based on judgment of jurisdiction staff); 3) support for implementation (based in part on various outreach activities); and 4) funding potential (opportunities/likelihood to raise new revenue to implement the project). Road and transit projects on the list will be drawn primarily from the Inventory of Unfunded Projects, but consideration will also be given to regional projects not included in the inventory that can be shown to address key gaps and to have broad regional support.
- **Develop and Approve a Plan of Unfunded Priority Improvements:** An official Plan of Unfunded Priority Improvements will be approved by the TPB at the end of FY 2017. This plan will reflect a broad level of regional consensus and will be designed to be useful for decision-makers at the state and local levels in their identification of projects for the Constrained Element of the long-range plan. It will be ready to be folded into the 2018 regional long-range transportation plan.

PREPARATION FOR THE 2018 LONG-RANGE PLAN

Toward the end of FY 2017, the TPB and its staff will begin preparations for the development of the next quadrennial update to the region's long-range transportation plan, which is scheduled for approval in 2018. The new plan will replace the current CLRP and will represent a new approach.

Compared to the current CLRP, the new long-range plan will be redefined to include unfunded priorities (based upon the Plan of Unfunded Priority Improvements) and a Constrained Element, which will meet federal requirements for financial constraint and air quality conformity. To a large degree, the Constrained Element will perform the same function as the current CLRP.

While the majority of work on the new long-range plan will occur in FY 2018, several key work tasks will be initiated in FY 2017:

- The Call for Projects for the Constrained Element of the 2018 Long-Range Plan will be

developed in the spring of 2017 and released in the summer of 2017. This solicitation document will ask implementing agencies to consider the Plan of Unfunded Priority Improvements and the policies of the Regional Transportation Priorities Plan in determining their project submissions.

- The next major financial analysis for the TPB's long-range plan, which is conducted every four years according to federal law, will be developed in FY 2018. Preparations for this quadrennial financial analysis will occur during the second half of FY 2017.

Performance-Based Planning and Programming

OVERSIGHT

Technical Committee

MAJOR PRODUCTS

- Preliminary performance measures and targets
- Updated projects and programs in FY 2017-2022

TOTAL COST ESTIMATE

~~\$519,143~~ \$469,145

AMENDMENT March 29, 2017:

Total Cost Estimate: \$469,145

Carryover \$50,000 from FY2017 to reflect revised timelines of federal rulemaking on PBPP requirements. This funding will support PBPP activities planned for FY 2018.

PERFORMANCE-BASED PLANNING

Federal surface transportation law, as developed in MAP-21 and continued under FAST, requires “a transition to performance-driven, outcome-based approaches” for the federal highway and transit programs. Metropolitan planning organizations, states, and public transportation providers will establish and use a performance-based approach to transportation decision making in planning and programming.

To implement this mandate, rulemakings on performance provisions are being issued by the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA). Most rulemakings have been issued in proposed form, with the final rules anticipated to be published through FY 2017. The proposed Statewide and Non-Metropolitan and Metropolitan Transportation Planning Joint Rulemaking provides for the implementation of performance-based planning within the planning process. The basic framework of the planning process is largely untouched from previous federal surface transportation reauthorization acts. However, the law directs changes to the planning process by requiring States, MPOs, and providers of public transportation to select performance targets and link investment priorities in the TIP and CLRP to the achievement of performance targets.

The proposed performance management framework initially created in MAP-21 requires coordination between States, MPOs, and public transportation providers. Integration of elements of other performance-based plans into the metropolitan planning process will also be required, including the:

- Highway Safety Improvement Plan including the State Highway Safety Plan
- Public Transportation Agency Safety Plan
- NHS and Transit Asset Management Plans
- Congestion Mitigation and Air Quality Program Performance Plan
- State Freight Plan

As the USDOT continues its rulemaking, TPB working groups in each area of expertise are coordinating the development of regional performance measures and targets for the metropolitan planning area. TPB staff are coordinating with the local DOTs and public transportation providers to evaluate the requirements for data collection, analysis, and reporting. Both the collection of current data and the forecasting of future performance are being evaluated. Following USDOT final

rulemaking, working groups will propose necessary revisions to the data processes used to establish measured performance.

Once the performance management rulemaking is finalized by USDOT, the states will have two years (anticipated for mid-2018) to establish performance targets in support of those measures; and the MPO subsequently has 180 days (anticipated for December 2018) 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 include a system performance report evaluating the condition and performance of the transportation system with respect to the established targets. The TIP will also include a description of the anticipated effect of the TIP toward achieving the performance targets set in the CLRP.

This task includes:

- Coordinate with DDOT, MDOT and VDOT on their setting of the state performance targets in support of the performance measures, and also coordinate with the DOTs to develop the specific performance targets in relation to the applicable performance measures for the TPB planning area. Similarly, coordinate with WMATA, VDRPT, and other public transportation agencies on their setting of performance targets for the established performance measures in transit state of good repair and safety. Preliminary measures and targets will be developed in FY 2017, with the first formal target-setting process anticipated in FY 2018.
- Coordinate with the State DOTs and public transportation providers in the development of the initial system performance report to evaluate the condition and performance of the transportation system with respect to the coordinated performance targets established for the TPB planning area. It is expected the first formal system performance report will be due in FY 2018.
 - Update the current Memorandum of Understanding on Metropolitan Transportation Planning Responsibilities for the National Capital Region which includes the TPB, the State DOTs, and Providers of Public Transportation to include transportation systems performance data sharing, the selection of performance targets, the reporting of performance targets, the reporting of system performance to be used in tracking progress toward attainment of critical outcomes for the region of the MPO, and the collection of data for the asset management plans for the NHS.
 - Begin to design the process to ensure that the Transportation Improvement Program (TIP) will contain projects that are consistent with and reflect CLRP investment priorities; demonstrates progress toward achieving transportation system performance targets; links investment priorities to the performance targets; and describes the anticipated effect of the TIP toward achieving the performance targets.

TRANSPORTATION IMPROVEMENT PROGRAM (TIP)

Federal surface transportation law, as developed in MAP-21 and continued under FAST, calls for MPOs, states, and public transportation providers to establish and use a performance-based approach to transportation decision making. States and MPOs must integrate performance based plans into their planning process, including goals, objectives, performance measures, and targets, either directly or by reference. The USDOT will establish performance measures and subsequently states and public transportation providers will establish performance targets in support of those measures. The MPO subsequently has 180 days 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 MPO should use targets to track progress towards attainment of critical performance outcomes for MPO region

Under the performance provisions, the TIP shall include the following, in coordination with the long-range metropolitan transportation plan.

- Contain projects consistent with the metropolitan transportation plan.
- Reflect investment priorities from the metropolitan transportation plan.
- Be designed to make progress toward achieving transportation system performance targets.
- Describe the anticipated effect of the TIP toward achieving the performance targets established in the metropolitan transportation plan.
- Link investment priorities to performance targets.

This task includes:

- Update the projects and programs in FY 2017-2022 TIP in conjunction with the approval of the 2016 CLRP amendment.
- Prepare and review amendments to the currently approved TIP.
- Enhance documentation of the TIP will be enhanced with additional analysis as a part of the CLRP/TIP brochure and the CLRP web site.
- Provide public access to CLRP and TIP project data through an improved online searchable database and a linked GIS database.
- Prepare annual certification of compliance with regulations on the provision of transit services to persons with disabilities.
- Prepare an annual listing of projects for which federal funds have been obligated in the preceding year for the FY 2017-2022 TIP.
- Process amendments and administrative modifications to the TIP will be processed.

Mobile Emissions Planning

OVERSIGHT

Technical Committee in consultation with MWAQC

MAJOR PRODUCTS

- Final report on 2016 CLRP and FY 2017-2022 TIP Air Quality Conformity Analysis; and supporting documents
- Reports on TERM evaluation and on greenhouse gas emissions reduction strategies; Updated mobile source emissions inventories/reports as required addressing ozone and PM2.5 standards and climate change goals

TOTAL COST ESTIMATE

\$1,598,800

AIR QUALITY CONFORMITY

The 1990 Clean Air Act Amendments require that detailed systems level technical analyses are conducted to assess air quality conformity of transportation plans and programs. This task will complete the air quality conformity analysis, or determination of the 2016 CLRP and FY2017-2022 TIP to ensure that they meet air quality requirements.

The updated CLRP and TIP will address ozone, wintertime carbon monoxide, and fine particles (particulate matter, PM2.5) requirements, including differing geographical boundaries, inventory time periods, and evaluation criteria by pollutant. The schedule for adoption of the updated plan and TIP calls for significant amount of the work to be completed in FY2017. The finalization of the plan is scheduled for middle of FY 2017. The final steps are the incorporation of public comments, development of the final report, adoption by the TPB, and subsequent transmittals.

This task includes:

- **Documentation:** This includes technical memoranda describing the development of inputs and procedures, a scope of work, organizing comments and testimony received from the consultation process and a final report detailing the modeling process, results, and the findings of the analysis.
- **Preparation of technical inputs in accordance with current planning assumptions:** TPB staff coordinates with several parties within the agency as well as with regional transportation agencies as part of the conformity effort. The inputs correspond to the latest plan, the currently adopted land activity forecasts, and non-travel related inputs to the mobile emissions model.
- **Travel demand modeling:** Modeling process includes execution of travel demand model and preparation of subsequent summaries, plots and technical data for quality assurance / quality control purposes.
- **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.

MOBILE EMISSIONS ANALYSIS

This task conducts a range of analyses to quantify emissions levels of various pollutants in support of air quality planning, as well as assesses the performance of Transportation Emissions Reduction Measures (TERMs) associated with PM_{2.5} and 8-hour ozone State Implementation Plan(SIP)s.

This task includes:

- Develop and review input data to the mobile emissions (MOVES) modeling runs for the 2016 CLRP & FY2017-22 TIP Air Quality Conformity Assessment, and the development of a financially constrained Long Range Plan.
- Execute MOVES sensitivity tests to assess the impacts of changes to model inputs, changes in MOVES software, or changes in hardware platforms.
- Estimate on-road mobile emissions reductions attributable to current and future Transportation Emissions Reduction Measures (TERMs).
- Provide technical assistance to the Commuter Connections Program in support of developing implementation plans and evaluating current and future TERMS.
- Develop on-road mobile emissions inventories using MOVES emissions model.
- Follow established TPB interagency and public consultation procedures and coordinate with the COG/DEP staff to involve the Metropolitan Washington Air Quality Committee (MWAQC) in the public and interagency consultation process.
- Coordinate 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.
- Inventory travel and emissions modeling that is in readily accessible formats for use by local planning agencies for regional and corridor/subarea planning studies.
- Coordinate with and provide technical support to the State Implementation Planning (SIP) activities that are undertaken by state air agencies.
- Respond to requests for technical assistance by governmental entities and/or their consultants working on technical analyses or municipal transportation planning.
- Develop presentations on mobile planning activities for TPB, MWAQC and CEEPC meetings or other public forums.
- Monitor FAST Act planning requirements related to mobile emissions planning and follow the development and release by EPA of the newest version of MOVES (MOVES2014a).
- Conduct follow-on work related to the development of the Action Plan by the COG Multi-Sector Working Group (MSWG) to reduce Greenhouse Gas (GHG) emissions in the region.

Planning Programs

OVERSIGHT	Various (see below)
MAJOR PRODUCTS	See program-specific products below
TOTAL COST ESTIMATE	\$1,714,200 \$1,564,200

AMENDMENT March 29, 2017

New Total Cost Estimate: \$1,564,200

Carryover \$150,000 from FY2017 UPWP resulting from a few planned work activities that are not being pursued for this fiscal year. The funds will be used to support these planned activities during the next fiscal year:

- **Congestion Management Process: Consistent with FAST Act. Work to leverage the Congestion Management Plan and its Technical report to develop a Regional Congestion Management Plan.**
- **Systems Performance, Operations and Technology Planning: Develop a comprehensive update to the Regional ITS Architecture document.**
- **Regional Public Transportation Planning: Publish the regional “State of Public Transportation” report.**
- **Freight Planning: Hold a regional Freight Forum to explore strategies to address current challenges for efficient freight movement, particularly for last mile deliveries in dense urban and suburban areas, and to explore opportunities offered by advancements in freight movement including shared mobility and autonomous vehicles.**

CONGESTION MANAGEMENT PROCESS

Under this task, the regional Congestion Management Process (CMP) informs the CLRP on current congestion on the region’s roadways by analyzing congestion data as well as identifying potential multi-modal congestion management strategies.

The CMP will address FAST and MAP-21 requirements for performance-based planning congestion reduction and system reliability measurements, on both recurring and non-recurring congestion.

This task includes:

- Work will begin on a preliminary regional Congestion Management Plan (CMPL), which is identified as an option in FAST. The preliminary plan will be refined and published after the regulations for it are finalized (likely in FY 2018 or later).
- Produce four other major aspects of the CMP:
 - CMP components of the CLRP that specifically address CMP and its subtopics, in the form of interlinked web pages of the on-line 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 CLRP Call for Projects, and incorporated into the regional CMP;

- A CMP Technical Report, published biennially, compiling and summarizing the results of CMP monitoring and analysis; in FY2017, technical analysis will prepare for the next major update of the CMP Technical Report to be produced in FY2018; 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.
- Obtain data from cost-effective public-sector and private-sector sources, including the I-95 Corridor Coalition Vehicle Probe Project (VPP), the Regional Integrated Transportation Information System (RITIS) of the Metropolitan Area Transportation Operations Coordination (MATOC) Program, the FHWA National Performance Management Research Data Set (NPMRDS), and, if needed, specialized data collection efforts. Compile, format, and review transportation systems performance data from these sources.
- Analyze congestion on the region's freeway networks, non-freeway arterials, the transit-significant roadways and the freight-significant roadway network.
- Produce related analyses, such as following a major event, on an as-needed basis.
- In conjunction with the CMP, support the Vehicle Probe Data Users Group (VPDUG) in its role to foster technical and methodological coordination in the application of vehicle probe data by member agencies and jurisdictions, including conducting regular Users Group meetings and maintaining reference materials on the TPB website.

OVERSIGHT

Systems Performance, Operations, and Technology Subcommittee (SPOTS)

MAJOR PRODUCTS

- Updated CMP portions of the CLRP
- Preliminary Congestion Management Plan materials
- VPDUG website reference materials
- Documentation for FAST/MAP-21 performance and target reporting requirements

SYSTEMS PERFORMANCE, OPERATIONS AND TECHNOLOGY PLANNING

The performance outcomes of the existing and planned regional transportation system rely on systems management, operations, and deployment of technologies. This task addresses these considerations in metropolitan transportation planning, in conjunction with the federal requirements for regional transportation systems management and operations (RTSMO).

This task includes:

- Conduct planning for operations including systems monitoring, traffic incident management and response, multi-modal coordination, traffic signal coordination, public traveler

information, and related strategies that address regional transportation systems management. Support the regional Traffic Signals Subcommittee and its information exchange, as well as annual regional surveys on traffic signal timing and power back-up systems.

- Conduct resiliency and reliability planning, focusing on outcomes-based applications of technology and operations strategies. Consider the resiliency of the region’s transportation systems to operate during and recover in a timely fashion from major disruptive events, (such as climate/extreme weather events), as well as its everyday reliability considering non-recurring congestion. Conduct related operations performance analyses. Resiliency and reliability are defined as metropolitan transportation planning factors in FAST.
- Advise the metropolitan transportation planning process regarding emerging technologies, including understanding and planning for connected and autonomous vehicles (CAVs) and related emerging “shared economy” aspects of transportation. Also support the longstanding regional Intelligent Transportation Systems (ITS) Architecture.
- In conjunction with FAST/MAP-21 performance-based planning requirements advise on congestion and reliability-related aspects of the FAST/MAP-21 requirements.
- Support the regional Systems Performance, Operations and Technology Subcommittee (SPOTS) (successor to the Management, Operations, and Intelligent Transportation Systems (MOITS) Technical Subcommittee). Also coordinate SPOTS activities with the Metropolitan Area Transportation Operations Coordination (MATOC) Program, including SPOTS’ defined advisory role for the MATOC Program on long-range planning topics.
- Maintain coordination with related member agency activities, and related COG and TPB committees including the Regional Emergency Support Function 1 (RESF-1) Emergency Transportation Committee.

OVERSIGHT

Systems Performance, Operations, and Technology Subcommittee (SPOTS)

MAJOR PRODUCTS

- **Technology, operations and systems performance documentation for the CLRP**
- **Regional ITS architecture**
- **Annual regional surveys on traffic signal timing and power back-up systems**
- **Documentation for FAST/MAP-21 performance and target reporting requirements**

TRANSPORTATION EMERGENCY PREPAREDNESS PLANNING

This task provides 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 and its public safety programs. This is a component of a much larger regional set of emergency preparedness activities funded primarily outside the UPWP by U.S. Department of Homeland Security (DHS) and COG local funding. The Regional Emergency Support Function #1 (RESF-1) Transportation Committee, within the COG public safety committee structure, advises these efforts and coordinates with emergency management agencies, police, fire,

and other emergency response (RESF) committees. Regular meetings of the RESF-1 Committee as well as subject matter-specific special events will be supported.

This task includes:

- Plan for the role of transportation as a support agency to emergency management in catastrophic or declared emergencies
- Undertake emergency coordination and response planning through the emergency management and Homeland Security Urban Area Security Initiative (UASI) processes
- Coordinate planning for transportation-related emergency communications, technical interoperability, and related capabilities
- Plan for transportation aspects of public outreach for emergency preparedness
- Coordinate with regional critical infrastructure protection and related security planning
- Advise emergency preparedness training and exercises
- Advise conformance with U.S. Department of Homeland Security (DHS) directives and requirements
- Advise applications for and management of UASI and other federal Homeland Security funding.
- Support the RESF-1 Emergency Transportation Committee.

OVERSIGHT

**Regional Emergency Support Function #1
Transportation Committee in coordination with the
Technology, Operations, and Performance
Subcommittee**

MAJOR PRODUCTS

**Documentation pursuant to DHS and UASI
requirements**

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. FAST requires metropolitan planning to increase the safety of the transportation system for motorized and non-motorized users. These and other factors, along with heightened awareness of the safety problem, have demonstrated the need for the regional transportation safety planning program.

This task includes:

- Address planning for safety aspects of the region's transportation systems, 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.

- Support MAP-21/FAST traffic safety performance measure requirements, including providing information on performance measures for safety, compiling fatality and injury data to support the “safety” national goal for performance management, coordinating with member states on addressing safety targets, and providing safety-related information and support for Performance-Based Planning for the CLRP/TIP.
- Undertake other safety data compilation and analysis, including maintenance of the safety element of region's long-range transportation plan.
- Support the Transportation Safety Subcommittee, as well as coordinating with member agencies and transportation safety stakeholders.

OVERSIGHT

Transportation Safety Subcommittee

MAJOR PRODUCTS

- **Safety element of the CLRP**
- **Documentation for FAST/MAP-21 performance and target reporting requirements**

BICYCLE AND PEDESTRIAN PLANNING

The enhancement of pedestrian and bicycle facilities, activities, and safety in the region is a critical component of the metropolitan transportation planning process. Advised by the regional Bicycle and Pedestrian Subcommittee, the 2015 Regional Bicycle and Pedestrian Plan provides the framework for this effort.

This task includes:

- Maintain the Regional Bicycle and Pedestrian Plan and support the Bicycle and Pedestrian Plan database on the TPB Web site for member agency and public access, including an on-line mapping and visualization of projects identified in the plan, and publication of an FY2017 biennial progress report on Regional Bicycle and Pedestrian Plan project implementation.
- Compile Bicycle and pedestrian project recommendations for the Transportation Improvement Program (TIP) and monitor Regional Complete Streets and Green Streets activities.
- Identify a list of unfunded bicycle and pedestrian projects serving the goals of the Regional Transportation Priorities Plan for the consideration by the TPB Unfunded Capital Needs Working Group. In conjunction with the Subcommittee and the Regional Trails Coalition, regional or long-distance bicycle routes/project needs will be identified, including potential circumferential "bicycle beltway" routes.
- Provide technical advice to the "Street Smart" regional pedestrian and bicycle safety public outreach campaign (Street Smart is supported by funding outside the UPWP); on the Capital Bikeshare system; on pedestrian and bicycle mapping and routing systems and information for the region; on pedestrian and bicycle safety; and on bicycle and pedestrian systems usage and consideration in the overall metropolitan transportation planning process.
- Conduct two or more regional bicycle and pedestrian planning or design training, outreach, or professional development opportunities for member agency staffs, at least one of which will have a primary focus on pedestrian planning.

- Support the Bicycle and Pedestrian Subcommittee.

OVERSIGHT

Regional Bicycle and Pedestrian Subcommittee

MAJOR PRODUCTS

- **Compilation of bicycle and pedestrian facilities for the TIP**
- **Maintenance of the regional bicycle and pedestrian plan on the TPB website**
- **Recommendations on circumferential bicycle routes**
- **Recommendations on unfunded bicycle and pedestrian projects**
- **Two or more regional outreach workshops**

REGIONAL PUBLIC TRANSPORTATION PLANNING

The region has a variety of local and commuter bus, rail transit, and commuter rail operators and other agencies involved in public transportation planning and operation. It also is served by a number of private providers. This task advises the consideration of public transportation activities and needs as an important part of the metropolitan transportation planning process.

This task includes:

- Provide support to the Regional Public Transportation Subcommittee for the coordination of public transportation planning in the region, and for incorporating regional public transportation plans into the CLRP and TIP;
- Evaluate federal rulemaking for the performance-based planning requirements, specifically transit safety and transit state of good repair, including data collection, analysis of the performance measures, forecasting, and setting of targets.
- Provide a forum for discussion of the development of the performance measures and selection of performance targets for the metropolitan planning area, in order to coordinate with relevant providers of public transportation to ensure consistency to the maximum extent practicable.
- Provide support to the TPB Private Providers Task Force and document the involvement of private providers of public transportation in the TIP. Also support quarterly meetings of the TPB Regional Taxicab Regulators Task Force.
- Evaluate the performance of the corridor projects implemented by the TPB's Transportation Investments Generating Economic Recovery (TIGER) Grant for Priority Bus in the National Capital Region, including the submission of one year after and two year after reports for projects concluded in calendar year 2016.
- Produce an annual report on the "State of Public Transportation" to provide informative public transportation operations, customer, and financial facts, including recent

accomplishments and upcoming activities, and a summary of the Subcommittee's recommendations for improving services for consideration by the TPB.

OVERSIGHT

Regional Public Transportation Subcommittee

MAJOR PRODUCTS

- **Annual report, data compilation, reports on technical issues, and outreach materials**
- **Private Provider involvement documentation**

FREIGHT PLANNING

The TPB provides opportunities for consideration, coordination, and collaborative enhancement of planning for freight movement in the region. The Regional Freight Plan updated in FY2016 provides guidance for continued regional planning activities.

This task includes:

- Address MAP-21 and FAST requirements related to regional freight planning. Coordinate with member jurisdictions on the establishment of freight performance targets.
- Ensure consideration of freight planning issues in overall metropolitan transportation planning through outreach to the private-sector, regular interaction with the TPB and other committees on regional freight planning issues, and interactions with public-sector officials of member jurisdictions.
- Engage and inform the Transportation Planning Board and the TPB Technical Committee, and other TPB subcommittees on regional freight issues. Coordinate with TPB travel monitoring and forecasting activities on freight considerations. Engage the transportation safety subcommittee on truck safety issues.
- 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 engage them in the metropolitan planning process.
- Coordinate with relevant jurisdictions and committees on regional rail issues.
- Compile and analyze readily available data to support regional freight planning.
- Continue ongoing “Freight Around the Region” outreach efforts focusing on individual jurisdictions' freight activities and their linkages to the regional freight picture.
- Maintain the Regional Freight Plan and supporting materials on the TPB Web site for member agency and public access.
- Organize a Regional Freight Forum.
- Maintain and update the freight component of the Constrained Long Range Plan (CLRP).
- Support the TPB Freight Subcommittee.

OVERSIGHT

Freight Subcommittee

MAJOR PRODUCTS

- **Freight Around the Region publication**
- **Regional Freight Forum**
- **Documentation as necessary supporting MAP-21 and FAST requirements of freight planning**

METROPOLITAN AREA TRANSPORTATION OPERATIONS COORDINATION PROGRAM PLANNING

TPB provides 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.

This task includes:

- **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
- **MATOC Annual Report:** Develop an Annual Report summarizing the 2016 accomplishments of the MATOC Program.
- **Supporting Materials:** Develop supporting or informational materials for the above activities as necessary.

OVERSIGHT

MATOC Steering Committee, in conjunction with the Technology, Operations, and Performance Subcommittee

MAJOR PRODUCTS

- MATOC 2016 Annual Report

Travel Forecasting

OVERSIGHT

Travel Forecasting Subcommittee

MAJOR PRODUCTS

- A series of highway and transit networks reflecting the latest CLRP and TIP for input to the regional travel demand model together with technical documentation.
- Updated travel models; documentation of models development activities; and recommendations for continued updating of the travel demand modeling process.

TOTAL COST ESTIMATE

\$2,266,800

NETWORK DEVELOPMENT

This task includes preparing transportation network files, which are primary inputs to the regional travel demand model that is used for forecasting travel in the CLRP, project planning studies, special scenario studies, and in support of the travel model development activities.

This task includes:

- Prepare base- and forecast-year highway and transit networks, in accordance with the latest CLRP and TIP elements received from state and local agencies, in support of long range planning and any special regional studies.
- Update the TPB's base-year (2016) transit network to reflect the most current service in the Metropolitan Washington Region.
- Maintain and refine the TPB's existing GIS-based information system used to facilitate network coding and multi-year network file management.
- Support the application of the current regional travel demand model (Version 2.3.57a or its successor) for air quality planning work and other TPB planning studies, which could also include updates in the transportation networks due to the strategic plan for models development (described below).
- Respond to network-related technical data requests, including requests for transit line files, station files, and shapefiles associated with features of the regional highway or transit network.

MODELS DEVELOPMENT AND SUPPORT

This task involves maintaining and improving the travel forecasting model which supports the regional transportation planning process. During FY 2016, a seven-year strategic models development plan and a short-term implementation plan for improving the TPB trip-based travel forecasting capabilities were formulated. The short term improvements, which were started during FY 2016, are planned to be completed in FY 2017.

This task includes:

- Continue the consultant-assisted effort to improve the current TPB trip-based travel model and begin development of an activity-based travel demand forecasting model (ABM) with existing data.
- Support the application of the current regional travel demand model (Version 2.3.57a or its successor) for air quality planning work and other TPB planning studies. 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.
- Work with local transportation agencies in formulating ways in which the regional travel model might be used to provide performance-based measures as called for in the new surface transportation authorization legislation (FAST Act).
- Assess model performance and reasonableness through comparison of travel model results with 2010 Census data and the TPB geographically focused household travel survey data.
- Provide staff support for the TPB Travel Forecasting Subcommittee, which is charged with overseeing technical practices and improvements to the TPB travel forecasting process.
- Keep abreast of new developments in travel demand forecasting, via participation with relevant groups, such as the Transportation Research Board (TRB) and the Travel Modeling Improvement Program (TMIP).
- Respond to model-related data requests from local partner agencies and their consultants.
- Provide continued support for software used to run the TPB travel demand model (Citilabs Cube Base, Cube Voyager, and Cube Cluster).
- Provide continued technical support for software used to estimate mobile emissions, such as the EPA MOVES model, including any supporting software applications.
- Provide training to DTP staff in various versions of Citilabs Cube Base, Cube Voyager, Cube Cluster, and MOVES, such as MOVES2014.
- Coordinate with the COG Office of Information, Technology and Facilities Management (ITFM) to help maintain the computers used to run the regional travel demand model, including the maintenance of data storage systems for the back-up, archiving, and retrieval of model-related files.

Travel Monitoring and Data Programs

OVERSIGHT	Various (see below)
MAJOR PRODUCTS	See program-specific products below
TOTAL COST ESTIMATE	\$1,987,200 FY 2017 \$1,500,000 carryover from FY 2016 \$3,487,200 total

AMENDMENT March 29, 2017:

Total Cost Estimate: \$1,961,573

Carryover \$1,525,627 in funding for the Household Travel Survey to commence and complete the major “once in a decade” region-wide household travel survey. This amount being carried over reflects UPWP funding allocations from both FY 2017 and FY 2016. Given the significant resources needed for this work activity (currently estimated at about \$3 million) funding for this activity has traditionally been allocated over multiple fiscal years. While data collection for this survey was originally scheduled to begin in the FY 2017, it was decided to defer the start of the survey data collection until FY 2018 after completion of the main stages of the Metrorail SafeTrack program. This carryover funding together with the funding proposed in the FY 2018 UPWP budget will provide the funding needed to conduct and complete the data collection for this survey.

HOUSEHOLD TRAVEL SURVEY

A new large scale region-wide household travel data is needed to obtain updated information on the travel patterns of persons residing in the TPB modeled area and the key factors influencing their current travel choices and travel behavior. The last large scale region-wide household travel survey was conducted in 2007/2008. The data collected in this new regional household travel survey will also be used to develop and calibrate the next generation TPB regional travel demand forecasting model that will be used to forecast future travel demands based on projected household and employment growth and planned improvements to the regional transportation system. In FY 2017, a professional survey firm, selected in FY 2016, will begin the full scale data collection for this new household travel survey. This survey will be designed to obtain the participation of approximately 12,000 households in TPB modeled area jurisdictions. It is expected that the full data collection for this survey will be completed in FY 2018.

This task includes:

- Data collections for a large sample methodologically enhanced activity-based region-wide household travel survey designed to collect detailed information on the characteristics and daily travel of approximately 12,000 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 could 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.

- Prepare information reports on various aspects of daily household and vehicle travel in the geographically focused subareas to support analysis of regional growth and transportation issues.
- Staff supervision of the survey contractor to ensure that all survey procedures and protocols are being correctly carried out and that survey quality control procedures are being maintained. Staff will also coordinate the conduct of survey activities with state and local government staff as appropriate.
- Continued provision of data, documentation, and technical support to users of 2007/2008 Regional Household Travel Survey and Geographically-Focused Household Travel Surveys. Update user documentation as required.

OVERSIGHT

Travel Forecasting Subcommittee

MAJOR PRODUCTS

- **Collected survey data**
- **Maintenance of survey quality control procedures**
- **Technical support**

TRAVEL MONITORING COUNTS/STUDIES

This task involves the conduct of special traffic counts, travel time runs and other special travel monitoring studies to support regional travel demand model validation and refinement activities and other activities such as regional high-occupancy vehicle (HOV) facility performance analysis and the identification of high volume truck travel routes in the region. In FY 2017, a travel monitoring study of intercity bus operations and facilities in the region will be conducted.

This task includes:

- Development of a database of intercity bus operations including detailed information on intercity bus operators serving the in the region, the destination cities served by these operators, the routing of this intercity bus service through the region, and the number of daily operations by time of day.
- Development of a complete inventory and GIS web map of intercity bus facilities, include including terminal facilities and curbside pick-up and drop-off locations in the region.
- Collection of intercity bus passenger ridership data and/or sample bus passenger counts

OVERSIGHT

Travel Forecasting Subcommittee

MAJOR PRODUCTS

- **Intercity bus database and GIS web map**

REGIONAL TRANSPORTATION DATA CLEARINGHOUSE

Efficient access to a comprehensive data set containing current and historic data on the characteristics and performance of the region's transportation system is vitally important for transportation planning, air quality analysis, models development, congestion management and project evaluations. Under this work item staff will continue to work with local, state, WMATA and other regional agencies to transfer data to and from the Clearinghouse and to update the it with updated highway and transit performance data as these data become available.

This task includes:

- 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 freeway and arterial road speed and level of service (LOS) data.
- Update Clearinghouse highway network bridge and pavement condition data from most current National Bridge Inventory and Highway Performance Management System (HPMS) databases.
- Distribute Regional Transportation Clearinghouse Data to TPB participating agencies via a GIS web-based application.

OVERSIGHT

Technical Committee

MAJOR PRODUCTS

- **Updated clearinghouse database and documentation**
- **Web interface to access clearinghouse data**

GIS DATA

This activity provides Geographic Information System (GIS) data and technical support to users of the TPB GIS for many important planning activities, including the CLRP, the TIP, the LRP, Congestion Monitoring and Analysis, Cooperative Forecasting, Regional Transportation Data Clearinghouse, Network and Models Development, and Bicycle Planning.

This task includes:

- Maintain and update GIS-related hardware and software used by staff for regional transportation planning activities.
- Provide data and technical support to staff using GIS for development and distribution of data and information developed for TPB planning activities, including the CLRP and Unconstrained LRP, the TIP, Congestion Monitoring and Analysis, Cooperative Forecasting, Regional Transportation Data Clearinghouse, Network and Models Development, and Freight, Bike and Pedestrian Planning activities.

- Respond to request for TPB GIS metadata, databases, and applications.
- Continue to coordinate the regional GIS activities with state DOTs, WMATA, and the local governments through COG's GIS Committee and subcommittees.

OVERSIGHT

Technical Committee

MAJOR PRODUCTS

- **Updated GIS software, databases, online web map applications, user documentation, support and coordination of COG/TPB GIS activities**

Cooperative Forecasting and Transportation Planning Coordination

This activity coordinates local, state and federal planning activities, develops population, household, and employment forecasts that are used as input into TPB travel demand-forecasting model, and facilitates the integration of land use and transportation planning in the region.

- 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.
- 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.
- 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.
- Update and maintain Cooperative Forecasting land activity databases of TAZ-level population, household, and employment forecasts that are used as input into TPB travel demand-forecasting model.
- Map and analyze Cooperative Forecasting growth forecasts in relation to COG Activity Centers and premium transit locations.
- Respond to public comments on the Round 9.0 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 work program.

OVERSIGHT

Technical Committee

MAJOR PRODUCTS

- Documentation of key land use and transportation assumptions for updates to the Cooperative Forecasting land activity forecasts
- Update of regional planning databases
- Analysis of Activity Center growth forecasts
- Development and distribution of technical reports and information products

TOTAL COST ESTIMATE

\$860,000

AMENDMENT March 29, 2017:

Total Cost Estimate: \$760,000

Carryover \$100,000 in funding into the next fiscal year. There have been no updates to the Cooperative forecasts (Round 9.0) and no updates are anticipated to be completed during the remaining term of this fiscal year. These additional funds will support work with the region's Planning Directors to identify and evaluate potential land use strategies and scenarios for improving transportation system performance outcomes as part of planned TPB's Long Range Plan Task Force work activities and the quadrennial update of the TPB's Constrained Long Range Plan element.

Public Participation and Human Service Transportation Coordination

OVERSIGHT

Transportation Planning Board

MAJOR PRODUCTS

- Public comment solicited and documented
- CAC and AFA committee reports
- Information dissemination through the website, social media, and printed documents

TOTAL COST ESTIMATE

\$830,200

PUBLIC PARTICIPATION

The Update of the Participation Plan as approved by the TPB in September 2014 will guide all public involvement activities to support the development of the CLRP, TIP, and all other TPB planning activities. The TPB's Public Participation plan emphasizes involving traditionally-disadvantaged populations in the planning process, as part of the TPB's commitment to ensuring nondiscrimination in all its programs and activities as required under Title VI and the Environmental Justice Executive Order.

- Conduct regular public involvement as described in the TPB Participation Plan, including public comment sessions as the beginning of TPB meetings and official public comment periods prior to the adoption of TPB plans and programs as key TPB policies and documents.
- 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 and representatives of low-income communities, minority communities, persons with disabilities and those with limited English skills as the TPB's primary strategy for engaging traditionally-disadvantaged population groups in the planning process. Staff will transmit AFA Committee comments to the TPB on transportation plans, projects, programs, services and issues that are important to AFA community groups.
- 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 development of the CLRP, the TIP, and the forthcoming Plan of Unfunded Regional Priority Projects.
- 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.
- Support implementation of the TPB Participation Plan and conduct evaluation activities of the public involvement process.
- Conduct continuing evaluation activities of the public involvement process using the process for evaluation established in FY 2016.

COMMUNICATIONS

- 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.
- Produce regular on-line and print TPB newsletters
- Produce the annual edition of the Region magazine highlighting significant TPB activities in the past year.
- Ensure that the TPB's website, publications and official documents are timely, thorough and user-friendly.
- 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 Produce regular on-line and/or print TPB newsletters

HUMAN SERVICE TRANSPORTATION COORDINATION

Under Federal regulations, a Coordinated Human Service Transportation Plan is required to guide funding decisions for the Federal Transit Administration (FTA) "Section 5310 Enhanced Mobility of Seniors and Individuals with Disabilities" program. COG is designated recipient of this program for the Washington DC-VA-MD Urbanized Area. In 2014, the TPB approved an update to the Coordinated Plan to respond to the requirements of the Enhanced Mobility program.

The TPB established the Human Service Transportation Coordination Task Force in 2006 to help develop the Coordinated Plan. In FY2016, the Task Force was incorporated into the Access for All Advisory Committee given overlapping membership and that the work of the Task Force is largely done.

This task includes:

- Review the Coordinated Human Service Transportation Plan with the AFA Committee for any revisions or updates to capture unmet transportation needs for people with disabilities and older adults.
- Plan for the next solicitation and selection of projects for Enhanced Mobility funding under FAST.
- Further the goals regional mobility management efforts to provide an array of transportation services and options to older adults and people with disabilities.

Transportation Alternatives and Land Use Connection (TLC) Programs

This work activity strengthens the coordination between local land use and transportation planning. Begun as a pilot in November 2006, the TLC program offers short-term technical assistance through consultant teams to local jurisdictions to advance their planning activities.

This activity will encompass the following work tasks in FY 2017:

- Offer short-term consultant team technical assistance to local jurisdictions to advance their land use and transportation planning activities.
- 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.
- 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.
- Conduct the selection process for small capital improvement projects using funding sub-allocated to the Washington metropolitan region through the state DOTs from the MAP-21 Transportation Alternatives Program (TAP).

OVERSIGHT

Technical Committee

MAJOR PRODUCTS

- Technical assistance, including final reports, provided by consultant teams to localities
- Updated website
- Peer exchange activities
- TAP coordination

TOTAL COST ESTIMATE

\$422,700

TPB Support and Management

This activity includes support for the Transportation Planning Board (TPB), management activities not attributable to specific tasks in the work program, and development of the Unified Planning Work Program (UPWP).

OVERSIGHT

Transportation Planning Board

MAJOR PRODUCTS

- **Materials for the meetings of the TPB, Steering Committee, Technical Committee, and State Technical Working Group**
- **Responses to information requests from elected officials, federal agencies, and media**
- **Participation in external meetings related to the TPB work program**

TOTAL COST ESTIMATE

\$825,785

TRANSPORTATION PLANNING BOARD (TPB) SUPPORT AND MANAGEMENT

- Make all administrative arrangements and provide staff support for TPB, the TPB Steering Committee, the State Technical Working Group, the TPB Technical Committee and special TPB work groups meetings.
- Maintain TPB Committee membership rosters and distribution lists and prepare meeting materials for TPB Committee meetings.
- Prepare monthly Director's Report.
- Respond to periodic requests from TPB members, federal agencies, Congressional offices, media and others for information or data of a general transportation nature.
- Meet with TPB Board members and participating agency staff to discuss current and emerging regional transportation planning issues.
- Respond to TPB correspondence and draft correspondence requested by the Board.
- Participate in meetings of other agencies whose programs and activities relate to and impact the TPB work program.
- Draft Memoranda of Understanding with other agencies for the TPB's review and approval.
- Participation in the Association of Metropolitan Planning Organizations (AMPO) and AMPO meetings.
- Coordination of TPB Planning Activities with Program Directors.
- Day-to-day management of and allocation of staff and financial resources
- Monitoring of all work program activities and expenditures

UNIFIED PLANNING WORK PROGRAM (UPWP)

The UPWP for the Metropolitan Washington Region describes all transportation planning activities utilizing federal funding, including Title I Section 134 metropolitan planning funds, Title III Section 8 metropolitan planning funds, and Federal Aviation Administration Continuing Airport System Planning (CASP) funds. The UPWP identifies state and local matching dollars for these federal planning programs, as well as other closely related planning projects utilizing state and local funds.

This task includes:

- Develop the FY 2018 UPWP that complies with anticipated metropolitan planning requirements in the Fixing America's Surface Transportation (FAST) Act.
- Supervise the preparation, negotiation, and approval of the annual work program and budget involving the State Transportation Agencies, the TPB Technical Committee, the TPB Technical Committee, the Steering Committee and the TPB.
- Preparation of monthly UPWP progress reports for each of the state agencies administering planning funding and prepare all necessary federal grant applications submissions.
- Review all monthly UPWP invoices going to each of the state agencies administering planning funding.

Technical Assistance

This TPB work program activity responds to requests for technical assistance from the state and local governments and transit operating agencies. This activity takes the form of technical work tasks in which TPB developed tools, techniques, data, and capabilities are used to support DDOT, MDOT, VDOT, VDRPT and WMATA sub-area planning, travel monitoring, travel modeling and data collection efforts related to regional transportation planning priorities. The funding level allocated to technical assistance is an agreed upon percentage of the total new FY 2017 funding in the basic work program. The funding level for each state is an agreed upon percentage of the total new FTA and FHWA planning funding passed through each state. The funding level for WMATA is an agreed upon percentage of the total new FTA funding. The specific activities and levels of effort are developed through consultation between the state and WMATA representatives and TPB staff.

AMENDMENT March 29, 2017:

The breakdown of the funds within the Technical Assistance program recommended to be carried over is as follows:

Of the total \$877,913 in funds being carried over: the DC Technical Assistance budget will be reduced by \$105,118, the MD Technical Assistance budget by \$498,367 and the VA Technical Assistance budget by \$251,428 and WMATA by \$23,000. The carryover amounts in this fiscal year are unusually large and reflect discontinued plans to explore a few technical work activities at this time. The carryover funds will form the largest basis of support for the TPB's Long Range Plan Task Force which is considering developing a set of unfunded or underfunded projects, program and policies initiatives that together can provide a substantive improvement in the performance outcomes of the region's transportation system in the long run.

DISTRICT OF COLUMBIA

TOTAL COST ESTIMATE \$274,742 FY 2017
 \$75,376 carryover from FY 2016
 \$350,118 total

AMENDMENT March 29, 2017:

Total Cost Estimate: \$245,000

Program Development, Data Requests and Miscellaneous Services

This work activity supports staff time spent in developing scopes of work for requested projects and in administering the DC Technical Assistance work program throughout the year. Work activities involve meeting with DDOT staff to discuss proposed projects, drafting and finalizing work statements and tasks, creating project accounts when authorized, and progress reporting throughout the projects. Additionally, this project establishes an account to address requests which are too small or too short-lived to warrant separate scopes of work. Requests may include staff time to participate in technical review committees and task forces and execution of small technical studies.

Cost Estimate \$10,000
Product Specific scopes of work
Schedule On-going activity

Traffic Counts and Highway Performance Management System (HPMS) Support

This task includes procurement of a contractor to perform 7-day vehicle classification counts and 3-day traffic volume machine counts on roadway segments and grade-separated ramps that part of DDOT's traffic counting program. A total of approximately 200 traffic counts and 60 ramp counts will be performed city-wide at locations specified by DDOT's HPMS Coordinating Committee. Staff will also provide quality control checking of the traffic counts conducted by the contractor and provide technical support to DDOT in preparation of its annual HPMS submittal. This technical support will include processing of the traffic counts into average annual daily traffic (AADT) volumes, growth factoring of AADT volumes, and preparation of vehicle classification summaries of daily travel activity and preparation of traffic volume metadata.

Cost Estimate \$235,000
Product Machine traffic counts and HPMS submittal support
Schedule June 2017

DC Technical Assistance - Automated Transferal for CLRP, Conformity and TIP Data

This task is to automate the process by which DDOT provide project information to the Transportation Improvement Program (TIP) database, known as "iTIP". DDOT will provide its data sets pertaining to the Financially Constrained Long-Range Transportation Plan, Air Quality Conformity Analysis, and Transportation Improvement Program to TPB staff. Staff will review these data sets and develop an automated process by which DDOT can directly transfer its data to the TPB's "iTIP" database. Consultant

assistance from AmericanEagle.com may be required for additional programming to the iTIP database tool.

Cost Estimate \$0
 \$15,000 carryover from FY 2016
 \$15,000 total

Product Automated data transfer

Schedule June 2017

DC Technical Assistance – Loading zone and Truck Restriction Data Collection

This work task is to collect filed data on activities and vehicle movements in DC loading zone and truck restricted areas to develop an accurate and robust database of truck counts and movements at specific locations in the District that can be used to facilitate data driven decisions regarding loading zone and truck restrict requests.

Cost Estimate \$0
 \$60,376 carryover from FY 2016
 \$60,376 total

Product Data collection

Schedule On-going activity

Other Tasks to Be Defined

This work element is established to respond to requests by DDOT for anticipated technical assistance work tasks that are not yet defined. These work tasks will be performed upon further specific authorization received from DDOT in FY 2017.

Cost Estimate \$29,742

MARYLAND

TOTAL COST ESTIMATE \$499,828 FY 2017
 \$315,539 carryover from FY 2016
 ~~\$815,367 total~~

AMENDMENT March 29, 2017:

Total Cost Estimate: \$317,000

Program Development Management

This work activity supports staff time spent administering the MD 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 needed for the development of the annual planning work program.

Cost Estimate \$20,000
Product Specific scopes of work
Schedule On-going activity

Project Planning Studies

This work task supports staff time associated with the development of scopes of work, interagency coordination, and technical analyses associated with travel demand modeling, evaluation of alternatives and coordination with other governmental entities and consultants. It is anticipated that technical work will continue on the MD 586 and MD 97 BRT transit corridors and potentially start work on the I-495 multimodal corridor. This work element also anticipates technical work on new planning studies administered by MDOT, MD SHA and other agencies.

Cost Estimate \$90,000
Schedule On-going activity

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 in Maryland. Work may include but is 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 \$50,000
Schedule On-going activity

Travel Monitoring/Transportation Performance Measures

This work task will provide funding for data collection and analysis to support the assessment of system performance on major freeway and arterial roadway segments of the region's transportation network in Maryland. Computation and analysis of various travel time, congestion level, system reliability and freight performance metrics will be performed as part of this work task. In addition, traffic volume, occupancy data, and travel time data will be collected to measure the performance of HOV facilities in the I-270 and U.S. 50 corridors.

Cost Estimate	\$150,000
Schedule	On-going activity

Miscellaneous Technical Support

This work task will support technical work associated with several pursuits of MDOT and MD SHA that do not fit into other Technical Assistance work tasks. It is envisioned that Transit Oriented Development (TOD) studies, statewide model support, GIS applications, scenario studies, SHRP2 Capacity and Reliability Product Implementation assessments, and possibly freight/special generator studies may be conducted as part of this work task.

Cost Estimate	\$25,000
Schedule	On-going activity

Transportation/Land Use Connections Program

The Transportation/Land Use Connections (TLC) program is an effort to provide technical assistance to local governments in the Washington region in order to facilitate integrating land use and transportation planning at the community level. Begun as a 6 month regional pilot program in January 2007, this project has been very well received. MDOT supplements this regional effort by allocating some of its Technical Assistance funds to provide additional TLC grant funding for Maryland jurisdictions.

Cost Estimate	\$160,000
Product	Grant awards, technical reports from contractors
Schedule	June 2017

Other Tasks Yet to Be Defined

This work element is established to respond to requests by MDOT and SHA for anticipated technical assistance work tasks that are not yet defined. These work tasks will be performed upon further specific authorization from MDOT and MMDSHA in FY 2017.

Cost Estimate	\$4,828
	\$315,539 carryover from FY 2016
	\$320,367 total

VIRGINIA

TOTAL COST ESTIMATE	\$397,806
	\$273,622 carryover from FY 2016
	\$671,428 total

AMENDMENT March 29, 2017:

Total Cost Estimate: \$420,000

Program Development and Data/Documentation Processing

This work activity supports staff time spent administering the VA Technical Assistance work program throughout the year. Work activities include 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 received from local jurisdictions in Northern Virginia as advised by VDOT throughout the year.

Cost Estimate	\$15,000
Product	Specific scopes of work
Schedule	On-going activity

Travel Monitoring and Survey

This work activity supports an ongoing continuous program to monitor travel and system performance on major commuting routes in Northern Virginia, with a goal to collect travel monitoring data for each major route on a 2 to 3 year cycle. Collected data and system performance analysis will include volume and occupancy data, travel time data, and other information. This travel monitoring program will also include collection of bicycle and pedestrian data at various locations throughout Northern Virginia, as identified by VDOT.

Cost Estimate	\$140,000
Products	Program management plan, data and analysis, technical memorandum
Schedule	On-going activity

Travel Demand Modeling

This work activity is designed to assist VDOT with the use of results from the regional transportation travel demand model to support various transportation planning efforts and studies in Northern Virginia. 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	\$40,000
Products	Model output, technical memoranda
Schedule	On-going activity

Regional and Sub-regional Studies

This work activity is designed to provide technical analysis and TPB staff support for various regional and sub-regional planning studies throughout the year as identified and requested VDOT and/or VDRPT. Work may include but is not be limited to technical support for 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. Tasks undertaken under this work activity may also involve staff assisting VDOT in the review and/or analysis of 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.

Cost Estimate	\$100,000
Products	Technical analysis and support for Northern Virginia regional and sub-regional planning studies
Schedule	On-going activity

VA Technical Assistance – Long Distance Commuter Bus Study

The purpose of this study is to determine demand for public commuter bus service into Northern Virginia from areas beyond the urbanized area. Specific tasks will include reviewing previous studies and best practices, documenting existing commuter bus, intercity bus and train, carpools and vanpools, estimating travel demand, and identifying strategies to provide publicly operated commuter bus service from outside the region into the region.

Cost Estimate	\$0 \$100,000 carryover from FY 2016 \$100,000 total
Products	Technical report
Schedule	March 2017

Other Tasks to Be Defined

This work element is established to respond to requests by VDOT and VDRPT for anticipated technical assistance work tasks that are not yet defined. These work tasks will be performed upon further specific authorization from VDOT and VDRPT in FY 2017.

Cost Estimate	\$102,806 \$173,622 carryover from FY 2016 \$276,428
Products	Program management plan, data and analysis, technical memorandum
Schedule	On-going activity

WMATA

TOTAL COST ESTIMATE \$172,620

AMENDMENT March 29, 2017:

Total Cost Estimate: \$149,620

Program Development

This work activity supports staff time spent in developing the scopes for requested work tasks and administering the WMATA Technical Assistance work program throughout the year. Work activities include meeting with WMATA staff to discuss projects, drafting and finalizing work statements and tasks, creating project accounts when authorized, and reporting progress on projects throughout the year. In addition, this project will provide staff with resources to attend required meetings at WMATA.

Cost Estimate \$5,000
Products Specific scopes of work
Schedule On-going activity

Miscellaneous Services

This miscellaneous account is a mechanism established to address requests which are too small or too short-lived to warrant separate work scopes. Past work has included requests for hard copy, plots, tape, or diskettes of data from any of the planning work activities at COG.

Cost Estimate \$15,000
Products Specific scopes of work
Schedule On-going activity

Bus Facility Enforcement and Education Guidelines for the National Capital Region

This project will develop a set of guidelines for bus facilities throughout the region, including bus lanes, bus stops, and transit stations, for recommended signage, enforcement, and citizen education. Work may include collection of information on existing bus facility signage, enforcement, and citizen education strategies in use throughout the region; identification of best practices through literature review and contacts with other cities/agencies; investigation of supportive policies to enable enforcement and education of drivers and pedestrians in and near bus facilities; and the convening of stakeholder sessions with regional traffic, transit, police, parking enforcement, and citizen education staff to discuss and identify practices and obstacles to safe and successful bus facility use. A report with suggested guidelines, strategies, and other recommendations will be produced for regional use.

Cost Estimate \$137,620
Products Stakeholder meetings, guidelines report
Schedule June 2017

Development of Transportation Analysis Zone (TAZ) Data Conversion Table

TPB staff will develop a Transportation Analysis Zone (TAZ) conversion table to translate data between the TPB's previous 2,191 TAZ system and its current 3,722 TAZ system. This conversion table is to be used by WMATA staff to analyze current and previously forecast data for Metrorail station areas in support of the development of potential new Connecting Communities performance indicator.

Cost Estimate	\$15,000
Products	TAZ data conversion table
Schedule	September 2016

Continuous Airport System Planning Program

The purpose of the CASP program is to provide a regional process that supports the planning, development and operation of airport and airport-serving facilities in a systematic framework for the Washington-Baltimore Air Systems Planning Region, which includes the region's three major commercial airports: Baltimore-Washington International Thurgood Marshall Airport (BWI), Ronald Reagan Washington National Airport (DCA), and Washington Dulles International Airport (IAD). Oversight of the program is the responsibility of the TPB Aviation Technical Subcommittee. The major elements of the CASP program have now been consolidated into a reoccurring two-year cycle based on available FAA funding.

OVERSIGHT	n/a
MAJOR PRODUCTS	<ul style="list-style-type: none">• Continuous Airport System Plan Update
TOTAL COST ESTIMATE	\$250,000

PROCESS 2015 AIR PASSENGER SURVEY - PHASE 2

This CASP work program task involves the continued processing and analysis of data collected in the 2015 Regional Air Passenger Survey. In Phase 1 of the 2015 Air Passenger Survey, the collected survey questionnaire data was reviewed, edited for logical consistency and tabulated. A General Findings Air Passenger Survey Report was also produced as part of Phase 1.

Specific tasks to be performed in Phase 2 of the 2015 Regional Air Passenger Survey include the geocoding of airport ground access trip origins to Aviation Analysis Zones (AAZs) and analysis of the geographic patterns of airport ground access trips for different types of air travelers and airport ground access trips (work vs. non-work air traveler trip purpose, area residents vs. non-residents, ground access travel mode, airport preference, etc.) Phase 2 tasks also include the production of summary tables and charts, and GIS-based maps that are incorporated into a Geographic Findings Report. Two final geocoded survey data files are also produced as part of the Phase 2 processing: a complete file for use by MWAA and MAA only, and a public use file where confidential and sensitive data have been suppressed.

Cost Estimate \$125,000

GROUND ACCESS FORECAST AND GROUND ACCESS ELEMENT UPDATE

The update of forecasts of ground access trips to the region's three commercial airports is an important step in the airport systems planning process. This work task will use the results of the most recent regional air passenger survey together with the latest available airport terminal area forecasts and land activity forecasts of future growth in the Washington-Baltimore region to develop updated forecasts of ground access trips from local area Aviation Analysis Zones (AAZ) to each of the region's three commercial airports. The deliverables for this work task will be updated AAZ ground access trip generation rates and updated base year and horizon year forecasts of ground access trips from all local area AAZs to each of the region's three commercial airports by time of day and major mode of travel used to reach the airport. A technical memorandum documenting methodology used to update the airport ground access trip forecasts will also be produced.

The results of the Ground Access Forecast Update will be used to update the Ground Access Element of the Regional Airport System Plan. This update will provide an analysis of current and forecast ground access constraints at Ronald Reagan Washington National (DCA), Washington Dulles International (IAD), and Baltimore-Washington International Thurgood Marshall (BWI) airports. This

plan element will also integrate airport system ground access and facility planning into the overall regional transportation planning process for the National Capital Region and include recommendations for improving ground access to the region's airports.

The update of the Ground Access Element will include a supply analysis, a demand analysis and production of a final report. Work performed for the supply analysis update will entail an extensive review and evaluation of existing planning studies, ground access data, and transportation plans and programs to identify problem areas in ground access systems and propose recommendations to address these problems. All steps in this update will be extensively coordinated with airport sponsors through the Aviation Technical Subcommittee.

Cost Estimate \$125,000

IV. PROPOSED FY 2017 STATE TRANSPORTATION AGENCY STATE PLANNING AND RESEARCH PROGRAMS (SPR)

District of Columbia Department of Transportation (DDOT)

STRATEGIC PLANNING

Develop a long-range plan that incorporate performance goals, measures, and targets into the process of identifying needed transportation improvements. Promote a transportation system that is efficient, effective and safe for multi-modal users.

STATE AND REGIONAL PLANNING

Ensure the District complies with the planning requirements of MAP-21 §52005; 23 USC 505 by maintaining and improving the safety of all components of the transportation system. Ensure planning of future highway programs and local public transportation systems and planning of the financing of such programs and systems, including metropolitan and statewide planning.

DEVELOPMENT REVIEW

Review development plans for transportation impact and ensure site plans are in proper compliance while maintaining system efficiency and safety.

ACTIVE TRANSPORTATION PROGRAM MANAGEMENT

Promote a safe and convenient bicycling, walking and public transit. Encourage the reduction of single occupant vehicle travel and support modes of transportation that are clean, advances physical activity, and elevate environmental stewardship and resource conservation.

The Statewide Planning funds will be used for the DC Circulator ongoing planning activities to improve our transit asset management program. The planning activities include: quarterly bus maintenance audit reports to collect data on the state of our vehicle assets, as well as, evaluation and best practices strategies for ongoing capital improvements. These reports and studies will empower DDOT through data collection to be more efficient in our decision-making process to improve our transit asset management program. All the data collected from these activities allows for more efficient planning of service; understanding of potential capital and operating needs; and assessing the program's ability to expand service to other areas in the District.

PROJECT DEVELOPMENT AND EXCELLENCE

Enhance the performance of the transportation system while protecting and enhancing the environment. Review projects for environmental compliance and address issues as they relate to environmental planning and coordination. Coordinate with the District Department of the Environment on air quality initiatives and serve as the liaison for the District's and Regional Air Quality Program.

DATA COLLECTION, ANALYSIS AND DISSEMINATION

Collect and analyze data in support of the Highway Performance Monitoring System (HPMS), a data system that reflects the extent, condition, performance, use, and operation characteristics of highways required by federal legislations for surface transportation.

TRAFFIC SAFETY DATA COLLECTION

Collect, manage, and analyze transportation data such as vehicle crashes, traffic counts and the review of design documents for safety improvements.

METROPOLITAN PLANNING

Describes the regional transportation planning and special technical assistance projects proposed to be undertaken July 1, 2016 through June 30, 2017 by COG/TPB staff in cooperation with state and local agencies and WMATA.

PROGRAM FUNDING

The FY 2017 SPR Program funding is under development. The FY2017 budget is \$2,861,866 (Federal = \$2,289,493 and District = \$572,373).

Maryland Department of Transportation (MDOT) Maryland State Highway Administration (MDSHA)

SYSTEMS AND PROGRAMMING

- Preparation and development of the 6 year Consolidated Transportation Program and Preparation of the Annual Statewide Transportation Improvement Program
 - Develop the FY 2017-2022 CTP.
 - Coordinate with appropriate State and local planning staffs, MPOs and State, county and municipal elected officials.
 - Prepare presentation materials for the annual tour.
 - Prepare and submit an annual program for use of available federal funds in accordance with Title 23 U.S.C. and MAP-21.
 - Coordinate the STIP with the regional TIPs, CTP and local jurisdiction's highway improvement programs
- Local Government Liaison
 - Coordinate between all levels of Federal, State, and local governments to ensure that transportation plans are compatible.
 - Review agency and local programs/plans via the state Clearinghouse process.
 - Coordinate and review county and municipal master plans.
 - Assess transportation impacts of proposed major development.
- Long Range Planning
 - Update the Highway Needs Inventory (HNI).
 - Evaluate long-term highway needs and investment levels for various program categories and sub-categories.
 - Review and provide input on updates to the statewide long range plan and Annual Attainment Report on Transportation System Performance.

TRAFFIC

Traffic Monitoring Program

- Monitor the characteristics of highway traffic.
- Enhance procedures to collect, process and disseminate traffic data.
- Ensure that the traffic monitoring system meets State needs and the requirements and guidelines of FHWA and AASHTO.
- Study, and as appropriate, implement methods to improve the efficiency and effectiveness of traffic monitoring through statistical analysis.
- Improve the monitoring of traffic on freeways, particularly in urban areas.
- Ensure the collection of traffic volume, classification and weight data on SHRP monitoring sites.

Metropolitan Planning Organization Liaison (Urbanized Areas)

- Work with the MPOs in modifying and adhering to their planning process.
- Work with the MPOs in the development of the UPWPs, CLRPs, TIPs, clean air conformity determinations, and management systems.

Highway Statistics

- Mileage – Federal Aid System
 - Develop new Federal Functional Classification and NHS maps and mileage tables for approval and distribution.
 - Update and maintain statistical records summary tables.
- State and Local Highway, Data Collection, Analysis and Distribution
 - Solicit receive and process reports from local jurisdictions regarding road improvements, mileage, etc.
 - Collect, update and maintain data used for the Universe portion of the HPMS submission.
 - Update and maintain the highway information databases to meet on-going state and federal requirements.
 - Provide data used for the update of SHA's maps.

Highway Performance and Monitoring System (HPMS)

- Update the HPMS database including revisions to any data elements, maintain sample size requirements to accurately reflect system-wide conditions and submit an updated HPMS data file and related reports and data files.

Special Studies – Preliminary Studies

- Prepare engineering and feasibility studies.
- Develop preliminary purpose and need statements.
- Develop access control plans for selected primary highway corridors.
- Prepare interstate access point approval requests.

MDOT State Highway Administration FY 2016 State Planning & Research Program Elements Supporting the Washington Area Work Program	
ITEM	AMOUNT
Systems & Programming	
CTP	\$ 236,754
Local Government Liaison	\$ 135,000
Long Range Planning	\$ 27,000
Traffic Monitoring Program	\$ 810,000
MPO Liaison	\$ 27,000
Highway Statistics	\$ 319,108
Special Studies	\$ 121,500
TOTAL	\$ 1,676,361

Virginia Department of Transportation (VDOT)

SPR FUNDS FOR DISTRICT PLANNING ANNUAL ACTIVITIES

Metropolitan Planning Support Activities

This element represents the various activities undertaken by NoVA District Planning and Investment Management staff (with support from the VDOT Central Office staff as needed) in the development and implementation of the various elements / work tasks in the MPOs FY 2017 Unified Planning Work Program (UPWP) and the annual work program of the Metropolitan Washington Air Quality Committee and the regional Climate, Energy, Environment Policy Committee. Planned work items, to be conducted mostly by in-house staff, include:

- The Department's participation in all work activities associated with the work programs of the: (a) Transportation Planning Board (TPB), (b) Metropolitan Washington Air Quality Committee (MWAQC), (c) Climate Energy, Environment Policy Committee (CEEPC); and Multi-Sector Green House Gas Working Group.
- Oversight of the TPB/MWCOG activities such as: development/update of the CLRP, TIP, regional air quality conformity analysis, regional Freight plan, Congestion Management Program report, Commuter Connections program and other regional studies undertaken by the MPO (e.g., Regional Priorities Plan, Regional Transit Improvement Hot Spots).
- Regional air quality planning related activities undertaken by MWAQC and CEEPC include: development of PM2.5 Maintenance Plan, Ground level Ozone NAAQS Attainment SIP, Clean Air Partners program, voluntary action to help reduce regional Greenhouse gases.

Statewide Planning Support Activities

This element of the SPR work program provides for staffing within the NoVA District Planning section to participate in and provide assistance to TMPD and others sections within the Department and the local agencies in a variety of tasks including:

- Corridor and sub-area studies to identify either multi-modal or mode specific improvements to the transportation system addressing specific congestions / mobility challenges in the near, mid or long term. Examples of such studies currently underway in FY 2016 include: Tier 2 EIS for I 66 Outside the Capital Beltway, NoVA Significant Projects Ratings Study (HB 599); Fairfax County Parkway corridor Improvements Study (Phase 1); I 66 Bus on
- Shoulders Pilot Program study.
- Provide inputs and review of the findings and recommendations for the State LRP (VTRANS); assist with development and implementation of the HB-2 Project Prioritization process;
- Regular and ongoing update of the Statewide Planning System inventory and traffic forecasts;
- Provide a dedicated full time Bicycle and Pedestrian Coordinator;
- Provide input and review of federal functional classification updates; and
- Provide assistance with General Assembly legislative impact statements and studies.

Project Development Support Activities

This element of the SPR work program represents the District Planning section staff working to:

- Prepare and/or review traffic forecasts for project design (LD-104) and environmental documents (Project level conformity analysis for Noise, Air and other pollutants for NEPA documents)
- Conduct and/or assist in the conduct of transportation planning studies initiated by VDOT and/or localities such as I 66 Inside the Beltway Bus on Shoulders Pilot Program, US 1 Transit Alternatives, Studies, Tier 2 EIS for I 66 Outside the Capital Beltway, etc.
- Participate in the development and/or review of the traffic forecasts for IMR and IJR as developed for/by the VDOT PE and/or L&D sections of the District;
- Review and comment on various Environmental Impact Reports received by the district as part of VDOT's role in Inter-agency consultation process.
- Assist the Transportation and Land Use directors in the review and planning of project activities such as location and design of Park and Ride lots.

Local Planning Activities

This element outlines activities undertaken by the District Planning section staff to assist the planning activities at the locality level.

- Locally prepared transportation studies: Participate in discussions on the scope of work for the conduct of Traffic Impact Analysis (TIA) reports by localities in response to proposed Comprehensive Plan / Master Plan amendment / Small Area Plans; review and comment on TIAs and/or CTIAs submitted by the localities to VDOT in part complying with the requirements of VA Code chapter 870.
- Assist in the development of the transportation portion of local comprehensive/master plans as needed
- Provide transportation technical assistance to localities including in the development of travel demand models; applying travel demand model for project and/or locality planning levels.

SPR FUNDS FOR SPECIAL STUDIES TO BE CONDUCTED BY CONSULTANTS OR ENTITIES OTHER THAN DISTRICT STAFF (LIST EACH STUDY INDIVIDUALLY)

The District is using \$500,000 in FY 2017 for the second round of the HB-599 Significant Project Evaluation Process. In September 2013, the Virginia Department of Transportation (VDOT), in coordination with the Commonwealth Transportation Board (CTB), the Department of Rail and Public Transportation (DRPT), and the Northern Virginia Transportation Authority (NVTA) initiated a study to evaluate and rate up to 40 significant transportation projects in and near the Northern Virginia Transportation District (NOVA District). The study was mandated by legislation passed by the Virginia General Assembly in 2012 (Code of Virginia, Section 33.1-13.03:1).

The Project Rating Process must occur at least every 4 years; however VDOT is committed to evaluate and rate a second round of projects within the next two years. The first round of project evaluations was completed on December 31, 2014, and project ratings were posted on the project website. The ratings are now being used as part of NVTA's project selection and funding process.

Each of the 40 project's evaluation and rating were based on the project's expected ability to reduce congestion, and to the extent possible, the project's expected ability to improve regional mobility during a homeland security emergency. The first evaluations included highway and technology projects. Transit projects will be evaluated and rated in the second round.

Recently, the General Assembly added a legislative requirement to evaluate and rate transit projects using the same methodology applied to highway projects in the first round of analysis. Working with DRPT and NVTA, VDOT has completed test runs of selected transit projects to assess the model's capability with respect to transit projects and their impact on congestion. The second round of HB 599 ratings are being developed with the inclusion of mass transit projects.

The funding for FY 2017 will cover partial costs of the Project Manager's salary and work performed by consultants. It will enable the evaluation and rating of at least 25 additional projects for the NVTA and CTB.

V. APPENDIX

MEMORANDA OF UNDERSTANDING

- Fredericksburg Area Metropolitan Planning Organization (FAMPO)
- Calvert-St. Mary's Metropolitan Planning Organization (C-SMMPO)