National Capital Region
Transportation Planning Board

MEMORANDUM

TO: Transportation Planning Board Technical Committee

FROM: Lyn Erickson, Plan Development and Coordination Program Director

SUBJECT: Outline and Preliminary Budget for the Fiscal Year 2022 Unified Planning Work Program (UPWP)

DATE: January 4, 2021

The Unified Planning Work Program (UPWP) is the annual statement of work, and associated budget, identifying the planning priorities and activities to be carried out within a metropolitan planning area. This memo includes a detailed work proposal for the Fiscal Year (FY) 2022 UPWP (July 1, 2021 through June 30, 2022). In the same format as last year, the work activities are grouped into 11 general areas which essentially all reflect and support the activities that the TPB is federally required to implement. This information is preliminary and will be refined over the next two months as we receive funding information from the state departments of transportation. The TPB will be asked to approve the FY 2022 UPWP at its March 17, 2021 meeting.

It is recognized that COVID-19 continues to play a role in our activities, both from an administrative and programmatic perspective. These tasks were developed with that in mind.

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:

> *Every action that the TPB considers - including every debate we have, and every decision we make as the region's MPO - must be viewed through the lens of justice, equity, and fairness, We must recognize past actions that have been exclusionary or had disparate impacts on people of color and marginalized communities, and we must take actions to correct or mitigate the resulting unfairness. From infrastructure to education and enforcement, we must act fairly to ensure equitable and true access to safety, accessibility and mobility.*

UPWP REVENUE AND EXPENDITURE ESTIMATES

The budget for the FY 2022 UPWP is based upon Metropolitan Planning Organization (MPO) planning funding allocations provided by our three state departments of transportation (DOTs). Federal Metropolitan Planning Funds are apportioned to the state DOTs who then allocate and distribute these funds to the MPO to enable us to lead the metropolitan planning process. As with all federal funds, there is a match that is necessary to access the federal funds. In our case, 80 percent of the revenue comes from a combination of Federal Transit Administration Section 5303 funds and Federal Highway Administration PL funds. The state DOTs provide a 10 percent state match and the local jurisdictions, through the COG dues, provide a 10 percent local match. Funding amounts are determined by the FY 2021 USDOT budget from the Fixing America's Surface Transportation Act (FAST) Act.

Budget information will be provided when it becomes available. Since the annual federal funding amounts have not changed significantly over time, we begin our budget process based on previous estimates and previously approved budgets. These proposed tasks will be further refined based on available funding.

OUTLINE OF PROPOSED UPWP WORK ACTIVITIES FOR FY 2022

1. LONG-RANGE TRANSPORTATION PLANNING

1.1 Visualize 2045 Implementation
1.2 Environmental Justice and Equity
1.3 Future Plan Development
1.4 Federal Compliance
1.5 Policy Board-Directed Activities

2. TRANSPORTATION IMPROVEMENT PROGRAM

2.1 Transportation Improvement Program
2.2 TIP Database Support

3. PLANNING ELEMENTS

3.1 Performance-Based Planning and Programming
3.2 Congestion Management Process
3.3 Systems Performance, Operations, and Technology Planning
3.4 Transportation Emergency Preparedness Planning
3.5 Transportation Safety Planning – Overall Planning Activities
3.6 Transportation Safety Planning – Regional Roadway Safety Program Bicycle and Pedestrian Planning
3.7 Bicycle and Pedestrian Planning
3.8 Regional Public Transportation Planning
3.9 Freight Planning
3.10 Metropolitan Area Transportation Operations Coordination Program Planning

4. PUBLIC PARTICIPATION

4.1 Public Participation and Outreach
4.2 Communications

5. TRAVEL FORECASTING

5.1 Network Development
5.2 Model Development and Support

6. MOBILE EMISSIONS PLANNING

6.1 Air Quality Conformity
6.2 Mobile Emissions Analysis

7. TRAVEL MONITORING AND DATA PROGRAMS

7.1 Travel Surveys
7.2 Travel Analysis Studies and Research
7.3 Regional Transportation Data Clearinghouse
7.4 GIS Data and Analysis

8. REGIONAL LAND USE AND TRANSPORTATION PLANNING COORDINATION

9. MOBILITY AND ENHANCEMENT PROGRAMS

9.1 Enhanced Mobility Grant Program
9.2 Transportation Alternatives Program
9.3 Transportation and Land Use Connection Program

10. TPB MANAGEMENT AND SUPPORT

10.1 TPB Committees Support and Management and UPWP

11. TECHNICAL ASSISTANCE PROGRAM

11.1 DDOT
11.2 MDOT
11.3 VDOT
11.4 Regional Transit Technical Assistance

CONTINUOUS AIRPORT SYSTEM PLANNING PROGRAM (CASP)

The following section identifies specific staff work tasks for FY 2022.

1. **LONG-RANGE TRANSPORTATION PLANNING**
   [Proposed FY 2022 Budget $XXX]

   1.1. Visualize 2045 Implementation
      1.1.1. Conduct general coordination and outreach to members to help members understand and implement the plan and the aspirational initiatives.
      1.1.2. Provide opportunities for consideration, coordination, and collaborative enhancement of Visualize 2045.
      1.1.3. Conduct analysis as necessary to support the aspirational initiatives.

   1.2. Environmental Justice and Equity
      1.2.1. Coordinate with TPB public participation staff to improve data collection regarding disadvantaged populations.
      1.2.2. Provide analysis and support for other equity-related activities.
      1.2.3. Communicate equity findings from analysis and outreach activities

   1.3. Future Plan Development
      1.3.1. Communicate to Board and other stakeholders the key planning activities for the quadrennial transportation plan update that is underway.
      1.3.2. Conduct additional planning analysis and coordination to support plan development.
      1.3.3. Develop the content and produce the update to Visualize 2045, TPB's long-range transportation plan, for board approval in June 2022.
      1.3.4. Continue developing and testing new performance measures for the LRTP and develop and approach to communicate performance measures.

   1.4. Federal Compliance
      1.4.1. Federal Certification was completed in July 2019. Complete tasks as noted in the Federal report to address any issues that have been noted.
      1.4.2. Monitor possible future transportation regulations and/or changes and prepare accordingly.
      1.4.3. Track, research, and respond to all Federal activities that impact the metropolitan transportation planning process.

   1.5. Policy Board-Directed Activities
      1.5.1. Carry out additional activities as directed by the TPB.
      1.5.2. Develop long-range transportation plan and related products through an 'equity lens' as directed by TPB Resolution R1-2021, which requires all TPB activities to be conducted with an equity lens.
      1.5.3. Support planning activities responsive to the TPB resolution R8-2021 endorsing the 2030 regional greenhouse gas reduction goal.

2. TRANSPORTATION IMPROVEMENT PROGRAM
[Proposed FY 2022 Budget $XXX]

2.1. Transportation Improvement Program (TIP) Programming
    2.1.1. Prepare, review, and process administrative modifications and amendments to the currently approved TIP.
    2.1.2. Review administrative modifications and amendments for fiscal constraint.
    2.1.3. Develop and produce the FY 2023-2026 TIP.
    2.1.4. Enhance documentation of the TIP with additional analysis as a part of the long-range plan/TIP publications and the Visualize 2045 web site.
    2.1.5. Provide public access to long-range plan and TIP project data through an improved online searchable database with integrated GIS project mapping.
    2.1.6. 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.

2.2. TIP Database Support – Project InfoTrak (PIT)
    2.2.1. Provide additional customizations to the system's forms, reports, and functionality.
    2.2.2. Provide assistance and guidance during first-time use of Project InfoTrak system for the adoption of Visualize 2045 and the FY 2023-2026 TIP.
    2.2.3. Provide ongoing help desk service for TPB staff and agency users to troubleshoot any technical issues that arise.
    2.2.4. Assist State DOT and other agency users with large-scale data transfer requests for major TIP amendments.
    2.2.5. Provide public access to long-range plan and TIP project data through an online searchable database with integrated GIS project mapping.
    2.2.6. Provide support for the development and maintenance of project data for the TPB's Bicycle and Pedestrian Plan.

3. PLANNING ELEMENTS
[Proposed FY 2022 Budget $XXX]

This task considers the following aspects of metropolitan transportation planning, in conjunction with federal FAST and MAP-21 requirements. Also included for all elements will be coordination with related state, regional, and local efforts, as well as outreach to members, stakeholders, and subject matter experts, to gather information and collaborate to advise future planning and committee activities.

3.1. Performance-Based Planning and Programming (PBPP)

    3.1.1. 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.

    3.1.2. Coordinate with the states and public transportation providers on data collection and sharing, targets, and federally required reporting.

    3.1.3. Set annual highway safety targets.

    3.1.4. Set annual transit asset management targets.

    3.1.5. Set regional annual transit safety targets.

    3.1.6. Update any four-year targets established in 2018 in the areas of pavement and bridge condition and highway system performance (travel time reliability, non-SOV mode, and CMAQ emissions reductions).

    3.1.7. Support TPB as it reviews data and sets required targets.

3.2. Congestion Management Process (CMP)

    3.2.1. Compile information and undertake analysis for the development of major CMP components, including application of available or emerging "big data" sources.

    3.2.2. Develop and publish the biennial 2022 CMP Technical Report.

    3.2.3. 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.

    3.2.4. Provide CMP technical input to the Performance-Based Planning task.

    3.2.5. Continue development (begun in FY 2020) of jurisdictional, subregional, and/or corridor-based congestion profiles, using available data plus additionally procured data. Include related information such as Census and transit use.

    3.2.6. Produce special CMP analyses, such as following a major event, on an as-needed basis.

    3.2.7. 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 (SPOT) Planning

    3.3.1. Address FAST Act requirements related to technology and RTSMO; address RTSMO-related aspects of connected and autonomous vehicle technology and shared mobility developments.

    3.3.2. Maintain the Regional Intelligent Transportation Systems (ITS) Architecture.

    3.3.3. Address Traffic Incident Management (TIM) as it relates to metropolitan transportation planning and RTSMO.

    3.3.4. Address planning for connected/autonomous vehicles (CAVs), advised by outcomes of the FY2020 TPB CAV forums and white paper.

    3.3.5. Address resiliency and reliability planning aspects of RTSMO, pending results of an FY 2021 regional Resiliency Planning Factor Adaptation Planning and Coordination study.

    3.3.6. Conduct supporting activities as necessary on the above topics, potentially including in-depth studies, development of reports or white papers, or stakeholder workshops.

    3.3.7. Conduct a regional survey on traffic signal timing and power back-up systems.

3.3.8. Support the regional Systems Performance, Operations, and Technology Subcommittee (SPOTS) and the Traffic Signals Subcommittee.

3.4. <u>Transportation Emergency Preparedness Planning</u>
    3.4.1. Undertake transportation emergency coordination and response planning through the emergency management and Homeland Security Urban Area Security Initiative (UASI) processes.
    3.4.2. Address Traffic Incident Management (TIM) as it relates to transportation emergency preparedness planning.
    3.4.3. Support the regional Transportation Emergency Preparedness Committee (R-ESF 1).

3.5. <u>Transportation Safety Planning – Overall Planning Activities</u>
    3.5.1. Support engineering, education, and enforcement strategies to reduce fatalities, serious injuries, and crashes in the National Capital Region.
    3.5.2. Address regional FAST Act traffic safety performance measure requirements, including compilation and analysis of safety data, tracking of regional performance measures for safety, and coordinating with member states on the setting of safety targets.
    3.5.3. Address the recommendations of the FY 2020 – FY 2021 regional safety study.
    3.5.4. Investigate and document regional safety trends and influencing factors and identify strategies to address these factors. This effort will help inform local planning and programming efforts to improve transportation safety and achieve/exceed the region's PBPP targets.
    3.5.5. 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 efforts.
    3.5.6. Provide technical advice to the "Street Smart" regional pedestrian and bicycle safety public outreach campaign (Street Smart is supported by funding outside the UPWP).
    3.5.7. Conduct one or more workshops, targeting member agency staffs, regarding transportation/roadway safety. Support the Transportation Safety Subcommittee in its coordination and advisory roles.

3.6. <u>Transportation Safety Planning – Regional Roadway Safety Program</u>
    3.6.1. Develop and execute a regional program that provides short-term consultant services to individual member jurisdictions 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 jurisdiction's roadways.
    3.6.2. Fund approximately three to eight technical assistance planning projects, or project design effort to achieve 30% completion at a level between $20,000 and $80,000 each.
    3.6.3. Develop tools and activities to facilitate regional learning about roadway safety issues among TPB member jurisdictions through regional peer exchange.
    3.6.4. Provide staff support for Regional Roadway Safety Program Technical Assistance Projects to be conducted as part of the DDOT, MDOT, and VDOT Technical

Assistance Programs and for other projects where additional funding is provided by state or local agencies.

3.7. Bicycle and Pedestrian Planning

    3.7.1.   Undertaken outreach and follow-up activities regarding the Regional Bicycle and Pedestrian Plan update published in FY 2021.

    3.7.2.   Update the National Capital Trail Network map.

    3.7.3.   Monitor and update nonmotorized recommendations for the Transportation Improvement Program (TIP) and Project Info Tracker (PIT); monitor Regional Complete Streets and Green Streets activities.

    3.7.4.   Address emerging mobility technologies, such as dockless bikesharing and electric scooters, and their relationship to bicycle and pedestrian planning.

    3.7.5.   Provide technical advice to the "Street Smart" regional pedestrian and bicycle safety public outreach campaign (Street Smart is supported by funding outside the UPWP).

    3.7.6.   Conduct two or more regional bicycle and pedestrian planning or design training, outreach, or professional development opportunities for member agency staffs.

    3.7.7.   Support the Bicycle and Pedestrian Subcommittee in its coordination and advisory roles.

3.8. Regional Public Transportation Planning

    3.8.1.   Address public transportation-related aspects of metropolitan transportation planning, such as consideration of inter-city buses, commuter buses, rail transit, and commuter rail.

    3.8.2.   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.

    3.8.3.   Address Bus Rapid Transit (BRT) planning and coordination.

    3.8.4.   Address TPB-related recommendations from the 2019 regional Bus Transformation Project.

    3.8.5.   Produce an annual report on the "State of Public Transportation."

    3.8.6.   Provide support to private providers of transportation in the region, including organizing the annual Private Providers Annual Transit Forum.

    3.8.7.   Conduct supporting activities as necessary on the above topics, potentially including in-depth studies, development of reports or white papers, or stakeholder workshops.

    3.8.8.   Support the Regional Public Transportation Subcommittee in its coordination and advisory roles.

3.9. Freight Planning

    3.9.1.   Develop and publish an updated Regional Freight Plan.

    3.9.2.   Compile and analyze data to support regional freight planning.

    3.9.3.   Address recommendations of the FY 2020 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.

    3.9.4.   Coordinate with relevant jurisdictions and committees on regional rail issues.

3.9.5. Address the FAST Act requirements related to regional freight transportation planning, including PBPP measures and targets.

3.9.6. Conduct supporting activities as necessary on the above topics, potentially including in-depth studies, development of reports or white papers, or stakeholder workshops.

3.9.7. Support the TPB Freight Subcommittee in its coordination and advisory roles.

3.10. Metropolitan Area Transportation Operations Coordination (MATOC) Planning

3.10.1. Provide administrative support of the MATOC Steering Committee, including preparation of agendas and summaries and tracking of action items.

3.10.2. Provide TPB staff input and advice to the MATOC Steering Committee and its subcommittees and working groups.

3.10.3. Address Traffic Incident Management (TIM) as it relates to MATOC planning.

3.10.4. Provide briefings to the TPB on MATOC Program progress as requested.

4. PUBLIC PARTICIPATION
[Proposed FY 2022 Budget $XXX]

4.1. Public Participation and Outreach

4.1.1. Conduct public involvement as described in the new 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.

4.1.2. Develop and conduct public engagement activities with consideration of 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.

4.1.3. 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.

4.1.4. Conduct public involvement activities in the summer and fall of 2021 as part of the update to Visualize 2045. These activities may include socially distant outreach such as webinars, virtual townhalls, and virtual popups. This phase of open-invitation outreach will complement public opinion research for Visualize 2045 that was conducted in FY 2021.

4.1.5. Conduct a final public comment period for Visualize 2045 in the spring of 2022.

4.1.6. 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.

4.1.7. Provide staff support for the TPB Access for All Advisory (AFA) Committee that includes leaders and representatives of low-income communities, minority communities, persons with disabilities, older adults, and those with limited English skills as the TPB's primary strategy for engaging traditionally disadvantaged population groups in the planning process and for providing guidance on Human Service Transportation Program activities. AFA Committee comments will be

shared with the TPB on transportation plans, projects, programs, services, and issues that are important to AFA community groups.

4.1.8. Conduct training activities, as needed, to help community leaders learn how to get more actively involved in transportation decision making in the Washington region.

4.1.9. Conduct evaluation activities of the public involvement process.

4.1.10. 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

4.2.1. Develop written and visual materials to spread information about regional transportation planning issues, explain how transportation decision-making works, and engage the public.

4.2.2. Support staff as they develop meeting materials and publications to communicate information developed in other tasks in the UPWP.

4.2.3. Produce content for the TPB News, Visualize 2045 newsletter, and other digital publications.

4.2.4. Regularly update information on the TPB's webpages, ensuring the site is timely, thorough, and user-friendly.

4.2.5. Effectively use social media and other digital tools to engage the public in current TPB activities.

5. TRAVEL FORECASTING
[Proposed FY 2022 Budget $XXX]

5.1. Network Development

5.1.1. 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 could be the current year or another recent year, depending on the extent of COVID-19-related disruptions.

5.1.2. Produce a series of forecast-year transportation networks used as inputs to the regional travel demand forecasting model, in support of transportation planning studies, such as scenario studies, project-planning studies, and air quality conformity (AQC) analyses of the TPB's Long-Range Transportation Plan (LRTP). The quadrennial update of the LRTP occurs in 2022, but, in some cases, TPB staff may be asked to perform an "off-cycle" AQC analysis.

5.1.3. Maintain and refine 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.

5.1.4. 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 will likely require networks in Cube Public Transport (PT) format. Develop a unified network database/COGTools to work with transportation networks in both TRNBUILD and PT formats in sync.

5.1.5. Respond to network-related technical data requests.

5.2. Model Development and Support

    5.2.1. Staff the TPB Travel Forecasting Subcommittee (TFS).

    5.2.2. Support both internal and external users of the TPB's current or future production-use travel demand forecasting models (either the Gen2/Ver. 2.3 Model or the Gen2/Ver. 2.4 Model)

    5.2.3. Develop new versions of the TPB's travel demand forecasting model that provide enhanced modeling capabilities: Development of the Generation-3 ("Gen3") Travel Model:

        5.2.3.1. The Gen3 Travel Model, which is being developed with consultant assistance, will be the TPB's next-generation travel demand forecasting model. This is planned to be a disaggregate, activity-based model (ABM), implemented in ActivitySim software. Model development is planned to last three years (FY 2020-2023). Development will occur via two main phases: Gen3 Model, Phase 1 is planned to conclude in September 2021 (early FY 2022). The goal of Phase 1 is to obtain a developmental model that has gone through an initial round of calibration and can be tested by TPB staff. Phase 2 is planned to run from September 2021 through November 2022 (middle of FY 2023). The goal of Phase 2 is to obtain a travel model that is calibrated, validated, and is production ready.

        5.2.3.2. Identify, and possibly obtain, data needed to support development of the Gen3 Model and its successor model, the Gen4 Model.

        5.2.3.3. Promote the regional coordination of future transit on-board surveys so that they can better support model development needs. This effort would be coordinated with other DTP teams and with the Regional Public Transportation Subcommittee (see Task #3, "Planning Elements").

        5.2.3.4. Join the ActivitySim consortium and coordinate with other member MPOs on the maintenance and development of ActivitySim, the underlying software of the Gen3 Travel Model.

    5.2.4. Keep abreast of best practices in travel demand modeling.

    5.2.5. Develop knowledge of and support 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 Team.

    5.2.6. Respond to travel-model related technical data requests from consultants and local agencies.

    5.2.7. Maintain software and hardware required to apply the regional travel demand model.

    5.2.8. Coordinate with the COG Office of Information Technology (IT) to help maintain the computers used to run the regional travel demand model. Assist IT with testing related to the planned agency-wide transition into cloud computing.

6. MOBILE EMISSIONS PLANNING
[Proposed FY 2022 Budget $XXX]

6.1. Air Quality Conformity Analysis

    6.1.1. Continue technical tasks related to the air quality conformity analysis of the TPB's 2022 Long-Range Transportation Plan quadrennial update.

6.1.2. Provide technical travel demand and mobile emissions modeling support for off-cycle AQC analysis, if requested by implementing agencies. This task may be funded from Technical Assistance accounts.

6.1.3. Keep abreast of federal requirements as related to air quality conformity determinations and the new mobile emissions estimation software, MOVES3.

6.1.4. Continue working to incorporate Performance-Based Planning and Programming (PBPP) requirements pertaining to Congestion Mitigation and Air Quality Improvement Program (CMAQ) into the planning process as it relates to the adopted Plan.

6.1.5. 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

6.2.1. With consultant assistance, conduct a study of approaches to reduce greenhouse gas (GHG) emissions to meet 2030 reduction goals in the Metropolitan Washington 2030 Climate and Energy Action Plan.[1]

6.2.2. Support development of Attainment State Implementation Plan (SIP), if needed, to address requirements of 2015 ozone National Ambient Air Quality Standards (NAAQS). This would include developing inventories of on-road mobile emissions for volatile organic compounds (VOC) and nitrogen oxides (NOx).

6.2.3. Coordinate with the Metropolitan Washington Air Quality Committee (MWAQC) and its subcommittees to support development of new motor vehicle emissions budgets (MVEBs), if needed, to address requirements of 2015 ozone NAAQS.

6.2.4. Revisit opportunities to refresh inputs to the EPA's Motor Vehicle Emission Simulator (MOVES) software, such as vehicle registration data, referred to as Vehicle Identification Number (VIN) data, in consultation with regional environmental and transportation agency partners.

6.2.5. Provide technical support to COG/DEP staff with regional greenhouse gas (GHG) related planning activities.

6.2.6. Keep abreast of MOVES updates and best practices.

6.2.7. Conduct sensitivity tests of new MOVES model versions that may be released by EPA.

6.2.8. Respond to technical requests from COG's Department of Environmental Programs (DEP) and from TPB member jurisdictions for readily available mobile emissions information.

6.2.9. 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.

7. TRAVEL MONITORING AND DATA PROGRAMS
[Proposed FY 2022 Budget $XXX]

---

[1] "Metropolitan Washington 2030 Climate and Energy Action Plan" (Washington, D.C.: Metropolitan Washington Council of Governments, November 18, 2020), https://www.mwcog.org/documents/2020/11/18/metropolitan-washington-2030-climate-and-energy-action-plan/.

7.1. Travel Surveys

  7.1.1. Provide continued briefings to the TPB, TPB Technical Committee, the Travel Forecasting Subcommittee, and other subcommittee and stakeholders, as appropriate, on the findings from the RTS, the 7-day panel survey, and other applicable surveys and data that examine travel behavior.

  7.1.2. Process data from the panel travel survey conducted in fall 2019 and prepare finalized datasets to be used in survey analysis and documentation.

  7.1.3. Conduct analysis of RTS and 2019 panel survey to produce data and findings for consideration and inclusion in the next regional long-range plan update, Visualize 2045.

  7.1.4. Identify and obtain appropriate data on regional travel behavior that occurred during the COVID-19 pandemic period.

  7.1.5. Conduct detailed analysis of the RTS, panel survey, 2019 State of the Commute Survey, 2020 Employer Survey, and applicable data from the pandemic period to analyze build a baseline understanding of how regional travel was changed as a result of the pandemic

  7.1.6. Respond to inquiries about the survey from state and local government staff, survey participants, and the media.

  7.1.7. Develop visualizations and other innovative means to convey survey results and findings.

  7.1.8. Initiate geographic-focused surveys.

7.2. Travel Analysis Studies and Research

  7.2.1. Continue the enhancement of the regional travel trends analysis program to produce more frequent data products, reports, and presentations on various aspects of regional travel trends. This will include:

    7.2.1.1. Developing and maintaining user-friendly and convenient travel trends information and visualizations, including a web-based dashboard that consolidates various regional transportation-related data and information products.

    7.2.1.2. Developing methodologies to develop more robust, geographic-focused travel trends analysis updates

    7.2.1.3. Developing user-friendly information reports/products that combine results of multiple travel trends research activities

    7.2.1.4. Making more frequent presentation to the TPB, TPB Technical Committee, and other committees and subcommittees, as appropriate, to provide more frequent and ongoing awareness and understanding of the latest travel trends and their implication for regional transportation planning, including the impact of the COVID-19 pandemic on regional travel

  7.2.2. Research and analyze regional travel trends using a variety of data sources, including, among others, the Regional Travel Survey, the 7-day panel survey, Census and other federal transportation-related datasets, and Big Data that will be acquired to support numerous programmatic requirements.

  7.2.3. Perform research and analysis that support regional transportation planning activities, including, among others, the development of the regional long-range

transportation plan update, Visualize 2045, as well as consideration of equity in regional transportation planning.

7.2.4. Acquiring Big Data to support travel trends and travel behavior analysis as well as supporting the estimating, calibrating, and validating the regional travel demand model.

7.2.5. Providing cross-program research and analysis support for regional transportation planning studies and activities using a variety of analytical tools. These may include the use of scenario planning tools that were evaluated in FY 2021 and intended to support complex "what if" analyses that examine the effects and impacts that could occur under varying future conditions. Scenario planning may be applied to better understand future uncertainties, such as changes in Greenhouse Gas production, the deployment of connected autonomous vehicles, and future alternative land use distribution patterns.

7.2.6. Performing travel monitoring studies based on programmatic needs of the regional travel demand forecasting model, PBPP requirements, and long-range plan development activities.

7.2.7. Continue to increase staff awareness of the use of planning tools in the regional transportation planning practice and build staff technical capabilities to apply scenario planning tools in transportation planning studies and analyses.

7.2.8. Identifying, testing, and acquiring a scenario planning tool to support scenario planning analyses that may be undertaken in multiple program areas.

7.3. Regional Transportation Data Clearinghouse

7.3.1. Update Clearinghouse traffic volume data with AADT and AAWDT volume estimates, hourly directional traffic volume counts, and vehicle classification counts received from state DOTs and participating local jurisdiction agencies.

7.3.2. Update Clearinghouse transit ridership data with data received from WMATA, PRTC, VRE, MTA and local transit agencies including the Ride-On, The Bus, ART, DASH and the Fairfax Connector.

7.3.3. Develop, maintain, and provide data at varying geographic levels of specificity, including parcel-level data, when needed, to support the development of the Gen3 regional travel demand model.

7.3.4. Update freeway and arterial road speed and level of service data, when available.

7.3.5. Update Clearinghouse highway network bridge and pavement condition data from most current National Bridge Inventory and Highway Performance Management System databases.

7.3.6. Add updated Cooperative Forecasting data by TAZ to the Regional Transportation Clearinghouse Data.

7.3.7. Support efforts to develop and maintain a web-based regional travel trends dashboard described in the previous task.

7.3.8. Distribute Regional Transportation Clearinghouse Data to TPB participating agencies via a GIS web-based application.

7.3.9. Ensure functionality of the RTDC with ongoing system administration and updates and promote the availability and use of the RTDC to local, state, and transit agency partners.

7.4. GIS Data and Analysis

7.4.1. 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 regional long-range transportation plan update, Visualize 2045.

7.4.2. Provide technical guidance and develop GIS-based products (web maps and applications, visualization, etc.) for TPB planning activities.

7.4.3. Respond to requests for TPB GIS metadata, databases, and applications.

7.4.4. Coordinate regional GIS activities with state DOTs, WMATA, and the local governments through COG's GIS Committee and subcommittees.

7.4.5. Maintain and update GIS-related hardware and software used by staff for regional transportation planning activities.

8. REGIONAL LAND USE AND TRANSPORTATION PLANNING COORDINATION
[Proposed FY 2022 Budget $XXX]

This activity coordinates 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.

8.1. 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 that were evaluated in FY 2021 and intended to support complex "what if" analyses that examine the effects and impacts that could occur under varying future land use and transportation conditions.

8.2. Conduct analysis related to regional land use and transportation in support of the development of the regional long-range transportation plan update, Visualize 2045, as well as the consideration of equity in regional land use and transportation planning.

8.3. Support the PDTAC in the coordination of local, state, and federal planning activities and the integration of land use and transportation planning in the region.

8.4. Develop annual Baseline Employment Guidance update to support local governments preparing employment forecast estimates.

8.5. Develop Travel Model Employment Definition Adjustment Factors, which are applied to develop a set of employment forecasts based on a consistent set of employment definitions and used in the regional travel demand model.

8.6. Analyze changes in regional economic, demographic, and housing trends drawing on the results from the U.S. Census American Communities Survey, the Census Transportation Planning Products (CTPP) program, and from other available federal, state, and local data sources.

8.7. 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.

8.8. Work with members of the Cooperative Forecasting and Data Subcommittee to enhance and improve the quality of small area (TAZ-level) employment, population, and employment data.

8.9. Work with the Cooperative Forecasting and Data Subcommittee and the PDTAC to assess the effects of significant transportation system changes on the Cooperative Forecasting land activity forecasts.

8.10. Work with the Cooperative Forecasting Subcommittee and the region's Planning Directors to develop updated growth forecasts at the regional and Transportation Analysis Zone (TAZ) level.

8.11. Conduct initial activities to commence the next major Cooperative Forecasting update (Round 10). Activities may include evaluating econometric databases that could be used to help identify base year estimates and examining regional, national, and global demographic and market trends that will inform underlying regional growth assumptions, among others.

8.12. Document key land use and transportation assumptions used in making updates to the Cooperative Forecasting land activity forecasts.

8.13. Update and maintain Cooperative Forecasting land activity databases of TAZ-level population, household, and employment forecasts that are used as input into TPB travel demand-forecasting model.

8.14. Map and analyze updated Cooperative Forecasting growth forecasts in relation to COG Activity Centers, high-capacity transit locations, and Equity Emphasis Areas.

8.15. Respond to public and stakeholder comments on the Cooperative Forecasts and the Cooperative Forecasting process.

8.16. Work with the Cooperative Forecasting Subcommittee to analyze results of the 2020 Census for use in developing future updates to the Cooperative Forecasts. Continue to provide regular seminars and trainings on accessing and analyzing Census data to support local demographic analysis and small-area forecasting.

8.17. Develop and publish useful economic, demographic and housing-related information products including the Regional Economic Monitoring Reports (REMS), 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.

8.18. Use TPB transportation planning data to update information for the approved COG Region Forward Targets and Indicators.

9. MOBILITY AND ENHANCEMENT PROGRAMS
[Proposed FY 2022 Budget $XXX]

9.1. Enhanced Mobility Grant Program
    9.1.1. Continue the solicitation and select projects for FTA Section 5310 Enhanced Mobility funding (Sumer/Fall 2021).

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

9.1.3. Initiate the next required update of the Coordinated Plan, which will take approximately 8 months and will be approved in calendar year 2022.

9.1.4. 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. Transportation Alternatives Program

9.2.1. 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).

9.2.2. 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.

9.3. Transportation and Land Use Connection Program

9.3.1. Fund at least six technical assistance planning projects at a level between $30,000 and $60,000 each.

9.3.2. Fund at least one project for between $80,000 and $100,000 to perform project design to achieve 30% completion.

9.3.3. Develop tools and activities to facilitate regional learning about TLC issues among TPB member jurisdictions through the Regional Peer Exchange Network. Organize at least one regional meeting to facilitate an exchange of information about lessons learned from past TLC projects.

9.3.4. 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.

9.3.5. Promote TLC 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.

10. TPB MANAGEMENT AND SUPPORT
[Proposed FY 2022 Budget $XXX]

10.1. TPB Committees Support and Management and UPWP

10.1.1. 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.

10.1.2. Maintain TPB Committee membership rosters and distribution lists and prepare meeting materials for TPB Committee meetings.

10.1.3. Prepare the monthly Director's Report.

10.1.4. Respond to periodic requests from TPB members, federal agencies, Congressional offices, media, and others for information or data of a general transportation nature.

10.1.5. Meet with TPB Board members and participating agency staff to discuss current and emerging regional transportation planning issues.

10.1.6. Respond to TPB correspondence and draft correspondence requested by the Board.

10.1.7. Participate in meetings of other agencies whose programs and activities relate to and impact the TPB work program.

10.1.8. Draft Memoranda of Understanding with other agencies for the TPB's review and approval.

10.1.9. Participate in the Association of Metropolitan Planning Organizations (AMPO) and meetings.

10.1.10. Coordinate TPB Planning Activities with Program Directors.

10.1.11. Day-to-day management of and allocation of staff and financial resources.

10.1.12. Monitor all work program activities and expenditures.

10.1.13. Develop a Unified Planning Work Program (UPWP) that complies with anticipated metropolitan planning requirements in the Fixing America's Surface Transportation (FAST) Act.

10.1.14. 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.

10.1.15. Prepare monthly UPWP progress reports for each of the state agencies administering planning funding and prepare all necessary federal grant applications submissions.

10.1.16. Review all monthly UPWP invoices going to each of the state agencies administering planning funding.

10.1.17. Prepare the FY 2023 UPWP.

11. TECHNICAL ASSISTANCE PROGRAM

The UPWP Technical Assistance Program provides assistance to state departments of transportation and regional transit agencies. Examples of past Technical Assistance projects have included the VRE-MARC Run-Through Study, support to the District of Columbia travel monitoring program, state- and mode-specific travel monitoring studies, technical support to state project pre-planning activities, and supplemental support to the Transportation Land-Use Connections (TLC) Program, among others.

11.1. **DDOT Technical Assistance - $XXX**
11.2. **MDOT Technical Assistance - $XXX**
11.3. **VDOT Technical Assistance - $XXX**
11.4. **Regional Transit Technical Assistance - $XXX**