

UNIFIED PLANNING WORK PROGRAM

FY 2019

Unified Planning Work Program (UPWP) for Transportation Planning for the Washington Metropolitan Region for FY 2019

March 2018 - Draft 2/14/2018

DRAFT



National Capital Region
Transportation Planning Board

UNIFIED PLANNING WORK PROGRAM (UPWP): FY 2019
Draft 2/14w/2018

The preparation of this program document was financially aided through grants from the District Department of Transportation, Maryland Department of Transportation, Virginia Department of Transportation, and the U.S. Department of Transportation.

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, 23 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).

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I. INTRODUCTION

Purpose

The FY 2019 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, 2018 through June 30, 2019. 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 to receive FHWA and FTA funds.

This work program describes all transportation planning activities utilizing federal funding, including FHWA metropolitan planning funds (PL Funds), FTA 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. On May 27, 2016, the FHWA and FTA jointly published a final rule on **Statewide and Nonmetropolitan Transportation Planning; Metropolitan Transportation Planning**. The planning rule updates federal surface transportation regulations with changes adopted in the Moving Ahead for Progress in the 21st Century Act (MAP-21) and the Fixing America's Surface Transportation (FAST) Act.

MAP-21 introduced and the FAST Act continues the implementation of performance management requirements through which States and metropolitan planning organizations (MPOs) will "transition to a performance-driven, outcome-based program that provides for a greater level of transparency and accountability, improved project decision-making, and more efficient investment of federal transportation funds." In addition, MAP-21 and the FAST Act included modest modifications to the planning process, policy board composition, participants in the process, and contents of the metropolitan long-range transportation plan. This work program complies with the new requirements regarding metropolitan planning.

On November 16, 2016, the TPB approved the 2016 Amendment to the Financially Constrained Long-Range Transportation Plan (CLRP) for the National Capital Region and the FY 2017-2022 Transportation Improvement Program (TIP). In February 2017, FHWA and FTA found that the 2016 CLRP and FY 2017-2022 TIP conform to the region's State Implementation Plans.

On November 16, 2016, the TPB, the District of Columbia Department of Transportation (DDOT), the Maryland Department of Transportation (MDOT), and the Virginia Department of Transportation (VDOT) self-certified that the metropolitan transportation planning process being conducted by the TPB is addressing the major issues in the metropolitan planning area and is being carried out in accordance with all applicable federal metropolitan planning requirements as described under 23 CFR 450.336. The Self-Certification Statement is signed by the three state DOTs and the TPB.

The Self Certification Statement can be found here:

http://www1.mwcog.org/clrp/resources/2016/SelfCertification_2016.pdf

The plan of record, approved on October 18, 2017 by the TPB, includes an off-cycle amendment to the 2016 Amendment to the CLRP for the National Capital Region which determined that VDOT and MDOT amendments conforms to all requirements of the Clean Air Act of 1990.

Currently the TPB is engaged in updating its long range plan which will be approved in October 2018. The name of the long-range plan has been changed from “CLRP” and is now called “Visualize 2045”. It will identify all regionally significant transportation investments planned through 2045 and provide detailed analysis to help decision makers and the public “visualize” the region’s future under current 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 28-29, 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 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 TPB will continue its rich tradition of coordination with adjacent MPOs and with those MPOs with which it shares DOTs. The TPB will not only continue to coordinate, but will look to enhance all coordination opportunities. TPB is involved in the statewide MPO planning efforts in both Maryland and Virginia. TPB participates in the Maryland MPO Roundtable meetings, which occur 4 times a year. TPB is an active participant and a voting member of the Virginia Association of Metropolitan Planning Organizations (VAMPO).

THE CLEAN AIR ACT

The Clean Air Act Amendments (CAAA) of 1990 require that the transportation actions and projects in the metropolitan transportation plan (LRP) and Transportation Improvement Program (TIP) support the attainment of federal health standards for ozone. The LRP and TIP must 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 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 tenet that permeates this work program. The TPB has a two-pronged approach to ensuring nondiscrimination: 1) analysis of the long-range plan for disproportionately high and 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 Transportation Planning. 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.

On February 22, 2016, USDOT issued a determination that the COG Title VI Program satisfies the Title VI program requirements. The next triennial Title VI program update is due to FTA on June 1, 2018. The Maryland Department of Transportation (MDOT) also approved the Title VI Plan on January 5, 2017.

Federal Requirements for Performance-Based Planning and Programming

MAP-21 and the FAST Act call for metropolitan planning organizations, public transportation providers and states to **establish and use a performance-based approach to transportation decision making**. USDOT has established 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.

FHWA and FTA have largely completed the issuance of final rulemaking for the performance measures. TPB has been, and will continue to be working with the states and public transportation providers over the next year to collect the data, make forecasts for performance, and establish performance targets in support of those measures; and the TPB will subsequently have up to 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. The plan and TIP are anticipated to be approved in October 2018 and will be compliant with these new requirements.

Regional Planning Goals

In 1998, the TPB adopted the TPB Vision, which outlines a set of policy goals that have since served to guide the TPB's planning work program:

- 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.

These goals are broad in scope, and together with the strategies and objectives that are also outlined in the TPB Vision, provide a framework for setting out core principles for regional transportation planning. TPB Vision's policy goals encompass the ten planning factors required under the planning process of MAP-21 and are considered when developing the metropolitan transportation plan. 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 for inclusion in the CLRP. In FY 2017, the Priorities Plan will influence policy actions, funding strategies, and potential projects considered for incorporation into Visualize 2045.

In 2017, the TPB established the Long-Range Plan Task Force, who engaged in a sketch planning effort to identify initiatives that could help the region achieve these goals. At that time TPB Members had decided that the current long-range plan did not show satisfactory performance compared to current conditions, nor did it bring us close enough to reach these regional planning goals. By early 2018 TPB had endorsed seven aspirational initiatives recommended by the Long-Range Plan Task

Force which have potential to significantly improve the performance of the region's transportation system compared to current plans and programs. These seven aspirational initiatives will be included in the new plan called Visualize 2045 as the aspirational element, calling upon member jurisdictions and agencies to plan for and implement these initiatives that will help bring the region closer to reaching its goals.

Responsibilities for Transportation Planning

The National Capital Region Transportation Planning Board (TPB) is the official metropolitan planning organization (MPO) for the National Capital Region and is responsible for conducting a continuing, cooperative, comprehensive (3-C) metropolitan transportation planning process. The TPB was designated as the region's MPO by the governors of Maryland and Virginia and the mayor of the District of Columbia.

The TPB is composed of representatives from the 23 cities and counties, including the District of Columbia, that are members of the Metropolitan Washington Council of Governments (COG), the three state-level 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.

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. Figure 1 lists the jurisdictions and organizations represented on the TPB and its technical committees and subcommittees. Figure 2 shows the geographic location of each of the local member jurisdictions.

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 metropolitan 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 metropolitan Washington, 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 regional transportation planning and programming have been established over several years. As required under planning regulations, the TPB, the state DOTs, and the public transportation operators have documented their transportation planning roles and responsibilities in a memorandum of understanding (MOU) that was executed by all parties on January 16, 2008. By the close of FY 2018 and effective for FY 2019, the 2008 MOU will be superseded by a revised agreement meeting FAST Act planning regulations. The current MOU is included in the Appendices and the responsibilities for the primary planning and programming activities are indicated in Figure 3.

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 agreements can be found in the Appendices. 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, Maryland, 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.

A list of transportation planning studies to be conducted within the National Capital Region can be found in Figure 4.

Figure 1: Jurisdictions and Organizations Represented on the TPB and its Technical Committees and Subcommittees

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

DISTRICT OF COLUMBIA

District of Columbia Council
District of Columbia Department of Transportation
District of Columbia Office of Planning

REGIONAL, FEDERAL, AND PRIVATE SECTOR

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

Figure 2: Membership of the National Capital Region Transportation Planning Board

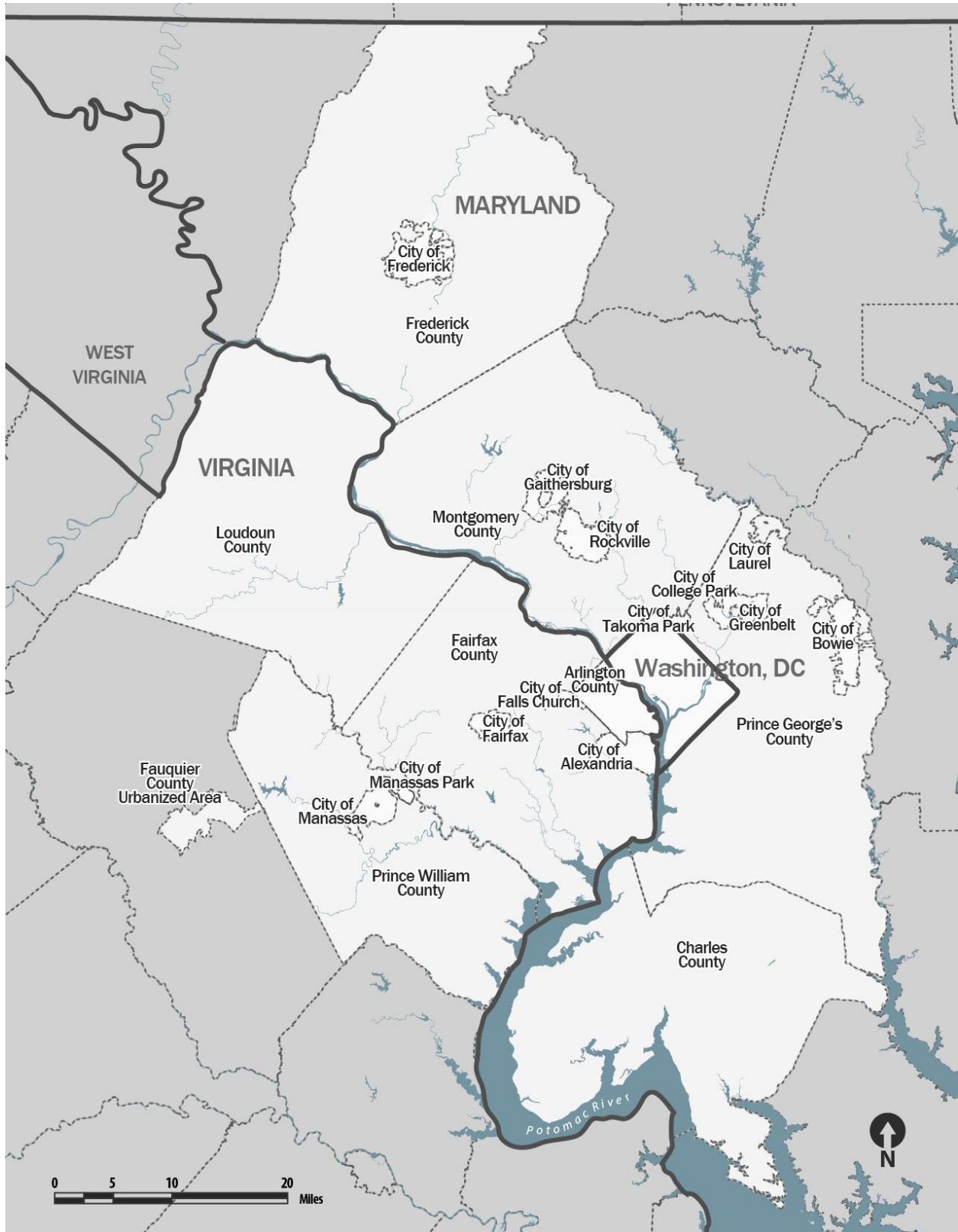


Figure 3: Transportation Planning and Programming Responsibilities

RESPONSIBILITY	AGENCIES
UPWP Development	TPB, DOTs, WMATA, Local Governments
Planning Certification	TPB, DOTs
Performance-Based Planning	TPB, DOTs, WMATA, Public Transportation Providers
Visualize 2045 Development	
Air Quality Conformity	TPB, FAMPO
Congestion Management Process	TPB, DOTs, Local Governments, FAMPO
Environmental Consultation	TPB, DOTs, Local Governments
Financial Element	TPB, DOTs, WMATA, Local Governments
Freight Element	TPB, DOTs, Local Governments
Participation Plan	TPB
Performance Based Planning and Programming	TPB, DOTs, WMATA, Public Transportation Providers
Plan Inputs/Update	DOTs, WMATA, Local Governments, NVTA, PRTC, FAMPO
Project Selection	TPB, DOTs, WMATA, Local Governments
Safety Element	TPB, DOTs, Local Governments
Transportation/Land-Use Planning	TPB, MDPC, Local Governments
TIP Development	
TIP Inputs	DOTs, WMATA, Local Governments, NVTA, PRTC
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
Project Selection	TPB, DOTs, WMATA
Projects Federal Funding	TPB, DOTs, WMATA
Public Involvement Plan	TPB
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 4: Transportation Planning Studies within the National Capital Region, 2018

STUDY	PRIMARY AGENCIES	SCHEDULE	PRODUCTS
REGIONAL			
Visualize 2045 Long-Range Transportation Plan	TPB, DOTs, WMATA, Local Governments	2018	LRP
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
Bus Service Evaluation Studies	WMATA	On-going	Studies
Off-Board Fare Payment Technical and Financial Feasibility Study	WMATA, Arlington, DDOT	2018	Feasibility Study
Updating Line Load	WMATA	2018	Model
Metrobus Strategy and Roadmap	WMATA	2019	Plan
Analysis of Regional Bus Service Provision	WMATA, TPB, DOTs, Local Operators	2018	Study
Flexible Metrorail Operational Analysis	WMATA	2019	Study, Plan
TRACE Model	WMATA	2018	Model
Short-Term Ridership Forecast	WMATA	2017	Model
Updated Silver Line Phase II Forecast, Operating Plan	WMATA	2018	Plan
2018 Metrobus Ridership Survey	WMATA	2018	Survey
National Park Service Long-Range Transportation Plan	NPS	2018	Plan

Figure 4: Transportation Planning Studies within the National Capital Region, 2018

STUDY	PRIMARY AGENCIES	SCHEDULE	PRODUCTS
MARYLAND			
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	On-hold	DEIS
MD 28/MD 198 Corridor Study (MD 97 to I-95)	MDOT SHA	2019	EA
MD 97 Montgomery Hills Study (MD 390 to MD 192)	MDOT SHA	2018	CE
MD 223 Corridor Study (Steed Road to MD 4)	MDOT SHA, Prince George's County	On-hold	TBD
MD 355 Bus Rapid Transit Study (MD 410/MD 187 to Clarksburg)	Montgomery County, MDOT MTA, MDOT SHA	2017	Report
MD 586 Bus Rapid Transit Study (MD 97 to MD 355)	Montgomery County, MDOT MTA, MDOT SHA	2017	Report
US 15/US 40 Frederick Freeway Study	MDOT SHA	2020	TBD
US 29 Bus Rapid Transit Study (MD 410 to MD 198)	Montgomery County, MDOT MTA, MDOT SHA	2017	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	2020	TBD
Commuter Bus Long-Range Plan	MDOT MTA	2017	Plan
Bus Facilities Master Plan	MDOT MTA	2017	Plan

Figure 4: Transportation Planning Studies within the National Capital Region, 2018

STUDY	PRIMARY AGENCIES	SCHEDULE	PRODUCTS
DISTRICT OF COLUMBIA			
First Place and Galloway NE Redesign (Fort Totten Metrorail Station)	DDOT, WMATA	On-going	Report/Design
DC Streetcar – Union Station to Georgetown	DDOT, FTA, FHWA	2017	NEPA
DC Streetcar – Benning Rd Ext Environmental	DDOT, FTA, FHWA	2017	EA
Long Bridge Environmental	DDOT, FRA	2019	NEPA
C Street NE Implementation Study	DDOT	2017	Design
Florida Avenue NE Study	DDOT	2017	Design
16th Street NW Transit Priority	DDOT	2017	Design
East End Bike Lane Study	DDOT	2017	Design
New York Avenue Streetscape and Trail	DDOT	2017	Study
Florida Avenue NE Study	DDOT	2017	Design
Downtown West	DDOT	2017	Study
Pennsylvania Avenue East of the White House	DDOT/NPS	2017	Study
New York Avenue / South Dakota Avenue Interchange Study	FHWA	2017	Study
Alabama Avenue Safety Study	DDOT	2017	Study
Metrorail Walkshed Improvement Project (TLC)	COG/DDOT	2017	Study
Section 5304 Transit Asset Management Study	DDOT	2017/2018	Study

Figure 4: Transportation Planning Studies within the National Capital Region, 2018

STUDY	PRIMARY AGENCIES	SCHEDULE	PRODUCTS
VIRGINIA			
Household Travel Survey	TPB, DOTs, WMATA, Local Governments	2018	Report
Regional Emergency Preparedness Effort	NVTC, Transit Agencies, Emergency Management personnel, VDOT	2018	Plans
Amendments to the Constrained Element of Visualize 2045	TPB, DOTs, WMATA, Local Governments	2018	LRP
Significant Projects Ratings Study (HB 599) – Round 2	VDOT	2018	Ratings
Fairfax County Pkwy Corridor Study – Long-Term / Vision	FCDOT	2019	Report
I-495 West / American Legion Bridge Strategic Plan Study from I-270 West Spur to the Virginia Hot Lanes	MDSHA Coordinating with VDOT	2018	Report
TransAction Update	NVTA	2018	Report
Transit Oriented Development Planning for the Richmond Highway Corridor	Fairfax County	2018	Report
Various Corridor Studies Associated with Loudoun County Comprehensive Plan Update	Loudoun County	2019	Plans
Long Bridge NEPA	PRTC	2019	Study
Transit Development Plan	PRTC	2018	Plan
Broad Run Expansion Study and NEPA	VRE	2018	Plan / NEPA
Crystal City Station Improvements	VRE	2018	Study

Figure 4: Transportation Planning Studies within the National Capital Region, 2018

STUDY	PRIMARY AGENCIES	SCHEDULE	PRODUCTS
L'Enfant Station Improvements and VA to L'Enfant 4th Track	VRE	2018	PE / Environmental Design
Transit Development Plan	VRE	2018	Plans
STARS Route 50 Corridor Improvement Study	VDOT	2018	Report
Route 28 Corridor Improvements Environmental Impact Statement (EIS)	Prince William County / VDOT	2021	EIS / NEPA Document / Record of Decision / Preferred Alternative
Buckland Study	Prince William County	2018	Improvement Options
I-495 Express Lanes Extension to American Legion Bridge (tentative)	VDOT	2019	Study
Arlington Master Transportation Plan Bike Element Update	Arlington County		Plan
Rosslyn Street Network Study	Arlington County		Study
Courthouse Square Shared Streets Study	Arlington County		Study
Wilson Blvd. Road Diet Follow-up Study	Arlington County	On hold	Study
Public Open Spaces Master Plan	Arlington County		Plan
Arlington General Land Use Plan Amendment Study	Arlington County		Study
Four Mile Run Valley Area Study	Arlington County		Study
Lee Highway Corridor Study	Arlington County		Study

FY 2019 Regional Planning Priorities

In March 2015, USDOT issued **planning emphasis areas** for MPOs 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 planning and programming 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 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 federal planning regulations and performance management requirements for MPOs.

In 2017, the TPB established the Long-Range Plan Task Force to identify initiatives that could help the region achieve the goal in the RTPP. The TPB has endorsed seven aspirational initiatives recommended by the Long-Range Plan Task Force with the potential to significantly improve the performance of the region’s transportation system. These seven aspirational initiatives will be included in Visualize 2045 as the aspirational element, calling upon member jurisdictions and agencies to plan for and implement these initiatives that will help bring the region closer to reaching its goals.

REGIONAL COORDINATION BEYOND TRADITIONAL BOUNDARIES

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 Virginia, Maryland, and the District of Columbia, 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 coordinate a revision to planning agreement to meet FAST planning regulations. The TPB coordinates with MPOs near its planning area, such as FAMPO, the Calvert-St. Mary’s Metropolitan Planning Organization (C-SMMPO), and the Baltimore Regional Transportation Board (BRTB). With regards to air quality conformity analysis, transportation projects and land use forecasts from these other MPOs 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.”

TPB is involved in the statewide MPO planning efforts in both Maryland and Virginia. TPB participates in the Maryland MPO Roundtable meetings, which occur 4 times a year. The Commonwealth of Virginia General Assembly established the Virginia Association of Metropolitan Planning Organizations (VAMPO) effective July 1, 2009, through House Joint Resolution No. 756 to provide education, information and opportunities for cooperation among Virginia’s Metropolitan Planning Organizations and among state, federal and community officials. TPB is an active participant and a

voting member of VAMPO. VAMPO's mission is "Moving Virginia forward by enhancing, promoting, and supporting the regional transportation planning process of the Commonwealth's MPOs."

The TPB's 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 governors of Maryland and Virginia and the mayor of the District of Columbia to coordinate with the state DOTs 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, which provide key access to essential services such as health care, education, employment, and recreation. This plan will be updated in FY 2019.

In FY 2016, an expanded analysis of the CLRP identified potentially vulnerable populations. The TPB's efforts to develop a list of unfunded regional priority projects includes 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.

Federal Metropolitan Planning Provisions

The **Statewide and Nonmetropolitan Transportation Planning; Metropolitan Transportation Planning** Rule was issued on May 27, 2016. The planning rule updates federal surface transportation regulations with changes adopted in the MAP-21 and the FAST Act. For MPOs, such as the TPB, the most significant change is the performance-based planning and programming requirements which must be adopted by May 27, 2018, and included in all subsequent TIPs and long-range plans. This UPWP will provide for an ongoing review of the metropolitan planning provisions and USDOT guidance with a consideration of what additional work activities may be called for. The TPB must respond to any guidance on how MPOs should implement the provisions. As new USDOT planning regulations or guidance 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.

II. PROPOSED FY 2019 TPB WORK PROGRAM AND BUDGET

Program Structure

The TPB is responsible for the federally required metropolitan transportation 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 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. The next several pages provide revenue and expenditure tables, and a series of figures which 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.

1. LONG-RANGE TRANSPORTATION PLANNING

The first major activity, **Long-Range Transportation Planning**, includes documentation and final development of the quadrennial update of Visualize 2045. It will identify all regionally significant transportation investments planned through 2045 and provide detailed analysis to help decision makers and the public “visualize” the region’s future under current plans. Visualize 2045 will be approved in October 2018. Strategic implementation of Visualize 2045, including but not limited to implementation of the aspirational element of the plan, will begin. Additional analysis to support and enhance plan components and other federal requirements will be undertaken as necessary. Work will also begin to plan for the next quadrennial update of the plan which will be approved in FY 2023.

2. PERFORMANCE-BASED PLANNING AND PROGRAMMING

The second major activity, **Performance-Based Planning and Programming**, includes the continuation of the development of 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 metropolitan transportation plan 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.

3. MOBILE EMISSIONS PLANNING

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 Constrained Element of the metropolitan transportation plan and the TIP.

4. PLANNING PROGRAMS

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.

5. TRAVEL FORECASTING

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.

6. TRAVEL MONITORING AND DATA PROGRAMS

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.

7. COOPERATIVE FORECASTING AND TRANSPORTATION PLANNING COORDINATION

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.

8. PUBLIC PARTICIPATION AND HUMAN SERVICE TRANSPORTATION COORDINATION

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 metropolitan transportation plan, TIP, and all other TPB activities. It also includes updating the

Coordinated Human Service Transportation Plan for the region which supports the MPO role in the FTA Section 5310 Enhanced Mobility program for elderly persons and persons with disabilities.

9. TRANSPORTATION ALTERNATIVES AND LAND-USE CONNECTIONS PROGRAM

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.

10. TPB SUPPORT AND MANAGEMENT

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.

11. TECHNICAL ASSISTANCE

The eleventh major activity, **Technical Assistance**, 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.

12. CONTINUOUS AIRPORT SYSTEM PLANNING (CASP)

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

Funding for the TPB Basic Work Program is similar to the FY 2018 level. The proposed budget levels for the 12 activities by funding source, which include FTA and FHWA funds together with state and local match, are shown in Table 1 on the next page. The proposed expenditures for each of these 12 tasks are identified in Table 2. A detailed breakdown of staffing, consultant costs, and other budgetary requirements is provided in Table 3. The TPB committee structure is shown in Figure 6. The TPB committee or sub-committee responsible for the activities listed in Figure 5 are shown under the descriptions for each task in Section III. Figure 7 illustrates the relationship between and among the TPB work activities.

Table 1: Revenue - FY 2019 TPB Proposed Funding by Federal, State, and Local Sources
(July 1, 2018 to June 30, 2019)

	FTA SECT 5303 80% FED & 20% STA/ LOC	FHWA PL FUNDS 80% FED & 20% STA/ LOC	FAA CASP 90% / 10% FED / LOC	TOTALS
DDOT ALLOCATIONS				
NEW FY 2019	\$538,004	\$2,209,419		\$2,747,423
UNEXPENDED FY 2017	\$57,490	\$262,761		\$320,251
<i>CARRYOVER FY 2018 - Anticipated</i>	\$55,573	\$216,703		\$272,277
SUBTOTAL - DC	\$651,067	\$2,688,882		\$3,339,950
MDOT ALLOCATIONS				
NEW FY 2019	\$1,288,745	\$3,709,536		\$4,998,281
UNEXPENDED FY 2017	\$133,397	\$470,464		\$603,861
<i>CARRYOVER FY 2018 - Anticipated</i>	\$139,568	\$382,391		\$521,958
SUBTOTAL - MD	\$1,561,709	\$4,562,391		\$6,124,101
VDRPT & VDOT ALLOCATIONS				
NEW FY 2019	\$1,122,089	\$3,245,898		\$4,367,987
UNEXPENDED FY 2017	\$116,886	\$430,608		\$547,494
<i>CARRYOVER FY 2018 - Anticipated</i>	\$123,748	\$329,708		\$453,456
SUBTOTAL - VA	\$1,362,723	\$4,006,214		\$5,368,937
TOTAL FHWA/FTA FUNDING ALLOCATIONS				
NEW FY 2019	\$2,948,838	\$9,164,853		\$12,113,691
UNEXPENDED FY 2017	\$307,772	\$1,163,832		\$1,471,605
<i>CARRYOVER FY 2018 - Anticipated</i>	\$318,889	\$928,802		\$1,247,692
SUB-TOTAL - FHWA-FTA	\$3,575,500	\$11,257,488		\$14,832,987
TOTAL BASIC UPWP	\$3,575,500	\$11,257,488		\$14,832,987
FAA - CASP PROGRAM			\$350,000	\$350,000
GRAND TOTAL UPWP	\$3,575,500	\$11,257,488	\$350,000	\$15,182,987

1. "New FY 2019" funding amounts are first time funds being provided by the DOTs.
2. "Unobligated FY 2017 funds" are unexpended funds from the FY2017 UPWP reprogrammed by DOTs.
3. "Carryover FY 2018 funds" are funds from work activities from the FY 2018 UPWP to be completed in FY 2019. These amounts will be finalized in time for TPB's action on Mar. 21, 2018.
4. As part of the Continuous Air System Planning work we anticipate receiving funds from FAA to process their 2017 biennial Air Passenger Survey & assist in Ground Access planning work.

Revenue estimates in bold font above are under review and will be finalized before March TPB action.

Table 2: FY 2019 UPWP Expenditures

WORK ACTIVITY	FY 2019 TOTAL COST ESTIMATE
CORE PROGRAMS	
1. Long-Range Transportation Planning	\$1,049,855
2. Performance-Based Planning and Programming	\$701,890
3. Mobile Emissions Planning	\$1,887,121
4. Planning Programs	\$1,859,037
5. Travel Forecasting	\$2,754,091
6. Travel Monitoring and Data Programs	\$2,676,725
7. Cooperative Forecasting & Transportation Planning Coordination	\$915,451
8. Public Participation & Human Transportation Service Coordination	\$1,261,894
9. Transportation Alternatives and Land Use Connection Programs	\$481,668
10. TPB Support and Management	\$865,699
Sub-total: Core Program	\$14,453,431
11. TECHNICAL ASSISTANCE	
A. District of Columbia	\$274,742
B. Maryland	\$383,253
C. Virginia	\$370,570
D. WMATA	\$17,765
Sub-total: Technical Assistance Program	\$1,046,331
Total - Basic UPWP	\$15,499,762
12. AIR SYSTEMS PLANNING	
1. Continuous Airport System Planning (CASP)	\$350,000
Sub-total: CASP	\$350,000
GRAND TOTAL UPWP	\$15,849,762
<p>1. Above estimates are based on the work activities outlined in the Draft FY 2019 UPWP Document. The estimates will be finalized along with the revenue estimates before the March TPB action.</p> <p>2. CASP work activities are based on anticipated FAA grants to process the biennial Air Passenger Survey conducted in FY 2018 and to assist in ground access improvement planning.</p>	

Revenue and Expenditure figure imbalance are preliminary and update in progress. Adjustments will be made prior to March TPB action.

Table 3: TPB FY 2019 Work Program by Funding Sources

Work Activity	Direct Labor Costs			Indirect Costs (Overheads)					Other Direct Costs			Total	
	Direct Salaries DTP Staff	Direct Salaries Other COG Staff	Total Direct Labor Costs	M&A 24.69%	Leave Benefits 19.43%	Fringe Benefits 24.50%	Non Personnel 37.10%	Total Indirect Costs	Data & PC	Consultant	Other Costs		Total Other Direct Costs
CORE PROGRAMS													
1. Long-Range Planning	\$354,290	\$15,525	\$369,815	\$91,292	\$89,574	\$134,917	\$254,357	\$570,140	\$3,000	\$100,000	\$6,900	\$109,900	\$1,049,854
2. Performance-Based Planning and Programming	\$245,855	\$0	\$245,855	\$60,692	\$59,549	\$89,694	\$169,098	\$379,033	\$1,200	\$75,000	\$800	\$77,000	\$701,888
3. Mobile Emissions Planning	\$640,018	\$74,221	\$714,240	\$176,316	\$172,999	\$260,571	\$491,251	\$1,101,136	\$28,438	\$10,000	\$33,300	\$71,738	\$1,887,114
4. Planning Programs	\$690,499	\$16,464	\$706,963	\$174,520	\$171,236	\$257,916	\$486,246	\$1,089,918	\$1,000	\$35,000	\$26,150	\$62,150	\$1,859,030
5. Travel Forecasting	\$790,437	\$0	\$790,437	\$195,126	\$191,455	\$288,369	\$543,659	\$1,218,609	\$25,438	\$650,000	\$69,600	\$745,038	\$2,754,084
6. Travel Monitoring and Data Programs	\$523,173	\$0	\$523,173	\$129,150	\$126,720	\$190,865	\$359,836	\$806,571	\$55,000	\$1,188,977	\$103,000	\$1,346,977	\$2,676,720
7. Cooperative Forecasting & Transportation Planning Coordination	\$146,458	\$190,895	\$337,353	\$83,279	\$81,712	\$123,074	\$232,030	\$520,094	\$2,500	\$0	\$55,500	\$58,000	\$915,447
8. Public Participation and Human Transportation Service Coordination	\$390,150	\$0	\$390,150	\$96,312	\$94,500	\$142,336	\$268,343	\$601,491	\$2,000	\$165,000	\$103,250	\$270,250	\$1,261,891
9. Transportation Alternatives and Land Use Connection Programs	\$50,181	\$36,225	\$86,406	\$21,330	\$20,929	\$31,523	\$59,430	\$133,211	\$1,000	\$260,000	\$1,050	\$262,050	\$481,667
10. TPB Support and Management	\$253,334	\$0	\$253,334	\$62,538	\$61,361	\$92,422	\$174,242	\$390,563	\$1,000	\$10,000	\$210,800	\$221,800	\$865,697
Core Program Total	\$4,084,395	\$333,330		\$1,090,555	\$1,070,033	\$1,611,687	\$3,038,490	\$6,810,765	\$120,576	\$2,393,977	\$610,350	\$3,224,903	\$14,453,393
TECHNICAL ASSISTANCE													
A. District of Columbia	\$59,521	\$0	\$59,521	\$14,693	\$14,417	\$21,715	\$40,938	\$91,763	\$0	\$123,458	\$0	\$123,458	\$274,742
B. Maryland	\$50,460	\$0	\$50,460	\$12,456	\$12,222	\$18,409	\$34,706	\$77,793	\$0	\$180,000	\$75,000	\$255,000	\$383,253
C. Virginia	\$60,421	\$0	\$60,421	\$14,915	\$14,635	\$22,043	\$41,557	\$93,150	\$0	\$147,000	\$70,000	\$217,000	\$370,570
D. WMATA	\$6,793	\$0	\$6,793	\$1,677	\$1,645	\$2,478	\$4,672	\$10,472	\$0	\$0	\$500	\$500	\$17,765
Technical Assistance Program Total	\$177,194	\$0	\$177,194	\$43,742	\$42,919	\$64,644	\$121,873	\$273,179	\$0	\$450,458	\$145,500	\$595,958	\$1,046,331
Total Basic Program	\$4,261,589	\$333,330	\$177,194	\$1,134,297	\$1,112,952	\$1,676,331	\$3,160,363	\$7,083,943	\$120,576	\$2,844,435	\$755,850	\$3,820,861	\$15,499,762
CONTINUOUS AIRPORT SYSTEM PLANNING PROGRAM (CASP)													
	\$135,262	\$0	\$135,262	\$33,391	\$32,762	\$49,347	\$93,033	\$208,533	\$0	\$0	\$6,205	\$6,205	\$350,000
GRAND TOTAL	\$4,396,851	\$333,330	\$312,456	\$1,167,688	\$1,145,714	\$1,725,678	\$3,253,396	\$7,292,476	\$120,576	\$2,844,435	\$762,055	\$3,827,066	\$15,849,724

Revenue and Expenditure figure imbalance are preliminary and update in progress. Adjustments will be made prior to March TPB action.

Figure 5: Major Components of UPWP Work Activities

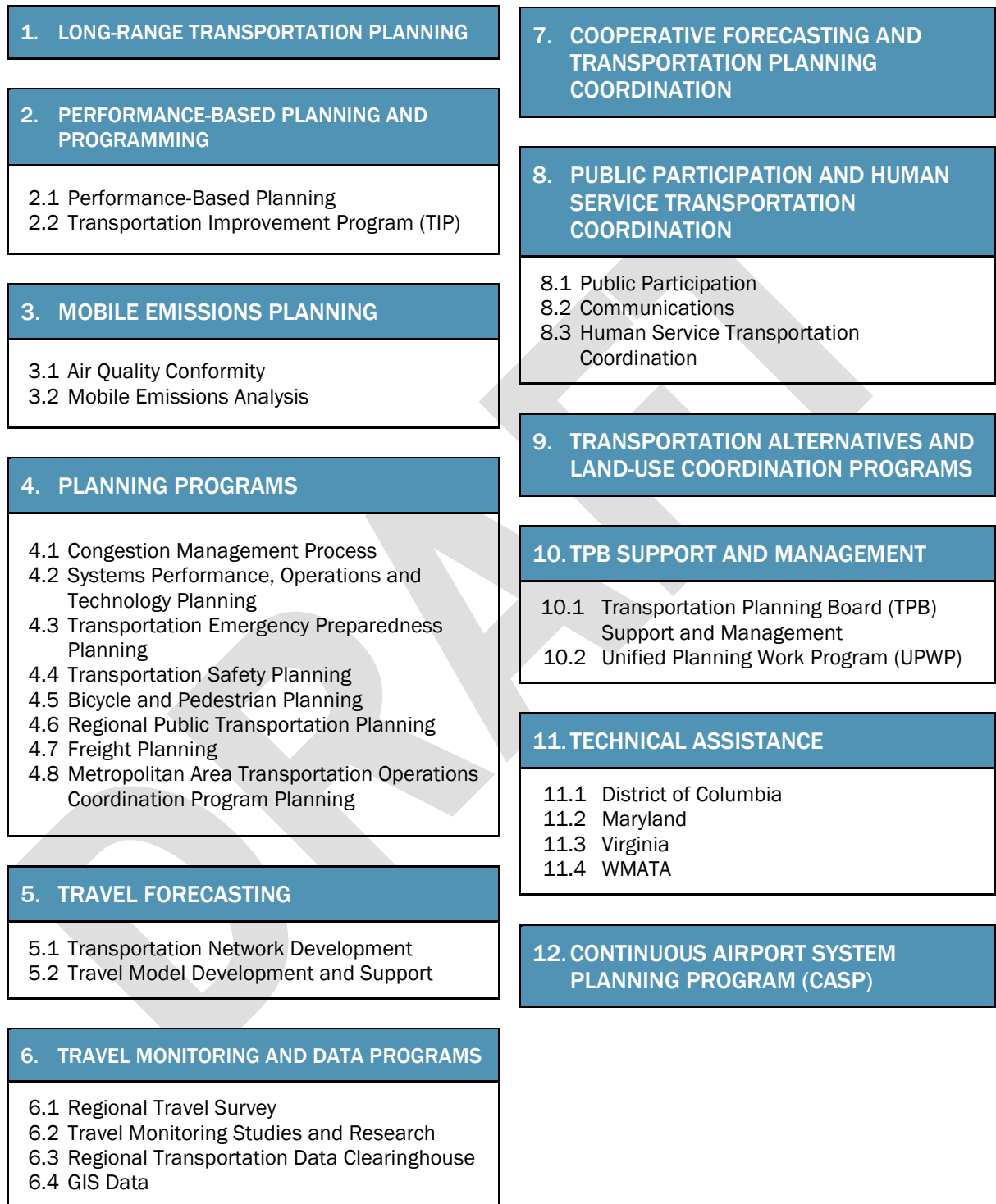


Figure 6: TPB Committee Structure

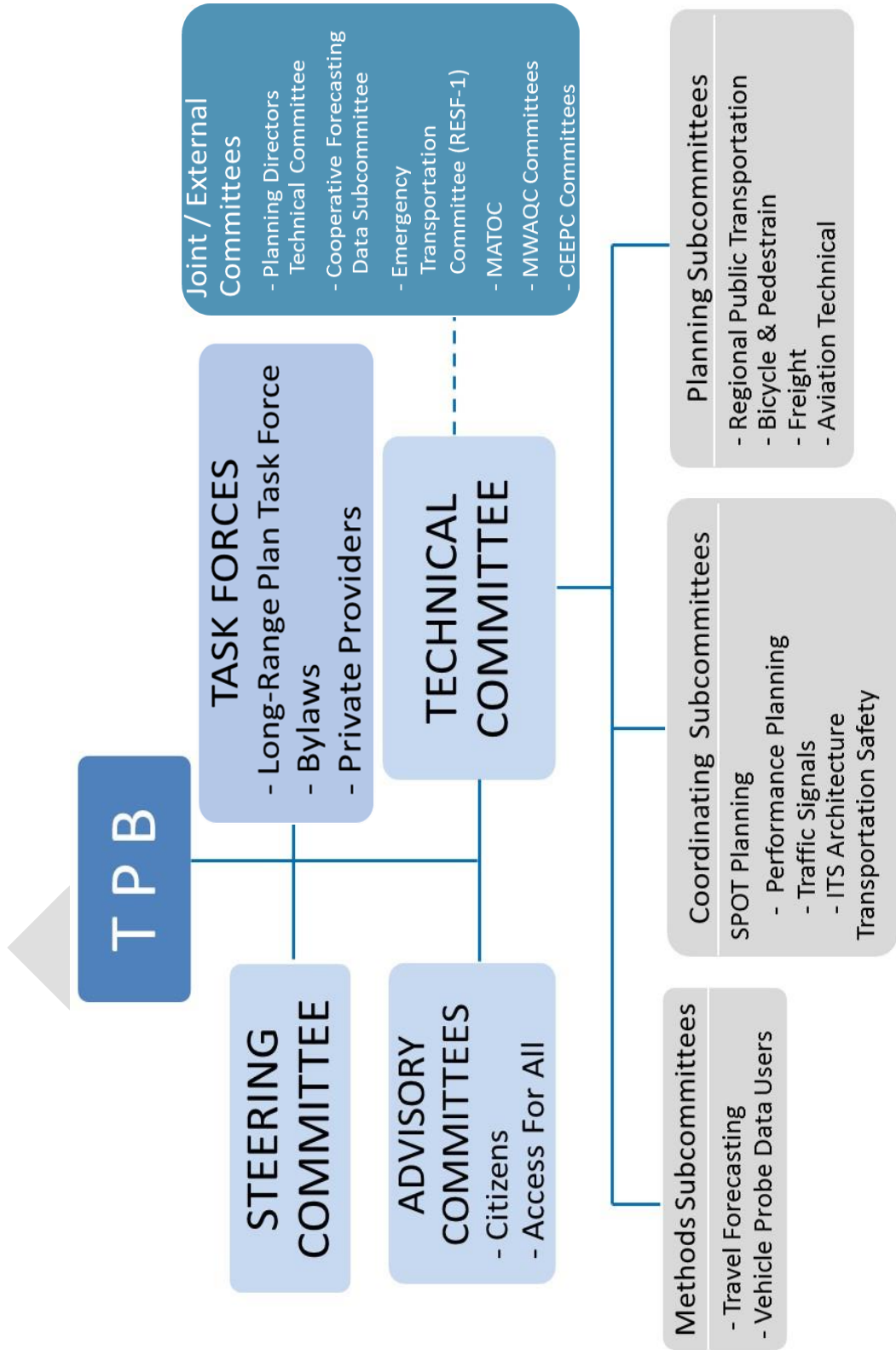
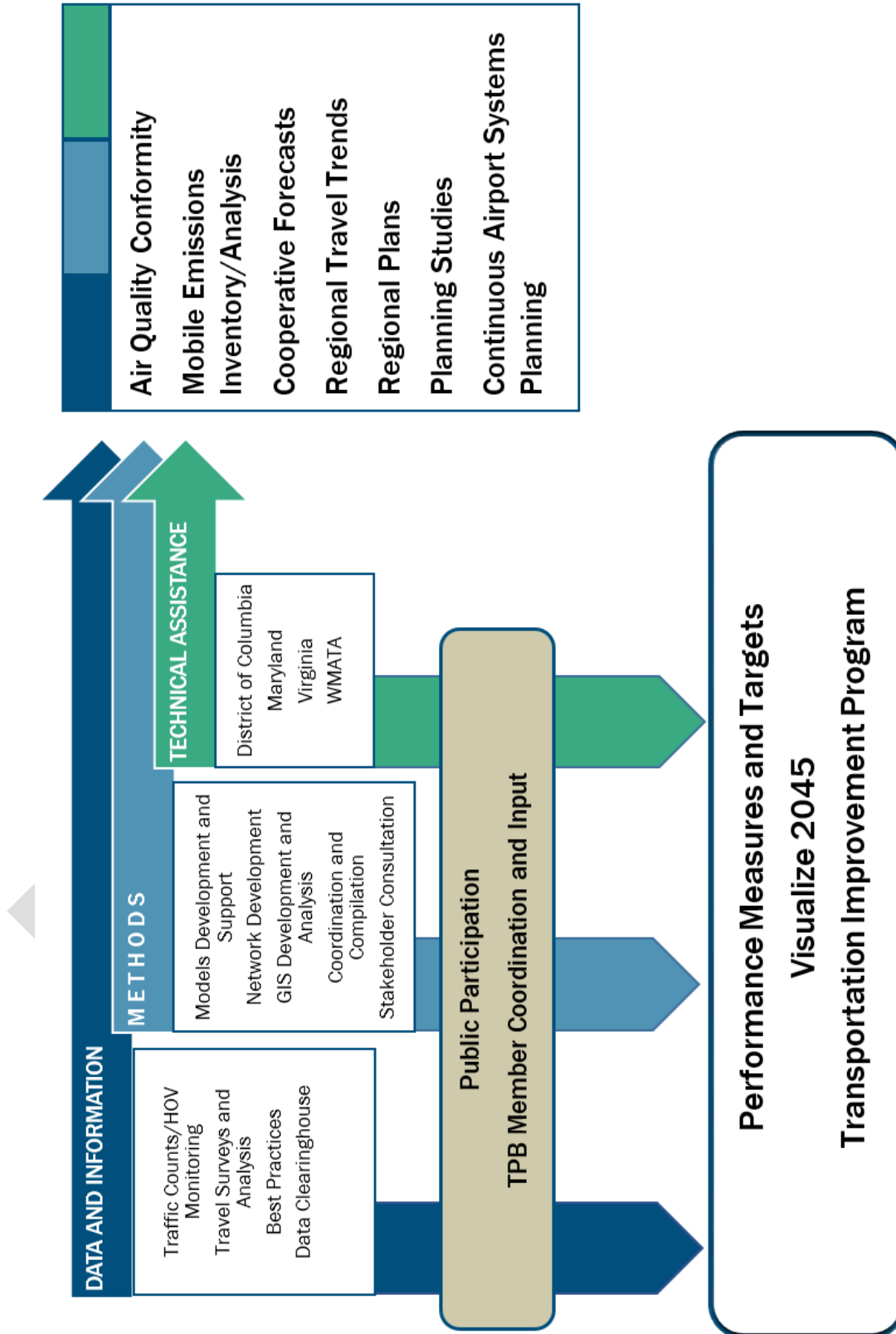


Figure 7: Overview of Planning Products and Supporting Processes



III. MAJOR WORK ACTIVITIES

1. Long-Range Transportation Planning

OVERSIGHT	Technical Committee
MAJOR PRODUCTS	<ul style="list-style-type: none">• Visualize 2045• Visualize 2045 Implementation• Environmental Justice Analysis of Visualize 2045
TOTAL COST ESTIMATE	\$1,049,855

Visualize 2045

Visualize 2045 is the federally required long-range transportation plan for the National Capital Region. It will identify all regionally significant transportation investments planned through 2045 and provide detailed analysis to help decision makers and the public “visualize” the region’s future under current plans. In FY 2019, Visualize 2045 will continue to be developed and will be approved in October 2018. Strategic implementation of Visualize 2045, including but not limited to the aspirational element of the plan, will begin. Work will also begin to plan for the next quadrennial update of the plan which will be approved in FY 2023.

During FY 2019, the following activities will be undertaken to support the development of the Visualize 2045. This plan will be different than past plans in that the product will be one document – the website will not be used as the repository of the plan any longer. This document will be coordinated through and reviewed by various committees throughout the year, and by the Technical Committee over the summer 2018. The following “elements” will be nearing completion in the fall of 2018 and approved by the TPB in October 2018. There will be additional elements and analysis as necessary; the major elements of the plan include:

- Federal Compliance: Visualize 2045 will be fully compliant with federal regulations.
- Performance Based Planning and Programming (PBPP): This element will be developed to fulfill PBPP requirements. The purpose of performance planning will be explained, highlighting the Performance-Based Planning and Programming (PBPP) federal requirements and significance. PBPP targets will be compared to existing data, where available. The Congestion Management Process and safety planning will also be summarized. See Task 2.1 for additional details.
- Stakeholder and public outreach: The Visualize 2045 plan will document and summarize these activities. See Task 8 for additional details.
- Financial Element: Revenue and expenditure projections will be developed through 2045 to demonstrate the operations and maintenance of the current transportation infrastructure will be adequately funded and for any capacity enhancement of the highway, transit, and federally-funded non-motorized (bicycle and pedestrian) system within the metropolitan planning area.
- Constrained Element: An element will be developed which will contain projects, programs, and policies officially submitted by the funding agencies for conformity analysis (approved by the TPB in January 2018). This element will be tested for fiscal constraint and for air quality conformity

(see Task 3 for conformity details). A performance analysis of the plan will be conducted and included in the plan.

- ***Unconstrained Element:*** The unconstrained element will include the unfunded regional needs and highlight the aspirational initiatives the TPB has endorsed: five from the Long-Range Plan Task Force and two non-motorized initiatives. It will emphasize how these initiatives could help the region reach its goals within the context of the future demand that growth will place on the existing and planned transportation system. The unconstrained element will help readers “visualize” what that future could be if the region works together following these aspirations.
- ***Additional Elements:*** Other TPB planning activities will be summarized, such as regional bicycle and pedestrian planning, regional freight planning, regional airport systems planning, the Equity Emphasis Areas, plus more. The significance and requirements fulfilled by each element will be explained, as well as how they relate to other TPB and local planning efforts.
- ***Additional analysis and link to RTPP:*** The existing transportation system and information about current travel conditions will be described, setting the context for future growth and demand. The plan will include land-use forecasts and will identify demands resulting from the pressures of growth. The plan will also explain how the region is preparing to respond to that demand. Overarching policies that guide the planning process will be described, including the Vision and the RTPP, and the newly endorsed aspirational initiatives. A summary of federal requirements will also be presented.
- ***Environmental Consultation:*** Consultation with federal, state, and local agencies in charge of natural resources, wildlife, land management, environmental protection, conservation, and historic preservation on the discussion of potential environmental mitigation activities will occur and be documented.

Visualize 2045 Implementation

General coordination and outreach will be conducted to members to implement the plan. This could be conducted in a variety of ways, including but not limited to: hosting regional meetings to share best practices; travelling to the jurisdictions to present materials and priorities identified in Visualize 2045; soliciting feedback from jurisdictions on how best to help them implement Visualize 2045, and to implement those suggestions; etc.

Conduct Additional Planning Analysis

A separate Title VI / Environmental Justice analysis will be conducted of Visualize 2045 to evaluate the impact of the plan for disproportionately high and adverse effects on low-income and minority population groups. This analysis will use the Equity Emphasis Areas adopted in early-2018 by the TPB, and will use the revised analytical methods which will be developed in FY 2018.

As necessary, additional planning analysis will be conducted to support long-range planning efforts.

Federal Certification Review 2019

The Federal Highway Administration and the Federal Transit Administration will conduct a Certification Review of the National Capital Region Transportation Management Area Planning Process in the summer of 2019. The TPB’s process was last certified on June 8, 2015, with the conclusion that the planning process at TPB is a continuing, cooperative, and comprehensive process and reflects a significant professional commitment to deliver quality in transportation planning. Materials and coordination to support the review will be prepared and executed.

2. Performance-Based Planning and Programming

OVERSIGHT

Technical Committee

MAJOR PRODUCTS

- Preliminary performance measures and targets
- Updated projects and programs in FY 2017-2022 TIP
- Annual Obligated Projects List
- Enhanced TIP/LRP database

TOTAL COST ESTIMATE

\$701,890

2.1 PERFORMANCE-BASED PLANNING

Federal surface transportation law, as developed in MAP-21 and continued under the FAST Act, 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 have been issued by the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA). The **Statewide and Nonmetropolitan Transportation Planning; Metropolitan Transportation Planning Rule**, issued on May 27, 2016, 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 Visualize 2045 to the achievement of performance targets.

The performance-based planning and programming framework requires coordination between states, MPOs, and public transportation providers. Integration of elements of other performance-based plans into the metropolitan planning process are also 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; and
- State Freight Plan.

TPB working groups in each area of expertise are undertaking 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 on the requirements for data collection, analysis, and reporting. Both the collection of current data and the forecasting of future performance

are being evaluated. As implementation continues, working groups are proposing necessary revisions to the data processes used to establish measured performance.

Under the final performance-based planning and programming rulemakings, the states and public transportation providers are required to establish performance targets in support of those measures and the MPO subsequently has 180 days to establish performance targets for the metropolitan planning area coordinated with those of the states and public transportation providers. After these targets are set, Visualize 2045 and TIP are required to include a description of the performance measures and targets used in assessing the performance of the transportation system. Visualize 2045 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 include a description of the anticipated effect of the TIP toward achieving the performance targets set in Visualize 2045.

This task includes:

- Coordinate with DDOT, MDOT, and VDOT on their setting of the state performance targets in support of the performance measures, and coordinate with the DOTs to develop the applicable performance measures for the TPB's metropolitan planning area or other designated area. Similarly, coordinate with MTA, VDRPT, WMATA, and other public transportation agencies on their setting of performance targets for transit state of good repair and safety.
- Coordinate with adjacent MPOs, DOTs and other highway owners, and providers of public transportation in the region to jointly agree upon and document in writing the coordinated processes for:
 - Collection of performance data;
 - Selection of performance targets for the metropolitan area;
 - Reporting of metropolitan area targets; and
 - Reporting of actual system performance (related to those targets).
- Redesign the Transportation Improvement Program (TIP) to track projects that are consistent with and reflect Visualize 2045 investment priorities; demonstrate progress toward achieving transportation system performance targets; link investment priorities to the performance targets; and describe the anticipated effect of the TIP toward achieving the performance targets.

2.2 TRANSPORTATION IMPROVEMENT PROGRAM (TIP)

Federal surface transportation law, as developed in MAP-21 and continued under the FAST Act, 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. 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, Visualize 2045 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 the MPO region.

Under the performance provisions, the TIP shall do the following, in coordination with Visualize 2045:

- 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:

- Prepare and review amendments and administrative modifications to the currently approved TIP.
- Enhance documentation of the TIP with additional analysis as a part of the Visualize 2045 and TIP brochure and the Visualize 2045 web site.
- Provide public access to Visualize 2045 and TIP project data through an improved online searchable database and a linked GIS database.
- Enhance the TIP/LRP database.
- Prepare an annual listing of projects for which federal funds have been obligated in the preceding year for the FY 2017-2022 TIP.
- Support the development of the FY 2019-2024 TIP.

3. Mobile Emissions Planning

OVERSIGHT

Technical Committee in consultation with MWAQC

MAJOR PRODUCTS

- Visualize 2045 Air Quality Conformity Analysis travel demand and mobile emissions model outputs for milestone analysis years
- Final report on the Visualize 2045 Air Quality Conformity Analysis and supporting technical documents
- Technical reports as required for TERMS analyses, and performance-based planning reporting

TOTAL COST ESTIMATE

\$1,887,121

3.1 AIR QUALITY CONFORMITY

The 1990 Clean Air Act Amendments require MPOs to conduct detailed systems-level technical analyses to demonstrate that future mobile source emissions resulting from the region's plans and programs comply with federally approved budgets. The Air Quality Conformity (AQC) analysis includes a formal solicitation of transportation projects from programming agencies and staff consultation with local transportation agencies, state air agencies and the public. The analysis also requires substantial travel demand and mobile emissions modeling.

The AQC analysis of the Visualize 2045 Plan was initiated in FY 2018 and is anticipated to be completed and advanced to the TPB for adoption during fall of 2018. Therefore, activities in the first half of the fiscal year will focus on completing the technical modeling activities and preparing the final report. Activities conducted during the second half of the fiscal year will involve further detailed analysis of the modeling outputs.

This task includes:

- Provide technical travel demand and mobile emissions modeling support to the Conformity Analysis of the constrained element of Visualize 2045 and TIP in accordance with federal requirements; activities include the preparation of technical inputs used in transportation and mobile emissions modeling, analysis of modeling outputs, and documentation of the analysis process and final results in memoranda and a final report.
- Keep abreast of evolving federal requirements as related to Air Quality Conformity determinations.
- Continue working to incorporate performance-based planning and programming requirements pertaining to CMAQ and GHG reductions into the planning process as it relates to Visualize 2045.
- Maintain communication and consultation among transportation agencies, air agencies, and the public regarding the TPB's conformity schedule for the constrained element of Visualize 2045.

3.2 MOBILE EMISSIONS ANALYSIS

This task conducts a wide range of analyses to quantify mobile-source emissions levels of various pollutants in support of air quality planning and Transportation Emissions Reduction Measures (TERMs). TPB staff is also actively involved with State Implementation Plan (SIP) activities that determine how metropolitan areas will attain and maintain national air quality standards. SIP activities include the establishment of mobile emission budgets for criteria pollutants that are analyzed in air quality conformity work.

This task includes:

- Support travel demand modeling and mobile emissions modeling related to SIP planning activities. Pending the EPA finalization of designations for the 2015 ozone NAAQS, develop mobile source inventories for VOC and NO_x for a designated Base Year. Inventories will require highway and transit network coding, travel demand modeling, and MOVES mobile emissions modeling for the designated Base Year.
- Conduct a school bus and transit bus fleet data inventory in coordination with state and local governments. School bus and transit bus inventories are used in the development of mobile inventories for air quality conformity and SIP work.
- When called upon, provide state-level mobile inventories or inputs to mobile inventories. The state air agencies are required to develop National Emissions Inventories (NEIs) every three years. The deadline for States to submit mobile source emissions for the 2017 NEI to EPA is January 15, 2019.
- Provide support with “Hot-Spot” analyses conducted by local transportation agencies.
- Respond to technical requests from COG’s Department of Environmental Programs and from TPB member jurisdictions for mobile emissions information.
- Follow established TPB interagency and public consultation procedures and coordinate with COG/DEP staff to involve the Metropolitan Washington Air Quality Committee (MWAQC) in the public and interagency consultation process.
- Keep abreast of mobile emissions software (MOVES) updates and best practices.

4. Planning Programs

OVERSIGHT	Various (see below)
MAJOR PRODUCTS	See program-specific products below
TOTAL COST ESTIMATE	\$1,859,037

4.1 CONGESTION MANAGEMENT PROCESS

OVERSIGHT	Systems Performance, Operations, and Technology Subcommittee (SPOTS)
MAJOR PRODUCTS	<ul style="list-style-type: none">• Updated CMP portions of Visualize 2045• Congestion Management Plan• VPDUG website reference materials• Documentation for FAST Act performance and target reporting requirements

Under this task, the regional Congestion Management Process (CMP) informs Visualize 2045 on current congestion on the region's roadways by analyzing congestion data as well as identifying potential multi-modal congestion management strategies.

The CMP addresses FAST Act requirements for performance-based planning congestion reduction and system reliability measurements, on both recurring and non-recurring congestion.

This task includes:

- CMP components of Visualize 2045 that specifically address CMP and its subtopics, fully incorporated as elements of Visualize 2045 publication.
- 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 "Visualize 2045: Technical Inputs Solicitation for the Constrained Element And Air Quality Conformity Analysis" document, and thereby incorporated into the regional CMP.
- 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.
- Provide CMP technical input to the Performance-Based Planning and Programming (PBPP) task.
- 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.

4.2 SYSTEMS PERFORMANCE, OPERATIONS, AND TECHNOLOGY PLANNING

OVERSIGHT

Systems Performance, Operations, and Technology Subcommittee (SPOTS)

MAJOR PRODUCTS

- **Technology, operations, and systems performance documentation for Visualize 2045**
- **Regional ITS architecture update**
- **Regional surveys on traffic signal timing and power back-up systems**
- **Documentation for FAST Act performance and target reporting requirements**

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:

- Address FAST Act requirements related to technology and RTSMO.
- Provide opportunities for consideration, coordination, and collaborative enhancement of planning for systems performance, operations, and technology applications in the region, and encourage these in TIP development and Visualize 2045.
- Address emerging connected and autonomous vehicle technology and shared mobility developments as they relate to regional transportation planning and RTSMO, and related aspects of the Regional Intelligent Transportation Systems (ITS) Architecture.
- 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, including coordination with the COG Traffic Incident Management Enhancement initiative.

- 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 Act.
- 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.
- Support and update the long-standing regional Intelligent Transportation Systems (ITS) Architecture.
- In conjunction with FAST Act performance-based planning requirements advise on congestion and reliability-related aspects of the FAST Act 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.

4.3 TRANSPORTATION EMERGENCY PREPAREDNESS PLANNING

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

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:

- Provide support for incorporating emergency preparedness considerations into Visualize 2045.

- 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 directives and requirements.
- Advise applications for and management of UASI and other federal Homeland Security funding.
- Support the RESF-1 Emergency Transportation Committee.

4.4 TRANSPORTATION SAFETY PLANNING

OVERSIGHT

Transportation Safety Subcommittee

MAJOR PRODUCTS

- **Safety element of Visualize 2045**
- **Documentation for FAST Act performance and target reporting requirements**

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. Growing numbers of pedestrians and bicyclists are using the region's multimodal transportation system, especially in suburban areas where they were not as common as in years past, thereby increasing the exposure of these vulnerable road users to collisions with vehicle traffic. The FAST Act emphasizes safety as part of the metropolitan planning process and requires MPOs to set safety performance targets for non-motorized as well as motorized users. These and other factors, along with heightened awareness of the importance of safety planning, continue to demonstrate the need for the regional transportation safety planning program.

This task includes:

- Support engineering, education, enforcement, and emergency medical services strategies in the metropolitan planning process to reduce fatalities, serious injuries, and crashes in the region. This includes planning for safety aspects of the region's transportation system and coordinating with the Strategic Highway Safety Plan development and implementation efforts of the District of Columbia, Maryland, and Virginia, as well as other state, regional, and local efforts.
- Provide opportunities for consideration, coordination, and collaborative enhancement of transportation safety in the region.
- Maintain active collaboration with the "Street Smart" pedestrian and bicycle safety outreach campaign.

- Address regional FAST Act traffic safety performance measure requirements, including compilation and analysis of safety data, tracking of regional performance measures for safety, and coordinating with member states on the setting of safety targets.
- Encourage the consideration of safety in all aspects of metropolitan transportation planning and ensuring that safety is addressed during Visualize 2045 and TIP development.
- Support the Transportation Safety Subcommittee, as well as coordinating with member agencies and transportation safety stakeholders.

4.5 BICYCLE AND PEDESTRIAN PLANNING

OVERSIGHT

Regional Bicycle and Pedestrian Subcommittee

MAJOR PRODUCTS

- **Bicycle and pedestrian facilities for the TIP and Visualize 2045**
- **Maintenance of the regional bicycle and pedestrian plan and related information on the TPB website**
- **Two or more regional outreach workshops**

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 2018 Regional Bicycle and Pedestrian Plan provides the framework for this effort.

This task includes:

- Maintain the Bicycle and Pedestrian Plan database on the TPB website for member agency and public access, including online mapping and visualization of projects identified in the plan.
- Monitor and update nonmotorized recommendations for the Transportation Improvement Program (TIP) and the aspirations element of Visualize 2045; monitor Regional Complete Streets and Green Streets activities.
- In conjunction with the Subcommittee and the Capital Trails Coalition, coordinate on regional or long-distance trails, bicycle routes and project needs.
- Provide technical advice to the “Street Smart” regional pedestrian and bicycle safety public outreach campaign (Street Smart is supported by funding outside the UPWP); bikesharing systems in the region; on pedestrian and bicycle mapping and data systems; 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 in its coordination and advisory roles.

4.6 REGIONAL PUBLIC TRANSPORTATION PLANNING

OVERSIGHT

Regional Public Transportation Subcommittee

MAJOR PRODUCTS

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

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 Visualize 2045 and TIP.
- Evaluate federal rulemaking for the performance-based planning requirements, specifically transit safety and transit asset management, 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 metropolitan planning process.
- 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 to the FTA 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.

4.7 FREIGHT PLANNING

OVERSIGHT

Freight Subcommittee

MAJOR PRODUCTS

- Documentation as necessary supporting FAST Act requirements of freight planning
- Maintenance of the regional freight plan, "Freight Around the Region" publications, and related information on the TPB website

The TPB provides opportunities for consideration, coordination, and collaborative enhancement of planning for freight movement in the region. The Regional Freight Plan updated in FY 2016 provides guidance for continued regional planning activities.

This task includes:

- Provide opportunities for consideration, coordination, and collaborative enhancement of planning for freight movement in the region, Visualize 2045, and TIP, including through outreach to the private sector, regular interaction with the TPB and other committees on regional freight planning issues.
- Coordinate with relevant jurisdictions and committees on regional rail issues.
- Compile and analyze readily available data to support regional freight planning.
- Continue “Freight Around the Region” outreach efforts focusing on individual jurisdictions’ freight activities and their linkages to the regional freight picture.
- Address the FAST Act requirements related to regional freight transportation planning, including PBPP measures and targets.
- Support the TPB Freight Subcommittee in its coordination and advisory roles.

4.8 METROPOLITAN AREA TRANSPORTATION OPERATIONS COORDINATION PROGRAM PLANNING

OVERSIGHT

MATOC Steering Committee, in conjunction with the Systems Performance, Operations, and Technology Subcommittee (SPOTS)

MAJOR PRODUCTS

- **MATOC Steering Committee and Subcommittee Meeting Materials**

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:

- Provide administrative support of MATOC Steering Committee and subcommittee meetings, including preparation of agendas and summaries and tracking of action items.
- Provide briefings to the TPB on MATOC Program progress.
- Provide TPB staff input and advice to the MATOC Information Systems Subcommittee and Operations Subcommittee.
- Develop supporting or informational materials for the above activities as necessary.

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5. Travel Forecasting

OVERSIGHT

Travel Forecasting Subcommittee

MAJOR PRODUCTS

- A series of highway and transit networks reflecting the latest Visualize 2045 and TIP for input to the regional travel demand forecasting model, together with technical documentation.
- Updated travel demand forecasting models; documentation of model development activities; and recommendations for continued updating of the travel demand modeling process.

TOTAL COST ESTIMATE

\$2,754,091

5.1 TRANSPORTATION NETWORK DEVELOPMENT

This task includes preparing transportation network files, which are primary inputs to the regional travel demand model that supports regional studies, project planning studies, and special scenario studies. Transportation networks are also important components of evolving travel forecasting methods.

This task will include:

- Develop, maintain, and improve the transportation networks (highway and transit) which are inputs to the regional travel demand forecasting model; transportation networks are envisioned to be developed for:
 - The Air Quality Conformity Analysis of Visualize 2045
 - Special regional scenario studies
 - Project planning studies
- Develop base-year transit networks, used for both base-year and future-year scenarios.
- Maintain and refine the multi-year transportation network database used in regional travel demand modeling.
- Support the network-related needs of the TPB's travel modeling improvements.
- Respond to network-related technical data requests.

5.2 TRAVEL MODEL DEVELOPMENT AND SUPPORT

This task involves developing, maintaining, and improving the travel demand forecasting model, which supports regional and local transportation planning in the region. Travel improvement activities are guided by a multi-year strategic plan that was formulated in FY 2015 and finalized in FY 2016. During FY 2019, TPB staff will advance a new travel demand model, known as Version 2.5, from development into production, supplanting the existing travel demand model known as Version 2.3. Version 2.5 is a trip-based model in formulation and testing over the past two years. In accordance with the strategic plan, staff will also begin development of a “next-generation” travel demand model, making use of existing travel survey data.¹ The model will be developed with the assistance of a knowledgeable consultant and with oversight of the TPB Travel Forecasting Subcommittee.

This task will include:

- Develop, maintain, and improve the TPB’s regional travel demand forecasting models, both the production model and one or more developmental models.
- Support the current production model (currently Ver. 2.3) for both internal and external users of the model.
- Continue implementation of consultant-recommended improvements to the TPB’s travel forecasting methods in accordance with a seven-year strategic model development plan established in 2015. The plan includes three phases: 1) Implement updates to the existing trip-based model; 2) Develop a next-generation (NextGen) model, with existing survey data; and 3) Develop a revised NextGen model with new survey data. During FY 2019:
 - Phase 1 will be completed. The refined trip-based model developed by a consultant during FY 2017 (Version 2.5) and evaluated by TPB staff during FY 2018 will supplant the Version 2.3 model series as the region’s adopted travel forecasting process.
 - Phase 2 will be initiated. A three-year consultant-assisted effort to develop a NextGen model using existing data, such as the 2007/2008 Household Travel Survey, will begin.
- Keep abreast of best practices in travel demand modeling through conference attendance and participation in AMPO Travel Modeling Work Group meetings.
- Collect, prepare, and analyze data relevant to travel modeling development and validation.
- Respond to travel-model related technical data requests from consultants and local agencies.
- Maintain software and hardware required to apply the regional travel demand model.
- Staff the TPB Travel Forecasting Subcommittee.
- 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.

¹ Cambridge Systematics, Inc., *Strategic Plan for Model Development, Task Order 15.2, Report 3 of 3, Final Report* (Washington, D.C.: Metropolitan Washington Council of Governments, National Capital Region Transportation Planning Board, October 15, 2015).

6. Travel Monitoring and Data Programs

OVERSIGHT	Various (see below)
MAJOR PRODUCTS	See program-specific products below
TOTAL COST ESTIMATE	\$2,676,725

6.1 REGIONAL TRAVEL SURVEY

OVERSIGHT	Travel Forecasting Subcommittee
MAJOR PRODUCTS	<ul style="list-style-type: none">• Completed survey datasets• Presentation and information reports• Technical support

Work will continue on the large-scale, multi-year Regional Travel Survey, which produces data required for the regional travel demand model. When complete, the survey will provide 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. This survey is undertaken approximately once every 10 years and was last 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 2018, a professional survey firm was hired to conduct data collection for survey, which was designed to obtain the participation of approximately 15,000 households in TPB modeled area jurisdictions.

This activity will encompass the following in FY 2019:

- Complete data collection for the 2017/2018 TPB Regional Travel Survey.
- Complete data validation for all survey records, including data editing and imputation.
- Geocode all survey records into a geodatabase.
- Develop initial survey weighting factors.
- Develop completed survey datasets to be used in subsequent analyses to provide inputs into travel demand models used to forecast future travel patterns and vehicle emissions.
- Compare results of 2017/2018 Regional Travel Survey with 2007/2008 Household Travel Survey and present the findings to appropriate committees.
- Coordinate survey activities with state and local government staff as appropriate and respond to inquiries about the survey from state and local government staff, survey participants, and the media.

- Analyze household travel survey response patterns by jurisdiction and activity center strata and begin development of initial survey weighting factors.
- Analyze and report on comparisons of preliminary 2017/2018 TPB Regional Household Travel Survey data tabulations with Census ACS demographic, household, worker characteristic, and commuting data.
- Make presentations and prepare information reports on various aspects of daily household and vehicle travel in the region to support analysis of regional growth and transportation issues.
- Provide data, documentation, and technical support to users of previous TPB Household Travel Surveys. Update user documentation as required.

6.2 TRAVEL MONITORING STUDIES AND RESEARCH

OVERSIGHT

Travel Forecasting Subcommittee

MAJOR PRODUCTS

- **Travel monitoring datasets to support PBPP and next-generation modeling requirements**
- **Technical reports**

This task conducts travel monitoring studies and research activities to support the regional travel demand forecasting model, performance-based planning and programming (PBPP), and Visualize 2045 development. Studies completed in recent years under this task have included:

- Regional high-occupancy vehicle (HOV) facility performance analysis of volume, occupancy, and travel time.
- Identification of high-volume truck travel routes in the region/
- A baseline inventory of intercity bus routes and performance analysis of intercity bus passenger volumes at the terminal at Washington Union Station and other major regional stop locations/

Individual studies for FY 2019 will be determined based on programmatic needs of the regional travel demand forecasting model, PBPP requirements, and Visualize 2045 development activities. There will be a special emphasis on the emerging needs associated with development of the next generation regional travel demand forecast model. Continuation of consultant assistance for this task initially procured in the third and fourth quarters of FY 2018 is anticipated to continue during FY 2019.

6.3 REGIONAL TRANSPORTATION DATA CLEARINGHOUSE

OVERSIGHT

Technical Committee

MAJOR PRODUCTS

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

Efficient access to a comprehensive source of current and historic data on the characteristics and performance of the region's transportation system is vitally important for transportation planning, air

quality analysis, travel models development, congestion management, and project evaluations. Under this activity, 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 Clearinghouse with updated highway and transit performance data and other important multi-modal travel data as they become available.

This activity will encompass the following in FY 2019:

- 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.
- Update freeway and arterial road speed and level of service data.
- Update Clearinghouse highway network bridge and pavement condition data from most current National Bridge Inventory and Highway Performance Management System databases.
- Add updated Cooperative Forecasting data by TAZ to the Regional Transportation Clearinghouse Data.
- Work with the Travel Forecasting and Mobile Emissions Planning Team to develop specifications for a geodatabase of cadastral (parcel-level) data; evaluate data availability and collective relevant data as required; begin developing a regional parcel-level land use database using TAZ-level Cooperative Forecasting data to support travel forecasting model improvements.
- Distribute Regional Transportation Clearinghouse Data to TPB participating agencies via a GIS web-based application.

6.4 GIS DATA

OVERSIGHT

Technical Committee

MAJOR PRODUCTS

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

This work activity provides Geographic Information System (GIS) data and technical support to users of the TPB's GIS data for numerous important planning activities, including Visualize 2045 and its constrained element, the TIP, performance-based planning and programming (PBPP), congestion monitoring and analysis, cooperative forecasting, Regional Transportation Data Clearinghouse, travel network and models development, freight, and bicycle planning, among others.

This activity will encompass the following work tasks in FY 2019:

- Provide data and technical support to staff using GIS for development and distribution of data and information developed for TPB planning activities.
- Provide technical guidance and develop GIS-based products (web maps and applications, visualization, etc.) for TPB planning activities.
- Respond to requests for TPB GIS metadata, databases, and applications.

- Coordinate regional GIS activities with state DOTs, WMATA, and the local governments through COG's GIS Committee and subcommittees.
- Maintain and update GIS-related hardware and software used by staff for regional transportation planning activities.

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7. Cooperative Forecasting and Transportation Planning Coordination

OVERSIGHT

Technical Committee

MAJOR PRODUCTS

- Updated Cooperative Forecasting land activity forecasts and documentation
- Analysis of Activity Center growth forecasts
- Information reports and products

TOTAL COST ESTIMATE

\$915,451

This task 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 U.S. Census American Communities Survey and from other available federal, state, and local data sources.
- Work with members of the Cooperative Forecasting and Data Subcommittee to enhance and improve the quality of small area (TAZ-level) employment, population, and 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.
- Work with the Cooperative Forecasting Subcommittee and the region's Planning Directors to develop updated Round 9.2 Transportation Analysis Zone (TAZ)-level growth 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 9.2 forecasts and the Cooperative Forecasting process.
- Develop and publish useful economic, demographic, and housing-related information products including the Regional Economic Monitoring Reports (REMS), the annual "Commercial

Development Indicators," and economic and demographic data tables to be included in the Region Forward work program.

- Use TPB transportation planning data to update information for the approved COG Region Forward targets and indicators.

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8. Public Participation and Human Service Transportation Coordination

OVERSIGHT

Transportation Planning Board

MAJOR PRODUCTS

- Public comment solicited and documented
- Support for Activity 1: Long-Range Planning
- CAC and AFA committee reports
- Information dissemination through the website, social media, and printed documents
- Update the TPB Participation Plan
- Coordinated Human Service Transportation Plan

TOTAL COST ESTIMATE

\$1,261,894

8.1 PUBLIC PARTICIPATION

The update of the TPB 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 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 at 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. Staff will ensure that CAC comments are communicated to the TPB regarding transportation plans, projects, programs, and issues that are important to the committee and its members.
- 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, older adults, and those with limited English skills as the TPB's primary strategy for engaging traditionally-disadvantaged population groups in the planning process and for providing guidance on Human Service Transportation Program activities. AFA Committee comments will be shared with the TPB on transportation plans, projects, programs, services, and issues that are important to AFA community groups.
- Develop and conduct workshops or events to engage the public and community leaders on key regional transportation issues, including the development of Visualize 2045, the TIP, and other regional planning activities.

- Conduct training activities to help community leaders learn how to get more actively involved in transportation decision making in the Washington region.
- Conduct evaluation activities of the public involvement process.
- Ensure that all public participation is consistent with and meets the Federal Civil Rights Act (Title VI) and Executive Order 12988 Environmental Justice.
- Update the TPB Participation Plan to ensure it is compliant with the requirements of the FAST Act.
- Develop orientation materials for individuals who are new to the TPB process, including board members, committee members, and interested members of the public.

8.2 COMMUNICATIONS

- Develop written and visual materials to spread information about regional transportation planning issues, explain how transportation decision-making works, and engage the public.
- Produce content for the *TPB News*, Visualize 2045 newsletter, and other digital publications.
- Produce an annual report or other print publication highlighting significant TPB activities.
- Regularly update information on the TPB's webpages, ensuring the site is timely, thorough, and user-friendly.
- Effectively use social media and other digital tools to engage the public in current TPB activities.

8.3 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 the designated recipient of this program for the Washington DC-VA-MD Urbanized Area. The Coordinated Plan must be updated every four years and the last update was approved by the TPB in November 2014. Therefore, In FY 2019 the Coordinated Human Service Transportation Plan will be updated and also coordinated with Visualize 2045, per federal requirements.

The TPB established the Human Service Transportation Coordination Task Force in 2006 to help develop the Coordinated Plan. In FY 2016, 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:

- Update the Coordinated Human Service Transportation Plan to guide the implementation of the Section 5310 Enhanced Mobility program. The Access for All Advisory Committee will provide guidance on the unmet transportation needs for people with disabilities and older adults and other key sections of the Coordinated Plan.
- Plan for the next solicitation and selection of projects for FTA Section 5310 Enhanced Mobility funding anticipated to occur in FY 2020.

- Support the implementation of the Coordinated Plan by furthering the goals and strategies in the plan provide an array of transportation services and options to older adults and people with disabilities.

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9. Transportation Alternatives and Land Use Connection (TLC) Programs

OVERSIGHT

Technical Committee

MAJOR PRODUCTS

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

TOTAL COST ESTIMATE

\$481,668

This work activity strengthens the coordination between local land use and transportation planning. Begun as a pilot in November 2006, the Transportation/Land-Use Connections (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 2019:

- 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).
- 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.
- 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.

10. 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

\$865,699

10.1 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.
- Participate in the Association of Metropolitan Planning Organizations (AMPO) and meetings.
- Coordinate TPB Planning Activities with Program Directors.
- Day-to-day management of and allocation of staff and financial resources.
- Monitor all work program activities and expenditures.

10.2 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 (FAA) 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 Unified Planning Work Program (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.
- Prepare 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.
- Prepare for Federal certification review to be conducted in summer 2019.

11. 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 2019 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.

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12. Continuous Airport System Planning Program

OVERSIGHT

Aviation Technical Subcommittee

MAJOR PRODUCTS

- Comprehensive Regional Air System Plan Update, Phase 1
- Process 2017 Regional Air Passenger Survey, Phase 1

TOTAL COST ESTIMATE

\$350,000

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.

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IV. PROPOSED FY 2018 STATE TRANSPORTATION AGENCY STATE PLANNING AND RESEARCH PROGRAMS (SPR)

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District of Columbia Department of Transportation (DDOT)

ADMINISTRATIVE AND FINANCIAL MANAGEMENT

Responsible for the management and operation of federal and local funds allocated to the District State Planning and Research (SPR) Work Program. Provide oversight to ensure planning activities are in compliance with federal laws, regulations, and policies. Ensure timely submission of all required reports.

STRATEGIC PLANNING

Develop plans and policies to improve citywide transportation systems and services; improve system performance with efficiency and safety for multi-modal users; coordinate the implementation of ongoing transportation planning activities including multimodal studies, parking, freight, transit, and highway safety; and develop and implement the Transportation Improvement Plan (TIP) and State Transportation Improvement Plan.

SYSTEM PLANNING

Examine transportation projects and zoning plans to ensure they are consistent with, and do not adversely impact DDOT's multimodal strategic objectives and the Transportation Element of the Comprehensive Plan. Coordinate with local and federal agencies on the development of major projects and provide guidance on public space policy and continue to see major land development activity adjacent to the Federal-Aid Highway network.

ACTIVE TRANSPORTATION PROGRAM MANAGEMENT

Develop policies, plans, and programs to encourage the reduction of single-occupant vehicle travel; promote bicycle and pedestrian facilities and programs to encourage non-vehicular methods of commuting; promote safe and convenient bicycling, walking, and public transit; and reduce the number of pedestrian injuries and fatalities in crashes and motor vehicles.

PROJECT DEVELOPMENT AND ENVIRONMENT

Provide oversight for all environmental and project development processes and ensure DDOT is in compliance with all federal-aid requirements, laws, and regulations.

DATA COLLECTION, ANALYSIS, AND DISSEMINATION

Ensure the collection of data for functional classification of local highway systems and mileage certification reporting.

TRAFFIC SAFETY DATA COLLECTION

Manage the collection of transportation data on city streets and highways to improve and incorporate safety controls; and manage the collection of traffic data, volume counts, and turning movement counts.

METROPOLITAN PLANNING

Describes the regional transportation planning and special technical assistance projects proposed to be undertaken July 1, 2018, through June 30, 2019, by COG/TPB staff in cooperation with state and local agencies and WMATA.

PROGRAM FUNDING

The FY 2019 SPR Program funding is under development. The FY 2018 budget is \$3,347,131 (Federal = \$2,677,705 and District = \$669,426).

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

SYSTEMS AND PROGRAMMING

- Preparation and development of the six-year Consolidated Transportation Program and preparation of the Annual Statewide Transportation Improvement Program
 - Develop the FY 2018-2023 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 the FAST Act.
 - Coordinate the STIP with the regional TIPs, CTP, and local jurisdictions' 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.
 - Develop 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 2017 State Planning & Research Program Elements Supporting the Washington Area Work Program	
ITEM	AMOUNT
Systems & Programming	
CTP	\$ 240,300
Local Government Liaison	\$ 178,200
Long-Range Planning	\$ 32,400
Traffic Monitoring Program	\$ 729,000
MPO Liaison	\$ 24,077
Highway Statistics	\$ 498,508
Special Studies	\$ 94,500
TOTAL	\$ 1,796,985

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 MPO's 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 Working Group on Greenhouse Gas Emissions.
- 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., Household Travel Survey, State of the Commute Survey, Modeling).
- Regional air quality planning related activities undertaken by MWAQC and CEEPC, including: 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 other 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 congestion/mobility challenges in the near-, mid-, or long term. Examples of such studies currently underway in FY 2018 include: NoVA Significant Projects Ratings Study (HB 599); Fairfax County Parkway corridor Improvements Study (Phase 1); STARS Program Route 7 Corridor Improvement study, STARS Program Liberia Avenue Corridor Improvement Study.

- Provide inputs and review of the findings and recommendations for the State LRP (VTRANS); assist with development and implementation of the Smart Scale 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 Comprehensive Plan updates, Transit Development Plan studies, corridor and sub area studies. 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 four 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 projects' evaluation and rating were based on the projects' 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.

In FY 2018, VDOT will work with the consultant to transition the modeling tool to the NVTA to perform the ratings. VDOT will review the ratings to ensure consistency with HB 599 legislation.

The remaining funds for FY 2017 will be used in FY 2018 and will cover partial costs of the Project Manager's salary and work performed by consultants. The District is using on-call consultant to perform two studies under the Strategically Affordable Roadway Solutions (STARS) program to identify short- and medium-term improvements to the Route 7 corridor west of the Dulles Greenway and Liberia Avenue in the City of Manassas. The recommendations from the studies will be used to develop projects for implementation using Smart Scale rating.

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V. APPENDIX

Memoranda of Understanding

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

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