# FY 2024



Work Program Progress Report January 2024

FY 2024

METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS
77 NORTH CAPITOL STREET, N.E., SUITE 300
WASHINGTON, D.C. 20002-4239

MAIN 202/962-3200 | FAX 202/962-3201 | TTY 202/962-3212 | HTTP://WWW.MWCOG.ORG

The TPB approved its FY 2024 Unified Planning Work Program (UPWP) in March 2023. The TPB Work Program Progress Report summarizes each activity for January. In addition, this report concludes with status updates reflecting timelines for all ongoing program plans and projects. Please reference the 2024 UPWP for details concerning the approved budget, and work description for each task. The following graphics identifies all the activities in the UPWP.

### 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
- 3.6 Bicycle and Pedestrian Planning
- 3.7 Regional Public Transportation Planning
- 3.8 Freight Planning
- 3.9 Metropolitan Area Transportation Operations Coordination Program Planning
- 3.10 Resiliency 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. TRANSPORTATION RESEARCH AND DATA PROGRAMS

- 7.1 Transportation Research and Analysis
- 7.2 Data Management and Visualization

# 8. REGIONAL LAND USE AND TRANSPORTATION PLANNING COORDINATION

## 9. MOBILITY AND ENHANCEMENT PROGRAMS

- 9.1 Enhanced Mobility Grant Program
- 9.2 Regional Roadway Safety Program
- 9.3 Transportation Alternatives Program
- 9.4 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)

Task 1	BUDGET	Billed this month	% Funds Expended	UPWP Page
LONG RANGE TRANSPORTATION PLANNING	\$1,136,668	\$76,561	46%	41

#### 1. LONG-RANGE TRANSPORTATION PLANNING

#### Task 1.1 - Visualize 2045 Implementation

Staff began assessing the Visualize 2045 plan's progress on implementation of two key priority strategies, expanding the express highway network and expand BRT/Transitways as demonstrated by the regionally significant project submissions for Visualize 2050. Staff worked with sponsor agencies to understand the project limits and other details to share the information with the public and regional stakeholders in March. TPB staff continued gathering and preparing data on progress implementing the National Capital Trail Network, a TPB priority strategy and aspirational initiative from Visualize 2045. TPB approval of the status report is expected in February.

#### Task 1.2 - Environmental Justice and Equity

Staff continued Spanish language preparations for the March comment period including communications materials and the comment form as well as preparing advertisements for minority newspapers.

#### Task 1.3 - Future Plan Development

The focus of Visualize 2050 development efforts this month was to continue reviewing regionally significant for air quality project submissions for inclusion in the draft air quality conformity table, and the creation of this table which was disseminated to agency staff for review. Staff reviewed the financial information of project inputs submitted to the PIT database for the Visualize 2050 air quality conformity analysis. Staff coordinated with agencies on project details to obtain the best information in preparation for the March public comment period.

Staff continued communications preparations for the comment period including the finalization of the new logo, drafting of a flyer, the 2050 webpage content, newspaper ads, newsletter blurbs, a project summary table, the MetroQuest form,etc. Staff held bi-monthly 2050 team meetings, weekly project meetings, and initiated weekly plan development meetings to keep tasks on track. Staff also continued organizing mapping layers to develop an interactive existing transportation map of the region. Staff continued the procurement process for a graphic design consultant and solicited responses to the 2023 public comments from the three states. Staff provided updates to the STWG, Technical Committee, and CAC.

#### 1.4 - Federal Compliance

There is no activity at this time.

#### 1.5 - Policy Board-Directed Activities

Staff maintained a calendar of key activities and met internally to ensure progress on plan development per the TPB's adopted schedule. Staff processed the full set of project inputs following the Board's 2021 request for a Zero-Based Budgeting approach to the Visualize 2050 plan's development.

Task 2	BUDGET	Billed this month	% Funds Expended	UPWP Page
TRANSPORTATION IMPROVEMENT PROGRAM	\$583,710	\$55,930	41%	43

#### 2. TRANSPORTATION IMPROVEMENT PROGRAM

#### 2.1 – Transportation Improvement Program (TIP)

At its meeting on Friday, January 5, the TPB Steering Committee approved 3 resolutions to amend the FY 2023–2026 TIP that were exempt from the air quality conformity requirement. DDOT requested the first amendment to add \$3.7 million for improvements to Oregon Ave. NW between Military Rd. and Western Ave. NW., which is a sub-project of the Roadway Reconstruction Citywide ongoing program. The second amendment, requested by MDOT on behalf of Prince George's County, added \$2.1 million in funding for PE, ROW acquisition, and construction of the Alcona St. Bridge Rehabilitation project. VDOT requested the third amendment to the TIP which added \$15.9 million for the Loudoun County CNG Bus Transition project, \$78.5 million for the Widening of VA 7 between VA 123 and I-495 (\$73 million of that is programmed the last year of VDOT's STIP, beyond the FY 2026 horizon year of the TPB's TIP), and reprogrammed (advanced) over \$722 million from fiscal years 2025 - 2027 into FY 2024 on the US 1 Bus Rapid Transit project. The projects in the District and Prince George's County, as well as the Loudoun County CNG Bus Transition project are all exempt from the air quality conformity requirement and the VA 7 widening and US 1 BRT projects were included in the Air Quality Conformity Analysis of the 2022 Update to Visualize 2045 and the FY 2023-2026 TIP.

During the month of January, TPB staff reviewed and approved nine administrative modifications to project or program records in the FY 2023-2026 TIP. TPB staff also assisted all member agencies with preliminary inputs for the FY 2026-2029 TIP for projects required to be in the air quality conformity analysis of the plan and TIP.

#### 2.2-TIP Database Support

Contractor EcoInteractive, continued to provide their Software as a Solution platform, customized and branded as TPB's Project InfoTrak database application, as well as ongoing bug fixes and help desk support for staff and member agency users.

Work in progress or completed in January under the baseline maintenance and support contract included:

- Adding a new "Federal Project Name" field to the Project Info Download (data export feature) and to make an available field in any report option lists for additional columns (completed).
- Add the "System" field back to the Conformity Information report (completed)
- Make spelling and order corrections to Primary Project Type list (completed).

Under an expanded contract for professional services, EcoInteractive developed and refined customizations of the software platform, and performed other specialized tasks. Work underway and completed in December under the professional services contract included:

- Ongoing platform upgrade work (in progress)
- Update "Federal project name" field to "TPB Project name field (in progress)
- Add "Pending Financial Close-Out" as Change Reason (in progress)
- Update Project Description report header/Visualize 2050 logo (in progress)
- Add Location Type field back to Conformity Information report (in progress)
- Make System and Location Type fields required for individual Conformity records (in progress)

Task 3	BUDGET	Billed this month	% Funds Expended	UPWP Page
PLANNING ELEMENTS	\$3,905,138	\$186,788	35%	45

#### 3. PLANNING ELEMENTS

#### 3.1 Performance-Based Planning

Staff briefed the TPB and TPB Technical Committee on the new final rulemaking from FHWA on a Greenhouse Gas (GHG) Emissions performance measure.

The approved targets for the annual Highway Safety and Transit Safety performance measures were transmitted to the State DOTs.

Staff commenced outlining PBPP material for the Visualize 2050 transportation plan document.

#### 3.2 Congestion Management Process

Staff continued information gathering and development of the 2024 Congestion Management Process Technical Report.

#### 3.3 Systems Performance, Operations, and Technology Planning

TPB staff prepared for the February meeting of the Systems Performance, Operations and Technology Subcommittee (SPOTS), including briefings on the Strategic Highway Network (STRAHNET) and U.S. Department of Defense coordination, as well as an overview of the military transportation system, as well as the regional Traffic Incident Management self-assessment.

#### 3.4 Transportation Emergency Preparedness Planning

The regularly scheduled January 10, 2024 Transportation Emergency Preparedness Committee (R-ESF 1) virtual meeting was organized and conducted, discussing current regional transportation emergency preparedness issues.

#### 3.5 Transportation Safety Planning

TPB staff began planning for potential 2024 safety program activities, including a safety summit.

TPB staff held a planning session on January 8, 16, and 31 with the Transportation Safety Subcommittee Chair to identify topics and speakers for future Subcommittee meetings.

#### 3.6. Bicycle and Pedestrian Planning

The TPB Technical Committee was briefed on the status of the National Capital Trail Network update at its January 3 meeting. The updated National Capital Trail Network was presented to the TPB on January 17, including a new interactive National Capital Trail Network web page.

The regular meeting of the Bicycle and Pedestrian Subcommittee was held on January 30. A new Chair was confirmed for 2025. The Subcommittee was briefed on the updated National Capital Trail Network and the newly completed Maryland Bicycle and Pedestrian Master Plan.

#### 3.7 Regional Public Transportation Planning

The Regional Public Transportation Subcommittee met in-person/hybrid in January. Agenda items included an update from WMATA on their Better Bus Network Redesign followed by TPB staff providing briefings on the Visualize 2050 Plan, the Regional Transportation Resilience Improvement Plan, and a first look at the 2023 State of Public Transportation Report.

Staff prepared letters of endorsement for federal grant applications by member jurisdictions. Staff also reviewed transit projects and information being submitted for the Visualize 2050 plan.

Staff continued working with the on-call planning consultants on the study of local transit access to HCT stations. Staff finalized a scope of work for a detailed intercity bus and rail travel study.

Staff attended several meetings on the WMATA FY 2025 budget and the monthly JCC meeting. In addition, Staff attended the monthly NVTC MAC meeting.

#### 3.8. Freight Planning

The Freight Subcommittee met on January 11, 2024. The meeting agenda included briefings by the Port of Virginia on its current initiatives, District of Columbia Department of Transportation (DDOT) staff about the DC Freight Plan Update, and staff about the results from the Subcommittee's annual member survey.

#### 3.9 Metropolitan Area Transportation Operations Coordination Program Planning

The regularly scheduled January 9, 2024 meeting of the MATOC Severe Weather Coordination Working Group was organized and conducted, hosted virtually, discussing coordination for transportation agency response to the winter weather season.

The regularly scheduled January 19 virtual meeting of the MATOC Steering Committee was organized and conducted, discussing communications, coordination, and Traffic Incident Management topics.

The regularly scheduled virtual meeting of the MATOC Operations Subcommittee was organized and conducted on January 25, discussing regional roadway operations and traffic issues.

#### 3.10 Resiliency Planning

In January, staff efforts in climate resilience and transportation initiatives continued both generally and regarding the Phase II Transportation Resiliency Study. Resilience Planner presented the preliminary results of the TRIP's vulnerability assessment at the January TPB Board meeting, including an overview and demo of the interactive mapping tool. Staff also presented this topic to the Regional Public Transit Subcommittee. Staff finalized the vulnerability assessment phase 2 (and phase 1) report, which were subsequently combined for full report, which will be published on the TPB Transportation Resilience Planning webpage soon. Staff planned for and held the third TRIP working group meeting, during which we reviewed the results of the vulnerability assessment, requested feedback and comments on the results of the analysis, and initiated round robin from all participants on the resilience projects they have submitted or are planning to submit.

Progress on existing projects continues – staff continues to provide ongoing support for the Prince William County TLC project, assisting with planning for presentations on the upcoming UPWP, and beginning to prepare scopes of work and proposals for work to be completed in the next fiscal year.

Task 4	BUDGET	Billed this month	% Funds Expended	UPWP Page
PUBLIC PARTICIPATION	\$753,904	\$45,260	51%	53

#### 4. PUBLIC PARTICIPATION

#### 4.1 Public Participation and Outreach

Staff prepared for the next public comment period for Visualize 2050, which will be open from March 1 to March 30, 2024. During this period, the public will have the opportunity to comment on transportation projects that may impact air quality conformity.

The January meeting of the 2023-2024 TPB Community Advisory Committee (CAC) was held on January 10. The meeting featured a briefing and discussion on the initial comments received for the Visualize 2050 plan update and last year's State of Public Transportation report.

Staff prepared for the new year for the CAC. Although the membership will largely remain the same for 2024 (the committee is on a two-year membership cycle), staff worked with TPB leadership to identify a new chair for 2024 and to ensure that two vacancies are filled. These positions were filled at the January TPB meeting.

Staff continued preparations for the new round of the TPB's Community Leadership Institute (CLI), which will be held in April 2024. The CLI is a three-day evening workshop in which community leaders from throughout the region come together to learn how regional transportation planning works. In January, staff lined up facilities for the program and held a kickoff meeting with them. Staff also began to update the curriculum, including the development of a new module related to planning to reduce greenhouse gas emissions.

#### 4.2 Communications

The following stories were featured in TPB News and in COG news releases:

November 2023 TPB meeting recap: safety targets, Enhanced Mobility Program, and Visualize 2050 updates January 5, 2024

TPB accepting applications for FY 2025 Transportation Land-Use Connections and Regional Roadway Safety Programs January 5, 2024

December 2023 TPB meeting recap: 2024 TPB Officers, Enhanced Mobility Program approval January 8, 2024

Staff updated pages on the COG website related to transportation including: Enhanced Mobility, Solicitation Process, Pre-Application Conference Program Information, Local Technical Assistance Programs Database

#### Staff shared information about TPB activities via social media:

Council of DC passed Strengthening Traffic Enforcement, Education, and Responsibility Act (January 10), COG workgroup report on Metro budget (January 10), COG Board of Directors elections (January 10), Virginia Mercury story on COG review of Metro budget (January 11), TPB meeting reminder

(January 17), 2023 Metro Report (January 17), WRAP traffic injuries and fatalities (January 26), DC receipt of INFRA funds (January 30)

#### Staff completed the following in support of Task 1 Long-Range Transportation Planning:

Visualize 2050 website and communications materials updated in preparation for March 1-30, 2024 comment period. Staff held a kick-off meeting with the website design update and Visualize 2050 document design contractor.

Task 5	BUDGET	Billed this month	% Funds Expended	UPWP Page
TRAVEL FORECASTING	\$3,442,357	\$137,719	36%	55

#### **5. TRAVEL FORECASTING**

#### 5.1 Network Development

Staff continued preparation of a 2023 base transit network to use as the foundation for forecast-year transit networks for the air quality conformity analysis of Visualize 2050. This work includes mining of GTFS route and schedule data and collection of online schedules for transit service providers where data is not provided via GTFS. In January, staff generated a second version of the mismatch table, significantly cutting down the number of mismatches by almost 300. Staff are conducting manual matching for the mismatches.

Staff continued review of projects input into the Project InfoTrak (PIT) database for inclusion in the highway and transit networks for the upcoming air quality conformity analysis of Visualize 2050. This included coordination with state departments of transportation (DOTs) regarding the function of their High Occupancy Vehicle (HOV) facilities.

Staff developed a base-year HOV/HOT/Toll Road shape file for use in the Visualize 2050 reporting.

Staff created transit route and stop shape files based on 2023 GTFS data per request from COG's Planning Development and Coordination Team.

Staff inquired about Network Wrangler, a Python-based network editing tool developed by a consultant. Staff examined the functionality of the tool, compared it to COGTools, and shared the findings internally.

#### 5.2 Model Development and Support

The Travel Forecasting Subcommittee (TFS) meets in odd-numbered months. Staff attended, ran, and presented at the January 26 meeting. Agenda topics included the following:

- Airport Ground Access Travel Time Study
- Generative Artificial Intelligence (AI): One Staff's Experience with ChatGPT
- Status Report on the COG/TPB Gen3 Travel Model
- Updates From the ActivitySim Consortium
- 2024 Transportation Research Board (TRB) Annual Meeting: Sharing Session

#### Generation 2/Ver. 2.4 Travel Model

Staff recently developed the Gen2/Ver. 2.4.6 Travel Model, which is to be used for the upcoming air quality conformity analysis of the 2025 LRTP, Visualize 2050. In January, staff continued to distribute the transmittal package for the model in response to a series of data requests.

Staff compiled the observed daily vehicle-miles of travel (VMT) data for the year 2022. Staff documented the data in a draft memo dated January 31, which underwent internal review. The data has been used to support both model development and model application activities.

COG's Department of Community Planning and Services (DCPS) staff are currently working with local jurisdictions to fix anomalies found in the draft, TAZ-level Round 10.0 Cooperative Forecasts. Staff will re-process the data once it is updated to prepare the land use input files for the Gen2 Travel Model.

The updating of the exogenous model inputs based on the draft, Round 10.0 Cooperative Forecast data was put on hold due to the ongoing investigation of the data anomalies.

#### Generation 2/Ver. 2.4 Public Transport (PT) Travel Model

No updates.

#### Generation 3 Travel Model

Regarding the consultant-assisted project to develop the TPB's next-generation travel demand forecasting model, known as the Gen3 Model, which will be an activity-based travel model (ABM) implemented in ActivitySim software:

- COG held two check-in meetings with RSG and BMG, the consultants on the Gen3 Model development project on January 11 (in person during the Transportation Research Board Annual Meeting) and January 30 (virtually).
- Staff continued to work with RSG on the development of the Gen3, Phase 2, Model.
   Specifically,
  - RSG submitted the final pull request (PR) in GitHub. COG staff is reviewing the PR and communicating with RSG on any issues found in it. After COG staff approves and merges this PR, the resulting Gen3 Model will be tagged as Version 1.0.0.
  - o RSG and COG staff are working on the following Phase 2 documentation:
    - RSG finalized the Gen3 Model User's Guide, dated January 31, 2024.
    - RSG staff updated the Phase 2 calibration and validation report on January 16 and 18. COG staff reviewed the updates and resolved their comments.
       RSG plans to finalize the document.
    - RSG plans to address the COG comments on the draft Phase 2 sensitivity testing report and finalize the document.
    - COG plans to conduct and document an equity analysis for the 2025 LRTP as part of the upcoming Gen3 Model usability evaluation.
  - COG staff continued to make enhancements and bugfixes to the Gen3 Model. Specifically, staff proposed and implemented a methodology to integrate the toll setting process in the Gen3 Model flow. In January, staff conducted test runs and found issues in the model summaries. Staff are conducting additional tests for a potential solution.

- RSG and COG put the Sharrow implementation task on hold. COG shared the issues found in Sharrow implementation with the ActivitySim consortium. The consortium issued the ActivitySim Phase 9a task orders to address Sharrow and other performance issues in ActivitySim.
- In preparation for the upcoming Gen3 Model usability evaluation, staff started to assemble model inputs for all the Visualize 2050 analysis years. This work is currently on hold due to the ongoing investigation of the Round 10.0 land use data.
- Staff worked to enhance and expand an existing Python script for processing land use data, in preparation for the generation of land use input files for the Gen3 Model.

#### Software support

Working with COG's Office of Information Technology (IT), TPB staff continued to maintain the software and hardware used to conduct travel demand forecasting and mobile emissions modeling. Hardware includes travel model servers (TMS) and mobile emissions model workstations (MEMWs) maintained at COG. Software includes Bentley Citilabs Cube, Python, Git/GitHub, R, MOVES, MySQL, MariaDB, and a travel speed post processor, implemented in Cube, for estimation of mobile emissions.

Staff have continued to meet, conduct model tests, and work with IT staff to address any issues related to the now completed migration of workstations and servers to the cloud. The migration of travel demand model and MOVES model servers to the Amazon Web Services (AWS) cloud began in December 2022, and it was completed in January 2023. TPB staff are continuing to conduct tests to ensure that the processes that used to be executed using the on-premises computers can now be executed in the cloud. TPB staff are continuing to back-up the files located on the on-premises servers.

#### Other activities

Staff serviced five data requests in January: Three requests were for the Gen2/Ver2.4.6 Travel Model, one request was for both the Gen2/Ver.2.4 and Ver.2.4.6 travel models, and one request was for loaded-link highway network shape files for the years 2017, 2021, 2023, 2025, 2030, 2040 and 2045 from the Gen2/Ver. 2.4.6 Travel Model. The request for network shape files came from a consultant working for DDOT on the study and design of Wheeler Road Safety Project from Alabama Avenue SE to Southern Avenue. The request for both travel models was from a consultant working for Crystal Clear Automation, LLC on a public engagement digital twin for the American Legion Bridge +270 project. One request for the Ver.2.4.6 Travel Model was from a consultant working on Fairfax County's Gallows Road Multimodal Study. The other request for the Ver. 2.4.6 Travel Model was from a researcher at Virginia Tech.

Staff attended the Transportation Research Board (TRB) 103rd Annual Meeting, January 7-11, in Washington, D.C. Staff developed a memo, dated January 16, that documents the TRB participation of the DTP staff, and shared it within the department.

Staff attended ActivitySim Consortium meetings regularly on Tuesdays and Thursdays.

Staff requested IT to install Bentley Cube, Version 6.5.1, on all work computers and provided stepby-step instructions. Staff also requested a renewal of the Cube Version 6.4.1 licensing from Bentley Citilabs until July 2024. Staff continued to explore the Big Data that COG recently purchased, including Teralytics, Replica and StreetLight Data, for model development purposes.

Staff continued to conduct daily modeling work on AWS cloud servers and work with IT to resolve issues encountered on the AWS servers. Staff had a coordination meeting with IT on January 19. Following the meeting, staff tested new AWS instances and recommended the replacement of R6 with R7 for the High instance on the cloud servers.

Senior staff continued to train a new, model development employee.

Task 6	BUDGET	Billed this month	% Funds Expended	UPWP Page
MOBILE EMISSIONS PLANNING	\$2,922,011	\$143,979	40%	59

#### **6. MOBILE EMISSIONS PLANNING**

**6.1 Air Quality Conformity and Other Activities Associated with the Long-Range Transportation Plan** Staff continued to attend coordination meetings related to scheduling tasks for the 2025 update of the region's Long-Range Transportation Plan (LRTP), known as Visualize 2050, including the air quality conformity analysis, system performance, and environmental justice analysis. This activity also included coordination of air quality conformity timelines to synchronize with schedules for Maintenance or Attainment State Implementation Plans (SIPs) and new Motor Vehicle Emissions Budgets (MVEBs).

Staff continued review of projects input into the Project InfoTrak (PIT) database for inclusion in the upcoming air quality conformity analysis of Visualize 2050. Staff sent out a draft version of the air quality conformity project input table for the implementing agencies to review and incorporate feedback into the project input table. Staff worked directly with many state and local department of transportation (DOT) staff as they continued to wrap up their project inputs for Visualize 2050.

In accordance with the TPB consultation procedures, staff forwarded to the consultation agencies and public advisory committees the TPB meeting agenda and a summary memo regarding the monthly TPB meeting and air quality conformity consultation elements.

6.2 Mobile Emissions Analysis, Including Activities Associated with Climate Change Planning
Staff from COG's Department of Environmental Programs (DEP) and COG's Department of
Transportation Planning (TPB staff) continued to coordinate with state air agencies on the update of
motor vehicle emissions budgets (MVEBs) associated with the 2008 Ozone Maintenance State
Implementation Plan (SIP). This MVEB update is being conducted to ensure that the tools used to
develop future air quality conformity emissions estimates are consistent with the tools used to
develop the MVEBs - i.e., that both are based on the current MOVES model. Given that the
Metropolitan Washington Air Quality Committee approved the plan in September 2023, the EPA is
now expected to approve the updated 2008 Ozone Maintenance Plan with new MVEBs in the next
few months.

Staff finalized the selection process and chose the vendor to provide TPB staff with software to decode vehicle registration data, also referred to as Vehicle Identification Number (VIN) data. These data are used to create various inputs for the EPA MOVES model used to calculate criteria pollutants and greenhouse gas (GHG) emissions. The software procurement process was completed in January 2024, with the vendor delivering the latest version of software to TPB staff. The software

will be used for the upcoming air quality conformity and greenhouse gas emissions analyses of Visualize 2050. To facilitate this process, TPB staff also solicited December 2023 VIN data from the state air agencies (via DEP's points of contact with state air agencies).

TPB staff continued to work with DEP staff, member jurisdictions, and state air agencies to facilitate various aspects of air quality and climate change planning activities in the region.

Staff continued to coordinate planning activities with the state departments of transportation related to the Carbon Reduction Program (CRP). This program, recently established by the Bipartisan Infrastructure Law (BIL), provides funds for projects designed to reduce on-road transportation emissions. As part of this program, each state was required to develop, by November 15, 2023, a Carbon Reduction Strategy, which should support efforts to reduce transportation emissions and identify projects and strategies to reduce these emissions. TPB staff attended a roundtable organized by MDOT for Maryland MPOs (January 26).

Staff continued to monitor developments related to the Climate Pollution Reduction Grants (CPRG), established by the Inflation Reduction Act. This program provides an investment of \$5 billion to support efforts by states, municipalities, air pollution control agencies, and tribes to develop and implement strong, local greenhouse gas reduction strategies. TPB staff attended a joint CPRG Steering and Technical Committee meeting on draft Priority Climate Action Plan (January 29). DEP staff are leading the effort to develop the Priority Climate Action Plan (PCAP) for the Metropolitan Statistical Area with funding from the CPRG.

Staff continued to participate in electric vehicle (EV) planning activities. COG staff and ICF staff (project consultant) held check-in meetings for the Regional Electric Vehicle Infrastructure Implementation (REVII) Strategy project. TPB staff and ICF staff jointly briefed the TPB Technical Committee (item #8) and the Regional Electric Vehicle Deployment working group on draft electric vehicle projections and a methodology used to create the maps that identify potential priority sites for EV charging infrastructure.

Staff continue to study the final rule for "National Performance Management Measures; Assessing Performance of the National Highway System, Greenhouse Gas Emissions Measure," announced on November 22, 2023. This new element of the Performance Based Planning and Programming (PBPP) includes planning requirements for the states and MPOs (e.g., setting declining greenhouse gas emissions targets). In support of these activities, staff briefed the TPB Technical Committee (item #5) and the TPB (item #10) on the rulemaking and the next steps.

As the version of MOVES that was last used in the air quality conformity analysis (MOVES2014b) cannot be used for these types of analyses starting with January 2023, TPB staff continued to conduct MOVES model tests using the most recent model versions (MOVES4 and MOVES3) and evaluate the impacts of new software on both criteria pollutants and greenhouse gases (GHGs). MOVES4 is now expected to be used in the Visualize 2050 air quality conformity analysis.

Task 7	BUDGET	Billed this month	% Funds Expended	UPWP Page
TRAVEL MONITORING AND DATA PROGRAMS	\$5,344,964	\$89,495	18%	63

#### 7. TRAVEL MONITORING AND DATA PROGRAMS

#### 7.1 Transportation Research and Analysis

The recruitment of a program manager for travel monitoring and planning assistance was ongoing throughout January.

Staff continued developing the scope for a future Household Travel Survey.

Staff reviewed the scope of work for the Intercity Travel Report and provided technical advice on the proposed approach.

Staff participated in internal meetings to discuss the development of the MetroQuest survey for Visualize 2050.

Staff reviewed the task order proposal request for consultant study on intercity bus and rail travel in the region.

#### **Traffic Trends**

Staff finalized the VMT Trends worksheet by Sub-Region including 2022 data and shared it with other TPB staff.

Staff prepared a TPB Modeled Region comparison of reported VMT on Interstates, Freeways, and Principal Arterials with VMT on the National Highway System calculated from the HPMS files, and provided it to fellow TPB staff working on the greenhouse gas emissions performance measure.

Staff finalized the work-around for the District of Columbia 2021 HPMS data issues found in the file hosted by FHWA. Using the corrected data, combined with 2021 HPMS data from Maryland and Virginia, staff prepared the 2021 Regional HPMS file for inclusion in the RTDC.

Staff continued to update traffic-related data by inclusion in the RTDC while creating step-by-step instructions of the processes.

Staff worked to document various projects for succession planning.

Staff met with fellow TPB staff to discuss PBPP pavement and bridge reporting and the status of FHWA's 2021 and 2022 HPMS files.

Staff attended the 2024 TRB annual conference and prepared notes for a future debriefing.

Staff participated in the January 10 NPS Regional Trail Count quarterly meeting.

Staff attended the kickoff meeting for COG/TPB's Replica data acquisition.

#### **Data Requests**

Staff fielded a RTS data request from a researcher at Penn State University.

#### Meetings & Conferences

COG/TPB staff participated in biweekly meetings with the Gen3 Model Development Team.

Several staff participated in the 2024 Transportation Research Board Annual Meeting. This included delivering presentations on technical subject matters and participating in TRB Committee business meetings as members of the committee leadership.

#### 7.2 Data Management and Visualization Services

Staff continued to refine the National Capital Trail Network (NCTN) geospatial dataset based on feedback received and technical corrections encountered. Staff also finalized the Hub page for the project and presented the page at the January meeting of the TPB Technical Committee held on January 5.

Staff met with TPB's resilience planner to discuss geospatial data acquisition through 'Big Data' sources and subsequent mapping related to natural hazards (specifically flooding). This work will be ongoing.

Staff worked with Plan Development and Coordination and Systems Performance staff to create an updated geospatial dataset representing Local Technical Assistance projects (Transportation-Land Use Connections and Regional Roadway Safety Program) and Transportation Alternatives Program (TAP) projects. Staff updated tabular data, created features, and developed a draft web map. This product is under review.

Staff began obtaining, cataloging, and creating online geospatial content in support of developing a multimodal transportation system current conditions map. Staff are working with Plan Development and Coordination staff to define roles and responsibilities and develop workflows for product development.

Staff updated the Managed Lanes geospatial dataset, with the assistance of Models Development staff.

Staff created an updated version of a PDF map of the updated Urban Areas/MPO map currently used to describe the Urban Areas (UA) that comprise the TPB Planning Area.

Staff met with WMATA staff to discuss the current status and direction of the High-Capacity Transit (HCT) map product.

Staff worked with team members on the Planning Research and Assistance side of the team to transition the management of the GIS Committee to the Planning Data Research side of the team.

Staff continued to meet with fellow staff to discuss the geospatial data needs and requirements to support Visualize 2050. This work is ongoing.

Staff continued to perform several tests around publishing data from ArcGIS Pro to Enterprise in different formats to document any changes or issues encountered. Staff are using this information to develop workflows for geospatial data management. This work is ongoing.

Staff created ArcGIS Online account credentials to consultant staff developing geospatial data products for TPB/COG as part of larger efforts (Regional Electric Vehicle Infrastructure Implementation (REVII) and HCT Local Transit Analysis Coordination project).

GIS Committee/GDX Working Group

Staff planned and participated in the January 16 GIS Committee/GDX Working Group virtual meeting. Highlights of the meeting included: a demonstration of a solar radiation study for the Fairfax County climate action viewer app that is being developed. Updates on CAD2GIS, quarterly streets and address updates, status of MD 2023 6-in imagery and Planimetrics release, updates on USGS LiDAR and Hydrography projects, and the regular status reports on Next Gen 9-1-1 and HSEMA Food and Water Resilience Project.

#### **Data Requests**

Staff responded to a request for information from a member of the Loudoun County Board of Supervisors regarding a segment of the National Capital Trail Network (Belmont Ridge Road).

#### Meetings & Conferences

Staff attended the Transportation Research Board (TRB) Annual meeting held January 7-12 in Washington, DC.

Staff attended the January 18 COG CIO Committee meeting.

Staff attended an Esri Lunch & Learn webinar on performing analytics with the Map Viewer on January 25.

Staff attended the MATOC Webinar: RITIS 101 on January 26.

Staff attended and participated in an initial kickoff and training on January 4 for TPB's new subscription to Replica Data to discuss the product and get familiar with the platform.

Staff attended and participated in the Regional Trail Count Program - Quarterly Meeting held on January 10.

Staff attended the TPB Freight Subcommittee meeting held on January 11.

Staff attended the TPB Regional Public Transportation Subcommittee (RPTS) meeting held on January 23.

Staff attended the Travel Forecasting Subcommittee (TFS) meeting held on January 26.

Staff attended the Bicycle and Pedestrian Subcommittee meeting held on January 30.

Staff participated in the recurring meeting related to Visualize 2050 planning activities on January 12 and January 26.

Staff continued to attend the regularly scheduled meetings (and additional meetings as needed) for the Regional Electric Vehicle Infrastructure Implementation (REVII) Strategy project.

Staff continued to attend meetings with the Plan Development and Coordination staff related to Project InfoTrak inputs in support of Visualize 2050 as necessary.

Staff participated in meetings and email exchanges with the Travel Forecasting and Emissions Analysis Program team and their contractor, RSG.

Task 8	BUDGET	Billed this month	% Funds Expended	UPWP Page
REGIONAL LAND USE AND TRANSPORTATION PLANNING COORDINATION	\$1,211,231	\$61,067	38%	67

#### 8. REGIONAL LAND USE AND TRANSPORTATION PLANNING COORDINATION

8.1 Regional Land Use and Transportation CoordinationDuring January, staff continued to work with local government staff to investigate and to make any necessary revisions to anomalies noted in the Round 10.0 TAZs file. Staff convened the final one-on-one conversation and received the final TAZ submission from Fairfax County.

The re-submissions from the District of Columbia, Prince Geroge's County, Fairfax County, and Loudoun County were integrated back into the Round 10.0 TAZs file with the other TPB Model Region jurisdictions. A comparison table was created to show how selected TAZs changed between the original Round 10.0 TAZs file, the January 2024 Round 10.0 TAZs file, and with Round 9.2.

Staff compiled the December issue of the Regional Economic Monitoring System (REMS) report that covers the following data points for the month of November 2023: Total Employment, Over-the-Year Inflation Rate, and Unemployment Rate, and New Housing Units Authorized During the Previous 24 Months. Similar data points for other MSAs are also collected for comparison purposes with the Washington MSA but not reported out.

Staff are in the final stages of completing the 2022 Multi-Family Rental Housing Construction Indicators report with completion planned for early February 2024. Work will start with compiling data from the Co-Star database for the future 2023 Commercial Construction and Multi-Family Construction reports planned release in 2024.

Task 9	BUDGET	Billed this month	% Funds Expended	UPWP Page
COMPLETE STREETS, MOBILITY AND ENHANCEMENT PROGRAMS	\$1,135,269	\$32,681	21%	69

#### 9. COMPLETE STREETS, MOBILITY AND ENHANCEMENT PROGRAMS

During January, staff began informing applicants of awards for the 2023 Enhanced Mobility program and document preparation and submission to FTA to begin the implementation process. The next solicitation for the Enhanced Mobility program is scheduled to begin in summer 2025.

#### 9.2 Regional Roadway Safety Program.

Each of the eight (8) FY 2024 approved projects is currently underway with progress as follows:

- City of Frederick: Jefferson-Patrick Redesign Study The consultant worked on concept plans for multiple intersections on Jefferson Street.
- City of Gaithersburg: Local Roadway Safety The consultant is conducting an on-line survey, with preliminary results to be presented to the city transportation committee in February.
- Montgomery County: Bel Pre Road Safety Improvement Project The consultant and Montgomery County staff delivered preliminary concept plans for the corridor and continued preparation for a public survey and meeting.
- City of Rockville: Pedestrian Crossing Guidelines Project team worked on drafts of a pedestrian crossing decision flow chart and a countermeasure selection flow chart.
- City of Alexandria: Pedestrian Lighting Improvements Study City of Alexandria staff are gathering GIS information for the consultant's analysis.
- Arlington County: Regionwide, Data-Driven Anti-Drunk Driving Campaign The consultant conducted a literature review and scan of existing anti-drunk driving campaigns.
- City of Fairfax: Main Street Corridor Roadway Safety Audit Collision diagrams for three
  accident hotspots and documentation of existing roadway conditions were completed and
  presented to the project team. Planning began for an in-person road safety audit, with
  scheduling expected for mid-March.
- Prince William County: Darbydale/Forestdale Avenue Corridor Retrofitting Project Traffic data for the project area is being gathered by County and VDOT staff.

Staff continued marketing the launch of the FY 2025 RRSP round.

#### 9.3 Transportation Alternatives Set-Aside Program

Staff continued the application review and project selection process for the TAP program in Virginia, which is on a two-year cycle. At the end of November, staff received 24 applications for the TPB region. Staff began to review the 24 applications that were received for the TPB region. The projects were analyzed to determine how well they align with regional priorities. Staff also conducted site visits.

Staff met with VDOT staff and the CTB member for Northern Virginia. Staff sent the applications to the TPB selection panel members for their review and scoring. Staff scheduled meetings with the selection panel for the end of February. The panel's recommendations will be presented to the TPB for approval in March.

#### 9.4 Transportation/Land-Use Connections (TLC) Program

Work on all the FY 2024 TLC projects was underway. See below:

Alexandria - South Pickett Street Corridor Improvements Study – The project team held monthly
meeting and an in-person design charette. Project team also finalized and shared first draft of
existing conditions report and the City provided their comments on it.

- Falls Church East-West Ped/Bike Connection Project team developed and submitted existing conditions memo and started to develop concepts.
- Frederick, City of East Street Redesign 30% Design The project team developed concepts for review.
- Gaithersburg SRTS Priority Improvements Study Initial tasks for the project got underway. A GIS
  analysis and engagement plan was under development, along with efforts to communicate with the
  three participating schools. Analyses of existing conditions of the elementary, middle, and high
  schools were completed after coordination with school leaders. Walking audit and workshop dates
  were scheduled for January 2024. All three school walk audits and workshops were successfully
  conducted and subsequent photo libraries and walk audit reports were drafted.
- Montgomery County As of early February, the consultant and the county are working on organizing a
  focus group, including scheduling it, determining participants and preparing questions. They are also
  planning to interview Flex operators. Otherwise, consultant plans to deliver Task 2 and 3 drafts in
  February
- Prince George's County The Jan. 9th meeting featured discussion about DPWT's current bus stop
  evaluation methods, potential assessment factors, and what future bus stop improvements may
  include. Consultant is planning to produce a Task 2 interim deliverable before the February meeting.
  Latisha Crawford is new at DPWT and will be involved in the project.
- Prince William County Green Infrastructure Study Project team held monthly status meeting
  February 5, noting that Tasks 1 and 2 are complete and noted delivery dates for tasks 3 and 4 are to
  move back by one week. Consultant project manager Laura Bendernagel left the company and was
  replaced by Scott Larsen as project manager.
- Prince William County Yorkshire Multimodal Corridor Planning Study Survey results were processed, and the project team prepared for wideshield audit, community meeting, and stakeholder meeting. All these events were scheduled for mid-February.
- Rockville, City of Mannakee Street Complete Streets Feasibility Study The Consultant continued reviewing traffic operation findings for the study area and coordinating count collection at Mannakee Street and Carr Avenue. The Draft Existing Conditions Report was also distributed to the work team for comment.
- Takoma Park Laurel Avenue Street Closure Traffic Study The contractor delivered the draft Existing Conditions memo. The contractor developed scenario assumptions and began analysis.

Staff launched the next solicitation for TLC and RRSP, which will be conducted between January 5 and March 8, 2024. Potential applicants could submit an abstract by January 23 to seek preliminary feedback about project concepts. Fourteen abstracts were received and staff provided comments by the end of January.

Staff hired an intern to assist with the TLC, RRSP, and TWR programs, and TAP. The intern will be on staff between January and May of 2024.

Task 10	BUDGET	Billed this month	% Funds Expended	UPWP Page
TPB MANAGEMENT AND SUPPORT	\$1,707,259	\$63,285	35%	71

#### **10. TPB MANAGEMENT AND SUPPORT**

#### <u>Transportation Planning Board Committee Support and Management</u>

This task includes activities not attributable to specific tasks in the work program but provides overall support for and management of the TPB and UPWP related activities.

- Provide administrative arrangements (such as preparation and distribution of meeting materials) and staff support for TPB and its various Committees, Sub-Committees, Task Forces and special TPB work groups meetings.
- Respond to 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.
- Participate in meetings of other agencies whose programs and activities relate to and impact the TPB work program.
- Coordination of TPB Planning Activities with Program Directors day-to-day management of and allocation of staff and financial resources.
- Monitoring of all work program activities and expenditures.

Staff support was provided for the monthly meetings of the following committees and subcommittees:

- State Technical Working Group (STWG)
- TPB Technical Committee
- TPB Steering Committee
- MWCOG Board meetings
- Transportation Planning Board (TPB)
- MATOC Steering Committee
- TPB Community Advisory Committee (CAC)
- Access for All (AFA)
- Regional Public Transportation Subcommittee (RPTS)
- Bicycle & Pedestrian Subcommittee
- COG Planning Directors
- TPB Freight Subcommittees
- CAOs Monthly
- System Performance Operation & Technology Subcommittee (SPOTS)

The Staff Director gave overall program management oversight into all the Department's activities. Work activities the Director was involved in during the month of January 2024 FY 2024 includes:

- Discussions, review, and finalization of the agenda topics for the TPB's Technical Committee, State Transportation Working Group (STWG) and Board meetings. This includes meeting with the Program Directors and project staff to review the progress and briefing materials for the Program Directors and project staff to review the progress and briefing materials.
- Participation in the STWG, TPB Technical, TPB Steering Committee, TPB's Citizen's Advisory Committee and the TPB Board Meetings.

Other additional activities for the TPB Staff Director for the month of January 2024 FY 2024 includes Telephone / Web Ex / Microsoft Teams Communications:

- COG Board Executive Committee Lunch
- TPB & CM Henderson
- Meeting w / Supervisor Walkinshaw, AFA Chair
- WMATA Meeting @ Interim Report
- DDOT FTA 5303 Funding
- TRB Meeting Prep. Call

- COG Board Meeting
- COG-WMATA Meeting @ Regional Transit Planning
- Regional Transit Plan Development Follow-up Discussion WMATA Staff
- Meet w/ Ra Amin, CAC Chair
- Region Forward Coalition Meeting
- Introducing CM Frumin to the TPB Roles & Responsibility
- Metro Funding Legislation VA/MD/DC

#### **UPWP**

The UPWP activities include:

- Supervise the preparation, negotiation, and approval of the annual work program and budget.
- involving the State Transportation Agencies, the TPB Technical Committee, the TPB Steering Committee and the TPB.
- Preparation of monthly UPWP progress reports for each of the state agencies administering planning funding and prepare all necessary federal grant applications submissions.
- Review all monthly UPWP invoices going to each of the state agencies administering planning *funding*.

Task 11	BUDGET	Billed this month	% Funds Expended	UPWP Page
TECHNICAL ASSISTANCE	\$2,215,511	\$8,559	2%	73
District of Columbia	\$330,930	\$0	0%	73
Maryland	\$707,967	\$0	0%	75
Virginia	\$664,437	\$8,559	7%	77
Regional Transit	\$512,177	\$0	0%	79

#### **11. TECHNICAL ASSISTANCE**

#### 11.A District of Columbia

1. Program Development, Data Requests, and Miscellaneous Services

No. Activity.

#### 2. Regional Safety Program

As part of the Regional Safety Program, technical assistance projects were partially funded under the District of Columbia Technical Assistance Program. See Regional Safety program section of this progress report for more details.

#### 3. Transportation / Land Use Connections Program

Although the FY 2024 UPWP identifies this subtask for support for the Transportation Land-Use Connections (TLC) Program, no TLC projects are being funded in FY 2024 through this subtask. As a result, this subtask is identified in the progress report as a placeholder to align with the UPWP document, however, no activity is anticipated during FY 2024.

#### 4. Other Tasks to Be Defined

No. Activity.

#### 11.B Maryland

#### 1. Program Development, Data Requests, and Miscellaneous Services

No activity.

#### 2. Project Planning, Feasibility, and Special Studies

No activity.

#### 3. Transportation / Land Use Connections Program

As part of the Transportation Land-Use Connections Program, four technical assistance projects in Maryland were fully or partially funded under this PE number. The projects were completed on time and within budget by the end of the fiscal year. See TLC item above (9.3) for further details about the TLC Program.

#### 4. Regional Safety Program

As part of the Regional Safety Program, technical assistance projects were partially funded under the Maryland Technical Assistance Program. See the Regional Safety program section of this progress report for more details.

#### 5. Other Tasks to be defined

No activity.

#### 11.C Virginia

#### 1. Program Development, Data Requests, and Miscellaneous Services

No activity.

#### 2. Travel Monitoring and Survey

Staff finalized the review of all the transmittal files (traffic, active transportation, and transit ridership data) from the contractor for the VDOT I-66/I-395 Mode Share study.

Staff reviewed all the transmittal files for the I-66 Outside the Beltway counts for the Mode Share study add-on.

Staff contacted all transit operators to request more transit ridership data for the VDOT I-66/I-395 Mode Share study.

Staff reviewed and accepted the corrected Fall 2023 Active Transportation study data from the consultant. Staff requested the geodatabase from the consultant.

#### 3. Travel Demand Modeling

No activity.

#### 4. Transportation / Land-Use Connections Program

As part of the Transportation Land-Use Connections Program, three technical assistance projects in Virginia were fully or partially funded under this PE number. The projects were completed on time

and within budget by the end of the fiscal year. See TLC item above (9.3) for further details about the TLC Program.

#### 5. Regional Safety Program

As part of the Regional Safety Program, technical assistance projects were partially funded under the Virginia Technical Assistance Program. See the Regional Safety program section of this progress report for more details.

#### 6. Other Tasks to be Defined

No activity.

#### 11.D Regional Transit

# <u>1. Program Development, Data Requests, and Miscellaneous</u> No Activity.

#### 2. Transit Within Reach Program

For two (DC and Gaithersburg) of the three new TWR projects, task orders were signed and kickoff meetings were conducted. For the third project (Fairfax), consultant selection was finalized (following a Technical Selection Committee consensus meeting), a task order was signed, and the kickoff meeting was scheduled.

#### 3. High-Capacity Transit Map

No Activity. This task has been placed on hold until after the next update of the regional long-range transportation plan, *Visualize 2050*, which will provide an updated list of High-Capacity Transit Stations that will then be used as the basis for this map product.

#### 4. Other Tasks to be Defined

No activity.

#### CONTINUOUS AIRPORT SYSTEM PLANNING PROGRAM

#### **Program Management**

- COG/TPB staff arranged logistics and supported the January 25, 2024 meeting of the Aviation Technical Subcommittee.
- COG/TPB staff has updated the monthly enplanement data.
- COG/TPB staff submitted the 2024-2028 Airport Capital Improvement Program (ACIP) to FAA.

#### Conduct and Process 2022/23 Baltimore-Washington Regional Air Passenger Survey (APS)

- COG/TPB staff developed initial tabulations from the 2023 APS full-scale survey for all three airports (BWI, DCA, IAD).
- COG/TPB staff reviewed and provided feedback to the contractor on the draft final report of the 2023 APS full-scale survey for all three airports (BWI, DCA, IAD).
- COG/TPB staff delivered a briefing on the 2023 APS focusing on initial findings from the survey data to the Aviation Technical Subcommittee on January 25.

#### Air Cargo Element Update

 Staff initiated development of an internal scope of work and timeline for preparing the Air Cargo Element Update study.

#### **Ground Access Travel Time Study**

COG/TPB staff delivered a briefing on the Ground Access Travel Time Study including
extensive findings from the study that assessed ground access travel to and between the
three airports (BWI, DCA, IAD) on January 25.

COG/TPB staff began developing an outline and template for the Ground Access Travel Time Study report.

#### **PROGRESS ON PLAN PRODUCTS**

#### Task 5. Travel Forecasting

- 1. Staffing the TPB Travel Forecasting Subcommittee (TFS). In FY 24, the TFS met on the following dates: 7/21/23, 9/22/23, 11/17/23, and 1/26/24.
- 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.
  - a. Completed development of a new base transit network, reflecting transit network service in December 2022. This included the update of rail service for four time-ofday periods. Staff developed an internal user's guide regarding developing base transit networks.
  - b. Staff developed and documented a tool to compare lists of air conformity transportation projects from the Project InfoTrack (PIT) database with those from the previous air quality conformity analysis.
  - c. Updates to networks files: Gen3 Model networks: Staff updated the capacities of road links on two regional screenlines in DC (screenlines #2 and #4) to account for roadside parking in DC. This was done in the 2018 and 2045 networks.
  - d. COGTools software and geodatabase: Staff developed an automated procedure in COGTools that performs Quality Assurance/Quality Control (QA/QC) checks on the network files exported from the Unified Network Database. The new procedure is being updated, based on staff feedback, and documented.
- 3. 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.
  - a. Gen2/Ver. 2.4 Travel Model
    - Staff developed the Gen2/Ver. 2.4.6 Travel Model, which is to be used for the upcoming 2025 LRTP. Staff prepared a transmittal package for the model in July.
    - ii. COG's Travel Forecasting and Emissions Analysis (TFEA) staff processed the draft Round 10, TAZ-level Cooperative Forecast socio-economic data for travel demand modeling, which includes interpolating the data (from five-year increments to annual increments) and applying the jurisdiction-level employment definition factors to the zone-level data, to ensure that a consistent definition of employment is used throughout the modeled area. Due to some anomalies found in the TAZ-level data, a revised version of the draft data will likely be released in February.
  - b. Gen3, Phase 1 Travel Model: Completed in FY 23.
  - c. Gen3, Phase 2 Travel Model
    - i. Sensitivity tests

- Proof of concept test of the autonomous vehicle (AV) model: COG staff conducted a model run for the 2045 baseline scenario, set up the calibration process, and adjusted the AV targets by income segment. Work has been documented in a memo and a chapter of the sensitivity test report.
- 2. Proof of concept test of conducting equity analyses: Staff conducted model runs for the 2018, 2045 No Build, and 2045 Build scenarios. Staff started to generate the equity indicator summary tables for the three scenarios.
- ii. COG staff developed a Python based view-from-space (VFS) summary script.
- iii. Staff successfully replicated the calibration processes for the telecommute frequency model and auto ownership model (December 2023).
- iv. Documentation
  - Consultant finalized the Gen3 Model User's Guide, dated January 31, 2024.
  - 2. Consultant updated the Phase 2 calibration and validation report on January 18.
  - 3. Phase 2 sensitivity testing report: In progress.
- d. Travel model-related data requests: Staff have responded to 27 data requests.
- 4. Keep abreast of best practices in travel demand modeling.
  - a. Staff following developments from the Transportation Research Board (TRB) and the U.S. DOT Travel Model Improvement Program (TMIP) email distribution list.
  - b. Modeling staff attended the regular Tuesday and Thursday ActivitySim Consortium meetings. The consortium includes 11 public-sector agencies, including MPOs and DOTs.
  - c. Staff attended the Association of Metropolitan Planning Organizations (AMPO) Annual Conference in Cleveland, Ohio from September 26 to 28, which covered topics in travel demand modeling, climate change planning, and equity analysis.
  - d. Staff attended the Transportation Research Board (TRB) 103rd Annual Meeting, January 7-11, in Washington, D.C.

#### Task 6. Mobile Emissions Planning

- 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.
  - a. Staff continued to attend coordination meetings related to scheduling tasks for the 2025 update of the region's LRTP (Visualize 2050), including the air quality conformity analysis, system performance, and environmental justice analysis.
  - b. Staff communicated with VDOT regarding whether specific projects are "regionally significant" for the purposes of air quality conformity.
- 2. Keep abreast of federal requirements related to air quality conformity determinations and the EPA's Motor Vehicle Emission Simulator (MOVES) software.
  - a. Staff attended MOVES4 webinars hosted by the EPA in July and September.
  - b. Staff conducted test runs of both MOVES3 and MOVES4 and continued to monitor model development activities related to the MOVES model.
- 3. 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).
- 4. Coordinate with MWAQC and its subcommittees to support development of new motor vehicle emissions budgets (MVEBs), if needed, to address requirements of 2008 and 2015

- ozone NAAQS: Staff continued to attend coordination meetings, including MWAQC and MWAQC-TAC.
- 5. Climate Change Planning: Provide support for efforts to mitigate climate change due to the on-road transportation sector.
  - a. Staff coordinated planning activities with the state departments of transportation related to the Carbon Reduction Program (CRP). This program, recently established by the Bipartisan Infrastructure Law (BIL), provides funds for projects designed to reduce on-road transportation emissions.
  - b. Staff participated in electric vehicle (EV) planning activities. DEP staff and TPB staff held internal planning meetings for the Regional Electric Vehicle Deployment (REVD) Working Group. TPB staff and ICF staff (project consultant) presented an overview of the Regional Electric Vehicle Infrastructure Implementation (REVII) Strategy project at the July REVD meeting.
  - c. Staff attended two EPA webinars related to the CPRG ("Programs, Tools, and Resources Used for Evaluation and Quantification of GHG Reduction Measures" on August 2 and "The Landscape of Measure-level GHG Quantification in Existing Climate Action Plans" on August 9).
  - d. Staff finalized the selection process and chose a vendor to provide TPB staff with software to decode Vehicle Registration data, also referred to as Vehicle Identification Number (VIN) data.
  - e. Staff continued to participate in the FHWA Every Day Counts (EDC) Initiative
    - i. Staff attended a half-day peer exchange called "Integrating GHG Assessment and Reduction Targets in Transportation Planning: Forecasting Emissions, Scenario Analysis, and Lifecycle and Infrastructure Emissions" (December 5).
    - ii. Staff prepared a presentation on the COG/TPB climate change planning experience, focusing on the Climate Change Mitigation Study of 2021, and briefed the attendees on these efforts during the peer exchange meeting.
    - iii. Staff also attended the kick-off meeting for Technical Practitioner Panel (TPP) to collaborate for the update of FHWA's 2013 Handbook for Estimating Transportation Greenhouse Gases for Integration into the Planning Process.
- 6. Air-quality-related data requests: This fiscal year, staff have responded to 10 air-quality-related data requests.
- 7. Joint letter: Bonds, Anita, Chair, Metropolitan Washington Air Quality Committee (MWAQC), Takis Karantonis, Chair, Climate Energy and Environment Policy Committee (CEEPC), Reuben Collins, Chair, National Capital Region Transportation Planning Board (TPB). Letter to Ann E. Carlson and National Highway Traffic Safety Administration. "Support for the Proposed Rule to Establish Corporate Average Fuel Economy Standards for Passenger Cars and Light Trucks for Model Years 2027–2032 and Fuel Efficiency Standards for Heavy-Duty Pickup Trucks and Vans for Model Years 2030–2035; Docket ID No. NHTSA–2023–0022," September 27, 2023.

#### Task 7. Travel Monitoring and Data Programs

- 7.1 Transportation Research and Analysis
  - Presentations, visualizations, and information reports on travel monitoring and travel trends analyses
    - Ongoing
  - Recommendations, workplan, and documentation of initial activities for ongoing Regional Travel Survey.
    - o Ongoing

- Recommendations, workplan, and documentation of initial activities for Regional Transit Onboard Survey activities
  - o Ongoing, including consulting with TPB Committees
- Workplan and documentation of activities for inter-city bus and rail survey.
  - o Ongoing, task order proposal received from contractor.
- Recommendations, workplan, and documentation of initial activities for Regional Bike Count Program Along Regional Network
  - Ongoing
- Technical Support
  - o Ongoing

#### 7.2 Data Management and Visualization Services

- Data management plan recommendations and documentation
  - o Ongoing
- Travel monitoring datasets to support PBPP and Gen3 modeling requirements
  - Ongoing
- Travel trends and dashboard and visualizations
  - Ongoing
- Technical reports/memoranda
  - o Ongoing, as needed.
- Presentations
  - o Ongoing, as needed.

#### <u>Task 8. Regional Land Use and Transportation Planning Coordination</u>

#### 8.1 Regional Land Use and Transportation Planning Coordination

- Analysis of Activity Center and High-Capacity Transit Station area historic trends and forecasts
  - Ongoing
- Presentations, visualizations, and information reports
  - Ongoing
- Workplan and documentation of initial activities for updating Regional Activity Centers Map
  - o Ongoing, workplan approved by Planning Directors Technical Advisory Committee.
- Updated Cooperative Forecasting land activity forecasts and documentation, if necessary
  - Concluding Round 10. Need to update Round 10 not yet determined.
- Technical support
  - Ongoing
- Annual Baseline Employment Guidance
  - Work commences later in the fiscal year

#### CONTINUOUS AIRPORT SYSTEM PLANNING PROGRAM

- Conduct and Process 2023 Washington-Baltimore Regional Air Passenger Survey
  - Data collection complete. Processing under way
- Air Cargo Element Update
  - Scope of work initiated.
- Ground Access Travel Time Study
  - Ongoing

# FY 2024 TRANSPORTATION PLANNING BOARD COG/TPB BUDGET EXPENDITURE SUMMARY

January 2024

Odii	DC, MD and VA		BILLED	
	Bo, WB and V/		DILLED	
	FTA, FHWA and LOCAL	FUNDS	THIS	% FUNDS
	BUDGET TOTAL	EXPENDED	MONTH	EXPENDED
Long-Range Transportation Planning				
Long - Range Transportation Planning	1,136,668.51	525,341.69	76,561.32	46%
Subtotal	1,136,668.51	525,341.69	76,561.32	46%
2. Transportation Improvement Program		,		
Transportation Improvement Program	353,708.82	108,588.35	18,087.89	31%
TIP Database Support	230,000.00	132,448.75	37,842.5	58%
Subtotal	583,708.82	241,037.1	55,930.39	41%
3. Planning Elements	•		,	
Congestion Management Process	833,870.74	226,945.75	19,927.06	27%
Systems Performance, Ops & Tech Planning	430,355.33	192,409.29	25,277.67	45%
Transportation Emergency Preparedness Planning	139,196.00	76,279.87	12,133.32	55%
Transportation Safety Planning	407,497.86	72,383.52	13,100.73	18%
Bicycle & Pedestrian Planning	198,851.96	95,109.41	15,017.13	48%
Regional Public Transportation Planning	573,566.35	230,001.89	10,942.83	40%
			16,893.92	24%
Freight Planning	396,491.66	95,312.83		
Metropolitan Area Transportation Operation Coord Program Planning	171,139.72	61,095.18	15,513.32	36%
Performance-Based Planning & Programming	216,047.96	88,429.14	21,699.09	41%
Resilience Planning	538,120.51	242,962.85	36,283.79	45%
Subtotal	3,905,138.09	1,380,929.73	186,788.86	35%
4. Public Participation				
Public Participation	753,904.21	382,198.95	45,260.38	51%
Subtotal	753,904.21	382,198.95	45,260.38	51%
5. Travel Forecasting				
Network Development	1,173,454.94	507,619.97	54,578.02	43%
Model Development	2,268,902.50	718,335.37	83,141.5	32%
Subtotal	3,442,357.44	1,225,955.34	137,719.52	36%
6. Mobile Emissions Planning				
Air Quality Conformity	1,221,950.95	533,859.42	65,303.4	44%
Mobile Emissions Analysis	1,700,061.94	626,647.46	78,676.17	37%
Subtotal	2,922,012.89	1,160,506.88	143,979.57	40%
7. Travel Monitoring and Data Programs				
Research & Analysis	4,458,336.48	674,439.78	62,360.3	15%
Data Visualization & Management	886,626.84	292,868.72	27,135.22	33%
Subtotal	5,344,963.32	967,308.5	89,495.52	18%
8. Planning Scenarios and Socioeconomic Forecasting				
Socioeconomic Forecasting	1,211,231.11	457,205.56	61,067.77	38%
Subtotal	1,211,231.11	457,205.56	61,067.77	38%
9. Complete Street Mobility and Enhancement Programs				
Transportation and Land Use Connections Program	622,450.01	135,237.49	21,308.01	22%
Enhanced Mobility Grant Program	97,904.69	54,922.56	3,940.12	56%
Transportation Alternatives Set-Aside Programs	37,912.20	34,336.8	5,179.28	91%
Regional Roadway Safety Program	377,004.84	11,879.08	2,254.39	3%
Subtotal	1,135,271.74	236,375.93	32,681.8	21%
10. TPB Support and Management	,	11,111	,,,,	
TPB Support and Management	1,707,259.82	604,581.76	63,285.42	35%
Subtotal	1,707,259.82	604,581.76	63,285.42	35%
Core Program	22,142,515.95	7,181,441.44	892,770.55	32%
A. District of Columbia Technical Assistance	220 024 42	0	0	00/
Program Development & Misc.	330,931.43	U	U	0%
B. Maryland Technical Assistance	707.000.44		٥١	00/
Program Development & Misc.	707,968.41	0	0	0%
C. Virginia Technical Assistance			0.550 (5)	
	221 125 1			
Program Development & Misc.	664,437.34	47,430	8,559.19	7%
D. Public Transit Technical Assistance				
D. Public Transit Technical Assistance Program Development & Misc.	512,176.17	0	0	0%
D. Public Transit Technical Assistance				

#### FY 2024 TRANSPORTATION PLANNING BOARD FINANCIAL STATUS OF TECHNICAL ASSISTANCE January 2024 SUPPLEMENT 1

	TOTAL	SOFFLEMEN	FTA/STA/LOCAL		PL FUNDS/LOCAL	
	AUTHORIZED	TOTAL	AUTORIZED	FTA	AUTORIZED	FHWA
	BUDGET	EVDEDITUBES	BUDGET	EVDENDITUDES	PLIDCET	EVDENDITUDES
A. District of Columbia Technical Assistance	BUDGET	EXPEDITURES	BUDGET	EXPENDITURES	BUDGET	EXPENDITURES
	14,999.52	0.00	442.54	0.00	14,556.98	0.00
Program Development, Data Requests, & Misc						0.00
Regional Roadway Safety Program	30,000.00	0.00	885.11	0.00	29,114.89	0.00
Transportation/Land Use Connections Program	0.00	0.00	0.00	0.00	0.00	0.00
TBD	285,931.91	0.00	8,436.07	0.00	277,495.84	0.00
Subtotal	330,931.43	0.00	9,763.73	0.00	321,167.70	0.00
B. Maryland Technical Assistance						
Feasibility/Speacial Studies	25,001.54	0.00	737.64	0.00	24,263.90	0.00
Program Development & Misc	14,999.52	0.00	442.54	0.00	14,556.98	0.00
Planning Studies	185,000.00	0.00	5,458.20	0.00	179,541.80	0.00
TBD	172,967.35	0.00	5,103.19	0.00	167,864.16	0.00
Transportation Performance Measures	310,000.00	0.00	9,146.17	0.00	300,853.83	0.00
Subtotal	707,968.41	0.00	20,887.75	0.00	687,080.66	0.00
C. Virginia Technical Assistance						
Program Development & Misc	14,999.52	594.81	442.54	17.55	14,556.98	577.26
MARC - VRE Runthrough - VA	185,000.00	0.00	5,458.20	0.00	179,541.80	0.00
Sub Regional Plan Studies	0.00	36.00	0.00	1.06	0.00	34.94
TBD	17,892.00	0.00	527.88	0.00	17,364.12	0.00
Transportation/Land Use Connection Program	185,000.00	0.00	5,458.20	0.00	179,541.80	0.00
Travel Demand Modeling	11,244.96	0.00	331.77	0.00	10,913.19	0.00
Travel Monitoring	250,300.86	46,782.29	7,384.82	1,380.25	242,916.04	45,402.04
VA Other Tasks	0.00	16.90	0.00	0.50	0.00	16.40
Subtotal	664,437.34	47,430.00	19,603.41	1,399.36	644,833.93	46,030.64
D. Public Transportation Technical Assistance						
Program Development & Misc	14,999.52	0.00	14,999.52	0.00	0.00	0.00
Regional HCT Graphic/Map	90,000.00	0.00	90,000.00	0.00	0.00	0.00
TBD	157,176.65	0.00	157,176.65	0.00	0.00	0.00
Transit Within Reach Solicitation	250,000.00	0.00	250,000.00	0.00	0.00	0.00
Subtotal	512,176.17	0.00	512,176.17	0.00	0.00	0.00
Grand Total	2,215,513.35	47,430.00	562,431.06	1,399.36	1,653,082.29	46,030.64