UNIFIED PLANNING WORK PROGRAM

FY 2024

Unified Planning Work Program (UPWP) for Transportation Planning for the Washington Metropolitan Region for FY 2024

March 2023

DRAFT

National Capital Region
Transportation Planning Board

DRAFT - UNIFIED PLANNING WORK PROGRAM (UPWP): FY 2024

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ABOUT THE TPB

The National Capital Region Transportation Planning Board (TPB) is the federally designated metropolitan planning organization (MPO) for metropolitan Washington. It is responsible for developing and carrying out a continuing, cooperative, and comprehensive transportation planning process in the metropolitan area. Members of the TPB include representatives of the transportation agencies of the states of Maryland and Virginia and the District of Columbia, 24 local governments, the Washington Metropolitan Area Transit Authority, the Maryland and Virginia General Assemblies, and nonvoting members from the Metropolitan Washington Airports Authority and federal agencies. The TPB is staffed by the Department of Transportation Planning at the Metropolitan Washington Council of Governments (COG).

ACCOMMODATIONS POLICY

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The Metropolitan Washington Council of Governments (COG) operates its programs without regard to race, color, and national origin and fully complies with Title VI of the Civil Rights Act of 1964 and related statutes and regulations prohibiting discrimination in all programs and activities. For more information, to file a Title VI related complaint, or to obtain information in another language, visit https://www.mwcog.org/documents/2021/05/27/title-vi-plan-to-ensure-nondiscrimination-in-all-programs-and-activities-cog-tpb/ or call (202) 962-3300.

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I. INTRODUCTION

Purpose

The National Capital Region Transportation Planning Board (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's responsibilities.

The FY 2024 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, 2023 through June 30, 2024. The UPWP provides a mechanism to coordinate transportation planning activities conducted by the TPB. It 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 fiduciary and other regulatory requirements to receive FHWA and FTA funds.

This work program describes all transportation planning activities utilizing federal funding, including FHWA metropolitan planning funds (PL Funds) and FTA Section 5303 metropolitan planning funds. The Federal Aviation Administration (FAA) Continuous Airport System Planning (CASP) program is a separate grant and is included for informational purposes as the TPB is responsible for implementing the grant. 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.

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), the Fixing America's Surface Transportation (FAST) Act, and the Bipartisan Infrastructure Law (BIL)/Infrastructure Investment and Jobs Act (IIJA) passed in November 2021.

MAP-21 introduced and the FAST Act continues implementing 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, the FAST Act and the IIJA 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 requirements regarding metropolitan planning.

On June 15, 2022, the TPB approved the 2022 Update to Visualize 2045, the long-range transportation plan for the National Capital Region, and the FY 2023-2026 Transportation Improvement Program (TIP). On August 25, 2022, FHWA and FTA found that Visualize 2045 and the FY 2023-2026 TIP conform to the region's State Implementation Plans (SIPs) for complying with the federal Clean Air Act.

On June 15, 2022, 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.

In June 2019, FHWA and FTA jointly certified that the TPB's planning process complies with metropolitan planning regulations and issued a certification report. On April 10-11, 2019, 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). Improvement and enhancements identified in the report will continue to be integrated into the TPB's ongoing planning process. The next certification review will be conducted in calendar year 2023.

The TPB will continue its rich tradition of coordinating with neighboring MPOs and with those MPOs with which it shares DOTs. The TPB will not only continue to coordinate but will look to enhance all its coordination opportunities. TPB is involved in the statewide MPO planning efforts in both Maryland and Virginia. The TPB participates in the Maryland MPO Roundtable meetings, which occur 4 times a year. The TPB is an active participant and a voting member of the Virginia Association of Metropolitan Planning Organizations (VAMPO). A TPB staff member served as the VAMPO Vice Chair in FY 2023.

THE CLEAN AIR ACT

The Clean Air Act Amendments (CAAA) of 1990 require that the transportation actions and projects in long-range transportation plan (LRTP) and Transportation Improvement Program (TIP) support the attainment of federal health standards for ozone (smog), carbon monoxide (CO), and particulate matter (PM-10).[1] The LRTP and TIP must meet specific requirements as specified by the Environmental Protection Agency (EPA) regulations first issued on November 24, 1993, and amended several times, most recently in April 2012,[2] 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.

[1] Office of Air and Radiation (OAR) of the U.S. Environmental Protection Agency (EPA), "1990 Clean Air Act Amendment Summary: Title I," Clean Air Act Overview, August 31, 2015, https://www.epa.gov/clean-air-act-overview/1990-clean-air-act-amendment-summary-title-i.
[2] "Transportation Conformity Regulations as of April 2012" (U.S. Environmental Protection Agency, April 2012), https://www.fhwa.dot.gov/environment/air_quality/conformity/laws_and_regs/rule.cfm.

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 transportation 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 4: Public Participation. COG's Title VI Plan and Title VI Program (including the Language Assistance Plan), the Title VI notice to the public, and complaint procedures can be found at https://www.mwcog.org/documents/titlevi/.

After USDOT review on June 24, 2021, COG's Title VI program meets the necessary requirements. The next triennial Title VI program update is due to FTA on June 1, 2024. On September 9, 2021, DDOT issued a determination that the COG Title VI Program satisfies DDOT's Title VI program requirements. VDOT also conducted a Title VI review in 2021.

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 completed the issuance of final rulemakings for the performance measures, with deadlines set for target setting and periodic updates. TPB has been and will continue to work with the states and public transportation providers to collect data, make forecasts for performance, and update performance targets in support of those measures; and the TPB subsequently has up to 180 days to update performance targets as required, coordinated with those of the states and public transportation providers. 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 is required 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 approved plan and TIP are compliant with these 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 LRTP. The Priorities Plan will influence future 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 previous 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. In December 2017 and January 2018, the TPB 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 are included in Visualize 2045, calling upon member jurisdictions and agencies to plan for and implement these initiatives that will help bring the region closer to reaching its goals.

As approved in Resolution R1-2021, the TPB and its staff commit to being guided by the following statement on equity, and the activities as carried out in the UPWP are intended to reflect this:

> *The TPB and its staff commit that our work together will be anti-racist and will advance equity including every debate we have, and every decision we make as the region's MPO; and the TPB affirms that equity, as a foundational principle, will be woven throughout TPB's analyses, operations, procurement, programs, and priorities to ensure a more prosperous, accessible, livable, sustainable, and equitable future for all residents; and we recognize past actions that have been exclusionary or had disparate negative impacts on people of color and marginalized communities, including institutionalized policies and practices that continue to have inequitable impacts today, and we commit to act to correct such inequities in all our programs and policies.*

In October 2020, the TPB endorsed new, interim, non-sector specific GHG reduction goals and new climate resiliency goals. These include a 2030 interim, regional, non-sector specific GHG reduction goal of 50% below 2005 levels by 2030;[3] Later, in June 2022, the TPB adopted Resolution R18-2022 adding greenhouse gas (GHG) reduction goals and strategies, specifically for the on-road transportation sector, as planning priorities in the development of the regional long-range transportation plans, to help support the region attain its multi-sectoral GHG reduction goals. In its June 2022 action, the TPB set the GHG reduction goals for the on-road transportation sector to be equivalent to the non-sector specific goals (e.g., 50% by 2030), even though the TPB's Climate Change Mitigation Study of 2021 showed that such ambitious goals for the transportation sector would be extremely challenging to attain.

TPB produced two summary documents to make it easy to understand the TPB's policies and all of the scenario work accomplished over the last 15 years. The TPB Synthesized Policy Framework can be found here and the TPB Summary of Scenario Findings can be found here.

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.

[3] "Resolution on the Metropolitan Washington Council of Governments' Regional Multi-Sector Interim Goals for Reducing Greenhouse Gases (TPB R8-2021)," Resolution (Washington, D.C.: National Capital Region Transportation Planning Board, October 21, 2020), https://www.mwcog.org/events/2020/10/21/transportation-planning-board/.

The TPB is composed of representatives from the 24 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,[4] 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 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 and urbanized areas (UZA).

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 air quality 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 an agreement that was executed by all parties in April 2018. To meet Performance-Based Planning and Programming provisions, the TPB and individual stakeholders have documented their roles in responsibilities in Letters of Agreement (LOAs) that respond to each required performance area: Highway Safety, Highway and Bridge Condition, and System Performance (Congestion, Freight, and CMAQ). The responsibilities for the primary planning and programming activities are indicated in Figure 3.

[4] The District of Columbia Department of Transportation (DDOT), the Maryland Department of Transportation (MDOT), and the Virginia Department of Transportation (VDOT).

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 the 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. On May 21, 2021 this agreement was updated and approved to reaffirm and validate the mutually agreed upon roles of each MPO and in consideration of the passage of multi-year federal surface transportation legislation to ensure that ongoing roles and responsibilities are consistent with regional, State and Federal expectations. 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
Fairfax County
Loudoun County
Fauquier County
Prince William County
City of Alexandria
City of Fairfax
City of Falls Church
City of Manassas
City of Manassas Park
Northern Virginia Transportation Authority
Northern Virginia Regional Commission
Northern Virginia Transportation Commission
Virginia Department of Transportation
Virginia Department of Rail and Public Transportation
Virginia Department of Aviation
Virginia General Assembly
Potomac and Rappahannock Transportation Commission

MARYLAND

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

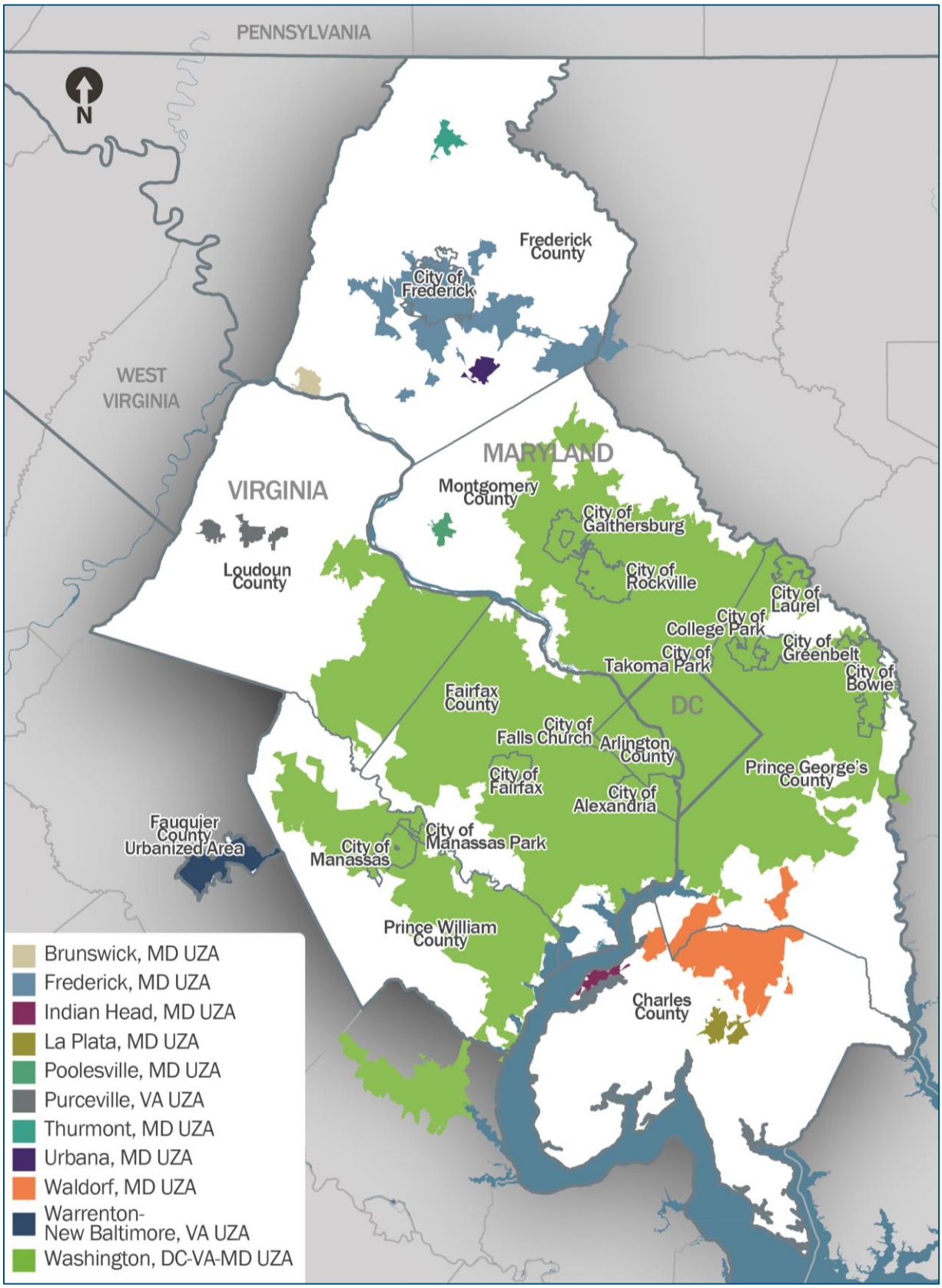

Figure 3: Transportation Planning and Programming Responsibilities

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
State Implementation Plan	MWAQC, TPB, DOTs
Motor Vehicle Emissions Budget	WMATA, State Air Quality Agencies
Climate Change Mitigation	TPB, DOTs, WMATA, Local Governments
CO2 Mobile Emissions Reduction	
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, 2023

STUDY	PRIMARY AGENCIES	SCHEDULE	PRODUCTS
REGIONAL			
Station Access Studies (multiple stations)	WMATA	Ongoing	Plans
Station Capacity Studies	WMATA	Ongoing	Plans
Project Development Program Feasibility Studies	WMATA	Ongoing	Plans/Design
Annual Bus Line Study	WMATA	Ongoing	Study
Bus Service Evaluation Studies	WMATA	Ongoing	Studies
Shepherd Parkway Study	WMATA	2022-2023	Study
Purple Line/Bus Connections	WMATA	2022	Study
Bus ROW Safety and Design Plan	WMATA	2023-2026	Study/Plan
Bus Station Operations Safety Plans	WMATA	Ongoing	Plan
Bus Network Redesign	WMATA	2023-2025	Plan
New Bus Operating Division Feasibility Study – Silver Spring	WMATA	2023-2024	Study
On-Demand Transit Study	WMATA	2023	Study
Bus Loop and Facility Analysis	WMATA	2023-2024	Study
Sustainable Mobility Index	WMATA	2023-2024	Tool
SmarTOD update	WMATA	2023	Model/Data tool
Five-Year Station Investment Plan	WMATA	2023-2024	Plan
Station Mode-of-Access Targets	WMATA	2022-2023	Plan
TOD Strategic Plans	WMATA	2023-2025	Plan
Bus-Oriented Development Study	WMATA	2023-2024	Study

Figure 4: Transportation Planning Studies within the National Capital Region, 2023

STUDY	PRIMARY AGENCIES	SCHEDULE	PRODUCTS
Customer Segmentation Analysis	WMATA	2022	Study
Wayfinding and Customer Experience Design Guidelines	WMATA	2022-2023	Plan
Resilience Implementation Strategy	WMATA	2023-2025	Plan
Electric Bus Alternatives Pilot	WMATA	2023-2024	Pilot
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 185 Needs Analysis (Chevy Chase Circle to MD 193)	MDOT SHA	2022	Plan/Report
MD 187 Needs Analysis (McKinley Street to Tilden Lane/Nicholson Lane)	MDOT SHA	2022	Plan/Report
MD 28/MD 198 Corridor Study (MD 97 to I-95)	MDOT SHA	2021	Plan/Report
US 15/US 40 Frederick Freeway Study	MDOT SHA	2022	CE
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	On-hold	TBD
TOD Planning for the Purple Line Project	UMD/MDOT MTA	2022	TBD
DISTRICT OF COLUMBIA			
East End Bike Lane Study	DDOT	2022	Design

Figure 4: Transportation Planning Studies within the National Capital Region, 2023

STUDY	PRIMARY AGENCIES	SCHEDULE	PRODUCTS
New York Avenue Streetscape and Trail	DDOT	2022	Study/Design
K Street Transitway	DDOT	2022	Design
DC Circulator Electrification Plan	DDOT	2022	Plan
DC Circulator South Capitol Street Facility Improvement	DDOT	2022	Design
DC Circulator Transit Development Plan 2020 Update	DDOT	2022	Plan
DC Circulator Claybrick Road Facility	DDOT	2022	Environmental /Design
MLK at Good Hope Road Safety and Connectivity Study	DDOT	2022	Concept Development/ Plan
Alabama Avenue	DDOT	2022	Design
Tenleytown Multimodal	DDOT	2022	Concept Development
Van Ness Commercial	DDOT	2022	Study/Design
VIRGINIA			
I-495 NEXT Express Lanes Extension to GWMP in vicinity of the American Legion Bridge	VDOT	Ongoing	NEPA Study/EA/FONSI
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

Figure 4: Transportation Planning Studies within the National Capital Region, 2023

STUDY	PRIMARY AGENCIES	SCHEDULE	PRODUCTS
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
I-495 Southside Capital Beltway Transit/TDM Study	DRPT	2022	Study
STARS Route 123/I-95 Safety and Operational Study	VDOT	2022	Report
STARS Route 123/Old Bridge Road Safety and Operational Study	VDOT	2022	Report
STARS Route 123/U.S. 1 Safety and Operational Study	VDOT	2022	Report
STARS Route 234 from Battleview Pkwy to Godwin Road Safety and Operational Study	VDOT	2022	Report
STARS Route 236 from I-495 to I-395 Safety and Operational Study	VDOT	2022	Report
STARS Route 50 from Route 28 to Stringfellow Road Safety and Operational Study (Phase 2 – Chantilly)	VDOT	2022	Report
STARS Route 7 from Plaza Street to Fort Evans Road Operational Study	VDOT	2022	Report
Dale Blvd/Minnieville Road Intersection Improvements Study	VDOT	2022	Report
Project Pipeline Study – Route 236 from Prosperity Avenue to Wakefield Chapel Road	VDOT	2022	Report

Project Pipeline Study – Route 7 from Route 123 to I-495	VDOT	2022	Report
Project Pipeline Study – US 29 from US 15 to Linton Hall Road	VDOT	2022	Report
Project Pipeline Study – Prince William Parkway from Smoketown Road to Crossing Place	VDOT	2022	Report
Project Pipeline Study – Route 7 from Route 9 to Dulles Greenway	VDOT	2022	Report

FY 2023 Accomplishments

In FY 2023, the TPB completed the following activities (this list also contains anticipated completions as well since the document will be approved three months prior to the end of the fiscal year):

1. *FY 2023 UPWP: TPB approval March 16, 2022; USDOT approval June 1, 2022.*
2. *On June 15, 2022, TPB approved the 2022 Update to Visualize 2045 and the FY 2023-2026 TIP. The federal approval was received on August 25, 2022.*
3. *Kicked off the new plan updated called Visualize 2050, anticipated to be approved in calendar year 2024.*
4. *Produced performance measures for inclusion in plan (Dec 2021- March 2022)*
5. *Maintained and updated Visaulize2045.org and Visuaize2050.org websites.*
6. *Coordinated with the TPB, TPB Technical Committee and numerous TPB and COG subcommittees, as well as other stakeholders, on plan development and outreach*
7. *Updated data for infographics and animated videos.*
8. *Updated the TPB's Coordinated Human Service Transportation Plan*
9. *Integrated equity considerations for regional transportation planning into the content of plan.*
10. *State of Public Transportation Report*
11. *Regional Freight Plan update*
12. *Performance Based Planning and Programming*
    a. *Highway Safety Targets set December 2022*
    b. *Transit Safety Targets set December 2022*
13. *In Depth Analysis of Topics Requested from the Regional Travel Survey, periodic presentations throughout FY 2022*
14. *Travel Monitoring Snapshot monthly report, ongoing throughout FY 2022*
15. *Interactive web mapping tool of high-capacity transit and Equity Emphasis Areas in the region, October 2021 with ongoing enhancements.*
16. *Travel Trends Dashboard, ongoing development throughout FY 2022*
17. *Regional Ground Access Forecasts, December 2021*
18. *COVID-19 regional transportation impacts analysis, ongoing throughout FY 2023*
19. *Workplan for Round 10 Cooperative Forecasts, December 2021*
20. *Census 2020 report, October 2021*
21. *Multifamily housing Report, December 2021*
22. *Travel Model Employment Adjustment Factors, June 2022*
23. *Updated National Capital Trail Network map*
24. *Network development*
    a. *COGTools, the software used by staff to edit and update transit networks used by the travel demand forecasting model*
        i. *Maintained and updated both COGTools and the geodatabase used by COGTools. The new integrated geodatabase supports two file formats: Cube TRNBUILD and Cube Public Transport (PT).*
        ii. *Developed a new station management module (Sep. 2022) and network quality assurance module (Dec. 2022) in COGTools.*
    b. *Developed base-year transit network for use in the travel demand forecasting model.*
    c. *Developed year-2021 jurisdictional weekday vehicle miles of travel (VMT) summaries (Nov. 2022).*

d. *Responded to numerous data requests concerning highway and transit networks.*

25. *Model development*
    a. *Planned for, coordinated, and conducted six meetings of the TPB Travel Forecasting Subcommittee.*
    b. *Updated various model-related webpages on the COG website.*
    c. *Continued support of COG's production-use regional travel demand forecasting model, the Gen2/Ver. 2.4 Travel Model, including developing an updated transmittal package, dated November 14, 2022, which includes the travel model, transportation networks, and land use data for the years 2017, 2021, 2023, 2025, 2030, 2040, and 2045.*
    d. *Continued to improve, enhance, and refine the Gen2/Ver. 2.4 Travel Model on a developmental track. Staff implemented various model enhancements and bug fixes, including replacing the old ArcPy-based walkshed generation process with a new GeoPandas-based process.*
    e. *Continued four-year consultant assistance project to develop the TPB's next-generation travel demand model, an activity-based model (ABM), known as the Gen3 Travel Model. The Gen3, Phase 1 (prototype) Model was delivered to COG staff in Feb. 2022. The Gen3, Phase 2 (production-use) Model is due to COG staff in fall 2023. Staff continued to manage the consultant (RSG) developing the Gen3 Model. Staff reviewed and provided feedback on consultant deliverables. Staff also conducted various Phase 2 model development tasks in house, such as the estimation of three sub-models, the implementation of Cube Public Transport (PT) Multipathing in the Gen3 Model, conducting sensitivity tests, and implementing various model enhancements and bug fixes. Below are some COG/RSG documents from these work activities*:
        i. *Xie. Memorandum to Files. "Implementing a Workaround to Address the Hyperpath Issue in the Public Transport (PT) Multipathing Implementation for the Gen3 Travel Model." August 16, 2022.*
        ii. *Xie. Memorandum to Files. "Implementing Public Transport (PT) Multipathing with a Partial Fix to the Hyperpath Issue for Gen3 Travel Model." September 29, 2022.*
        iii. *RSG. "MWCOG Gen 3 Model - ActivitySim Estimation Mode." Memorandum, December 20, 2022.*
        iv. *RSG. "Gen3 Auxiliary Travel Model Implementation in the Phase 2 Development." Memorandum, August 18, 2022.*
        v. *RSG, Baseline Mobility Group, and MWCOG. "Gen3 Model Phase 2 Model Estimation." December 20, 2022.*
        vi. *Gen3 Model Phase 2 Model Calibration documentation (expected Feb. 2023).*
    f. *Began planning for a multi-year effort to develop a regionally coordinated transit on-board survey. To initiate this effort, in FY 23, staff conducted outreach, held internal meetings and wrote memos that explored the strategies adopted by peer MPOs and proposed methodologies to move forward.*
    g. *Worked with COG's Information Technology (IT) staff to migrate modeling servers, mobile emissions modeling workstations, and modeling files from on premises devices to devices in the cloud (Jan. 2023). Prior to migration, Travel Forecasting and Emissions Analysis (TFEA) staff worked with IT staff to conduct both technical and cost feasibility analyses of moving computing systems to the cloud.*

h. *Keeping abreast of developments in travel demand modeling: Attended conferences such as the Association of Metropolitan Planning Organizations Annual Conference (Minneapolis, Minnesota, October 25-28, 2022), the Transportation Research Board's Annual Meeting (Washington, D.C., January 8-12, 2023), and TRB Innovations in Travel Analysis and Planning Conference (June 4-6, 2023). Made presentations to AMPO: Newman, Freedman, Farmer, Castiglione, Sun, Chen, and Xie. "Using ActivitySim: Practical Experience with Collaborative Open-Source Modeling." October 26, 2022, as well as to TRB Innovations Conference (planned).*
i. *Reviewed the 2019 air passenger ground access travel forecasts, developed by the Planning Data and Research (PDR) Team (Oct. 2022) and processed the trip tables for the use of the Gen3 Model.*
j. *Responded and replied to about 40 model-related to technical data requests, which are typically submitted on the COG Data Request webpage.*[5]

26. Model application

a. *Vuksan. "Using Data from the COG/TPB Regional Travel Demand Forecasting Model: Staff Recommendations for Consultants and Others Who Request Model Outputs." Presented at the COG/TPB Travel Forecasting Subcommittee, July 22, 2022.*
b. *Conducted a review of a Congestion Mitigation and Air Quality (CMAQ) Improvement Program Toolkit (Nov. 2022).*
c. *Conducted a sensitivity analysis to determine the response of the travel demand forecasting model to possible increases in toll rates on local toll roads (Dec. 2022).*

27. Air Quality Conformity & Activities Associated with the LRTP

a. *Finished technical activities associated with the Air Quality Conformity (AQC) analysis of the 2022 LRTP and associated TIP, including analyzing motor vehicle registration data, also known as vehicle identification number (VIN) data, which was used as part of the input data for the mobile emissions modeling done using the EPA's MOVES model.*
b. *Developed technical travel-model-related output used by the Plan Development and Coordination (PDC) Team for the environmental justice analysis of the LRTP. For example, "Transmittal of Data in Support of the Environmental Justice Analysis of the 2022 Update to Visualize 2045." Memorandum, October 25, 2022.*
c. *Provided support for activities related to the TPB's 2024 Long-Range Transportation Plan interim update, including coordination with local jurisdictions on transit network inputs for the upcoming air quality conformity analysis.*

28. Mobile Emissions Analysis, including Climate Change Planning

a. *In support of the update to motor vehicle emissions budgets (MVEBs) related to the Maintenance Plan for the Washington DC-MD-VA 2008 Ozone National Ambient Air Quality Standards (NAAQS) Nonattainment Area, developed and documented inventories of on-road mobile emissions for volatile organic compounds (VOC) and nitrogen oxides (NOx) using EPA's MOVES3 model (in coordination with the Metropolitan Washington Air Quality Committee (MWAQC) and its subcommittees).*
b. *Participated in activities related to the development of an Attainment/Maintenance State Implementation Plan (SIP) to address requirements of the 2015 ozone NAAQS (in coordination with MWAQC).*

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[5] "Data Requests," Metropolitan Washington Council of Governments, Transportation, Modeling, November 16, 2022, https://www.mwcog.org/transportation/data-and-tools/modeling/data-requests/.

c. *Participated in activities related to the recently established Carbon Reduction Program (CRP), designed to provide federal funding for the projects that reduce greenhouse gas emissions (e.g., coordination with state DOTs to gain a better understanding of DOT and TPB roles in the process).*
d. *Son, Park. "Emission Modeling Process Version 2.0.1 Compatible with MOVES3.0.4 (Draft)." Memorandum, August 22, 2022.*
e. *Son, Park. "MOVES3 & Related Software Applications Installation Guide (Draft)." Memorandum, August 22, 2022.*
f. *Conducted sensitivity test on the mobile emissions impact of the 2045 highway no-build scenario for the 2020 LRTP (Sep. 2022).*
g. *Comment letter: Srikanth, Kanathur. Letter to Stephanie Pollack, Acting Administrator, Federal Highway Administration. "Comments on 'National Performance Management Measures; Assessing Performance of the National Highway System, Greenhouse Gas Emissions Measure' [Docket No. FHWA–2021–0004]," September 29, 2022.*
h. *Conducted various internal sensitivity tests on EPA's new mobile emissions modeling software, MOVES3 (fall 2022).*
i. *Provided information to support various COG or TPB resolutions*
    i. *"Resolution Endorsing Regional Climate Mitigation and Resiliency Goals (COG R49-2022)." Resolution. Washington, D.C.: Metropolitan Washington Council of Governments, October 12, 2022.*
    ii. *"Resolution Endorsing Efforts to Support Electric Vehicle Deployment (COG R40-2022)." Resolution. Washington, D.C.: Metropolitan Washington Council of Governments, September 14, 2022.*
    iii. *"Resolution on the Adoption of On-Road Transportation Greenhouse Gas Reduction Goals and Strategies (TPB R18-2022)." Resolution. Washington, D.C.: National Capital Region Transportation Planning Board, June 15, 2022.*[6]
j. *"Emissions Savings from 2022 Car Free Day." Memorandum, November 2, 2022.*
k. *Provided review for the following draft report: Cook, Srikanth. "A summary of the TPB and COG scenario study findings: Informing planning for the metropolitan Washington region," (Nov. 2022)*
l. *Met with the U.S. Government Accountability Office (GAO) on December 20, 2022, to provide information for a report being written by GAO about how MPOs analyze and plan for greenhouse gas (GHG) emissions.*
m. *Kept abreast of developments regarding air quality regulations/guidance and climate change planning.*
n. *Responded and replied to about 8 model-related to technical data requests.*

29. *Technical assistance to state DOTs and regional transit agencies as part of the UPWP Technical Assistance program.*

[6] This occurred in late FY 2022 but was not reported in the FY 2022 accomplishments list of last year's UPWP.

FY 2024 Regional Planning Priorities

In December 2021, USDOT issued planning emphasis areas for MPOs to consider in Unified Planning Work Programs. The eight areas are: 1) Tackling the Climate Crisis – Transition to a Clean Energy, Resilient Future; 2) Equity and Justice40 in Transportation Planning; 3) Complete Streets; 4) Public Involvement; 5) Strategic Highway Network (STRAHNET)/U.S. Department of Defense (DOD) Coordination; 6) Federal Land Management Agency (FLMA) Coordination; 7) Planning and Environment Linkages (PEL); and 8) Data in Transportation Planning. This section provides a summary of how the work activities in this UPWP address these USDOT priority areas. In addition, Figure 5 on page 26 provides a crosswalk of how UPWP activities and deliverables support the TPB's policy priorities

TACKLING THE CLIMATE CRISIS – TRANSITION TO A CLEAN ENERGY, RESILIENT FUTURE

In 2010, the TPB joined MWCOG's action to set greenhouse gas (GHG) reduction targets to mitigate the impact of climate change. Over the last decade, the TPB completed three studies to evaluate strategies to address these targets, including the What Would It Take? analysis,[7] the Multisector Working Group study,[8] and the TPB Climate Change Mitigation Study (CCMS) of 2021.[9] These three studies identified various types of projects, programs, and policies that have the greatest potential to reduce GHG emissions from the on-road, transportation sector. In October 2020, the TPB endorsed new, interim, non-sector specific GHG reduction goals and new climate resiliency goals. These include a 2030 interim, regional, non-sector specific GHG reduction goal of 50% below 2005 levels by 2030;[10] the region's climate resilience goals of becoming a Climate Ready Region and making significant progress to be a Climate Resilient Region by 2030; and the need to incorporate equity principles and expand education on climate change into CEEPC, COG and TPB members' actions to reach the climate mitigation and resiliency goals. This will require many changes, such as an increase in the share of the vehicle fleet that is zero emissions and a decrease in per-capita vehicle miles traveled (VMT) to effect an associated decrease in on-road vehicle emissions generated by vehicles using roads in the LRTP. In November 2021, the TPB published results of its TPB Resiliency Study, including a white paper on regional transportation planning for resiliency and an inventory of current TPB member resiliency planning activities. The TPB will use this information as it implements future planning activities for transportation resiliency. A new Task 3.10, Resiliency Planning, has been added to the UPWP, to focus and augment the TPB's climate and natural hazards resiliency planning activities. Also, on the topic of climate change planning, following up on the TPB Climate

[7] Monica Bansal and Erin Morrow, "What Would It Take? Transportation and Climate Change in the National Capital Region," Final Report (Washington, D.C.: National Capital Region Transportation Planning Board, Metropolitan Washington Council of Governments, May 18, 2010), http://www.mwcog.org/uploads/pub-documents/qF5eXVw20110617114503.pdf.

[8] ICF International, "Multi-Sector Approach to Reducing Greenhouse Gas Emissions in the Metropolitan Washington Region," Final Technical Report (Metropolitan Washington Council of Governments, January 31, 2016), https://www.mwcog.org/file.aspx?D=Uj%2fOvKporwCjlofmfR2gk7ay5EmBOb9a4UhR7cKKQig%3d&A=ITSlgZNdO1uWwMHJVzfUV1WIPhZ9IDhMGqWIEQSf9CM%3d.

[9] ICF, Fehr & Peers, and Gallop Corporation, "TPB Climate Change Mitigation Study of 2021: Scenario Analysis Findings," Final Report (National Capital Region Transportation Planning Board, Metropolitan Washington Council of Governments, January 7, 2022), https://www.mwcog.org/tpb-climate-change-mitigation-study-of-2021/.

[10] "Resolution on the Metropolitan Washington Council of Governments' Regional Multi-Sector Interim Goals for Reducing Greenhouse Gases (TPB R8-2021)," Resolution (Washington, D.C.: National Capital Region Transportation Planning Board, October 21, 2020), https://www.mwcog.org/events/2020/10/21/transportation-planning-board/.

Change Mitigation Study (CCMS), the TPB set a series of GHG reduction targets specifically for the on-road transportation sector which are identical to the earlier non-sector sector-specific goals,[11] despite the findings from the CCMS that such large GHG reductions from the transportation sector would be very challenging to attain. In February 2022, the TPB members were surveyed about which GHG reduction strategies they could support.[12] Based on this survey, seven GHG reduction strategies received majority or plurality support,[13] and seven strategies were deemed not yet ready to be adopted by the TPB, thus requiring further study. [14] In FY 2024, the TPB staff plans to work with COG's Department of Environmental Programs (DEP) to coordinate efforts to encourage implementation of those strategies that have TPB support and to further study those strategies identified.

EQUITY AND JUSTICE40 IN TRANSPORTATION PLANNING

TPB Resolution R1-2021 established equity as a fundamental value and integral part of all transportation planning board's work activities. The TPB and its staff resolved to commit that our work together will be anti-racist and will advance equity including every debate we have, and every decision we make as the region's MPO; and the TPB affirms that equity, as a foundational principle, will be woven throughout TPB's analyses, operations, procurement, programs, and priorities to ensure a more prosperous, accessible, livable, sustainable, and equitable future for all residents; and we recognize past actions that have been exclusionary or had disparate negative impacts on people of color and marginalized communities, including institutionalized policies and practices that continue to have inequitable impacts today, and we commit to act to correct such inequities in all our programs and policies.

Examples of TPB's activities to improve equity related to transportation in the TPB region include:

- TPB staff have participated in equity discussions and training.
- Asking questions in surveys that inform regional planning on issues of equity.
- Developing performance measures and other analysis that inform planning for a more equitable region.
- Incorporating equity considerations into TPB studies on climate mitigation and resilience, transit, and safety.

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[11] "Resolution on the Adoption of On-Road Transportation Greenhouse Gas Reduction Goals and Strategies (TPB R18-2022)," Resolution (Washington, D.C.: National Capital Region Transportation Planning Board, June 15, 2022), https://www.mwcog.org/documents/2022/06/15/r18-2022-resolution-on-the-adoption-of-on-road-transportation-ghg-reduction-goals-and-strategies/.

[12] National Capital Region Transportation Planning Board, Climate Change Mitigation Goals and Strategies Questionnaire, interview by TPB staff, February 28, 2022, https://www.mwcog.org/events/2022/2/4/tpb-technical-committee/.

[13] See, for example, slide 9 of Mark S. Moran, "Climate Change Mitigation: Recent Efforts by the Transportation Planning Board to Establish Transportation-Sector Greenhouse Gas Reduction Goals and Strategies"; OR slide 6 of Kanti Srikanth, "Climate Change Elements Under Consideration by TPB: Transportation-Sector Greenhouse Gas Reduction Goals and Strategies," https://www.mwcog.org/events/2022/6/3/tpb-technical-committee/.

[14] See, for example, slide 10 of Moran, "Climate Change Mitigation: Recent Efforts by the Transportation Planning Board to Establish Transportation-Sector Greenhouse Gas Reduction Goals and Strategies"; OR slide 7 of Srikanth, "Climate Change Elements Under Consideration by TPB: Transportation-Sector Greenhouse Gas Reduction Goals and Strategies."

- 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. 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 December 2018, and currently undergoing an update. 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
- For the update to Visualize 2045, the TPB's long-range transportation plan:
    - TPB staff incorporated equity considerations throughout the plan, including amplifying equity discussions and perspectives throughout the chapters of Visualize 2045 as well as the voice of under-represented/historically disadvantaged groups in the Voices of the Region public outreach
    - TPB staff conducted focus groups to discuss equity issues in transportation.
    - In FY 2016, an expanded analysis of the long-range transportation plan identified potentially vulnerable populations. Areas containing such populations are called Equity Emphasis Areas. Like past plans, the federally required environmental justice (EJ) analysis will be conducted after approval of the plan. Staff updated the Equity Emphasis Areas (EEAs) using 2020 census data in 2022, when all new census data required for the analysis is available, and used it to conduct the EJ analysis for the updated plan.
    - Information was provided regarding as to which projects in the constrained element are in an EEA or connect an EEA to an Activity Center, as well as narrative descriptions provided by the project sponsors about equity considerations in planning for each project in the constrained element. Funding totals for this subset of plan projects will be documented in the plan.

COMPLETE STREETS AND SAFETY

TPB Resolution R3-2021, adopted in July of 2020, reaffirmed and codified the board's resolve to dramatically reduce the number of people killed and injured on the Region's roadways. Based on the findings of a regional roadway safety study commissioned by the TPB in 2019, the resolution urges TPB member jurisdictions and agencies to reaffirm road user safety as a top priority and to prioritize the implementation of projects, programs, and policies to reduce the number of fatal and serious injury crashes on the Region's roadways. The resolution also established and funded an ongoing Regional Safety Program at a level of $250,000 per fiscal year to provide short-term consultant services to member jurisdictions or agencies to assist with planning or preliminary engineering projects that address roadway safety issues; this program will enter its fourth year in FY 2024.

PUBLIC INVOLVEMENT

Task 4 "Public Participation" 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 long-range transportation plan, TIP, and all other TPB activities. Virtual Public Involvement (VPI) tools have played an integral role in how the TPB has been conducting public involvement over the past few years, and the TPB will continue to use them wherever possible.

Most recently updated in October of 2020, the TPB's Participation Plan states the board's commitment to transparent communications and engagement with the public and with relevant agencies to support the regional transportation planning process. This includes communications and engagement to inform developing the Long-Range Transportation Plan (LRTP) and the Transportation Improvement Program (TIP).

The plan articulates the TPB's policy for public participation. It describes how members of the public can get involved and demonstrates how staff will work to meet and exceed federal requirements. Most importantly, this plan guides TPB staff interactions with the public so their public-facing work can: 1) reach as many people as inclusively as possible, and 2) collect meaningful input and build support to inform TPB plans and programs, and aid in decision making. The Participation Plan is required under federal laws and regulations pertaining to metropolitan planning. The plan builds on previous efforts designed to encourage participation in the TPB process and provide reasonable opportunities for residents and other interested agencies to be involved in the metropolitan transportation planning process.

As articulated in the Participation Plan, the TPB conducts an array of public engagement work. Some activities, such as the meetings of the Community Advisory Committee and Access for All Advisory Committee, occur on a recurring basis and are designed to provide regular and consistent feedback to the regional planning process. Other activities are intended to get input on specific, important TPB plans and actions. In 2020 and 2021, public engagement was particularly focused on the update of the region's long-range plan Visualize 2045. These activities included a representative public opinion survey, a serious of focus groups, and the solicitation of public comment on TPB priorities through QR code signs and posters. All the activities reflected the TPB's prioritization of equity, by asking about the concerns of underserved communities and seeking to incorporate their voices and opinions into the TPB's planning products.

STRATEGIC HIGHWAY NETWORK (STRAHNET)/U.S. DEPARTMENT OF DEFENSE (DOD) COORDINATION

The region's Interstate highways and several key connecting links comprise the Strategic Highway Network in the TPB planning area, roadways that have long been of critical focus in the metropolitan transportation plan. TPB will continue and strengthen our attention to the operations and reliability of these key roadways, in coordination with federal partners.

FEDERAL LAND MANAGEMENT AGENCY (FLMA) COORDINATION

Upon approval, the Eastern Federal Lands Highway Division (EFLHD) of the U.S. Federal Highway Administration transmits its four-year TIP to be included in the TPB's TIP. The lists of projects in the District of Columbia, suburban Maryland, and Northern Virginia are placed in the respective parts of Appendix A of the TIP along with the programming tables of the DOTs and other implementing agencies in those three jurisdictions. It is by this inclusion, that EFLHD's projects are included in the appropriate STIP which is submitted for federal approval.

TPB staff also participate in the DC Programming Decisions Committee (PDC) to score and rank applications for the DC Federal Lands Access Program (FLAP).

PLANNING AND ENVIRONMENT LINKAGES (PEL)

The TPB's environmental consultation and mitigation activities provide resources and opportunities for environmental and historic agencies at the state and local levels to engage in the regional long-range transportation planning process.

Through TPB and COG committees and the public participation process, the TPB conducts a consultation effort during the development of the transportation plan that engages, as appropriate, state and local agencies responsible for land-use management, natural resources, environmental protections, conservation, and historic preservation. The consultation process includes a comparison of the transportation plans with state conservation plans or maps and inventories of natural or historic resources.

The TPB also must include a discussion of possible mitigation activities that may have the greatest potential to restore and maintain environmental functions, (see Appendix G of Visualize 2045). The areas where mitigation efforts can be focused include neighborhoods and communities, cultural resources; wetlands and water resources; forested and other natural areas; endangered and threatened species; and air quality. State and local transportation agencies examine, document and implement any needed environmental mitigation actions at the individual project level.

A new interactive map provides a regional-level resource to inform the relationship between the transportation and environmental concerns. It is available online at: https://visualize2045.org/future-factor/climate-resiliency-and-environmental-health/.

The map allows the public and decision makers to view the natural resource data layers along with the transportation projects expected to be built by 2045 from the financially constrained element of this plan. By defining and inventorying environmental resources and data, the interactive map can be used to inform state and local agencies and the public about the relationship between the projects in the constrained element and environmental concerns at the regional scale.

DATA IN TRANSPORTATION PLANNING

Data management activities are carried out under Task 7.2 (Data Management and Visualizations). This activity entails developing and supporting transportation data management procedures and systems and publishing findings from research through digital reporting and data visualization products. This includes hosting and managing data collected and compiled under this task as well as across numerous programs. It also entails developing visualizations of these data, such as

dashboards and interactive maps, as part of research and analysis activities. TPB completed an evaluation of Big Data and its potential to support planning and analysis across multiple programs. As an outcome of this study, TPB intends to acquire Big Data products as an ongoing investment in emerging and important Big Data sources that have great potential to support cross-program regional transportation planning, understanding, and decision-making. The Data Management and Visualization task also supports the continued development and maintenance of the Regional Transportation Clearinghouse (RTDC), which serves as a one-stop portal for staff and regional partners to access important regional datasets. Over the years, staff has collected transportation data from various sources, primarily member jurisdictions, state agencies, and transit authorities. The data have been organized and presented in the RTDC in an open format to improve access and data sharing between TPB members and other users in the region. Examples of data include traffic counts, transit, land use forecasts, bicycle and pedestrian, demographic and socioeconomic, bridge, pavement, and related system performance data, aviation, and roads, highways, and networks.

PERFORMANCE-BASED PLANNING AND PROGRAMMING

An overview of performance-based planning and programming was provided earlier in this Introduction. Performance-based planning and programming is an articulated priority of the TPB as demonstrated in Activity 3: Performance-Based Planning and Programming in this UPWP. Ongoing processes have been established to address 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.

As included in the Metropolitan Planning Agreement (3C Agreement) approved by the Transportation Planning Board on April 18, 2018, in accordance with the latest federal metropolitan planning requirements as adopted in the FAST Act, the TPB's TIP includes a description of how the investments in the TIP make progress toward achievement of the targets in the Plan.

The TIP includes funding under the Highway Safety Improvement Program for priority HSIP projects as programmed by the three states. Examples of HSIP programmed projects include impact attenuators, guardrails, upgrading traffic signal devices, work zone safety reviews, and improved signs and markings. The three states have processes for inclusion of safety-related projects as identified in their Strategic Highway Safety Plans and other state plans and documents. Safety improvements are also included within projects funded with non-HSIP funds and through other state and federal sources, such as the Transportation Alternatives Program Block Grants, including Safe Routes to School grants, and CMAQ and maintenance projects, all of which will provide benefits that contribute to improved safety performance. Thus, the funding and the program of projects in the TIP will enable the TPB to achieve the region's safety performance targets.

The TIP includes funding from multiple FTA sources for projects that support Transit Asset Management. Examples of these projects include rural and urban capital assistance programs; rolling stock acquisition, maintenance, and overhauls; bus fleet rehabilitation and replacement; track and rail yard maintenance and improvements; and maintenance of passenger facilities. Each of the three states and WMATA have adopted Transit Asset management plans which are included in their respective STIPs. Transit Asset Management category projects are also supported by non-FTA sources such as state and local funding, WMATA Insurance Proceeds, and flexible CMAQ and STP funding. The funding and the program of projects in the TIP will enable the TPB to achieve the region's transit asset management performance targets.

REGIONAL POLICY FRAMEWORK AND PRIORITIES

The TPB's LRTP seeks to respond to both federal requirements and its own adopted set of policy goals and priorities. To a large extent, federal and regional goals intersect. The TPB has worked continually to develop and adopt a set of consensus-based policy goals and priorities to inform local decision making on the types of projects, programs and polices it seeks for its LRTP and TIP. The Vision, adopted in 1998, is the overarching policy document that describes regional goals and objectives as well as strategies to achieve them. This vision informed the 2014 Regional Transportation Priorities Plan. The vision and goals focus on multimodal transportation solutions that give people greater choice in finding the travel mode that works best for them. It emphasizes the important role of land-use, especially strengthening the region's Activity Centers by providing high quality connections between centers and improving non-auto travel options within them. System maintenance is also paramount, recognizing that our existing roadways and transit systems must be in a state of good repair to be safe, efficient, and reliable.

In 2020, the TPB approved three resolutions renewing commitments to safety, equity, and climate change. The TPB's equity resolution affirms equity as a foundational principle that will be woven throughout TPB's analyses, operations, procurement, programs, and priorities. The safety resolution established that safety for all modes of transportation is a regional priority which will be monitored and analyzed through performance-based planning and programming with an emphasis on aspirational safety goals associated with Vision Zero and Towards Zero Deaths.

The TPB endorsed the region's new GHG reduction goals and new climate resiliency goals. These include a regional greenhouse gas emissions reduction goal of 50 percent below 2005 levels by 2030 and becoming a Climate Ready Region - making significant progress by 2030. The goals identified the need to incorporate equity principles and expand education on climate change into the TPB members' actions to reach the climate mitigation and resiliency goals.

In June 2022, the TPB also set its own goals when it adopted Resolution R18-2022 adding greenhouse gas (GHG) reduction goals and strategies, specifically for the on-road transportation sector, as planning priorities in the development of the regional long range transportation plans, to help support the region attain its multi-sectoral GHG reduction goals.

PROMOTE VISUALIZE 2045 ASPIRATIONAL INITIATIVES

In December 2017 and January 2018, the TPB 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 are included in Visualize 2045 (2018) 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. To support implementation of these initiatives, TPB staff have met with TPB member jurisdictions and transit agencies to discuss the projects, programs, and policies that the members are advancing that align with the Aspirational Initiatives, and how TPB can support its members in doing so. TPB staff also worked on follow-up to TPB Resolution R10-2019 which directed staff to conduct activities related to the implementation of three of the Aspirational Initiatives:

- Improve walk and bike access to transit – Staff developed and refined a network analysis to identify walksheds around high-capacity transit stations. Staff have shared with various committees the online 'walksheds analysis' tool that can be used by anyone in the region. Staff is conducting outreach to technical staff at the local jurisdictions.

- Complete the National Capital Regional Trail Network – Staff implemented a work program for expanding the regional trail network to cover the entire TPB region, as a network.
- Provide more telecommuting and other options for commuting -- Commuter Connections Program launched the IncenTrip app on August 28, 2020. Staff also conducted other activities related to Travel Demand Management (TDM).

COG staff (who are not explicitly TPB staff) worked on activities to address another of the seven initiatives— "Bring jobs and hosing closer together." The Housing Initiative has been underway to identify how to work together as a region to build 100,000 more housing units over the next decade in the region's Activity Centers. Resolution R10-2019 also encouraged regional coordination activities, led by TPB partners, to promote implementation of the initiatives "Expand bus rapid transit (BRT) regionwide," and "Expand the express highway network." COG staff made recommendations to the COG board regarding three regional housing targets. In September, the COG Board voted unanimously to endorse the three housing targets.

Supporting the Initiative, Bring Jobs and Housing Closer Together, the COG issued a Certified Resolution R46-2021 - endorsing high-capacity transit station areas (HCTs) as a key planning concept and tool. The TPB endorsed these concepts also, supporting the COG resolution with TPB Resolution R4-2022.

The Visualize 2045 Voices of the Region survey, focus groups, and, the Aspiration to Implementation event each, in some way, provided data, insights, and information to promote or support planning for the concepts behind the Aspirational Initiatives. For example, the survey asked questions about public opinion regarding transportation enhancements such as the use of dedicated lanes for bus rapid transit. The Aspirations to Implementation event was designed to help the TPB better understand and communicate about how the concepts behind the endorsed initiatives impact the lives of people living in the region.

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 developing performance measures and targets, the unfunded regional priority projects, MATOC, congestion management, safety, public transportation, and freight. 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."

The TPB is involved in the statewide MPO planning efforts in both Maryland and Virginia. The 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. The 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." A TPB staff member currently serves as the Vice Chairman of VAMPO.

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.

Figure 5: Selected FY 2024 UPWP Work Activities and Planning Policy Focus Areas[15]

No.	UPWP Work Activities	Accessibility / Connectivity	Environment (Air Quality / Climate Change)	Comprehensive Multimodal System	Emerging Mobility and Technology	Resiliency / Sustainability	Equity	Land Use	Mobility/ Reliability	Operational Efficiency	Safety
1	Transportation Land Use Connections Program (Task 9.4)	✓	✓	✓			✓	✓	✓		
2	Transportation Alternatives Set Aside Program (Task 9.3)	✓	✓	✓			✓	✓	✓		
3	Enhanced Mobility Grant Program (Task 9.1)	✓		✓			✓		✓		
4	Regional Roadway Safety Program (Task 9.2)				✓		✓		✓	✓	✓
5	Transit Within Reach Program (Task 11)	✓	✓	✓			✓	✓	✓		
6	Regional Air Quality Conformity Analysis (Task 6.1)		✓			✓	✓				
7	Visualize 2045 Plan Performance Measure Dashboard (Task 1.3)	✓	✓	✓		✓	✓	✓	✓		
8	Visualize 2050 development (Task 1.3)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
9	Resiliency - Coordination, Phase II study and interactive map (Task 3.10)		✓			✓	✓				✓
11	State of Public Transportation Report (Task 3.7)	✓		✓	✓	✓	✓		✓	✓	✓
12	National Capital Trail Network Update (Task 3.6)	✓				✓	✓	✓	✓		✓
13	Coordinate implementation of Transportation-Sector Climate Change Mitigation Strategies (Task 6.2)		✓	✓		✓	✓	✓	✓	✓	
14	Travel Demand Forecasting: Production-Use & Developmental Models (Task 5.2)	✓	✓	✓		✓	✓	✓	✓		

[15] Excludes regular committee meetings that provide input and oversight of all the activities of the TPB.

No.	UPWP Work Activities	Accessibility / Connectivity	Environment (Air Quality / Climate Change)	Comprehensive Multimodal System	Emerging Mobility and Technology	Resiliency / Sustainability	Equity	Land Use	Mobility/ Reliability	Operational Efficiency	Safety
15	Mobile Emissions Inventory and Planning (Task 6.2)		✓			✓	✓			✓	
16	Performance-Based Planning and Programming Analysis and Target Setting (Task 3.1) and Congestion Management Process (Task 3.2)		✓	✓	✓	✓			✓	✓	✓
17	Inventorying and Planning for Transit Electrification (Task 3.7)		✓	✓	✓	✓	✓		✓	✓	
18	Regional Intelligent Transportation Systems (ITS) Architecture (Task 3.3)			✓	✓				✓	✓	✓
19	Bicycle and Pedestrian Planning Professional Development/Best Practices Forums (Task 3.6)	✓		✓	✓	✓	✓				✓
20	Transit Private Providers Forum (Task 3.7)			✓					✓		
21	Travel Surveys and Travel Trends Analysis, Studies and Research, Data Management, and Visualizations (Tasks 7.1 and 7.2)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
22	Coordination of land use and regional transportation planning, including Cooperative Forecasts (Task 8.1)	✓	✓	✓	✓	✓	✓	✓	✓		
23	Technical Assistance Program (Task 11)	✓		✓	✓		✓	✓	✓		✓

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 2024 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 order of the tasks is deliberate with the federal regulatory requirements identified most prominently followed by the subsequent tasks providing support for elements of those requirements.

1. LONG-RANGE TRANSPORTATION PLANNING

The first major activity, **Long-Range Transportation Planning,** includes activities related to the development of Visualize 2050 (the new long-range transportation plan), activities to maintain federal compliance, and activities to implement policy board directed activities. The current plan, Visualize 2045, identifies all regionally significant transportation investments planned through 2045 and provides detailed analysis to help decision makers and the public "visualize" the region's future under current plans. The 2022 Update to Visualize 2045 was approved in June 2022, and strategic implementation including a focus on the aspirational element continues. Additional analysis to support and enhance plan components and other federal requirements will be undertaken as necessary.

2. TRANSPORTATION IMPROVEMENT PROGRAM

The second major activity, the **Transportation Improvement Program** (TIP), provides support to update, amend, modify, and enhance the TPB's TIP. In FY 2019, TPB procured a consultant to develop a new iTIP Database, called Project InfoTrak, which provides a complete upgrade and overhaul to the project database information system. In FY 2024, work continues to refine and enhance the long-range transportation plan, TIP project, and conformity record database, including a GIS database.

3. PLANNING ELEMENTS

The third major element, **Planning Elements**, considers the following aspects of metropolitan transportation planning, and their support of regional long-range transportation plan and program development, in conjunction with federal FAST, MAP-21, and IIJA requirements:

- Performance-Based Planning and Programming (PBPP);
- Regional congestion management process (CMP);
- Systems performance, operations, and technology (SPOT) planning;
- Transportation emergency preparedness planning;
- Transportation safety planning;
- Bicycle and pedestrian planning;
- Regional public transportation planning;
- Freight planning;
- Planning support for the Metropolitan Area Transportation Operations Coordination (MATOC) Program; and
- Transportation resiliency planning.

A key objective is to provide opportunities for regional consideration, coordination, and collaborative enhancement of planning for each of these elements. Also included for all elements will be outreach to members, stakeholders, and subject matter experts, to gather information to advise future planning and committee activities.

4. PUBLIC PARTICIPATION

The fourth major activity, **Public Participation**, 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 long-range transportation plan, TIP, and all other TPB activities.

5. TRAVEL FORECASTING

The fifth major activity, **Travel Forecasting**, consists of developing, maintaining, supporting, and improving the TPB's travel demand forecasting methods. Methods can range from tactical models, such as the TPB's regional travel demand forecasting model, to strategic models, such as sketch and scenario planning models. This work activity includes preparing the inputs, such as transportation networks, for the regional travel demand model and also includes developmental work, both to improve the production-use travel model and also to develop the next version of the regional travel model, such as the TPB's next-generation travel model, an activity-based travel model (ABM), known as the Generation 3, or Gen3, Model, which is being developed with consultant assistance during a four-year period, from FY 20 through FY 24.

6. MOBILE EMISSIONS PLANNING

The sixth major activity, **Mobile Emissions Planning**, consists of maintaining and applying the adopted, production-use TPB travel demand model and the EPA Motor Vehicle Emissions Simulator (MOVES) model to forecast air pollution emitted by on-road motor vehicles. This activity includes the

air quality conformity analysis of the LRTP and TIP, technical support for the LRTP (such as with performance analysis of the LRTP or the equity analysis), and technical work supporting state environmental planning activities, such as climate change planning pertaining to the on-road transportation sector.

7. TRANSPORTATION RESEARCH AND DATA PROGRAMS

The seventh major activity, **Transportation Research and Data Programs**, provides empirical travel research, data, visualizations, and documentation on regional travel trends and behavior. This includes information from traffic counts, high occupancy vehicle (HOV) monitoring, regional travel surveys and other travel trend analysis activities. This activity includes data management, development of data visualizations, and GIS technical support for all planning activities across the department and maintaining the Regional Transportation Data Clearinghouse.

8. REGIONAL LAND USE AND TRANSPORTATION PLANNING COORDINATION

The eighth major activity, **Regional Land Use and Transportation Planning Coordination,** includes coordination of local, state, and federal planning activities, develops population, household, and employment forecasts that are used as input into the TPB travel demand forecasting model, and facilitates the integration of land use and transportation planning in the region.

9. MOBILITY AND ENHANCEMENT PROGRAMS

The TPB solicits and selects projects for four programs. The ninth major activity, **Mobility and Enhancement Programs**, captures the efforts involved in soliciting and selecting projects for the FTA "Section 5310: Enhanced Mobility of Seniors and Individuals with Disabilities" program, the Regional Roadway Safety Program (RRSP), the FHWA Transportation Alternatives Set-Aside Program (TAP), and the TPB's Transportation Land-Use Connections Program (TLC).

10. TPB MANAGEMENT AND SUPPORT

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

11. TECHNICAL ASSISTANCE PROGRAM

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

CONTINUOUS AIRPORT SYSTEM PLANNING (CASP)

Finally, the **Continuous Airport System Planning (CASP)** Program conducts ground access planning studies and analyses for airport and airport-serving facilities in the region.

Work Activity Budgets

The funding level for the TPB's FY 2024 Basic Work Program is assumed to be slightly higher than the FY 2023 level, due to the additional funding from the IIJA. The proposed budget levels for the 11 activities by funding source, which include FTA and FHWA funds together with state and local match, are shown in Table 1 on the next page. The proposed expenditures for each of these 11 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 7 are shown under the descriptions for each task in Section III. Figure 8 illustrates the relationship between and among the TPB work activities.

Table 1: Revenue - FY 2024 TPB Proposed Funding by Federal, State, and Local Sources
(July 1, 2023, to June 30, 2024)

	FTA SECT 5303	FHWA PL FUNDS	FHWA & FTA	OTHER CASP & SPR	
	80% FED & 20% STATE/ LOCAL	80% FED & 20% STATE/ LOCAL	SAFE AND ACCESSIBLE TRANSPORTATION OPTIONS SET-ASIDE[1]	90% FAA & LOCAL 10% SPR 80% FHWA & LOCAL 20%	TOTALS
DDOT ALLOCATIONS					
NEW FY 24 & Unobligated FY 23[2]	$813,365	$2,853,616	$94,025		$3,761,006
PRIOR UNEXPENDED[3]	$169,873	$616,410	$0		$786,283
CARRYOVER FY 2023[4]	$79,984	$380,080	$0		$460,064
SUBTOTAL – DC	**$1,063,221**	**$3,850,106**	**$94,025**		**$5,007,353**
MDOT ALLOCATIONS					
NEW FY 24 & Unobligated FY 23[2]	$2,170,948	$5,632,627	$168,415		$7,971,990
PRIOR UNEXPENDED[3]	$316,362	$884,440	$0		$1,200,802
CARRYOVER FY 2023[4]	$185,542	$528,860	$0		$714,403
SUBTOTAL – MD	**$2,672,852**	**$7,045,927**	**$168,415**		**$9,887,194**
VDRPT & VDOT ALLOCATIONS					
NEW FY 24 & Unobligated FY 23[2]	$1,961,668	$4,885,095	$141,257		$6,988,020
PRIOR UNEXPENDED[3]	$259,190	$759,773	$0		$1,018,963
CARRYOVER FY 2023[4]	$150,661	$409,373	$0		$560,034
SUBTOTAL – VA	**$2,371,519**	**$6,054,241**	**$141,257**		**$8,567,017**
TOTAL FHWA/FTA FUNDING ALLOCATIONS					
NEW FY 24 & Unobligated FY 23[2]	$4,945,980	$13,371,338	$403,697		$18,721,016
PRIOR UNEXPENDED[3]	$745,425	$2,260,623	$0		$3,006,048
CARRYOVER FY 2023[4]	$416,187	$1,318,313	$0		$1,734,500
SUB-TOTAL – FHWA-FTA	**$6,107,592**	**$16,950,275**	**$403,697**		**$23,461,564**
TOTAL BASIC UPWP	**$6,107,592**	**$16,950,275**	**$403,697**		**$23,461,564**
FAA - CASP PROGRAM				$675,000	**$629,030**
State Planning & Research (SPR)				$248,000	**$245,721**
GRAND TOTAL UPWP	**$6,107,592**	**$16,950,275**	**$403,697**	**$923,000**	**$24,384,564**

1. The November 15, 2021, Infrastructure Investment and Jobs Act (a.k.a. Bipartisan Infrastructure Law) requires each MPO to use at least 2.5% of its PL funds (under 23 U.S.C. 505) on specified planning activities to increase safe and accessible options for multiple travel modes for people of all ages and abilities.
2. "New FY2024" funding amounts are at the levels in the federal Infrastructure Investment Jobs Act (IIJA). It also includes the increased funding provided by the IIJA in federal FY2022 not programmed in TPB's FY2023 UPWP.
3. "Prior Unexpended" funding amounts are yet to be confirmed by funding agencies and may change.
4. "Carryover FY2023 funds" are funds budgeted for Core and Technical Assistance work program activities in FY 2023 UPWP, that are not anticipated to be spent in FY 2023. As such, these funds will be carried over from FY 2023 to be used to perform Core program and Tech. Assistance activities in FY 2024.

Table 2: FY 2024 UPWP Expenditures

WORK ACTIVITY	FY 2023 TOTAL COST ESTIMATE
CORE PROGRAMS	
1. Long-Range Transportation Planning	$1,123,429
2. Transportation Improvement Program	$583,710
3. Planning Elements	$3,406,428
4. Public Participation	$740,717
5. Travel Forecasting	$3,442,357
6. Mobile Emissions Planning	$2,922,011
7. Transportation Research and Data Programs	$5,344,964
8. Regional Land Use and Transportation Planning Coordination	$1,211,231
9. Mobility and Enhancement Programs (EM, TLC, TAP, RSP) [1]	$1,133,413
10. TPB Management and Support	$1,622,651
Sub-total: Core Program	**$21,530,912**
11. TECHNICAL ASSISTANCE	
A. District of Columbia	$334,164
B. Maryland	$693,520
C. Virginia	$606,210
D. Public Transportation [2]	$296,759
Sub-total: Technical Assistance Program	**$1,930,651**
Total - Basic UPWP	**$23,461,564**
AIR SYSTEMS PLANNING	
1. Continuous Airport System Planning (CASP) [1]	$675,000
2. State Planning & Research (SPR) [2]	$248,000
Sub-total: CASP and SPR	**$923,000**
GRAND TOTAL UPWP	**$24,384,564**

1. **Work activities are based on anticipated FAA grants to conduct airport ground access planning as part of CASP program.**
2. **SPR program activities are funded through a separate grant from the District of Columbia's Department of Transportation to assist in DDOT's HPMS program.**

Table 3: TPB FY 2024 Work Program by Funding Sources

UPWP - Work Activity	COG Labor Cost: DTP Staff	COG Labor Cost: Other Staff	Total COG Staff	COG Labor Fringe Cost	Supplemental Labor: Interns	Supplemental Labor: Temps	Total Labor & Fringe Cost	Total Indirect Cost	Direct Costs (Implementation): Computers, Data	Direct Costs (Implementation): Studies Programs	Direct Costs (Implementation): Other Costs	Total Prgrm. (Implmntn.) Direct Cost	Grand Total Cost
CORE PROGRAMS													
1. Long-Range Transportation Planning	$435,816	$0	*$435,816*	$99,628	$0	$0	*$535,444*	$326,085	$5,000	$250,000	*$6,900*	**$261,900**	**$1,123,429**
2. Transportation Improvement Program	$178,423	$0	*$178,423*	$40,788	$0	$0	*$219,211*	$133,499	$230,000	$0	*$1,000*	**$231,000**	**$583,710**
3. Planning Elements	$1,168,603	$60,989	*$1,229,591*	$281,085	$0	$0	*$1,510,676*	$920,002	$8,750	$925,000	*$42,000*	**$975,750**	**$3,406,428**
4. Public Participation	$310,457	$0	*$310,457*	$70,971	$0	$0	*$381,428*	$232,290	$2,000	$25,000	*$100,000*	**$127,000**	**$740,717**
5. Travel Forecasting	$1,142,421	$0	*$1,142,421*	$261,157	$0	$0	*$1,403,578*	$854,779	$480,000	$582,000	*$122,000*	**$1,184,000**	**$3,442,357**
6. Mobile Emissions Planning	$1,157,440	$103,683	*$1,261,124*	$288,293	$0	$0	*$1,549,417*	$943,595	$90,000	$230,000	*$109,000*	**$429,000**	**$2,922,011**
7. Transportation Research and Data Progr	$918,124	$0	*$918,124*	$209,883	$0	$0	*$1,128,007*	$686,957	$980,000	$2,500,000	*$50,000*	**$3,530,000**	**$5,344,964**
8. Regional Land Use and Transportation Planning Coordination	$212,770	$273,482	*$486,252*	$111,157	$0	$0	*$597,409*	$363,822	$75,000	$100,000	*$75,000*	**$250,000**	**$1,211,231**
9. Mobility Enhancement Programs	$230,210	$0	*$230,210*	$52,626	$48,682	$0	*$331,519*	$201,895	$1,000	$597,500	*$1,500*	**$600,000**	**$1,133,413**
10. TPB Support and Management	$510,255	$0	*$510,255*	$116,644	$25,000	$0	*$651,900*	$397,007	$2,500	$353,744	*$217,500*	**$573,744**	**$1,622,651**
UPWP Core Program Total	**$6,264,520**	**$438,154**	***$6,702,674***	**$1,532,231**	**$73,682**	**$0**	***$8,308,588***	**$5,059,930**	**$1,874,250**	**$5,563,244**	***$724,900***	**$8,162,394**	**$21,530,912**
TECHNICAL ASSISTANCE PROGRAM													
A. District of Columbia	$6,685	$0	*$6,685*	$1,528	$0	$0	*$8,213*	$5,002	$0	$0	*$320,948*	**$320,948**	**$334,164**
B. Maryland	$6,685	$0	*$6,685*	$1,528	$0	$0	*$8,213*	$5,002	$0	$0	*$680,304*	**$680,304**	**$693,520**
C. Virginia	$6,685	$0	*$6,685*	$1,528	$0	$0	*$8,213*	$5,002	$0	$0	*$592,994*	**$592,994**	**$606,210**
D. Public Transportation	$6,685	$0	*$6,685*	$1,528	$0	$0	*$8,213*	$5,002	$0	$90,000	*$193,544*	**$283,544**	**$296,759**
Technical Assistance Program Total	**$26,740**	**$0**	***$26,740***	**$6,113**	**$0**	**$0**	***$32,853***	**$20,008**	**$0**	**$90,000**	***$1,787,791***	**$1,877,791**	**$1,930,651**
Total Basic Program	**$6,291,261**	**$438,154**	***$6,729,415***	**$1,538,344**	**$73,682**	**$0**	***$8,341,441***	**$5,079,938**	**$1,874,250**	**$5,653,244**	***$2,512,691***	**$10,040,185**	**$23,461,564**
OTHER PROGRAMS													
Continuous Air Systems Planning	$146,556	$0	*$146,556*	$33,503	$0	$0	*$180,059*	$109,656	$0	$210,000	*$175,286*	**$385,286**	**$675,000**
State Planning & Research Program (DC)	$87,057	$0	*$87,057*	$19,901	$0	$0	*$106,958*	$65,137	$0	$75,905	*$0*	**$75,905**	**$248,000**
GRAND TOTAL	**$6,437,817**	**$438,154**	***$6,875,971***	**$1,571,847**	**$73,682**	**$0**	***$8,521,500***	**$5,189,593**	**$1,874,250**	**$5,863,244**	***$2,687,977***	**$10,425,471**	**$24,384,564**

Figure 6: Major Components of UPWP Work Activities

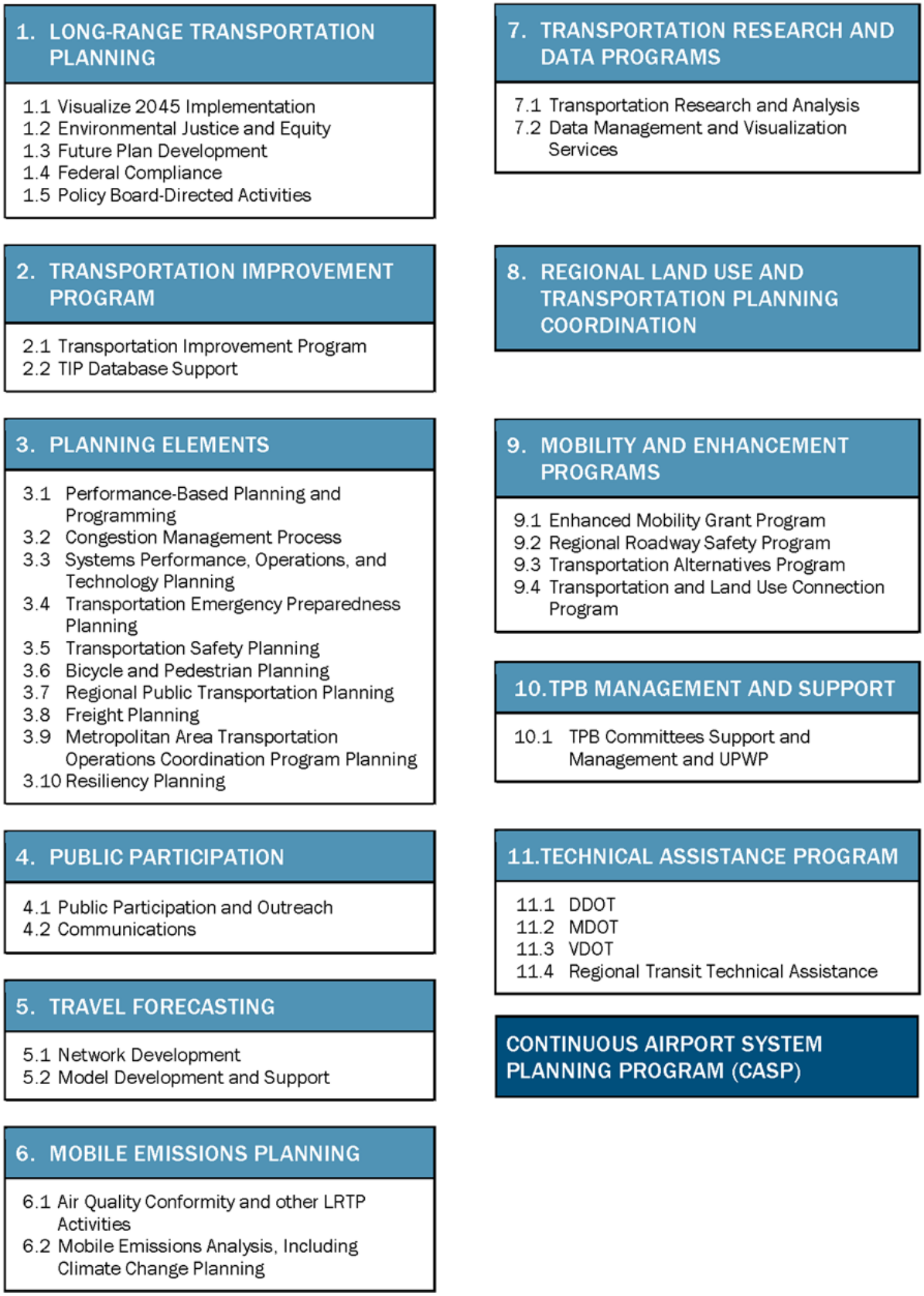


Figure 7: TPB Committee Structure

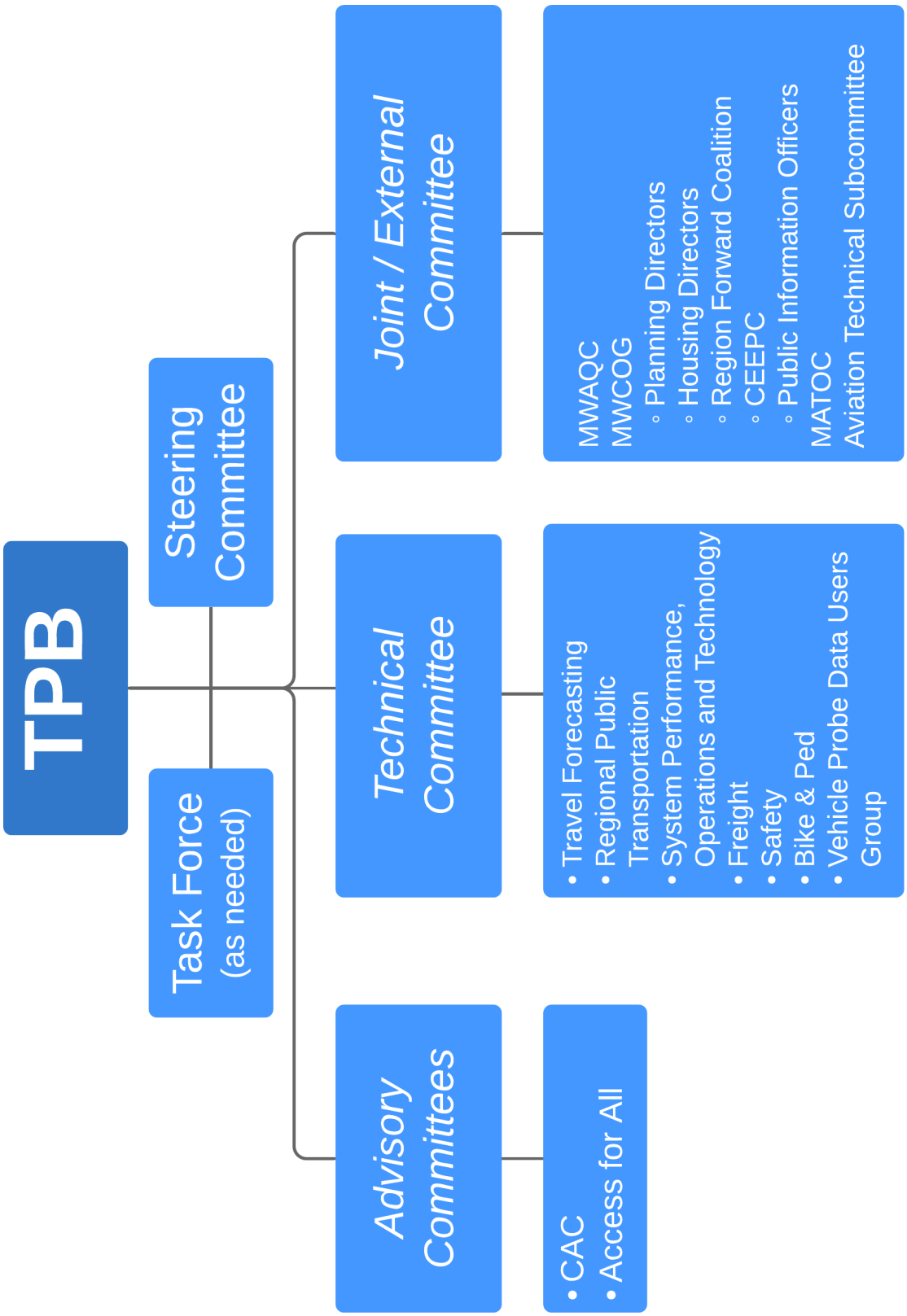
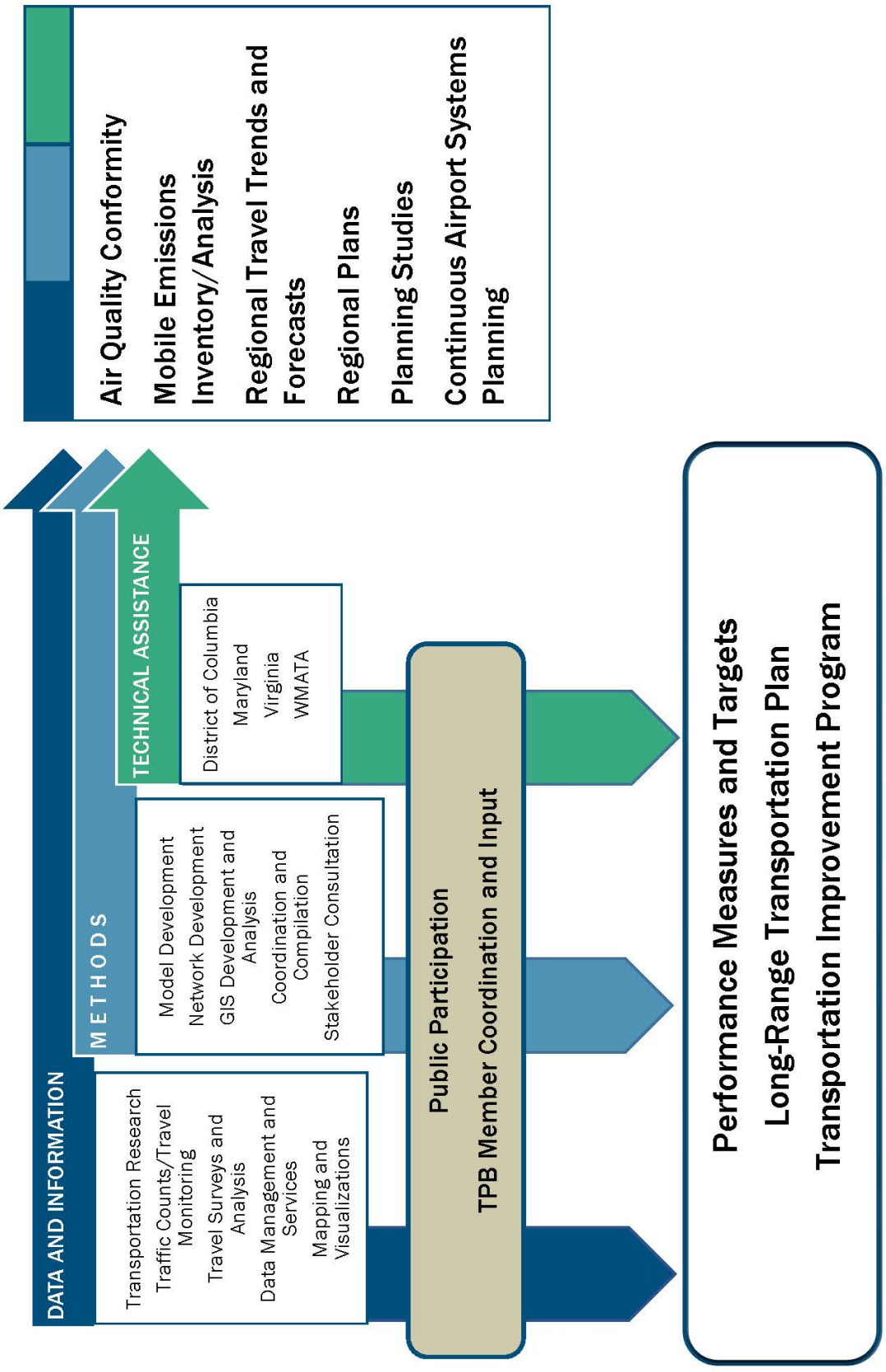


Figure 8: Overview of Planning Products and Supporting Processes



III. MAJOR WORK ACTIVITIES

1. Long-Range Transportation Planning

OVERSIGHT	**TPB Technical Committee**
MAJOR PRODUCTS	• **Visualize 2050 – continue plan update** • **Conduct supporting analysis for the plan** • **Visualize 2045 plan implementation**
TOTAL COST ESTIMATE	**$TBD**

1.1 VISUALIZE 2045 IMPLEMENTATION

Visualize 2045 (2022) is the federally required long-range transportation plan for the National Capital Region. It identifies all regionally significant transportation investments planned through 2045 and provides detailed analysis to help decision makers and the public "visualize" the region's future under current plans. The plan was approved in June 2022 and this activity describes work to support implementation and the Visualize 2045 activities related to the next plan update, called Visualize 2050.

- Conduct general coordination and outreach to members to help members understand and implement the plan and the priority strategies supported by the TPB.
- Provide opportunities for consideration, coordination, and collaborative enhancement of the TPB's long-range transportation plan.
- Conduct analysis as necessary to support the TPB priorities.

1.2 ENVIRONMENTAL JUSTICE AND EQUITY

The TPB continues to seek opportunities to understand the needs of all users of the regional transportation system. TPB will conduct outreach and analysis that will improve the region's understanding of specific needs of and considerations for disadvantaged populations in the transportation planning process.

- Coordinate with TPB public participation staff to improve data collection regarding disadvantaged populations.
- Provide analysis and support for other equity-related activities.
- Communicate equity findings from analysis and outreach activities
- Track and respond to USDOT equity initiatives applicable to the TPB

1.3 FUTURE PLAN DEVELOPMENT

TPB staff will also undertake other activities to advance the development of the next long-range transportation plan called Visualize 2050.

- Communicate to Board and other stakeholders the key planning activities for the next plan update – the update of Visualize 2045 to Visualize 2050, by 2024. This update is expected to take place over two fiscal years.
- Conduct coordination across all tasks to support plan development.
- Conduct planning and coordination activities related to PBPP and the federal planning factors (See Task 3 for more detail).

1.4 FEDERAL COMPLIANCE

The TPB has federal responsibilities, and this task supports work to maintain compliance with those requirements.

- Track, research, and respond to all federal activities and regulations that impact the metropolitan transportation planning process.

1.5 POLICY BOARD-DIRECTED ACTIVITIES

The TPB is a policy board that can take action on a variety of transportation planning and policy initiatives. This task will support any activities that the Board directs staff to do.

- Support implementation of TPB Resolution R19-2021 to update the plan with a targeted completion date of 2024.
- Support implementation of TPB Resolution R4-2022 that focuses on building transit-oriented communities throughout the region around High-Capacity Transit (HCT) station areas using Equity Emphasis Areas as a key planning concept and tool to inform decision making and action.
- Produce all products through an 'equity lens' as directed by TPB Resolution R1-2021, which requires all TPB activities to be conducted with an equity lens.
- Carry out additional activities as directed by the TPB.

2. Transportation Improvement Program

OVERSIGHT	**TPB Technical Committee**
MAJOR PRODUCTS	• **Maintain and continue to tailor the iTIP Database (Project InfoTrak) to meet the needs of staff and members**
TOTAL COST ESTIMATE	**$ TBD**

2.1 TRANSPORTATION IMPROVEMENT PROGRAM (TIP)

The Transportation Improvement Program (TIP) is a federal obligation document which describes the planned schedule in the next six years for distributing federal, state, and local funds for state and local transportation projects. This activity will encompass the following work tasks in FY 2024:

TIP Programming

- Prepare, review, and process administrative modifications and amendments to the currently approved TIP.
- Review administrative modifications and amendments for fiscal constraint.
- Enhance documentation of the TIP with additional analysis as a part of the long-range plan/TIP publications and the Visualize 2050 website.
- Provide public access to long-range plan and TIP project data through an improved online searchable database with integrated GIS project mapping.
- Prepare an annual listing of projects for which federal funds have been obligated in the preceding fiscal year compared against the federal funding programmed for that year in the TIP of record.
- Prepare for FY 2025-2028 TIP inputs.

Performance Based Planning and Programming

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 has established performance measures and subsequently states and public transportation providers have established performance targets in support of updated 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 reviews 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.

See also Performance Based Planning and Programming Task 3.1 for related additional non-TIP activities.

2.2 TIP DATABASE SUPPORT

TPB developed the iTIP Database, called Project InfioTrak (PIT), which provides a complete upgrade and overhaul to the project database information system. This system integrates current functionality into one enhanced, unified, user-friendly, customizable system that is branded with COG and TPB styles. The system has the ability to add or change fields, forms, queries and reports to respond to data requests or changes to requirements and incorporates GIS mapping of projects into the system. This allows for data to be exported and used in other ArcGIS applications. The system allows the many data input users to provide automated data transfers to the extent possible. The system includes searchable data sets for the public, TPB members, federal approval agencies, and other stakeholders to query and interact with using maps, reports and charts. These are the work activities that will be undertaken to support this task.

- Provide additional customizations to the system's forms, reports, and functionality.
- Provide assistance and guidance in using the Project InfoTrak system for the amendments and the new iteration of the plan.
- Provide ongoing help desk service for TPB staff and agency users to troubleshoot any technical issues that arise.
- Assist State DOT and other agency users with large-scale data transfer requests for major TIP amendments.
- Provide support for the development and maintenance of project data for the TPB's Bicycle and Pedestrian Plan.

3. Planning Elements

OVERSIGHT	**Various (see below)**
MAJOR PRODUCTS	**See program-specific products below**
TOTAL COST ESTIMATE	**$ TBD**

3.1 PERFORMANCE-BASED PLANNING AND PROGRAMMING

OVERSIGHT	**TPB Technical Committee**
MAJOR PRODUCTS	• **Performance measures and targets; associated documentation**

The Performance-Based Planning and Programming (PBPP) task supports implementation of the performance-based planning framework for metropolitan transportation planning and decision making, including investment priorities, target setting and measuring progress toward those targets.

- Develop data and reports for the TPB's setting and tracking of federally specified PBPP targets, in accordance with Letters of Agreement that have been signed between TPB and partner agencies.
- Coordinate with the states and public transportation providers on data collection and sharing, targets, and federally required reporting.
- Set annual highway safety targets.
- Set regional annual transit safety targets.
- Report on performance in relation to previously set targets, as required.
- Support TPB as it reviews data and sets required targets.

3.2 CONGESTION MANAGEMENT PROCESS

OVERSIGHT

Systems Performance, Operations, and Technology Subcommittee (SPOTS)

MAJOR PRODUCTS

- **National Capital Region Congestion Report Dashboard**
- **Vehicle Probe Data Users Group reference materials**
- **Documentation for federal performance and target reporting requirements**

This task develops and maintains the regional Congestion Management Process (CMP), providing information on current congestion on the region's roadways through data analysis, as well as identifying potential multi-modal strategies to manage congestion.

This task includes:

- Produce the biennial 2024 CMP Technical Report.
- Compile information and undertake analysis for the development of major CMP components, including application of "big data" sources, in conjunction with big data acquisition and analysis activities in Tasks 5 and 7.
- Produce the National Capital Region Congestion Report, released as a quarterly website "dashboard", in conjunction with travel monitoring and data publishing activities undertaken in Task 7.
- Provide CMP technical input to the Performance-Based Planning task.
- Produce special CMP analyses, such as following a major event or roadway improvement, or examining short- to mid-range trends, such as for impacts of the COVID-19 pandemic, on an as-needed basis.
- 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.

3.3 SYSTEMS PERFORMANCE, OPERATIONS, AND TECHNOLOGY PLANNING

OVERSIGHT

Systems Performance, Operations, and Technology Subcommittee (SPOTS)

MAJOR PRODUCTS

- **Regional ITS architecture maintenance**
- **Documentation for FAST Act performance and target reporting requirements**

This task addresses requirements for Regional Transportation Systems Management and Operations (RTSMO) and related technology.
This task includes:

- Conduct regional planning activities regarding regional transportation systems management and operations (RTSMO) and emerging technologies, including information gathering and sharing, subcommittee briefings, and discussions among stakeholders; produce one or more summary memorandums/presentations for the TPB Technical Committee regarding this year's findings and recommendations.
- Conduct Traffic Incident Management (TIM) planning as a component of RTSMO.
- Conduct regional planning activities regarding connected/autonomous vehicles (CAVs).
- Compile information on ITS and CAV deployments in the region; conduct an inventory of technology applications by member agencies.
- Maintain the Regional Intelligent Transportation Systems (ITS) Architecture.
- Conduct supporting activities as necessary on the above topics, potentially including in-depth studies, development of reports or white papers, or stakeholder workshops.
- Support the regional Systems Performance, Operations, and Technology Subcommittee (SPOTS).

3.4 TRANSPORTATION EMERGENCY PREPAREDNESS PLANNING

OVERSIGHT	**COG Transportation Emergency Preparedness Committee in coordination with the Systems Performance, Operations, and Technology 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 (R-ESF 1) Transportation Emergency Preparedness Committee, within the COG public safety committee structure, advises these efforts and coordinates with emergency management agencies, police, fire, and other emergency response committees.

This task includes:

- Undertake transportation emergency coordination and response planning through the emergency management and Homeland Security Urban Area Security Initiative (UASI) processes.
- Conduct Traffic Incident Management (TIM) planning as it relates to transportation emergency preparedness planning.
- Support the regional Transportation Emergency Preparedness Committee (R-ESF 1).

3.5 TRANSPORTATION SAFETY PLANNING

OVERSIGHT	**TPB Transportation Safety Subcommittee**
MAJOR PRODUCTS	• **Documentation for FAST Act performance and target reporting requirements** • **Updated Safety Data Analysis** • **Workshop(s)**

This task addresses planning for safety aspects of the region's transportation system and coordinating with various state and local safety planning efforts including development and implementation activities associated with Strategic Highway Safety Plans and Vision Zero efforts of the District of Columbia, Maryland, and Virginia, as well as other state, regional, and local safety efforts.

This task includes:

- Conduct regional roadway safety planning in a manner that emphasizes equity, including information gathering and sharing as well as subcommittee briefings and discussions among stakeholders; produce one or more summary memorandums/presentations for the TPB Technical Committee regarding this year's findings and recommendations.
- Support engineering, education, and enforcement strategies to reduce fatalities, serious injuries, and crashes in the National Capital Region, including consideration of equity.
- Compile and analyze regional crash data to produce updated roadway safety performance measures and coordinate with member states to develop federally required regional roadway safety targets.
- Update crash data analysis from previous regional safety studies to develop new charts, graphs, and tables that include the latest available data; produce one or more memorandums/presentations for the TPB and the TPB Technical Committee regarding the findings. This effort will help inform local planning and programming efforts to improve transportation safety and achieve/exceed the region's PBPP targets.
- Participate in and coordinate 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 safety efforts.
- Coordinate regional transportation safety planning with the Regional Roadway Safety Program undertaken in Task 9.
- Provide technical advice to the "Street Smart" regional pedestrian and bicycle safety public outreach campaign (Street Smart is supported by funding outside the UPWP).
- Conduct one or more workshops, targeting member agency staff, regarding transportation/roadway safety.
- Support the Transportation Safety Subcommittee in its coordination and advisory roles..

3.6 BICYCLE AND PEDESTRIAN PLANNING

OVERSIGHT — **TPB Regional Bicycle and Pedestrian Subcommittee**

MAJOR PRODUCTS

- **Updated National Capital Trail Network map**
- **Regional outreach workshops**

This task addresses planning for bicycle and pedestrian aspects of the region's transportation system and coordinating with related state, regional, and local efforts. This task includes:

- Conduct regional planning regarding bicycle and pedestrian activities and infrastructure, incorporating consideration of equity, including information gathering and sharing, subcommittee briefings, and discussions among stakeholders; produce one or more summary memorandums/presentations for the TPB Technical Committee regarding this year's findings and recommendations.
- Conduct outreach and follow-up activities regarding the Regional Bicycle and Pedestrian Plan update published in FY 2022.
- Update the National Capital Trail Network map; monitor implementation of National Capital Trail Network projects.
- Monitor and update nonmotorized recommendations for the Transportation Improvement Program (TIP) and Project Info Tracker (PIT).
- Monitor Regional Complete Streets and Green Streets activities.
- Conduct regional planning regarding emerging mobility technologies, such as dockless bikesharing and electric scooters.
- Provide technical advice to the "Street Smart" regional pedestrian and bicycle safety public outreach campaign (Street Smart is supported by funding outside the UPWP).
- Conduct two or more regional bicycle and pedestrian planning or design training, outreach, or professional development opportunities for member agency staff.
- Support the Bicycle and Pedestrian Subcommittee in its coordination and advisory roles.

3.7 REGIONAL PUBLIC TRANSPORTATION PLANNING

OVERSIGHT — **TPB Regional Public Transportation Subcommittee**

MAJOR PRODUCTS

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

This task addresses planning for public transportation aspects of the region's transportation system and coordinating with related state, regional, and local efforts. This task includes:

- Conduct regional planning regarding public transportation activities and infrastructure, incorporating consideration of equity, including information gathering and sharing, subcommittee briefings, and discussions among stakeholders; produce one or more

summary memorandums/presentations for the TPB Technical Committee regarding this year's findings and recommendations.

- Compile an inventory of regional transit-related electrification, including an inventory of transit operator plans as well as operator needs to be able to transition to clean fuel.
- Continue implementation of federal requirements for performance-based planning, specifically transit safety and transit asset management, including data collection, analysis of the performance measures, forecasting, and setting of targets.
- In conjunction with Task 7, conduct a regional survey gathering usage information on inter-city buses, commuter buses, rail transit, and commuter rail, to advise regional planning and coordination.
- Address Bus Rapid Transit (BRT) planning and coordination as part of regional public transportation planning activities.
- Address TPB-related recommendations from the 2019 regional Bus Transformation Project as well as the recently initiated WMATA Better Bus/Network Redesign effort, as part of regional public transportation planning activities.
- Produce an annual report on the "State of Public Transportation."
- Provide support to private providers of transportation in the region, including organizing the annual Private Providers Annual Transit Forum.
- Conduct supporting activities as necessary on the above topics, potentially including in-depth studies, development of reports or white papers, or stakeholder workshops.
- Support the Regional Public Transportation Subcommittee in its coordination and advisory roles.

3.8 FREIGHT PLANNING

OVERSIGHT	**TPB Freight Subcommittee**
MAJOR PRODUCTS	• **Updated Regional Freight Plan** • **Documentation as necessary supporting FAST Act requirements of freight planning**

This task addresses planning for freight aspects of the region's transportation system and coordinating with related state, regional, and local efforts. The Regional Freight Plan, last updated in 2016, will be completely updated in FY 2023, and will provide guidance for continued regional planning activities.

This task includes:

- Conduct regional planning regarding freight and goods movement activities and infrastructure, incorporating consideration of equity, including information gathering and sharing, subcommittee briefings, and discussions among stakeholders; produce one or more summary memorandums/presentations for the TPB Technical Committee regarding this year's findings and recommendations.

- Conduct outreach and follow-up activities regarding the Freight Plan update published in FY 2023.
- Compile and analyze data to support regional freight planning.
- Conduct a symposium/workshop on the topic of curbside management in the National Capital Region, across fields of planning for freight, safety, public transportation, and related areas.
- Coordinate with relevant jurisdictions and committees on regional rail issues.
- Address federal requirements related to regional freight transportation planning, including PBPP measures and targets.
- Conduct supporting activities as necessary on the above topics, potentially including in-depth studies, development of reports or white papers, or stakeholder workshops.
- Support the TPB Freight Subcommittee in its coordination and advisory roles.

3.9 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 Materials**

This task is to provide TPB's planning support for the Metropolitan Area Transportation Operations Coordination (MATOC) Program, in conjunction with the MATOC Steering Committee, subcommittees, and partner agencies, as MATOC pursues its function of providing real-time situational awareness of transportation operations in the National Capital Region. TPB is an ex-officio member of MATOC.

This task includes:

- Provide administrative support of the MATOC Steering Committee, including preparation of agendas and summaries and tracking of action items.
- Provide TPB staff input and advice to the MATOC Steering Committee and its subcommittees and working groups.
- Address Traffic Incident Management (TIM) as it relates to MATOC planning.
- Provide briefings to the TPB on MATOC Program progress as requested.

3.10 RESILIENCY PLANNING

OVERSIGHT TPB Technical Committee

MAJOR PRODUCTS

- Regional Interactive Resiliency Map
- Transportation Resiliency Study (Phase II)
- Training/Outreach/Professional Development Forum(s)

This task addresses planning for the resiliency of the region's transportation system, particularly regarding climate impacts, and coordinating with various state and local resiliency planning efforts. Planning for transportation resiliency and reliability is one of the federal Planning Factors, as well as one of TPB's policy priorities. Work will follow and expand upon the TPB Transportation Resiliency Study [Phase I] completed in FY 2022, building upon the planning and capital-programming activities that the TPB member agencies and select partners are undertaking to prepare for the transportation system to be resilient in the face of natural disasters. Among topics of focus will be regional vulnerabilities to natural hazards, strategies for resilience, ensuring equity in resiliency planning, and MPO roles in resilience planning efforts.

This task includes:

- Developing a regional interactive map, using data provided by previous COG studies, that layers major resiliency hazards, to inform future planning and programming.
- Conducting a TPB Transportation Resiliency Study (Phase II), to expand upon the Phase I study completed in FY 2022, informing future planning and programming.
- Convening a temporary working group to guide current resiliency planning activities, to identify and engage stakeholders and member agency participants in this regional planning task.
- Conducting one or more regional resiliency planning or training, outreach, or professional development forums to strengthen regional awareness.
- Developing resources to support member agencies and select partners in their transportation resiliency planning goals to move towards becoming a Climate Ready Region.

4. Public Participation

OVERSIGHT	**Transportation Planning Board**
MAJOR PRODUCTS	• **Public comment solicited and documented** • **Materials and activities for public participation related to Visualize 2050** • **CAC and AFA Committee reports** • **Conduct the 19th session of the Community Leadership Institute** • **Information dissemination through the website, social media, and printed documents** • **Communication support for all Tasks**
TOTAL COST ESTIMATE	**$ TBD**

4.1 PUBLIC PARTICIPATION AND OUTREACH

Public participation, outreach, and communications are essential to carrying out the continuing, cooperative, and comprehensive (3C) metropolitan transportation planning process. The TPB's 2020 Participation Plan guides all public involvement activities to support the development of the plan, 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. Virtual Public Involvement (VPI) tools have played an integral role in how the TPB has been conducting public involvement over the past few years, and the TPB will continue to use them wherever possible. This activity will encompass the following work tasks:

- Conduct public involvement as described in the TPB Participation Plan, which was approved by the TPB in October of 2020. The plan calls upon staff to integrate public engagement, as appropriate, into planning activities throughout the department. All such public involvement activities will be developed and implemented with consideration given to an equity perspective, as directed by TPB Resolution R1-2021, which called for equity, as a foundational principle, to be woven into all of the TPB's work.
- Provide regular opportunities for comment on TPB activities and products, including public comment sessions at the beginning of TPB meetings and official public comment periods prior to the adoption of key TPB plans and programs.
- Conduct outreach to support the update to the Long-Range Transportation Plan, Visualize 2050.
- Provide staff support for the TPB Community 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 traditionally underserved communities, including low-income communities, underrepresented communities, people with limited English proficiency, people with disabilities, and older adults as the TPB's primary strategy for engaging traditionally underserved population groups in the planning process and for providing guidance on Human Service Transportation Program activities. Feedback from the AFA Committee on transportation plans, projects, programs, services, and issues that are important to the communities the AFA represents will be shared with the TPB.
- Conduct training activities, as needed, to help community leaders learn how to get more actively involved in transportation decision making in the Washington region.
- Ensure that all public participation is consistent with and meets the Federal Civil Rights Act (Title VI) and Executive Order 12988 Environmental Justice.

4.2 COMMUNICATIONS

This activity will encompass the following work tasks:

- Develop written and visual materials to spread information about regional transportation planning issues, explain how transportation decision-making works, and engage the public.
- Support staff as they develop meeting materials and publications to communicate information developed in other tasks in the UPWP.
- Produce content for the TPB News and other digital publications.
- 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.

5. Travel Forecasting

OVERSIGHT	**TPB Travel Forecasting Subcommittee**
MAJOR PRODUCTS	• **Staffing the TPB Travel Forecasting Subcommittee (TFS)** • **A series of highway and transit networks used by the regional travel demand forecasting model, together with technical documentation, for use in air quality conformity analyses, development of air quality state implementation plans (SIPs), scenario studies, and model development.** • **Development, maintenance, support, and improvement of the COG/TPB regional travel demand forecasting methods, including both the production-use and developmental travel models, and associated documentation.** • **Keep abreast of best practices in travel demand modeling.**
TOTAL COST ESTIMATE	**$ TBD**

The Travel Forecasting work activity consists of two sub-activities: 1) Network Development and 2) Model Development and Support. The goal of Network Development is to prepare the primary inputs for the regional travel demand model, especially the transportation networks. The goal of Model Development and Support is to develop, maintain, support, and improve the TPB's regional travel demand forecasting methods for both tactical and strategic planning models.

5.1 NETWORK DEVELOPMENT

Develop, maintain, and improve the transportation networks used as inputs to the TPB's regional travel demand forecasting models, both the production-use and developmental models.

Planned tasks for FY 2024:

- Develop a base-year transit network representing recent conditions, which is used as the starting point for developing future-year transit networks used by the regional travel demand forecasting model. This typically represents a recent year, but the choice of year can be influenced by factors such as COVID-19-related disruptions.
- Produce a series of forecast-year transportation networks used as inputs to the regional travel demand forecasting model, in support of transportation planning studies, air quality studies, and mobile emissions planning work. Examples include scenario studies, project-planning studies, and air quality conformity (AQC) analyses of the TPB's Long-Range Transportation Plan (LRTP), State Implementation Plans (SIPs) for attaining or maintaining air pollution standards, and greenhouse gas (GHG) planning studies. The

quadrennial update of the LRTP occurred in 2022. The next major update would normally be scheduled for 2026, but, under current plans, a moderate update of the LRTP is planned for 2024.

- Maintain, refine, and enhance both 1) the multi-year transportation network geodatabase used in regional travel demand modeling and 2) the software used to edit and update the geodatabase, known as COGTools.
- Develop transportation networks in formats that support both 1) the production-use travel models, such as the Gen2/Ver. 2.3 and Ver. 2.4 models, which require networks in Cube TRNBUILD format; and 2) developmental travel models, such as the Gen3 Model, which requires networks in Cube Public Transport (PT) format. As we transition from the aggregate, trip-based travel model (Gen2/Ver. 2.4) to the disaggregate, activity-based travel model (Gen3), transit networks will transition from having two time-of-day periods (peak and off-peak) to four time-of-day periods (AM peak, midday, PM peak, and nighttime).
- Maintain and update network development documentation, such as the COGTools User's Guide and the highway and transit network report.
- Respond to network-related technical data requests.

5.2 MODEL DEVELOPMENT AND SUPPORT

Develop, maintain, support, and improve the TPB's travel demand forecasting methods. Methods can range from tactical models, such as the TPB's regional travel demand forecasting model, to strategic models, such as sketch and scenario planning models. Regarding tactical models, the TPB regional travel demand forecasting methods include both the production-use and developmental travel models. The current production-use travel model is an aggregate, trip-based travel model (TBM), also known as a "four-step model," or FSM, called the Generation 2, or Gen2, Ver. 2.4 Travel Model. An example of a developmental TPB travel model is the Generation 3, or Gen3, Travel Model, a disaggregate, activity-based travel model (ABM), being developed with consultant assistance, which will make use of the open-source ActivitySim software package. The Gen3 Model is being developed during a four-year period, from FY 20 through FY 24. Regarding strategic models, TPB staff plans to continue, when time permits, exploring the use of strategic planning models, such as RSPM and VisionEval. The Model Development and Support work activity also includes related tasks such as data collection, research, and interfacing with travel demand modeling staff at peer MPOs.

Planned tasks for FY 2024:

- Staff the TPB Travel Forecasting Subcommittee (TFS). Conduct about six meetings per year.
- Maintain, update, and implement a strategic plan for model development that directs the model development activities from a long-term perspective to support regional transportation planning.
- Maintain, update, and enhance the TPB's current production-use, trip-based, Gen2 Travel Demand Model, potentially with the 2017/2018 Regional Travel Survey (RTS) data.
- Support both internal and external users of the TPB's production-use travel demand forecasting models (i.e., the Gen2/Ver. 2.4 Model).
- Develop the TPB's next-generation travel demand forecasting model that is expected to provide enhanced modeling capabilities. TPB staff is currently working with a consultant to develop a disaggregate, activity-based travel model (ABM), to be known as the Generation 3, or Gen3, Travel Model. The Gen3 Model is to be implemented in both the open-source

ActivitySim software platform and Bentley Cube software. Model development is planned to last about four years (FY 2020-2024). Development will occur via two main phases. Phase 1 development of the Gen3 Model concluded in February 2022. Phase 1 created a developmental model that had gone through an initial round of calibration and had been tested by TPB staff. Phase 2 of the Gen3 Model started in March 2022 (FY 22) and is planned to run through approximately September 2023 (FY 24). The goal of Phase 2 is to obtain a travel model that is calibrated, validated, and is production ready.

- Promote the regional coordination of future transit on-board surveys (TOBS) to ensure that the surveys provide information needed by both transit agencies and COG/TPB staff, who use the data to estimate, calibrate, and validate regional travel demand forecasting models. See Work Activity 7 ("Transportation Research and Data Programs") for further details.
- Identify, and possibly obtain, data needed to support development of the Gen3 Model and/or its successor model, such as the Gen4 Model. This could include Big Data, such as passively collected origin-destination (O-D) data. See Work Activity 7 ("Transportation Research and Data Programs") for further details.
- Attend the ActivitySim Consortium meetings, participate in the decision making representing MWCOG and coordinate with other member agencies, including MPOs, state DOTs, and other transportation agencies, on the maintenance and development of ActivitySim, the underlying software of the Gen3 Travel Model.
- Keep abreast of best practices in travel demand modeling.
- Develop knowledge of, and provide support for, other DTP staff in the use of strategic planning models, such as sketch and scenario planning models (e.g., VisionEval and RSPM). Coordinate with DTP's Planning Data & Research (PDR) Team.
- Respond to travel-model related technical data requests from consultants, state/local agencies, and academics.
- Working with COG's Office of Information Technology (IT), acquire and maintain the hardware and software needed to conduct regional travel demand modeling on computers and servers located at COG (on premises) and/or in the cloud (off premises). Assist COG IT with testing related to the planned agency-wide transition to cloud computing.
- Continue to use version control software, such as Git and GitHub, to manage the computer code for COG's production-use and developmental travel models. Explore the possibility of using the version control software to manage code associated with COGTools.
- Possible consultant assistance to re-calibrate the Gen2 (trip-based) Regional Travel Demand Forecasting model to year-2018 conditions. Although the Gen3 (activity-based) Travel Model is expected to become the production-use travel model in FY 24, some stakeholders may prefer to continue to use the older Gen2 Model.

6. Mobile Emissions Planning

OVERSIGHT	**TPB Technical Committee in consultation with MWAQC**
MAJOR PRODUCTS	• **Activities related to conducting regional air quality conformity analyses, such as conducting runs of the travel model and mobile emissions model and preparing technical documentation.** • **Keep abreast of federal requirements related to air quality conformity determinations and the EPA's Motor Vehicle Emission Simulator (MOVES) software.** • **Support development of an Attainment/Maintenance State Implementation Plans (SIPs) regarding the 2008 and 2015 ozone National Ambient Air Quality Standards (NAAQS), including developing inventories of on-road mobile emissions for volatile organic compounds (VOC) and nitrogen oxides (NOx).** • **Coordinate with MWAQC and its subcommittees to support development of new motor vehicle emissions budgets (MVEBs), if needed, to address requirements of the 2008 and 2015 ozone NAAQS.** • **Climate Change Planning: Provide support for efforts to mitigate climate change due to the on-road, transportation sector.**
TOTAL COST ESTIMATE	**$ TBD**

The Mobile Emissions Planning work activity consists of two sub-activities: 1) Air Quality Conformity and Other Activities Associated with the Long-Range Transportation Plan; and 2) Mobile Emissions Analysis, Including Activities Associated with Climate Change Planning. The goal of this work activity is to conduct a wide range of analyses to quantify mobile-source emissions levels of various air pollutants, in support of air quality planning and development of Transportation Emissions Reduction Measures (TERMs). TPB staff is also actively involved with air quality-related State Implementation Plan (SIP) activities that determine how metropolitan areas will attain and maintain national air quality standards. SIP activities include the establishment of motor vehicle emission budgets (MVEBs) for criteria pollutants that are analyzed in air quality conformity work. This task also covers climate change mitigation activities, which strive to reduce greenhouse gas (GHG) emissions due to the on-road, transportation sector.

6.1 AIR QUALITY CONFORMITY AND OTHER ACTIVITIES ASSOCIATED WITH THE LONG-RANGE TRANSPORTATION PLAN

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 motor vehicle emissions budgets. This task supports the

air quality conformity analyses and other air quality modelling to comply with federal regulations. This activity will encompass the following work tasks in FY 2023:

- Provide technical support for activities related to the TPB's 2024 Long-Range Transportation Plan interim update.
- Provide technical travel demand and mobile emissions modeling support for any off-cycle AQC analysis, if requested by implementing agencies and approved by the TPB. This task may be funded from Technical Assistance accounts.
- Keep abreast of federal requirements and legislation related to air quality conformity determinations and the EPA's MOtor Vehicle Emission Simulator (MOVES) software, especially the latest version of this tool, MOVES3.
- Continue working to incorporate Performance-Based Planning and Programming (PBPP) requirements pertaining to the Congestion Mitigation and Air Quality (CMAQ) Improvement Program into the planning process as it relates to the adopted LRTP.
- Maintain communication and consultation among transportation agencies, air agencies, and the public regarding air-quality-related matters in the region..

6.2 MOBILE EMISSIONS ANALYSIS, INCLUDING ACTIVITIES ASSOCIATED WITH CLIMATE CHANGE PLANNING

The goal of this task is to conduct a wide range of analyses to quantify mobile-source emissions levels of various air pollutants in support of air quality planning and development of 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 also covers climate change planning and mitigation activities, which strive to reduce greenhouse gas (GHG) emissions due to the on-road transportation sector.

- Support update of motor vehicle emissions budgets (MVEBs) related to the Maintenance Plan for the Washington DC-MD-VA 2008 Ozone National Ambient Air Quality Standards (NAAQS) Nonattainment Area. This would include developing inventories of on-road mobile emissions for volatile organic compounds (VOC) and nitrogen oxides (NOx) using EPA's MOVES3 model and coordination with the Metropolitan Washington Air Quality Committee (MWAQC) and its subcommittees.
- Support development of an Attainment/Maintenance State Implementation Plan (SIP) to address requirements of the 2015 ozone NAAQS. This would include developing inventories of on-road mobile emissions for VOC and NOx, and coordination with the MWAQC and its subcommittees to support development of new motor vehicle emissions budgets (MVEBs), if needed, to address requirements of 2015 ozone NAAQS.
- Revisit opportunities to refresh inputs to the EPA's MOVES software in consultation with regional environmental and transportation agency partners.
- Provide technical support to COG/DEP staff regarding regional climate change planning activities.
- Keep abreast of federal requirements and legislation related to climate change planning.
- Keep abreast of MOVES model updates and best practices and conduct sensitivity tests of new MOVES model versions that may be released by EPA (e.g., MOVES3 model updates).
- Respond to technical requests from COG's Department of Environmental Programs (DEP)

and from TPB member jurisdictions for readily available mobile emissions information.

- Follow established TPB interagency and public consultation procedures and coordinate with COG/DEP staff to involve the MWAQC in the public and interagency consultation process.
- On the topic of climate change planning, following up on the TPB Climate Change Mitigation Study (CCMS), the TPB set a series of GHG reduction targets specifically for the on-road transportation sector which are identical to the earlier non-sector sector-specific goals,[16] despite the findings from the CCMS that such large GHG reductions from the transportation sector would be very challenging to attain. In February 2022, the TPB members were surveyed about which GHG reduction strategies they supported.[17] Based on this survey, seven GHG reduction strategies received majority or plurality support,[18] and seven strategies were deemed not yet ready to be adopted by the TPB, thus requiring further study. [19] In FY 2024, the TPB staff plans to work with COG's Department of Environmental Programs (DEP), and possibly a consultant, to coordinate efforts to encourage implementation of those strategies that have TPB support and to further study those strategies about which the TPB had some concerns.

[16] "Resolution on the Adoption of On-Road Transportation Greenhouse Gas Reduction Goals and Strategies (TPB R18-2022)," Resolution (Washington, D.C.: National Capital Region Transportation Planning Board, June 15, 2022), https://www.mwcog.org/documents/2022/06/15/r18-2022-resolution-on-the-adoption-of-on-road-transportation-ghg-reduction-goals-and-strategies/.

[17] National Capital Region Transportation Planning Board, Climate Change Mitigation Goals and Strategies Questionnaire, interview by TPB staff, February 28, 2022, https://www.mwcog.org/events/2022/2/4/tpb-technical-committee/.

[18] See, for example, slide 9 of Mark S. Moran, "Climate Change Mitigation: Recent Efforts by the Transportation Planning Board to Establish Transportation-Sector Greenhouse Gas Reduction Goals and Strategies"; OR slide 6 of Kanti Srikanth, "Climate Change Elements Under Consideration by TPB: Transportation-Sector Greenhouse Gas Reduction Goals and Strategies," https://www.mwcog.org/events/2022/6/3/tpb-technical-committee/.

[19] See, for example, slide 10 of Moran, "Climate Change Mitigation: Recent Efforts by the Transportation Planning Board to Establish Transportation-Sector Greenhouse Gas Reduction Goals and Strategies"; OR slide 7 of Srikanth, "Climate Change Elements Under Consideration by TPB: Transportation-Sector Greenhouse Gas Reduction Goals and Strategies."

7. Transportation Research and Data Programs

OVERSIGHT	**Various (see below)**
MAJOR PRODUCTS	**See program-specific products below**
TOTAL COST ESTIMATE	**$ TBD**

This task entails conducting and supporting regional travel trends research and travel monitoring using research, surveys data analytics to inform regional transportation planning, understanding, and decision making. This task includes developing and maintaining data management procedures and systems required to conduct these activities and to document and report on research findings using advanced reporting and visualization techniques.

7.1 TRANSPORTATION RESEARCH AND ANALYSIS

OVERSIGHT

TPB Travel Forecasting Subcommittee

MAJOR PRODUCTS

- **Presentations, visualizations, and information reports on travel monitoring and travel trends analyses**
- **Recommendations, workplan, and documentation of initial activities for ongoing Regional Travel Survey.**
- **Recommendations, workplan, and documentation of initial activities for Regional Transit Onboard Survey activities**
- **Workplan and documentation of activities for inter-city bus and rail survey.**
- **Recommendations, workplan, and documentation of initial activities for Regional Bike Count Program along Regional Network**

Technical Support

Work under this activity will focuses on regional transportation research activities, including data collection, surveys, analysis, and documentation. These activities will produce key information and findings that provide insights and understanding of regional travel trends as well as provide key inputs into the regional travel demand forecasting model.

This activity will encompass the following in FY 2023:

- Evaluate and provide recommendations for future household travel surveys / travel diaries. This may involve moving away from conducting the once-a-decade Regional Travel Survey to more frequent data collection. Develop, seek support for, and conduct initial steps to implement a multi-year plan for data collection.

- Promote the regional coordination of future transit on-board surveys (TOBS) to ensure that the surveys: 1) Are largely consistent across agencies; 2) Provide transit agencies the customer satisfaction, subsidy allocation, and Title VI demographic information that transit agencies need to carry out their mission; and 3) Provide COG/TPB staff the data needed to estimate, calibrate, and validate regional travel demand models, which support many transportation planning studies. This effort would be coordinated with other DTP teams, the TPB Travel Forecasting Subcommittee, and the TPB Regional Public Transportation Subcommittee. This item is also noted under Work Activity 5 ("Travel Forecasting").
- Conduct focused travel surveys and provide cross-program coordination support for all survey efforts. This may include, for example, collaborating with the Travel Forecasting and Emissions Analysis program staff, to develop and oversee a Transit On-board Survey (TOBS) to support regional travel demand forecasting activities, or with the Plan Development Coordination staff on public opinion survey(s) that may be conducted as part of the LRTP update.
- Coordinate with Systems Performance Planning Program to conduct a regional survey gathering usage information on inter-city buses, commuter buses, rail transit, and commuter rail, updating the survey last completed in 2016, to advise regional planning and coordination.
- Perform and provide cross-program support to research and analysis efforts using a variety of analytical tools that support regional transportation planning activities and incorporate resulting data into department transportation data products and visualizations. This may include:
    - Research and update 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.
    - Performance Based Planning and Programming, bridge and pavement condition analysis
    - Baseline (existing) conditions for the LRTP performance analysis
- Perform travel monitoring studies based on programmatic needs of the regional travel demand forecasting model, PBPP requirements, and LRTP development activities.
- Develop a program to collect and report active transportation data along the regional network, including the National Capital Trail Network. This may include compiling data collected by other jurisdictions and/or collecting data in the field.
- Support use of planning tools in regional transportation planning practice and build staff technical capabilities to test and apply scenario planning tools in transportation planning studies and analyses. This may include the use of scenario planning tools intended to support complex "what if" analyses that examine the effects and impacts that could occur under varying future conditions.
- Provide briefings to the TPB, TPB Technical Committee, the Travel Forecasting Subcommittee, and other subcommittee and stakeholders, as appropriate, on analysis and findings of travel surveys and travel survey research, including comprehensive analysis of multiple surveys and the overall regional story they tell of travel in the region.
- Respond to inquiries from state and local government staff, survey participants, and the media concerning research, analysis, and findings developed in this task.

7.2 DATA MANAGEMENT AND VISUALIZATION SERVICES

OVERSIGHT TPB Technical Committee

MAJOR PRODUCTS

- **Data management plan recommendations and documentation**
- **Travel monitoring datasets to support PBPP and Gen3 modeling requirements**
- **Travel trends and dashboard and visualizations**
- **Technical reports/memoranda**
- **Presentations**

This activity entails developing and supporting transportation data management procedures and systems and publishing findings from research through digital reporting and data visualization products. This includes hosting and managing data collected and compiled under this task and across numerous programs and developing visualizations of these data as part of research and analysis activities.

During FY 2024, key activities will also include:

- Develop and implement new plan to manage collection of important travel trends and travel behavior data and information on a more on-going basis. The plan will include 1) identifying and establishing a base set of data that can be refreshed and updated on a regular basis developing methodologies for more robust travel trends research and analysis, 2) developing plan and identifying resources to support continued update of data 3) leveraging appropriate data sources from partner agencies and other external sources, 4) evaluate new data management techniques and software that may be considered for future applications in transportation research
- Acquire Big Data to support travel trends and travel behavior analysis as well as supporting the estimating, calibrating, and validating the regional travel demand model. This could include passively collected origin-destination (O-D) data, roadway speed/volume data, roadway congestion data, transit speed/volume data, or other similar data for other travel modes, such as biking (see Task #5, “Travel Forecasting” and Task #3, “Planning Elements”).
- Maintain and improve the Regional Transportation Data Clearinghouse as a GIS web-based application to distribute RTDC Data to TPB member agencies by ongoing system administration and updates. Promote the availability and use of the RTDC to local, state, and transit agency partners. Regularly publish and update the following resources on the Regional Transportation Data Clearinghouse (RTDC), as available:
    - Traffic volume and vehicle classification count data.
    - Regional average weekday transit ridership data
    - Freeway and arterial road speed and level of service data

    - Performance Based Planning and Programming Requirements data including Bridge and pavement condition data
    - Socio-economic forecasting data
- Develop and maintain user-friendly and convenient travel trends information and visualizations, including a web-based dashboard that consolidates various regional transportation-related data and information products.
- Provide cross-program and/or cross-department support and coordination to
    - Identify opportunities to integrate additional datasets into the regional transportation data clearinghouse, travel monitoring dashboard, or other visualization products.
    - Connect internal and external stakeholders to data resources, including to support the development of the Gen3 Regional Travel Demand Model (see Task #5, "Travel Forecasting").
    - Integrate data and products to be consistent across program areas to ensure consistency when presenting to TPB's stakeholders/audience.
- Provide data and technical support to staff using GIS for development and distribution of data and information developed for TPB planning activities, including, among others, the development of the LRTP.
- Provide technical guidance and develop GIS-based products (web maps and applications, visualization, etc.) for TPB planning activities.
- Collaborate with other TPB staff on the development of new spatial data products that will enhance the visibility of TPB's programs and planning activities to TPB's stakeholders/audience. This may include an active transportation monitoring application for the National Capital Trail Network. Also, update existing products (e.g. "major projects map" and dashboard for LRTP).
- 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.

8. Regional Land Use and Transportation Planning Coordination

OVERSIGHT	**TPB Technical Committee**
MAJOR PRODUCTS	• **See program-specific products**
TOTAL COST ESTIMATE	**$ TBD**

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

8.1 REGIONAL LAND USE AND TRANSPORTATION PLANNING COORDINATION

OVERSIGHT	**TPB Technical Committee**
MAJOR PRODUCTS	• **Analysis of Activity Center and High Capacity Transit Station area historic trends and forecasts** • **Presentations, visualizations, and information reports** • **Workplan and documentation of initial activities for updating Regional Activity Centers Map** • **Updated Cooperative Forecasting land activity forecasts and documentation, if necessary** • **Technical support** • **Annual Baseline Employment Guidance**

Staff will continue to coordinate land use and regional transportation planning in the region. Central to this activity will be supporting initial activities in the development of the Round 10 Cooperative Forecasts. Activities required to coordinate the development of the Cooperative Forecasts and regional transportation planning will include:

- Support initiatives of COG Board of Directors and the TPB on matters related to the coordination and analysis of regional transportation and land use planning to support important regional policy discussions and decisions. This may entail analyzing the relationship between regional land use and transportation using a variety of analytical tools. These may include the use of scenario planning tools intended to support complex "what if" analyses that examine the effects and impacts that could occur under varying future land use and transportation conditions.
- Support the COG Planning Directors Technical Advisory Committee (PDTAC) in the coordination of local, state, and federal planning activities and the integration of land use and transportation planning in the region

- Work with the CFDS and the region's Planning Directors to develop technical updates to the Round 10 Cooperative Forecasts (population, household, and employment forecasts), if necessary.
- Update and maintain Cooperative Forecasting land activity databases of TAZ-level population, household, and employment forecasts that are used as input into the TPB travel demand-forecasting model.
- Document key land use and transportation assumptions used in making updates to the Cooperative Forecasting land activity forecasts.
- Develop annual Baseline Employment Guidance update to support local governments preparing employment forecast estimates.
- Work with the CFDS to analyze results and implications of newly-released baseline data products such as the American Community Survey and the Bureau of Labor Statistics employment and labor force estimates for use in developing future updates to and assumptions in the Cooperative Forecasts. Continue to provide regular seminars and trainings on accessing and analyzing Census data and other data products to support local demographic analysis and small-area forecasting.
- Map and analyze updated Cooperative Forecasting growth forecasts in relation to COG Activity Centers, high-capacity transit locations, and Equity Emphasis Areas
- Respond to public and stakeholder comments on the Cooperative Forecasts and the Cooperative Forecasting process.
- Develop Travel Model Employment Definition Adjustment Factors, which are applied during post-processing to apply a consistent definition of employment to forecasts for use in the travel demand model.
- Provide continued support for the Transportation Analysis Zone (TAZ) system used in the regional travel demand forecasting model and the Cooperative Forecasting process, including any activities that may be necessary to make TAZ adjustments to support future model development processes.
- Conduct analysis related to regional land use and transportation in support of the development of the LRTP, as well as the consideration of equity in regional land use and transportation planning. This includes supporting LRTP performance analysis, baseline (existing conditions), and developing supporting graphics and visualizations to convey complex land use and transportation planning concepts to myriad stakeholders.
- Develop and publish economic, demographic and housing-related information products including the Regional Economic Monitoring System (REMS) reports, the annual "Commercial Development Indicators," the “Multi-family Rental Housing Construction” report, and economic and demographic data tables to be included in the Region Forward work program.
- Following completion of Round 10 Cooperative Forecasts, work with the PDTAC to update the Regional Activity Centers map.
- Use TPB transportation planning data to update information for the approved COG Region Forward Targets and Indicators.
- Develop and publish analyses and user-friendly visualizations and tools of land use, demographic, socioeconomic, and other applicable data to support the TPB’s initiative to optimize high-capacity transit areas (HCTs) and elevating Equity Emphasis Areas (EEAs) in its planning program.

9. Mobility and Enhancement Programs

OVERSIGHT	**TPB Technical Committee**
MAJOR PRODUCTS	• **Solicit and select projects for FTA Section 5310 funding** • **Regional Roadway Safety Program Assistance, including final reports, provided by consultant teams** • **TAP Coordination and project selection** • **TLC Technical Assistance including final reports, provided by consultant teams to localities** • **Regional Peer Exchange Network Activities**
TOTAL COST ESTIMATE	**$ TBD**

The TPB solicits and selects projects for the following four programs. This activity will encompass the following work tasks in FY 2024:

9.1 ENHANCED MOBILITY GRANT PROGRAM

COG is the designated recipient for the FTA "Section 5310: Enhanced Mobility of Seniors and Individuals with Disabilities" program. This task includes:

- Support the implementation of the Coordinated Plan by furthering the goals and strategies in the plan to provide an array of transportation services and options to older adults and people with disabilities.
- The UPWP does not provide financial support to implement the projects and oversee the grants that have been awarded. These activities are funded by the FTA Section 5310 Program.

9.2 REGIONAL ROADWAY SAFETY PROGRAM

TPB Resolution R3-2021, adopted in July 2020, established the Regional Roadway Safety Program to assist its member jurisdictions and the region to develop and/or implement projects, programs, or policies to equitably improve safety outcomes for all roadway users. Specifically, the Regional Roadway Safety Program provides short-term consultant services to member jurisdictions or agencies to assist with planning or preliminary engineering projects that address roadway safety issues.

- Conduct a regional program that provides short-term consultant services to member jurisdictions or agencies to assist with planning or preliminary engineering projects that address roadway safety issues, including studies, planning, or design projects that will improve roadway safety and lead to a reduction in fatal and serious injury crashes on the region's roadways.

- Fund approximately three to eight technical assistance planning projects, or project design effort to achieve 30% completion at a level between $30,000 and $80,000 each, supported by UPWP core funding plus portions of the DDOT, MDOT, and VDOT Technical Assistance Programs (and potentially more projects if additional funding is provided by state or local agencies).
- Develop tools and activities to facilitate regional learning about roadway safety issues among TPB member jurisdictions through regional peer exchange.
- Provide staff support for project proposal solicitation, review, and conduct.

9.3 TRANSPORTATION ALTERNATIVES SET-ASIDE PROGRAM

- Conduct the selection process for small capital improvement projects using funding sub-allocated to the Washington metropolitan region through the state DOTs from the federal Transportation Alternatives Set-Aside Program (TAP).
- Promote TAP funding for projects that seek to complete the National Capital Trail Network (NCTN) or promote pedestrian and bicycle access in Transit Access Focus Areas (TAFAs). The TPB approved the NCTN and TAFA concepts and maps in July 2020.

9.4 TRANSPORTATION LAND USE CONNECTION PROGRAM

The TLC Program offers short term consultant technical assistance to local jurisdictions to advance planning activities that strengthen the connection between local land use and transportation planning. This activity will encompass the following work tasks in FY 2024:

- Fund at least six technical assistance planning projects.
- Fund at least one project to perform project design to achieve 30% completion.
- Develop tools and activities to facilitate regional learning about TLC issues among TPB member jurisdictions. 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 and VDOT Technical Assistance Programs and for other projects where additional funding is provided by state or local agencies.
- Promote TLC funding for projects that seek to complete the NCTN or promote pedestrian and bicycle access in TAFAs.

10. TPB Management and Support

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** • **FY 2025 UPWP**
TOTAL COST ESTIMATE	**$ TBD**

10.1 TRANSPORTATION PLANNING BOARD COMMITTEE SUPPORT AND MANAGEMENT AND UNIFIED PLANNING WORK PROGRAM

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

TPB Committee Support and Management and UPWP

- 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 the 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.
- Develop a 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 the FY 2025 UPWP.

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, and regional transit agencies' 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 2024 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 regional transit 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 regional transit agency representatives and TPB staff. Specific technical assistance projects and work activities falling within the broad categories identified in this section are identified and coordinated through consultation with state departments of transportation and regional transit agencies throughout the fiscal year.

11.A. DISTRICT DEPARTMENT OF TRANSPORTATION

MAJOR PRODUCTS **See program-specific products below**

TOTAL COST ESTIMATE **$ TBD**

1. Program Development, Data Requests and Miscellaneous Services

MAJOR PRODUCT **Specific scopes of work, on-going activity**

TOTAL COST ESTIMATE **$ TBD**

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

2. Regional Safety Program

MAJOR PRODUCTS

- **Work products in support of Regional Safety Program described in Task 9.2**
  To be completed by June 2024

TOTAL COST ESTIMATE **$ TBD**

The Regional Safety Program is an effort to provide short-term consultant services to individual member jurisdictions to assist with planning or preliminary engineering projects that address roadway safety issues. Examples include studies, planning, or design projects that will improve roadway safety and lead to a reduction in fatal and serious crashes on the jurisdiction's roadways. The program was established by TPB in 2020. District of Columbia Technical Assistance funds provide additional technical assistance funding for the Regional Safety Program.

3. Transportation / Land Use Connections Program

MAJOR PRODUCTS

- **TLC Technical Assistance awards, technical reports from contractors,**
  To be completed by June 2024

TOTAL COST ESTIMATE **$ TBD**

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

4. Other Tasks to Be Defined

TOTAL COST ESTIMATE **$ TBD**

This work element is established to respond to requests by DDOT for anticipated technical assistance work tasks that are not yet defined. These work tasks will be performed upon further specific authorization received from DDOT in FY 2024.

11.B. MARYLAND DEPARTMENT OF TRANSPORTATION

MAJOR PRODUCTS **See program-specific products below**

TOTAL COST ESTIMATE **$ TBD**

1. Program Development, Data Requests and Miscellaneous Services

MAJOR PRODUCT

- **Specific scopes of work, on-going activity**

TOTAL COST ESTIMATE **$ TBD**

This work activity supports staff time spent administering the Maryland Technical Assistance work program throughout the year. Work activities would involve meetings with participating agencies to discuss proposed/new projects, development of monthly progress reports, budgetary reporting and technical quality control. This work task also includes staff time needed for the development of the annual planning work program.

2. Project Planning, Feasibility, and Special Studies

MAJOR PRODUCT

- **Specific scopes of work, on-going activity**

TOTAL COST ESTIMATE **$ TBD**

This work task will provide funding to support technical support on feasibility/special studies as well as staff time associated with the development of scopes of work, interagency coordination, and technical analyses associated with travel demand modeling, evaluation of alternatives and coordination with other governmental entities and consultants, as requested by MDOT, SHA and other agencies in Maryland. Work may include but is not limited to technical support in ongoing corridor/subarea studies, initiating new studies ranging from major new corridor analyses to the development of travel demand forecasts for individual facilities, scenario analyses, and travel demand modelling. Project authorizations may occur throughout the fiscal year as priorities dictate to address transportation planning initiatives and strategic goals of MDOT, SHA and other agencies.

3. Transportation / Land Use Connections Program

MAJOR PRODUCTS

- **TLC Technical Assistance awards, technical reports from contractors,**
  To be completed by June 2024

TOTAL COST ESTIMATE **$ TBD**

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

4. Regional Safety Program

MAJOR PRODUCTS

- **Work products in support of Regional Safety Program described in Task 9.2,**
  To be completed by June 2024

TOTAL COST ESTIMATE **$ TBD**

The Regional Safety Program is an effort to provide short-term consultant services to individual member jurisdictions to assist with planning or preliminary engineering projects that address roadway safety issues. Examples include studies, planning, or design projects that will improve roadway safety and lead to a reduction in fatal and serious crashes on the jurisdiction's roadways. The program was established by TPB in 2020. Maryland Technical Assistance funds provide additional technical assistance funding for the Regional Safety Program.

5. Other Tasks to be defined

TOTAL COST ESTIMATE **$ TBD**

This work element is established to respond to requests by MDOT and SHA for anticipated technical assistance work tasks that are not yet defined. These work tasks will be performed upon further specific authorization from MDOT and MDSHA in FY 2024.

11.C. VIRGINIA DEPARTMENT OF TRANSPORTATION

MAJOR PRODUCTS **See program-specific products below**

TOTAL COST ESTIMATE **$ TBD**

1. Program Development, Data Requests, and Miscellaneous Services

MAJOR PRODUCT

- **Specific scopes of work, on-going activity**

TOTAL COST ESTIMATE **$ TBD**

This work activity supports staff time spent administering the VA Technical Assistance work program throughout the year. Work activities include meetings with participating agencies to discuss proposed/new projects, development of monthly progress reports, budgetary reporting and technical quality control. This work task also includes staff time to process requests for data/documents received from local jurisdictions in Northern Virginia as advised by VDOT throughout the year.

2. Travel Monitoring and Survey

MAJOR PRODUCT

- **Program management plan, data and analysis, technical memorandum – on-going activity**

TOTAL COST ESTIMATE **$ TBD**

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

3. Travel Demand Modeling

MAJOR PRODUCT

- **Model output, technical memoranda, on-going activity**

TOTAL COST ESTIMATE **$ TBD**

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

4. Transportation / Land Use Connections Program

MAJOR PRODUCTS

- **TLC Technical Assistance awards, technical reports from contractors,**
  To be completed by June 2024

TOTAL COST ESTIMATE **$ TBD**

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

5. Regional Safety Program

MAJOR PRODUCTS

- **Work products in support of Regional Safety Program described in Task 9.2,**
  To be completed by June 2024

TOTAL COST ESTIMATE **$ TBD**

The Regional Safety Program is an effort to provide short-term consultant services to individual member jurisdictions to assist with planning or preliminary engineering projects that address roadway safety issues. Examples include studies, planning, or design projects that will improve roadway safety and lead to a reduction in fatal and serious crashes on the jurisdiction's roadways. The program was established by TPB in 2020. Virginia Technical Assistance funds provide additional technical assistance funding for the Regional Safety Program.

6. Other Tasks to be Defined

TOTAL COST ESTIMATE **$ TBD**

This work element is established to respond to requests by VDOT and VDRPT for anticipated technical assistance work tasks that are not yet defined. These work tasks will be performed upon further specific authorization from VDOT and VDRPT in FY 2024.

11.D. REGIONAL TRANSIT TECHNICAL ASSISTANCE

MAJOR PRODUCTS See program-specific products below

TOTAL COST ESTIMATE $ TBD

1. Program Development, Data Requests and Miscellaneous Services

MAJOR PRODUCT

- Specific scopes of work, on-going activity

TOTAL COST ESTIMATE $ TBD

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

2. Transit Within Reach Program

MAJOR PRODUCTS

- Technical Assistance awards, technical reports from contractors,
  To be completed by June 2024

TOTAL COST ESTIMATE $ TBD

The Transit within Reach program will offer short-term consultant technical assistance to advance design projects to improve bike and walk connections to TPB Transit Access Focus Areas. The program will feature a competitive solicitation process to select qualifying projects to be funded.

3. High-Capacity Transit Map

MAJOR PRODUCTS

- High-capacity Transit Map graphic,
  To be completed by June 2024

TOTAL COST ESTIMATE $ TBD

An aesthetically pleasing regional high-capacity transit (HCT) map that is mode specific and operator neutral will be developed for the TPB Planning Region. This project will include developing regional consensus on project inputs, including transit lines and a project definition for bus rapid transit, and using a consultant to develop a quality graphic design of an easily legible/understood schematic map. The final map, a high-resolution image, will be distributed to TPB members and stakeholders to share with the public.

4. Other Tasks to be Defined

TOTAL COST ESTIMATE **$ TBD**

This work element is established to respond to requests by regional transit agencies for anticipated technical assistance work tasks that are not yet defined. These work tasks will be performed upon further specific consultation with regional transit agencies in FY 2024.

Continuous Airport System Planning Program

OVERSIGHT	**TPB Aviation Technical Subcommittee**
MAJOR PRODUCTS	• **Conduct and Process 2023 Regional Air Passenger Survey, Phase 1 and Phase 2** • **Air Cargo Element Update**
TOTAL COST ESTIMATE	**$ (Not funded with federal UPWP funding)**

The purpose of the CASP program is to provide a regional process that supports the planning, development, and operation of airport and airport-serving facilities in a systematic framework for the Washington-Baltimore Air Systems Planning Region, which includes the region's three major commercial airports: Baltimore-Washington International Thurgood Marshall Airport (BWI), Ronald Reagan Washington National Airport (DCA), and Washington Dulles International Airport (IAD). Oversight of the program is the responsibility of the TPB Aviation Technical Subcommittee. The major elements of the CASP program have now been consolidated into a reoccurring two-year cycle based on available and anticipated FAA funding. The CASP work program elements for the for FY 2023 UPWP cycle are as follows:

Conduct and Process 2022 Baltimore-Washington Regional Air Passenger Survey (APS), Phase 1 and Phase 2

The purpose of the APS is to collect information about travel patterns and user characteristics of air passengers using the three major commercial airports—Ronald Reagan Washington National Airport (DCA), Washington Dulles International Airport (IAD), and Baltimore-Washington International/Thurgood Marshall Airport (BWI)—and to help determine airport terminal and groundside needs. Data from the air passenger surveys provide the basis for analysis of major changes in airport use in the region. Funding for survey design, sample generation, and data collection for the 2022 Regional Air Passenger Survey will be provided by the Metropolitan Washington Airports Authority (MWAA) and the Maryland Aviation Administration (MAA) of the Maryland Department of Transportation (MDOT). The processing of the data collected in the 2022 Regional Air Passenger Survey will be carried out in this UPWP project.

Specific tasks to be undertaken in Phase 1 include: (1) survey operations and data collection, (2) data editing, (3) finalizing the survey database, and (4) producing the survey General Findings Report and corresponding visualization and information products.

Phase 2 of this project provides for the continued processing of data collected in the 2019 Regional Air Passenger Survey. In Phase 1, data collected as part of the survey was corrected and geocoded and the 2019 Air Passenger Survey database was finalized in preparation for data analysis.

Specific tasks to be completed in Phase 2 are: data expansion, data tabulation, data analysis. During this process detailed statistical analysis of the survey is conducted, which ultimately results in summarization of the survey findings. Findings are summarized by the various characteristics of the air passengers, characteristics of their ground access trips (work vs. non-work, resident vs. non-resident, mode of access, airport preference, etc.) as well as the geographic characteristics of ground access trips. Analysis concludes with the production of summary tables and charts, and GIS-based maps that will be incorporated the final survey report. The products for this phase will be the preparation of a summary findings and a final full technical report.

Air Cargo Element Update

The purpose of this project is to update the Ground Access/Air Cargo Element of the Regional Airport System Plan to examine ground accessibility for both air passengers and cargo. Maintaining ground access to the region's airports by both passengers and cargo provides significant benefits to the region's economy. However, ground access and landside congestion problems are expected to increase in the future. These ground access problems could adversely impact airport use in the Washington-Baltimore region. This update will provide an analysis of current and forecast ground access problems at Ronald Reagan Washington National, Washington Dulles International, and Baltimore-Washington International Thurgood Marshall Airports. It will analyze how current and future traffic congestion affects access to the airports by passengers and cargo. It will also look at overall conditions and demand for air cargo facilities in the region. Further, this plan element will integrate airport system ground access and facility planning into the overall regional transportation planning process for the National Capital Region and include recommendations for improving ground access to the region's airports.

IV. PROPOSED FY 2022 STATE TRANSPORTATION AGENCY STATE PLANNING AND RESEARCH PROGRAMS (SPR)

District of Columbia Department of Transportation (DDOT)

The following presents the types of activities that DDOT uses Statewide Planning and Research Program (SPR) funding to implement.

STATE AND REGIONAL PLANNING

Responsible for developing and administering plans and programs related to the District's statewide and regional transportation networks including the development of the State Planning and Research Program (SPR); Regional Planning including STIP maintenance and updates; and update to the District's Long Range Transportation Plan (moveDC).

NEIGHBORHOOD AND PROJECT PLANNING

Provide oversight and direction for neighborhood planning efforts. Coordinate with local and federal agencies on development review projects and public space use. Provide ongoing planning, management and research on transportation planning studies, operations and policies. Expand programs such as Streateries and Open Streets.

FREIGHT PLANNING

Begin implementation of the State Freight Plan Update anticipated to be approved in FY2022. Serve to help meet multimodal and intermodal freight mobility needs and activities
Provide guidance on issues related to freight movement in the District.

PROJECT DELIVERY

Ensure decisions made on a project level reflects the priorities of the agency; and are aligned with the goals of the department. Streamline and improve the efficiency of project completion from start to finish.

DATA COLLECTION AND ANALYSIS

Oversee pavement data collection and the condition of Highway Performance Monitoring System (HPMS) used for determining the condition, maintenance, and rehabilitation/reconstruction of the District's highways; used in the federally mandated annual HPMS submittal; and supports asset management.

COUNCIL OF GOVERRNMENTS (COG) TECHNICAL ASSISTANCE

DDOT will hire a consultant to conduct traffic counts for the Highway Performance Monitoring Systems (HPMS). This technical assistance support in the past was funded through the Unified Planning Work Program.

TRANSPORTATION PLANNING CONTRACTUAL SERVICES

DDOT will hire a consultant to provide transportation planning support on an on-call basis. Create Purchase Order for Truck Size and Weight Scale Calibration. Create Purchase Order to conduct manual bicycle counts in the District.

PROGRAM FUNDING

The FY 2022 budget is $2,643,513 (Federal = $2,114,810 and District = $528,703).

Maryland Department of Transportation
State Highway Administration (MDOT SHA)

SYSTEMS AND PROGRAMMING

- Preparation and development of the six-year Consolidated Transportation Program (CTP) and preparation of the Annual Statewide Transportation Improvement Program (STIP)
    - Develop the FY 2023-2028 CTP.
    - Coordinate with appropriate state and local planning staffs, MPOs, and state, county, and municipal elected officials.
    - Prepare presentation materials for the Annual CTP Tour consultation with local elected officials.
    - Prepare and submit an annual program for use of available federal funds in accordance with Title 23 U.S.C. and the FAST Act (and/or successor federal authorizing act).
    - Coordinate the STIP with the regional TIPs, CTP, and local jurisdictions' highway improvement programs.
- Regional Planning
    - 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 projects.
    - Work with the MPOs in modifying and adhering to their planning process.
    - Work with the MPOs in the development of the UPWPs, CLRPs, TIPs, air quality conformity determinations, and management systems.
    - 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 the 2023 Annual Attainment Report on Transportation System Performance.
- Congestion Management and Spot and Safety Improvement Project Development
    - Prepare responses to elected officials and community members regarding traffic safety and operational concerns.
    - Development of updates to MDOT SHA guidelines, standards, and policies related to traffic safety and operations.
    - Study locations identified as safety concerns such as Candidate Safety Improvement Locations and develop concepts and strategies to mitigate the identified concerns.
    - Evaluate existing pedestrian and bicycle facilities and develop plans to improve non-vehicular infrastructure.
    - Conduct annual review of all School Zones.

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 set forth by 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.

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 MDOT SHA's highway maps.

Highway Performance 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 Estimated FY 2023 State Planning & Research Program Elements Supporting the Washington Area Work Program	
ITEM	**AMOUNT**
Systems & Programming	
CTP	$ 305,785
Regional Planning	$ 620,074
Congestion Management and Spot and Safety Improvement Project Development	$1,195,857
Traffic Monitoring Program	$965,460
Highway Statistics	$1,576,542
Highway Performance Monitoring System	$61,751
Special Studies	$ 383,537
TOTAL	**$5,109,006**

Virginia Department of Transportation (VDOT)

SPR FUNDS FOR DISTRICT PLANNING ANNUAL ACTIVITIES

Metropolitan Planning Support Activities

This element represents the various activities undertaken by Northern Virginia 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 2020 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 long-range transportation plan, 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 Northern Virginia District Planning section to participate in and provide assistance to Transportation and Mobility Planning Division 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 2020 include: Assist NVTA in evaluation of significant transportation projects pursuant to HB 599; validate NVTA ratings; Fairfax County Parkway corridor Improvements; STARS Program Corridor Improvement studies; Smart Scale performance-based project prioritization and funding process.

Ongoing planning functions supported by SPR funding include:

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)

In addition to supporting staff planning activities, SPR funding is used to fund special plans and studies requiring outside consultants. This takes two different forms, depending on the size, complexity and budget of the project.

Major SPR Special Projects: These are projects that require major funding (generally over $500,000) and time commitments and procurement of consultants. There are no current or anticipated Major SPR projects.

On-Call Consultant Plans and Studies: VDOT uses SPR funds to support routine planning projects, generally with budgets under $500,000 and requiring consultants. VDOT procures on-call consultants for 2-year contracts and assigns the appropriate consultant team to work on District-level projects as needed. VDOT also conducts Strategically Targeted and Affordable Roadway Solutions (STARS) studies using SPR funds. STARS studies evaluate existing conditions data and

traffic forecasts and develop project alternatives to address identified needs prior to a project being submitted for implementation funding. STARS studies that will be underway in FY 22 include:

- Route 7 (East Market Street) from Plaza Street to Fort Evans Road – Leesburg, VA
- Route 50 (Lee Jackson Memorial Highway) from Route 28 to Stringfellow Road, Phase 2 – Chantilly, VA
- Route 234 (Sudley Road) from Godwin Drive to Battleview Parkway – Prince William County
- Route 236 (Little River Road) from I-495 to I-395 – Fairfax County

V. APPENDIX

Additional Tables

- Table A: Revenue - Detailed FY 2021 TPB Proposed Funding by Federal, State, and Local Sources (July 1, 2023 to June 30, 2024)

Memoranda of Understanding

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

Table A: Revenue - Detailed FY 2022 TPB Proposed Funding by Federal, State, and Local Sources (July 1, 2023 to June 30, 2024)

	FTA			FHWA			FED	LOCAL	
	SECT 5303 80%	State 10%	Local 10%	PL FUNDS 80%	State 10%	Local 10%	CASP (FAA 90%) SPR (FHWA 80%)	CASP (10%) SPR (20%)	Totals
DDOT ALLOCATIONS									
NEW FY 2022	$ 492,727	$ 61,591	$ 61,591	$ 2,341,429	$ 292,679	$ 292,679			$ 3,542,695
PRIOR UNEXPENDED	$ 81,951	$ 10,244	$ 10,244	$ 1,010,732	$ 126,342	$ 126,342			$ 1,365,854
CARRYOVER FY 2021	$ 33,346	$ 4,168	$ 4,168	$ 232,198	$ 29,025	$ 29,025			$ 331,930
SUBTOTAL - DC	**$ 608,025**	**$ 76,003**	**$ 76,003**	**$ 3,584,358**	**$ 448,045**	**$ 448,04**			**$ 5,240,479**
MDOT ALLOCATIONS									
NEW FY 2022	$1,143,007	$142,876	$142,876	$ 3,257,967	$ 407,246	$ 407,2			$ 5,501,218
PRIOR UNEXPENDED	$ 327,702	$ 40,963	$ 40,963	$ 892,552	$,569	,569			$ 1,525,317
CARRYOVER FY 2021	$ 75,840	$ 9,480	$ 9,480	$ 389,852	732	,732			$ 582,115
SUBTOTAL – MD	**$1,546,549**	**$193,319**	**$193,319**	**$ 4,540,3**	**$ 67,**	**567,546**			**$ 7,608,650**
VDOT/PT & VDOT ALLOCATIONS									
NEW FY 2021	$ 928,124	$116,016	$116,016	$ 521,8	315,236	$ 315,236			$ 4,312,510
PRIOR UNEXPENDED	$ 278,260	$ 34,783	34,783	$	$ 60,172	$ 60,172			$ 949,548
CARRYOVER FY 2021	$ 62,814	$	$ 52	$ 344,750	$ 43,094	$ 43,094			$ 509,455
SUBTOTAL – VA	**$1,269,198**	**$1 650**	**$15 65**	**$ 3,348,013**	**$ 418,502**	**$ 418,502**			**$ 5,771,513**
TOTAL FHWA/FTA FUNDING ALLOCATIONS									
NEW FY 2022	2 3,858	$320,4 2	$320,482	$ 8,121,280	$1,015,160	$1,015,160			$ 13,356,423
PRIOR UNEXPENDE	$ 7,913	$ 85,989	$ 85,989	$ 2,384,662	$ 298,083	$ 298,083			$ 3,840,719
CARRYOVER FY 2021	172,	$ 21,500	$ 21,500	$ 966,800	$ 120,850	$ 120,850			$ 1,423,500
SUB-TOTAL – FHWA-FTA	**423,771**	**$427,971**	**$427,971**	**$ 11,472,742**	**$1,434,093**	**$1,434,093**			**$ 18,620,642**
TOTAL BASIC UPWP	**$3,423,771**	**$427,971**	**$427,971**	**$ 11,472,742**	**$1,434,093**	**$1,434,093**			**$ 18,620,642**
CASP PROGRAM							**$ 566,127**	**$ 62,903**	**$ 629,030**
SPR PROGRAM							**$ 196,577**	**$ 49,144**	**$ 245,721**
GRAND TOTAL UPWP	**$3,423,771**	**$427,971**	**$427,971**	**$ 11,472,742**	**$1,434,093**	**$1,434,093**	**$ 762,704**	**$ 112,047**	**$ 19,495,393**

TO BE UPDATED