

# FY 2024



National Capital Region  
**Transportation Planning Board**

**Work Program Progress Report**  
**December 2023**

**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](http://www.mwco.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 December. 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.

<b>1. LONG-RANGE TRANSPORTATION PLANNING</b> 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	<b>7. TRANSPORTATION RESEARCH AND DATA PROGRAMS</b> 7.1 Transportation Research and Analysis 7.2 Data Management and Visualization Services
<b>2. TRANSPORTATION IMPROVEMENT PROGRAM</b> 2.1 Transportation Improvement Program 2.2 TIP Database Support	<b>8. REGIONAL LAND USE AND TRANSPORTATION PLANNING COORDINATION</b>
<b>3. PLANNING ELEMENTS</b> 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	<b>9. MOBILITY AND ENHANCEMENT PROGRAMS</b> 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
<b>4. PUBLIC PARTICIPATION</b> 4.1 Public Participation and Outreach 4.2 Communications	<b>10. TPB MANAGEMENT AND SUPPORT</b> 10.1 TPB Committees Support and Management and UPWP
<b>5. TRAVEL FORECASTING</b> 5.1 Network Development 5.2 Model Development and Support	<b>11. TECHNICAL ASSISTANCE PROGRAM</b> 11.1 DDOT 11.2 MDOT 11.3 VDOT 11.4 Regional Transit Technical Assistance
<b>6. MOBILE EMISSIONS PLANNING</b> 6.1 Air Quality Conformity 6.2 Mobile Emissions Analysis	<b>CONTINUOUS AIRPORT SYSTEM PLANNING PROGRAM (CASP)</b>

Task 1	BUDGET	Billed this month	% Funds Expended	UPWP Page
LONG RANGE TRANSPORTATION PLANNING	\$1,136,668	\$94,577	39%	41

**1. LONG-RANGE TRANSPORTATION PLANNING**

***Task 1.1 – Visualize 2045 Implementation***

Staff began drafting additional requested content for the CMP report update. Staff met with agency staff on 2045 project resubmission questions. Staff coordinated with WMATA and MDOT staff to present to the TPB on the status of the MD Op Lanes and Metro funding given the changes that have arisen since the 2045 plan adoption.

***Task 1.2 – Environmental Justice and Equity***

Staff made arrangements for Spanish translation for the upcoming Visualize 2050 March comment period form.

***Task 1.3 – Future Plan Development***

Staff held the 2050 monthly team meeting and continued internal staff meetings to review project inputs and clarify staff’s understanding of the project details in order to request additional information from agencies. Staff reviewed the financial, air quality, project description and other key information of project inputs submitted to the PIT database for the Visualize 2050 air quality conformity analysis. Staff held another three Q&A meeting for stakeholders on PIT inputs and met individually with stakeholders to provide project input assistance.

Staff continued tweaking the Metroquest comment form and shared it internally with the full team for feedback. Staff wrote the public comment period summary report. Staff provided an overview to the TPB of the summary for the V2050 first comment period and coordinated presentations on key project inputs from MDOT and WMATA. Staff reported on project inputs progress to the Technical Committee. Staff finished organizing draft 2050 plan content continued from the 2045 plan. Staff drafted a mapping work plan, formed a small internal group, and initiated regular meetings in December.

Staff worked on drafting additional new 2050 logo options with the graphic designer. Staff presented the draft Visualize 2050 logo options to staff to determine a staff preference and solicited additional feedback from STWG members. Staff began drafting some plan sections related to current system performance.

***1.4 – Federal Compliance***

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.

Task 2	BUDGET	Billed this month	% Funds Expended	UPWP Page
TRANSPORTATION IMPROVEMENT PROGRAM	\$583,710	\$17,510	32%	43

**2. TRANSPORTATION IMPROVEMENT PROGRAM**

**2.1- Transportation Improvement Program (TIP)**

At its meeting on Friday, December 1, the TPB Steering Committee approved an amendment to the FY 2023–2026 TIP that was exempt from the air quality conformity requirement. DDOT requested this amendment to add \$4.75 million in federal and District funding to the 16th Street Bridge over Piney Branch Parkway NW Rehabilitation project.

During the month of December, PTB staff reviewed and approved three 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 December under the baseline maintenance and support contract included:

- Add recently created “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/Visuzlize 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	\$254,532	31%	45

**3. PLANNING ELEMENTS**

**3.1 Performance-Based Planning**

Staff briefed the TPB and TPB Technical Committee on the proposed targets for the federally required annual Highway Safety and Transit Safety performance measures, which were adopted by

the board on December 20. Additional information on safety actions by TPB/COG and in the region was prepared in response to questions.

Staff attended the quarterly VDOT-OIPI-MPO meeting.

Staff met with State DOTs and adjoining MPOs on the new final rulemaking from FHWA on a Greenhouse Gas (GHG) Emissions performance measure. Staff prepared briefing materials for the January meetings on the new rulemaking.

### ***3.2 Congestion Management Process***

The regularly scheduled quarterly meeting of the Vehicle Probe Data Users Group was organized and conducted on December 14, discussing a comparison of data supplied by vendor StreetLight to ridership data from Virginia transit agencies, as well as a demonstration of Regional Integrated Transportation Information System report templates.

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

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

Staff prepared for future meetings of the Systems Performance, Operations, and Technology Subcommittee.

### ***3.4 Transportation Emergency Preparedness Planning***

The regularly scheduled December 13 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 presented finalized annual highway safety targets to the Technical Committee on December 1 and to the TPB on December 20. The finalized targets were adopted by the board on December 20, 2023. As requested by the TPB, staff additionally developed and briefed the TPB on potential safety work activities for 2024.

In addition, the Transportation Safety Subcommittee met on December 12, 2023. The meeting agenda included briefings by staff about the National Capital Region's annual highway safety targets, the Street Smart Fall campaign, and results from the Subcommittee's annual member survey.

### ***3.6. Bicycle and Pedestrian Planning***

At its December 12 meeting the Transportation Safety Subcommittee was briefed on the Fall 2023 Street Smart Pedestrian and Bicycle Safety campaign.

At its December 14 meeting the Community Advisory Committee was briefed on the updated National Capital Trail Network. A web page, memo, and presentation on the National Capital Trail Network were prepared for the January 5 TPB Technical Committee meeting.

### ***3.7 Regional Public Transportation Planning***

The Regional Public Transportation Subcommittee did not meet in December.

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, with interim products presented to the TPB Technical Committee at its December meeting. Staff worked to develop a scope of work for a detailed intercity bus and rail travel study in 2024.

Staff attended several meetings on the WMATA FY 2025 budget. Staff also conducted financial analysis and attended meetings as the region considers funding for WMATA. In addition, Staff attended the monthly NVTC MAC meeting and a Zero Emission Bus working group meeting.

### ***3.8. Freight Planning***

TPB staff held a planning session on December 15 with the Freight Subcommittee Chair to identify topics and speakers for future Subcommittee meetings.

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

The regularly scheduled December 12, meeting of the MATOC Severe Weather Coordination Working Group was organized and conducted, hosted at the Montgomery County Department of Transportation facility in Rockville, Maryland, discussing preparations and coordination for transportation agency response to the winter weather season.

The regularly scheduled December 15 virtual meeting of the MATOC Steering Committee was organized and conducted, discussing communications, coordination, and Traffic Incident Management topics.

### ***3.10 Resiliency Planning***

In December, staff efforts in climate resilience and transportation initiatives continued both generally and regarding the Phase II Transportation Resiliency Study. Staff actively participated in the Resilient Communities Roundtable hosted by M&T Bank, where a comprehensive presentation on COG's climate resilience endeavors was delivered. Drawing from the insights gained from the fifth National Climate Assessment report, staff conducted a review to discern its implications for transportation resilience planning. The annual DC Silverjackets meeting provided an invaluable platform for engaging discussions on flooding issues in the DC area, coupled with a detailed briefing on the flood mitigation project at the Tidal Basin. TPB staff continued to proactively engage with key stakeholders, including a meeting with new DDOT environmental staff and joining the AMPO Environment and Resilience interest group. This involvement has catalyzed the commencement of planning for quarterly webinars, enhancing our collaborative efforts within the broader environmental and resilience community.

Progress on existing projects continues – staff continue to provide ongoing support for the Prince William County TLC project and the Transportation Resilience Improvement Plan (TRIP). TPB resilience planner completed review and finalization of the phase 2 vulnerability assessment report, scheduled and held an “office hours” style meeting to address stakeholder queries on the resilience project submission form, scheduled the third TRIP working group meeting, and prepared a comprehensive presentation for the TPB Board for the January 2024 meeting. The dedicated efforts in collecting resilience project submissions for TRIP, including providing guidance to localities on project eligibility and specifics, underline our commitment to fostering a resilient and sustainable transportation landscape.

Task 4	BUDGET	Billed this month	% Funds Expended	UPWP Page
PUBLIC PARTICIPATION	\$753,904	\$53,211	45%	53

**4. PUBLIC PARTICIPATION**

**4.1 Public Participation and Outreach**

Staff analyzed comments received during a comment period on project inputs for the TPB’s long-range plan update. The comment period was conducted between February 15 and November 30, 2023. A total of 997 project comments were received. The comments were focused on projects that were included in the plan's constrained element, along with soliciting ideas for new projects. Staff developed a report on the input, which was presented to the Technical Committee and to the TPB.

The December meeting of the TPB Community Advisory Committee (CAC) was held on December 14. The meeting featured briefings and discussion on the development of COG’s Priority Climate Action Plan and the update of the National Capital Trail Network.

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 vacancies are filled.

Staff began 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.

**4.2 Communications**

The following stories were featured in TPB News and in COG newsreleases:

Transportation Planning Board Elects District of Columbia’s Christina Henderson to serve as 2024 chair – posted December 20, 2023

Transportation Planning Board approves \$10.2 million to fund transportation services to improve mobility for people with disabilities and older adults – posted December 20, 2023

**Staff updated pages on the COG website related to transportation including:**

Plans, Visualize 2045, TPB Comment Form, Climate Change

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

American Legion Bridge/I-270 open house, COG news release on Metro funding commitment, Virginia transportation funding, new COG video, recognition of COG board chairs, December TPB meeting agenda, WMATA interim report, 2024 TPB chairs, Enhanced Mobility grant funding, Safe Streets regional funding awards, TPB Chair Collins recognition, TPB committee chairs recognition, TPB departing member recognitions

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

Visualize 2050 logo finalized with contracted designer.

Task 5	BUDGET	Billed this month	% Funds Expended	UPWP Page
TRAVEL FORECASTING	\$3,442,357	\$181,955	32%	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, the region’s Long-Range Transportation Plan. 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 the General Transit Feed Specification (GTFS). In December, staff combined the GTFS scheduling data with the paper scheduling data and performed the first round of GTFS to transit network database mapping. Staff is in the process of conducting manual matching based on the resulting mismatch table.

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. Staff coordinated with the Virginia Department of Transportation (VDOT) regarding the allowance of trucks on the Express Lanes.

Staff developed and documented a tool to compare lists of air conformity transportation projects from the PIT database with those from the previous air quality conformity analysis. The tool can identify which projects have changed, and what type of changes have been made to each project. Staff held an internal training session for this tool.

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. In December, staff responded to the comments received on November 27 following an internal review of the module. This task is currently on hold due to other work priorities.

Staff are in the process of fixing all DC road lanes (considering roadside parking and new sidewalk space since 2021) for the upcoming 2025 LRTP update. In December, staff modified the COGTools TIP-UP process function which enables the updating of the number of lanes by time of day in the network database. The new function will be tested with a draft TIP-UP table.

Staff reviewed and signed off on network revisions that the consultant proposed as part of the Gen3 Model calibration and validation work. Staff plan to include these network revisions, where appropriate, in the current network database.

Staff is in the process of developing a highway and transit network report for the Gen3 Travel Demand Model. This report will be included in the Gen3 Model transmittal package when the model is released for production use.

**5.2 Model Development and Support**

The Travel Forecasting Subcommittee (TFS) meets in odd-numbered months, so it did not meet in December. Nonetheless, staff prepared meeting highlights for the November 17 TFS meeting.



### **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 2025 LRTP Update. In December, staff continued to distribute the transmittal package for the model in response to a series of data requests.

COG's Department of Community Planning and Services (DCPS) staff is currently working with local jurisdictions to fix errors found in the draft Round 10.0 Cooperative Forecast land use data. Staff will re-process the data once it is updated to prepare the land use input files for the Gen2 Model. The updating of the exogenous model inputs based on the Round 10.0 cooperative land use forecasts data was put on hold due to the ongoing investigation of the draft Round 10.0 land use data.

Staff compiled the observed daily vehicles miles of travel (VMT) data for the year 2022. The data has been used to support both model development and model application activities. As of December, staff have obtained data from DC, Maryland, and West Virginia, but are still waiting for the Virginia data.

### **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 one check-in meeting with RSG and BMG, the consultants on the Gen3 Model development project on December 20.
- Staff continued to work with RSG on the development of the Gen3, Phase 2, Model. Specifically,
  - COG staff tested the "develop" branch of the Gen3 Model with the updated input files. RSG's December 20 model run matched COG's test run results.
  - COG staff merged the "develop" branch to the main branch, but RSG staff may make additional updates to the "develop" branch.
  - Staff successfully replicated the calibration processes for the telecommute frequency model and auto ownership model. With the assistance of RSG staff, staff investigated and resolved issues found when executing the calibration processes.
  - Staff reviewed and tested calibration target generation scripts and trip mode choice model calibration scripts. Staff reported model run errors to RSG and requested the Survey Processing Application (SPA) setup and outputs from RSG.
  - COG reviewed the draft Phase 2 model calibration and validation report from RSG. RSG will address the COG comments and finalize the document.
  - As part of the Phase 2 sensitivity testing, COG staff continued to work on two additional tests related to Autonomous Vehicles (AV) and equity:
    - RSG provided feedback on a COG memo, dated November 29, that documents the findings from the AV sensitivity test. Staff finalized the AV sensitivity test memo (dated 12/15/23) based on the RSG comments.
    - Staff completed the equity test and started to work on the documentation. In December, the documentation was put on hold due to other work priorities.

- Staff reviewed the BMG portion of the Phase 2 sensitivity testing report. Staff also documented the findings from the AV sensitivity test in the report. RSG will address the COG comments and finalize the document.
- COG staff continued to work with RSG on the Gen3 Model User's Guide. RSG will finalize the document.
- 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. The preliminary testing results looked reasonable to both COG and RSG staff. Staff plan to rerun all the tests after receiving the final Gen3 Model from RSG. This task was put on hold in December.
  - Per staff request, RSG updated the environment file in the model to include additional libraries.
- RSG continued to work on Task Order 5 tasks. As all the funds for Task 1 (Complete sensitivity testing and model validation) were expended, COG gave permission for RSG to start charging on Task 2 (On-call assistance with the travel model). RSG provided a status update on Task 3 (Gen3 Travel Model, Sharrow implementation) on December 20. Subsequently, COG staff initiated a conversation with RSG regarding the next steps of this task.
- 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 anomalies in the TAZ-level Round 10.0 land use data.

### **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 implement the 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 one data request in December: The request was from VDOT for a loaded-links highway network and auto-driver trip data for the years 2021 and 2023 from the Gen2/Ver2.4.6 Travel Model for an Artificial Intelligence (AI)-based Decision Support System project.

Staff attended ActivitySim Consortium meetings regularly on Tuesdays and Thursdays. Staff also attended a series of ad-hoc partners-only meetings on ActivitySim Phase 9 development. On behalf

of COG, staff reviewed and ranked consultant proposals in response to Phase 9 Informal Request for Proposals (IRFP).

Staff conducted test runs and confirmed that Cube version 6.5.1 replicates results from Cube version 6.5.0. Subsequently, staff upgraded Cube to version 6.5.1 on most of the travel modeling servers. Staff updated a memo, now dated December 15, 2023, that documents the computer specs for the modeling servers.

As COG obtained access to several Big Data products from vendors, staff started to explore the Big Data for model development purposes:

- Staff extracted work Origin-Destination (OD) trip flows, regional screenline volumes, and VMT by jurisdictions within the TPB Planning Area from Teralytics, compared the Teralytics data with the observed data, and shared the findings with Teralytics staff. Staff also transmitted the screenlines shapefile, 2018 link count file, and the highway network shapefile to Teralytics staff per their request.
- Staff attended the StreetLight Data kickoff meeting on December 6 and a StreetLight Data InSight Overview webinar on December 19.

Staff created a draft memo that summarizes the COG/TPB Staff Participation at the 2024 TRB Annual Meeting and solicited input from TPB staff.

Staff attended the TPB Vehicle Probe Data Users Group (VPDUG) Meeting on December 14 and developed a meeting summary for the team.

Staff continued to conduct daily modeling work on AWS cloud servers and work with IT to resolve issues encountered on the AWS servers.

Senior staff continued to train the new model development employee on various work tasks.

---

Task 6	BUDGET	Billed this month	% Funds Expended	UPWP Page
MOBILE EMISSIONS PLANNING	\$2,922,011	\$215,884	35%	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 LRTP (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 to review projects that have been input into the Project InfoTrak (PIT) database for inclusion in the upcoming air quality conformity analysis of Visualize 2050. Staff is using the inputs to develop an updated air quality conformity project input table showing project input changes from the last conformity analysis. Staff finalized a draft version of the program designed to compare the conformity input table with the PIT table and held demonstrations of how to implement the new tool.

Staff also continued to hold question-and-answer sessions for implementing agencies related to coordination of conformity project inputs in the PIT air quality conformity project input table.

Staff continued to coordinate activities with the Maryland Department of Transportation (MDOT) and the Virginia Department of Transportation (VDOT) regarding the project inputs for modeled jurisdictions outside of the TPB Planning Area (e.g., Calvert-St. Mary's MPO in Maryland and the Fredericksburg Area MPO in Virginia). These projects will be listed in the conformity project input table and will be included in the travel modeling for the air quality conformity analysis of 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 MOVES3 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. To facilitate the updated plan approval process, TPB staff responded to an EPA inquiry about the development of Motor Vehicle Emissions Budgets (MVEBs) in the region. This included providing the background of the development of two tiers (Tier 1 and Tier 2) of MVEBs and when and why the Tier 2 budgets were first used for a conformity analysis.

Staff finalized the selection process and chose the vendor tasked with providing TPB staff with software to decode Vehicle Registration data, also referred to as Vehicle Identification Number (VIN) data, as documented in the selection memorandum. These data are used to create various inputs for the EPA MOVES model, which is used to calculate criteria pollutant and greenhouse gas (GHG) emissions. The software procurement process is expected to be completed in January 2024, and it will be used for the upcoming Visualize 2050 air quality conformity and greenhouse gas emissions analyses. To facilitate this process, TPB staff also solicited December 2023 VIN data from the state air agencies (via DEP's point 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 transportation emissions, defined as carbon dioxide emissions from on-road transportation sources. 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 provided a CRP status update to the TPB Technical Committee (Other Business).

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 the COG CPRG Technical Committee meeting (December 15). DEP staff are leading the effort to develop the Priority Climate Action Plan (PCAP) for the Metropolitan Statistical Area with funding from the CPRG. DEP

staff provided a detailed update on the planning efforts for the PCAP at the TPB Technical Committee meeting (item #6).

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 and reviewed the ICF presentation for the January TPB Technical Committee meeting.

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 attended an informational webinar held by the Federal Highway Administration on the measure (December 13) and coordinated with staff from other teams to prepare a summary memorandum for the December TPB meeting (Director’s Report) and for the January TPB Technical Committee meeting.

To further enhance climate change planning in the region, staff continued to participate in various related activities at the national level. In support of the FHWA Every Day Counts (EDC) Initiative, 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). TPB 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. 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 as part of the Every Day Counts initiative entitled “Integrating GHG Assessment and Reduction Targets in Transportation Planning.”

In support of other air quality/GHG planning activities in the region, staff provided the requested MOVES2014b input data from the 2022 Update to Visualize 2045 to a Massachusetts institute of Technology professor working in a research partnership with WMATA to assess the best paths that would allow WMATA to help the region meet its sustainability goals.

As the version of MOVES that was last used in the air quality conformity analysis (MOVES2014b) cannot be used for these types of analyses as of January 2023, TPB staff continued to conduct MOVES model tests using one of the recent versions of MOVES (MOVES3.0.4) and evaluate the impacts of new software on both criteria pollutants and GHG emissions. Staff also continued to evaluate a draft version of the most recent developmental MOVES model, MOVES4, and will continue to monitor model development activities related to the new tool.

Task 7	BUDGET	Billed this month	% Funds Expended	UPWP Page
TRAVEL MONITORING AND DATA PROGRAMS	\$5,344,964	\$377,690	16%	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 continued throughout the month of November.

Staff conducted research to develop the scope for a future Household Travel Survey.

Staff reached out to MPO stakeholders to discuss recent HTS efforts.

Staff reviewed the draft SOW for the Intercity Travel Report.

Staff held an internal meeting to discuss the development of the MetroQuest survey for Visualize 2050.

Staff developed and issued scope of work and task order proposal request for consultant study on intercity bus and rail travel in the region.

Traffic Trends

Staff received the Virginia 2022 VMT and AADT data. Staff summarized 2022 Virginia VMT for inclusion in the draft regional VMT trends file and reported findings of questionable data to VDOT.

Staff continued to develop a work-around for the District of Columbia 2021 HPMS data issues found in the file hosted by FHWA. As part of this effort, staff requested and received the 2021 HPMS route geodatabase from DDOT staff.

Staff continued to add 2019-2021 traffic count data by link for inclusion in the RTDC while creating step-by-step instructions of the process.

Staff worked to document various projects for the purpose of succession planning.

Staff attended the 2023 FHWA Highway Information Seminar and the kickoff meeting for COG/TPB’s STREETLIGHT data acquisition.

Data Requests

None.

Meetings & Conferences

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

## ***7.2 Data Management and Visualization Services***

Staff created additional visualization products in support of the National Capital Trail Network update. Staff developed dashboard/infographics, web maps and applications as well as a Hub page for the project. Work is ongoing.

Staff created image files of the TPB Planning area boundary for TPB's Transportation Communications Manager for use by TPB's graphic design consultant to develop a new logo for Visualize 2050.

Staff created several static images and documents of the new TPB Planning area boundary (without Fauquier County) for the Plan Development and Coordination 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 performed several tests around publishing data from ArcGIS Pro to Enterprise in different formats to document any changes or issues encountered. 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).

Staff visited with Montgomery County Planning staff on December 7 to discuss geospatial data sharing and organization in an ArcGIS Enterprise Portal environment.

### *GIS Committee/GDX Working Group*

Staff planned and participated in the December 5 GIS Committee/GDX Working Group virtual meeting. Highlights of the meeting included a discussion of jurisdictional GIS Day activities and the regular status reports on the NCR/GDX, NextGen 9-1-1, and the HSEMA Food and Water Resilience Project.

### Data Requests

Staff responded to a data request from a consultant (from Kimley Horn) working on the Virginia Department of Transportation (VDOT) NOVA Bicycle/Pedestrian Network Study to obtain a geospatial dataset of TPB/COG's existing High-Capacity Transit (HCT) stations.

### Meetings & Conferences

Staff attended and participated in the Maryland State Geographic Information Committee (MSGIC) executive committee meeting on December 13.

Staff attended and participated in a kick-off call on December 6 to do introductions, discuss onboarding plan, and resources that will be available to TPB/COG. Staff also attended a follow-up introductory/training meeting on December 19.

Staff attended and participated in the kick off meeting for the Analysis of Transportation Inequities in Disadvantaged Communities Task Order with TPB's on-call consultant, ICF.

Staff attended the MDOT Sidewalk Data Collaborative Workgroup Meeting #2 on December 4.

Staff attended the December meeting of the Cooperative Forecasting Subcommittee meeting held on December 12.

Saff participated in the recurring meeting related to Visualize 2050 planning activities on December 15.

Staff attended the webinar “Interagency Transit Data Webinar - No 20: Mapping of Bus Performance” on December 20.

Staff continued to attend the regularly scheduled meetings (as well as 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 and MetroQuest survey development in support of Visualize 2050.

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	\$79,159	33%	67

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

***8.1 Regional Land Use and Transportation Coordination***

During December, DCPS staff continued work to investigate and revise aberrations noted in the Round 10.0 TAZ file. DCPS convened one on one conversations with individual members and continued to receive data.

Staff supported the December meeting of the Cooperative Forecasting and Data Subcommittee on December 12.

DCPS also hosted the December Planning Directors Technical Advisory Committee meeting which included a presentation from staff summarizing the Committee’s accomplishments during calendar year 2023. DCPS staff presented a detailed PowerPoint on the work plan and schedule for updating the Regional Activity Centers map, specifically asking members to reaffirm that the criteria used in 2012 would be the criteria to be applied for the update.

- DCPS staff compiled the REMS report for November which showed that, in October,
- over-the-year employment increased by 60,100 jobs or 1.8 percent in the Washington Metropolitan Statistical Area (MSA), while the national over-the-year employment increased by about 2.9 million jobs or 1.9 percent. Locally, the Leisure & Hospitality Sector gained 12,900 jobs and the Educational & Health Services Sector gained 20,000 jobs during the last year. (373,800 jobs were lost between March 2020 and April 2020) The Washington region has recovered 442,200 jobs between April 2020 and October 2023 – 102.1 percent recovery.
- The region’s inflation increased in September to 3.3 percent from a rate of 1.8 percent in July.



- During October, the region’s unemployment rate increased to 2.7 percent, while the national rate remained at 3.6 percent.
- The 1,848 new housing units authorized during October 2023 represent a 13.2 percent decrease from October 2022, when 2,129 new units were started.

DCPS staff continued work on the 2023 multifamily residential construction report.

Task 9	BUDGET	Billed this month	% Funds Expended	UPWP Page
COMPLETE STREETS, MOBILITY AND ENHANCEMENT PROGRAMS	\$1,135,269	\$40,112	18%	69

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

**9.1 Enhanced Mobility Grant Program**

During December, staff advanced the process for finalizing the selection process and awards for the 2023 solicitation program. Staff produced meeting materials and conducted a presentation to the TPB Technical Committee to update them on the process. Then, advancing the recommendations of the Selection Committee, staff produced meeting materials and conducted a presentation to the Transportation Planning Board to act on Resolution R6-2024 to approve funding recommendations for Enhanced Mobility and to approve an amendment of the FY 2023-2026 Transportation Improvement Program (TIP) to include these projects. The TPB unanimously approved the Selection Committee recommendations and staff began the process of informing applicants and implementing next steps.

**9.2 Regional Roadway Safety Program.**

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

**Maryland**

- City of Frederick: Jefferson-Patrick Redesign Study - The consultant is working on an analysis of traffic safety data in the corridor.
- 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 began an evaluation of existing conditions in the corridor and preparation of a public survey to understand community safety concerns.
- City of Rockville: Pedestrian Crossing Guidelines – The project team developed draft criteria, which were reviewed and edited, and began work on a decision tree/tables using the agreed-upon set of criteria.

**Virginia**

- City of Alexandria: Pedestrian Lighting Improvements Study – The consultant and City staff held a project kick off meeting. Information is currently being collected by the consultant.
- Arlington County: Regionwide, Data-Driven Anti-Drunk Driving Campaign – The consultant and County staff held a kick-off meeting.

- City of Fairfax: Main Street Corridor Roadway Safety Audit – The consultant completed a crash analysis for the stretch of Main Street in Fairfax City being evaluated. They are examining crash locations for collision diagrams, and further data collection and study of existing conditions is planned.
- Prince William County: Darbydale/Forestdale Avenue Corridor Retrofitting Project – The consultant and County staff participated in a kick-off meeting. County staff is currently coordinating with the Virginia Department of Transportation to gather traffic data for the project area.

Staff began marketing and preparing for the launch of the FY 2025 RRSP round.

### ***9.3 Transportation Alternatives Set-Aside Program***

Staff began the project review and selection process for the TAP program in Virginia, which is on a two-year cycle. At the end of November, staff received 25 applications for the TPB region. Staff began to review the applications in December and met with VDOT staff and the CTB member for Northern Virginia. Staff communicated with selection panel members and developed a schedule for evaluating applications and selecting projects for funding.

Staff facilitated an off-cycle funds transfer through the TPB Steering Committee to add money to complete a previously funded TAP project on the W&OD Trail in Falls Church.

### ***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 second meeting occurred on November 1. It covered a site visit from late October, data gathering from the consultant, and getting ready for a virtual public engagement effort. During the month, there were also emails exchanged on comments on draft virtual public engagement tools and dates.
- Falls Church - East-West Ped/Bike Connection – Existing conditions documentation was gathered and synthesized. An existing conditions memo was developed and reviewed.
- Frederick, City of - East Street Redesign 30% Design – The project team worked on CADD basemapping, typical section development and field observations for potential traffic management and safety challenges, including coordination with a major industrial landowner.
- Gaithersburg - SRTS Priority Improvements Study - Initial tasks for the project got underway. In November, a GIS analysis and engagement plan were being developed, along with efforts to communicate with the three participating schools.
- Montgomery County - Flex Microtransit Post-COVID Planning Study – Startup work on the project got underway.
- Prince George's County - Bus Stop Safety & Accessibility Study – Preliminary research for the project got underway. A stakeholder meeting for December was scheduled.
- Prince William County - Green Infrastructure Study - Preliminary research for the project got underway.
- Prince William County - Yorkshire Multimodal Corridor Planning Study – A stakeholder meeting was conducted on November 17. Existing conditions research was conducted.
- Rockville, City of - Mannakee Street Complete Streets Feasibility Study – The consultant and city staff have set up a calendar for monthly meetings. The consultant also requested existing data from Rockville. At the same time, the consultant compiled existing conditions data from a variety of sources for the Study.

- Takoma Park - Laurel Avenue Street Closure Traffic Study - The contractor conducted Task 2 preliminary research and data collection and began drafting Task 2 technical memo.

Staff conducted a webinar on November 2 that featured presentations on seven of the FY 2023 TLC projects and projects from the Regional Roadway Safety Program (RRSP). The online seminar used a pecha kucha format, which was designed to be engaging, fast-paced and high-level. The webinar was posted on the TPB’s website and was made available for AICP credits from the American Planning Association.

Staff prepared for the next solicitation for TLC and RRSP, which will be conducted between January 5 and March 8, 2024.

Staff recruited candidates for an intern to assist with the TLC and RRSP programs between January and June of 2024.

Task 10	BUDGET	Billed this month	% Funds Expended	UPWP Page
TPB MANAGEMENT AND SUPPORT	\$1,707,259	\$146,783	32%	71

**10. TPB MANAGEMENT AND SUPPORT**

***Transportation Planning Board Committee Support and Management***

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 December 2023 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 December 2023 FY 2024 includes Telephone / Web Ex / Microsoft Teams Communications:

- WMATA Check-in
- TRB Telework Session Organization Meeting – M. Fontaine / VDOT
- PBPP GHG Emissions Rulemakings
- Community Solutions Capacity
- Off Site Remodeling Buildings Visit
- COG Board Legislative Committee Meeting
- FY25 Proposed Budget
- UPWP Budget Discussion
- COG Annual Board Meeting / Kellogg Center
- TPB Nominating Committee
- COG Planning Directors Meeting
- COG Metro Funding Strategy Group Meeting
- Commuter Connections Operations Staff Meeting

## **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*. [OBJ]

Task 11	BUDGET	Billed this month	% Funds Expended	UPWP Page
TECHNICAL ASSISTANCE	\$2,215,511	\$3,446	2%	73
District of Columbia	\$330,930	\$0	0%	73
Maryland	\$707,967	\$0	0%	75
Virginia	\$664,437	\$3,446	2%	77
Regional Transit	\$512,177	\$0	0%	79

**11. TECHNICAL ASSISTANCE**

***11.A District of Columbia***

***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 performed the first round of review of all the data for the I66/I395 Mode Share study (inside the Beltway) and notified the contractor about the missing and incorrect files. Staff monitored the consultant's progress in preparing the data for the I66 Outside the Beltway counts.

Staff received the data prepared by the traffic counting consultant from the Fall 2023 active transportation study. Staff reviewed the data with the videos and informed the consultant about missing and suspect data. Staff received the corrected data 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**

### ***11.D Regional Transit***

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

No activity to report.

#### **2. Transit Within Reach Program**

Six proposals for the three new TWR projects were received by the deadline of November 27. Staff convened Technical Selection Committees (TSCs) for each project and asked TSC members to review and evaluate the proposals. For two of the projects, winning consultants were identified by the end of December. For one proposal, a TSC consensus meeting was scheduled for early January to help determine a final winning proposal.

#### **3. High-Capacity Transit Map**

No Activity.

#### **4. Other Tasks to be Defined**

No Activity.

## **CONTINUOUS AIRPORT SYSTEM PLANNING PROGRAM**

### Program Management

- COG/TPB staff has updated the monthly enplanement data.
- COG/TPB staff finalized the project descriptions for the 2024-2028 Airport Capital Improvement Program (ACIP) to be submitted to FAA in January.

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

- COG/TPB staff reviewed the final datasets of the 2023 APS full-scale survey for all three airports (BWI, DCA, IAD).
- COG/TPB staff reviewed the draft final report of the 2023 APS full-scale survey for all three airports (BWI, DCA, IAD).

### Air Cargo Element Update

- No Activity.

### Ground Access Travel Time Study

COG/TPB staff continued working on the Ground Access Travel Time (GATT) study and prepared summaries of tabulations and figures.

---

## **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, and 11/17/23.
2. 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-of-day 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
    - i. 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 January.
  - b. Gen3, Phase 1 Travel Model: Completed in FY 23.
  - c. Gen3, Phase 2 Travel Model
    - i. Sensitivity tests
      1. 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. Per request from RSG, COG staff conducted a re-review of the draft Gen3 Model User's Guide and provided feedback in July.
    - iv. Staff successfully replicated the calibration processes for the telecommute frequency model and auto ownership model (December 2023).
  - d. Travel model-related data requests: Staff have responded to 22 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.

## ***6. Mobile Emissions Planning***

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

### 7.2 Data Management and Visualization Services

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

## **Task 8. Regional Land Use and Transportation Planning Coordination**

### **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
  - 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
  - Not started.
- Ground Access Travel Time Study
  - Ongoing

FY 2024 TRANSPORTATION PLANNING BOARD  
COG/TPB BUDGET EXPENDITURE SUMMARY  
December 2023

	DC, MD and VA		BILLED	
	FTA, FHWA and LOCAL	FUNDS	THIS	% FUNDS
	BUDGET TOTAL	EXPENDED	MONTH	EXPENDED
<b>1. Long-Range Transportation Planning</b>				
Long - Range Transportation Planning	1,136,668.51	448,780.37	94,577.09	39%
<b>Subtotal</b>	<b>1,136,668.51</b>	<b>448,780.37</b>	<b>94,577.09</b>	<b>39%</b>
<b>2. Transportation Improvement Program</b>				
Transportation Improvement Program	353,708.82	90,500.46	17,510.86	26%
TIP Database Support	230,000.00	94,606.25	0	41%
<b>Subtotal</b>	<b>583,708.82</b>	<b>185,106.71</b>	<b>17,510.86</b>	<b>32%</b>
<b>3. Planning Elements</b>				
Congestion Management Process	833,870.74	207,018.69	33,573.18	25%
Systems Performance, Ops & Tech Planning	430,355.33	167,131.62	33,160.49	39%
Transportation Emergency Preparedness Planning	139,196.00	64,146.55	14,697.8	46%
Transportation Safety Planning	407,497.86	59,282.79	12,467.06	15%
Bicycle & Pedestrian Planning	198,851.96	80,092.28	17,854.56	40%
Regional Public Transportation Planning	573,566.35	219,059.06	47,989.42	38%
Freight Planning	396,491.66	78,418.91	13,118.18	20%
Metropolitan Area Transportation Operation Coord Program Planning	171,139.72	45,581.86	11,222.75	27%
Performance-Based Planning & Programming	216,047.96	66,730.05	14,232.39	31%
Resilience Planning	538,120.51	206,679.06	56,216.19	38%
<b>Subtotal</b>	<b>3,905,138.09</b>	<b>1,194,140.87</b>	<b>254,532.02</b>	<b>31%</b>
<b>4. Public Participation</b>				
Public Participation	753,904.21	336,938.57	53,211.36	45%
<b>Subtotal</b>	<b>753,904.21</b>	<b>336,938.57</b>	<b>53,211.36</b>	<b>45%</b>
<b>5. Travel Forecasting</b>				
Network Development	1,173,454.94	453,041.95	77,882.54	39%
Model Development	2,268,902.50	635,193.87	104,072.91	28%
<b>Subtotal</b>	<b>3,442,357.44</b>	<b>1,088,235.82</b>	<b>181,955.45</b>	<b>32%</b>
<b>6. Mobile Emissions Planning</b>				
Air Quality Conformity	1,221,950.95	468,556.02	105,170.66	38%
Mobile Emissions Analysis	1,700,061.94	547,971.29	110,714.11	32%
<b>Subtotal</b>	<b>2,922,012.89</b>	<b>1,016,527.31</b>	<b>215,884.77</b>	<b>35%</b>
<b>7. Travel Monitoring and Data Programs</b>				
Research & Analysis	4,458,336.48	612,079.48	335,655.41	14%
Data Visualization & Management	886,626.84	265,733.5	42,034.66	30%
<b>Subtotal</b>	<b>5,344,963.32</b>	<b>877,812.98</b>	<b>377,690.07</b>	<b>16%</b>
<b>8. Planning Scenarios and Socioeconomic Forecasting</b>				
Socioeconomic Forecasting	1,211,231.11	396,137.79	79,159.33	33%
<b>Subtotal</b>	<b>1,211,231.11</b>	<b>396,137.79</b>	<b>79,159.33</b>	<b>33%</b>
<b>9. Complete Street Mobility and Enhancement Programs</b>				
Transportation and Land Use Connections Program	622,450.01	113,929.48	21,716.62	18%
Enhanced Mobility Grant Program	97,904.69	50,982.44	10,282.54	52%
Transportation Alternatives Set-Aside Programs	37,912.20	29,157.52	6,196.19	77%
Regional Roadway Safety Program	377,004.84	9,624.69	1,917.44	3%
<b>Subtotal</b>	<b>1,135,271.74</b>	<b>203,694.13</b>	<b>40,112.79</b>	<b>18%</b>
<b>10. TPB Support and Management</b>				
TPB Support and Management	1,707,259.82	541,296.34	146,783.4	32%
<b>Subtotal</b>	<b>1,707,259.82</b>	<b>541,296.34</b>	<b>146,783.4</b>	<b>32%</b>
<b>Core Program</b>	<b>22,142,515.95</b>	<b>6,288,670.89</b>	<b>1,461,417.14</b>	<b>28%</b>
<b>A. District of Columbia Technical Assistance</b>				
Program Development & Misc.	330,931.43	0	0	0%
<b>B. Maryland Technical Assistance</b>				
Program Development & Misc.	707,968.41	0	0	0%
<b>C. Virginia Technical Assistance</b>				
Program Development & Misc.	664,438.02	38,870.81	3,446.62	6%
<b>D. Public Transit Technical Assistance</b>				
Program Development & Misc.	512,176.17	0	0	0%
<b>Technical Assistance</b>	<b>2,215,514.03</b>	<b>38,870.81</b>	<b>3,446.62</b>	<b>2%</b>
<b>TPB Grand Total</b>	<b>24,358,029.98</b>	<b>6,327,541.7</b>	<b>1,464,863.76</b>	<b>26%</b>

FY 2024 TRANSPORTATION PLANNING BOARD  
 FINANCIAL STATUS OF TECHNICAL ASSISTANCE  
 December 2023  
 SUPPLEMENT 1

	TOTAL		FTA/STA/LOCAL		PL FUNDS/LOCAL	
	AUTHORIZED	TOTAL	AUTHORIZED	FTA	AUTHORIZED	FHWA
	BUDGET	EXPEDITURES	BUDGET	EXPENDITURES	BUDGET	EXPENDITURES
<b>A. District of Columbia Technical Assistance</b>						
Program Development, Data Requests, & Misc	14,999.52	0.00	442.54	0.00	14,556.98	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	285,931.91	0.00	8,436.07	0.00	277,495.84	0.00
TBD	0.00	0.00	0.00	0.00	0.00	0.00
<b>Subtotal</b>	<b>330,931.43</b>	<b>0.00</b>	<b>9,763.72</b>	<b>0.00</b>	<b>321,167.71</b>	<b>0.00</b>
<b>B. Maryland Technical Assistance</b>						
Feasibility/Special 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
<b>Subtotal</b>	<b>707,968.41</b>	<b>0.00</b>	<b>20,887.74</b>	<b>0.00</b>	<b>687,080.67</b>	<b>0.00</b>
<b>C. Virginia Technical Assistance</b>						
Program Development & Misc	14,999.52	565.82	442.54	16.69	14,556.98	549.13
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	14,138.12	0.00	417.13	0.00	13,720.99	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	14,999.52	0.00	442.54	0.00	14,556.98	0.00
Travel Monitoring	250,300.86	38,252.09	7,384.82	1,128.58	242,916.04	37,123.51
VA Other Tasks	0.00	16.90	0.00	0.50	0.00	16.40
<b>Subtotal</b>	<b>664,438.02</b>	<b>38,870.81</b>	<b>19,603.43</b>	<b>1,146.84</b>	<b>644,834.59</b>	<b>37,723.97</b>
<b>D. Public Transportation Technical Assistance</b>						
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
<b>Subtotal</b>	<b>512,176.17</b>	<b>0.00</b>	<b>512,176.17</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
<b>Grand Total</b>	<b>2,215,514.03</b>	<b>38,870.81</b>	<b>562,431.06</b>	<b>1,146.84</b>	<b>1,653,082.97</b>	<b>37,723.97</b>